City of Mount Vernon, New York

1 ROOSEVELT SQ. RM. 104
CITY HALL, MOUNT VERNON, NEW YORK 10550
& VIA FACEBOOK.COM/MOUNTVERNONNY

Referral Packet - Final

Wednesday, May 13, 2026

7:00 PM

CITY COUNCIL CHAMBERS
CITY HALL

City Council

NICOLE BONILLA, MBA
City Clerk

JORDAN A. RIULLANO, JD
Deputy City Clerk

A REGULAR MEETING OF THE CITY OF THE MOUNT VERNON CITY COUNCIL HELD ON WEDNESDAY, MAY 13TH, 2026.
Scheduled for 7:00 pm in the City Council Chambers, City Hall, Mount Vernon, New York.

**** This meeting was held in the City Council Chambers, with virtual participation via ZOOM and CMVNY Facebook. The meeting was not closed to the public.****

PRESIDING: Derrick Thompson, President

OTHERS: Nicole Bonilla, City Clerk; Jordan A. Riullano, Deputy City Clerk; Antoinette Anderson, Legislative Aide; Johan Powell, Deputy Corporation Counsel; Greg Bailey, Asst. Corp. Counsel.

CALL TO ORDER / PLEDGE OF ALLEGIANCE

Council President Derrick Thompson called the meeting to order and provided general house-keeping rules, including encouraging citizens to share the meeting on social media and what to do "in case of emergency". Council President Thompson explained the 3-minute-plus-1 public comment rule. He then asked a Councilperson to lead the council in the Pledge of Allegiance. Council President then proceeded to the Public Speakers session of the evening (listed below as public comment).

AWARDS / PRESENTATIONS / SWEARING IN

PUBLIC COMMENT

REFERRAL SESSION

Roll Call administered by City Clerk Nicole Bonilla

REPORTS OF STANDING COMMITTEES AND ACTION THEREON

To the Council:

LEGISLATION AND PUBLIC WORKS

1. Management Services: An Ordinance Authorizing a Budget Transfer and Approving Payment to Vertosoft for OpenGov Asset Management and Permitting & Licensing Software through Solutions for the Department of Public Works

Code: LPW

Attachments: City Council Referral Letter - Vertosoft OpenGov Asset Mgmt Extension
Q-17451 Vertosoft Quote for City of Mount Vernon NY

2. Management Services: An Ordinance Authorizing the Mayor to Execute a 36-Month Service Renewal Agreement with Spectrum Business for Dedicated Fiber Internet, Managed Network Edge Services, Static IP Services, and DDos Protection

Code: LPW

Attachments: Spectrum FIBRE Renewal with DDoS Protection Request
Mt Vernon - Spectrum DFI MNE Renewal with DDoS Protection Proposal

3. Office of the Mayor: An Ordinance Authorizing the Mayor's Attendance at the New York Conference of Mayors (NYCOM) 2026 Annual Meeting

Code: LPW

Attachments: MYR Referral_NYCOM Annual Meeting 2026
SPH Travel Form_NYCOM May 2026

4. Office of the Mayor: An Ordinance Authorizing Travel for a Representative of the Mayor's Office to Attend the Cities United Leading the Way Tour (LTW) Peer Exchange Convening - (June 17 - 19, 2026)

Code: LPW

Attachments: Mayor Referral_Cities United LTW_2026
LTW Peer Exchange High Level Agenda (2)

5. Office of the Mayor: An Ordinance Ratifying and Approving the Collective Bargaining Agreement Between the City of Mount Vernon and the Civil Service Employees Association (CSEA)

Code: LPW

Attachments: CSEA Contract Referral
Ratified CSEA Agreement 2024-2027

6. Office of the Mayor: An Ordinance Authorizing the Office Relocation, Space Optimization, and Renovation Plan for the Department of Recreation and the Department of Buildings, and Authorizing Related Expenditures

Code: LPW

Attachments: Office Relocation and Renovation Plan FinalMerged

7. Department of Recreation: An Ordinance Authorizing the Department of Recreation to Co-Sponsor the Yusuf Shah Islamic Center Juneteenth Health Fair at Hartley Park - (Saturday, June 6, 2026)

Code: LPW

Attachments: 2026 Juneteenth Recognition (Walk) and Health Fair - as of May 5th - FINAL
FD Response Juneteenth
OEM Approval Juneteenth

8. Department of Public Works: An Ordinance Authorizing the Celebration of National Public Works Week in the City of Mount Vernon, NY, from May 17, 2026 through May 23, 2026

Code: LPW

Attachments: National Public Works Week 2026
DPW 56 (002)
DPW WEEK 2026 FLYER
James Finch 2026

9. City Council: Local Law No. __ of 2026 - A Local Law Amending Article VII-A, - § 86-b of the Mount Vernon City Charter Regarding the Composition of the Capital Projects Board

Code: LPW

Attachments: Capital Projects Board LL Amendment

To the Council:

HUMAN RESOURCES

10. Department of Recreation: An Ordinance Authorizing a Partnership with Optimum for the City of Mount Vernon Employee Appreciation Day Event - (Monday, May 18, 2026, on City Hall Plaza)

Code: HR

Attachments: 2026 Optimum Employee Appreciation Day Referral Letter

11. Youth Bureau: An Ordinance Authorizing the City of Mount Vernon Youth Bureau to Host the 6th Annual "Let Your Colors Shine" Pride Day Event, Authorizing the Raising of the Pride Flag at City Hall, and Providing for Public Safety Support and Related Expenditures - (Friday, June 5, 2026, from 3:30 p.m. to 6:30 p.m. at City Hall Plaza)

Code: HR

Attachments: Pride event
Let Your Colors Shine Flyer 2026 (Pride Event)

12. Department of Recreation: An Ordinance Authorizing the Mayor to Enter into an Agreement with the County of Westchester for the Fun-Filled Summer (Park Activation Program) Grant

Code: HR

Attachments: 2026 Fun Filled Summer Referral Letter
2026 Fun Filled Summer Award Letter

13. Department of Recreation: An Ordinance Amending Ordinance No. 1, Adopted by the City Council of March 25, 2026, Entitled "An Ordinance Authorizing the Department of Recreation to Co-Sponsor the Antigua and Barbuda International Cultural Association (ABICA) International Food Festival"

Code: HR

Attachments: 2026 ABICA Food Festival Referral Letter as of May 8th

To the Council:

PUBLIC SAFETY AND CODES

14. Management Services: An Ordinance Authorizing the Mayor to Execute a Three (3) Year Lease Agreement with BEI Holdings, Inc. dba Business Electronics for the Upgrade of the Police Department Interview Room Recording System

Code: PSC

Attachments: BEI Holding Referral Letter
BEI

To the Council:

FINANCE AND PLANNING

15. Office of the Comptroller: An Ordinance Authorizing the Establishment of a Policy for Waiver of Health Insurance - (COMP2026-02)

Code: FP

Attachments: COMP2026 - 02 - Established of a Policy for Waiver of Health Insurance
2026 Waiver of Health Insurane Policy.v3

16. Office of the Comptroller: An Ordinance Adopting the City of Mount Vernon Finance Policy and Procedures Document and Related Financial Management Policies - (COMP2026-06)

Code: FP

Attachments: COMP2026 - 06- Finance Policy Procedures Documents
Cash Management CR Process - 3.2026

17. Comptroller: An Ordinance Authorizing the Adoption of a Comprehensive Policy and Procedures Document and Related Financial Policies

Code: FP

Attachments: Policy Referral Letter
Final Journal Entry Policy and Procedures

18. Comptroller: An Ordinance Authorizing the Adoption of a Comprehensive Finance Policy and Procedures Document and Related Financial Policies - (COMP2026-06)

Code: FP

Attachments: Policy Referral Letter
Electronic Funds Transfer Policy

19. Comptroller: An Ordinance Approving and Adopting the Finance Policy and Procedures Document and Related Financial Policies

Code: FP

Attachments: Policy Referral Letter
CMVNY Corporate Credit Card Policy

20. Comptroller: An Ordinance Adopting the Finance Policy and Procedures Document and Related Financial Policies - (COMP2026-06)

Code: FP

Attachments: Policy Referral Letter
CMVNY Municipal Vehicle Risk Policy

21. Comptroller: An Ordinance Authorizing the Adoption of a Comprehensive Finance Policy and Procedures Document and Related Financial Policies for the City of Mount Vernon - (COMP2026-06) - EZ Pass

Code: FP

Attachments: Policy Referral Letter
EZ Pass Policy

22. Office of the Comptroller: An Ordinance Adopting a Uniform Workers' Compensation Reporting and Claims Process for the City of Mount Vernon - (REF. COMP2026-05)

Code: FP

Attachments: COMP2026 - 05- Workers' Compensation Reporting and Claim Procedure
Cmvny-Workers' Compensation Claims Process (Final Package)

23. Comptroller: A Ordinance Authorizing the Acceptance of the 2021 Annual Independent Audit Prepared by PKF O'Connor Davies and the Implementation of any Necessary Correction Action Measures

Code: FP

Attachments: COMP2026 - 07 - Acceptance of the 2021 Annual Independent Audit
Final 2021 City of Mount Vernon Financials

24. Department of Planning and Community Development: An Ordinance Authorizing the Mayor to Execute a Professional Services Agreement with ARUP for Phase II of a New York State Energy Research and Development Authority (NYSERDA) Project

Code: FP

Attachments: ARUP Agreement Carbon Solutions Referral Letter 2.3.2026
2026 Updated Attachment_B_Budget_PON5180_Round2

ADD-ON

LEGISLATION AND PUBLIC WORKS

25. Department of Management Services: An Ordinance Authorizing the Mayor to Enter into a 24-Month Managed Server, Storage, and Backup Services Agreement with Hi-Link Technology Group Through SHI International Corp. Pursuant to Sourcewell Cooperative Purchasing Contract No. 121923-SHI

Code: LPW

Attachments: Hi-Link_Referral_Letter_May13_2026
HI_LINK_Master_Agreement_Mount_Vernon_NY
HI_Link City of Mount Vernon Service Order
Hi-Link 24 Months Quote

FINANCE AND PLANNING

26. City Council: An Ordinance Authorizing the Office of the City Comptroller to Establish a Custodial Account for the Development Project Located at 230 West Third Street, Mount Vernon, New York

Code: FP

Attachments: 230 West Third St escrow account - May 2026

27. City Council: An Ordinance Authorizing the Establishment of a Custodial Account for the Development Project Located at 150 East First Street, Mount Vernon, New York

Code: FP

Attachments: 150 East First St Escrow Account - May 2026

28. City Council: A Resolution of the City Council of the CIty of Mount Vernon Declaring Itself as Lead Agency, Issuing a Determination Pursuant to SEQRA, and Granting Approval of the Application of Macquesten Station Takeover, LLC for the Station Plaza project

Code: FP

Attachments: EA 20 S. West - revised December 12162025_compressed
Mayor Referral_Grove Street Playground Renovation and Revitilization Improvements_May 2026
Resolution Lead Agency Neg Dec Approval (Station Plaza).docx - Copy

OTHER BUSINESS/CLOSING COMMENTS

CITY OF MOUNT VERNON, N.Y.
DEPARTMENT of PUBLIC WORKS

SHAWYN PATTERSON-HOWARD
Mayor

City Hall, One Roosevelt Square
Mount Vernon, NY. 10550
(914) 914-665-3262

Juan Perez
Commissioner

May 5, 2026

Honorable City Council Members
The City of Mount Vernon
Mount Vernon, New York
(*Through the Office of the Mayor*)

Re: Request for Approval for a Budget transfer from A1640.435 (DPW) to A1680.216 (Management Services) and to Make Payment to Vertosoft for OpenGov Asset Management & Permit Licensing Domains for the Department of Public Works through Management Services.

Dear Honorable City Council Members,

The Department of Management Services would like to formally request approval of a budget transfer from A1640.435 to A1680.216. The budget transfer amount will be for $151,568.11.

This will allow for payment to Vertosoft for the implementation of the OpenGov Asset Management and Permitting & Licensing software solutions for the Department of Public Works. This three (3) year commitment will be used to streamline the current asset management and permitting process for the Public Works team while simultaneously simplifying the process for constituents.

The OpenGov Permitting platform will allow constituents to apply and pay online 24/7, track application status without calling the office, and provide faster approvals due to streamlined processes. The applications will move through predefined steps so staff will not have to manually track where things are, plans, permits, and supporting documents will be uploaded, stored, and easily accessible in one place, and the system will automatically calculate fees to be paid online.

The Asset Management software will create an organized database of roads, sidewalks, bridges, and vehicles/heavy equipment and work order management like pothole maintenance, repairs, and routine work will be tracked more efficiently. These systems will replace the use of SeeClickFix and iWorQ and are critical to modernizing our operations, improving efficiency, and enhancing transparency across multiple departments.

CITY OF MOUNT VERNON, N.Y.
DEPARTMENT of PUBLIC WORKS

SHAWYN PATTERSON-HOWARD
Mayor

City Hall, One Roosevelt Square
Mount Vernon, NY. 10550
(914) 914-665-3262

Juan Perez
Commissioner

The total cost of this three-year commitment is $475,648.68 made in three (3) payments. The first payment is $151,568.11. Funds for this purchase will be available through A1680.216 after a budget transfer from A1640.435 and the elimination of SeeClickFix and iWorQ systems.

From	Amount	To
A1640.435 DPW (Gas, Diesel, Oil)	$151,568.11	A1680.216 MS (Application Services)

Payments for the remaining years will be budgeted through Management Services A1680.216.

Thank you for your consideration.

Respectfully,

Juan Perez
Commissioner of Management Services

Dwayne Jones
Commissioner of Public Works

Cc: Department of Public Works
Comptroller's Office
File

"The Jewel of Westchester"

1602 Village Market Blvd SE, Suite 320
Leesburg, VA20175 USA

Cage Code: 7QV38
UEI Number Y7D5MXRU2839
DUNS# 080431574
Federal Tax ID: 81-3911287
Business Size: Small Business

Date: 12/29/2025, 6:15 PM

Phone: 571 707-4130
Fax: 571-291-4119
Email: opengov@vertosoft.com

Vertosoft Contact: Carly Moore
Phone: (540) 998-8361
Email: carly.moore@vertosoft.com

Vertosoft Quote for OpenGov - City of Mount Vernon, NY

Contract: NCPA - OMNIA 01-165

Quote #: Q-17451
Expires On: 12/31/2025

Ship To
City of Mount Vernon, NY
Condell Hamilton
chamilton@mountvernon.gov

Quote For:
Name: Condell Hamilton
Company: City of Mount Vernon, NY
Email: chamilton@mountvernon.gov
Phone: 9146652314

PAYMENT TERMS	DELIVERY METHOD	PAYMENT METHOD	VERTOSOFT CUST ID	SUPPLIER REF #
Net 30	Electronic	Check/ACH/Credit Card		

Overall POP Start Date: 1/1/2026
Overall POP End Date: 12/31/2028

Term 1 01/01/2026-12/31/2026

PART #	DESCRIPTION	QTY	UNIT PRICE	EXTENDED
OG-TWAQ-B100150M-AR-3Y	Asset Management - Between $100-150 Million - 3Y	1.00	$25,330.02	$25,330.02
OG-SWCV-B100150M-AR-3Y	Autofill Interface - Between $100-150 Million - 3Y	2.00	$1,050.37	$2,100.74
OG-TWAW-B100150M-AR-3Y	Facilities Domain - Between $100-150 Million - 3Y	1.00	$21,494.44	$21,494.44
OG-TWAY-B100150M-AR-3Y	Parks & Recreation Domain - Between $100-150 Million - 3Y	1.00	$19,902.15	$19,902.15
OG-TWEE-B100150M-AR-3Y	Permitting and Licensing Expert Services: Elevate - Between $100-150 Million - 3Y	1.00	$5,999.22	$5,999.22
OG-TWAT-B100150M-AR-3Y	Scenario Builder - Between $100-150 Million - 3Y	1.00	$6,332.80	$6,332.80
OG-TWBC-B100150M-AR-3Y	Transportation Domain - Between $100-150 Million - 3Y	1.00	$21,494.44	$21,494.44
OG-TWBD-B100150M-AR-3Y	Walkability Domain - Between $100-150 Million - 3Y	1.00	$19,106.30	$19,106.30

PART #	DESCRIPTION	QTY	UNIT PRICE	EXTENDED
OG-TWEW-B100150M-OT-0Y	Professional Services Deployment - Fixed Fee - Between $100-150 Million - 0Y	138.00	$216.00	$29,808.00
			Term 1 TOTAL:	$151,568.11

Term 2 01/01/2027-12/31/2027

PART #	DESCRIPTION	QTY	UNIT PRICE	EXTENDED
OG-TWAQ-B100150M-AR-3Y	Asset Management - Between $100-150 Million - 3Y	1.00	$26,596.52	$26,596.52
OG-SWCV-B100150M-AR-3Y	Autofill Interface - Between $100-150 Million - 3Y	2.00	$1,102.88	$2,205.76
OG-TWAW-B100150M-AR-3Y	Facilities Domain - Between $100-150 Million - 3Y	1.00	$22,569.16	$22,569.16
OG-TWAY-B100150M-AR-3Y	Parks & Recreation Domain - Between $100-150 Million - 3Y	1.00	$20,897.26	$20,897.26
OG-TWEE-B100150M-AR-3Y	Permitting and Licensing Expert Services: Elevate - Between $100-150 Million - 3Y	1.00	$6,299.17	$6,299.17
OG-TWAT-B100150M-AR-3Y	Scenario Builder - Between $100-150 Million - 3Y	1.00	$6,649.43	$6,649.43
OG-TWBC-B100150M-AR-3Y	Transportation Domain - Between $100-150 Million - 3Y	1.00	$22,569.16	$22,569.16
OG-TWBD-B100150M-AR-3Y	Walkability Domain - Between $100-150 Million - 3Y	1.00	$20,061.61	$20,061.61
OG-TWEW-B100150M-OT-0Y	Professional Services Deployment - Fixed Fee - Between $100-150 Million - 0Y	287.00	$216.00	$61,992.00
			Term 2 TOTAL:	$189,840.07

Term 3 01/01/2028-12/31/2028

PART #	DESCRIPTION	QTY	UNIT PRICE	EXTENDED
OG-TWAQ-B100150M-AR-3Y	Asset Management - Between $100-150 Million - 3Y	1.00	$27,926.34	$27,926.34
OG-SWCV-B100150M-AR-3Y	Autofill Interface - Between $100-150 Million - 3Y	2.00	$1,158.03	$2,316.06
OG-TWAW-B100150M-AR-3Y	Facilities Domain - Between $100-150 Million - 3Y	1.00	$23,697.62	$23,697.62
OG-TWAY-B100150M-AR-3Y	Parks & Recreation Domain - Between $100-150 Million - 3Y	1.00	$21,942.13	$21,942.13
OG-TWEE-B100150M-AR-3Y	Permitting and Licensing Expert Services: Elevate - Between $100-150 Million - 3Y	1.00	$6,614.13	$6,614.13
OG-TWAT-B100150M-AR-3Y	Scenario Builder - Between $100-150 Million - 3Y	1.00	$6,981.90	$6,981.90
OG-TWBC-B100150M-AR-3Y	Transportation Domain - Between $100-150 Million - 3Y	1.00	$23,697.62	$23,697.62
OG-TWBD-B100150M-AR-3Y	Walkability Domain - Between $100-150 Million - 3Y	1.00	$21,064.70	$21,064.70
			Term 3 TOTAL:	$134,240.50

Grand Total: $475,648.68

Annual invoices will be delivered by the start of each consecutive annual period. Payment of invoices shall be annually in advance. Customer's use of the OpenGov Services is pursuant to the OpenGov End User License Agreement set forth

at https://opengov.com/terms-of-service/end-user-license-agreement/. Any Professional Services shall be performed pursuant to the attached Statement of Work, if any.

Quote Terms

By purchasing the products and services described in this order form, the Customer is expressly agreeing to the End User Agreement published at https://www.vertosoft.com/terms-and-conditions-opengov

Taxes: Sales tax shall be added at the time of an invoice, unless a copy of a valid tax exemption or resale certificate is provided.
Credit Card Orders: Additional fees may apply if paying by credit card.

All Purchase Orders must include: End User Name, Phone Number, Email Address, Purchase Order Number, Government Contract Number or Our Quote Number, Bill-To and Ship-To Address (Cannot ship to a PO Box), Period of Performance (if applicable), and a Signature of a duly Authorized Representative.

CITY OF MOUNT VERNON, N.Y.
Mayor Office

SHAWYN PATTERSON-HOWARD, MPA
Mayor

City Hall, One Roosevelt Square
Mount Vernon, NY, 10550
(914) 665-2362 – Fax: (914) 665-6173

Juan Perez
Commissioner Management Services

May 5, 2026

VIA EMAIL:

Honorable City Council Members
City of Mount Vernon
1 Roosevelt Square
Mount Vernon, New York 10550

RE: Approval Authorizing the Mayor to Execute a 36-Month Spectrum Business Service Renewal for Dedicated Fiber Internet, Managed Network Edge Services, Static IP Services, and DDoS Protection; **FOR APPROVAL AT THE May 13, 2026 CITY COUNCIL MEETING**

Honorable Councilmembers:

The Department of Management Services respectfully requests approval from the City Council authorizing the Mayor to execute a service renewal with Spectrum Business for the City's existing Spectrum fiber and managed network services. The renewal covers dedicated fiber internet, static IP services, Managed Network Edge equipment and support, and DDoS protection for key City network locations.

These services support the City's core network connectivity at City Hall and multiple satellite locations, including 1 Roosevelt Square, 2 Roosevelt Square, 250 South 6th Avenue, 470 East Lincoln Avenue, and 50 West 3rd Street. These circuits and managed network services are already integrated into the City's network environment and are needed for daily operations. Allowing the services to lapse, or attempting to replace them without a planned transition, would create unnecessary operational and cybersecurity risk.

This renewal is also beneficial because it adds DDoS protection to the covered circuits, keeps licensing and equipment updates active, and allows the City to continue using the existing Spectrum network infrastructure while receiving renewed pricing and promotional credits.

Contract Summary:

- Vendor: Spectrum Business / Charter Communications Operating, LLC.
- Term: 36 months.
- Services: Dedicated Fiber Internet, Static IP, Managed Network Edge, managed switches/WiFi, and DDoS protection.
- Estimated recurring cost: approximately $13,177 per month before applicable taxes, fees, surcharges, and credits.
- Estimated 36-month recurring value: approximately $474,372 before taxes, fees, surcharges, and credits.
- Promotional credit: $6,160 total, applied as $3,080 for each of the first two months after processing.
- Funding source: Telecommunications budget line 1912.441.

Management Services has reviewed this renewal with Finance and Legal as part of the normal contract review process. The renewal is for existing critical telecommunications and network services already deployed within the City environment. Because these services are tied to active circuits, managed network equipment, and citywide connectivity, continuity of service is important to avoid disruption to City operations.

Should this request meet with the approval of the City Council, the City will proceed with any additional

CITY OF MOUNT VERNON, N.Y.
Mayor Office

SHAWYN PATTERSON-HOWARD, MPA
Mayor

City Hall, One Roosevelt Square
Mount Vernon, NY, 10550
(914) 665-2362 – Fax: (914) 665-6173

Juan Perez
Commissioner Management Services

approvals required through the Board of Estimate and Contract, and the Mayor will be authorized to execute the Spectrum service renewal documents.

Thank you for your consideration.

Respectfully,

Juan Perez
Management Services Commissioner

cc: Shawyn Patterson-Howard, Mayor
cc: Brian Johnson, Corporation Council
cc: Darren Morton, Comptroller

SPECTRUM ALL IN SERVICE PROPOSAL FOR

These prices will remain in effect throughout the initial Order Term, subject to the following contingencies:

- final engineering, design and site visits; and
- complete Terms & Conditions as provided in our service contract

Spectrum Renewal and Upgrade Based on 36 Month Term

LOCATION	SERVICE			MONTHLY COST
				Renewing Circuit with DDoS Protection Included
1 Roosevelt Sq	Renewing Dedicated Fiber Internet and Static IP block with DDoS Protection on the Circuit	1G	**36 Month Term**	**$1490**
	Current Managed Network Edge Deployment with 2 additional 8 Port PoE for the Connection to Client Provided LAN			**$1498**
2 Roosevelt Sq	Renewing Dedicated Fiber Internet and Static IP block with DDoS Protection on the Circuit	1G		**$1490**
	Current Managed Network Edge MX Device with 2 additional 8 Port PoE for the Connection to Client Provided LAN			**$540**

250 S 6th Ave	Renewing Dedicated Fiber Internet and Static IP block with DDoS Protection on the Circuit	500M	**$1035**
	Current Managed Network Edge Deployment		**$1094**
470 E Lincoln Ave	Renewing Dedicated Fiber Internet and Static IP block with DDoS Protection on the Circuit	1G	**$1490**
	Current Managed Network Edge Deployment		**$540**
50 W 3rd St	Renewing Dedicated Fiber Internet and Static IP block with DDoS Protection on the Circuit	1G	**$1490**
	Current Managed Network Edge Deployment		**$918**
			All-In Renewal: $11,780
Current Monthly: $14,980			*Waiving our implementation fee for the DDoS Protection and installation fees for the needed, additional switches

100M Enterprise Internet coax connection with Static IP and DDoS Protection as a secondary transport at each location for failover/redundancy would be an additional $170 per location, as discussed on the call. This would make the renewal equal $12,630 – still a cost savings for the city.

As well we received approval to provide $3080 off on your first two months after processing this renewal, total credit $6160 towards the bill.

Spectrum BUSINESS

For our SLED Vertical

Many of our clients have seen additional cost savings from their cyber liability insurance premiums with the added layer of security provided with DDoS Protection on their network. Check with your cyber liability insurance provider on possible additional savings.

File #: TMP -2081 **Agenda Date:** 5/13/2026 **Agenda #:** 3.

City Council:

AN ORDINANCE AUTHORIZING THE MAYOR'S ATTENDANCE AT THE NEW YORK CONFERENCE OF MAYORS (NYCOM) 2026 ANNUAL MEETING

Whereas, by correspondence dated April 1, 2026, Mayor Shawyn Patterson-Howard requested authorization to attend the New York Conference of Mayors (NYCOM) 2026 Annual Meeting, to be held in Bolton Landing, New York, from May 13 through May 15, 2026; and

Whereas, the City of Mount Vernon recognizes the importance of continued professional development, intergovernmental collaboration, and participation in statewide municipal organizations; and

Whereas, the New York Conference of Mayors (NYCOM) Annual Meeting provides a forum for municipal leaders across New York State to exchange best practices, discuss legislative priorities, and strengthen effective local governance; and

Whereas, the Mayor of the City of Mount Vernon serves as a NYCOM Executive Committee Board Member and has served for three (3) consecutive years, including service on the Women's Advisory Committee; and

Whereas, the Mayor has served as President of the Women's Advisory Committee from 2025-2026 and will be sworn in as First Vice President at the 2026 NYCOM Annual Meeting; and

Whereas, attendance at the NYCOM 2026 Annual Meeting will provide valuable opportunities for networking with fellow mayors and municipal officials, as well as engagement in policy discussions relevant to the City of Mount Vernon; and

Whereas, registration fees for member mayors are waived for this event; and

Whereas, the total cost of travel, lodging, transportation, and incidental expenses is not anticipated to exceed Seven Hundred Dollars ($700.00); and

Whereas, funding for said expenses shall be allocated from the Austerity Budget Code A1030.402 upon submission of proper documentation, subject to the availability of funds and the Comptroller's approval, subject to proper documentation and compliance with applicable procurement and fiscal procedures;

NOW, THEREFORE, BE IT ORDAINED BY THE CITY COUNCIL OF THE CITY OF MOUNT VERNON, NEW YORK, AS FOLLOWS:

Section 1. Authorization. The Mayor of the City of Mount Vernon is hereby authorized to attend the New York Conference of Mayors (NYCOM) 2026 Annual Meeting in Bolton Landing, New

York, from May 13, 2026, through May 15, 2026.

Section 2. Purpose. The purpose of this authorization is to permit the Mayor's participation in official NYCOM programming, including leadership responsibilities, networking opportunities, and professional development activities consistent with the City's interests.

Section 3. Funding Authorization and Cap. All reasonable and necessary expenses associated with attendance at the NYCOM 2026 Annual Meeting, including transportation, lodging, and incidental expenses, shall be paid from the Austerity Budget Code A1030.402 upon submission of proper documentation, subject to the availability of funds and Comptroller's approval. Total expenditure shall not exceed Seven Hundred Dollars ($700.00).

Section 4. Compliance. All expenditures shall be subject to submission of proper documentation and shall comply with all applicable City of Mount Vernon purchasing policies, fiscal procedures, and audit requirements.

Section 5. Severability. If any section, subsection, sentence, clause, or provision of this Ordinance is held invalid, such decision will not affect the validity of the remaining portions of this Ordinance.

Section 6. Effective Date. This Ordinance shall take effect immediately upon its adoption by the City Council, subject to prior approval by the Board of Estimate and Contract.

BOARD OF ESTIMATE AND CONTRACT

A REQUEST AUTHORIZING THE ATTACHED TRAVEL AND TRAINING REQUEST FORM AND APPROVING THE EXPENDITURE OF FUNDS

FOR:

Mayor Shawyn Patterson-Howard TO ATTEND THE New York Conference of Mayors (NYCOM) 2026 Annual Meeting

FROM: MAY 13 -15, 2026

Board of Estimate and Contract:

A RESOLUTION AUTHORIZING THE MAYOR TO ATTEND THE NEW YORK CONFERENCE OF MAYORS (NYCOM) 2026 ANNUAL MEETING AND APPROVING ASSOCIATED EXPENDITURES

WHEREAS, by correspondence dated April 1, 2026, Mayor Shawyn Patterson-Howard requested authorization to attend the New York Conference of Mayors (NYCOM) 2026 Annual Meeting, to be held in Bolton Landing, New York, from May 13 through May 15, 2026; and

WHEREAS, the NYCOM Annual Meeting provides an important forum for municipal leaders to engage in discussions on public policy, share best practices, and collaborate on initiatives that benefit cities throughout New York State; and

WHEREAS, attendance at this conference will afford the Mayor the opportunity to network with fellow mayors, exchange innovative ideas, and gain insight into effective governance strategies that can be implemented in the City of Mount Vernon; and

WHEREAS, the Mayor has served as a member of the NYCOM Executive Committee Board for three (3) consecutive years and has actively participated on the Women's Advisory Committee, including serving as President from 2025-2026, and is expected to be sworn in as 1st Vice President at the 2026 Annual Meeting; and

WHEREAS, the registration fee for Member Mayors for this conference is waived, resulting in no cost to the City for registration; and

WHEREAS, the total anticipated cost of travel, lodging, and incidental expenses for the Mayor's attendance at said conference shall not exceed seven hundred dollars ($700.00); and

WHEREAS, funding for said travel expenses, including transportation, lodging, and incidental costs, shall not exceed a total amount of seven hundred dollars ($700.00) and shall be allocated from Austerity Budget Code A1030.402, subject to the submission of proper documentation and compliance with all applicable purchasing and fiscal procedures; NOW**, THEREFORE, BE IT**

RESOLVED, that the City Council of the City of Mount Vernon hereby authorizes the Mayor to attend the New York Conference of Mayors (NYCOM) 2026 Annual Meeting in Bolton Landing, New York, from May 13 through May 15, 2026; and **BE IT FURTHER**

RESOLVED, that the Comptroller is hereby authorized and directed to make payment for said expenses from the Austerity Budget Code A1030.402 upon submission of proper documentation and in accordance with applicable purchasing and fiscal procedures; be, and the same is hereby approved; and **BE IT FURTHER**

RESOLVED, that the total cost for said travel, including transportation, lodging, and incidental expenses, shall not exceed seven hundred dollars ($700.00), to be charged to Austerity Budget Code A1030.402 upon submission of proper documentation and in accordance with applicable purchasing and fiscal procedures; be, and the same is hereby approved; and **BE IT FURTHER**

RESOLVED, that this Resolution is subject to approval by the Board of Estimate and Contract (BOE&C) and subsequent approval by the City Council.

CITY OF MOUNT VERNON, N.Y.
Mayor Office

SHAWYN PATTERSON-HOWARD
Mayor

City Hall, One Roosevelt Square
Mount Vernon, NY. 10550
(914) 665-2362 – Fax: (914) 665-6173

MALCOLM CLARK
Chief of Staff

KHENDRA DAVID
Deputy Chief of Staff

April 1st, 2026

Honorable City Council
Members City of Mount Vernon
One Roosevelt Square
Mount Vernon, New York 10550

Re: New York Conference of Mayors (NYCOM) 2026 Annual Meeting

Dear Honorable City Council Members,

This letter comes as a request to the City Council for the enactment of legislation authorizing the Mayor to attend the New York Conference of Mayors (NYCOM) Annual Meeting in Bolting Landing, NY from May 13th to May 15th, 2026.

Throughout the meeting, I will have the opportunity to network with fellow mayors, exchange best practices and build on what's working in the State of New York. As a NYCOM Executive Committee Board Member for 3 consecutive years, I have the pleasure of serving on the Women's Advisory Committee. From 2025-2026 I served as President and will be sworn in as 1st Vice President at this year's meeting. **Agenda:** ANNUAL CONVENTION TENTATIVE AGENDA - New York Conference of Mayors

This year, the registration fee for Member Mayors is at no cost to the city. The entire trip including transportation, incidentals, and hotel should not exceed $700.00 (seven hundred dollars). The cost of the travel, hotel fees, and incidentals will be expensed from budget *A1030.402 – BOE Education and Travel*.

In Service,

Shawyn Patterson-Howard
Mayor

City of Mount Vernon

Travel and Training Request Form

Employee Information

- **Employee Name:** Shawyn Patterson-Howard
- **Title:** Mayor
- **Department:** Office of the Mayor

Travel Details

- **Destination (City/State):** Bolting Landing, NY
- **Purpose of Travel:** 2026 NYCOM Annual Meeting
- **Conference / Training / Meeting Name:** NYCOM
- **Travel Dates (From – To):** May 13 - May 15, 2026

Travel Justification (Check all that apply)

Please answer the following questions to support the necessity of this travel request:

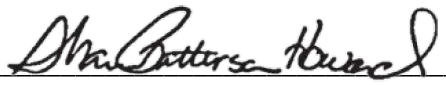
- ☐ **Is this travel a requirement of your job duties?**
  - ■ Yes ☐ No
- ☐ **Is this travel required to maintain a professional license or certification?**
  - ■ Yes ☐ No
  - If yes, specify certification/license: Elected Officials Academy
- ☐ **Is this travel required as a result of an audit finding or corrective action plan?**
  - ☐ Yes ■ No
  - If yes, identify audit or corrective action plan: _____
- ☐ **Is this travel funded by an external source or sponsorship?**
  - ■ Yes ☐ No
  - If yes, identify funding source: NYCOM Exec. Committee
- **Additional Justification (if applicable):**
  Mayor to be sworn in as 1st Vice President

Estimated Travel Costs

- **Registration / Tuition:** $0.00
- **Transportation (Air/Rail/Auto):** $0.00
- **Lodging:** $586.78
- **Meals & Incidentals:** $0.00
- **Other (Specify):** $0.00

Total Estimated Cost: $586.78

Approvals

Employee Signature:  **Date:** 4/13/2026

Department Head Approval: _____ **Date:** _____

Finance / Comptroller Approval: _____ **Date:** _____

Mayor Approval: _____ **Date:** _____

Council President Approval: _____ **Date:** _____

Submission of this form does not constitute approval. Travel may not be booked until all required approvals are obtained.

CITY OF MOUNT VERNON, N.Y.
Mayor Office

SHAWYN PATTERSON-HOWARD
Mayor

City Hall, One Roosevelt Square
Mount Vernon, NY. 10550
(914) 665-2360 – Fax: (914) 665-6173

MALCOLM CLARK
Chief of Staff

KHENDRA K. DAVID
Deputy Chief of Staff

May 5, 2026

Honorable Members of the City Council
City of Mount Vernon
One Roosevelt Square
Mount Vernon, NY 10550

Dear Honorable Council Members,

This letter comes as a request to the City Council for the enactment of legislation authorizing one staff member from the Mayor's Office to attend the upcoming *Cities United Leading the Way (LTW) Peer Exchange Convening*, scheduled for June 17–19, 2026, in Greensboro, North Carolina. The staff member designated to attend is Tajean Turnier, Director of Neighborhood Safety and Engagement.

The City of Mount Vernon was honored to serve as a stop on Cities United's *Leading the Way Tour* in June 2025. This upcoming peer exchange convening builds on that engagement by bringing together participating cities to exchange knowledge, share best practices, and provide mutual support to enhance local violence prevention and community safety efforts.

Over the course of the convening, participants will engage in peer-to-peer learning, reflect on key takeaways from the tour, and collaborate with national partners and other municipalities to strengthen strategies that support safe, healthy, and hopeful communities. The sessions will further emphasize youth voice, innovation, and cross-sector partnerships as critical components of comprehensive public safety planning.

Registration, travel, and lodging expenses are covered; therefore, no expenses are to be charged to the Office of the Mayor. For more information on the convening please see attached agenda.

In Service,

Shawyn Patterson-Howard, MPA
Mayor

"The Jewel of Westchester"

Cities United Leading the Way Peer Exchange
June 17-19, 2026
Greensboro, NC

Over three days, participants will engage in peer-to-peer learning, share key takeaways from the Leading the Way Tour, and deepen collaboration toward safe, healthy and hopeful communities. The exchange will elevate young Black leaders and community partnerships, spotlight scalable strategies, and support cities in moving to the next phase of their work toward a comprehensive public safety plan.

Agenda- Wednesday June 17, 2026

12:00pm- 1:30pm	**National Partner & Cities United Team Office Hours** • *Cities United welcomes attendees to attend office hours with our national partners and members of our team to build upon existing relationships, create new ones and enhance local support in building comprehensive public safety ecosystems.*
2:00pm- 3:30pm	**Welcome & Leading the Way Tour Reflections** • *The Cities United team shares reflections on the 2025-2026 Leading the Way Tour and learnings from the 19 plus jurisdictional stops (inclusive of a preview of the final report).*
3:30pm-5:00pm	**The Greensboro Story** • *Greensboro's Community Safety Department shares the story of its inception, evolution and future through a panel discussion and dialogue with attendees.*

6:30pm-8:00pm	**Welcome Mixer & Reception** ● *Attendees get an opportunity to network, connect and unwind.*

Agenda- Thursday June 18, 2026

8:30am- 9:15am	**Breakfast**
9:15am-10:15am	**Daily Overview & Learn, Act, Lead Framework Review** ● *Cities United welcomes the group and shares its newly launched Learn, Act, Lead Framework.*
10:15am-11:45am	**Innovation Session #1** ● *The Power & Promise of Young Leaders*
11:45am-1:00pm	**Lunch**
1:00pm-2:45pm	**Innovation Sessions #2 & #3** ● *Maximizing Data to Support Black Men & Boys & Their Families* ● *Creatives: Storytelling as a Tool in Public Safety*
3:00pm-4:45pm	**Reflective Activity & Intentional Engagement** ● *Learn about the CU Team's efforts, take some time to reflect on the learnings of the day, work with your local team to determine key next steps and determine who in the room can support your journey toward safe, healthy & hopeful communities.*
4:45pm-5:00pm	**Closing Remarks**

DRAFT

6:00pm-8:00pm	**Evening Activity** ● *Dinner or other event TBD*

Agenda- Friday June 19, 2026

8:00am-10:00am	**National Partner & Cities United Team Office Hours** ● *Cities United welcomes attendees to attend office hours with our national partners and members of our team to build upon existing relationships, create new ones and enhance local support in building comprehensive public safety ecosystems.*

DRAFT

CITY OF MOUNT VERNON, N.Y.
Mayor Office

SHAWYN PATTERSON-HOWARD
Mayor

City Hall, One Roosevelt Square
Mount Vernon, NY. 10550
(914) 665-2360 – Fax: (914) 665-6173

MALCOLM CLARK
Chief of Staff

KHENDRA K. DAVID
Deputy Chief of Staff

May 6, 2026

City Council
City Hall
1 Roosevelt Square
Mount Vernon, NY 10552

RE: Civil Service Employees Association (CSEA) of the City of Mount Vernon

Dear Honorable City Council Members,

I am submitting this letter to respectfully request that the Mount Vernon City Council enact legislation to ratify and approve the Civil Service Employees Association (CSEA) (the "Union") contract. Below you will find the wage increases that were agreed upon between the City of Mount Vernon (the City) and the Union.

1. Effective January 1, 2024, all bargaining unit members' salaries shall be increased retroactively by one and a half percent (1.5%).
2. Effective January 1, 2025, all bargaining unit members' salaries shall be increased retroactively by one and a half percent (1.5%).
3. Effective January 1, 2026, all bargaining unit members' salaries shall be increased retroactively by two percent (2%).
4. Effective January 1, 2027, all bargaining unit members' salaries shall be increased retroactively by three percent (3%).

The decision was made between the Union and the City regarding other provisions in the attached agreement to address the outdated contract.

We thank the City Council for your support in addressing need in the city. I am available to address any questions or concerns you have regarding this request.

In Service,

Shawyn Patterson-Howard, MPA
Mayor, City of Mount Vernon

Memorandum of Agreement
TENTATIVE AGREEMENT
CSEA, Local 1000 AFSCME, AFL-CIO, City of Mount Vernon Unit #9166, Westchester County Local 860; and the
City of Mount Vernon

WHEREAS, the CSEA, Local 1000 AFSCME, AFL-CIO, City of Mount Vernon Unit #9166, Westchester County Local 860 ("Union"); and the City of Mount Vernon ("Employer", having engaged in good faith collective bargaining regarding a successor Collective Bargaining Agreement (CBA) to the CBA expiring December 31, 2023; and

WHEREAS, the Union and Employer having reached Tentative Agreement this date, April 7, 2026, subject to required internal approval processes by both parties, upon terms for a successor CBA for the period from January 1, 2024 through December 31, 2027; and

WHEREAS, the Union and Employer seek to memorialize the tentatively agreed upon terms as set forth below, subject to various internal final approval processes; and

WHEREAS, any final agreement is subject to ratification by both parties, and both parties reserve the right to request edits and changes to this "Tentative Agreement" as may be necessary to reflect the agreed upon terms; and

Now, be it resolved that the parties have tentatively agreed to the following additions, changes and amendments to the CBA, same to be incorporated into a successor Collective Bargaining Agreement upon final approval and ratification by both Parties:

ARTICLE 2 (F) Modify as follows:
DUES, AGENCY SHOP, AND OTHER DEDUCTIONS

~~F. Agency Shop. All employees included in the bargaining unit, who are not members of the Union, shall be required to pay to the Union an Agency Shop Fee, as provided by the Civil Service Law, which is an amount equivalent to the amount of dues payable by a member of the Union. The employer will make deductions from the wages of said employees and transmit them in the same manner as specified in Section B above, as an Agency Shop Fee deduction.~~

ARTICLE 3 – (Section 1 C 2; Section 5, Section 9 G Modify as follows:
VACATIONS, SICK LEAVE, LEAVE OF ABSENCE

C. 2. ~~Emergency Service Dispatchers~~ **Communications Specialist** who work a schedule assigned by the Police Commissioner or his/her designee, ~~or Fire Commissioner or his/her designee,~~ receiving a fixed annual salary and whose normal workweek includes:

Section 5. Scheduling of ~~Emergency Service Dispatcher~~ Communications Specialist Vacations:

Sections 3 and 4 of this Article shall not apply to ~~Emergency Service Dispatchers~~ **Communication Specialist.** Vacations for such employees shall be scheduled in accordance with Police or Fire Department policy (whichever he/she is assigned). Vacation shall be chosen on the basis of seniority in the Police Department within the group consisting of ~~Emergency Service Dispatchers~~ **Communication Specialist**; or, in the Fire Department, within the group consisting of Dispatcher Lineman and Emergency Service Dispatchers.

Section 9. G. Full-time members of the unit who have worked an entire calendar year shall be eligible for cash payments based on utilization of sick leave according to the following:

0 days used - ~~$500.00~~ **$650.00**

1 day used - ~~$400.00~~ **$500**

2 days used - ~~$300.00~~ **$400**

3 days used - ~~$200.00~~ **$300**

Employees scheduled to work less than full-time, i.e. 40 hours or 35 hours per week as applicable but more than 25 hours per week, shall receive a pro-rated amount.

School Crossing Guards who have worked an entire calendar year shall be eligible for cash payment based upon utilization of sick leave according to the following:

0 days used - ~~$150.00~~ **$200.00**

1 day used - ~~$120.00~~ **$140.00**

2 days used - $90.00

3 days used - $60.00

Section 12. Sick Leave Absences:

A. An employee, other than an ~~Emergency Service Dispatcher~~ **Communications Specialist**, who fails to report for duty due to personal illness or injury may be required to submit a written report from his/her physician, which shall include a statement of the nature of the illness and a statement as to whether or not the employee was sufficiently ill to justify absence. Such written report shall not be unreasonably requested.

In the event of failure to submit proof of illness within 48 hours of the request of the department head, such absences shall be considered as unauthorized leave and the employee shall not be paid for such absence and such absence shall not be charged against accumulated sick leave credits.

B. Sick leave for ~~Emergency Service Dispatchers~~ **Communication Specialist** shall be governed by the regulations of the Police or Fire Department (whichever the employee assigned).

Section 21. Maternity Leave:

A pregnant employee, upon filing appropriate medical evidence that she is unable to perform the duties of her position due to this pregnancy, shall be permitted to use any annual leave, personal leave, and sick leave for the period of her disability. Should the employee elect to use annual, personal, and sick leave for the period of disability, any disability payments that are the result of a City paid / provided disability policy (if any) received by the employee for the period of time during which she is receiving annual, personal, and sick leave shall be paid over to the City. If disability payments are the result of a policy paid for by the employee, then the City shall not be entitled to any payments or offset.

Upon her request to the City, the employee may be granted a maternity leave of absence, without pay, for a maximum period of six (6) months. Such leave may be extended upon recommendation of the department head, up to a maximum of one (1) year. Said leave of absence, without pay, shall be in addition to the above leave with pay benefits.

Section 28. Holidays:

B. ~~Emergency Service Dispatchers~~ **Communication Specialist** shall be paid in cash for twelve (12) paid holidays, whether worked or not. This payment shall be in lieu of time off for the holidays provided in the contract. Six (6) holidays shall be paid in the first pay period in July, and six (6) holidays shall be paid in the first pay period of December. Holiday pay shall be made in separate checks. Compensation for each of said holidays shall be made at the rate of one-tenth ($1/10^{th}$) of the biweekly salary of the employee. In order to be entitled to such paid holidays, the employee shall have held the position during the entire preceding six (6) month period and shall be so employed at the end thereof.

C. School Crossing Guards shall be paid for Thanksgiving Day as a holiday, based upon the number of hours he/she is normally assigned to work each day.

ARTICLE 7 Section E – Modify as follows:

WORKWEEK, WORKDAY, OVERTIME:

E. Subsections A, B, and C shall not apply to ~~Emergency Service Dispatchers~~ **Communication Specialist.** The normal work schedule for Emergency Service Dispatchers shall be as assigned by the Commissioner of the Police or **Fire Department**, or his/her designee, **(whichever Department the employee is assigned).** Emergency Service Dispatchers shall be compensated at the rate of time and one-half (1-1/2) for time the employee is assigned to work by the Supervisor prior to or following his/her normal work hours. Said overtime shall be paid in cash at the rate of one and one-half (1-1/2) the employee's normal hourly rate.

Overtime shall be paid when an ~~Emergency Service Dispatcher~~ **Communication Specialist** has accumulated one (1) hour or more of overtime, or fifteen (15) days following the close of the fiscal year for those who have accumulated less than one (1) hour in the prior fiscal year, whichever occurs first. Overtime involving less than one (1) hour in an entire year shall not be compensated for in any manner.

ARTICLE 9 Section 1, Section 2, Section 3, Section 4, Section 5, Section 6, Section 9 – Modify as follows:

WAGES AND SALARY SCHEDULE

Union Proposal

Section 1:

A. Effective January 1, ~~2020~~ **2024**, each step of the salary schedule in effect shall reflect a one and one half **percent (1.5%)** increase and any employee due an increment shall advance accordingly.

B. Effective January 1, ~~2021~~ **2025**, each step of the salary schedule in effect shall reflect a one and one half **percent (1.5%)** increase and any employee due an increment shall advance accordingly.

C. Effective January 1, ~~2022~~ **2026**, each step of the salary schedule in effect shall reflect a two **percent (2.0%)** increase, and any employee due an increment shall advance accordingly.

D. Effective January 1, ~~2023~~ **2027**, each step of the salary schedule in effect shall reflect a three **percent (3.0%)** increase, and any employee due an increment shall advance accordingly.

Section 2 – School Crossing Guards+

A. Effective January 1, ~~2020~~ **2024**, each step of the salary schedule in effect shall reflect a one and one half **percent (1.5%)** increase and any employee due an increment shall advance accordingly.

B. Effective January 1, ~~2021~~ **2025**, each step of the salary schedule in effect shall reflect a one and one half **percent (1.5%)** increase and any employee due an increment shall advance accordingly.

C. Effective January 1, ~~2022~~ **2026**, each step of the salary schedule in effect shall reflect a two **percent (2.0%)** increase, and any employee due an increment shall advance accordingly.

D. Effective January 1, ~~2023~~ **2027**, each step of the salary schedule in effect shall reflect a three **percent (3.0%)** increase, and any employee due an increment shall advance accordingly.

Section 4 – Clothing Allowance:

A. An annual clothing allowance of ~~$750.00~~ **$850.00** shall be paid to employees in the following titles:

Animal Warden

Assistant Animal Warden

Fire Mechanic

Garage Superintendent

Ordinance Officer

Parking Enforcement Officers

Parks Supervisor

Public Works Supervisor

Assistant Public Works Supervisor

Sanitation Foreman

~~Time Keeper~~

Code Enforcer

ARTICLE 21 – Modify as follows:

DURATION

This Agreement shall be in effect for a term of four (4) years, commencing January 1, ~~2018~~ **2024**, and terminating on December 31, ~~2023~~ **2027.**

CSEA, LOCAL 1000 AFSCME, AFL-CIO,	City of Mount Vernon
City of Mount Vernon Unit #9166	
Westchester County Local 860	
By: Kimberly Morales	By:_____
Dated April 8, 2026	Dated: April ____, 2026

CITY OF MOUNT VERNON, N.Y.
Mayor Office

SHAWYN PATTERSON-HOWARD, MPA
Mayor

City Hall, One Roosevelt Square
Mount Vernon. NY. 10550
(914) 665-2362 – Fax: (914) 665-6173

MALCOLM CLARK
Chief of Staff
KHENDRA DAVID
Deputy Chief of Staff

April 24, 2026

The Honorable City Council
City of Mount Vernon
City Hall
1 Roosevelt Square
Mount Vernon, New York 10550

Re: Office Relocation and Renovation Plan – Department of Recreation and Department of Buildings

To the Honorable City Council,

This letter comes as a formal request for the proposed office relocation, space optimization, and renovation plan involving the Department of Recreation and the Department of Buildings, in partnership with the Department of Public Works and Management Services.

Over the past several years, there have been discussions about the capacity to handle day to day operations within the building department space. At its current rate, the department has outgrown its current office and requires additional space to ensure effective and safe daily operations. As it stands, the building department is overcrowded and creating a myriad of problems that have been documented by both the public and departmental staff.

This initiative is rooted in our continued efforts to modernize municipal operations, improve service delivery, and better align departmental functions with the needs of our residents. After careful evaluation of current space utilization and operational demands, it has become clear that the reconfiguration of these departments presents an opportunity to enhance both efficiency and public access.

The proposed plan includes the relocation of the Department of Recreation to the building department's current location. In parallel, the Department of Buildings would be relocated to the ground floor of City Hall, positioning it closer to the primary public entrance and internal security post to enhance accessibility, safety, and overall customer experience.

The Department of Public Works and Management Services will support the coordination and execution of this transition and has helped to bring a significant amount of work in-house to lower the overall cost of this relocation. This alignment has been beneficial to ensuring a smooth and efficient exchange of spaces.

Based on conversations the **Department of Public Works, Maintenance of City Hall and Court, Outside Contracting** will be utilized to fund this project.

From Account	Amount
A1620.405 – Department of Public Works, Maintenance of City Hall and Court (Outside Contracting)	$34,800.00

CITY OF MOUNT VERNON, N.Y.
Mayor Office

SHAWYN PATTERSON-HOWARD, MPA
Mayor

City Hall, One Roosevelt Square
Mount Vernon. NY. 10550
(914) 665-2362 – Fax: (914) 665-6173

MALCOLM CLARK
Chief of Staff
KHENDRA DAVID
Deputy Chief of Staff

Additionally, this work considers targeted renovations to ensure that each space is functional, compliant, and reflective of the City's commitment to professionalism and service excellence. **During this transition, the Department of Recreation will operate out of the Doles Center.**

These improvements would support a more welcoming and efficient experience for residents, contractors, and stakeholders interacting with City services. **For your review and reference, please find attached the following supporting documents:**

- Proposed Office Layout
- Estimated Office Move Proposal (Exhibit A & B)
- Office Scope of Work and Schedule

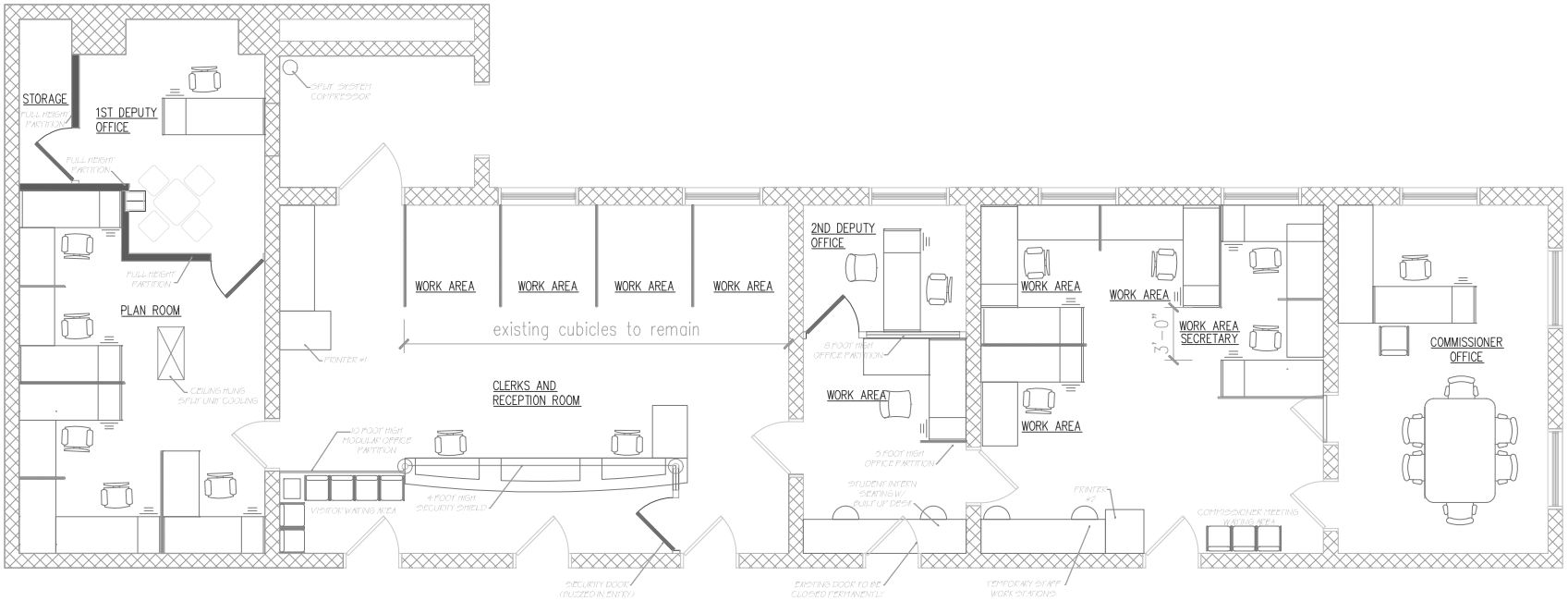
This proposal is not simply a physical relocation, but a strategic alignment of resources aimed at strengthening interdepartmental collaboration, increasing operational capacity, and enhancing the overall quality of service delivery across key functions. We respectfully request the Council's review and support to advance feasibility assessments, space planning, and any necessary approvals associated with this initiative.

Thank you for your continued partnership and commitment to the advancement of the City of Mount Vernon. Should you have any question or require further information, please do not hesitate to contact us.

In Service,

Shawyn Patterson-Howard, Mayor
City of Mount Vernon, NY

Attachment:
Proposed Office Layout
Estimated Office Move Proposal (Exhibit A & B)
Office Scope of Work and Schedule



PROPOSED LAYOUT DOB

CITY OF MOUNT VERNON, NY
DEPARTMENT OF BUILDINGS

SHAWYN PATTERSON-HOWARD
MAYOR

City Hall – One Roosevelt Square
Mount Vernon, NY 10550
Phone: (914) 665-2483, Fax ((14) 465-2988
Email: DOB@cmvny.com

Website: WWW.CMVNY.com

PATRICK G. HOLDER R.A.
COMMISSIONER

HEDIYE MAMAK
1st Deputy Commissioner

DAWM ASBURY
2nd Deputy Commissioner

Memorandum

Subject: DOB Office Move updated Estimates 2026:
We were able to reduce the estimates for Phase I and II by removing items that we will need assistance from DPW & Management Services including the following Scope: Painting; Mechanical; Electrical…SEE Phase III

Phase I: Total 34,800.00

- Build Out: -SEE ATTACHED ESTIMATE/PROPOSAL – **Exhibit A**

Scope of Work includes:

- New Framing of Reception Station
- New Framing of new electronic entrance door
- New framing of back office including 36x80 office door
- Intercom System one 18/4 wire to 3 locations and intercom system with lock and buzzer
- 18 feet data rack, 3 cat 6 patch panel, cat 6 cable, 50 cat 6 jacks and 25 2 port face plate.
- Doot (Provide 1- 48"x 80" Glass entrance door magnetic lock and buzzer
- Clean work site and remove all construction related debris

Phase II: Total 34,700.00

Workspace Cubicles:

Scope of Work includes:

- SEE ATTACHED ESTIMATE/PROPOSAL – **Exhibit B (3 Bids)**

Phase III: Total 15,000.00 (by DPW & IT)

Mechanical/Data/Electrical etc…

Scope of Work includes:

SHAWYN PATTERSON-HOWARD
MAYOR

City Hall – One Roosevelt Square
Mount Vernon, NY 10550
Phone: (914) 665-2483, Fax ((14) 465-2988
Email: DOB@cmvny.com

Website: WWW.CMVNY.com

PATRICK G. HOLDER R.A.
COMMISSIONER

HEDIYE MAMAK
1st Deputy Commissioner

DAWM ASBURY
2nd Deputy Commissioner

- Mechanical- Installation of new Fujitsu ductless split unit, 36000 BTU with 3 interior heads and remotes control.
- Provide all electrical wiring, cooling lines
- Painting entire Office (DPW)

Phase IV: Total 10,000.00

Office Furniture:

Scope of Work includes:

- (2) 50" TV monitors for Office (1 at Receptionist area and one in Commissioners office). We will relocate the two currently in the 2nd floor hallway and bring them down to the ground floor hallway
- (2) printers to supplement the one we currently have. One is to be located in the Code Enforcement space which will remain on the 2nd floor where it currently is.
- Additional security cameras to supplement our 2 existing security cameras which we will relocate from the old office to the new office. for temporary file storage room (Veterans office)
- 16 File Cabinets – to replace green cabinets in front office and document coordinators
- Office Supply closest
- Office Blinds
- Bulletin Boards
- Refrigerator
- Coffee Brewer
- Water cooler
- Microwave
- Office clocks
- Plan room – wall hung plan racks 2 more to add to those we already have

Schedule (aggressive 1 Month schedule) (DOB Office closed for 1 week- June 9th reopen June 16th). Schedule is based on a May 13th Council Approval:

- Starting w/ Approval from Council and Board (May 13th)
- Phase I mobilization (May 27th)
- Phase I completion (June 3rd)
- Phase III painting (June 3rd thru June 8th) (extends over weekend if necessary)

CITY OF MOUNT VERNON, NY
DEPARTMENT OF BUILDINGS

SHAWYN PATTERSON-HOWARD
MAYOR

City Hall – One Roosevelt Square
Mount Vernon, NY 10550
Phone: (914) 665-2483, Fax ((14) 465-2988
Email: DOB@cmvny.com

Website: WWW.CMVNY.com

PATRICK G. HOLDER R.A.
COMMISSIONER

HEDIYE MAMAK
1st Deputy Commissioner

DAWM ASBURY
2nd Deputy Commissioner

- Phase II Workspace Cubicles mobilization (June 8th) _start work from Commissioners Office towards Plan Rm. (vendor requires 2-3 days)
    - Potentially move all Commissioners and Clerks (Clerks Only) down (June 11th – 15th) Packing existing office (June 11th - 15th)
    - Potentially Open to public (Tues. June 16th)
- Phase III Mechanical and Electrical commence (June 1st)
- Phase II Workspace Cubicles continues Plan Rm. complete (June 8th – 10th)
- Move all DOB files down between June 9th -June 12th)
    - Move remaining Rm 210 staff down by (June 15th)

Respectfully,
Commissioner Holder

EXHIBIT A

WEBB DEVELOPMENT SERVICES CORPORATION

Construction Contract Agreement

Renovation of Recreation Department to Department of Buildings
City of Mount Vernon

Contractor: Webb Development Services Corporation
Address: 34 East 1st Street, 2nd Floor, Mount Vernon, NY 10550
Phone: 914-371-7372 | Mobile: 914-473-5924 | Fax: 914-371-7376

1. PARTIES TO THE AGREEMENT

This Time and Materials Agreement is made between the Contracting Party, hereinafter referred to as the “Owner” or “Property Owner,” and Webb Development Services Corporation, hereinafter referred to as the “Contractor” or “General Contractor.”

2. PROJECT LOCATION

City of Mount Vernon – Department of Buildings

1 Roosevelt Square

Mount Vernon, New York 10550

3. DESCRIPTION OF WORK

The Contractor agrees to provide all necessary labor, equipment, supervision, and materials required to complete the renovation project in accordance with the attached drawings, project details, and specifications.

4. COMMENCEMENT OF WORK

Work shall begin within thirty (30) days after the Contractor receives all necessary permits issued by the City of Mount Vernon Department of Buildings.

5. SCOPE OF WORK

- Renovation of recreation department space to convert to Department of Buildings office
- New framing of reception station
- New framing for electronic entrance door
- Framing of back office including installation of 36" x 80" office door
- Supply and install one (1) 48" x 80" glass entrance door with magnetic lock and buzzer
- Patch and repaint work areas
- Final cleanup and removal of construction debris

6. CONTRACT PRICE

Total Contract Price: $34,800.00 (Thirty Four Thousand Eight Hundred Dollars)

Estimated completion time: One (1) month after commencement of work.

7. PAYMENT TERMS

Payment schedule shall be mutually agreed upon by both Owner and Contractor.

Failure to make payments when due may result in suspension of work until payment arrangements have been satisfied.

8. CHANGE ORDERS

Any changes to the scope of work must be requested in writing and approved by both parties.

Changes may result in additional charges and adjustments to the project timeline.

9. FORCE MAJEURE

The Contractor shall not be held responsible for delays caused by circumstances beyond its control including but not limited to acts of God, fire, storms, labor shortages, material shortages, supplier failures, government actions, epidemics, riots, or war.

10. QUALITY OF WORK

All work shall be performed in a professional and workmanlike manner in accordance with industry standards and all applicable building codes and regulations.

11. INSURANCE

The Contractor shall maintain the following insurance coverage:

- Public Liability Insurance – minimum coverage $500,000
- Workers' Compensation Insurance as required by law

12. WARRANTY

The Contractor guarantees workmanship for a period of one (1) year from the date of project completion. Manufacturer warranties for materials shall apply where applicable.

13. DISPUTE RESOLUTION

Any disputes arising from this agreement shall be resolved through arbitration administered by the American Arbitration Association.

14. ENTIRE AGREEMENT

This document represents the entire agreement between the Owner and Contractor and supersedes any prior oral or written agreements.

SIGNATURES

Owner Name: _____

Owner Signature: _____ Date: _____

Contractor Name: Alonzo Webb

Contractor Signature: _____ Date: _____

EXHIBIT B

INNOV8 OFFICE FURNITURE
DEFINE YOUR SPACE

"Clarion Office Supply Inc."
101 E. Main Street, Little Falls NJ 07424
Telephone: 201 250-4994

Windy Long-Fong
1 Roosevelt Square North, Mount Vernon 10550, NY, US

Email wlong-fong@mountvernonny.gov
Phone 917 488-3613

Invoice #RE28485

9 Mar 2026 3:11pm | Innov8 Office Furniture
Served by: Raymond Estay
Register: Raymond Estay

1	**Office Star Products**	@ $2,245.00	**$2,245.00**
	Note: 1st Deputy Office: 1-Clifton Series 30d x 72"w double pedestal desk BFL-BFL w/ open modesty ($695.00) 1-42" round meeting table w/ matching X-base ($350.00) w/ 4 sled base client chairs W/O arms ($400.00) 1-48w x 85"h full fabric wall partition w/ wall start anchor bracket ($800.00) Finishes: TBD		
1	**Office Star Products**	@ $8,625.00	**$8,625.00**
	Note: Plan Room: 5-Clifton Series 30d x 72"w lshape desk w/ 24d x 42"w return w/ BFL-BFL ($875.00 each = $4,375.00) Wall dividers: 4-36w x 85"h full fabric wall partition w/ wall start anchor bracket + 2-2 way connectors ($2,000.00) 1-48w x 85"h full fabric wall partition w/ wall start anchor bracket ($800.00) for in-between desk: 2-30w x 53"h full fabric panel divider ($450.00) 4-36w x 53"h full fabric panel divider ($1000.00) Finishes: TBD		
1	**Office Star Products**	@ $6,600.00	**$6,600.00**
	Note: Main Work Area: 2-48w x 85"h full fabric wall partition w/ wall start anchor bracket ($800.00 each = $1,600.00) 1-Modena Series Custom bow top reception Lshape desk made in 2pcs 36d x 120w x 43"h main w/ 24d x 48"w left hand return w/ BBFL pedestal + 2-BBFL mobile pedestals ($3,500.00) 6-WD Series sidearm client guest chair 24w x 30d w/ wood frame + fabric back & seat ($250.00 each = $1,500.00) Finishes: TBD		
1	**Office Star Products**	@ $3,370.00	**$3,370.00**

Note: 2nd Deputy Office/Work Area:
1-Clifton Series 30d x 72"w double pedestal desk BFL-BFL w/ open modesty ($695.00)

1-Clifton Series 30d x 72"w lshape desk w/ 24d x 42"w return w/ BFL-BFL ($875.00)

2-Intern parsons training table 24d x 54"w ($450.00 each -$900.00)

3-36w x 67"h full fabric wall partition w/ wall start anchor bracket ($900.00)

Finishes: TBD

1	**Office Star Products**	@ $7,220.00	**$7,220.00**

Note: Back Work Area / Secretary:
5-Clifton Series 30d x 72"w lshape desk w/ 24d x 42"w return w/ BFL-BFL ($875.00 each = $4,375.00)

for in-between desk:
2-30w x 53"h full fabric panel divider ($450.00)
2-36w x 53"h full fabric panel divider ($500.00)

Secretary:
1-Clifton Series 30d x 72"w double pedestal desk BFL-BFL w/ open modesty ($695.00)

1-Intern parsons training table 24d x 72"w ($450.00)

Commissioner meeting waiting area:
3-WD Series sidearm client guest chair 24w x 30d w/ wood frame + fabric back & seat ($250.00 each = $750.00)

Finishes: TBD

1	**Office Star Products**	@ $4,245.00	**$4,245.00**

Note: Commissioner Office:
1-Tuxedo Designer Series Executive Lshape desk 36d x 72"w main w/ 24d x 48"w Right return (overall of 6'x7') w/ frosted glass modesty w/ power grommet ($2,400.00)

1-WD Series sidearm client guest chair 24w x 30d w/ wood frame + fabric back & seat ($250.00)

1-Tuxedo Designer Series rectangular conference table 48d x 96"w (4'x8') w/ matching pedestal base + dual power grommet -TO SIT 6 ($1,595.00)

Finish: TBD

31	**Office Star Products**	@ $150.00	**$4,650.00**

Note: Office Chair for entire floor plan:
Proline II midback ergonomic swivel managers chair w/ mesh back + cushioned fabric seat w/ adjustable arms & back w/ tilt lock

Finish: Black

1	**Full Delivery & Installation (NORMAL BUSINESS HOURS)**	@ $2,500.00	**$2,500.00**

Note: 3rd Draft Proposal (UPDATED 3/9/26)
Waiting on final confirmation

Contact Windy 917 488-3613 OR Patrick Holder

Subtotal	$39,455.00
Additional Discount	-$4,755.00
TOTAL 38 items	**$34,700.00**
TOTAL SAVINGS	$4,755.00
C.O.D	**$34,700.00**

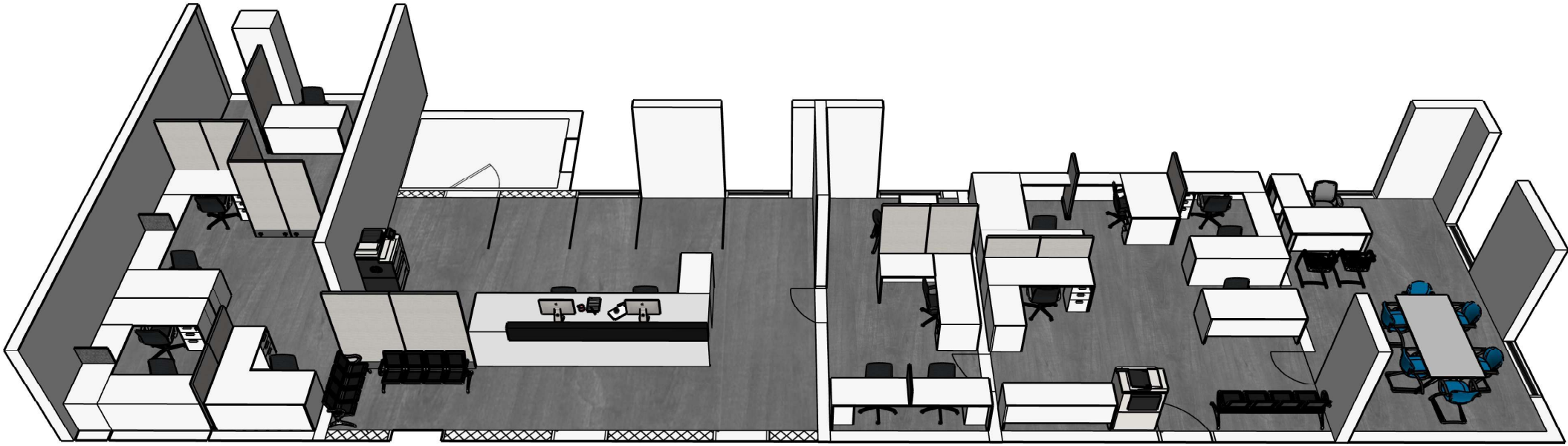
Terms: ALL ORDERS ARE C.O.D UNLESS OTHERWISE SPECIFIED

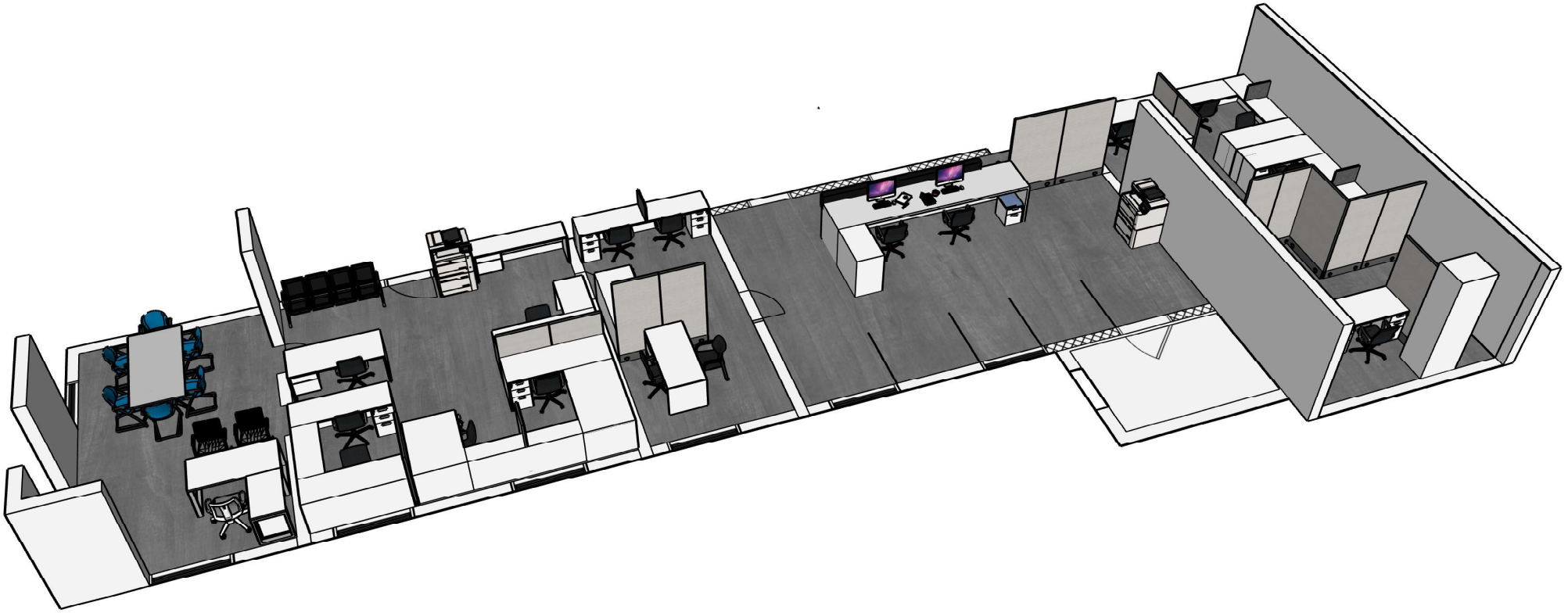
PLEASE READ CAREFULLY:

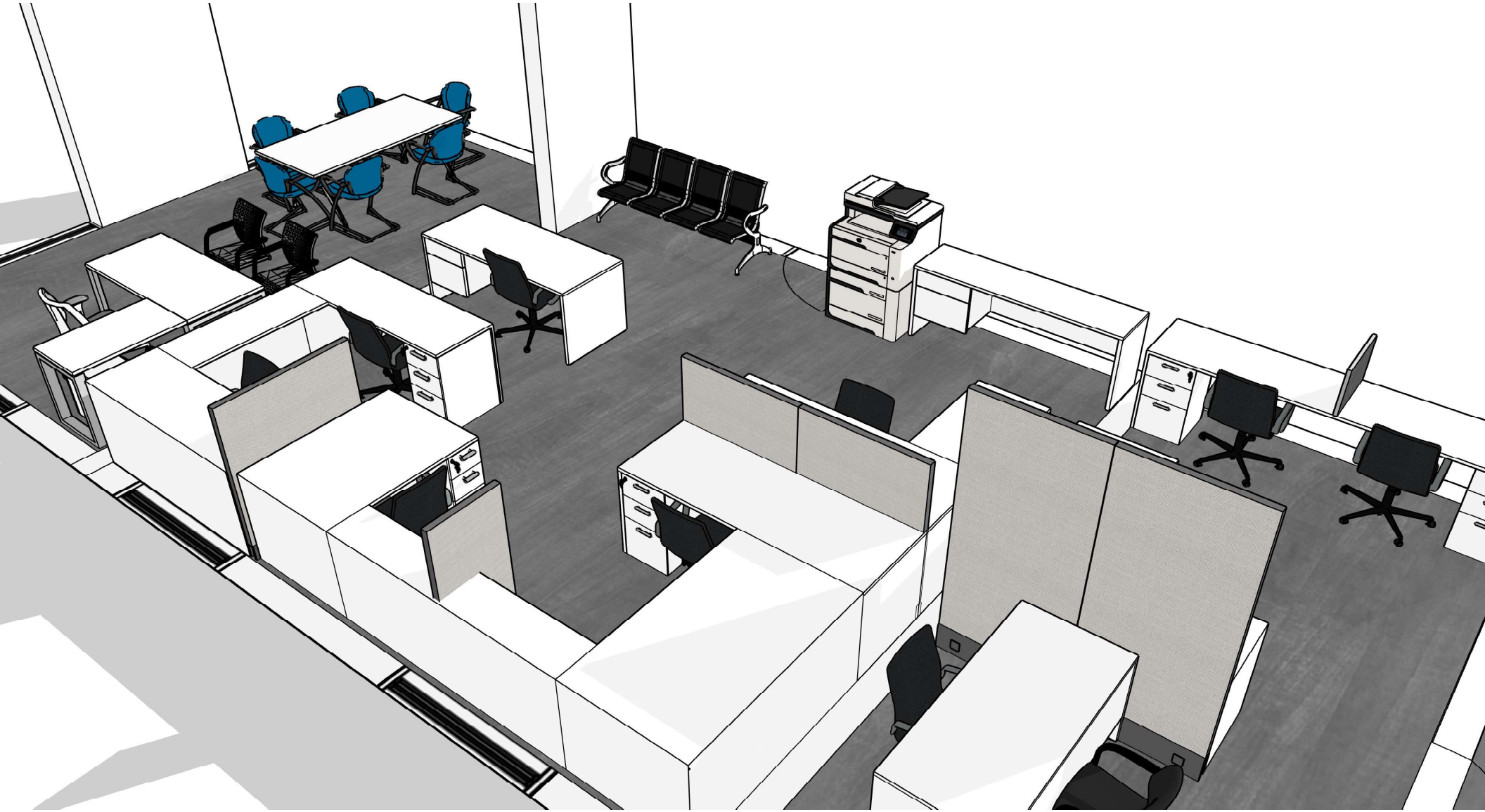
I, The Purchaser agrees that ALL MERCHANDISE TRANSACTED, Remains the SOLE PROPERTY OF INNOV8 & CLARION OFFICE FURNITURE until FULLY PAID FOR, I The Purchaser also understand that ALL CUSTOM ORDERS are made to my SPECIFICATIONS & are NOT RETURNABLE. NOTE* There is a 30% RESTOCKING FEE ON NEW ORDERED ITEMS.

GIVE US A REVIEW ON GOOGLE OR YELP AND RECEIVE 10% OFF YOUR NEXT PURCHASE

Like saving money? Receive a discount on your project for any references you send our way that turn into orders!







File #: TMP -1987 **Agenda Date:** 3/11/2026 **Agenda #:** 7.

City Council:

AN ORDINANCE AUTHORIZING THE DEPARTMENT OF RECREATION TO CO-SPONSOR THE YUSUF SHAH ISLAMIC CENTER JUNETEENTH HEALTH FAIR AT HARTLEY PARK

Whereas, in correspondence dated February 13, 2026, the Deputy Commissioner of the Department of Recreation formally requested authorization to co-sponsor the Yusuf Shah Islamic Center Juneteenth Health Fair to be held at Hartley Park on Saturday, June 6, 2026, and annually thereafter on the first Saturday in June, subject to compliance with all applicable laws, rules, permits, and regulations of the City of Mount Vernon; and

Whereas, the Yusuf Shah Islamic Center has requested that the City of Mount Vernon authorize the Department of Recreation to co-sponsor the "Juneteenth Health Fair" to be held at Hartley Park on Saturday, June 6, 2026, and annually thereafter on the first Saturday in June; and

Whereas, the Yusuf Shah Islamic Center's mission is to promote a stronger sense of community, educate the public regarding Islam, its teachings, ideology, philosophy, and culture, and foster civic responsibility among members and non-members alike; and

Whereas, the proposed Juneteenth Health Fair is intended to provide community engagement, health awareness resources, educational opportunities, and family-oriented activities for residents of the City of Mount Vernon; and

Whereas, the Yusuf Shah Islamic Center has requested authorization for the use of Hartley Park from 8:00 a.m. through 8:00 p.m., including designated periods for event setup, event operations, and cleanup; and

Whereas, the Yusuf Shah Islamic Center has further requested the presence of Auxiliary Police Officers to assist with public safety during the event; and

Whereas, vendor spaces will be made available to local food and craft merchants, and all vendors shall be required to obtain any necessary one-day vendor permits and comply with all applicable City regulations; and

Whereas, all vendors utilizing propane, grills, or open flames shall obtain pre-inspections from the Mount Vernon Fire Department prior to operation; and

Whereas, all cleanup activities associated with the event shall be jointly conducted by the Yusuf Shah Islamic Center and the Department of Recreation; and

Whereas, the City Council finds that sponsoring community-based cultural and health-related events serves a valid public purpose and promotes the general welfare of the residents of the City of

Mount Vernon.

NOW, THEREFORE, BE IT ORDAINED by the City Council of the City of Mount Vernon as follows:

Section 1. Authorization of Co-Sponsorship. The Department of Recreation is hereby authorized to co-sponsor the Yusuf Shah Islamic Center Juneteenth Health Fair to be held at Hartley Park on Saturday, June 6, 2026, and annually thereafter on the first Saturday in June, subject to compliance with all applicable laws, rules, permits, and regulations of the City of Mount Vernon.

Section 2. Use of Hartley Park. Authorization is hereby granted for the use of Hartley Park from 8:00 a.m. through 8:00 p.m. on the date of the event, including:

1. Setup activities from 8:00 a.m. to 12:00 p.m.;
2. Event operations from 12:00 p.m. to 7:00 p.m.; and
3. Cleanup activities from 7:00 p.m. to 8:00 p.m.

The use of the park shall be provided as part of the City's co-sponsorship at no cost to the Yusuf Shah Islamic Center.

Section 3. Public Safety Support. The City hereby authorizes the presence of Auxiliary Police Officers during the event, subject to scheduling and operational approval by the appropriate City departments.

Section 4. Vendor Requirements. All vendors participating in the event shall be required to:

1. Submit a completed one-day vendor permit application;
2. Comply with all City licensing and permitting requirements; and
3. Obtain any required approvals from the Mount Vernon Fire Department for the use of propane, grills, or any open-flame equipment.

No vendor shall operate without the required approvals and inspections.

Section 5. Cleanup Responsibilities. The Yusuf Shah Islamic Center and the Department of Recreation shall be jointly responsible for ensuring that Hartley Park is properly cleaned and restored following the event.

Section 6. Severability. If any clause, sentence, paragraph, section, or part of this Ordinance shall be adjudged by any court of competent jurisdiction to be invalid, such judgment shall not affect, impair, or invalidate the remainder thereof, but shall be confined in its operation to the clause, sentence, paragraph, section, or part thereof directly involved in the controversy in which such judgment shall have been rendered

Section 8. Effective Date. This Ordinance shall take effect immediately upon adoption by the City Council.

CITY OF MOUNT VERNON, NY
DEPARTMENT OF RECREATION

SHAWYN PATTERSON-HOWARD
Mayor

City Hall, One Roosevelt Square
Mount Vernon, NY 10550
(914) 665-2420 – Fax: (914) 665-2421

KATHLEEN WALKER-PINCKNEY
Commissioner
ANDRÉ G. EARLY
Deputy Commissioner

February 13, 2026

Honorable Members of the City Council
Through the Office of the Mayor
1 Roosevelt Square
Mount Vernon, New York 10550

Re: Yusuf Shah Islamic Center – Juneteenth Health Fair – Hartley Park

Dear Honorable Council Members:

This letter requests that the city enact legislation allowing the Department of Recreation to co-sponsor the Yusuf Shah Islamic Center – Juneteenth Health Fair on Saturday, June 6, 2026, and the 1st Saturday in the month of June, annually.

The Yusuf Shah Islamic Center's mission is to achieve a unified front that would promote a better sense of community, enlighten the American public opinion with the true knowledge about Islam, its teachings, ideology, philosophy and culture, and instill a sense of responsibility among both members and non-members.

The Juneteenth Health Fair will take place in Hartley Park and the Yusuf Shah Islamic Center respectfully requests the following partnership provisions from the City:

- Authorization to utilize Hartley Park; the cost of the park is the co-sponsorship with the Department of Recreation from 8:00 a.m. to 8:00 p.m. (8 am-12 noon to Set-up), 12 noon-7:00 pm (Event time), 7:00 pm-8:00pm (Clean-up) - This event will be at no cost to the city;
- We request the presence of Auxiliary Officers.

Vendor spaces will be made available to local food and craft merchants on a predetermined basis. All Vendors must submit a one-day vendor permit application, which will be included in the Yusuf Shah Islamic Center's vendor package. In addition, all vendors using propane, grills, or fire of any nature will be required to have a pre-inspection from the MVFD.

All clean up will be done by Yusuf Shah and the Recreation Department. Thank you in advance for your cooperation and consideration in this matter.

Sincerely,

André G. Early, Deputy Commissioner

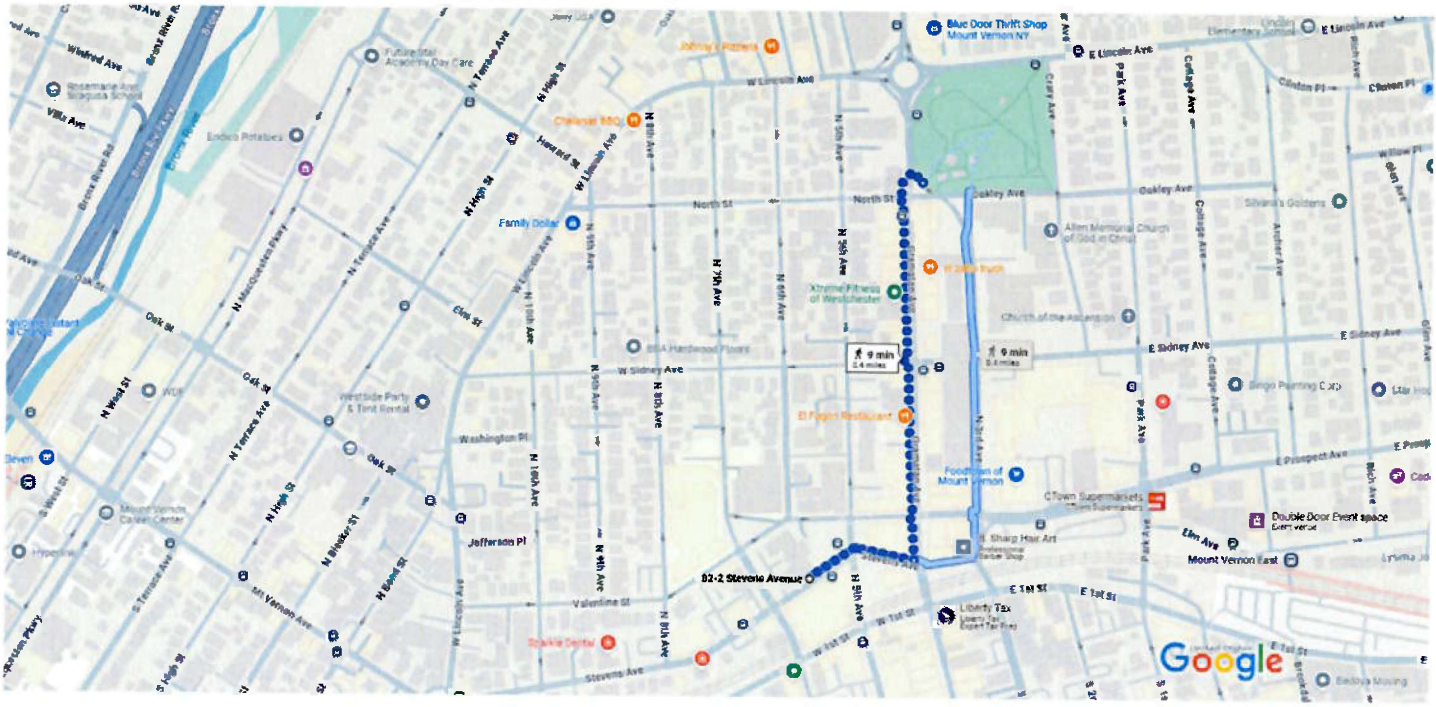
cc: Kathleen Walker-Pinckney, Commissioner
Shawyn Patterson-Howard, Mayor

Google Maps

82-2 Stevens Ave, Mt Vernon, NY 10550 to Hartley Park, 144 N 5th Ave, Hartley Ave, Mt Vernon, NY 10550

Walk 0.4 mile, 9 min

Juneteenth Walk



Map data ©2025 Google 200 ft

⚠ Use caution–walking directions may not always reflect real-world conditions

82-2 Stevens Ave
Mt Vernon, NY 10550

1. Head northeast on Stevens Ave toward S 5th Ave

463 ft

2. Turn left onto Gramatan Ave

0.3 mi

3. Sharp right

66 ft

4. Turn left

13 ft

Hartley Park
144 N 5th Ave, Hartley Ave, Mt Vernon, NY 10550

City of Mount Vernon, NY

April 30, 2026

Fire Department Approval

Record No.**EFR-26-5**

Status Completed

Type Approval

Assignee Teddy Beale

Became Active March 19, 2026

Due Date None

Record No: EFR-26-5

Event Facility Request Form - Current

Status: Active

Submitted On: 2/9/2026

Primary Location

No location

Owner

No owner information

Applicant

Yusuf Shah Islamic Center Shah
347-463-0457
efidai@yahoo.com
10 South 2nd Ave. 3rd Floor
Mt. Vernon, New York 10550

Messages

Teddy Beale March 19, 2026 at 9:53 am

FDMV has no objections

City of Mount Vernon, NY

May 5, 2026

OEM Approval

Record No.**EFR-26-5**

Status Completed

Type Approval

Assignee Michael Montes

Became Active March 19, 2026

Due Date None

Record No: EFR-26-5

Event Facility Request Form - Current

Status: Active

Submitted On: 2/9/2026

Primary Location

No location

Owner

No owner information

Applicant

Yusuf Shah Islamic Center Shah

[redacted]

10 South 2nd Ave. 3rd Floor
Mt. Vernon, New York 10550

Messages

Michael Montes April 16, 2026 at 2:36 pm

The Office of Emergency Management (OEM) has no objection to the proposed event taking place.

All public safety protocols must be strictly adhered to and remain in full compliance with all applicable city ordinances, as well as local and New York State laws and regulations.

Please ensure all necessary safety measures, permits, and operational guidelines are followed accordingly.

Michael Montes May 4, 2026 at 12:27 pm

The Office of Emergency Management Auxiliary Police Unit will present to provide public safety assistance during this event.

CITY OF MOUNT VERNON, N.Y.
DEPARTMENT of PUBLIC WORKS

SHAWYN PATTERSON-HOWARD
Mayor

City Hall, One Roosevelt Square
Mount Vernon, NY, 10550
(914) 665-2300 – Fax: (914) 665-2476

DWAYNE A. JONES
Commissioner

RYAN ULRICH
Deputy Commissioner

April 27, 2026

Honorable City Council
1 Roosevelt Square
Mount Vernon, NY 10550
(Through the Office of the Mayor)

Re: Authorization to Celebrate National Public Works Week - May 17, 2026-May 23, 2026

Dear Honorable City Council Members:

The Department of Public Works respectfully seeks your support and approval to celebrate National Public Works Week in the City of Mount Vernon, NY from May 17, 2026- May 23, 2026. This week is a time to celebrate and recognize the dedicated professionals who play a pivotal role in our country and community who provide and maintain the infrastructure and services collectively known as Public Works.

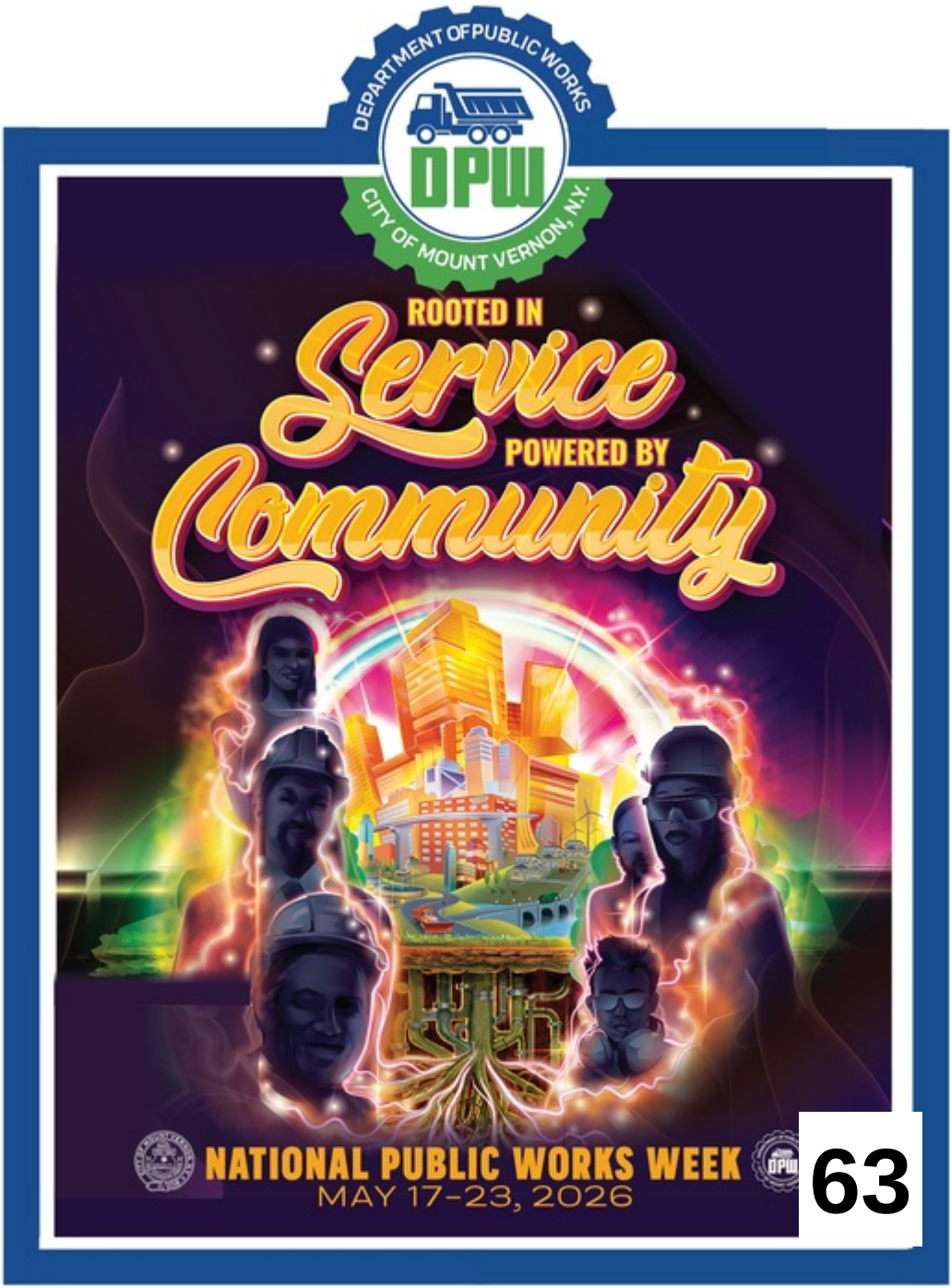
Public Works professionals play a vital role in our daily lives by ensuring that we have access to clean water, safe roads, bridges, functioning transportation systems, and much more. They work tirelessly to build, maintain, and improve the physical and environmental aspects of our community to increase our city's quality of life.

This year's national theme, **"Rooted in Service Powered by Community"**, reminds us that public works professionals are motivated to serve the communities that they love and that power them to always do their best.

Through this multi-day event, we aim to raise public awareness, strengthen community relationships, build departmental morale, and express our appreciation for the invaluable contributions of our workforce.

Respectfully,

Dwayne A. Jones
Commissioner of Public Works
DJ/lp


DEPARTMENT OF PUBLIC WORKS
DPW
CITY OF MOUNT VERNON, N.Y.
ROOTED IN
Service
POWERED BY
Community
NATIONAL PUBLIC WORKS WEEK
MAY 17-23, 2026

DEPARTMENT OF PUBLIC WORKS

DPW

CITY OF MOUNT VERNON, N.Y.

NATIONAL
PUBLIC WORKS WEEK
MAY 16, 2026
BRUSH PARK

12:00 PM TO 4:00 PM

The Department of Public Works cordially invites you to take part in our Department of Public Works Week.

SHAWYN PATTERSON-HOWARD
Mayor

DWAYEN JONES
Commissioner

RYAN ULRICH
Deputy Commission

DEPARTMENT OF PUBLIC WORKS

DPW

CITY OF MOUNT VERNON, N.Y.

Presents

A lasting tribute to service and dedication

join us as we name this park in honor of

May 16th 10:am to 11:am

Location: 99 Vernon Ave. Mount Vernon, NY

SHAWYN PATTERSON-HOWARD	DWAYEN JONES	RYAN ULRICH
Mayor	*Commissioner*	*Deputy Commissioner*

LOCAL LAW NO. ___ OF 2025

A LOCAL LAW AMENDING ARTICLE VII-A, § 86-b OF THE MOUNT VERNON CITY CHARTER REGARDING THE COMPOSITION OF THE CAPITAL PROJECTS BOARD

BE IT ENACTED by the City Council of the City of Mount Vernon, in the County of Westchester, State of New York, as follows:

Section 1. Legislative Findings and Intent. The City Council finds that the efficient and transparent management of capital projects is essential to the health, safety, and economic vitality of the City of Mount Vernon. The Capital Projects Board plays a central role in reviewing, prioritizing, and coordinating the City's capital investments.

To enhance oversight, broaden representation, and strengthen coordination across departments and branches of City government, it is the intent of this Local Law to amend Article VII-A, § 86-b of the City Charter to restructure the composition of the Capital Projects Board.

This amendment ensures that key City departments and elected officials are represented in the capital planning process, thereby fostering improved collaboration, accountability, and alignment of infrastructure priorities.

Section 2. Amendment to the Mount Vernon City Charter, Article VII-A, § 86-b

Section 86-b. Capital Projects Board (Amended Composition)

The existing text of § 86-b of the Mount Vernon City Charter is hereby amended to read as follows:

§ 86-b. Capital Projects Board.

1. **Composition**. The Capital Projects Board shall consist of nine (9) voting members appointed by the Mayor in the following manner:

   (a) Two (2) members of the City Council (both appointed by the Mayor);

   (b) The Commissioner of Public Works;

   (c) The Commissioner of Buildings;

   (d) The Commissioner of Planning;

   (e) The Commissioner of the Board of Water Supply; and

   (f) One (1) member from the Land Use Boards (Planning Board, Zoning Board of Appeals, or Architectural Review Board).

   (g) The Comptroller

   (h) The City Engineer

2. **Chairperson**. The Mayor shall designate one of the voting members to serve as Chairperson of the Board.

3. **Terms of Office**. The terms of appointment for voting members shall expire concurrently with the term of the Mayor. Vacancies occurring other than by expiration shall be filled for the unexpired term by the Mayor.

4. **Voting Powers**. The voting powers of the Board shall be exercised by a majority of the voting members in office, excluding ex officio members.

5. **Compensation**. Ex officio members shall serve without additional compensation. Other members shall serve without pay but may receive actual and necessary expenses incurred in the performance of their duties.

Section 3. Purpose and Rationale.

This amendment shall:

- **Broaden representation and expertise** by including departmental commissioners and a land use representative whose areas of responsibility directly inform the City's infrastructure and capital planning.
- **Enhance accountability and legislative oversight** through the inclusion of two members of the City Council as voting participants.
- **Preserve financial and technical review** through the participation of the Comptroller and City Engineer as ex officio members.
- **Promote strategic alignment and interdepartmental collaboration** in the planning and prioritization of capital projects.
- **Ensure effective governance** by maintaining clear voting procedures, leadership designation, and term alignment with the Mayor's administration.

Section 4. Effective Date. This Local Law shall take effect immediately upon filing with the Secretary of State in accordance with the Municipal Home Rule Law.

CITY OF MOUNT VERNON, NY
DEPARTMENT OF RECREATION

SHAWYN PATTERSON-HOWARD
Mayor

City Hall, One Roosevelt Square
Mount Vernon, NY 10550
(914) 665-2420 – Fax: (914) 665-2421

KATHLEEN WALKER-PINCKNEY
Commissioner
ANDRÉ G. EARLY
Deputy Commissioner

May 6, 2026

The Honorable Members of the City Council
City of Mount Vernon
One Roosevelt Square
Mount Vernon, New York 10550

RE: Partnership with Optimum for City of Mount Vernon Employee Appreciation Day

Dear Honorable Members of the City Council:

This letter requests that the City Council enact legislation allowing the Department of Recreation to partner with Optimum, a connectivity service company, to host an Employee Appreciation Day event for City of Mount Vernon employees on Monday, May 18, 2026, on City Hall Plaza.

Optimum will provide a full on-site branded activation at no cost to the City, featuring the following: Branded Tent Experience, Optimum Sprinter Van, Interactive Engagement Stations, etc. This partnership presents a range of direct and indirect benefits to the City's employees.

The Department of Recreation respectfully requests that the City Council:

- Review and approve the proposed Employee Appreciation Day partnership with Optimum for the event to be held on May 18, 2026 on City Hall Plaza;
- Authorize the Department of Recreation to coordinate all logistical elements of the activation in partnership with Optimum; and
- Endorse the use of City Hall Plaza for the duration of the event on said date.

We believe this activation reflects the City's commitment to honoring its workforce while promoting meaningful community and corporate engagement.

Respectfully submitted,

Kathleen Walker Pinckney, Commissioner
Department of Recreation

cc: André G. Early, Deputy Commissioner
Mayor Shawyn Patterson-Howard
City Clerk

File #: TMP -2090 **Agenda Date:** 5/13/2026 **Agenda #:** 11.

City Council:

AN ORDINANCE AUTHORIZING THE CITY OF MOUNT VERNON YOUTH BUREAU TO HOST THE 6TH ANNUAL "LET YOUR COLORS SHINE" PRIDE DAY EVENT, AUTHORIZING THE RAISING OF THE PRIDE FLAG AT CITY HALL, AND PROVIDING FOR PUBLIC SAFETY SUPPORT AND RELATED EXPENDITURES

Whereas, in correspondence dated April 20, 2026, the Deputy Director of the Youth Bureau formally requested authorization to host the 6th Annual "LET YOUR COLORS SHINE" Pride Day event on Friday, June 5, 2026, from 3:30 p.m. through 6:30 p.m. at City Hall Plaza; and

Whereas, the event is intended to serve approximately two hundred (200) students, parents, community partners, and residents of the City of Mount Vernon; and

Whereas, the event is being conducted in partnership with the Department of Recreation, the Office of Emergency Management (OEM), the Mount Vernon Police Department (MVPD), WJCS, Fidelis, The Loft, and Daisy's Dream; and

Whereas, the purpose of the event is to increase awareness of the services and programs offered by the Youth Bureau and other community-based organizations, and to disseminate resources and information supporting youth within the LGBTQIA+ community; and

Whereas, in the event of inclement weather, the event shall be relocated to the Doles Center, located at 250 South 6th Avenue, Mount Vernon, New York 10550; and

Whereas, the Youth Bureau has further requested authorization for the Pride flag, to be provided by the Youth Bureau, to be raised at City Hall on June 1, 2026, and lowered and returned to the Youth Bureau on July 1, 2026; and

Whereas, the Youth Bureau has requested the assignment of four (4) Auxiliary Police Officers and between two (2) and four (4) members of the Mount Vernon Police Department to ensure the safety and security of all event participants and attendees; and

Whereas, funding for the event shall be charged and accounted for under Budget Code A7312.401; and

Whereas, the City Council finds that hosting and supporting this event serves a valid public purpose by promoting youth engagement, community awareness, inclusivity, public health, and access to supportive services and resources.

NOW, THEREFORE, BE IT ORDAINED BY THE CITY COUNCIL OF THE CITY OF

MOUNT VERNON AS FOLLOWS:

Section 1. Authorization of Event. The City Council hereby authorizes the Mount Vernon Youth Bureau to host the 6th Annual "LET YOUR COLORS SHINE" Pride Day event on Friday, June 5, 2026, from 3:30 p.m. through 6:30 p.m. at City Hall Plaza.

Section 2. Inclement Weather Location. In the event of inclement weather, the City Council hereby authorizes the relocation of the event to the Doles Center, located at 250 South 6th Avenue, Mount Vernon, New York 10550.

Section 3. Authorization to Raise Pride Flag. The City Council hereby authorizes the raising of the Pride flag at City Hall on June 1, 2026. The flag shall remain displayed through July 1, 2026, at which time it shall be lowered and returned to the Mount Vernon Youth Bureau.

Section 4. Public Safety and Municipal Support. The City Council hereby authorizes the participation and assignment of four (4) Auxiliary Police Officers and between two (2) and four (4) Mount Vernon Police Department personnel for purposes of maintaining public safety, crowd management, and general event security.

The appropriate municipal departments, including but not limited to the Department of Recreation, Office of Emergency Management, and Mount Vernon Police Department, are further authorized to provide reasonable logistical and operational support necessary for the successful execution of the event.

Section 5. Funding Authorization. All costs and expenditures associated with this event shall be charged to and accounted for under Budget Code A7312.401, subject to applicable purchasing, accounting, and auditing procedures of the City of Mount Vernon.

Section 6. Severability. If any clause, sentence, paragraph, subdivision, section, or part of this Ordinance shall be adjudged by any court of competent jurisdiction to be invalid, such judgment shall not affect, impair, or invalidate the remainder thereof, but shall be confined in its operation to the clause, sentence, paragraph, subdivision, section, or part thereof directly involved in the controversy in which such judgment shall have been rendered.

Section 7. Effective Date. This Ordinance shall take effect immediately upon adoption by the City Council and subsequent approval by the Board of Estimate and Contract.

CITY OF MOUNT VERNON, N.Y.
MOUNT VERNON YOUTH BUREAU

SHAWYN PATTERSON-HOWARD
Mayor

City Hall, One Roosevelt Square
Mount Vernon, NY 10550
(914) 665-2344 – Fax: (914) 665-1373
cityofmountvernonyouthbureau@gmail.com
HTTP//youthbureau.cmvny.com
@mountvernonyb/ mvyouthbureau

DEBBIE BURRELL-BUTLER, MBA
Executive Director

DENA T. WILLIAMS, MPA
Deputy Director

April 20, 2026

Honorable Members of the City Council
Through the Office of the Mayor
City Hall – Roosevelt Square
Mount Vernon, New York 10550

Dear Honorable Members of City Council:

This letter comes to respectfully request that City Council enact legislation that will authorize the Youth Bureau to host the 6th Annual **"LET YOUR COLORS SHINE"** Pride Day event**,** on Friday, June 5, 2026, at City Hall Plaza from 3:30pm -6:30pm. This community event is in partnership with Recreation, OEM, MVPD, WJCS, Fidelis, The Loft and Daisy's Dream. In the event of inclement weather, the rain location will be the Doles Center, located at 250 South 6th Ave. Mt. Vernon, NY 10550.

The Youth Bureau also requests authorization to have the Pride flag (provided by the Youth Bureau) raised on June 1, 2026, and lowered and returned to the Youth Bureau on July 1, 2026. In addition, the presents of four (4) Auxiliary Police Officers and two (2) to four (4) MVPD for the safety of the participants. The expectation is to have approximately 200 students, parents, partners, and community members in attendance.

The purpose of the event is to increase awareness of the Youth Bureau and other CBO offerings, as well as disseminate community resources which include providing exposure of programs that serve youth in the LGBTQIA+ community.

Funds for this event are to be accounted for in the budget code A7312.401 and will not exceed $600.00. Please feel free to contact me directly on (914) 665-2393, should you have any questions.

Sincerely,

Dena T. Williams
Deputy Director

Cc: Shawyn Patterson-Howard, Mayor
Darren M. Morton, Comptroller
Brian Johnson, Corporation Counsel

THE CITY OF MOUNT VERNON YOUTH BUREAU PRESENTS
LET YOUR COLORS SHINE
PRIDE CELEBRATION
FRIDAY, JUNE 5TH, 2026
3:00 PM - 6:00 PM
CITY HALL PLAZA
1 ROOSEVELT SQ. MOUNT VERNON, NY 10550
RAIN LOCATION (SAME DATE): DOLES CENTER, 250 SO. 6TH AVE, MOUNT VERNON, NY 10550
RUNWAY SHOW • LIGHT REFRESHMENTS • MUSIC
FOR MORE INFORMATION OR TO REGISTER CONTACT
DENA T. WILLIAMS AT (914) 665 - 2393 OR DWILLIAMS@MOUNTVERNONNY.GOV
@MOUNTVERNONYB

City Council:

AN ORDINANCE AUTHORIZING THE MAYOR TO ENTER INTO AN AGREEMENT WITH THE COUNTY OF WESTCHESTER FOR THE FUN-FILLED SUMMER (PARK ACTIVATION PROGRAM) GRANT

Whereas, in correspondence dated February 3, 2026, the Commissioner of the Department of Recreation formally requested authorization for the Mayor to execute an agreement, and any related documents necessary thereto, with the County of Westchester for participation in and funding of the Fun-Filled Summer (Park Activation Program) for the period of July 1, 2026, through August 31, 2026; and

Whereas, pursuant to said agreement, the City of Mount Vernon Department of Recreation shall receive grant funding in the amount of Eight Thousand Four Hundred Ninety-Nine Dollars ($8,499.00) for the operation of the Fun-Filled Summer (Park Activation Program) for the period commencing July 1, 2026, and ending August 31, 2026; and

Whereas, the Fun-Filled Summer (Park Activation Program) shall operate Monday through Thursday from 10:00 a.m. through 2:00 p.m. at various parks throughout the City of Mount Vernon, providing recreational, educational, and enrichment opportunities for youth and residents of the community; and

Whereas, the funds received pursuant to this agreement shall be deposited into Revenue Account A2229.15, designated as Westchester County Funded Recreation Grants, and appropriated into Account A7310.104 for Youth Program Salary - Part-Time and Account A7310.458 for Equipment, Trips, Guest Speakers, and Supplies; and

Whereas, the City Council finds that participation in the Fun-Filled Summer (Park Activation Program) promotes the health, welfare, recreation, and community engagement of the residents of the City of Mount Vernon.

NOW, THEREFORE, BE IT ORDAINED BY THE CITY COUNCIL OF THE CITY OF MOUNT VERNON AS FOLLOWS:

Section 1. Authorization to Enter into Agreement. The Mayor of the City of Mount Vernon is hereby authorized and directed to execute an agreement, and any related documents necessary thereto, with the County of Westchester for participation in and funding of the Fun-Filled Summer (Park Activation Program) for the period of July 1, 2026, through August 31, 2026.

Section 2. Acceptance and Deposit of Funds. The City of Mount Vernon is hereby authorized to accept grant funds from the County of Westchester in the amount of Eight Thousand

Four Hundred Ninety-Nine Dollars ($8,499.00).

Such funds shall be deposited into Revenue Account A2229.15, identified as Westchester County Funded Recreation Grants.

Section 3. Appropriation of Funds. The funds received pursuant to this Ordinance are hereby appropriated as follows:

1. Account A7310.104 - Youth Program Salary - Part-Time; and
2. Account A7310.458 - Equipment, Trips, Guest Speakers, and Supplies.

Said appropriations shall be utilized exclusively for the administration and operation of the Fun-Filled Summer (Park Activation Program).

Section 4. Purpose. The purpose of this Ordinance is to support recreational programming and park activation initiatives throughout the City of Mount Vernon by providing structured summer programming and community engagement opportunities for youth and residents.

Section 5. Severability. If any clause, sentence, paragraph, subdivision, section, or part of this Ordinance shall be adjudged by any court of competent jurisdiction to be invalid, such judgment shall not affect, impair, or invalidate the remainder thereof, but shall be confined in its operation to the clause, sentence, paragraph, subdivision, section, or part thereof directly involved in the controversy in which such judgment shall have been rendered.

Section 6. Effective Date. This Ordinance shall take effect immediately upon adoption by the City Council and subsequent approval by the Board of Estimate and Contract.

CITY OF MOUNT VERNON, N.Y.
RECREATION DEPARTMENT

SHAWYN PATTERSON-HOWARD
Mayor

City Hall, One Roosevelt Square
Mount Vernon, NY. 10550
(914) 665-2420 – Fax: (914) 665-2421

KATHLEEN WALKER- PINCKNEY
Commissioner
ANDRE' EARLY
Deputy Commissioner

February 3, 2026

Honorable Members of the City Council
Through the Office of the Mayor
City Hall
Mount Vernon, NY 10550

RE: 2026 Fun Filled Summer

Dear Honorable Members:

This letter comes to request that the City Council enact legislation that would enable the mayor to enter into agreement with The County of Westchester.

Under this program, the City of Mount Vernon Recreation Department will receive $8,499.00 for the operation of the Fun Filled Summer (Park Activation Program) for the period of July 1, 2026 to August 31, 2026. This Program runs Monday thru Thursday from 10:00am – 2:00pm at Various parks throughout the City of Mt Vernon.

These funds are to be deposited into revenue account A2229.15 (Westchester County funded recreation grants) for appropriation in A7310.104 (youth program salary – part-time) and A7310.458 (equipment, trips, guest speakers, and supplies).

Respectfully submitted,

Kathleen Walker Pinckney, Commissioner
Department of Recreation

cc: André G. Early, Deputy Commissioner
Mayor Shawyn Patterson-Howard
City Clerk

WESTCHESTER COUNTY

Kenneth W. Jenkins
County Executive

Ernest L. McFadden
Executive Director, Westchester County Youth Bureau

December 9, 2025

Kathleen Walker-Pinckney
Commissioner of Recreation
City of Mount Vernon
1 Roosevelt Square
Mount Vernon, New York 10550

Dear Ms. Walker-Pinckney,

I am pleased to inform you that the Westchester County Youth Bureau has awarded your city in connection with the New York State Office of Children and Family Services **Youth Development Programs** funding to deliver the following program, for the period October 1, 2025 continuing through September 30, 2026:

Name of Program: Fun Filled Summer	Amount Awarded: $8,499.00

Your agency will be required to submit an application and associated budget as well as an annual assessment to report on the performance measures implemented to achieve your chosen Touchstone Life Area. An agreement for services is subject to a resolution approval by the Westchester County Board of Acquisition and Contract and also contingent upon review and approval of the program application and budget submitted.

Please note that the Agreement that your organization is required to enter into with Westchester County shall contain a provision that the County shall retain the right, upon the occurrence of any release by the Governor of a proposed budget of the State of New York and/or the adoption of the State budget or any amendments thereto, and after the County has a reasonable period of time to conduct an analysis of the impacts of such budget(s) on County finances, to terminate the Agreements authorized herein or to renegotiate the amounts and rates approved herein. If the County subsequently offers to pay a reduced amount to the contract agencies, then the contract agencies shall have the right to terminate their respective Agreements upon reasonable prior written notice.

Please be advised that all contracts will now be executed through the County's mandatory E-Signature Portal**. This new process will streamline contract execution and eliminate the need for paper copies.** Additional information and step-by-step instructions regarding the use of the portal will be provided to you shortly.

The Westchester County Youth Bureau program administrator for this program is Chandreyee Mitra. Her number is 995-2754 and her email is cxme@westchestercountyny.gov. Please contact her with any questions.

Thank you,

Ernest McFadden
Executive Director

112 East Post Road, 3rd Floor
White Plains, New York 10601

Telephone: (914) 995-2745
Fax: (914) 995-3871

westchestercountyny.gov/youthbureau

File #: TMP -2127 **Agenda Date:** 5/13/2026 **Agenda #:** 13.

City Council:

AN ORDINANCE AMENDING ORDINANCE NO. 1, ADOPTED BY THE CITY COUNCIL ON MARCH 25, 2026, ENTITLED "AN ORDINANCE AUTHORIZING THE DEPARTMENT OF RECREATION TO CO-SPONSOR THE ANTIGUA AND BARBUDA INTERNATIONAL CULTURAL ASSOCIATION (ABICA) INTERNATIONAL FOOD FESTIVAL"

The City of Mount Vernon, in City Council convened, does hereby ordain, and enact:

Section 1. The first decretal paragraph of Ordinance No. 1, adopted on March 25, 2026, entitled "AN ORDINANCE AUTHORIZING THE DEPARTMENT OF RECREATION TO CO-SPONSOR THE ANTIGUA AND BARBUDA INTERNATIONAL CULTURAL ASSOCIATION (ABICA) INTERNATIONAL FOOD FESTIVAL," is hereby amended, and additional paragraphs are added to authorize the raising of a flag representing the Antiguan and Barbadian cultures for the duration of the festival day, and to provide that all costs associated with the event, including services rendered by the Department of Public Works (DPW), shall be the responsibility of ABICA, as follows:

Whereas, by correspondence dated February 11, 2026, the Deputy Commissioner of the Department of Recreation requested authorization to amend Ordinance No. 1, adopted by the City Council on March 25, 2026, to co-sponsor the ABICA International Food Festival at Hartley Park on Saturday, May 23, 2026, and on the fourth Saturday in May annually thereafter; and

Whereas, the Antigua and Barbuda International Cultural Association (ABICA) is a community-based organization composed of Mount Vernon residents of Antiguian and Barbudan heritage, dedicated to promoting cultural and educational events that strengthen the community; and

Whereas, ABICA has requested that the City of Mount Vernon, through its Department of Recreation, co-sponsor the ABICA International Food Festival to be held on Saturday, May 23, 2026, and subsequently on the fourth Saturday of May each year; and

Whereas, the event will take place at Hartley Park and is intended to celebrate cultural heritage while providing opportunities for local food and craft vendors; and

Whereas, ABICA has requested authorization to use Hartley Park from 8:00 a.m. to 8:00 p.m. on the day of the event, including set-up and clean-up times, at no cost to the City; and

Whereas, ABICA has further requested permission to raise a flag representing the cultures and heritage of Antigua and Barbuda for the duration of the festival, with all Department of Public Works costs associated therewith to be borne solely by ABICA; and

Whereas, ABICA will be responsible for the cost of Mount Vernon Police Department (MVPD) or

Auxiliary Officers, vendor permits, and any necessary fire inspections by the Mount Vernon Fire Department (MVFD) for vendors using grills, propane, or other open flames; and

Whereas, the Department of Recreation will be responsible for general cleanup of the park following the event;

NOW, THEREFORE, BE IT ORDAINED BY THE CITY COUNCIL OF THE CITY OF MOUNT VERNON, NEW YORK, AS FOLLOWS:

Section 1. Authorization of Event. The City of Mount Vernon, through its Department of Recreation, is hereby authorized to co-sponsor the ABICA International Food Festival at Hartley Park on Saturday, May 23, 2026, and on the fourth Saturday in May annually thereafter.

Section 2. Use of the park. The Department of Recreation is authorized to provide ABICA the use of Hartley Park from 8:00 a.m. to 8:00 p.m., which shall include:

1. **Set-Up:** 8:00 a.m. to 12:00 noon;
2. **Event Time:** 12:00 noon to 7:00 p.m.;
3. **Clean-Up:** 7:00 p.m. to 8:00 p.m.

The use of Hartley Park for this purpose shall be at no cost to the City.

Section 3. Public Safety and Vendor Regulations.

1. ABICA shall be responsible for the cost of providing MVPD or Auxiliary Officers for the event.

2. All vendors shall obtain a one-day vendor permit through the ABICA vendor package.

3. Mount Vernon Fire Department (MVFD):

- All fire extinguishers appropriate to the type of cooking equipment shall be inspected prior to the event. Any vendor utilizing propane, grills, or open flames must obtain a pre-event inspection from the Mount Vernon Fire Department (MVFD).
- The MVFD shall conduct mandatory pre-event safety inspections for all vendors using propane, grills, or open flames.
- All food trucks participating in the event must be inspected and approved no later than May 16, 2026, in accordance with the Fire Department of Mount Vernon (FDMV) Mobile Food Preparation Safety requirements.
- All vendors shall comply with applicable fire safety regulations and standards.
- Vendors are required to contact the Fire Prevention Office at (914) 665-2611 to schedule inspections at least one (1) week prior to the event to ensure timely compliance and a safe event environment.

Section 4. Flag Raising Authorization. ABICA is hereby authorized to raise a flag representing the cultures and heritage of Antigua and Barbuda during the event. Any and all costs

associated with installation, removal, labor, or services provided by the Department of Public Works shall be the sole responsibility of ABICA.

Section [4]5. Cleanup. The Department of Recreation shall be responsible for all post-event cleanup to restore Hartley Park to its original condition.

Section [5]6. Severability. If any clause, sentence, paragraph, or part of this ordinance shall be adjudged by any court of competent jurisdiction to be invalid, such judgment shall not affect, impair, or invalidate the remainder thereof, but shall be confined in its operation to the clause, sentence, paragraph, or part thereof directly involved in the controversy in which such judgment shall have been rendered.

Section [6]7. Effective Date. This Ordinance shall take effect immediately upon its adoption by the City Council [and subsequent approval by the Board of Estimate & Contract].

New Matter Underlined
Deleted Matter in Brackets [ ]

CITY OF MOUNT VERNON, NY
DEPARTMENT OF RECREATION

SHAWYN PATTERSON-HOWARD
Mayor

City Hall, One Roosevelt Square
Mount Vernon, NY 10550
(914) 665-2420 – Fax: (914) 665-2421

KATHLEEN WALKER-PINCKNEY
Commissioner
ANDRÉ G. EARLY
Deputy Commissioner

February 11, 2026

Honorable Members of the City Council
Through the Office of the Mayor
1 Roosevelt Square
Mount Vernon, NY 10550

Re: ABICA - International Food Festival - AMENDED

Dear Honorable Council Members:

This letter requests that the city enact legislation allowing the Department of Recreation to co-sponsor the Antigua and Barbuda International Cultural Association (ABICA) International Food Festival on Saturday, May 23, 2026, and the 4th Saturday in the month of May, annually.

ABICA is a community-based organization comprised of many Mt. Vernon residents of Antiguan and Barbadian heritage with the mission to promote and uplift our community through cultural and educational events.

The International Food Festival will take place in Hartley Park and ABICA respectfully requests the following partnership provisions from the City:

- Authorization to utilize Hartley Park; the cost of the park is the co-sponsorship with the Department of Recreation from 8:00 a.m. to 8:00 p.m. (8 am-12 noon to Set-up), 12 noon-7 pm (Event time), 7 pm-8pm (Clean-up) - This event will be at no cost to the city;
- The ability to raise a flag representing the Antiguan and Barbadian cultures for the duration of the day and festival and all costs associated (DPW) will be the responsibility of ABICA;
- We request the use of MVPD/Auxiliary Officers - the cost of which is the responsibility of ABICA.

Vendor spaces will be made available to local food and craft merchants on a predetermined basis. All Vendors must submit a One-day vendor permit application, which will be included in ABICA's vendor package. In addition, all vendors using propane, grills, or fire of any nature will be required to have a pre-inspection from the MVFD.

Thank you in advance for your cooperation and consideration in this matter.

Sincerely,

André G. Early, Deputy Commissioner

cc: Kathleen Walker-Pinckney, Commissioner

CITY OF MOUNT VERNON, NY
DEPARTMENT OF RECREATION

SHAWYN PATTERSON-HOWARD
Mayor

City Hall, One Roosevelt Square
Mount Vernon, NY 10550
(914) 665-2420 – Fax: (914) 665-2421

KATHLEEN WALKER-PINCKNEY
Commissioner
ANDRÉ G. EARLY
Deputy Commissioner

Shawyn Patterson-Howard, Mayor

CITY OF MOUNT VERNON, N.Y.
Mayor Office

SHAWYN PATTERSON-HOWARD, MPA
Mayor

City Hall, One Roosevelt Square
Mount Vernon. NY. 10550
(914) 665-2362 – Fax: (914) 665-6173

Juan Perez
Commissioner Management Services

May 5, 2026

VIA EMAIL:

Honorable City Council Members
City of Mount Vernon
1 Roosevelt Square
Mount Vernon, New York 10550

RE: Approval Authorizing the Mayor to Execute a 3-Year Lease with BEI Holdings, Inc. for and upgrade to the interview room system for the Police Department; FOR APPROVAL AT THE May 13, 2026 CITY COUNCIL MEETING

Honorable Councilmembers:

The Department of Management Services respectfully requests approval from the City Council authorizing the Mayor to execute the quote, for Police Department hardware and operating system upgrade with BEI Holdings, Inc. DBA Business Electronics. The project will upgrade the Mount Vernon Police Department's existing two-room iRecord Interview Room Solution.

This upgrade is necessary because the current iRecord environment is operating on Windows 7 and older iRecord software that are no longer supported. As a result, the system no longer receives current security updates, or automatic patches, which creates a serious cybersecurity and operational risk for the City and specifically for the Police Department.

The iRecord system supports the police interview room recording and related evidence capture. Maintaining this system on an unsupported operating system increases the risk of system failure, security exposure, and disruption to a sensitive law enforcement function. Moving this environment to supported hardware and software is an important risk-reduction measure.

The BEI proposal provides a technology refresh for the existing system, including a Windows 11 IoT Enterprise LTSC hardware bundle, iRecord Version 4 software, a secondary evidence vault/back-up hard drive, software licensing and support items, project management, installation, programming, training, and the hardware refresh components listed in the quote.

The proposal also allows certain existing components to be reused where they remain functional, helping control costs while addressing the unsupported platform risk.

The recommended payment structure is the 3-year annual payment, $1 buyout lease option with one advance payment. This option spreads the hardware cost over three annual payments and allows the City to own the equipment at the end of the lease term for a $1 buyout. The first year of maintenance/support is covered through the contract/first-year warranty, and annual maintenance after the first year is expected to be $2,485.00 and billed separately.

CITY OF MOUNT VERNON, N.Y.
Mayor Office

SHAWYN PATTERSON-HOWARD, MPA
Mayor

City Hall, One Roosevelt Square
Mount Vernon. NY. 10550
(914) 665-2362 – Fax: (914) 665-6173

Juan Perez
Commissioner Management Services

Contract Summary:

- Vendor: BEI Holdings, Inc. DBA Business Electronics.
- Quote: QTRB101378 v2, dated April 2, 2026; expiration date July 15, 2026.
- System: Mount Vernon Police Department iRecord Interview Room Recording Solution (2-room) upgrade.
- Project quote amount: $15,930.00.
- Recommended payment option: 3-year annual payment, $1 buyout lease with one advance payment.
- Annual hardware lease payment: $6,107.72 per year, and separately billed maintenance.
- Estimated hardware lease payments over 3 years: $18,323.16, plus the $1.00 buyout, before applicable fees, and insurance.
- Maintenance: First year covered through the contract/first-year warranty; years 2 and 3 anticipated at $2,485.00 per year, billed separately.
- Funding sources: A1680.203 Equipment for the initial and year 2-3 hardware lease payments; A1680.216 Application Services for annual maintenance costs.
- Optional iRecord Nexus Cloud enhancement: not included in this approval request and would require separate review if pursued.

Management Services is recommending approval because this upgrade addresses an avoidable security exposure in a Police Department technology environment and supports continued reliable operation of a system used by the Police Department. Delaying this upgrade would leave the City relying on unsupported technology for a sensitive public safety function.

Should this request meet with the approval of the City Council, we will sign the contract and proceed to make the initial payment from budget code A1680.203 after Board of Estimate Approvals

Sincerely,

Juan Perez
Management Services Commissioner

cc: Shawyn Patterson-Howard, Mayor
cc: Brian Johnson, Corporation Council
cc: Darren Morton, Comptroller

business electronics
BEI Holdings, Inc.

We have prepared a quote for you

iRecord Interview Room Recording Solution (2-Room) Upgrade

Quote # QTRB101378
Version 2

Prepared for:

iRecord

Mount Vernon Police Department

Juan Perez
jperez@mountvernonny.gov

6 Capital Drive
Wallingford, CT 06492
http://www.beiinc.com
(203)741-9301

business electronics
BEI Holdings, Inc.

Executive Summary

About Business Electronics (BEI)

Trusted Solutions Backed by Experience.

Sales with Service since 1976

BEI Holdings, Inc. (DBA: Business Electronics) “BEI” has been a full service customer driven result oriented company, providing cutting-edge digital video and audio recording systems. Our solution advisors provide you with the most reliable Call Recording, Interview Room Recorder, Access Control & Video Surveillance products & services available today.

BEI’s advanced product portfolio that provides Recording & Business Security Solutions are used in Public Safety, Contact Centers and a multitude of other markets. BEI’s expertise is unmatched in New England and we specialize in providing in Public Safety Critical Recording, Call & Dispatch Center Work Force Optimization, VoIP Recording, Quality Assurance, Access Control, Court Room & Interview Room Recording products.

As BEI continues to evolve to assist in increasing the effectiveness and efficiency of call center management, by providing the agent monitoring, recording & reporting tools needed to manage your center. Additionally, as regulatory standards continue to evolve, all of our Public Safety offerings are designed to comply with Next Gen 9-1-1 and with our consultative approach, we continue to help businesses & agencies like yours to increase efficiency, better manage costs, and implement forward thinking strategies with their office communication & security processes and provide the tools needed that will have a positive impact to your bottom line.

Our award-winning experienced staff is ready to assist you with all phases of planning, design, installation and maintenance of our solutions, which will ensure proper installation, ongoing support and maintenance of your investment. We have certified technicians on staff serving a territory that spans from Maine to Maryland. (CT, NY, MA, NJ, DE, PA, MD, RI, ME, VT & NH) to ensure that your critical recording needs are handled as quickly and efficiently as possible.

6 Capital Drive
Wallingford, CT 06492
http://www.beiinc.com
(203)741-9301

business electronics
BEI Holdings, Inc.

Project Overview

iRecord

iRecord® Interview Room Recording Solutions

The right recording system for different types of interview applications

iRecord System Upgrade – Mount Vernon Police Department

BEI will provide an upgrade to the Mount Vernon Police Department's existing iRecord system. This upgrade will replace the current 2-room iRecord system, originally purchased in 2017, which operates on iRecord 2.2.5 software and Windows 7—both of which are no longer supported by iRecord or Microsoft.

Upgrade Overview

The new system will include a full technology refresh of both PC hardware and software. The quote features the certified iRecord "Turnkey" PC hardware bundle, which comes preloaded with **Windows 11 IoT Enterprise LTSC** operating system.

The upgrade will also include **iRecord Version 4** software, offering the latest features such as browser-based search and replay functionality. This is the most current release available from iRecord.

Hardware Reuse

The following existing components may be repurposed:

- On/Off Switch
- Microphones
- POE Switch
- Axis Cameras
- POE Switch

If budget permits, BEI recommends replacing these components with the latest versions to ensure optimal performance and compatibility.

Included in Quote

- 8TB Secondary Evidence Vault (Backup Interview Hard Drive)

Assumptions & Notes

- BEI assumes reused equipment is in good working condition. Any defective hardware discovered during installation will be identified and quoted separately.
- Cabling and installation services are **not included** in the quoted price.
- If any quoted item is unavailable at the time of purchase, BEI will substitute or replace it with a suitable alternative for installation.

6 Capital Drive
Wallingford, CT 06492
http://www.beiinc.com
(203)741-9301

business electronics
BEI Holdings, Inc.

Core System-Software, Licensing & Hardware Upgrade

Qty	Product Details	Price	Ext. Price
iRecord Universe IP Recording System - Configured IR-Universe Systems			
1	**iRecord Universe IP Recording System Hardware & Windows 11 IoT Enterprise O/S LTSC Bundle (1 Room) *(Upgraded PC will include (1) 8TB HD)**	**$4,250.00**	**$4,250.00**
2	**iRecord Universe Software Version Upgrade - (Pricing is Per Room and Per Version)**	$725.00	$1,450.00
Hardware			
- (Back Up Storage) Disaster Recovery			
1	**Secondary Evidence Vault (Recommended-Backup Interview Capture Hard Drive)**	**$575.00**	**$575.00**
1	**iRecord -Mfg RTSA - License Support SW-1st Rm (1st Room.)(Initial)**	$220.00	$220.00
1	**iRecord -Mfg RTSA - License Support SW-(Per Additional Rm) (Initial)**	$220.00	$220.00

Subtotal: **$6,715.00**

Core Upgrade-Professional Services

Qty	Product Details	Price	Ext. Price
1	**BEI Project Management, Installation, Programming & Training-2 Room iRecord**	$1,750.00	$1,750.00
1	**SA2R-iRecord Tier IILicense Support (Initial)**	$440.00	$440.00
CABLING BEING REUSED, ANY CABLING REQUIRED NOT INCLUDED (Will Be Quoted Separately)			

Subtotal: **$2,190.00**

Optional Other Hardware Upgrade (replacement of hardware purchased back in 2017)

Qty	Product Details	Price	Ext. Price
System Accessories			
Hardware (Covert Camera, Network Switch, Start/Stop Switch)			
1	**16-Port Gigabit Ethernet Unmanaged PoE Switch with 16 x PoE+ @ 183W**	$565.00	$565.00

6 Capital Drive
Wallingford, CT 06492
http://www.beiinc.com
(203)741-9301

business electronics
BEI Holdings, Inc.

Optional Other Hardware Upgrade (replacement of hardware purchased back in 2017)

Qty	Product Details	Price	Ext. Price
4	**512GB microSDXC - Camera Back Up Storage (Redundant Recording)**	$125.00	$500.00
2	**AXIS 4-Channel Modular Main Unit w/POE (1-Per Room)**	$915.00	$1,830.00
4	**AXIS Varifocal Sensor, 2nd Generation (Includes 02250-001 8m cable) [F-Series]**	$565.00	$2,260.00
4	**Axis 8MM Cable (2nd Gen Main Units & Sensors)**	$50.00	$200.00
2	**Thermostat *Including Assembly Labor**	$235.00	$470.00
2	**Motion Detector *Including Assembly Labor**	$225.00	$450.00
Hardware (Covert Camera, Network Switch, Start/Stop Switch)			
1	**BEI Professional Services-Interview Room Related Installation , Configuration, Testing & Training**	$750.00	$750.00

Subtotal: **$7,025.00**

Warranty 1st Year

Qty	Product Details	Price	Ext. Price
1	**Remote Helpdesk Contract-Interview Room (1st Year Warranty) 9-5**	$0.00	$0.00

Subtotal: **$0.00**

Enhancement Options-iRecord NEXUS Cloud - Implementation & 1st Year * Optional

Qty	Product Details	Price	Ext. Price
1	**BEI Professional Services-Nexus Installation , Configuration, Testing & Training**	$750.00	$750.00
iRecord NEXUS Subscription *(Requires Signed Agreement)*			
12	**iRecord NEXUS Cloud - Storage, Users & Sharing - Subscription (Billed Annually)**	$325.00	$3,900.00

* Optional Subtotal: **$4,650.00**

6 Capital Drive
Wallingford, CT 06492
http://www.beiinc.com
(203)741-9301

business electronics
BEI Holdings, Inc.

iRecord Interview Room Recording Solution (2-Room) Upgrade

Prepared by:

Business Electronics

Rich Bartoli
(203)741-9337
Fax (203)741-9291
rich.bartoli@beiinc.com

Prepared for:

Mount Vernon Police Department

2 Roosevelt Square North
Mount Vernon, NY 10550
Juan Perez
(914) 665-3262
jperez@mountvernonny.gov

Quote Information:

Quote #: QTRB101378

Version: 2
Delivery Date: 04/02/2026
Expiration Date: 07/15/2026

Quote Summary

Description	Amount
Core System-Software, Licensing & Hardware Upgrade	$6,715.00
Core Upgrade-Professional Services	$2,190.00
Optional Other Hardware Upgrade (replacement of hardware purchased back in 2017)	$7,025.00
Warranty 1st Year	$0.00
Total:	**$15,930.00**

*Optional Expenses

Description	One-Time
Enhancement Options-iRecord NEXUS Cloud - Implementation & 1st Year	$4,650.00
Optional Subtotal:	**$4,650.00**

Payment Options

Description	Amount
GreatAmerica	
3 Yr.- Annual Payment - $1 Buyout Lease w/1 Advance Payment *Annual maintenance billed separately	**$6,107.72**
4 Yr.- Annual Payment - $1 Buyout Lease w/1 Advance Payment *Annual maintenance billed separately	$4,829.34
5 Yr.- Annual Payment - $1 Buyout Lease w/1 Advance Payment *Annual maintenance billed separately	$4,096.08

* The information provided is a proposal and is subject to credit approval. The proposal provides an approximate monthly payment for hardware, software and services based upon the contract type and term in months. Taxes, fees and insurance are not included. Any change in the amount financed will change this information. Pricing valid 30 days from the day quote is initiated.

Signature below specifies that the above prices, specifications and conditions are satisfactory and are hereby accepted. The Seller is authorized to do the work as specified. Payment will be made as outlined, and I (the customer) agree to all conditions outlined in this quote.

6 Capital Drive
Wallingford, CT 06492
http://www.beiinc.com
(203)741-9301

business electronics
BEI Holdings, Inc.

Business Electronics

Signature:

Name: Rich Bartoli

Title: Vice President

Date: 04/02/2026

Mount Vernon Police Department

Signature: _____

Name: Juan Perez

Date: _____

iRecord NEXUS

ENHANCED CLOUD SOLUTION

EMPOWER YOUR iRECORD SYSTEM

iRecord Nexus is a cloud solution hosted in Azure Government that enhances your iRecord system with redundant storage, remote viewing, recording, and secure sharing of recordings and documents. This new extension will increase redundancy of the system, the dependability of access to recordings, and overall experience of iRecord!

RECORD

The record module of iRecord Nexus provides end users with the ability to do just that – start and stop recordings without having to be on the local network!

- Remote Viewing – Ability to see in progress recordings, and jump right in the view and listen to the stream
- Start/Stop – Ability to trigger a new recording or stop in progress recordings
- Picture in Picture Management – Ability to swap primary stream and in picture stream in real time, as well as move the PIP box to different areas or side by side view

REVIEW

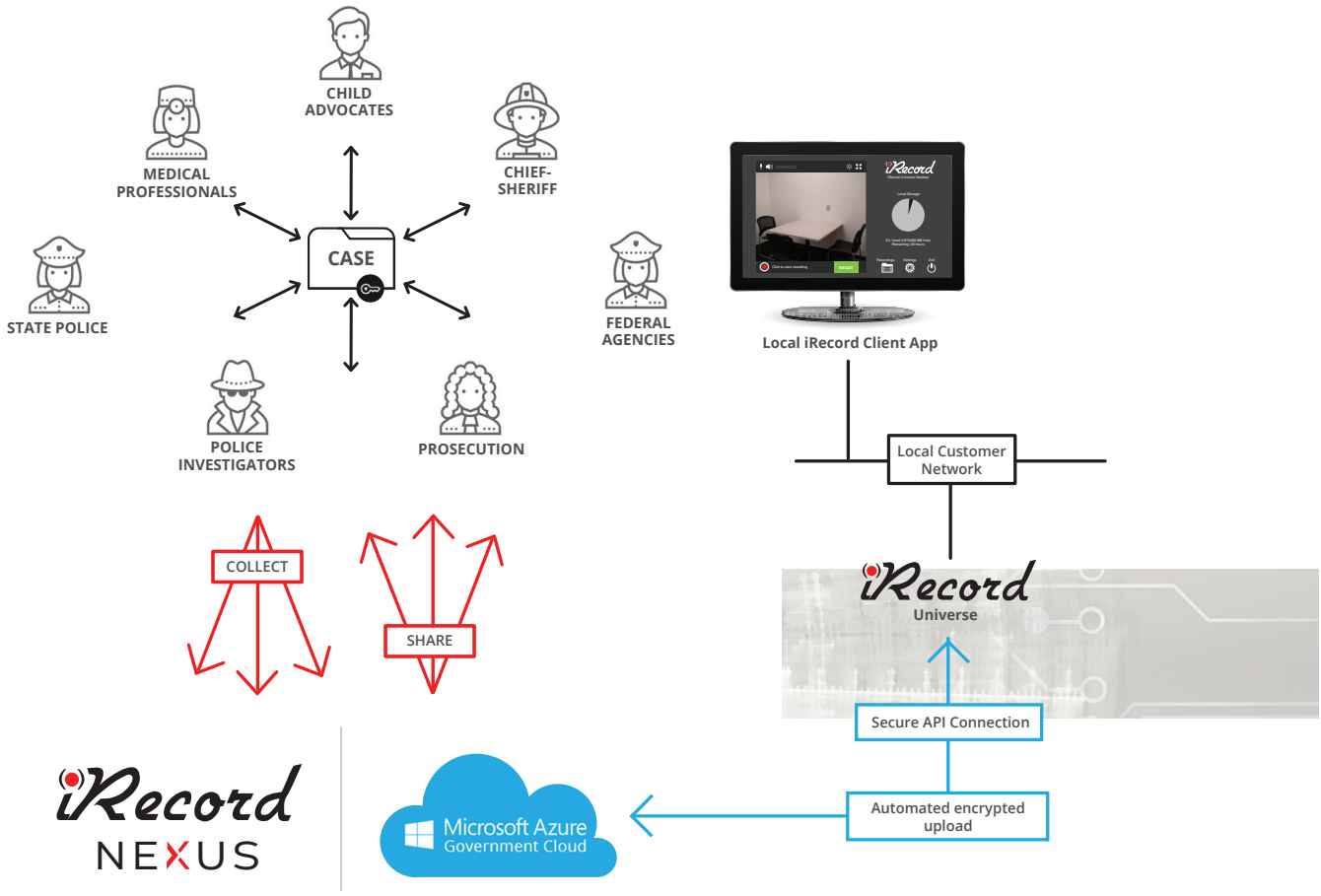
The review module of iRecord Nexus is the storage component of the secure Azure Government hosted infrastructure. Allowing for migration, redundancy, and sharing of your recordings!

- Storage – iRecord Universe recordings can be configured to automatically upload to the cloud or be manually trigger to be pulled up via Nexus portal
- Recording Management –Details can be edited, notes can be added, audit trails can be downloaded, and recordings can be deleted

- **Case Management** [Only in Nexus] – capability to group multiple recordings into a case and upload additional documents to be stored all together
- **Sharing** [Only in Nexus] – multi-factor authentication sharing of recordings or cases with expiration date, choice to include related information like notes, and ability to all downloading
- **Collaboration** – add notes during a recording and recording review

ALL-IN-ONE, SYSTEM MANAGEMENT

We believe that our customers should be able to have the ability to do everything in iRecord Nexus that they can do in iRecord Universe. User management, Group management, and everything else! WSI Technologies is committed to increasing the controls for iRecord Admins and bi-directionally sync settings and data between iRecord Nexus and iRecord Universe Capture Units.



Empowering your data, connecting your world.

www.beiinc.com

"business electronics"
BEI Holdings, Inc.

iRECORD PARTNERSHIP

iRecord

Partnership Overview

In 2007, BEI started our relationship with iRecord, LLC, an "On Demand" Audio & Video Recording solution provider specializing in the Public Safety and Child Advocacy markets. With BEI's reputation in New England as a strong voice recording application & telecommunication peripherals provider we continued to be a respected recording application solution provider.

BEI is the vendor of choice providing the iRecord product to the State of Connecticut, Department of Criminal Justice for the initial pilot program to provide a solution that would help to standardize on the Audio & Video recording Investigative Interviews. Since the implementation of the 6 systems BEI continues to provide the iRecord system to many local Public Safety & Child Advocacy locations allowing these customers to take advantage of the many features and ease of use that iRecord bring to their users.

iRecord Corporate Overview

iRecord is a leading provider of Interview and Investigative Interrogation solutions. PSAP's & CAC's alike recognize the value of capturing evidence in timely and secure matter. They only have one chance to collect vast amounts of information. Agencies need to be sure that the recording process is done correctly, accurately and to provide the resources to help individuals present this information when easily when required. iRecord helps by providing the tools to capture the Audio and Video and developed a "Secure Evidence Vault" that will store not only the recording content, but also additional customer required content which is linked to the recording which can be provided from customer modifiable fields. All this metadata is stored and can be used to provide an easy way to retrieve the recordings at any time.

Areas of Business

iRecord's solutions are used primarily in Law Enforcement and Child Advocacy Center. Town Meeting Rooms, Medical, HR Department and many other markets have utilized the product.

Law Enforcement

The iRecord solutions help Law Enforcement by providing a simple to use "On Demand" Recording solutions that requires little to no training to operate. Walk into a room flip a switch and your Interview or Investigative Interrogation is being recorded. Be assured that the system will simultaneously record in two non-proprietary formats that will allow this evidence to be provided and replayed on any Windows PC and off the shelf DVD player.

Child Advocacy Centers

iRecord's presence and experience in assisting Child Advocacy Centers is unmatched. With a child forensic interview professional on staff, with years of experience in this field. This helps to assure that BEI has the resources to provide the guidance needed to work with individuals at the centers and understand what is needed to help provide the necessary information to all members of the multidisciplinary team.

Hosted Cloud

iRecord's Cloud offerings make switching to digital storage to allow agencies to securely store and helps to facilitate the tracking and distribution process and at the same time provides redundant storage of interviews.

CITY OF MOUNT VERNON, N.Y.
OFFICE OF THE COMPTROLLER

Darren M. Morton, Ed.D., CPRP, CMFO
Comptroller

City Hall, One Roosevelt Square
Mount Vernon, NY, 10550
(914) 665-2303

April 16, 2026

Honorable Members of the City Council
City Hall – One Roosevelt Square
Mount Vernon, NY 10550

Re: **COMP2026-2 – Established of a Policy for Waiver of Health Insurance**

Dear Honorable Members:

My office continues to review and analyze the City's health insurance expenditures and to identify responsible, cost-effective strategies to manage these rising costs. As part of this ongoing effort, we have identified a gap in current policy.

At present, the City does not have a formal policy permitting employees who are otherwise eligible for employer-sponsored health insurance to waive coverage in favor of alternative insurance (e.g., through a spouse or family member), with the exception of provisions applicable to members of the Fire Union under their collective bargaining agreement. As a result, some employees maintain dual coverage, which increases overall costs to the City without a corresponding benefit.

Given the significant and growing cost of health insurance, it would be fiscally prudent to establish a formal "opt-out" policy. Such a policy would allow eligible employees who can demonstrate comparable alternative coverage to decline enrollment in the City's health plan in exchange for a modest financial incentive. This approach is widely utilized by municipalities to reduce redundant coverage and generate net savings.

Accordingly, I am proposing the adoption of the attached policy, which provides for an annual opt-out incentive of $3,000. This amount is consistent with practices in comparable municipalities and is structured to ensure that the City realizes a net savings relative to the cost of providing full health insurance coverage.

This proposal is also consistent with applicable New York State laws and New York State Health Insurance Program (NYSHIP) guidelines. Specifically:

- Under **New York State Civil Service Law § 167(8)**, participating employers in NYSHIP are authorized to establish health insurance buyout or opt-out programs, subject to local approval and compliance with plan requirements.
- NYSHIP permits such opt-out arrangements provided that the employee demonstrates enrollment in other employer-sponsored group coverage and that the opt-out payment does not exceed 50% of the employer's cost of individual coverage (or applicable limits established by the State).
- Any such policy must be implemented in a manner consistent with applicable collective bargaining agreements pursuant to the **Taylor Law (New York Civil Service Law Article 14)**, where health insurance benefits are a mandatory subject of negotiation.
- Additionally, compliance with federal requirements, including **Internal Revenue Code Section 125 (Cafeteria Plans)** and **Affordable Care Act (ACA)** provisions, must be ensured to avoid adverse tax implications or impacts on affordability determinations.

The proposed policy has been structured with these legal and regulatory considerations in mind and will be implemented in coordination with Labor Relations, Human Resources, and legal counsel, as necessary.

Thank you for your consideration of this referral. Should you have any questions, please contact the Comptroller's Office at (914) 665-2304 or Comptroller@cmvny.com.
Respectfully submitted,

Dr. Darren M. Morton Ed. D., CPRP. CMFO
Comptroller

cc: Mayor
Law Department

Waiver of Health Insurance Policy

APRIL 16, 2026

WAIVER OF HEALTH INSURANCE POLICY

I. PURPOSE

The purpose of this policy is to establish a voluntary Health Insurance Buy-Out ("Opt-Out") Program permitting eligible elected officials and employees who are otherwise entitled to enroll in the City's health insurance coverage through NYSHIP to waive such coverage in exchange for a monetary incentive, in accordance with:

- New York Civil Service Law §167(8)
- NYSHIP rules, regulations, and administrative guidance issued by the New York State Department of Civil Service
- Applicable collective bargaining agreements
- Federal and State tax laws, including the Internal Revenue Code and Affordable Care Act (ACA)

Participation is strictly voluntary, subject to annual approval, and contingent upon continued compliance with all eligibility requirements.

II. SCOPE AND APPLICABILITY

This policy applies only to:

- Elected officials and employees eligible for City-provided health insurance through NYSHIP;
- Employees whose collective bargaining agreements expressly permit participation, where applicable.

Nothing in this policy shall supersede any provision of a collective bargaining agreement.

Where a collective bargaining agreement is silent, implementation shall be subject to compliance with the Taylor Law (Civil Service Law Article 14), including, where required, negotiation or written union acknowledgment.

This policy shall not apply to:

- Retirees;
- Employees not eligible for health insurance coverage;
- Employees enrolled in COBRA continuation coverage;
- Employees whose waiver would result in non-compliance with ACA employer shared responsibility provisions.

III. LEGAL AUTHORITY

This program is authorized pursuant to:

- New York Civil Service Law §167(8), permitting participating employers in NYSHIP to offer a cash incentive in lieu of health insurance coverage;
- NYSHIP rules and guidance governing employer-sponsored opt-out programs;
- Collective bargaining obligations under Civil Service Law Article 14 (Taylor Law);
- Applicable federal requirements, including:
    - Internal Revenue Code (IRC) §125 (where applicable);
    - Affordable Care Act (ACA) employer shared responsibility provisions.

IV. ELIGIBILITY REQUIREMENTS

To participate, an elected official or employee must:

- Be eligible for City health insurance coverage under NYSHIP;
- Be eligible under the applicable collective bargaining agreement, if represented;
- Provide satisfactory proof of enrollment in alternative employer-sponsored group health coverage;
- Certify that the alternative coverage:
    - Is not City-sponsored;
    - Is not solely Medicare (unless supplemented by qualifying group coverage);
    - Constitutes comprehensive major medical coverage meeting minimum essential coverage (MEC) standards under the ACA;
- Submit a completed Waiver Election Form during the designated enrollment period.

The City reserves the right to require additional documentation to verify eligibility and compliance with NYSHIP and ACA requirements.

V. APPLICATION PROCESS

Applications must be submitted to the Employee Benefits Office during the annual NYSHIP Open Enrollment or designated recertification period.

The employee must:

- Complete the Health Insurance Waiver Election Form;
- Provide documentation of alternative coverage (e.g., insurance card, employer certification);
- Certify understanding of the waiver, including forfeiture of City health benefits for the applicable plan year.

Elections shall become effective January 1 of the following plan year, unless otherwise permitted under NYSHIP rules.

Failure to timely submit required documentation shall result in denial of participation.

VI. COVERAGE OPT-OUT INCENTIVE

Approved participants shall receive an annual opt-out incentive of $3,000, subject to the following conditions:

- The incentive amount shall not exceed applicable NYSHIP limits, including guidance that opt-out payments generally may not exceed 50% of the employer's cost of individual coverage (or other limits as established by the State);
- Payments shall be made in two equal installments:
    - First installment: last payroll in March;
    - Second installment: last payroll in September;
- Payments shall be treated as taxable income and subject to all applicable payroll taxes and withholdings;
- Payments are contingent upon:
    - Continued employment;
    - Continuous maintenance of qualifying alternative coverage;
    - Ongoing compliance with all program requirements.

The City reserves the right to suspend payments if eligibility requirements are no longer met.

VII. REINSTATEMENT OF COVERAGE

An employee who elects to waive coverage may re-enroll:

- During the next NYSHIP Open Enrollment period; or
- Upon involuntary loss of alternative coverage (qualifying life event), consistent with NYSHIP rules and ACA special enrollment provisions.

In the event of mid-year reinstatement:

- The employee shall reimburse the City on a pro rata basis for any unearned portion of the opt-out payment;
- Reinstatement is subject to NYSHIP eligibility and administrative approval.

VIII. TERMINATION OF EMPLOYMENT

If employment ends during the plan year:

- The opt-out incentive shall be prorated based on the period of eligibility;

- Any overpayment may be recovered through payroll deduction, consistent with New York Labor Law §193, or through other lawful means.

IX. ADMINISTRATION

This policy shall be administered by the Employee Benefits Office in consultation with:

- The City Comptroller
- Corporation Counsel
- NYSHIP representatives

The City reserves the right to:

- Deny, revoke, or audit participation for non-compliance;
- Require periodic recertification of eligibility;
- Modify or terminate the program, subject to:
    - NYSHIP requirements;
    - Collective bargaining obligations;
    - Approval by the City Council.

X. LIMITATIONS

- Participation in this program does not create a vested right;
- Participation is annual and must be renewed each year;
- The City may suspend or terminate the program if required by:
    - NYSHIP;
    - Changes in law or regulation;
    - Fiscal necessity, subject to bargaining obligations.

CITY OF MOUNT VERNON, N.Y.
OFFICE OF THE COMPTROLLER

Darren M. Morton, Ed.D., CPRP, CMFO
Comptroller

City Hall, One Roosevelt Square
Mount Vernon, NY, 10550
(914) 665-2303

April 15, 2026

Honorable Members of the City Council
1 Roosevelt Square - City Hall
Mount Vernon, NY 10550

Re: Finance Policy Procedures Documents
Referral # COMP2026-06

Dear Honorable Members of the City Council:

Pursuant to Section 91 of the Mount Vernon City Charter, the Comptroller is charged with the supervision of the City's financial affairs and is authorized to establish rules, regulations, and general practices for the organization and administration of fiscal operations. This authority includes defining the financial roles, responsibilities, and levels of authority of City staff and elected officials.

Consistent with this mandate, your Honorable Body previously authorized my office to collaborate with the City's financial advisors and external consultants to develop and strengthen the City's financial policy framework. As part of that effort, interim procedures were implemented to support ongoing operations, and the following policies were formally adopted and remain in effect:

- Investment Policy
- Fund Balance Policy
- Debt Management Policy
- Travel and Expense Policy

At this time, I respectfully request that the Mount Vernon City Council ("the Council") adopt, by legislation, the comprehensive Finance Policy and Procedures Document, along with the following individual policy components:

- Cash Management – Cash Receipts Policy

- Journal Entry Policy and Procedures
- Electronic Funds Transfer Policy
- Municipal Credit Card Policy
- Vehicle Risk Management and Reporting Policy
- E-ZPass Policy

These proposed policies are designed to further standardize, strengthen, and enhance the City's fiscal controls and operational procedures. They also directly support the implementation of the Corrective Action Plan (CAP) stemming from the 2021 New York State Comptroller's Audit Report.

Each policy will be reviewed at least annually, or more frequently as necessary, to ensure continued relevance, compliance, and effectiveness.

I appreciate your consideration of this proposed legislation and respectfully request your support in adopting these policies and procedures to further promote transparency, accountability, and sound financial management for the City of Mount Vernon.

If you have any questions, please call the Comptroller's Office at 914-665-2304 or email at Comptroller@cmvny.com.

Sincerely,

Dr. Darren M. Morton Ed. D., CPRP. CMFO
Comptroller

cc: Mayor
Law Department

CASH MANAGEMENT
CASH RECEIPTS POLICY

City of Mount Vernon
New York

City Council
Derrick Thompson, President
Cathlin B. Gleason
Jaevon Boxhill
Cynthia Turnquest-Jones
Andre Wallace

Mayor
Shawyn Patterson-Howard

City Comptroller
Dr. Darren M. Morton

CASH MANAGEMENT – CASH RECIEPTS
CITY OF MOUNT VERNON

LEGEND

- Task
- Procedure

WHY IS CASH MANAGEMENT IMPORTANT?

Cash Management is indispensable, it is the catalyst, which allows the City of Mount Vernon to limit its cash outflow and accelerate cash inflow. The City of Mount Vernon wants to increase the amount of money flowing into the city. An improved inflow of cash can assist the Comptroller's office and city's leaders, meet the various needs and obligations for the city.

Cash Management for the Mount Vernon's Comptroller's Office is the benchmark, the financial point of reference, which will help the Comptroller and Mayor make keen financial decisions.

ITEMS COMPTROLLERS OFFICE NEEDS TO ASSURE

- Provide centralized cash collections, fewer locations, and fewer employees collecting cash reduce opportunities for theft to occur and provide better accountability over cash collections.

- Designate separate cash drawers. A separate cash drawer for each collector provides individual accountability over received cash. In the event an employee is engaged in theft, separate cash drawers and individual accountability make it easier to trace the theft to the responsible party.

- Checks over a taxpayer's due amount **should not** be accepted. The City of Mount Vernon Comptroller's Office is not a bank and cannot provide "cash back" services.

- Secure undeposited cash in a safe location and prepared deposits until they are deposited in the bank.

- Limit access to the safe location, when not in use. Limit unauthorized personnel near funds before the funds can be deposited in the bank.

- Deposit monies timely. **Minimum twice a week,** funds are to be deposited into JP Morgan Chase the bank of choice. Prolonged un-deposited money increases the risk of loss or theft.

- Prepare and maintain detailed deposit slips. Deposit slips must be detailed to identify the composition of the deposit between cash collected and individual checks deposited.

- Bank reconciliation should be completed monthly and the Senior accountant preparing the bank reconciliation should be the keeper of all deposit slips.

- Set a fee for Non-Sufficient Funds (NSF) transactions and notify such fee to all taxpayers. An (NSF) fee will deter customers from issuing checks that will not clear the bank.

CASH MANAGEMENT – CASH RECIEPTS
CITY OF MOUNT VERNON

PROCEDURE FOR THE CASHIER

RECEIVING CHECK AND CASH PAYMENTS

- When a taxpayer presents one-self to settle their due tax payment(s), the Cashier shall meet and greet the taxpayer.

- The Cashier shall endeavor to provide an answer(s) to any taxpayer question(s). In the event the Cashier is not able to provide the appropriate answer(s) to the taxpayer, the cashier is to contact the Comptroller or one of his deputies in order to obtain the relevant answer(s) to the question(s) posed by the taxpayer.

- The Cashier shall provide a statement of account(s) to all taxpayers. Should the taxpayer be in agreeance with the statement of account(s) and the taxpayer makes payment(s), the Cashier shall provide the taxpayer with a receipt as their proof of payment.

- The Cashier is to process all received payment(s) in the Tax Collection System, thus indicating a registered payment is made in cash, check, or money order.

- The Cashier shall secure the daily collected funds, cash, and check payments in a designated locked draw.

- All daily tax payment(s) transactions shall cease at 3:00 PM given cashier time to reconcile cash drawer.

- All tax payment(s) received after 3:00 PM shall be recorded and reconciled the following business day.

- The Cashier shall prepare a bank deposit slip (separating cash and checks on a deposit slip) for the daily receipts and or transactions to be deposited into JP Morgan Chase the bank of choice.

- The completed deposit slips shall be handed over to the 2nd Deputy Comptroller for review and any corrections if needed.

RECEIVING CREDIT CARD PAYMENTS

- Should a taxpayer payment(s) is/are made via credit card; the cashier shall collect said payment(s) using the Info-Tech Credit card system.

- The Cashier shall provide the taxpayer with a receipt as their proof of payment.

- The Cashier shall then process the received credit-card payment in the Tax Collection System, thus indicating the taxpayer payment(s) was/were paid by means of a credit card.

PROCEDURE FOR EXECUTIVE ASSISTANT ("EA") TO THE COMPTROLLER OR DESIGNEE

- The EA or designee is to receive a completed bank deposit slip from the 2nd Deputy Comptroller for deposit.

- The EA or designee is tasked to make monetary deposits at least **twice a week** into JP Morgan Chase the approved banking institution of the City of Mount Vernon.

- The EA or designee **is tasked** to telephone the Police Department to attain security escort to and from the approved banking institution.

- The EA or designee shall subsequently hand over the after-deposit slips and a cash report to the Senior Accountant to record and scan said information in the Finance drive for record-keeping.

PROCEDURE FOR SENIOR ACCOUNTANT

- The Senior Accountant when receiving the deposit slips and cash report(s) from the EA or designee shall confirm the accuracy of the account codes.

- The Senior Accountant shall make any corrections on the said cash report as needed for the preparation of the journal entry.

- The Senior Account shall also confirm **ALL** deposited amounts.

- The Senior Accountant shall book the necessary journal entry to record banking deposits in the general ledger system (Munis).

- The Senior Accountant shall add **ALL** the supporting depository documentation(s) into Munis the accounting software.

- The Senior Accountant shall additionally scan all supporting documents in the Finance drive as a backup of the journal entry and for auditing purposes.

- The Senior Accountant shall also scan a copy of **ALL** cash reports and Journal entries in the Finance drive for record keeping.

CITY OF MOUNT VERNON, N.Y.
OFFICE OF THE COMPTROLLER

Darren M. Morton, Ed.D., CPRP, CMFO
Comptroller

City Hall, One Roosevelt Square
Mount Vernon, NY, 10550
(914) 665-2303

April 15, 2026

Honorable Members of the City Council
1 Roosevelt Square - City Hall
Mount Vernon, NY 10550

Re: Finance Policy Procedures Documents
Referral # COMP2026-06

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- E-ZPass Policy

These proposed policies are designed to further standardize, strengthen, and enhance the City's fiscal controls and operational procedures. They also directly support the implementation of the Corrective Action Plan (CAP) stemming from the 2021 New York State Comptroller's Audit Report.

Each policy will be reviewed at least annually, or more frequently as necessary, to ensure continued relevance, compliance, and effectiveness.

I appreciate your consideration of this proposed legislation and respectfully request your support in adopting these policies and procedures to further promote transparency, accountability, and sound financial management for the City of Mount Vernon.

If you have any questions, please call the Comptroller's Office at 914-665-2304 or email at Comptroller@cmvny.com.

Sincerely,

Dr. Darren M. Morton Ed. D., CPRP. CMFO
Comptroller

cc: Mayor
Law Department

JOURNAL ENTRY POLICY & PROCEDURES

City of Mount Vernon
New York

City Council

Derrick Thompson, President
Cathlin B. Gleason
Jaevon Boxhill
Cynthia Turnquest-Jones
Andre Wallace

Mayor

Shawyn Patterson-Howard

City Comptroller

Dr. Darren M. Morton

Journal Entry Policy Overview

Policy:

This document defines the policy to ensure all general ledger journal entries are properly prepared, reviewed, approved, and recorded in accordance with generally accepted accounting principles and stored in a uniform and consistent manner for easy accessibility.

Policy Scope:

This policy applies to all City employees involved in the creation, processing, approval, and recording of general ledger journal entries. This policy excludes journal entries that are sub-ledger generated and posted automatically to the general ledger.

Purpose:

To describe the process and requirements for preparing journal entries and to assure that the following requirements are achieved:

1. All journal entries are to be signed by both the preparer and reviewer prior to posting.

2. Person(s) preparing a journal entry cannot approve the same journal entry.

3. All journal entries should have supporting documentation and a description that fully explains the nature of the entry and amounts being recorded.

4. All journal entries must be properly processed prior to closing the accounting period.

5. All posted journal entries and related documentation should be maintained in an accessible file for review by management and external sources, if necessary.

Journal Entry Preparation, Review, and Processing Procedures

Journal Entry Preparation

1.1 The person preparing a journal entry is responsible for providing all detailed supporting documents for submission and auditing of documentation to ensure accuracy of journal entry.

1.2 The person preparing a journal entry is responsible for explaining the reason to justify and the basis used in preparing the journal entry to supervisor and/or management. This includes ensuring that the debits and credits on the journal entry are in balance. The system will not allow one sided entry.

1.3 Before any journal entry is processed in the accounting system, a Journal Entry Form must be filled out completely:

SEE JOURNAL ENTRY TEMPLATE ATTACHMENT

1.4 Once the Journal Entry Form has been completed and supporting documents attached, the preparer will record the journal entry in the accounting system.

The Unposted General Ledger Transaction Report will be printed and attached to the journal entry.

1.5 The journal entry will be submitted to management for review and approval.

Journal Entry Review and Approval

2.1 Approval of journal entries is limited to an accounting department staff that is at least one level higher in the organization than the preparer. Occasionally, a member of the Management team will authorize the journal entry.

2.2 Individuals who approve journal entries are required to review the detail accompanying the journal entry and ensure that the detail fully explains and supports the journal entry they are authorizing.

2.3 The preparer of a journal entry cannot post the journal entry to the general ledger until proper review and approval has been given.

2.4 Once a journal entry has been reviewed and approved, it is posted by the approver.

2.5 The journal entry is filed by the preparer and maintained for future reference/review, if necessary.

CITY OF MOUNT VERNON-LIVE

GENERAL JOURNAL ENTRY PROOF

Journal Summary

Year	Period	Journal	Journal Desc	Ref 2	Ref 3
2026	04	18	Prisoner T		

Src	Eff Date	Account Project String	Ref 1	Account Description Line Description	T	OB	Debit	Credit
GEN	04/13/2026	A-38003-	RP	ACCOUNTS REC-A/H 20003 Prisoner Transp_ 04 13 2025			9,239.10	
GEN	04/13/2026	A-22295-	RP	COUNTY-TRANSP OF PRISONERS Prisoner Transp_ 04 13 2025				9,239.10
						Totals	**9,239.10**	**9,239.10**
GEN	04/13/2026	A-980-	RP	REVENUES				9,239.10

Fund Summary

Year	Period	Journal	Eff Date
2026	04	18	04/13/2026

Fund	Fund Description	Account	Account Description	Debit	Credit
A	GENERAL FUND	A-38003-	ACCOUNTS REC-A/H 20003	9,239.10	
A	GENERAL FUND	A-980-	REVENUES		9,239.10
			Fund Totals	**9,239.10**	**9,239.10**

Due To/Due From Summary

Fund	Fund Description	DUE TO	DUE FROM
		0.00	0.00
	Totals	**0.00**	**0.00**

** End of Report - Generated by Persaud, Rajendra **

APPROVED BY:

DATE: 4/14/26

Report generated: 04/14/2026 14:41:45
User: Persaud, Rajendra (4780rpersaud)
Program ID: glcjeent

CITY OF MOUNT VERNON
OFFICE OF THE COMPTROLLER

CASH REPORT

RECEIVED DATE	RECEIVED FROM	DESCRIPTION	AMOUNT
4/13/26	County of Westchester	Prisoner Transportation	9,239.10
		TOTAL	$ 9,239.10

Account	Description	Debit	Credit	Journal #
A38003	Due from Other Govts	9,239.10		18
A22295	Prisoner Transportation_04 13 2026		9,239.10	
	Total	9,239.10	9,239.10	

Notes: Entry to record the reimbursement from Westchester County for the transport of Prisoners

RECEIVED BY: Finance Dept.

DATE 4/13/26

SIGNED R. Persaud

CRJ PAGE_____

CITY OF MOUNT VERNON
POLICE DEPARTMENT

STATEMENT OF CASH RECEIPTS

DATE RECEIVED	PAYOR OR SOURCE OF RECEIPT	PURPOSE (S) FOR WHICH RECEIVED	AMOUNT
4/3/2026	County of Westchester Department of Finance	Prisoner Transportation Services Jan-26 COR26032603191	CHECK: WIRE DATED: AMOUNT: $9518.80

RECEIVED
PAYROLL
CITY OF MOUNT VERNON
2026 APR 10 A 11:43

CASH RECEIPTS JOURNAL PAGE _____ DATED _____

TO BE DEPOSITED
ACCOUNT CODE: **A2229.5**

SIGNED BY: _____
POLICE COMMISSIONER OR CHIEF

RECEIVED BY: _____
COMPTROLLER OR DEPUTY

County of Westchester
Dept. of Finance
914-995-2788

Remittance Information for EFT Number: 202604010860736

Effective Date of Deposit: 04/03/2026

Vendor Name: CITY OF MOUNT VERNON
Vendor Number: 993152

Payment Voucher/Number	Vendor Invoice	Purchase Order/ Contract No.	Description	Discount/ Retainage	Net Amount Paid
COR26032603191	01-26	PRT99315225	Prisoner Transportat	.00	9,518.80

Total Amount: 9,518.80

CITY OF MOUNT VERNON, N.Y.
OFFICE OF THE COMPTROLLER

Darren M. Morton, Ed.D., CPRP, CMFO
Comptroller

City Hall, One Roosevelt Square
Mount Vernon, NY, 10550
(914) 665-2303

April 15, 2026

Honorable Members of the City Council
1 Roosevelt Square - City Hall
Mount Vernon, NY 10550

Re: Finance Policy Procedures Documents
Referral # COMP2026-06

Dear Honorable Members of the City Council:

Pursuant to Section 91 of the Mount Vernon City Charter, the Comptroller is charged with the supervision of the City's financial affairs and is authorized to establish rules, regulations, and general practices for the organization and administration of fiscal operations. This authority includes defining the financial roles, responsibilities, and levels of authority of City staff and elected officials.

Consistent with this mandate, your Honorable Body previously authorized my office to collaborate with the City's financial advisors and external consultants to develop and strengthen the City's financial policy framework. As part of that effort, interim procedures were implemented to support ongoing operations, and the following policies were formally adopted and remain in effect:

- Investment Policy
- Fund Balance Policy
- Debt Management Policy
- Travel and Expense Policy

At this time, I respectfully request that the Mount Vernon City Council ("the Council") adopt, by legislation, the comprehensive Finance Policy and Procedures Document, along with the following individual policy components:

- Cash Management – Cash Receipts Policy

- Journal Entry Policy and Procedures
- Electronic Funds Transfer Policy
- Municipal Credit Card Policy
- Vehicle Risk Management and Reporting Policy
- E-ZPass Policy

These proposed policies are designed to further standardize, strengthen, and enhance the City's fiscal controls and operational procedures. They also directly support the implementation of the Corrective Action Plan (CAP) stemming from the 2021 New York State Comptroller's Audit Report.

Each policy will be reviewed at least annually, or more frequently as necessary, to ensure continued relevance, compliance, and effectiveness.

I appreciate your consideration of this proposed legislation and respectfully request your support in adopting these policies and procedures to further promote transparency, accountability, and sound financial management for the City of Mount Vernon.

If you have any questions, please call the Comptroller's Office at 914-665-2304 or email at Comptroller@cmvny.com.

Sincerely,

Dr. Darren M. Morton Ed. D., CPRP. CMFO
Comptroller

cc: Mayor
Law Department

ELECTRONIC FUNDS TRANSFER POLICY

City of Mount Vernon
New York

City Council
Derrick Thompson, President
Cathlin B. Gleason
Jaevon Boxhill
Cynthia Turnquest-Jones
Andre Wallace

Mayor
Shawyn Patterson-Howard

City Comptroller
Dr. Darren M. Morton

Created: March 2022

Electronic Funds Transfer Policy and Procedures

Policy Purpose:

The primary goal of this policy is to ensure Electronic Funds Transfers (EFTs) are initiated, executed, and approved in a secure manner. This policy establishes requirements with respect to domestic and international payments via EFT for payments of City obligations to vendors. This policy is not applicable to student refunds paid from the student information system.

Definitions:

Automated Clearing House (ACH): Generally refers to payments made via direct deposit and should be set up in the vendor master that denotes this payment method.

Bank codes:

- ABA - American Banking Association
- BIC - Business Identifier Code
- IBAN - International Business Account Number
- IRC - International Routing Codes
- SWIFT - Society of Worldwide Interbank Financial Telecommunications

Banking information: Information from the payee or their bank regarding their account; including bank name, account name, account number, routing number, bank contact information and any other information necessary to transmit funds.

Electronic Funds Transfer (EFT): The electronic exchange (transfer of money from one bank account to another), either within a single financial institution or across multiple institutions, through computer-based systems. Wire transfers and ACH payments are examples of EFTs.

Wire request form: This form includes all required information necessary to complete the wire and is required to be submitted to the Comptroller's office. Wire request forms can be requested by explaining the need for wire transfer via email to comptroller@cmvny.com.

Wire transfer: An electronic transfer of funds from one bank account to another initiated directly with the payer's bank.

Policy Statement:

A wire transfer of funds in payment of an obligation of the City will only be used when the situation **requires immediate good funds or by terms of agreement** to settle a transaction. If a more inexpensive mechanism can be utilized to effect payment of the obligation (i.e. ACH or paper check), which is true for most domestic payments, the Comptroller's Office shall reserve the right to effect payment with a more inexpensive mechanism.

All other policies and procedures in relation to the purchase of goods and/or services must be adhered to.

General Requirements:

All EFT payments will be coordinated and submitted through the Comptroller's Office. The Comptroller or his/her designee will approve all new and changes to electronic funds transfer requests, ensuring that the payment via wire is necessary, all required documentation is provided and appropriately approved, and that the request and banking account information is accurate and valid.

Roles and Responsibilities

Accounts Payable in the Comptroller's office is responsible for ensuring that proper documentation, authorization and accounting information are provided and accompany any EFT payment instructions.

The Department of Management Services (DMS) is responsible for administrative process for the purchase of goods and/or services and negotiating payment terms in relation to those purchases. If payment via EFT is requested, DMS is responsible for working with the Comptroller's office to ensure the payment can be made in accordance with this policy.

The Comptroller's Office is responsible for initiating releasing EFTs on behalf of the City. Two separate individuals are required to initiate and release EFT payments through the City's banking partner's computer-based system. The Comptroller's Office also has the responsibility to confirm EFT instructions with specific departments and individuals if there is any question as to the validity of the EFT request.

Departments are responsible for obtaining and submitting proper support and approvals, including the completed and approved Wire Transfer Request form to the Comptroller's office at least fourteen (14) business days prior to payment being needed, unless exception approved by the Comptroller or his/her designee.

Procedures

To promote the safety of City funds in the EFT environment, the following procedures will be adhered to all City employees requesting payments via EFT and all City employees involved in processing payments via EFT:

1. The procedure to initiate an EFT is subject to the same financial policies, procedures and controls that govern disbursement by any other payment mechanism.
2. EFT transactions will not be made without proper authorization of affected parties in accordance with federal and state statue and accepted business practices.
3. 3. Authentication of new EFT requests and changes to existing EFTs required prior to the transaction being input into the computer-based banking system and includes the following steps:
    - **Validate** all new electronic payment instruction requests received even if the request is internal.
    - **Contact** the vendor or requester directly by phone to confirm any requests for payment method or payment instruction changes. Do not use the contact information provided on the request to change payment method or payment instructions; do use contact information known to be genuine such as the contact information in your accounting management system (e.g. MUNIS) or information collected from the original contract. Have the contact confirm existing payment instructions on file prior to making changes to those instructions (i.e. current bank account and routing number provided in original instructions).
    - **Verify** the new information provided on the payment instructions provided with the known contact (i.e. contact bank to confirm correct account name, number and routing information).
    - **Document** the verification process that was followed to validate payment instructions. The person responsible for entering/updating wire instructions and the person approving new/updated wire instructions must approve the record of verification. A record of the verification must be maintained in accordance with record retention policies.
4. When wire payments are approved, they will be set up as a template in the computer-based banking system and cannot be altered by those assigned to use it. The set-up and modifications to these templates will require two authorized City signatories designated by the Comptroller or Deputy Comptroller.

5. When ACH payments are approved, they will be set-up in the vendor master database in the financial accounting system by individuals authorized to perform vender maintenance.
6. Bank balances will be monitored daily for unusual or unexpected transactions.
7. Reconciliation of banking activity to the general ledger will be accomplished in a timely manner with investigation and resolution of reconciling items.

CITY OF MOUNT VERNON, N.Y.
OFFICE OF THE COMPTROLLER

Darren M. Morton, Ed.D., CPRP, CMFO
Comptroller

City Hall, One Roosevelt Square
Mount Vernon, NY, 10550
(914) 665-2303

April 15, 2026

Honorable Members of the City Council
1 Roosevelt Square - City Hall
Mount Vernon, NY 10550

Re: Finance Policy Procedures Documents
Referral # COMP2026-06

Dear Honorable Members of the City Council:

Pursuant to Section 91 of the Mount Vernon City Charter, the Comptroller is charged with the supervision of the City's financial affairs and is authorized to establish rules, regulations, and general practices for the organization and administration of fiscal operations. This authority includes defining the financial roles, responsibilities, and levels of authority of City staff and elected officials.

Consistent with this mandate, your Honorable Body previously authorized my office to collaborate with the City's financial advisors and external consultants to develop and strengthen the City's financial policy framework. As part of that effort, interim procedures were implemented to support ongoing operations, and the following policies were formally adopted and remain in effect:

- Investment Policy
- Fund Balance Policy
- Debt Management Policy
- Travel and Expense Policy

At this time, I respectfully request that the Mount Vernon City Council ("the Council") adopt, by legislation, the comprehensive Finance Policy and Procedures Document, along with the following individual policy components:

- Cash Management – Cash Receipts Policy

- Journal Entry Policy and Procedures
- Electronic Funds Transfer Policy
- Municipal Credit Card Policy
- Vehicle Risk Management and Reporting Policy
- E-ZPass Policy

These proposed policies are designed to further standardize, strengthen, and enhance the City's fiscal controls and operational procedures. They also directly support the implementation of the Corrective Action Plan (CAP) stemming from the 2021 New York State Comptroller's Audit Report.

Each policy will be reviewed at least annually, or more frequently as necessary, to ensure continued relevance, compliance, and effectiveness.

I appreciate your consideration of this proposed legislation and respectfully request your support in adopting these policies and procedures to further promote transparency, accountability, and sound financial management for the City of Mount Vernon.

If you have any questions, please call the Comptroller's Office at 914-665-2304 or email at Comptroller@cmvny.com.

Sincerely,

Dr. Darren M. Morton Ed. D., CPRP. CMFO
Comptroller

cc: Mayor
Law Department

MUNICIPAL CREDIT CARD POLICY

City of Mount Vernon
New York

City Council
Derrick Thompson, President
Cathlin B. Gleason
Jaevon Boxhill
Cynthia Turnquest-Jones
Andre Wallace

Mayor
Shawyn Patterson-Howard

City Comptroller
Dr. Darren M. Morton

Created 1/16/23 / Revised March 2026

Purpose:
The purpose of this policy is to provide guidelines for the use of Municipal credit cards and to ensure Officers and Employees are responsible and accountable in regards to Municipal credit card purchases.

Allocation of Municipal Credit Cards:
The City of Mount Vernon may only issue credit cards to Elected Officers, and Department Heads, unless otherwise recommended by the Comptroller. Approval from City Council is required in order to issue a municipal credit card, and can be rescinded by the Department of Finance (DOF) at any time deemed warranted by the Comptroller. The following conditions shall apply to Municipal credit cards:

- Each Municipal credit card will be issued to a specific person, who will remain personally accountable for the use of the card. Each cardholder will sign the attached declaration (Appendix A).
- Credit cards may be used by municipal staff on a temporary basis and shall be returned to the appropriate director immediately following the specified use. Temporary card users must sign the attached declaration (Appendix B).
- No more than one Municipal credit card shall be issued per cardholder. The exception being the case where a second card may be issued to the DOF or Comptroller that may be used temporally by other staff members.
- Maximum credit card limits are set up to the following:
    - Mayor $5,000
    - Council Member $2,000
    - Comptroller $10,000
    - Department Head $2,000
    - Comptroller /DOF (second card) $2,000 (for temporary or special use by department of travel)
- Any person eligible to be issued a Municipal credit card may decline and instead complete a Municipal Expense Form and submit all supporting documentation of transactions made on behalf of the Municipality to the DOF for direct reimbursement.

Acceptable Use of Municipal Credit Cards:
The objectives of the Municipal credit cards are to simplify travel arrangements, facilitate record keeping and to provide a means of payment when a purchase order or invoicing protocol cannot be facilitated.

Municipal credit card holders shall:

- In all cases obtain and retain sufficient supporting documentation to validate the expense (i.e. receipts and invoices detailing the expense) and complete the credit card expense form (Appendix C).
- Immediately notify the COMPTROLLER and DOF if:
    - The card is lost or stolen.
    - Any unauthorized transaction is detected or suspected.
- Notify the DOF of any change in name or contact details.
- Take adequate means to ensure the security of the card.
- Return the card to the DOF if the cardholder's employment is terminated with the employer.
- Be aware that the Comptroller will determine if there is no longer need for a cardholder to retain their Municipal credit card.
- Notify the DOF if their card is cancelled by the Financial Institution.
- Be personally responsible for any unauthorized transaction unless the card is stolen, lost or subject to fraud on some part of a third party.

Municipal credit card holders shall not:

- Exceed the maximum credit limit set on their Municipal credit card.
- Increase the maximum credit limit set on their Municipal credit card.
- Obtain personal cash advances, money orders, bank drafts, etc. through the Municipal credit card.
- Use the Municipal credit card for any illegal purchases.
- Use the Municipal credit card for any personal purchases.
- Make direct payment on their municipal credit card account for personal purchases made in error, payment is to be provided to the Municipality. If there are repeated instances of personal purchases made in error, card use shall be reviewed and may result in loss of card privileges.
- Authorize their own expenses as stated in the Municipal Mileage/Expense Policy.
- Claim double allowances (i.e. request reimbursement for an expense already paid by the card or on an expense claim).
- Save municipal credit card information within online user accounts (i.e. Vista Print, Paypal, Staples, etc.).

Finance Services:
The DOF shall:

- Review the monthly statements of each Municipal credit card.
- Sign each monthly statement to verify that each transaction has been accounted for.
- Follow up as appropriate to investigate unusual transactions.
- Act immediately upon receipt of advice that abuse or irregularities are known or suspected.
- Maintain records of all cardholders.
- Cancel a card when a cardholder's employment with the Municipality is terminated or an Officer's term ends.
- Follow up with the Financial Institution on lost or stolen cards to confirm the card is cancelled.
- The monthly statement for the DOF shall be signed off by the Comptroller or designee.

Authorized Signature Date

Appendix A – Card Holder Declaration

City of Mount Vernon
Municipal Credit Card Holder Declaration

Department	Credit Card Number

Cardholder Name	Title

Although this card is issued in your name, it is the property of the City of Mount Vernon and must be used in accordance with the Municipality's policies and procedures.

By signing this declaration you acknowledge that you have received the card indicated above, reviewed the Municipal Credit Card and Mileage/Expense Policies and agree to comply with the following terms and conditions:

- This card is provided to you based upon your need to purchase business-related goods and services in the course of employment with the Municipality. This card may be revoked at any time and is not an entitlement nor is it reflective of your title or position.
- This card is for business-related purchases only. Any use of this card for purchases of a personal nature is strictly prohibited.
- Any unauthorized use of this card will be considered an improper use of municipal funds and will be subject to appropriate disciplinary action.
- This card must be used in accordance with all municipal policies and procedures. Municipal policies and procedures may from time to time be issued and amended.
- Employee cards must be returned to the Director of Finance immediately upon request and, in the event, upon your resignation, retirement or dismissal. Officer cards must be returned to the Director of Finance immediately upon the end of your term as Officer. Once a card has been returned no further use of this card will be authorized.

As the holder of this card, you are responsible for its protection and safekeeping. If this card is lost or stolen you are required to immediately advise your supervisor and the Comptroller or his/her budget management designee.

_____ _____

Signature of Cardholder **Date**

_____ _____

Approved By **Date**

Appendix B – Temporary Card User Declaration

City of Mount Vernon
Temporary Municipal Credit Card User Declaration

Name	Title

Although all municipal credit cards are issued in the name of the cardholder, they are the property of the City of Mount Vernon and must be used in accordance with the Municipality's policies and procedures.

By signing this declaration you acknowledge that you have reviewed the Municipal Credit Card and Mileage/Expense Policies and agree to comply with the following terms and conditions:

- A card may be temporarily provided to you based upon your need to purchase business-related goods and services in the course of employment with the Municipality. This card may be revoked at any time and is not an entitlement nor is it reflective of your title or position.
- This card is for business-related purchases only. Any use of this card for purchases of a personal nature is strictly prohibited.
- You are responsible for all charges made against the card while it is in your care.
- Any unauthorized use of this card will be considered an improper use of municipal funds and will be subject to appropriate disciplinary action.
- This card must be used in accordance with all municipal policies and procedures. Municipal policies and procedures may from time to time be issued and amended.
- The card must be returned to your Department Head and the Comptroller or his/her budget management designee immediately following the specified use with supporting documentation of purchases made. Once a card has been returned no further use of this card will be authorized.

As the temporary holder of a municipal credit card, you are responsible for its protection and safekeeping. If a card is lost or stolen you are required to immediately advise the Comptroller or his/her budget management designee.

Signature _____ **Date** _____

Approved By _____ **Date** _____

Appendix C – Credit Card Expense Form

City of Mount Vernon
Credit Card Expense Form

Department	Credit Card Number

Cardholder Name	Title

Purchases

Date	Description	Amount	Budget Line Item
	Total		

Summary

Budget Line Item	Amount
Total	

Signature of Cardholder _____ Date _____

Approved By _____ Date _____

CITY OF MOUNT VERNON, N.Y.
OFFICE OF THE COMPTROLLER

Darren M. Morton, Ed.D., CPRP, CMFO
Comptroller

City Hall, One Roosevelt Square
Mount Vernon, NY, 10550
(914) 665-2303

April 15, 2026

Honorable Members of the City Council
1 Roosevelt Square - City Hall
Mount Vernon, NY 10550

Re: Finance Policy Procedures Documents
Referral # COMP2026-06

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If you have any questions, please call the Comptroller's Office at 914-665-2304 or email at Comptroller@cmvny.com.

Sincerely,

Dr. Darren M. Morton Ed. D., CPRP. CMFO
Comptroller

cc: Mayor
Law Department

VEHICLE RISK MANAGEMENT AND REPORTING POLICY

City of Mount Vernon
Finance Department
New York

City Council
Derrick Thompson, President
Cathlin B. Gleason
Jaevon Boxhill
Cynthia Turnquest-Jones
Andre Wallace

Mayor
Shawyn Patterson-Howard

City Comptroller
Dr. Darren M. Morton

CITY VEHICLES

The City shall provide vehicles for various departments and employees for the purpose of conducting City business when determined necessary by the Department of Public Works, Mayor, Comptroller and/or City Council.

All vehicle maintenance is the responsibility of the respective department Fleet Manager. No political paraphernalia or other markings such as bumper stickers, signs or advertisements are allowed on City vehicles.

Any employee who is charged with a traffic violation while driving a City vehicle shall be held personally responsible for the payment of any fines incurred during such use. In addition, the employee shall bring such violation(s) to the attention of their Department Head through written memorandum.

Any employee who is involved in an accident with a City vehicle regardless of severity, shall obtain a Police Accident Report on the circumstances of the accident. The Department Head will in turn submit such report to the City's Claims Investigator and the City Comptroller or his/her designee.

The City's Law Department and/or Comptroller will submit and follow up with the City Insurance Carrier regarding any claim, settlement and payment. The City Corporation Counsel shall recommend any settlement, if applicable, to the Board of Estimates and Contracts for approval, with notice to the City Council.

The use of City vehicles for personal purposes, use by unauthorized individuals, or operation of a City vehicle in an unsafe manner is strictly prohibited. Any such use will result in the revocation of vehicle use privileges and/or other disciplinary action as deemed appropriate and necessary by the Comptroller and/or City Council.

Any vehicle assigned to an employee as a "take home" vehicle must comply with this policy, the City Vehicle Use Policy and the Internal Revenue regulations pertaining to vehicle fringe benefits, including the annual report of use and mileage.

NOTE: For positions requiring licensure, annual license checks will be required. Employees should request a certified copy of their driving record from DMV and submit the report to their supervisor.

NOTE: License revocations, suspensions and other limitations and restrictions must be reported to your supervisor within 24 hours of the notification and where applicable may affect your title and salary grade.

CITY OF MOUNT VERNON, N.Y.
OFFICE OF THE COMPTROLLER

Darren M. Morton, Ed.D., CPRP, CMFO
Comptroller

City Hall, One Roosevelt Square
Mount Vernon, NY, 10550
(914) 665-2303

April 15, 2026

Honorable Members of the City Council
1 Roosevelt Square - City Hall
Mount Vernon, NY 10550

Re: Finance Policy Procedures Documents
Referral # COMP2026-06

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Sincerely,

Dr. Darren M. Morton Ed. D., CPRP. CMFO
Comptroller

cc: Mayor
Law Department

E-ZPASS POLICY

City of Mount Vernon
New York

City Council
Derrick Thompson, President
Cathlin B. Gleason
Jaevon Boxhill
Cynthia Turnquest-Jones
Andre Wallace

Mayor
Shawyn Patterson-Howard

City Comptroller
Dr. Darren M. Morton

Created 06/27/23

City of Mount Vernon, NY
Office of the Comptroller

Directive and Procedures for the Management and Use of the E-ZPASS® Transponders

In accordance the Article VIII, Section 91a of the City Charter, the Comptroller has established this directive and procedures for the management and use of the E-ZPASS® transponders. Any violation of this Directive and procedures will be subject to disciplinary action, in accordance with the personnel policies and City Charter.

This directive and procedures apply to all City of Mount Vernon activities and employees.

Directive:

- E-Zpasses® will only be used while performing official City business in government owned vehicles registered to the City transponder E-Pass® account. Personally obtained transponders are not allowed unless prior authority is granted by the Comptroller or his/her designee.
- There are two types of E-Zpasses® issued by the Office of the Comptroller: (1) Vehicle-Assigned and (2) Departmental. The Vehicle-Assigned E-ZPASS® is specifically assigned to a City-owned vehicle and must only be used for said vehicle, unless otherwise authorized by the Comptroller. The Departmental E-ZPASS® is assigned to the department and distributed to the Department Head for management, safeguard, and distribution.
- E-Zpasses® are to be kept in a Secure location within each Department or in the vehicle assigned to the E-ZPASS®.

Responsibilities:

- The individual operator with a vehicle-assigned E-ZPASS® are accountable for appropriate utilization of the E-ZPASS® and the Department Head of each Department shall be held accountable for ensuring the appropriate utilization of each E-ZPASS® assigned to the Department, in accordance with this directive.
- E-Zpasses® should be issued only to authorized personnel, thus allowing said personnel to perform their responsibilities for the City of Mount Vernon, in an effective manner.
- E-Zpasses® are **NOT** to be used for personnel use.
    - For example, they are not to be used for traveling to work from home or vice versa.
    - Employees are reminded that abuse of a city-sponsored E-ZPASS® is prohibited and may lead to disciplinary proceedings.
- E-Zpasses® are issued and monitored by the Office of the Comptroller.
- The Department Head shall be responsible for verifying that all usage incurred are appropriate and return the signed monthly vehicle trip log sheet to the Office of the Comptroller.
- If an employee uses a city-issued E-ZPASS® for personnel use, the said employee is responsible for **ALL** charges including surcharges late fees, etc.

- Payment of E-ZPASS® toll violations will be the responsibility of the vehicle operator, unless it is determined that the transponder malfunctioned, the account had been suspended or cancelled, or other legitimate reason clearly beyond the control of the vehicle operator.
- All E-ZPASS® usage must be reported to the Comptroller's office at the end of every month to the attention of the Deputy Comptroller using a vehicle trip log detail sheet provided (see attached).
    - Subsequently, the driver must indicate in detail what the vehicle was used for and why it needed to be used so that accurate city vehicle trip logbooks can be maintained.

Employees are allowed to use a city-sponsored E-ZPASS® only when conducting official City business and in connection with the approval of the Department Head.

E-ZPASS® in Fleet vehicles

- Where applicable, the Department Head will ensure that a supervisor is appointed as the responsible party for E-ZPASS® oversight with respect to fleet vehicles. The said supervisor will retain the pooled vehicle's E-ZPASS® until a driver indicates a need to use it for official City business. Prior to granting approval, the supervisor will notify the Department Head for permission.

Loss of an E-ZPASS®

- If an E-ZPASS® is lost or stolen, the driver will notify the supervisor who will inform the Department Head who must notify the Comptroller's office immediately, to properly close out the account and obtain a replacement E-ZPASS® .

Reimbursement of E-ZPASS® charges City receives monthly E-ZPASS® statements. Drivers are responsible for reimbursement to the agency for any charges incurred while not performing official City business. Drivers are reminded that abuse of a City-sponsored E-ZPASS® is prohibited and may lead to disciplinary proceedings.

CITY OF MOUNT VERNON, N.Y.
OFFICE OF THE COMPTROLLER

Darren M. Morton, Ed.D., CPRP, CMFO
Comptroller

City Hall, One Roosevelt Square
Mount Vernon, NY, 10550
(914) 665-2303

April 15, 2026

Honorable Members of the City Council
1 Roosevelt Square - City Hall
Mount Vernon, NY 10550

Re: Workers' Compensation Reporting and Claim Process
Referral # COMP2026-05

Dear Honorable Members:

Pursuant to Section 91 of the Mount Vernon City Charter, the Comptroller is entrusted with the supervision of the City's financial affairs and is authorized to establish rules, regulations, and general practices for organizing and regulating fiscal operations. This includes the authority to define the financial responsibilities and authority of City staff and elected officials.

In alignment with this responsibility, I respectfully request that the Mount Vernon City Council ("the Council") enact legislation adopting the attached Works' Compensation Reporting and Claims Process for the City of Mount Vernon.

This proposed policy is intended to standardize and enhance the City's procedures for managing workers' compensation claims.

To ensure compliance with applicable laws, city policy and collective bargaining agreements, to support the efficient administration of City resources, it is essential to establish clear procedures. Furthermore, it is essential for this process to be centralized and monitored by the Employee Benefits and Human Resources offices. This policy provides the framework for enhanced efficiency, consistency and transparency.

I appreciate your thoughtful consideration of this proposed legislation and look forward to your support in adopting this uniformed procedure that promotes accountability, transparency, and operational consistency.

If you have any questions, please call the Comptroller's Office at 914-665-2304 or email at Comptroller@cmvny.com.

Sincerely,

Dr. Darren M. Morton Ed. D., CPRP. CMFO
Comptroller

cc: Mayor
Law Department

Workers' Compensation Reporting and Claim Procedures

City of Mount Vernon
New York

City Council
Derrick Thompson, President
Jaevon Boxhill
Cathlin Gleason
Cythnia Turnquest-Jones
Andre' Wallace

Mayor
Shawyn Patterson-Howard

City Comptroller
Dr. Darren M. Morton

CMVNY

The Workers' Compensation Incident Reporting, Claims Process and Return-to-Work Procedures

!Important! The Workers' Compensation claim process is a guide to ensure all work injuries are reported efficiently and timely. The employer must notify TRIAD within 10 days from the incident. Failure to file the claim within 10 days after the accident, will result in the City receiving a penalty.

❶ Immediate Reporting & Medical Assistance

The employee must report any workplace incident to their supervisor immediately. If necessary, appropriate medical assistance should be sought without delay.

❷ Supervisor's Responsibilities

The supervisor is responsible for completing an internal incident report and the NYS Workers' Compensation Form C-2F.

❸ Submission of Documentation

The designated department representative must submit the incident report and C-2F form to both Human Resources and the Employee Benefits office within 24 hours of the incident.

Important: All documentation must be delivered in person to safeguard employee privacy and ensure HIPAA compliance (e.g., avoid emailing documents containing Social Security numbers).

❹ Claim Initiation

The Employee Benefits office will initiate the claim by submitting the completed C-2F form to Triad (the Workers' Compensation carrier) and will notify HR upon successful submission.

❺ Medical Documentation

The employee must provide all relevant medical documentation to HR. The physician's note must clearly indicate whether the employee is fit to resume work duties or requires medical leave.

❻ Notification of Required RPC

Upon receipt of the physician's note, HR will inform the supervisor if a Request Personnel Change (RPC) form is required. The department must submit the RPC to HR within 24–48 business hours. HR will then submit the RPC to Civil Service, Payroll and update the Employee Benefits office with the employee's status.

❼ Ongoing Claim Monitoring

The Employee Benefits office will continue to work with Triad to monitor the status and progress of the employee's Workers' Compensation claim.

❽ Return-to-Work Process

The employee must submit return-to-work documentation to both HR and their department head within 24–48 business hours of their clearance.

HR and the department head will review and assess any restrictions, limitations, or job accommodations required, and confirm the employee's return-to-work date.

❾ Final RPC Submission

Once a return-to-work date is established, the supervisor must submit an updated RPC to HR within 24–48 business hours to reflect the employee's updated status. HR will submit the updated RPC to Civil Service, Payroll and update the Employee Benefits office with the employee's updated status.

❿ Closure of Worker's Compensation Claim

The Employee Benefits office will coordinate with Triad's closure of claim and process any outstanding payments.

The Workers' Compensation Claim Process is subject to change, based on the Comptroller's discretion

INCIDENT REPORT FORM

Your Name: _____ Date: _____

Title: _____ Phone Number: _____

Department: _____

Status: ____Employee ____Contractor

Other (Specify) _____

Address: _____

Complaint Information

Date of Incident: _____ Time of Incident: _____

Location of Incident: _____

Please describe the incident in detail:

_____

_____

_____

_____

_____

_____

If there are others who have witnessed the incident, please provide their names and phone numbers below:

_____

_____

_____

Is this the first time you have raised this concern about this person?

____ Yes ____ No

Do you have any suggestions for resolving the complaint? If so, please explain.

_____

_____

_____

Do you have any additional information or complaints? If so, please explain.

_____

_____

_____

Signature: _____ Print Name: _____

WORKERS' COMPENSATION BOARD

State of New York - Workers' Compensation Board

Employer's First Report of Work-Related Injury/Illness

C-2F

A work-related injury or illness must be reported within 10 days (Per Section 110) of the injury/illness or be subject to a penalty. Employers are not required to submit form C-2F to the Workers' Compensation Board if the employer's insurer will be submitting the accident information electronically to the Board on the employer's behalf. If you need assistance completing this form, please contact your insurer for guidance on the best method of reporting work-related accident information. If you submit this form to the Board, please send it to P.O. Box 5205, Binghamton, NY 13902 and provide a copy to your insurer.

Employee Name _____

WCB Case Number (JCN) _____ **Date of Injury** _____

Claim Administrator Claim Number _____

INSURER / CLAIM ADMINISTRATOR INFORMATION

Insurer Name _____ **Insurer ID** _____

Name TRIAD GROUP

Info/Attn _____

Address 185 JORDAN RD

City TROY **State** NY

Postal Code 12180 **Country** USA

Claim Admin ID T100068

EMPLOYEE INFORMATION

First Name _____ **Middle Name/Initial** _____

Last Name _____ **Suffix** _____

Mailing Address _____

City _____ **State** _____

Postal Code _____ **Country** _____

Phone Number _____ **Date of Hire** _____

Date of Birth _____ **Gender** ☐ Male ☐ Female ☐ Unknown

Employee SSN _____

Occupation Description _____

CLAIM INFORMATION

Time of Injury _____ **Date Employer Had Knowledge of the Injury** _____

Employment Status _____ **Date Employer Had Knowledge of Date of Disability** _____

Estimated Weekly Wage _____ **Number of Days Worked Per Week** _____

Work Week Type ☐ Standard Work Week ☐ Fixed Work Week ☐ Varied Work Week

Work Days Scheduled ☐ Sun ☐ Mon ☐ Tues ☐ Wed ☐ Thurs ☐ Fri ☐ Sat

EMPLOYEE INJURY

Full Wages Paid for Date of Injury ☐ Yes ☐ No **Employer Paid Salary in Lieu of Compensation** ☐ Yes ☐ No

Initial Treatment ☐ No Medical Treatment ☐ Minor On-Site Treatment By Employer ☐ Minor Clinic/Hospital Treatment
☐ Emergency Evaluation ☐ Hospitalization Greater Than 24 Hours ☐ Future Major Medical/Lost Time Anticipated

Death Result of Injury ☐ Yes ☐ No ☐ Unknown **Date of Death** _____ **Number of Dependents** _____

Nature of Injury (i.e. Laceration, Burns, Fracture, Strain, etc) _____

Part of Body (i.e. left arm, right foot, head, multiple, etc) _____

Cause of Injury (i.e. Motor Vehicle, Machine, Strain or Injury by lifting, etc) _____

Accident/Injury Description (see instructions)

WORK STATUS

Initial Date Last Day Worked _____ **Return To Work Type** ☐ Actual ☐ Released

Initial Date Disability Began _____ **Physical Restrictions** ☐ Yes ☐ No

Initial Return to Work Date _____ **Return To Work Same Employer** ☐ Yes ☐ No

ACCIDENT LOCATION AND WITNESSES

Premises (see instructions) ☐ Employer ☐ Lessee ☐ Other

Organization Name _____

Street _____ **State** _____

City _____ **Postal Code** _____

County _____ **Country** _____

Location Narrative _____

Witnesses	Business Phone Number

EMPLOYER INFORMATION

Name CITY OF MT VERNON **Employer FEIN** 136007305

UI Number 04-60117 3 **Manual Classification Code**

Industry Code 92119

Info/Attn COMPTROLLERS OFFICE

Mailing Address CITY HALL

City MT VERNON **State** NY

Postal Code 10550 **Country** USA

Physical Addr CITY HALL

City MT VERNON **State** NY

Postal Code 10550 **Country** USA

Contact Name

Contact Business Phone Number

INSURED INFORMATION

Insured Name **Insured FEIN**

Insured Type ☐ Insured ☒ Self-Insured ☐ Uninsured **Insured Location ID**

Policy Number ID

Policy Effective Date **Policy Expiration Date**

An employer or carrier, or any employee, agent, or person acting on behalf of an employer or carrier, who KNOWINGLY MAKES A FALSE STATEMENT OR REPRESENTATION as to a material fact in the course of reporting, investigation of, or adjusting a claim for any benefit or payment under this chapter for the purpose of avoiding provision of such payment or benefit SHALL BE GUILTY OF A CRIME AND SUBJECT TO SUBSTANTIAL FINES AND IMPRISONMENT.

The above information is true to the best of my knowledge and belief.

If prepared by the employer:

Signature of Person Preparing Form **Date**

Print Name

Title **Phone Number**

CITY OF MOUNT VERNON, N.Y.
OFFICE OF THE COMPTROLLER

Darren M. Morton, Ed.D., CPRP, CMFO
Comptroller

City Hall, One Roosevelt Square
Mount Vernon, NY, 10550
(914) 665-2303

April 27, 2026

The Honorable City Council
City Hall
1 Roosevelt Square
Mount Vernon, NY 10550

RE: COMP2026 – 07 – Acceptance of the 2021 Annual Independent Audit prepared by PKF O'Connor Davies

Honorable City Council Members:

I am pleased to announce and submit the 2021 City Audit for acceptance by your Honorable Body. Pursuant to General Municipal Finance Law and the Mount Vernon City Charter Section 98 – Independent Audit, the annual independent audit shall be submitted to the City Council, the Mayor and the Comptroller. Additionally, copies are to be made accessible to the public.

Therefore, enclosed you will find copies of the final audit documents for the 2021 fiscal year, which will also be available on the City website. It is my request for the City Council to adopt this audit and any corrective action measures. If there are any questions, please do not hesitate to contact me.

Thanking you in advance for your assistance in this matter.

Respectfully,

Darren M. Morton, Ed.D., CPRP, CMFO
Comptroller
City of Mount Vernon
1 Roosevelt Sq.
Mount Vernon, NY 10550
dmorton@cmvny.com
914-665-2304

cc: Mayor Shawyn Patterson-Howard
Corporation Counsel
File

City of Mount Vernon, New York

Financial Statements and
Supplementary Information

Year Ended December 31, 2021

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PKF O'CONNOR DAVIES
ACCOUNTANTS AND ADVISORS

Independent Auditors' Report

The Honorable Mayor and the City Council
of the City of Mount Vernon, New York

Report on the Audit of the Financial Statements

Qualified and Unmodified Opinions

We have audited the financial statements of the governmental activities, the discretely presented component unit, each major fund and the aggregate remaining fund information of the City of Mount Vernon, New York ("City") as of and for the year ended December 31, 2021, and the related notes to the financial statements, which collectively comprise the City's basic financial statements as listed in the table of contents.

We did not audit the financial statements of the Mount Vernon Industrial Development Agency (a component unit), which represents 100% of the assets and revenues of the discretely presented component unit, for the year ended December 31, 2021. Those statements were audited by another auditor, whose report has been furnished to us, and our opinion, insofar as it relates to the amounts included for such component unit, is based solely on the report of the other auditor.

Summary of Opinions

Opinion Unit	*Type of Opinion*
Governmental Activities	Qualified
Discretely Presented Component Unit	Unmodified
General Fund	Unmodified
Community Development Fund	Unmodified
Capital Projects Fund	Unmodified
Water Fund	Qualified
Debt Service Fund	Unmodified
Aggregate Remaining Fund Information	Qualified

Qualified Opinions on Governmental Activities, Water Fund and Aggregate Remaining Fund Information

In our opinion, except for the effects of the matters described in the Basis for Qualified Opinion paragraphs on the Governmental Activities, Water Fund and the Aggregate Remaining Fund Information, the financial statements referred to above present fairly, in all material respects, the respective financial position of the governmental activities and each major fund of the City, as of December 31, 2021, and the respective changes in financial position and, where applicable, cash flows thereof and the respective budgetary comparison for the General Fund for the year then ended in accordance with accounting principles generally accepted in the United States of America.

Unmodified Opinions on Discretely Presented Component Unit, General Fund, Community Development Fund, Capital Projects Fund and Debt Service Fund

In our opinion, the accompanying financial statements referred to above present fairly, in all material respects, the respective financial position of the discretely presented component unit, General Fund, Community Development Fund, Capital Projects Fund and Debt Service Fund of the City, as of December 31, 2021, and the respective changes in financial position, for the year then ended in accordance with accounting principles generally accepted in the United States of America.

Basis for Qualified and Unmodified Opinions

We conducted our audit in accordance with auditing standards generally accepted in the United States of America ("GAAS") and the standards applicable to financial audits contained in *Government Auditing Standards*, issued by the Comptroller General of the United States. Our responsibilities under those standards are further described in the Auditor's Responsibilities for the Audit of the Financial Statements section of our report. We are required to be independent of the City, and to meet our other ethical responsibilities, in accordance with the relevant ethical requirements relating to our audit. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our qualified and unmodified audit opinions.

Matters Giving Rise to Qualified Opinion on Water Fund

The financial statements of the Water Fund did not disclose all known, actual or possible litigation and claims whose effects should be considered by management when preparing the financial statements. In our opinion, disclosure of this information is required by accounting principles generally accepted in the United States of America. Consequently, we were unable to determine the effect of the lack of litigation disclosure.

Matters Giving Rise to Qualified Opinion on Governmental Activities and Aggregate Remaining Fund Information

The City has reported a liability for compensated absences in the amount of $5,039,608 on the Governmental Activities statement of net position at December 31, 2021. We were unable to obtain sufficient appropriate audit evidence surrounding this balance because the records were not being maintained properly and could not be compiled into a comprehensive and coherent format suitable for the audit. Consequently, we were unable to determine whether any adjustment to this amount was necessary.

Responsibilities of Management for the Financial Statements

Management is responsible for the preparation and fair presentation of these financial statements in accordance with accounting principles generally accepted in the United States of America and for the design, implementation, and maintenance of internal control relevant to the preparation and fair presentation of financial statements that are free from material misstatement, whether due to fraud or error. In preparing the financial statements, management is required to evaluate whether there are conditions or events, considered in the aggregate, that raise substantial doubt about the City's ability to continue as a going concern for twelve months beyond the financial statement date, including any currently known information that may raise substantial doubt shortly thereafter.

Auditors' Responsibilities for the Audit of the Financial Statements

Our objectives are to obtain reasonable assurance about whether the financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditors' report that includes our opinion. Reasonable assurance is a high level of assurance but is not absolute assurance and therefore is not a guarantee that an audit conducted in accordance with GAAS and *Government Auditing Standards* will always detect a material misstatement when it exists. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion,

forgery, intentional omissions, misrepresentations, or the override of internal control. Misstatements are considered material if there is a substantial likelihood that, individually or in the aggregate, they would influence the judgment made by a reasonable user based on the financial statements.

In performing an audit in accordance with GAAS and *Government Auditing Standards*, we:

- Exercise professional judgment and maintain professional skepticism throughout the audit.
- Identify and assess the risks of material misstatement of the financial statements, whether due to fraud or error, design and perform audit procedures responsive to those risks. Such procedures include examining, on a test basis, evidence regarding the amounts and disclosures in the financial statements.
- Obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the City's internal control. Accordingly, no such opinion is expressed.
- Evaluate the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, as well as evaluate the overall presentation of the financial statements.
- Conclude whether, in our judgment, there are conditions or events, considered in the aggregate, that raise substantial doubt about the City's ability to continue as a going concern for a reasonable period of time.

We are required to communicate with those charged with governance regarding, among other matters, the planned scope and timing of the audit, significant audit findings, and certain internal control-related matters that we identified during the audit.

Other Matters

Required Supplementary Information

Management has omitted Management's Discussion and Analysis that accounting principles generally accepted in the United States of America require to be presented to supplement the financial statements. Such missing information, although not a part of the basic financial statements, is required by the Governmental Accounting Standards Board which considers it to be an essential part of financial reporting for placing the financial statements in an appropriate operational, economic or historical context. Our opinions on the basic financial statements are not affected by this missing information.

Accounting principles generally accepted in the United States of America require that the schedules included under the Required Supplementary Information in the accompanying table of contents be presented to supplement the basic financial statements. We have applied certain limited procedures to the required supplementary information in accordance with auditing standards generally accepted in the United States of America, which consisted of inquiries of management about the methods of preparing the information and comparing the information for consistency with management's responses to our inquiries, the basic financial statements and other knowledge we obtained during our audit of the basic financial statements. We do not express an opinion or provide any assurance on the information because the limited procedures do not provide us with sufficient evidence to express an opinion or provide any assurance.

Supplementary Information

Our audit was conducted for the purpose of forming opinions on the financial statements that collectively comprise the City's basic financial statements. The individual fund financial statements and schedules are presented for purposes of additional analysis and are not a required part of the basic financial statements. Such information is the responsibility of management and was derived from and relates directly to the underlying accounting and other records used to prepare the basic financial statements. The information has been subjected to the auditing procedures applied in the audit of the basic financial statements and certain additional procedures, including comparing and reconciling such information directly to the

underlying accounting and other records used to prepare the basic financial statements or to the basic financial statements themselves, and other additional procedures in accordance with auditing standards generally accepted in the United States of America. In our opinion, the individual fund financial statements and schedules are fairly stated, in all material respects, in relation to the basic financial statements as a whole.

Other Reporting Required by *Government Auditing Standards*

In accordance with *Government Auditing Standards*, we have also issued our report dated April 3, 2026 on our consideration of the City's internal control over financial reporting and our tests of its compliance with certain provisions of laws, regulations, contracts and grant agreements and other matters. The purpose of that report is solely to describe the scope of our testing of internal control over financial reporting and compliance and the results of that testing, and not to provide an opinion on the internal control over financial reporting or on compliance. That report is an integral part of an audit performed in accordance with *Government Auditing Standards* in considering the City's internal control over financial reporting and compliance.

PKF O'Connor Davies, LLP

PKF O'Connor Davies, LLP
Harrison, New York
April 3, 2026

PKF O'CONNOR DAVIES
ACCOUNTANTS AND ADVISORS

Report on Internal Control Over Financial Reporting and on Compliance and Other Matters Based on an Audit of Financial Statements Performed in Accordance With *Government Auditing Standards*

Independent Auditors' Report

The Honorable Mayor and City Council
of the City of Mount Vernon, New York

We have audited, in accordance with auditing standards generally accepted in the United States of America and the standards applicable to financial audits contained in *Government Auditing Standards* issued by the Comptroller General of the United States, the financial statements of the governmental activities, each major fund and the aggregate remaining fund information of the City of Mount Vernon, New York ("City") as of and for the year ended December 31, 2021, and the related notes to the financial statements, which collectively comprise the City's basic financial statements, and have issued our report thereon dated April 3, 2026. Our report includes a reference to other auditors who audited the financial statements of the Mount Vernon Industrial Development Agency (a component unit), as described in our report on the City's financial statements. This report does not include the results of the other auditors' testing of internal control over financial reporting or compliance and other matters that are reported on separately by those auditors. Our report includes a qualified opinion on the Governmental Activities, Water Fund and aggregate remaining fund information.

Internal Control Over Financial Reporting

In planning and performing our audit of the financial statements, we considered the City's internal control over financial reporting ("internal control") to determine the audit procedures that are appropriate in the circumstances for the purpose of expressing our opinions on the financial statements, but not for the purpose of expressing an opinion on the effectiveness of the City's internal control. Accordingly, we do not express an opinion on the effectiveness of the City's internal control.

Our consideration of internal control was for the limited purpose described in the preceding paragraph and was not designed to identify all deficiencies in internal control that might be material weaknesses or significant deficiencies and therefore, material weaknesses or significant deficiencies may exist that were not identified. However, as described in the accompanying schedule of findings and questioned costs, we identified certain deficiencies in internal control that we consider to be a material weakness and significant deficiencies.

A deficiency in internal control exists when the design or operation of a control does not allow management or employees, in the normal course of performing their assigned functions, to prevent, or detect and correct, misstatements on a timely basis. A material weakness is a deficiency, or a combination of deficiencies, in internal control such that there is a reasonable possibility that a material misstatement of the entity's financial statements will not be prevented, or detected and corrected, on a timely basis. We consider the deficiencies described in the schedule of findings and questioned costs included in the City's Single Audit reporting package as findings 2021-001, 2021-002, 2021-003, 2021-004 and 2021-005 to be material weaknesses.

PKF O'Connor Davies, LLP is a member firm of the PKF International Limited network of legally independent firms and does not accept any responsibility or liability for the actions or inactions on the part of any other individual member firm or firms.

A significant deficiency is a deficiency, or a combination of deficiencies, in internal control that is less severe than a material weakness, yet important enough to merit attention by those charged with governance. We consider the deficiencies described in the schedule of findings and questioned costs included in the City's Single Audit reporting package as items 2021-006 and 2021-007 to be significant deficiencies.

Compliance and Other Matters

As part of obtaining reasonable assurance about whether the City's financial statements are free from material misstatement, we performed tests of its compliance with certain provisions of laws, regulations, contracts and grant agreements, noncompliance with which could have a direct and material effect on the determination of financial statement amounts. However, providing an opinion on compliance with those provisions was not an objective of our audit, and accordingly, we do not express such an opinion. The results of our tests disclosed no instances of noncompliance or other matters that are required to be reported under *Government Auditing Standards*.

We noted certain other matters that we reported to the management of the City in a separate letter.

City's Response to Findings

The City's response to the findings identified in our audit are described in the schedule of findings and questioned costs included in the City's Single Audit reporting package. The City's response was not subjected to the auditing procedures applied in the engagement to audit the financial statements and, accordingly, we express no opinion on it.

Purpose of this Report

The purpose of this report is solely to describe the scope of our testing of internal control and compliance and the results of that testing, and not to provide an opinion on the effectiveness of the City's internal control or on compliance. This report is an integral part of an audit performed in accordance with *Government Auditing Standards* in considering the City's internal control and compliance. Accordingly, this communication is not suitable for any other purpose.

PKF O'Connor Davies, LLP

PKF O'Connor Davies, LLP
Harrison, New York
April 3, 2026

Statement of Net Position
December 31, 2021

	Primary Government	Component Unit
	Governmental Activities	Industrial Development Agency
ASSETS		
Cash and equivalents	$ 31,511,813	$ 2,315,783
Cash - restricted	-	850,434
Receivables		
Taxes, net	24,137,438	435,498
Accounts, net	2,576,896	-
Water rents	7,541,146	-
State and Federal aid	4,745,090	-
Due from other governments	452,348	-
Mortgages, net	8,109,204	-
Other	-	335,905
Prepaid expenses	23,722	6,500
Capital assets		
Not being depreciated	5,730,931	245,000
Being depreciated, net	73,984,234	1,170,601
Total Assets	158,812,822	5,359,721
DEFERRED OUTFLOWS OF RESOURCES		
Pension related	66,001,888	-
OPEB related	72,084,468	-
Total Deferred Outflows of Resources	138,086,356	-
LIABILITIES		
Accounts payable and accrued liabilities	32,078,866	100,095
Due to other governments	429,980	1,676,990
Due to school district	6,826,098	-
Due to fiduciary fund	224,926	-
Due to retirement systems	9,649,974	-
Deposits payable	1,250,557	830,434
Employee payroll deductions	596,376	-
Overpayments	2,417,772	-
Unearned revenues	17,457,278	30,138
Accrued interest payable	34,672	-
Non-current liabilities		
Due within one year	10,617,303	-
Due in more than one year	382,065,744	-
Total Liabilities	463,649,546	2,637,657
DEFERRED INFLOWS OF RESOURCES		
Pension related	70,467,330	-
OPEB related	41,706,856	-
Total Deferred Inflows of Resources	112,174,186	-
NET POSITION		
Net investment in capital assets	69,425,611	1,415,601
Restricted for		
Community development	8,241,457	-
Capital projects	3,131,066	-
Liability and casualty claims	1,931,451	-
Debt service	119,601	-
Industrial development agency	-	1,306,463
Unrestricted	(361,773,740)	-
Total Net Position	$ (278,924,554)	$ 2,722,064

The notes to financial statements are an integral part of this statement.

City of Mount Vernon, New York

Statement of Activities
Year Ended December 31, 2021

Functions/Programs	Expenses	Program Revenues: Charges for Services	Program Revenues: Operating Grants and Contributions	Program Revenues: Capital Grants and Contributions
Primary government				
Governmental activities				
General government support	$ 26,353,329	$ 1,366,446	$ 628,440	$ -
Public safety	89,310,435	3,570,321	220,245	40,807
Health	376,500	-	76,953	-
Transportation	5,514,761	-	-	1,937,958
Economic opportunity and development	2,140,934	510	1,548,094	-
Culture and recreation	7,809,461	527,011	232,953	-
Home and community services	31,362,105	16,887,006	6,780,486	4,649,696
Interest	414,398	-	-	1,134
Total Governmental Activities Primary Government	$ 163,281,923	$ 22,351,294	$ 9,487,171	$ 6,629,595
Component unit				
Industrial Development Agency	$ 513,239	$ 156,209	$ -	$ -

General revenues
- Real property taxes
- Other tax items
  - Interest and penalties on real property taxes
  - Payments in lieu of taxes
  - Real estate transfer tax
- Non-property taxes
  - Utilities gross receipts taxes
  - Cable television franchise taxes
  - Sales taxes
- Unrestricted use of money and property
- Unrestricted State aid
- Rental income
- Miscellaneous

Total General Revenues

Change in Net Position

NET POSITION

Beginning, as Reported

Prior Period Adjustment

Beginning, as Restated

Ending

The notes to financial statements are an integral part of this statement.

Net (Expense) Revenue and Changes in Net Position	
Primary Government	Component Unit
Governmental Activities	Industrial Development Agency
$ (24,358,443)	$ -
(85,479,062)	-
(299,547)	-
(3,576,803)	-
(592,330)	-
(7,049,497)	-
(3,044,917)	-
(413,264)	-
(124,813,863)	-
-	(357,030)
60,236,197	-
1,909,743	-
1,071,321	-
4,722,849	-
918,749	-
1,059,517	-
27,367,553	-
5,546	240
8,993,851	-
-	200,025
299,756	9,292
106,585,082	209,557
(18,228,781)	(147,473)
(260,324,510)	2,869,537
(371,263)	-
(260,695,773)	2,869,537
$ (278,924,554)	$ 2,722,064

City of Mount Vernon, New York

Balance Sheet
Governmental Funds
December 31, 2021

	General	Community Development	Capital Projects
ASSETS			
Cash and equivalents	$ 24,703,644	$ 979,319	$ 4,618,553
Taxes receivable, net	24,137,438	-	-
Other receivables			
Accounts, net	2,243,417	-	-
Water rents	-	-	-
State and Federal aid	1,604,826	1,776,518	1,363,746
Due from other governments	452,348	-	-
Mortgages, net	-	8,109,204	-
Due from other funds	5,222,861	408,616	1,129,537
	9,523,452	10,294,338	2,493,283
Prepaid expenditures	-	23,722	-
Total Assets	$ 58,364,534	$ 11,297,379	$ 7,111,836
LIABILITIES, DEFERRED INFLOWS OF RESOURCES AND FUND BALANCES (DEFICITS)			
Liabilities			
Accounts payable	$ 8,620,423	$ -	$ 269,303
Accrued liabilities	17,205,925	1,592,104	-
Due to other governments	429,980	-	-
Due to school district	6,826,098	-	-
Due to other funds	6,649,787	1,298,839	3,272,003
Due to fiduciary fund	224,926	-	-
Due to retirement systems	9,649,974	-	-
Deposits payable	1,250,557	-	-
Employee payroll deductions	596,376	-	-
Overpayments	2,417,772	-	-
Unearned revenues	17,206,163	141,257	109,858
Total Liabilities	71,077,981	3,032,200	3,651,164
Deferred inflows of resources			
Deferred tax revenues	21,450,267	-	-
Deferred mortgage principal repayments	-	8,109,204	-
Unavailable revenues - grants	-	-	553,069
Total Deferred Inflows of Resources	21,450,267	8,109,204	553,069
Total Liabilities and Deferred Inflows of Resources	92,528,248	11,141,404	4,204,233
Fund balances (deficits)			
Nonspendable	-	23,722	-
Restricted	193,026	132,253	2,907,603
Committed	-	-	-
Assigned	-	-	-
Unassigned	(34,356,740)	-	-
Total Fund Balances (Deficits)	(34,163,714)	155,975	2,907,603
Total Liabilities and Fund Balances (Deficits)	$ 58,364,534	$ 11,297,379	$ 7,111,836

The notes to financial statements are an integral part of this statement.

Water	Debt Service	Total Governmental Funds
$ 1,210,297	$ -	$ 31,511,813
-	-	24,137,438
333,479	-	2,576,896
7,541,146	-	7,541,146
-	-	4,745,090
-	-	452,348
-	-	8,109,204
1,282,227	277,140	8,320,381
9,156,852	277,140	31,745,065
-	176,522	200,244
$ 10,367,149	$ 453,662	$ 87,594,560
$ 4,391,111	$ -	$ 13,280,837
-	-	18,798,029
-	-	429,980
-	-	6,826,098
1,805,299	334,061	13,359,989
-	-	224,926
-	-	9,649,974
-	-	1,250,557
-	-	596,376
-	-	2,417,772
-	-	17,457,278
6,196,410	334,061	84,291,816
-	-	21,450,267
-	-	8,109,204
-	-	553,069
-	-	30,112,540
6,196,410	334,061	114,404,356
-	176,522	200,244
1,931,451	-	5,164,333
1,470,580	-	1,470,580
768,708	-	768,708
-	(56,921)	(34,413,661)
4,170,739	119,601	(26,809,796)
$ 10,367,149	$ 453,662	$ 87,594,560

Reconciliation of Governmental Funds Balance Sheet to
the Government-Wide Statement of Net Position
December 31, 2021

Amounts Reported for Governmental Activities in the Statement of Net Position are Different Because

Fund Balances - Total Governmental Funds	$ (26,809,796)
Capital assets used in governmental activities are not financial resources and, therefore, are not reported in the funds.	
Capital assets - non-depreciable	5,730,931
Capital assets - depreciable	237,167,041
Accumulated depreciation	(163,182,807)
	79,715,165
Revenues in the statement of activities that do not provide current financial resources are not reported as revenues in the funds.	
Real property taxes	21,450,267
Departmental income	8,109,204
Grants	553,069
	30,112,540
Differences between expected and actual experiences, assumption changes and net differences between projected and actual earnings and contributions subsequent to the measurement date for the postretirement benefits (pension and OPEB) are recognized as deferred outflows of resources and deferred inflows of resources on the statement of net position.	
Deferred outflows - pension related	66,001,888
Deferred outflows - OPEB related	72,084,468
Deferred inflows - pension related	(70,467,330)
Deferred inflows - OPEB related	(41,706,856)
	25,912,170
Long-term liabilities that are not due and payable in the current period and, therefore are not reported in the funds.	
Accrued interest payable	(211,194)
General obligation bonds payable	(12,625,000)
Financed purchase debt payable	(2,045,000)
Claims payable	(11,130,507)
Net pension liability - ERS	(79,520)
Net pension liability - PFRS	(15,427,455)
Retirement incentives and other pension liabilities	(6,435,219)
Other post employment benefit liabilities payable	(339,759,513)
	(387,713,408)
Governmental funds report the effect of premiums, discounts, and refundings and similar items when debt is first issued, whereas these amounts are deferred and amortized in the statement of activities.	
Premium on general obligation bonds	(141,225)
Net Position of Governmental Activities	$ (278,924,554)

The notes to financial statements are an integral part of this statement.

City of Mount Vernon, New York

Statement of Revenues, Expenditures and
Changes in Fund Balances
Governmental Funds
Year Ended December 31, 2021

	General	Community Development	Capital Projects	Water
REVENUES				
Real property taxes	$ 57,271,782	$ -	$ -	$ -
Other tax items	7,703,913	-	-	-
Non-property taxes	29,345,819	-	-	-
Departmental income	6,804,487	-	-	-
Intergovernmental charges	896,767	-	-	-
Charges for services	-	-	-	10,931,261
Use of money and property	608,100	-	1,134	-
Licenses and permits	708,753	-	-	-
Fines and forfeitures	2,366,292	-	-	-
Sale of property and compensation for loss	133,452	-	-	-
State aid	9,634,726	453,520	949,467	-
Federal aid	5,923,165	1,903,115	1,127,282	-
Miscellaneous	310,754	99,807	40,807	160,661
Total Revenues	121,708,010	2,456,442	2,118,690	11,091,922
EXPENDITURES				
Current				
General government support	19,448,102	-	-	-
Public safety	43,584,774	-	-	-
Health	275,163	-	-	-
Transportation	1,884,126	-	-	-
Economic opportunity and development	1,366,397	-	-	-
Culture and recreation	4,606,993	-	-	-
Home and community services	11,827,478	2,652,485	-	10,220,991
Employee benefits	40,513,296	-	-	-
Capital outlay	-	-	6,281,031	682,281
Debt service				
Principal	250,000	-	-	-
Interest	-	-	-	-
Total Expenditures	123,756,329	2,652,485	6,281,031	10,903,272
Excess (Deficiency) of Revenues Over Expenditures	(2,048,319)	(196,043)	(4,162,341)	188,650
OTHER FINANCING SOURCES (USES)				
Financed purchase debt issued	-	-	2,295,000	-
Transfers in	-	-	864,148	-
Transfers out	(3,222,417)	-	(1,134)	-
Total Other Financing Sources (Uses)	(3,222,417)	-	3,158,014	-
Net Change in Fund Balances	(5,270,736)	(196,043)	(1,004,327)	188,650
FUND BALANCES (DEFICITS)				
Beginning of Year, as Reported	(28,892,978)	723,281	3,911,930	3,982,089
Prior Period Adjustment	-	(371,263)	-	-
Beginning of Year, as Restated	(28,892,978)	352,018	3,911,930	3,982,089
End of Year	$ (34,163,714)	$ 155,975	$ 2,907,603	$ 4,170,739

The notes to financial statements are an integral part of this statement.

Debt Service	Total Governmental Funds
$ -	$ 57,271,782
-	7,703,913
-	29,345,819
-	6,804,487
-	896,767
-	10,931,261
-	609,234
-	708,753
-	2,366,292
-	133,452
-	11,037,713
-	8,953,562
-	612,029
-	137,375,064
-	19,448,102
-	43,584,774
-	275,163
-	1,884,126
-	1,366,397
-	4,606,993
-	24,700,954
-	40,513,296
-	6,963,312
1,875,000	2,125,000
482,968	482,968
2,357,968	145,951,085
(2,357,968)	(8,576,021)
-	2,295,000
2,359,403	3,223,551
-	(3,223,551)
2,359,403	2,295,000
1,435	(6,281,021)
118,166	(20,157,512)
-	(371,263)
118,166	(20,528,775)
$ 119,601	$ (26,809,796)

Reconciliation of the Statement of Revenues, Expenditures and
Changes in Fund Balances of Governmental Funds
to the Statement of Activities
Year Ended December 31, 2021

Amounts Reported for Governmental Activities in the Statement of Activities are Different Because

Net Change in Fund Balances - Total Governmental Funds	$ (6,281,021)
Governmental funds report capital outlays as expenditures. However, in the statement of activities, the cost of those assets is allocated over their estimated useful lives and reported as depreciation expense.	
Capital outlay expenditures	6,638,855
Depreciation expense	(5,559,605)
	1,079,250
Revenues in the statement of activities that do not provide current financial resources are not reported as revenues in the funds.	
Real property taxes	2,964,415
Departmental income	4,160,594
Grants	553,069
	7,678,078
Bond and other debt proceeds provide current financial resources to governmental funds, but issuing debt increases long-term liabilities in the statement of net position. Repayment of bond and other debt principal is an expenditure in the governmental funds, but the repayment reduces long-term liabilities in the statement of net position. Also, governmental funds report the effect of premiums, discounts and similar items when debt is first issued, whereas, these amounts are deferred and amortized on the statement of activities.	
Financed purchase debt issued	(2,295,000)
Principal paid on financed purchase debt	250,000
Principal paid on general obligation bonds	1,875,000
	(170,000)
Some expenses reported in the statement of activities do not require the use of current financial resources and, therefore, are not reported as expenditures in governmental funds.	
Accrued interest	5,803
Claims payable	1,025,169
Changes in pension liabilities and related deferred outflows and inflows of resources	1,351,672
Retirement incentives and other pension liabilities	(711,644)
Other post employment benefit liabilities payable	(22,268,855)
Amortization of premium on bonds	62,767
	(20,535,088)
Change in Net Position of Governmental Activities	$ (18,228,781)

The notes to financial statements are an integral part of this statement.

City of Mount Vernon, New York

Statement of Revenues, Expenditures and Changes
in Fund Balance - Budget and Actual
General Fund
Year Ended December 31, 2021

	Original Budget	Final Budget	Actual	Variance with Final Budget
REVENUES				
Real property taxes	$ 63,487,580	$ 63,487,580	$ 57,271,782	$ (6,215,798)
Other tax items	4,650,000	4,650,000	7,703,913	3,053,913
Non-property taxes	24,900,000	24,900,000	29,345,819	4,445,819
Departmental income	4,238,630	4,238,630	6,804,487	2,565,857
Intergovernmental charges	1,180,000	1,180,000	896,767	(283,233)
Use of money and property	952,000	952,000	608,100	(343,900)
Licenses and permits	2,257,000	2,257,000	708,753	(1,548,247)
Fines and forfeitures	2,511,000	2,511,000	2,366,292	(144,708)
Sale of property and compensation for loss	2,378,500	2,378,500	133,452	(2,245,048)
State aid	9,632,122	9,632,122	9,634,726	2,604
Federal aid	770,000	770,000	5,923,165	5,153,165
Miscellaneous	141,159	141,159	310,754	169,595
Total Revenues	117,097,991	117,097,991	121,708,010	4,610,019
EXPENDITURES				
Current				
General government support	18,605,117	18,605,117	19,448,102	(842,985)
Public safety	43,265,716	43,265,716	43,584,774	(319,058)
Health	777,676	777,676	275,163	502,513
Transportation	2,835,818	2,835,818	1,884,126	951,692
Economic opportunity and development	1,108,136	1,108,136	1,366,397	(258,261)
Culture and recreation	3,983,459	3,983,459	4,606,993	(623,534)
Home and community services	9,663,342	9,663,342	11,827,478	(2,164,136)
Employee benefits	40,422,180	40,422,180	40,513,296	(91,116)
Debt service principal	250,000	250,000	250,000	-
Total Expenditures	120,911,444	120,911,444	123,756,329	(2,844,885)
Excess (Deficiency) of Revenues Over Expenditures	(3,813,453)	(3,813,453)	(2,048,319)	1,765,134
OTHER FINANCING SOURCES (USES)				
Transfers in	1,433,761	1,433,761	-	(1,433,761)
Transfers out	(2,386,644)	(2,386,644)	(3,222,417)	(835,773)
Total Other Financing Uses	(952,883)	(952,883)	(3,222,417)	(2,269,534)
Net Change in Fund Balance	(4,766,336)	(4,766,336)	(5,270,736)	(504,400)
FUND DEFICIT				
Beginning of Year	4,766,336	4,766,336	(28,892,978)	(33,659,314)
End of Year	$ -	$ -	$ (34,163,714)	$ (34,163,714)

The notes to financial statements are an integral part of this statement.

Internal Service Fund - Compensated Absences
Statement of Net Position
December 31, 2021

ASSETS	
Current assets	
Due from other funds	$ 5,039,608
LIABILITIES	
Current liabilities	
Current portion of compensated absences	504,000
Noncurrent liabilities	
Compensated absences, less current portion	4,535,608
Total Liabilities	$ 5,039,608

The notes to financial statements are an integral part of this statement.

City of Mount Vernon, New York

Internal Service Fund - Compensated Absences
Statement of Revenues, Expenses and
Changes in Net Position
Year Ended December 31, 2021

OPERATING REVENUES		
Charges for services	$	4,553
OPERATING EXPENSES		
Employee benefits		4,553
Income from Operations		-
NET POSITION		
Beginning of Year		-
End of Year	$	-

The notes to financial statements are an integral part of this statement.

City of Mount Vernon, New York

Internal Service Fund - Compensated Absences
Statement of Cash Flows
Year Ended December 31, 2021

CASH FLOWS FROM OPERATING ACTIVITIES		
Receipts from other funds	$	4,553
Payments to employees		(4,553)
Net Cash from Operating Activities		-
CASH AND EQUIVALENTS		
Beginning of Year		-
End of Year	$	-
RECONCILIATION OF INCOME FROM OPERATIONS TO NET CASH FROM OPERATING ACTIVITIES		
Income from operations	$	-
Adjustments to reconcile income from operations to net cash from operating activities		
Changes in assets and liabilities		
Due from other funds		4,553
Compensated absences		(4,553)
Net Cash from Operating Activities	$	-

The notes to financial statements are an integral part of this statement.

City of Mount Vernon, New York

Statement of Fiduciary Net Position
Fiduciary Fund
December 31, 2021

	Custodial Fund
ASSETS	
Due from other funds	$ 224,926
LIABILITIES	
Due to other governments	$ 224,926

The notes to financial statements are an integral part of this statement.

Note 1 - Summary of Significant Accounting Policies

The City of Mount Vernon, New York ("City") was incorporated in 1892 and operates in accordance with its Charter and the various other applicable laws of the State of New York. The City functions under a Mayor/Comptroller/City Council form of government. The City Council is the legislative body responsible for overall operation. The Mayor serves as the chief executive officer and the Comptroller serves as the chief financial officer. The City provides the following services to its residents: public safety, health, transportation, economic opportunity and development, culture and recreation, home and community services and general and administrative support.

The financial statements of the City have been prepared in conformity with accounting principles generally accepted in the United States of America as applied to local governmental units and the Uniform System of Accounts as prescribed by the State of New York. The Governmental Accounting Standards Board ("GASB") is the accepted standard setting body for establishing governmental accounting and financial reporting principles. The City's significant accounting policies are described below:

A. Financial Reporting Entity

The financial reporting entity consists of a) the primary government, which is the City, b) organizations for which the City is financially accountable and c) other organizations for which the nature and significance of their relationship with the City are such that exclusion would cause the reporting entity's financial statements to be misleading or incomplete as set forth by GASB.

In evaluating how to define the City, for financial reporting purposes, management has considered all potential component units. The decision to include a potential component unit in the City's reporting entity was made by applying the criteria set forth by GASB, including legal standing, fiscal dependency and financial accountability. Based upon the application of these criteria, the following individual component unit is included in the City's reporting entity because of its operational or financial relationship with the City.

The Mount Vernon Industrial Development Agency ("IDA") is a public benefit corporation created by State legislation to promote the economic welfare, recreation opportunities and prosperity of the City's inhabitants. Members of the IDA serve at the pleasure of the Mayor and, therefore, the City is considered able to impose its will on the IDA. IDA members have complete responsibility for management of the IDA and accountability for fiscal matters. The City is not liable for IDA bonds or notes. Since the IDA does not provide services entirely or almost entirely to the City, the financial statements of the IDA have been reflected as a discretely presented component unit.

Complete financial statements for the IDA can be obtained from their administrative office at the address indicated below:

City of Mount Vernon Industrial Development Agency
City Hall - Roosevelt Square
Mount Vernon, New York 10550

B. Government-Wide Financial Statements

The government-wide financial statements (i.e., the Statement of Net Position and the Statement of Activities) report information on all non-fiduciary activities of the primary government as a whole and its component unit. For the most part, the effect of interfund activity has been removed from these statements, except for interfund services provided and used. The primary government is reported separately from the legally separate component unit.

Note 1 - Summary of Significant Accounting Policies (Continued)

The Statement of Net Position presents the financial position of the City and its component unit at the end of its fiscal year. The Statement of Activities demonstrates the degree to which direct expenses of a given function or segment are offset by program revenues. Direct expenses are those that are clearly identifiable with a specific function or segment. Program revenues include (1) charges to customers or applicants who purchase, use or directly benefit from goods or services, or privileges provided by a given function or segment, (2) grants and contributions that are restricted to meeting the operational or capital requirements of a particular function or segment and (3) interest earned on grants that is required to be used to support a particular program. Taxes and other items not identified as program revenues are reported as general revenues. The City does not allocate indirect expenses to functions in the Statement of Activities.

While separate government-wide and fund financial statements are presented, they are interrelated. Separate financial statements are provided for governmental funds, proprietary funds and fiduciary funds, even though the latter are excluded from the government-wide financial statements. Major individual governmental funds are reported as separate columns in the fund financial statements.

Proprietary funds distinguish operating revenues and expenses from non-operating items. Operating revenues and expenses generally result from providing services in connection with a proprietary fund's principal ongoing operation. The principal operating revenues of the Internal Service Fund are charges to other funds. Operating expenses for the Internal Service Fund includes certain employee benefit costs. All revenues and expenses not meeting the definition are reported as non-operating revenues and expenses.

C. Fund Financial Statements

The accounts of the City are organized and operated on the basis of funds. A fund is an independent fiscal and accounting entity with a self-balancing set of accounts which comprise its assets, deferred outflows of resources, liabilities, deferred inflows of resources, fund balances/net position, revenues and expenditures/expenses. Fund accounting segregates funds according to their intended purpose and is used to aid management in demonstrating compliance with finance related legal and contractual provisions. The City maintains the minimum number of funds consistent with legal and managerial requirements. The focus of governmental fund financial statements is on major funds as that term is defined in professional pronouncements. Each major fund is to be presented in a separate column, with non-major funds, if any, aggregated and presented in a single column. Internal service and fiduciary funds are reported by type. The City has elected to treat each governmental fund as a major fund as provided by the provisions of GASB Statement No. 34. Since the governmental fund statements are presented on a different measurement focus and basis of accounting than the government-wide statements' governmental activities column, a reconciliation is presented on the pages following, which briefly explains the adjustments necessary to transform the fund based financial statements into the governmental activities column of the government-wide presentation. The City's resources are reflected in the fund financial statements in three broad fund categories, in accordance with generally accepted accounting principles as follows:

Fund Categories

a. Governmental Funds - Governmental Funds are those through which most general government functions are financed. The acquisition, use and balances of expendable financial resources and the related liabilities are accounted for through governmental funds. The following are the City's major governmental funds.

Note 1 - Summary of Significant Accounting Policies (Continued)

General Fund - The General Fund constitutes the primary fund of the City and is used to account for and report all financial resources not accounted for and reported in another fund.

Special Revenue Funds - Special revenue funds are used to account for and report the proceeds of specific revenue sources that are restricted or committed to expenditures for specified purposes other than debt service or capital projects. The major special revenue funds of the City are as follows:

Community Development Fund - The Community Development Fund is used to account for projects/programs financed by entitlements from the United States Department of Housing and Urban Development.

Water Fund - The Water Fund is used to account for the activities of the Mount Vernon Board of Water Supply. The Board of Water Supply was created by State legislation to provide for the supply of water to the residents of the City. The major revenue of this fund is charges to customers based on water consumption.

Capital Projects Fund - The Capital Projects Fund is used to account for and report financial resources that are restricted, committed or assigned to expenditures for capital outlays, including the acquisition or construction of major capital facilities and other capital assets, other than those financed by proprietary funds.

Debt Service Fund - The Debt Service Fund is used to account for and report financial resources that are restricted, committed or assigned to expenditures for principal and interest, and for financial resources that are being accumulated for principal and interest maturing in future years.

b. Proprietary Funds - The Proprietary fund consists of an internal service fund. Internal service funds account for operations that provide services to other departments or agencies of the government, or to other governments, on a cost reimbursement basis. The City has established its Compensated Absences Fund as an internal service fund.

c. Fiduciary Funds (Not Included in Government-Wide Financial Statements) – The Fiduciary Funds are used to account for assets held by the City in an agency capacity on behalf of others. The Custodial Fund is used to account for real property taxes collected for other governments.

D. Measurement Focus, Basis of Accounting and Financial Statement Presentation

The accounting and financial reporting treatment is determined by the applicable measurement focus and basis of accounting. Measurement focus indicates the type of resources being measured such as current financial resources (current assets less current liabilities) or economic resources (all assets and liabilities). The basis of accounting indicates the timing of transactions or events for recognition in the financial statements.

The government-wide financial statements are reported using the *economic resources measurement focus* and the *accrual basis of accounting*, as is the Internal Service Fund and Fiduciary funds. Revenues are recorded when earned and expenses are recorded when a liability is incurred, regardless of the timing of related cash flows. Property taxes are recognized as revenues in the year

Note 1 - Summary of Significant Accounting Policies (Continued)

for which they are levied. Grants and similar items are recognized as revenue as soon as all eligibility requirements imposed by the provider have been met.

Governmental fund financial statements are reported using the *current financial resources measurement focus* and the *modified accrual basis of accounting*. Revenues are recognized when they have been earned and they are both measurable and available. Revenues are considered to be available when they are collectible within the current period or soon enough thereafter to pay liabilities of the current period. Property taxes are considered to be available if collected within sixty days of the fiscal year end. If expenditures are the prime factor for determining eligibility, revenues from Federal and State grants are recognized as revenues when the expenditure is made and the amounts are expected to be collected within one year of the fiscal year end. A ninety day availability period is generally used for revenue recognition for most other governmental fund revenues. Expenditures generally are recorded when a liability is incurred, as under accrual accounting. However, debt service expenditures, as well as expenditures related to certain claims, compensated absences, net pension liabilities, certain pension liabilities and other postemployment benefit liability are recognized later based on specific accounting rules applicable to each, generally when payment is due. General capital asset acquisitions are reported as expenditures in governmental funds. Issuance of long-term debt and acquisitions under capital leases are reported as other financing sources.

Component Unit

The component unit is presented on the basis of accounting that most accurately reflects its activities. The IDA is accounted for on the accrual basis of accounting. Under the accrual basis of accounting, revenues are recognized when earned and expenses are recorded at the time liabilities are incurred.

E. Assets, Liabilities, Deferred Outflows/Inflows of Resources and Net Position or Fund Balances

Cash and Equivalents, Investments and Risk Disclosure

Cash and Equivalents - Cash and equivalents consist of funds deposited in demand deposit accounts, time deposit accounts and certificates of deposit with original maturities of less than three months from the date of acquisition.

The City's deposits and investment policies are governed by State statutes. The City has adopted its own written investment policy which provides for the deposit of funds in FDIC insured commercial banks or trust companies located within the State. The City is authorized to use demand deposit accounts, time deposit accounts and certificates of deposit.

Collateral is required for demand deposit accounts, time deposit accounts and certificates of deposit at 100% of all deposits not covered by Federal deposit insurance. The City has entered into custodial agreements with the various banks which hold their deposits. These agreements authorize the obligations that may be pledged as collateral. Such obligations include, among other instruments, obligations of the United States and its agencies and obligations of the State and its municipal and school district subdivisions.

Investments - Permissible investments include obligations of the U.S. Treasury, U.S. Agencies, repurchase agreements and obligations of New York State or its political subdivisions, and accordingly, the City's policy provides for no credit risk on investments.

Note 1 - Summary of Significant Accounting Policies (Continued)

The City follows the provisions of GASB Statement No. 72, "*Fair Value Measurement and Application",* which defines fair value and establishes a fair value hierarchy organized into three levels based upon the input assumptions used in pricing assets. Level 1 inputs have the highest reliability and are related to assets with unadjusted quoted prices in active markets. Level 2 inputs relate to assets with other than quoted prices in active markets which may include quoted prices for similar assets or liabilities or other inputs which can be corroborated by observable market data. Level 3 inputs are unobservable inputs and are used to the extent that observable inputs do not exist.

Risk Disclosure

Interest Rate Risk - Interest rate risk is the risk that the government will incur losses in fair value caused by changing interest rates. The City does not have a formal investment policy that limits investment maturities as a means of managing its exposure to fair value losses arising from changing interest rates. Generally, the City does not invest in any long-term investment obligations.

Custodial Credit Risk - Custodial credit risk is the risk that in the event of a bank failure, the City's deposits may not be returned to it. GASB Statement No. 40, "*Deposit and Investment Risk Disclosures – an amendment of GASB Statement No. 3*", directs that deposits be disclosed as exposed to custodial credit risk if they are not covered by depository insurance and the deposits are either uncollateralized, collateralized by securities held by the pledging financial institution or collateralized by securities held by the pledging financial institution's trust department but not in the City's name. The City's aggregate bank balances that were not covered by depository insurance were not exposed to custodial credit risk at December 31, 2021.

Credit Risk - Credit risk is the risk that an issuer or other counterparty will not fulfill its specific obligation even without the entity's complete failure. The City does not have a formal credit risk policy other than restrictions to obligations allowable under General Municipal Law of the State of New York.

Concentration of Credit Risk - Concentration of credit risk is the risk attributed to the magnitude of a government's investments in a single issuer. The City's investment policy limits the amount on deposit at each of its banking institutions.

Restricted Cash - Component Unit – The amount represents cash held by the IDA for a specific purpose. Restricted cash amounted to $850,434 as of December 31, 2021. The IDA has recorded a security deposit liability of $830,434 for project deposits and $20,000 is included in due to other governments for a non-IDA project deposit.

Property Taxes Receivable - City real property taxes attach as an enforceable lien on real property and are levied on January 1st. The City collects City, County and School District taxes. City taxes for the period January 1st to December 31st are levied and due on January 1st with the first half payable without penalty until January 31st and the second half payable without penalty until July 31st. County taxes are due April 1st and are payable without penalty until April 30th. School district taxes for the period July 1st to June 30th are levied on July 1st with the first half payable without penalty until July 31st and the second half payable without penalty until January 31st. The City guarantees the full payment of the County and School District warrants and assumes the responsibility for uncollected taxes. The City also has the responsibility for conducting in-rem foreclosure proceedings.

Note 1 - Summary of Significant Accounting Policies (Continued)

The City functions in both a fiduciary and guarantor relationship with the County of Westchester ("County") and the City School District of Mount Vernon ("School District") with respect to the collection and payment of real property taxes levied by such jurisdictions. The County Charter provides for the City to collect County taxes and remit them as collected. However, the City must remit to the County sixty percent of the amount levied by May 25th and the balance of forty percent on October 15th. With respect to School District taxes, New York State law provides that the City satisfy the warrant of the School District two years after February 20th of the fiscal year for which such taxes were levied. Thus, the City's fiduciary responsibility for school district taxes is from the date of the levy until two years after the above date, at which time the City will satisfy its obligations to the School District. Since the County tax warrant must be paid by October, uncollected County taxes have been accounted for in a manner similar to City taxes. The collection of School District taxes is deemed a financing transaction until the warrants are satisfied. County and school district taxes collected prior to the satisfaction of the respective warrants are considered a fiduciary activity under the provisions of GASB Statement No. 84, *"Fiduciary Activities"*, and therefore have been accounted for within the Custodial Fund.

Other Receivables - Other receivables include amounts due from other governments and individuals for services provided by the City. Receivables are recorded and revenues recognized as earned or as specific program expenditures/expenses are incurred. Allowances are recorded when appropriate.

Mortgages Receivable - The City has outstanding mortgages receivable of $8,109,204 at December 31, 2021. Mortgages are issued to qualifying small and minority businesses and for housing rehabilitation projects at or below market interest rates. Allowances are recorded when appropriate.

Due From/To Other Funds and Due From/To Fiduciary Fund - During the course of its operations, the City has numerous transactions between funds to finance operations, provide services and construct assets. To the extent that certain transactions between funds had not been paid or received as of December 31, 2021, balances of interfund amounts receivable or payable have been recorded in the fund financial statements.

Prepaid Expenses/Expenditures - Certain payments to vendors reflect costs applicable to future accounting periods and are recorded as prepaid items using the consumption method in both the government-wide and fund financial statements. Prepaid expenses/expenditures consist of costs which have been satisfied prior to the end of the fiscal year, but represent amounts which have been provided for in the subsequent year's budget and will benefit such periods. Reported amounts in governmental funds are equally offset by nonspendable fund balance, in the fund financial statements, which indicates that these amounts do not constitute "available spendable resources" even though they are a component of current assets.

Inventories - Inventories in the Water Fund are valued at cost on a first-in, first-out basis and consist of certain expendable supplies held for consumption. The cost is recorded as inventory at the time individual items are purchased. The City uses the consumption method to relieve inventory. In the fund financial statements, reported amounts are equally offset by nonspendable fund balance, which indicates that these amounts do not constitute "available spendable resources" even though they are a component of current assets. Purchases of other inventory items are recorded as expenditures at the time of purchase and year-end balances are undeterminable. Refer to the Basis of Qualified Opinion on Water Fund paragraph in the independent auditors' report for further information regarding inventory.

Note 1 - Summary of Significant Accounting Policies (Continued)

Capital Assets - Capital assets, which include property, plant, equipment and infrastructure assets (e.g., roads, bridges, sidewalks and similar items) are reported in the governmental activities column in the government-wide financial statements. Capital assets are defined by the City as assets with an initial, individual cost of more than $5,000 and an estimated useful life in excess of one year. Such assets are recorded at historical cost or estimated historical cost if purchased or constructed. Donated capital assets are recorded at acquisition value at the date of donation. Acquisition value is the price that would be paid to acquire an asset with equivalent service potential on the date of the donation.

In the case of the initial capitalization of general infrastructure assets (i.e., those reported by governmental activities), the City chose to include certain items regardless of their acquisition date or amount. The City was able to estimate the historical cost for the initial reporting of these assets through backtrending (i.e., estimating the current replacement cost of the infrastructure to be capitalized and used an appropriate price-level index to deflate the cost to the acquisition year or estimated acquisition year).

Major outlays for capital assets and improvements are capitalized as projects are completed. The cost of normal maintenance and repairs that do not add to the value of the asset or materially extend asset's life, is not capitalized.

Land and construction-in-progress are not depreciated. Property, plant, equipment and infrastructure of the City are depreciated using the straight line method over the following estimated useful lives.

Class	Life in Years
Primary Government:	
Buildings	50
Improvements	20
Machinery and equipment	5-20
Vehicles	5-10
Infrastructure	40-60
Component Unit:	
Buildings	40
Machinery and Equipment	3

The costs associated with the acquisition or construction of capital assets are shown as capital outlay expenditures on the governmental fund financial statements. Capital assets are not shown on the governmental fund balance sheet.

Unearned Revenues - Unearned revenues arise when assets are recognized before revenue recognition criteria have been satisfied. In the government-wide financial statements, unearned revenue consists of revenue received in advance and/or amounts from grants received before the eligibility requirements have been met.

Unearned revenues in the fund financial statements are those where asset recognition criteria have been met, but for which revenue recognition criteria have not been met. The City has reported unearned revenues of $17,206,163 for various receipts in the General Fund, $141,257 for various items in the Community Development Fund and $109,858 for Federal and State aid in the Capital Projects Fund received in advance. Such amounts have been deemed to be measurable but not "available" pursuant to generally accepted accounting principles.

Note 1 - Summary of Significant Accounting Policies (Continued)

Deferred Outflows/Inflows of Resources - In addition to assets, the statement of financial position includes a separate section for deferred outflows of resources. This separate financial statement element represents a consumption of net assets that applies to a future period and so will not be recognized as an outflow of resources (expense/expenditure) until then.

In addition to liabilities, the statement of financial position includes a separate section for deferred inflows of resources. This separate financial statement element represents an acquisition of net assets that applies to a future period and so will not be recognized as an inflow of resources (revenue) until that time.

The City reported deferred inflows of resources of $21,450,267 for real property taxes in the General Fund, $8,109,204 for mortgages receivable in the Community Development Fund and $553,069 in the Capital Projects Fund for state aid not expected to be collected within one year of the subsequent fiscal year. These amounts are deferred and recognized as an inflow of resources in the period that the amount becomes available.

The City also reported deferred outflows of resources and deferred inflows of resources in relation to its pension obligations and deferred inflows of resources in relation to its OPEB liability in the government-wide financial statement for governmental activities. These amounts are detailed in the discussion of the City's pension plans in Note 3E.

Long-Term Liabilities - In the government-wide financial statements, long-term debt and other long-term obligations are reported as liabilities in the Statement of Net Position. Bond premiums and discounts are deferred and amortized over the life of the bonds. Bonds payable are reported net of the applicable bond premium or discount. Bond issuance costs are expensed as incurred.

In the fund financial statements, governmental funds recognize bond premiums and discounts, as well as bond issuance costs, during the current period. The face amount of the debt issued is reported as other financing sources. Premiums received on debt issuances are reported as other financing sources, while discounts on debt issuances are reported as other financing uses. Issuance costs, whether or not withheld from the actual debt proceeds received, are reported as Capital Projects or Debt Service funds expenditures.

Compensated Absences - The various collective bargaining agreements provide for the payment of accumulated vacation and sick leave upon separation from service. The liability for such accumulated leave is reflected in the government-wide Statement of Net Position as current and long-term liabilities. Liabilities for compensated absences are recorded in both the governmental funds and the internal service fund. However, only the liability maturing through employee resignation or retirement is recorded in the governmental funds. The liability for compensated absences includes salary related payments, where applicable.

Net Pension Liability - The net pension liability represents the City's proportionate share of the net pension liability of the New York State and Local Employees' Retirement System and the New York State and Local Police and Fire Retirement System. The financial reporting of these amounts are presented in accordance with the provisions of GASB Statement No. 68, "*Accounting and Financial Reporting for Pensions"* and GASB Statement No. 71, "*Pension Transition for Contributions Made Subsequent to the Measurement Date – An Amendment of GASB Statement No. 68".*

Other Postemployment Benefit Liability ("OPEB") - In addition to providing pension benefits, the City provides health care benefits for certain retired employees and their survivors. The financial

Note 1 - Summary of Significant Accounting Policies (Continued)

reporting of these amounts are presented in accordance with the provisions of GASB Statement No. 75, "*Accounting and Financial Reporting for Postemployment Benefits Other than Pensions"*.

Net Position - Net position represents the difference between assets and deferred outflows of resources less liabilities and deferred inflows of resources. Net position is comprised of three components: net investment in capital assets, restricted and unrestricted.

Net investment in capital assets consists of capital assets, net of accumulated depreciation/amortization and reduced by outstanding balances of bonds and other debt that are attributable to the acquisition, construction, or improvement of those assets. Deferred outflows of resources and deferred inflows of resources that are attributable to the acquisition, construction, or improvement of those assets or related debt are also included in this component of net position.

Restricted net position consists of restricted assets and deferred outflows of resources reduced by liabilities and deferred inflows of resources related to those assets. Assets are reported as restricted when constraints are placed on asset use either through the enabling legislation adopted by the City or through external restrictions imposed by creditors, grantors, or laws or regulations of other governments. Restricted net position for the City includes restricted for community development, capital projects, liability and casualty claims, debt service and industrial development agency.

Unrestricted net position is the net amount of the assets, deferred outflows of resources, liabilities, and deferred inflows of resources that does not meet the definition of the two preceding categories.

Sometimes the City will fund outlays for a particular purpose from both restricted and unrestricted resources. In order to calculate the amounts to report as restricted net position and unrestricted net position in the government-wide financial statements, a flow assumption must be made about the order in which the resources are considered to be applied. It is the City's policy to consider restricted net position to have been depleted before unrestricted net position is applied.

Fund Balance - Generally, fund balance represents the difference between current assets and deferred outflows of resources and current liabilities and deferred inflows of resources. In the fund financial statements, governmental funds report fund classifications that comprise a hierarchy based primarily on the extent to which the City is bound to honor constraints on the specific purposes for which amounts in those funds can be spent. Under this standard, the fund balance classifications are as follows:

Nonspendable fund balance includes amounts that cannot be spent because they are either not in spendable form (inventories, prepaid amounts, long-term receivables) or they are legally or contractually required to be maintained intact (the corpus of a permanent fund).

Restricted fund balance is reported when constraints placed on the use of the resources are imposed by grantors, contributors, laws or regulations of other governments or imposed by law through enabling legislation. Enabling legislation includes a legally enforceable requirement that these resources be used only for the specific purposes as provided in the legislation. This fund balance classification is used to report funds that are restricted for debt service obligations and for other items contained in the General Municipal Law of the State of New York.

Committed fund balance is reported for amounts that can only be used for specific purposes pursuant to formal action of the entity's highest level of decision making authority. The City Council is the highest level of decision making authority for the City that can, by the adoption of a resolution prior to the end of the fiscal year, commit fund balance. Once adopted, these

Note 1 - Summary of Significant Accounting Policies (Continued)

funds may only be used for the purpose specified unless the entity removes or changes the purpose by taking the same action that was used to establish the commitment. This classification includes certain amounts established and approved by the City Council.
Assigned fund balance, in the General Fund, represents amounts constrained either by the policies of the City Council for amounts assigned for balancing the subsequent year's budget or the City Comptroller for amounts assigned for encumbrances, workers' compensation benefits, tax certiorari claims, contractual labor settlements and capital projects. Unlike commitments, assignments generally only exist temporarily, in that additional action does not normally have to be taken for the removal of an assignment. An assignment cannot result in a deficit in the unassigned fund balance in the General Fund. Assigned fund balance in all funds except the General Fund includes all remaining amounts, except for negative balances, that are not classified as nonspendable and are neither restricted nor committed.

Unassigned fund balance, in the General Fund, represents amounts not classified as nonspendable, restricted, committed or assigned. The General Fund is the only fund that would report a positive unassigned fund balance. For all governmental funds other than the General Fund, any deficit fund balance is reported as unassigned.

In order to calculate the amounts to report as restricted and unrestricted fund balance in the governmental fund financial statements, a flow assumption must be made about the order in which the resources are considered to be applied. When both restricted and unrestricted amounts of fund balance are available for use for expenditures incurred, it is the City's policy to use restricted amounts first and then unrestricted amounts as they are needed. For unrestricted amounts of fund balance, it is the City's policy to use fund balance in the following order: committed, assigned, and unassigned.

F. Encumbrances

In governmental funds, encumbrance accounting, under which purchase orders, contracts and other commitments for the expenditure of monies are recorded in order to reserve applicable appropriations, is generally employed as an extension of formal budgetary integration in the General Fund. Encumbrances outstanding at year-end are generally reported as assigned fund balance since they do not constitute expenditures or liabilities.

G. Use of Estimates

The preparation of the financial statements in conformity with generally accepted accounting principles requires management to make estimates and assumptions that affect the reported amounts of assets, deferred outflows of resources, liabilities and deferred inflows of resources and disclosures of contingent assets and liabilities at the date of the financial statements. Estimates also affect the reported amounts of revenues and expenditures/expenses during the reporting period. Actual results could differ from those estimates.

H. Subsequent Events Evaluation by Management

Management has evaluated subsequent events for disclosure and/or recognition in the financial statements through the date that the financial statements were available to be issued, which date is April 3, 2026.

Note 2 - Stewardship, Compliance and Accountability

A. Budgetary Data

The City, in accordance with the City Charter, follows the procedures enumerated below in establishing the budgetary data reflected in the financial statements:

a) On or before the nineteenth day of November, the Board of Estimate and Contract, which is comprised of the Mayor, Comptroller and President of the City Council, shall hold a public hearing on the proposed budget presenting a financial plan for conducting the affairs of the City for the ensuing fiscal year.

b) After said public hearing, the Board of Estimate and Contract adopts the budget and submits it to the entire City Council for approval.

c) The City Council then holds a second public hearing on the proposed budget.

d) The City Council shall adopt the budget estimates as submitted or amended by December 5th, which shall then become the annual budget, and shall at the same time appropriate the amounts set forth in the budget as adopted and for the purposes stated therein.

e) Formal budgetary integration is employed during the year as a management control device for the General and Debt Service funds.

f) Budgets for General and Debt Service funds are legally adopted annually on a basis consistent with generally accepted accounting principles. However, for fiscal year ended December 31, 2021, the City did not present nor adopt a budget for the Debt Service Fund. The Capital Projects Fund is budgeted on a project basis. Annual budgets are not adopted for the Community Development and Water funds.

g) The City Council has established legal control of the budget at the function level of expenditures. Transfers between appropriation accounts, at the function level, require initial approval by the City Council and ultimate approval by the Board of Estimate and Contract. Any modifications to appropriations resulting from increases in revenue estimates or supplemental reserve appropriations also requires a similar approval process.

h) Appropriations in General and Debt Service funds lapse at the end of the fiscal year, except that outstanding encumbrances are reappropriated in the succeeding year, pursuant to the Uniform System of Accounts promulgated by the Office of the State Comptroller.

Budgeted amounts are as originally adopted, or as amended by the City Council.

B. Property Tax Limitation

The amount that may be raised by the City for real property taxes in any fiscal year, for purposes other than for debt service on City indebtedness, is limited by the Constitution of the State of New York to two percent of the five year average full valuation of taxable real estate located within the City. For 2021, the maximum amount which could have been raised was $107,907,653 , which exceeded the levy subject to the tax limit by $47,678,342, inclusive of the allowable exclusions of $2,358,269 and the overlay to provide for uncollected taxes.

Note 2 - Stewardship, Compliance and Accountability (Continued)

In addition to this constitutional tax limitation, Chapter 97 of the Laws of 2011, as amended ("Tax Levy Limitation Law"), modified previous law by imposing a limit on the amount of real property taxes a local government may levy. The following is a brief summary of certain relevant provisions of the Tax Levy Limitation Law. The summary is not complete and the full text of the Tax Levy Limitation Law should be read in order to understand the details and implementations thereof. The Tax Levy Limitation Law imposes a limitation on increases in the real property tax levy, subject to certain exceptions. The Tax Levy Limitation Law permits the City to increase its overall real property tax levy over the tax levy of the prior year by no more than the "Allowable Levy Growth Factor," which is the lesser of one and two-one hundredths or the sum of one plus the Inflation Factor; provided, however that in no case shall the levy growth factor be less than one. The "Inflation Factor" is the quotient of: (i) the average of the 20 National Consumer Price Indexes determined by the United States Department of Labor for the twelve-month period ending six months prior to the start of the coming fiscal year minus the average of the National Consumer Price Indexes determined by the United States Department of Labor for the twelvemonth period ending six months prior to the start of the prior fiscal year, divided by (ii) the average of the National Consumer Price Indexes determined by the United States Department of Labor with the result expressed as a decimal to four places. The City is required to calculate its tax levy limit for the upcoming year in accordance with the provision above and provide all relevant information to the New York State Comptroller prior to adopting its budget. The Tax Levy Limitation Law sets forth certain exclusions to the real property tax levy limitation of the City, including exclusions for certain portions of the expenditures for retirement system contributions and tort judgments payable by the City. The Common Council may adopt a budget that exceeds the tax levy limit for the coming fiscal year, only if the Common Council first enacts, by a vote of at least sixty percent of the total voting power of the Common Council, a local law to override such limit for such coming fiscal year.

C. Fund Deficits

The unassigned and total fund balance deficits in the General Fund of $34,356,740 and $34,163,714, respectively, arise in-part because of actual expenditures exceeding budgetary appropriations, along with actual revenues falling short of budgeted amounts.

D. Expenditures in Excess of Budget

The following categories of expenditures exceeded their budgetary provisions by the amounts indicated:

General Fund	
General government support:	
Law	$ 967,829
Civil service	2,852
Building maintenance	91,903
Vehicle maintenance	61,069
Special items:	
Unallocated insurance	653,472
City-wide electricity charges	70,747
City-wide telephone charges	92,115
Judgments and claims	762,309
Tax certiorari payments	594,377
Tax abatements	20,161
Public safety:	
Jail	42,773
Fire Department	1,795,230

Note 2 - Stewardship, Compliance and Accountability (Continued)

General Fund *(continued)*	
Transportation:	
Street lighting	65,550
Economic opportunity and development:	
Youth board - Job training	294,821
Programs for the aging	157,885
Culture and recreation:	
Neighborhood facility center	37,558
Youth bureau	563,902
Youth centers	1,133,853
Home and community services:	
Refuse disposal	3,020,076
Employee benefits:	
Police and fire retirement	8,586,681
Workers' compensation benefits	382,784
Employee assistance program	3,000
Health and dental insurance	296,246
Transfers out - Capital Projects Fund	864,148

In addition, the entire General Fund is overexpended by $3,680,658.

E. Prior Period Adjustment

The Agency's beginning fund balance as of December 31, 2020 was restated to record a prior period adjustment that resulted in a decrease of $371,263. During the current year, management identified that employer contributions payable to the New York State Health Insurance Program ("NYSHIP") related to employee health insurance coverage for the period from August 2017 through December 2020 had not been accrued or remitted in the Agency's financial statements in prior years. Accordingly, the accompanying financial statements have been adjusted to recognize this liability and to reflect the cumulative effect of this error as a prior period adjustment to beginning fund balance.

F. Capital Projects Fund Projects Deficit

The individual project deficits in the Capital Projects Fund arises because of expenditures exceeding current financing on the projects. These deficits will be eliminated with the subsequent receipt or issuance of authorized financing.

Note 3 - Detailed Notes on All Funds

A. Taxes Receivable

Taxes receivable at December 31, 2021 consisted of the following:

City taxes	$ 14,393,104
County taxes	5,997,863
Relevied water rents	774,938
School district taxes	12,034,884
Property acquired for taxes	3,961,671
	37,162,460
Less - Allowance for uncollectible taxes	(13,025,022)
	$ 24,137,438

Note 3 - Detailed Notes on All Funds (Continued)

B. Due From/To Other Funds

The composition of interfund balances at December 31, 2021 were as follows:

Fund	Due From	Due To
General	$ 5,222,861	$ 6,649,787
Community Development	408,616	1,298,839
Capital Projects	1,129,537	3,272,003
Water	1,282,227	1,805,299
Debt Service	277,140	334,061
Total Governmental Funds	8,320,381	13,359,989
Internal Service	5,039,608	-
	$ 13,359,989	$ 13,359,989

The composition of due from/to fiduciary fund at December 31, 2021 were as follows:

Fund	Due From	Due To
General	$ -	$ 224,926
Fiduciary	224,926	-
	$ 224,926	$ 224,926

The outstanding balances between funds results mainly from the time lag between the dates that 1) interfund goods and services are provided or reimbursable expenditures occur, 2) transactions are recorded in the accounting system and 3) payments between funds are made.

C. Capital Assets

Changes in the City's capital assets are as follows:

Class	Balance January 1, 2021	Additions	Deductions	Balance December 31, 2021
Capital Assets, not being depreciated - Land	$ 5,730,931	$ -	$ -	$ 5,730,931

Note 3 - Detailed Notes on All Funds (Continued)

Class	Balance January 1, 2021	Additions	Deductions	Balance December 31, 2021
Capital Assets, being depreciated:				
Buildings	$ 54,618,477	$ -	-	$ 54,618,477
Improvements	4,087,610	-	-	4,087,610
Machinery and equipment	15,078,957	2,295,000	-	17,373,957
Vehicles	22,615,606	3,278,590	-	25,894,196
Infrastructure	134,127,536	1,065,265	-	135,192,801
Total Capital Assets, being Depreciated	230,528,186	6,638,855	-	237,167,041
Less Accumulated Depreciation for:				
Buildings	35,197,262	1,348,049	-	36,545,311
Improvements	3,223,071	100,809	-	3,323,880
Machinery and equipment	13,652,484	523,140	-	14,175,624
Vehicles	18,923,104	1,144,048	-	20,067,152
Infrastructure	86,627,281	2,443,559	-	89,070,840
Total Accumulated Depreciation	157,623,202	5,559,605	-	163,182,807
Total Capital Assets, being Depreciated, net	$ 72,904,984	$ 1,079,250	$ -	$ 73,984,234
Capital Assets, Net	$ 78,635,915	$ 1,079,250	$ -	$ 79,715,165

Depreciation expense was charged to City functions and programs as follows:

Governmental Activities:	
General Government Support	$ 439,019
Public Safety	756,724
Transportation	367,422
Culture and Recreation	639,803
Home and Community Services	3,356,637
Total	$ 5,559,605

Capital Assets - Component Unit

Changes in the capital assets of the component unit were as follows:

Class	Balance January 1, 2021	Additions	Deductions	Balance December 31, 2021
Capital Assets, not being depreciated - Land	$ 245,000	$ -	$ -	$ 245,000
Capital Assets, being depreciated - Buildings	$ 2,217,853	$ -	$ -	$ 2,217,853
Less Accumulated Depreciation for - Buildings	990,899	56,353	-	1,047,252
Total Capital Assets, being depreciated, net	$ 1,226,954	$ (56,353)	$ -	$ 1,170,601
Component Unit - Capital Assets, net	$ 1,471,954	$ (56,353)	$ -	$ 1,415,601

Note 3 - Detailed Notes on All Funds (Continued)

D. Accrued Liabilities

Accrued liabilities at December 31, 2021 were as follows:

	Fund		Total
	General	Community Development	Governmental Funds
Payroll and Employee Benefits	$ 14,157,297	$ 258,166	$ 14,415,463
Other	3,048,628	1,333,938	4,382,566
Total Accrued Liabilities	$ 17,205,925	$ 1,592,104	$ 18,798,029

E. Long-Term Liabilities

The following table summarizes changes in the City's long-term liabilities for the year ended December 31, 2021:

	Balance January 1, 2021	New Issues/ Additions	Maturities and/or Payments	Balance December 31, 2021	Due Within One Year
Governmental Activities (inclusive of Internal Service Fund):					
General Obligation Bonds Payable:					
Capital construction	$ 12,640,000	$ -	$ 1,670,000	$ 10,970,000	$ 1,725,000
Judgments and claims	1,860,000	-	205,000	1,655,000	210,000
	14,500,000	-	1,875,000	12,625,000	1,935,000
Plus					
Unamortized premium on bonds	203,992	-	62,767	141,225	-
	14,703,992	-	1,937,767	12,766,225	1,935,000
Financed Purchase Payable	-	2,295,000	250,000	2,045,000	260,571
Other Non-Current Liabilities:					
Claims Payable	12,155,676	67,493	1,092,662	11,130,507	1,639,280
Compensated Absences	5,044,161	-	4,553	5,039,608	504,000
Net Pension Liability - ERS	21,693,596	-	21,614,076	79,520	-
Net Pension Liability - PFRS	49,172,179	-	33,744,724	15,427,455	-
Retirement Incentives and Other Pension Liabilities	5,723,575	1,844,246	1,132,602	6,435,219	1,175,975
Other Postemployment Benefit Liabilities Payable	338,470,899	25,935,984	24,647,370	339,759,513	5,102,477
Total Other Non-Current Liabilities	432,260,086	27,847,723	82,235,987	377,871,822	8,421,732
Governmental Activities - Long-Term Liabilities	$ 446,964,078	$ 30,142,723	$ 84,423,754	$ 392,683,047	$ 10,617,303

Each governmental fund's liability for compensated absences is liquidated by the Internal Service Fund, which is funded primarily by the General Fund. Financed purchase payable, claims, net pension liabilities, retirement incentives and other pension liabilities and other postemployment benefit liabilities are liquidated primarily by the General Fund. The City's indebtedness for general obligation bonds is satisfied by the Debt Service Fund, which is funded by the General Fund.

Note 3 - Detailed Notes on All Funds (Continued)

General Obligations Bonds Payable

General obligation bonds payable at December 31, 2021 are comprised of the following individual issues:

Purpose	Year of Issue	Original Issue Amount	Final Maturity	Interest Rate	Amount Outstanding at December 31, 2021
Various Public Improvements	2012	$ 14,224,000	July, 2029	3.00 - 3.25 %	$ 7,470,000
Various Public Improvements	2013	1,680,000	July, 2031	4.00	1,030,000
Tax Certiorari Obligations	2013	3,000,000	July, 2028	4.50 - 5.25	1,655,000
Refunding Bonds	2016	6,765,000	September, 2024	3.00	2,470,000
					$ 12,625,000

Interest expenditures of $482,968 were recorded in the fund financial statements in the Debt Service Fund. Interest expense of $398,251 was recorded in the government-wide financial statements for governmental activities.

Financed Purchases Payable

Financed payable at December 31, 2021 are comprised of the following individual issues:

Purpose	Year of Issue	Original Issue Amount	Final Maturity	Interest Rate	Amount Outstanding at December 31, 2021
Motorola	2021	$ 2,295,000	October, 2028	3.79 %	$ 2,045,000

Interest expense of $16,147 was in the government-wide financial statements for governmental activities.

Payments to Maturity

The annual requirements to amortize all bonded debt outstanding as of December 31, 2021 including interest payments of $2,147,741 are as follows:

Year Ending December 31,	General Obligation Bonds		Financed Purchases		Total	
	Principal	Interest	Principal	Interest	Principal	Interest
2022	$ 1,935,000	$ 427,144	$ 260,571	$ 77,506	$ 2,195,571	$ 504,650
2023	1,985,000	365,044	270,448	67,630	2,255,448	432,674
2024	2,055,000	300,744	280,697	57,380	2,335,697	358,124
2025	1,245,000	234,206	291,336	46,741	1,536,336	280,947
2026	1,290,000	191,206	302,378	35,700	1,592,378	226,906
2027-2031	4,115,000	307,856	639,570	36,584	4,754,570	344,440
	$ 12,625,000	$ 1,826,200	$ 2,045,000	$ 321,541	$ 14,670,000	$ 2,147,741

The above general obligation bonds are direct obligations of the City for which its full faith and credit are pledged and are payable from taxes levied on all taxable real property within the City.

Note 3 - Detailed Notes on All Funds (Continued)

Legal Debt Margin

The City is subject to legal limitations on the amount of debt that it may issue. The City's legal debt margin is 7% of the five year average full valuation of taxable real property.

Claims Payable

The government-wide financial statements reflect self-insured portions of general liability and workers' compensation claims, which are based upon estimates of the ultimate cost of claims (including future claim adjustment expenses) that have been reported, but not settled, and of claims that have been incurred but not reported ("IBNR's"). The length of time for which such costs must be estimated varies depending on the coverage involved. Because actual claim costs depend on such complex factors as inflation, changes in doctrines of legal liability and damage awards, the process used in computing claim liabilities does not necessarily result in an exact amount. Claim liabilities are recomputed periodically using a variety of actuarial and statistical techniques to produce current estimates that reflect recent settlements, claim frequency and other economic and social factors. A provision for inflation in the calculation of estimated future claim costs is implicit in the calculation because reliance is placed both on actual historical data that reflects past inflation and other factors that are considered to be appropriate modifiers of past experience.

An analysis of the activity of unpaid claim liabilities is as follows:

	2021		2020	
	Workers' Compensation	General Liability	Workers' Compensation	General Liability
Unpaid Claims - Beginning of Year	$ 3,964,717	$ 2,002,455	$ 3,457,194	$ 2,205,489
Incurred Claims including IBNR's	920,711	48,341	583,086	138,152
Claims Paid and Adjustments	(1,025,387)	(67,275)	(75,563)	(341,186)
Unpaid Claims - End of Year	$ 3,860,041	$ 1,983,521	$ 3,964,717	$ 2,002,455
Due Within One Year	$ 386,004	$ 198,352	$ 396,472	$ 220,245

The City has restricted $193,026 of the fund balance of the General Fund for workers' compensation benefits. The City has also restricted $1,931,451 of the fund balance of the Water Fund for liability and casualty claims.

Claims payable also includes a liability of $5,286,945 for court ordered tax certiorari refunds ($1,054,924 due within one year), which were not due and payable at year-end. This amount has been recorded in the government-wide financial statements.

Compensated Absences

Vacation time is generally taken in the year earned but can be carried over to succeeding years, subject to limitations as provided in the respective collective bargaining agreements and the City code. Employees are allowed to accumulate sick and terminal leave up to a maximum depending upon the contract. Payments for accumulated sick and terminal leave are dependent upon the length of service or accumulated days. At December 31, 2021, the value of such accumulated leave was

Note 3 - Detailed Notes on All Funds (Continued)

reflected in the Compensated Absences Internal Service Fund. Refer to the Independent Auditors' Report for additional information on Compensated Absences.

Pension Plans

New York State and Local Retirement System

The City participates in the New York State and Local Employees' Retirement System ("ERS") and the New York State and Local Police and Fire Retirement System ("PFRS") which are collectively referred to as the New York State and Local Retirement System ("System"). These are cost-sharing, multiple-employer defined benefit pension plans. The System provides retirement benefits as well as death and disability benefits. The net position of the System is held in the New York State Common Retirement Fund ("Fund"), which was established to hold all net assets and record changes in plan net position. The Comptroller of the State of New York serves as the trustee of the Fund and is the administrative head of the System. The Comptroller is an elected official determined in a direct statewide election and serves a four year term. Obligations of employers and employees to contribute and benefits to employees are governed by the New York State Retirement and Social Security Law ("NYSRSSL"). Once a public employer elects to participate in the System, the election is irrevocable. The New York State Constitution provides that pension membership is a contractual relationship and plan benefits cannot be diminished or impaired. Benefits can be changed for future members only by enactment of a State statute. The City also participates in the Public Employees' Group Life Insurance Plan, which provides death benefits in the form of life insurance. The System is included in the State's financial report as a pension trust fund. That report, including information with regard to benefits provided may be found at www.osc.state.ny.us/retire/publications/index.php or obtained by writing to the New York State and Local Retirement System, 110 State Street, Albany, NY 12244.

The System is noncontributory except for employees who joined after July 27, 1976, who contribute 3% of their salary for the first ten years of membership, and employees who joined on or after January 1, 2010, who generally contribute between 3% and 6% of their salary for their entire length of service. Under the authority of the NYSRSSL, the Comptroller annually certifies the actuarially determined rates expressly used in computing the employers' contributions based on salaries paid during the System's fiscal year ending March 31. The employer contribution rates for the plan's year ending in 2021 are as follows:

	Tier/Plan	Rate
ERS	1 75I 41J	21.6%
	2 75I 41J	19.7
	3 A14 41J	16.1
	4 A15 41J	16.1
	5 A15 41J	13.4
	6 A15 41J	9.6
PFRS	2 375I	18.6
	2 384	21.6
	2 384D	25.6
	3 384F	23.4
	5 384D	21.0
	5 384F	18.8
	6 384D	15.7

Note 3 - Detailed Notes on All Funds (Continued)

At December 31, 2021, the City reported the following for its proportionate share of the net pension liability for ERS and PFRS:

	ERS	PFRS
Measurement Date	March 31, 2021	March 31, 2021
Net pension liability	$ 79,520	$ 15,427,455
City's proportion of the net pension liability	0.0798600%	0.8885371%
Change in proportion since the prior measurement date	(0.0020626%)	(0.0314396%)

The net pension liability was measured as of March 31, 2021 and the total pension liability used to calculate the net pension liability was determined by an actuarial valuation as of that date. The City's proportion of the net pension liability was based on a computation of the actuarially determined indexed present value of future compensation by employer relative to the total of all participating members.

For the year ended December 31, 2021, the City recognized pension expense in the government-wide financial statements of $1,928,256 for ERS and $8,073,826 for PFRS. Pension expenditures of $3,471,289 for ERS and $7,882,465 for PFRS were recorded in the fund financial statements and were charged to the following funds:

Fund	ERS	PFRS
General	$ 3,103,043	$ 7,882,465
Community Development	75,646	-
Water	292,600	-
	$ 3,471,289	$ 7,882,465

At December 31, 2021, the City reported deferred outflows of resources and deferred inflows of resources related to pensions from the following sources:

	ERS		PFRS	
	Deferred Outflows of Resources	Deferred Inflows of Resources	Deferred Outflows of Resources	Deferred Inflows of Resources
Differences between expected and actual experience	$ 971,152	$ -	$ 3,423,271	$ -
Changes of assumptions	14,621,123	275,759	37,903,590	-
Net difference between projected and actual earnings on pension plan investments	-	22,842,764	-	45,363,529
Changes in proportion and differences between City contributions and proportionate share of contributions	331,029	217,882	355,567	1,767,396
City contributions subsequent to the measurement date	2,608,374	-	5,787,782	-
	$ 18,531,678	$ 23,336,405	$ 47,470,210	$ 47,130,925

Note 3 - Detailed Notes on All Funds (Continued)

	Total	
	Deferred Outflows of Resources	Deferred Inflows of Resources
Differences between expected and actual experience	$ 4,394,423	$ -
Changes of assumptions	52,524,713	275,759
Net difference between projected and actual earnings on pension plan investments	-	68,206,293
Changes in proportion and differences between City contributions and proportionate share of contributions	686,596	1,985,278
City contributions subsequent to the measurement date	8,396,156	-
	$ 66,001,888	$ 70,467,330

$2,608,374 and $5,787,782 reported as deferred outflows of resources related to ERS and PFRS, respectively, resulting from the City's accrued contributions subsequent to the measurement date will be recognized as a reduction of the net pension liability in the year ended March 31, 2022. Other amounts reported as deferred outflows of resources and deferred inflows of resources related to ERS and PFRS will be recognized in pension expense as follows:

Year Ended March 31,	ERS	PFRS
2022	$ (1,284,550)	$ (2,117,794)
2023	(447,388)	(407,956)
2024	(1,250,392)	(1,915,004)
2025	(4,430,771)	(8,334,256)
2026	-	7,326,513
Thereafter	-	-
	$ (7,413,101)	$ (5,448,497)

The total pension liability for the ERS and PFRS measurement date was determined by using an actuarial valuation date as noted below, with update procedures used to roll forward the total pension liabilities to that measurement date. Significant actuarial assumptions used in the valuation were as follows:

	ERS	PFRS
Measurement Date	March 31, 2021	March 31, 2021
Actuarial valuation date	April 1, 2020	April 1, 2020
Investment rate of return	5.9% *	5.9% *
Salary scale	4.4%	6.2%
Inflation rate	2.7%	2.7%
Cost of living adjustments	1.4%	1.4%

*Compounded annually, net of pension plan investment expenses, including inflation.

Note 3 - Detailed Notes on All Funds (Continued)

Annuitant mortality rates are based on the System's experience with adjustments for mortality improvements based on Society of Actuaries Scale MP-2020.

The actuarial assumptions used in the valuation are based on the results of an actuarial experience study for the period April 1, 2015 - March 31, 2020.

The long-term expected rate of return on pension plan investments was determined using a building-block method in which best estimate ranges of expected future real rates of return (expected return, net of investment expenses and inflation) are developed for each major asset class. These ranges are combined to produce the long-term expected rate of return by weighting the expected future real rates of return by the target asset allocation percentage and by adding expected inflation.

Best estimates of arithmetic real rates of return for each major asset class included in the target asset allocation is summarized in the following table.

Asset Type	Target Allocation	Long-Term Expected Real Rate of Return
Domestic Equity	32 %	4.05 %
International Equity	15	6.30
Private Equity	10	6.75
Real Estate	9	4.95
Opportunistic/ARS Portfolio	3	4.50
Credit	4	3.63
Real Assets	3	5.95
Fixed Income	23	0.00
Cash	1	0.50
	100 %	

The real rate of return is net of the long-term inflation assumption of 2.7%.

The discount rate used to calculate the total pension liability was 5.9%. The projection of cash flows used to determine the discount rate assumes that contributions from plan members will be made at the current contribution rates and that contributions from employers will be made at statutorily required rates, actuarially determined. Based upon those assumptions, the System's fiduciary net position was projected to be available to make all projected future benefit payments of current plan members. Therefore, the long-term expected rate of return on pension plan investments was applied to all periods of projected benefit payments to determine the total pension liability.

The following presents the City's proportionate share of the net pension liability calculated using the discount rate of 5.9%, as well as what the City's proportionate share of the net pension liability (asset) would be if it were calculated using a discount rate that is 1 percentage point lower (4.9%) or 1 percentage point higher (6.9%) than the current rate:

Note 3 - Detailed Notes on All Funds (Continued)

	1% Decrease (4.9%)	Current Discount Rate (5.9%)	1% Increase (6.9%)
City's proportionate share of the ERS net pension liability (Asset)	$ 22,071,615	$ 79,520	$ (20,202,339)
City's proportionate share of the PFRS net pension liability (Asset)	$ 65,606,234	$ 15,427,455	$ (26,107,606)

The components of the collective net pension liability as of the March 31, 2021 measurement date were as follows:

	ERS	PFRS	Total
Total pension liability	$ 220,680,157,000	$ 41,236,775,000	$ 261,916,932,000
Fiduciary net position	220,580,583,000	39,500,500,000	260,081,083,000
Employers' net pension liability	$ 99,574,000	$ 1,736,275,000	$ 1,835,849,000
Fiduciary net position as a percentage of total pension liability	99.95%	95.79%	99.30%

Employer contributions to ERS and PFRS are paid annually and cover the period through the end of the System's fiscal year, which is March 31st. Accrued retirement contributions as of December 31, 2021 represent the employer contribution for the period of April 1, 2021 through December 31, 2021 based on prior year ERS and PFRS wages multiplied by the employers' contribution rate, by tier. Retirement contributions to ERS and PFRS for the nine months ended December 31, 2021 were $2,608,374 and $5,787,782, respectively.

Voluntary Defined Contribution Plan

The City also offers a defined contribution plan to all non-union employees hired on or after July 1, 2013 and earning at the annual full-time salary rate of $75,000 or more. The employee contribution is between 3% and 6% depending on salary and the City will contribute 8%. Employer contributions vest after 366 days of service. No current employees participated in this program.

Retirement Incentives and Other Pension Obligations

The State Legislature enacted Chapter 57 of the Laws of 2010. This chapter authorized local governments, at their option, to amortize a portion of their respective ERS and PFRS contributions beginning in 2010. The maximum amortization amount each year going forward will be determined by the difference between each employer's effective contribution rate as compared to the System's overall graded rate. The amortized amounts are to be paid in equal annual installments over a ten year period, although amounts may be prepaid at any time. Interest will be charged at rates which approximate a market rate of return on taxable fixed rate securities of a comparable duration and will be adjusted annually. The City elected to amortize the maximum allowable ERS and PFRS contributions for the years noted in the table below.

Legislation enacted as part of the 2013-14 New York State adopted budget as Chapter 57 of the Laws of 2013 established an alternative to the original Contribution Stabilization Program enacted in 2010. This Alternate Contribution Stabilization Program ("ACSP") authorized local governments,

Note 3 - Detailed Notes on All Funds (Continued)

at their option, to defer payment on a portion of their annual ERS and PFRS contributions beginning in the 2013 fiscal year. The maximum amortization amount in each year going forward under this alternate plan will be determined by the difference between each employer's normal effective contribution rate as compared to the System's ACSP graded rate. The graded rate will always move from the previous graded rate towards the new actuarial rate by no more than .5% per year. Any amounts amortized under this program are to be paid in equal annual installments over a twelve year period, although amounts may be prepaid at any time. The interest rate on an amount amortized in a given year will be the interest rate for that year and will be fixed for the duration of that payment period. The interest rate will be comparable to a twelve year US Treasury bond plus 1%. If the System's average actuarial rates are lower than the employer's graded rate, the employer would still be required to pay the graded rate. Any additional contributions made as a result will first be used to pay off existing amortizations with any excess being deposited into a reserve account to be used to offset future increases in contribution rates. The City elected to amortize the maximum allowable ERS and PFRS contributions for the 2021 fiscal year. The current year cost and balance due are noted in the table below.

	Original Amount Amortized	Current Year Payments	Principal Balance Due	Principal Due Within One Year
2011 ERS	$ 868,074	$ 105,698	$ -	$ -
2011 PFRS	212,999	25,935	-	-
2012 ERS	1,134,113	132,952	129,079	129,079
2012 PFRS	1,287,368	150,919	146,523	146,523
2013 ERS	1,340,496	140,851	514,180	121,518
2013 PFRS	2,345,883	246,491	899,819	212,657
2014 ERS	1,335,823	138,236	624,146	116,391
2014 PFRS	1,200,104	124,191	560,732	104,566
2015 ERS	1,012,416	103,601	555,503	85,214
2015 PFRS	111,682	11,428	61,279	9,400
2018 PFRS	930,151	95,182	659,499	73,353
2019 ERS	85,534	9,109	67,756	6,405
2019 PFRS	470,184	50,070	372,457	35,209
2022 ERS	267,722	-	267,722	19,693
2022 PFRS	1,576,524	-	1,576,524	115,967
	$ 14,179,073	$ 1,334,663	$ 6,435,219	$ 1,175,975

The current year payments were charged to retirement expenditures in the General Fund.

Other Postemployment Benefit Obligations ("OPEB")

In addition to providing pension benefits, the City provides certain health care benefits for retired employees through a single employer defined benefit OPEB plan. The various collective bargaining agreements stipulate the employees covered and the percentage of contribution. Contributions by the City may vary according to length of service. The cost of providing postemployment health care benefits is shared between the City and the retired employee as noted below. Substantially all of the City's employee's may become eligible for those benefits if they reach normal retirement age while working for the City. No assets are accumulated in a trust that meets the criteria in paragraph 4 of GASB Statement No. 75, "*Accounting and Financial Reporting for Postemployment Benefits Other than Pensions*", so the net OPEB liability is equal to the total OPEB liability. Separate financial statements are not issued for the plan.

Note 3 - Detailed Notes on All Funds (Continued)

At December 31, 2021, the following employees were covered by the benefit terms:

Inactive employees currently receiving benefit payments	362
Active Employees	765
	1,127

The City's total OPEB liability of $339,759,513 was measured as of December 31, 2021.

The total OPEB liability in the January 1, 2021 actuarial valuation was determined using the following actuarial assumptions and other inputs, applied to all periods included in the measurement, unless otherwise specified:

Inflation	3.00%
Salary increases	3.00%
Discount rate	2.25%
Healthcare cost trend rates	8.0% for 2021, decreasing by 0.5% per year to an ultimate rate of 5% for 2027 and later years
Retirees' share of benefit-related costs	Varies from 0% to 10%, depending on applicable retirement year and bargaining unit

The discount rate was based on a review of the yield derived from the S&P Municipal Bond 20-year High Grade Rate Index, as of December 31, 2021.

Mortality rates were in accordance with the SOA RP-2014 Total Dataset. Mortality improvements are projected using SOA Scale MP-2020.

The City's change in the total OPEB liability for the year ended December 31, 2021 is as follows:

Total OPEB Liability - Beginning of Year	$ 338,470,899
Service cost	16,560,226
Interest	6,483,249
Changes of benefit terms	-
Differences between expected and actual experience	2,892,509
Changes in assumptions or other inputs	(19,544,893)
Benefit payments	(5,102,477)
Total OPEB Liabiliy - End of Year	$ 339,759,513

The following presents the total OPEB liability of the City, as well as what the City's total OPEB liability would be if it were calculated using a discount rate that is 1 percentage point lower (1.25%) or 1 percentage point higher (3.25%) than the current discount rate:

Note 3 - Detailed Notes on All Funds (Continued)

	1% Decrease (1.25%)	Current Discount Rate (2.25%)	1% Increase (3.25%)
Total OPEB Liability	$ 413,176,992	$ 339,759,513	$ 278,753,053

The following presents the total OPEB liability of the City, as well as what the City's total OPEB liability would be if it were calculated using healthcare cost trend rates that are 1 percentage point lower (7.0% decreasing to 4.0%%) or 1 percentage point higher (9.0% decreasing to 6.0%) than the current healthcare cost trend rates:

	1% Decrease (7.0% decreasing to 4.0%)	Current Health Cost Trend Rates (8.0% decreasing to 5.0%)	1% Increase (9.0% decreasing to 6.0%)
Total OPEB Liability	$ 274,021,822	$ 339,759,513	$ 428,368,202

For the year ended December 31, 2021, the City recognized OPEB expense of $27,668,628 in the government-wide financial statements. At December 31, 2021, the City reported deferred outflows of resources and deferred inflows of resources related to OPEB from the following sources:

	Deferred Outflows of Resources	Deferred Inflows of Resources
Changes of assumptions or other inputs	$ 58,695,191	$ 25,228,404
Differences between expected and actual experience	13,389,277	16,478,452
	$ 72,084,468	$ 41,706,856

Amounts reported as deferred outflows of resources related to OPEB will be recognized in OPEB expense as follows:

Year Ended December 31,	
2022	$ 4,327,857
2023	4,327,857
2024	4,327,855
2025	10,159,017
2026	9,613,938
2027	(2,378,912)
	$ 30,377,612

Note 3 - Detailed Notes on All Funds (Continued)

F. Revenues and Expenditures

Interfund Transfers

Interfund transfers are defined as the flow of assets, such as cash or goods and services, without the equivalent flow of assets in return. The interfund transfers reflected below have been reflected as transfers:

	Transfers In		
Transfer Out	Capital Projects Fund	Debt Service Fund	Total
General Fund	$ 864,148	$ 2,358,269	$ 3,222,417
Capital Projects Fund	-	1,134	1,134
	$ 864,148	$ 2,359,403	$ 3,223,551

Transfers are used to 1) move funds from the General Fund to the Debt Service Fund as debt service principal and interest payments become due and 2) move amounts earmarked in the operating funds to fulfill commitments for Capital Projects Fund expenditures.

G. Net Position

The components of net position are detailed below:

Net Investment in Capital Assets - the component of net position that reports the difference between capital assets less both the accumulated depreciation and the outstanding balance of debt, excluding unexpended proceeds, that is directly attributable to the acquisition, construction or improvement of those assets.

Restricted for Community Development - the component of net position that reports the difference between assets and liabilities of the Community Development Funds with constraints placed on their use by the United States Department of Housing and Urban Development.

Restricted for Capital Projects - the component of net position that reports the amounts restricted for capital projects less unexpended bonds proceeds and unrestricted interest earnings.

Restricted for Liability and Casualty Claims - the component of net position that has been established to set aside funds to be used for the payment of future claims made upon the Board of Water Supply of the City of Mount Vernon, New York in accordance with Section 6n of the General Municipal Law of the State of New York.

Restricted for Debt Service - the component of net position that reports the difference between assets and liabilities with constraints placed on their use by Local Finance Law.

Restricted for Industrial Development Agency - component unit - the component of net position that represents funds restricted for acquiring or constructing various business and recreational facilities and advance job opportunities, health, general prosperity and economic welfare of the people of the City.

Unrestricted - all other amounts that do not meet the definition of "restricted" or "net investment in capital assets".

Note 3 - Detailed Notes on All Funds (Continued)

H. Fund Balances

	General Fund	Community Development Fund	Capital Projects Fund	Water Fund	Debt Service Fund	Total
Nonspendable:						
Prepaid expenditures	$ -	$ 23,722	$ -	$ -	$ 176,522	$ 200,244
Restricted:						
Workers' compensation benefits	193,026	-	-	-	-	193,026
Capital projects	-	-	2,907,603	-	-	2,907,603
Liability and casualty claims	-	-	-	1,931,451	-	1,931,451
Community development purposes	-	132,253	-	-	-	132,253
Total Restricted	193,026	132,253	2,907,603	1,931,451	-	5,164,333
Committed:						
Additions, betterments and replacements	-	-	-	926,721	-	926,721
Maintenance of water supply system	-	-	-	543,859	-	543,859
Total Committed	-	-	-	1,470,580	-	1,470,580
Assigned:						
Water Fund	-	-	-	768,708	-	768,708
Unassigned:						
Future claims	2,273,017	-	-	-	-	2,273,017
Unassigned	(36,629,757)	-	-	-	(56,921)	(36,686,678)
Total Unassigned	(34,356,740)	-	-	-	(56,921)	(34,413,661)
Total Fund Balances (Deficits)	$ (34,163,714)	$ 155,975	$ 2,907,603	$ 4,170,739	$ 119,601	$ (26,809,796)

Certain elements of fund balance are described above. Those additional elements which are not reflected in the statement of net position but are reported in the governmental funds balance sheet are described below.

Prepaid Expenditures has been established to account for certain payments made in advance. The amount is classified as nonspendable to indicate that funds are not “available” for appropriation or expenditure even though they are a component of current assets.

The amounts restricted for Workers’ Compensation Benefits have been established to set aside funds to be used for a specific purpose in accordance with Section 6j of the General Municipal Law of the State of New York.

The amounts committed for Additions, Betterments and Replacements, established by the City Council, is used to segregate a portion of fund balance to be utilized for additions, betterments and replacements of property and equipment. The City Council legislation permits the members of the Board of Water Supply to set aside $250,000 per year up to a maximum of $1,000,000.

The amounts committed for Maintenance of Water Supply System, established by the City Council, is used to segregate a portion of fund balance to be utilized for work to be performed on the water supply system. The City Council legislation permits the members of the Board of Water Supply to set aside $200,000 per year up to a maximum of $1,000,000.

Purchases on order are assigned and represent the City’s intention to honor the contracts in process at year-end. The subsequent year’s appropriations will be amended to provide authority to complete the transactions.

Unassigned fund balance in the General Fund represents amounts not classified as nonspendable, restricted, committed or assigned.

Note 4 - Summary Disclosure of Significant Contingencies

A. Litigation

The City, in common with other municipalities, receives notices of claims for money damages occurring from false arrest, civil rights violations, wrongful death, property damage, negligence, personal injury, improper practice charges, wrongful termination and employment discrimination. The filing of such claims commences a statutory period for initiating judicial action. Currently, the City is a defendant in numerous actions with varying degrees of monetary exposure ranging from $100,000 to $29,000,000 per case. Certain cases were adjudicated against the City; however, the City continues to vigorously defend these cases and has filed its appeals when deemed appropriate. The City's claims administrator has reviewed the status of the cases and has determined the City's exposure has been reflected in the government-wide financial statements.

The Board of Water Supply ("Water Fund"), established by State legislation to provide water services to residents of the City, issues separately audited financial statements. The independent auditors' report on the Water Fund's financial statements includes a qualified opinion related to the completeness of disclosures of known, actual, or possible litigation and claims whose effects should be considered by management, as required by accounting principles generally accepted in the United States of America.

The City is also defendant in numerous tax certiorari proceedings, the results of which generally require tax refunds on the part of the City. Any refunds resulting from adverse settlements will be funded in the year in which the expenditure is incurred.

B. Other Contingencies

The City participates in various Federal grant programs, principal of which are programs of the U.S. Department of Housing and Urban Development. These programs are subject to program compliance audits pursuant to the Uniform Guidance. The amount of expenditures which may be disallowed by the granting agencies cannot be determined at this time, although the City anticipates such amounts, if any, to be immaterial.

During the fiscal year, the Agency determined that certain loans issued under the Community Development Block Grant ("CDBG") program were uncollectible due to borrower defaults, including business closures and financial hardship. As a result, these loans were formally written off after obtaining Board approval. While these actions were taken in 2025, the Agency recognizes that federal program requirements under the CDBG program are subject to oversight and interpretation by the U.S. Department of Housing and Urban Development ("HUD"). Accordingly, there is a possibility that HUD could review the circumstances surrounding the loan write-offs and determine that reimbursement of program funds is necessary. At this time, no formal notice or finding has been received from HUD, and the outcome of any future review cannot be reasonably estimated.

C. Risk Management

The City purchases conventional insurance coverages to reduce its exposure to loss. The City purchases property insurance on a replacement cost basis. The City maintains general, law enforcement and auto liability insurance with limits of $7million, excess of a self-insured retention ("SIR"). From 2010 to the present, the City has a $350,000 SIR, except for the 2014/15 policy year which had an SIR of $250,000. The City also maintains public officials' liability/employment practice liability insurance with coverage of $8 million, excess an SIR of $100,000 per claim. The City purchases excess workers' compensation coverage, excess of $700,000 SIR. All open or paid claims have not exceeded the coverage limits in any of the past three fiscal years.

Note 5 - Additional Disclosure

Mount Vernon Housing Authority

The Mount Vernon Housing Authority ("Authority") operated a 500 unit five building housing complex known as Levister Towers. Unpaid real property taxes, excluding penalties and interest, due the City dating back to 1987 totaled $2,607,585. The Authority was also obligated to the City for unpaid utilities charges totaling $858,000.

On July 17, 2001, the Authority sold its property to a private developer. Under the terms of the sale, the developer entered into an installment agreement with the City that provided for the repayment of the outstanding property taxes and utilities charges over a ten year period, without interest. The developer had defaulted on each of the annual installment payments due since July 2002. Certain minimal payments were made in 2011 and 2013. The City has reflected an allowance for the remaining unpaid amounts in the General Fund.

Note 6 - Tax Abatements

The City has real property tax abatement agreements with housing development and redevelopment companies organized pursuant to Article V or Article XI of the Private Housing Finance Law of the State of New York ("PHFL") for the purpose of creating or preserving affordable housing in the City.

Generally, these agreements provide for a 100 percent abatement of real property taxes in exchange for a payment in lieu of taxes (PILOT) based on a percentage of shelter rents, and continue until the property no longer provides the required affordable housing or no longer complies with the requirements of the PHFL.

The City also has real property tax abatement agreements pursuant to Section 412-a of the Real Property Tax Law for the purpose of acquiring a leasehold interest in certain land for improvements. These agreements induce a Company to acquire, renovate, construct, and equip the Project.

Copies of the agreements may be obtained from the City. Information relevant to disclosure of these agreements for the fiscal year ended December 31, 2021 is as follows:

Start Date	Agreement	Taxable Assessed Value	Tax Rate	Tax Value	PILOT Received	Taxes Abated
9/1/2015	Levister Towers	$ 862,000	$ 0.42667	$ 367,790	$ 363,729	$ 4,061
12/1/2015	Petrillo	112,660	0.42667	48,069	17,708	30,361
1/1/1983	Wartburgh	3,618,200	0.42667	1,543,777	74,000	1,469,777
12/1/2020	Ebony Gardens	311,650	0.42667	132,972	142,046	-
11/1/2014	203 Gramatan Ave, Blue Rico LLC Dept	418,641	0.42667	178,622	16,168	162,454
12/1/2014	130 Modern LLC / Macquesten Commercial	190,000	0.42667	81,067	10,874	70,193
4/1/2018	Ace Natural , inc /Exit 8 Hutch LLC Natural Food	130,615	0.42667	55,730	31,080	24,650
4/1/2016	Luciano Bros DBA Dominican Magic	52,583	0.42667	22,436	14,350	8,086
9/1/2017	Enclave at Fleetwood (A&B)	163,829	0.42667	69,901	53,978	15,923
8/1/2013	Enclave on Fifth Housing Development Fund .Company	94,300	0.42667	40,235	11,134	29,101
5/1/2004	Grace Plaza LLC	30,000	0.42667	12,800	15,498	-
9/1/2014	Grace Terrace LLC	125,404	0.42667	53,506	17,367	36,139
6/1/2005	Heritage House North (AKA Mount Vernon North)	250,000	0.42667	106,668	33,756	72,912
6/1/2005	Heritage House South (AKA Mount Vernon South)	1,000,000	0.42667	426,670	61,890	364,780
1/1/2020	Oakwood Gardens	182,720	0.42667	77,961	20,029	57,932
9/1/2017	Warren Place LLC / American Christmas inc	115,000	0.42667	49,067	13,970	35,097
1/1/2001	Target	500,000	0.42667	213,335	79,864	133,471
4/1/2014	Zion Court Apartments LP	96,000	0.42667	40,960	9,266	31,694
11/1/2003	Kings Court	10,500	0.42667	4,480	5,357	-
11/1/2003	Macedonia Towers	38,800	0.42667	16,555	16,495	60
1/1/2021	22 South West Street	422,799	0.42667	180,396	43,896	136,500
1/1/2021	Regent Hospitality Linen	27,750	0.42667	11,840	8,472	3,368
1/1/2021	Sanford Terrace	64,197	0.42667	27,391	8,359	19,032
		$ 8,817,648		$ 3,762,228	$ 1,069,286	$ 2,705,591

Note 7 - Subsequent Events

Rehabilitation of Storm Sewer System

In September 2020, the Federal District Court ordered the City to bring its polluting storm system into compliance with the Clean Water Act. The filing alleged that since at least January 2012 the City has failed to comply with permit obligations and has allowed raw sewage to flow into its storm sewer system, which then discharges into the Hutchinson and Bronx Rivers. The City's Department of Public Works Commissioner estimated the total cost to rehabilitate the entire system would range from approximately $124 million to $199 million.

In 2022, the New York State Governor announced a $150 million investment for water and sewer infrastructure in Mount Vernon. An additional $3 million in federal funding was allocated to assist residents impacted by the sewer and water infrastructure crisis through the Governor's Office of Storm Recovery Healthy Homes pilot program.

In addition, in August 2022, the City was awarded $10 million from the Water Quality Improvement Project administered by the New York State Department of Environmental Conservation.

Mount Vernon City School District ("School District") Taxes

Beginning in 2018, the City Comptroller's office delayed payments to vendors, including tax payments to the School District. The School District has identified approximately $11.7 million in back taxes not received from the City that relate to tax years 2017 through 2019. The City has identified approximately $11 million of these back taxes as uncollected from the taxpayers. In response to the delayed payments from 2018-2020, the School District elected to take over the billing and collection of school taxes effective with its's 2020-21 fiscal year. However, since the School District has no authority to lien properties for unpaid taxes, the School District must submit a certified listing of unpaid taxes for the 2020-21 fiscal year to the City for relevy on the City's 2023 tax bills. (i.e., two year old taxes). The City would have been required to make the School District whole (with certain exceptions) for these taxes prior to the end of the School District's fiscal year end of June 30, 2023. These 2020-21 School District unpaid taxes aggregate to approximately $6.83 million. While this process was supposed to be under way, we have been advised by City officials that a listing of unpaid 2020-21 taxes has not been certified and provided to the City.

Vendor Payments

After fiscal year end December 31, 2017, the City Comptroller's office began delaying payments to vendors. Subsequently, the City Comptroller's office issued a financial report on July 7, 2022 that has identified an estimated $60 million of unpaid bills relating to New York State health insurance, New York State Retirement System and various other vendors.

New York State Office of the State Comptroller ("NYS OSC") - Report of Examination of the City of Mount Vernon

The NYS OSC conducted an examination of the City's finances for the period January 1, 2018 through September 30, 2020 and extended their audit period back to January 1, 2017. The NYS OSC report dated January 2022, identified internal control deficiencies relating to electronic disbursements, withdrawals and uncollected property taxes. The report can be accessed at wwe1.osc.state.ny.us.

Note 7 - Subsequent Events (Continued)

Bond Anticipation Notes

The City, in November 2023, issued bond anticipation notes for various purposes in the amount of $3,204,456 with an interest rate of 6.50% that will mature in November 2024.

The City, in May 2024, issued bond anticipation notes to finance the costs of certain settled claims in the amount of $15,800,000 with an interest rate of 5.50% that will mature in May 2025.

The City, in November 2024, issued bond anticipation notes for various purposes in the amount of $3,204,456 with an interest rate of 5.25% that will mature in May 2025.

The City, in December 2024, issued tax anticipation notes in anticipation of the collection of taxes or assessments levied in the amount of $6,500,000 with an interest rate of 4.75% that will mature in December 2025.

The City, in May 2025, issued bond anticipation notes for various purposes in the amount of $18,733,000 with an interest rate of 5.00% that will mature in May 2026.

Tax Anticipation Notes

The City, in December 2025, issued tax anticipation notes in anticipation of the collection of taxes or assessments levied, or to be levied, by the City in the amount of $7,300,000 with an interest rate of 4.50% that will mature in December 2026.

Note 8 - Recently Issued GASB Pronouncements

GASB Statement No. 87, *"Leases,"* as amended by GASB Statement No. 95, *"Postponement of the Effective Dates of Certain Authoritative Guidance,"* established a single model for lease accounting based on the concept that leases are a financing of a "right-to-use" underlying asset. As such, this Statement requires a lessee to recognize a lease liability and an intangible right-to-use lease asset. A lessor will be required to recognize a lease receivable and a deferred inflow of resources. The requirements of this Statement are effective for reporting periods beginning after June 15, 2021.

GASB Statement No. 96, *"Subscription-Based Information Technology Arrangements"* provides guidance on the accounting and financial reporting for subscription-based information technology arrangements ("SBITAs") for government end users. This Statement defines a SBITA and establishes that a SBITA results in a right-to-use subscription asset (intangible asset) and a corresponding liability. The Statement also provides the capitalization criteria for outlays other than subscription payments, including implementation costs of a SBITA, as well as detailing the requirements for note disclosures regarding a SBITA. The requirements of this Statement are effective for reporting periods beginning after June 15, 2022.

GASB Statement No. 101, *"Compensated Absences"*, provides guidance on the accounting and financial reporting for compensated absences. The objective of this Statement is to better meet the information needs of financial statement users by updating the recognition and measurement guidance under a unified model and by amending certain previously required disclosures. The requirements of this Statement are effective for reporting periods beginning after December 15, 2023.

Note 8 - Recently Issued GASB Pronouncements (Continued)

GASB Statement No. 102, *"Certain Risk Disclosures"*, was issued to disclosure within the government financial statements risks related to a government's vulnerabilities due to certain concentrations or constraints. A concentration is defined as a lack of diversity related to an aspect of a significant inflow of resources or outflow of resources. A constraint is a limitation imposed on a government by an external party of by formal action of the government's highest level of decision-making authority. Concentrations and constraints may limit a government's ability to acquire resources or control spending. The requirements of this Statement are effective for reporting periods beginning after June 15, 2024.

GASB Statement No. 104, *"Disclosure of Certain Capital Assets"*, has been issued to provide users of government financial statements with essential information about certain types of capital assets. The requirements of this Statement are effective for reporting periods beginning after June 15, 2025.

GASB Statement No. 105, "*Subsequent Events*", has been issued to improve the financial reporting requirements for subsequent events (recognized/nonrecognized), thereby enhancing consistency in their application and better meeting the information needs of financial statement users. The requirements of this Statement are effective for reporting periods beginning after June 15, 2026.

This is not an all-inclusive list of recently issued GASB pronouncements but rather a listing of Statements that the City believes will most impact its financial statements. The City will evaluate the impact this and other pronouncements may have on its financial statements and will implement them as applicable and when material.

* * * * *

Required Supplementary Information - Schedule of Changes in the
City's Total OPEB Liability and Related Ratios
Last Ten Fiscal Years (1)(2)

	2021	2020	2019
Total OPEB Liability:			
Service cost	$ 16,560,226	$ 10,637,798	$ 9,639,390
Interest	6,483,249	7,780,406	8,097,140
Changes of benefit terms	-	-	-
Differences between expected and actual experience	2,892,509	15,273,978	(13,056,050)
Changes of assumptions or other inputs	(19,544,893)	68,675,978 (4)	16,871,614
Benefit payments	(5,102,477)	(5,120,069)	(5,556,388)
Net Change in Total OPEB Liability	1,288,614	97,248,091	15,995,706
Total OPEB Liability – Beginning of Year	338,470,899	241,222,808	225,227,102
Total OPEB Liability – End of Year	$ 339,759,513	$ 338,470,899	$ 241,222,808
Covered-employee payroll	$ 64,329,232	$ 65,765,117	$ 65,617,520
Total OPEB liability as a percentage of covered-employee payroll	528.16%	514.67%	367.62%

Notes to Schedule:

(1) Data not available prior to fiscal year 2018 implementation of Governmental Accounting Standards Board Statement No. 75, "*Accounting and Financial Reporting for Postemployment Benefits Other Than Pensions*".

(2) No assets are accumulated in a trust that meets the criteria in paragraph 4 of this Statement to pay related benefits.

(3) Restated for the implementation of the provisions of GASB Statement No. 75.

(4) Due to an increase in head count since previous valuation and decrease in discount rate.

See independent auditors' report.

2018	
$ 11,785,471	
7,871,969	
-	
(21,041,656)	
(19,776,487)	
(5,450,303)	
(26,611,006)	
251,838,108	(3)
$ 225,227,102	
$ 63,700,494	
353.57%	

Required Supplementary Information
New York State and Local Employees' Retirement System
Last Ten Fiscal Years (1)

Schedule of the City's Proportionate Share of the Net Pension Liability (2)

	2021 (4)	2020 (3)	2019
City's proportion of the net pension liability	0.0798600%	0.0819226%	0.0810780%
City's proportionate share of the net pension liability	$ 79,520	$ 21,693,596	$ 5,744,617
City's covered payroll	$ 21,790,354	$ 21,991,912	$ 21,744,897
City's proportionate share of the net pension liability as a percentage of its covered payroll	0.36%	98.64%	26.42%
Plan fiduciary net position as a percentage of the total pension liability	99.95%	86.39%	96.27%

Schedule of Contributions

	2021	2020	2019
Contractually required contribution	$ 3,365,265	$ 3,296,246	$ 3,222,581
Contributions in relation to the contractually required contribution	(3,365,265)	(3,296,246)	(3,222,581)
Contribution excess	$ -	$ -	$ -
City's covered payroll	$ 22,514,778	$ 22,224,279	$ 22,426,672
Contributions as a percentage of covered payroll	14.95%	14.83%	14.37%

(1) Data not available prior to fiscal year 2015 implementation of Governmental Accounting Standards Board Statement No. 68, "*Accounting and Financial Reporting for Pensions*".
(2) The amounts presented for each fiscal year were determined as of the March 31 measurement date within the current fiscal year.
(3) Increase in proportionate share of the net pension liability mainly attributable to decrease in plan fiduciary net position due to investment losses.
(4) Decrease in the proportionate share of the net pension liability mainly attributable to increase in plan fiduciary net position due to investment gains.

See independent auditors' report.

2018	2017	2016	2015
0.0782397%	0.0778000%	0.0802498%	0.0813849%
$ 2,525,143	$ 7,310,258	$ 12,880,315	$ 2,749,381
$ 20,640,896	$ 19,679,508	$ 20,843,445	$ 21,254,838
12.23%	37.15%	61.80%	12.94%
98.24%	94.70%	90.70%	97.90%

2018	2017	2016	2015
$ 3,216,625	$ 3,161,136	$ 3,762,662	$ 3,356,410
(3,216,625)	(3,161,136)	(3,762,662)	(3,356,410)
$ -	$ -	$ -	$ -
$ 21,305,445	$ 20,169,013	$ 18,764,023	$ 19,134,374
15.10%	15.67%	20.05%	17.54%

Required Supplementary Information
New York State and Local Police and Fire Retirement System
Last Ten Fiscal Years (1)

Schedule of the City's Proportionate Share of the Net Pension Liability (2)

	2021 (4)	2020 (3)	2019
City's proportion of the net pension liability	0.8885371%	0.9199767%	0.9210992%
City's proportionate share of the net pension liability	$ 15,427,455	$ 49,172,179	$ 15,447,415
City's covered payroll	$ 35,316,743	$ 35,257,411	$ 35,549,512
City's proportionate share of the net pension liability as a percentage of its covered payroll	43.68%	139.47%	43.45%
Plan fiduciary net position as a percentage of the total pension liability	95.79%	84.86%	95.09%

Schedule of Contributions

	2021	2020	2019
Contractually required contribution	$ 7,841,169	$ 7,649,931	$ 7,369,182
Contributions in relation to the contractually required contribution	(7,841,169)	(7,649,931)	(7,369,182)
Contribution excess	$ -	$ -	$ -
City's covered payroll	$ 35,196,870	$ 36,585,904	$ 35,411,503
Contributions as a percentage of covered payroll	22.28%	20.91%	20.81%

(1) Data not available prior to fiscal year 2015 implementation of Governmental Accounting Standards Board Statement No. 68, "*Accounting and Financial Reporting for Pensions*".

(2) The amounts presented for each fiscal year were determined as of the March 31 measurement date within the current fiscal year.

(3) Increase in proportionate share of the net pension liability mainly attributable to decrease in plan fiduciary net position due to investment losses.

(4) Decrease in the proportionate share of the net pension liability mainly attributable to increase in plan fiduciary net position due to investment gains.

See independent auditors' report.

2018	2017	2016	2015
0.9271820%	0.7983856%	0.8552386%	0.8663737%
$ 9,371,556	$ 16,547,755	$ 25,321,793	$ 2,384,776
$ 33,936,605	$ 35,408,391	$ 28,897,760	$ 27,752,986
27.61%	46.73%	87.63%	8.59%
96.93%	93.50%	90.20%	99.00%

2018	2017	2016	2015
$ 8,008,092	$ 6,663,870	$ 5,749,156	$ 6,185,009
(8,008,092)	(6,663,870)	(5,749,156)	(6,185,009)
$ -	$ -	$ -	$ -
$ 35,329,453	$ 33,440,029	$ 30,102,307	$ 28,909,815
22.67%	19.93%	19.10%	21.39%

City of Mount Vernon, New York

General Fund
Schedule of Revenues and Other Financing Sources Compared to Budget
Year Ended December 31, 2021

	Original Budget	Final Budget	Actual	Variance with Final Budget
REAL PROPERTY TAXES	$ 63,487,580	$ 63,487,580	$ 57,271,782	$ (6,215,798)
OTHER TAX ITEMS				
Interest and penalties on real property taxes	1,250,000	1,250,000	1,909,743	659,743
Payments in lieu of taxes	500,000	500,000	1,071,321	571,321
Real estate transfer tax	2,900,000	2,900,000	4,722,849	1,822,849
	4,650,000	4,650,000	7,703,913	3,053,913
NON-PROPERTY TAXES				
Utilities gross receipts taxes	850,000	850,000	918,749	68,749
Cable television franchise taxes	1,850,000	1,850,000	1,059,517	(790,483)
Sales taxes	22,200,000	22,200,000	27,367,553	5,167,553
	24,900,000	24,900,000	29,345,819	4,445,819
DEPARTMENTAL INCOME				
Parking meter and permit fees	3,150,000	3,150,000	5,136,071	1,986,071
Red light camera demonstration program	-	-	50,175	50,175
Charges for tax advertising	30,000	30,000	-	(30,000)
Comptroller's fees	22,700	22,700	287,711	265,011
City Clerk fees	14,080	14,080	-	(14,080)
Building Department fees	111,000	111,000	604,393	493,393
Police Department fees	28,000	28,000	-	(28,000)
Fire Department fees	750	750	-	(750)
Animal shelter fees	10,000	10,000	3,215	(6,785)
Safety inspection fees	375,000	375,000	345	(374,655)
Vital statistics	35,000	35,000	-	(35,000)
Public works fees	56,000	56,000	58,913	2,913
Bus shelter and scale fees	125,000	125,000	79,626	(45,374)
Park and recreation charges	45,000	45,000	419,962	374,962
Zoning and Planning Board fees	30,500	30,500	-	(30,500)
Sewer rents	40,000	40,000	101,178	61,178
Emergency Tenant Protection charges	120,000	120,000	62,388	(57,612)
Participant's contributions - Nutrition programs	7,500	7,500	510	(6,990)
Other departmental income	38,100	38,100	-	(38,100)
	4,238,630	4,238,630	6,804,487	2,565,857
INTERGOVERNMENTAL CHARGES				
County prisoner transportation	180,000	180,000	-	(180,000)
Police Department services	1,000,000	1,000,000	777,494	(222,506)
Administrative charges - Industrial Development Agency	-	-	22,403	22,403
Other	-	-	96,870	96,870
	1,180,000	1,180,000	896,767	(283,233)

(Continued)

General Fund
Schedule of Revenues and Other Financing Sources Compared to Budget (Continued)
Year Ended December 31, 2021

	Original Budget	Final Budget	Actual	Variance with Final Budget
USE OF MONEY AND PROPERTY				
Earnings on investments	$ 40,000	$ 40,000	$ 5,546	$ (34,454)
Earnings on investments - Restricted to workers' compensation benefits	-	-	58	58
Rentals of real property	900,000	900,000	601,896	(298,104)
Commissions	12,000	12,000	600	(11,400)
	952,000	952,000	608,100	(343,900)
LICENSES AND PERMITS				
Business and occupational licenses	110,000	110,000	415,429	305,429
Dog licenses and apportionment	1,000	1,000	-	(1,000)
Public safety permits	75,000	75,000	48,023	(26,977)
Building permits	900,000	900,000	187,190	(712,810)
Street opening permits	856,000	856,000	11,494	(844,506)
Plumbing permits	85,000	85,000	46,617	(38,383)
Other permits	230,000	230,000	-	(230,000)
	2,257,000	2,257,000	708,753	(1,548,247)
FINES AND FORFEITURES				
Fines and forfeited bail	2,504,000	2,504,000	2,366,142	(137,858)
Forfeiture of deposits	7,000	7,000	150	(6,850)
	2,511,000	2,511,000	2,366,292	(144,708)
SALE OF PROPERTY AND COMPENSATION FOR LOSS				
Sale of real property	2,300,000	2,300,000	-	(2,300,000)
Sale of scrap	1,500	1,500	79,470	77,970
Insurance recoveries	75,000	75,000	377	(74,623)
Other compensation for loss	2,000	2,000	53,605	51,605
	2,378,500	2,378,500	133,452	(2,245,048)
STATE AID				
Per capita	6,440,122	6,440,122	7,155,691	715,569
Mortgage tax	1,500,000	1,500,000	1,838,160	338,160
Public safety grant	192,000	192,000	187,817	(4,183)
Mental health - Westchester County	450,000	450,000	76,953	(373,047)
Youth programs	-	-	17,385	17,385
Supplemental nutrition assistance program	-	-	112,345	112,345
Comprehensive adolescent pregnancy prevention program	-	-	163,202	163,202
Fire department	-	-	1,925	1,925
Other	1,000,000	1,000,000	56,074	(943,926)
Veteran's services	50,000	50,000	25,174	(24,826)
	9,632,122	9,632,122	9,634,726	2,604

(Continued)

General Fund
Schedule of Revenues and Other Financing Sources Compared to Budget (Continued)
Year Ended December 31, 2021

	Original Budget	Final Budget	Actual	Variance with Final Budget
FEDERAL AID				
Programs for the aging	$ 20,000	$ 20,000	$ 130,921	$ 110,921
Workforce investment act	-	-	97,785	97,785
21st century community learning centers grant	550,000	550,000	829,165	279,165
Nutrition for the elderly - Title IIIC	200,000	200,000	167,667	(32,333)
Youth Bureau - Girls Embracing Maturity program	-	-	16,528	16,528
American Rescue Plan Act	-	-	3,957,836	3,957,836
STOP act	-	-	561,310	561,310
Justice assistance grant	-	-	28,863	28,863
Other	-	-	29,998	29,998
Medical assistance	-	-	103,092	103,092
	770,000	770,000	5,923,165	5,153,165
MISCELLANEOUS				
Refund of prior year's expenditures	25,000	25,000	299,050	274,050
Gifts and donations	100,000	100,000	10,998	(89,002)
Other	16,159	16,159	706	(15,453)
	141,159	141,159	310,754	169,595
TOTAL REVENUES	117,097,991	117,097,991	121,708,010	4,610,019
OTHER FINANCING SOURCES				
Transfers in				
Community Development Fund	583,761	583,761	-	(583,761)
Water Fund	850,000	850,000	-	(850,000)
TOTAL OTHER FINANCING SOURCES	1,433,761	1,433,761	-	(1,433,761)
TOTAL REVENUES AND OTHER FINANCING SOURCES	$ 118,531,752	$ 118,531,752	$ 121,708,010	$ 3,176,258

See independent auditors' report.

General Fund
Schedule of Expenditures and Other Financing Uses Compared to Budget
Year Ended December 31, 2021

	Original Budget	Final Budget	Actual	Variance with Final Budget
GENERAL GOVERNMENT SUPPORT				
City Council	$ 465,501	$ 465,501	$ 260,975	$ 204,526
Board of Estimate and Contract	28,000	28,000	1,217	26,783
Mayor	568,124	568,124	479,310	88,814
Department of Finance	1,473,884	1,473,884	1,199,635	274,249
Assessment and Taxation	390,726	390,726	381,991	8,735
Expenses on City owned property	300,000	300,000	49,924	250,076
City Clerk	640,183	640,183	505,588	134,595
Law	1,710,549	1,710,549	2,678,378	(967,829)
Civil service	249,779	249,779	252,631	(2,852)
Personnel	219,500	219,500	183,126	36,374
Elections	136,624	136,624	30,830	105,794
Bureau of Management Services	1,383,836	1,383,836	1,121,360	262,476
Engineering	243,404	243,404	196,825	46,579
Public Works Commissioner's office	1,025,115	1,025,115	802,155	222,960
Building maintenance	1,034,518	1,034,518	1,126,421	(91,903)
Vehicle maintenance	2,398,874	2,398,874	2,459,943	(61,069)
Special items:				
Independent audit	300,000	300,000	110,000	190,000
Inspector general	91,500	91,500	-	91,500
Unallocated insurance	1,060,000	1,060,000	1,713,472	(653,472)
City-wide electricity charges	1,800,000	1,800,000	1,870,747	(70,747)
City-wide telephone charges	325,000	325,000	417,115	(92,115)
Municipal association dues	105,000	105,000	5,000	100,000
Judgments and claims	850,000	850,000	1,612,309	(762,309)
Taxes on City property	70,000	70,000	-	70,000
Tax certiorari payments	750,000	750,000	1,344,377	(594,377)
Tax abatements	35,000	35,000	55,161	(20,161)
Metropolitan commuter transportation mobility tax	200,000	200,000	197,707	2,293
Contingency	750,000	750,000	391,905	358,095
	18,605,117	18,605,117	19,448,102	(842,985)
PUBLIC SAFETY				
Police Department	24,989,829	24,989,829	23,988,406	1,001,423
Jail	257,464	257,464	300,237	(42,773)
Animal shelter	216,093	216,093	111,871	104,222
Fire Department	16,395,848	16,395,848	18,191,078	(1,795,230)
Architectural Board of Review	33,050	33,050	6,157	26,893
Building Department	1,244,698	1,244,698	874,458	370,240
Civil defense	128,734	128,734	112,567	16,167
	43,265,716	43,265,716	43,584,774	(319,058)
HEALTH				
Developmentally disabled programs	277,676	277,676	275,163	2,513
Emergency ambulance services	500,000	500,000	-	500,000
	777,676	777,676	275,163	502,513

(Continued)

General Fund
Schedule of Expenditures and Other Financing Uses Compared to Budget (Continued)
Year Ended December 31, 2021

	Original Budget	Final Budget	Actual	Variance with Final Budget
TRANSPORTATION				
Highway maintenance and repair	$ 2,263,695	$ 2,263,695	$ 1,485,817	$ 777,878
Maintenance of bridges	10,000	10,000	9,744	256
Snow removal	400,000	400,000	193,970	206,030
Street lighting	117,123	117,123	182,673	(65,550)
Sidewalks	45,000	45,000	11,922	33,078
	2,835,818	2,835,818	1,884,126	951,692
ECONOMIC OPPORTUNITY AND DEVELOPMENT				
Veteran's services	151,000	151,000	137,127	13,873
Consumer affairs	72,298	72,298	71,430	868
Youth board - Job training	-	-	294,821	(294,821)
Programs for the aging	326,838	326,838	484,723	(157,885)
Office for the Aging - Elderly nutrition	558,000	558,000	378,296	179,704
	1,108,136	1,108,136	1,366,397	(258,261)
CULTURE AND RECREATION				
Parks and recreation - Administration	510,745	510,745	390,022	120,723
Parks and recreation - Maintenance	1,216,820	1,216,820	1,025,287	191,533
Memorial field	125,000	125,000	-	125,000
Playgrounds	440,345	440,345	162,988	277,357
Neighborhood facility center	326,210	326,210	363,768	(37,558)
Pools	20,000	20,000	-	20,000
Youth programs	562,198	562,198	236,827	325,371
Youth bureau	479,856	479,856	1,043,758	(563,902)
Youth centers	234,785	234,785	1,368,638	(1,133,853)
Adult education	67,500	67,500	15,705	51,795
	3,983,459	3,983,459	4,606,993	(623,534)
HOME AND COMMUNITY SERVICES				
Zoning Board of Appeals	41,731	41,731	12,480	29,251
Department of Planning and Development	1,691,740	1,691,740	1,502,611	189,129
Planning Board	45,336	45,336	17,445	27,891
ETPA administrative charge	120,000	120,000	117,220	2,780
Sanitary and storm sewers	1,909,744	1,909,744	1,581,758	327,986
Refuse disposal	3,186,286	3,186,286	6,206,362	(3,020,076)
Street cleaning	2,653,505	2,653,505	2,383,282	270,223
Shade trees	15,000	15,000	6,320	8,680
	9,663,342	9,663,342	11,827,478	(2,164,136)

(Continued)

General Fund
Schedule of Expenditures and Other Financing Uses Compared to Budget (Continued)
Year Ended December 31, 2021

	Original Budget	Final Budget	Actual	Variance with Final Budget
EMPLOYEE BENEFITS				
State retirement	$ 12,580,055	$ 12,580,055	$ 3,733,490	$ 8,846,565
Police and fire retirement	-	-	8,586,681	(8,586,681)
Social security	4,687,125	4,687,125	4,556,095	131,030
Workers' compensation benefits	950,000	950,000	1,332,784	(382,784)
Employee assistance program	5,000	5,000	8,000	(3,000)
Unemployment benefits	200,000	200,000	-	200,000
Health and dental insurance	22,000,000	22,000,000	22,296,246	(296,246)
	40,422,180	40,422,180	40,513,296	(91,116)
DEBT SERVICE				
Principal				
Financed purchase debt	250,000	250,000	250,000	-
TOTAL EXPENDITURES	120,911,444	120,911,444	123,756,329	(2,844,885)
OTHER FINANCING USES				
Transfers out				
Capital Projects Fund	-	-	864,148	(864,148)
Debt Service Fund	2,386,644	2,386,644	2,358,269	28,375
TOTAL OTHER FINANCING USES	2,386,644	2,386,644	3,222,417	(835,773)
TOTAL EXPENDITURES AND OTHER FINANCING USES	$ 123,298,088	$ 123,298,088	$ 126,978,746	$ (3,680,658)

See independent auditors' report.

Capital Projects Fund
Project-Length Schedule
Inception of Project Through December 31, 2021

PROJECT	Authorization	Expenditures and Transfers		Unexpended Balance
		Capital Outlay	Interfund Transfers	
Police Equipment	$ 3,395,613	$ 2,625,263	$ 555,837	$ 214,513
City Hall Computer System Phase II	730,000	729,737	-	263
Roundabout Construction	1,838,487	1,771,178	-	67,309
Municipal Garage Elevators	750,000	394,873	-	355,127
Demolition of Public Nuisance Buildings	750,000	629,783	-	120,217
Memorial Field Renovations	10,450,215	4,150,216	-	6,299,999
Fourth Street Playground	1,250,000	140,142	-	1,109,858
Streetscape	400,000	26,342	-	373,658
Roof Replacement	750,000	656,693	-	93,307
Computer System Upgrade	325,000	271,741	-	53,259
Police Department	325,000	222,516	-	102,484
Fire - Emergency Operations Center	1,542,090	1,287,707	-	254,383
Fire Vehicles	192,000	186,928	-	5,072
Road Work	275,000	273,034	-	1,966
Parking Garage	750,000	628,493	-	121,507
Parking Garage Scape Entrance	750,000	4,143	-	745,857
Citywide Grounds Upkeep	135,000	134,146	-	854
Citywide Grounds Upkeep	1,081,500	1,066,374	-	15,126
Street Sewers Citywide	516,050	512,635	-	3,415
Doles Center Renovations	1,411,003	967,441	-	443,562
Armory Renovations	365,000	302,859	-	62,141
Municipal Buildings	650,000	614,612	-	35,388
HVAC	600,000	79,733	-	520,267
Maintenance Vehicle	225,000	218,105	-	6,895
Parking and Building Vehicles	149,700	148,802	-	898
Street Signs	150,000	94,862	-	55,138
License Plate Reader	260,000	241,782	-	18,218
Police Vehicles	150,000	149,471	-	529
Garage Renovation	250,000	201,099	-	48,901
Sanitary Sewers	200,000	198,555	-	1,445
Equipment	35,000	21,072	-	13,928
Resurfacing	3,162,200	2,877,199	-	285,001
YMCA Purchase	750,000	705,118	-	44,882
Parking Meters	180,000	177,600	-	2,400
YMCA Renovation	750,000	451,218	-	298,782
Police Justice Assistance Grant - 2013	52,532	33,301	-	19,231
Police Justice Assistance Grant - 2014	53,492	53,472	-	20
Resurfacing - 2014	1,914,313	1,237,643	-	676,670
Police Justice Assistance Grant - 2011	64,516	64,214	-	302
Con Edison Overtime	598,882	256,802	-	342,080
Resurfacing - 2015	2,257,273	2,190,517	-	66,756
Police Justice Assistance Grant - 2016	43,494	-	-	43,494
Broadband Digital Tech	1,000,000	-	-	1,000,000
Digital and Cybersecurity Tech	1,600,000	425,960	-	1,174,040
Fire Protection and Rescue Equipment	600,000	-	-	600,000
City Owned Property	3,850,000	20,725	-	3,829,275
Resurfacing - 2021-2023	9,575,212	1,937,958	-	7,637,254
Sewer Rehabilitation and Mitigation	3,125,000	417,463	-	2,707,537
Sewer Infrastructure	2,000,000	492,065	-	1,507,935
Department of Environmental Conservation Grant	1,102,342	1,099,338	-	3,004
Installment Purchase Debt	2,295,000	2,295,000	-	-
Totals	$ 65,625,914	$ 33,685,930	$ 555,837	$ 31,384,147

See independent auditors' report.

Revenues	Fund Balance at December 31, 2021
$ 3,395,613	$ 214,513
730,000	263
1,813,919	42,741
750,000	355,127
750,000	120,217
4,150,216	-
140,142	-
150,000	123,658
750,000	93,307
325,000	53,259
325,000	102,484
1,350,090	62,383
192,000	5,072
275,000	1,966
750,000	121,507
750,000	745,857
135,000	854
1,081,500	15,126
516,050	3,415
1,406,537	439,096
365,000	62,141
650,000	35,388
600,000	520,267
225,000	6,895
149,700	898
150,000	55,138
260,000	18,218
150,000	529
250,000	48,901
200,000	1,445
35,000	13,928
2,877,199	-
750,000	44,882
180,000	2,400
750,000	298,782
33,301	-
53,472	-
1,237,643	-
64,214	-
598,882	342,080
2,190,517	-
-	-
-	-
425,960	-
-	-
20,725	-
1,937,958	-
417,463	-
-	(492,065)
546,269	(553,069)
2,295,000	-
$ 37,149,370	$ 2,907,603

Debt Service Fund
Schedule of Revenues, Expenditures and Changes in Fund Balance
Year Ended December 31, 2021

	Original Budget	Final Budget	Actual	Variance with Final Budget
REVENUES	$ -	$ -	$ -	$ -
EXPENDITURES				
Debt service				
Serial bonds				
Principal	-	1,875,000	1,875,000	-
Interest	-	511,644	482,968	28,676
Total Expenditures	-	2,386,644	2,357,968	28,676
Deficiency of Revenues Over Expenditures	-	(2,386,644)	(2,357,968)	28,676
OTHER FINANCING SOURCES				
Transfers in	-	2,386,644	2,359,403	(27,241)
Net Change in Fund Balance	-	-	1,435	1,435
FUND BALANCE				
Beginning of Year	-	-	118,166	118,166
End of Year	$ -	$ -	$ 119,601	$ 119,601

See independent auditors' report.

PLANNING & COMMUNITY DEVELOPMENT
ONE ROOSEVELT SQUARE
MOUNT VERNON, NEW YORK 10550
PHONE: (914) 840-4029
EMAIL: TGRAHAM-OUATTARA@CMVNY.COM

JAMES RAUSSE, FAICP, WEDG
COMMISSIONER

February 3, 2026

VIA EMAIL:
Honorable City Council Members
City of Mount Vernon
1 Roosevelt Square
Mount Vernon, New York 10550

RE: Request for the City Council to Enact Legislation Authorizing the Mayor to Execute a Professional Services Agreement with ARUP for Phase II of the NYSERDA Project. For consideration on the agenda for the February 11, 2026, City Council meeting.

Honorable City Council President Thompson and Council Members:

I am writing to respectfully request that the City Council enact legislation authorizing the Mayor to enter into a Professional Services Agreement with ARUP, an international environmental and engineering consulting firm, to support the City of Mount Vernon's participation in Phase II of a New York State Energy Research and Development Authority (NYSERDA)–funded project**.**

As the City Council may recall, the City previously authorized the Mayor to execute a Letter of Commitment with ARUP in support of its Phase I submission to NYSERDA. ARUP has since been selected by NYSERDA to advance this initiative to Phase II, which focuses on implementation-oriented planning and policy integration. Execution of a formal Professional Services Agreement is now required to define roles, responsibilities, and deliverables and to allow the City to fully participate in the next phase of work.

Phase II will focus on advancing actionable, data-driven strategies to integrate climate resilience and urban heat mitigation into Mount Vernon's land use and regulatory framework. ARUP will work collaboratively with the Department of Planning and Community Development to refine and apply urban heat and environmental data, evaluate zoning and development standards through a climate lens, and develop clear, implementable tools that can be incorporated into the City's zoning ordinance update. The project is structured around specific, measurable outcomes, including producing policy-ready analyses, identifying zoning mechanisms that support heat-resilient development, and aligning climate mitigation strategies with the City's ongoing zoning modernization efforts.

Participation in Phase II will provide Mount Vernon with advanced technical expertise, planning tools, and policy guidance that directly support the City's Comprehensive Plan and zoning ordinance update, while strengthening climate resilience, public health protections, and environmental equity. Key benefits of the City's participation include enhanced decision-making capacity for zoning and development review, improved integration of climate considerations into local law, and the opportunity to serve as a model for other municipalities undertaking similar efforts statewide.

Importantly, the proposed Professional Services Agreement does not require any direct cash expenditure by the City**.** The City's financial responsibility will be satisfied through an in-kind contribution of Department of

PLANNING & COMMUNITY DEVELOPMENT
ONE ROOSEVELT SQUARE
MOUNT VERNON, NEW YORK 10550
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JAMES RAUSSE, FAICP, WEDG
COMMISSIONER

Planning and Community Development staff time, which will be accounted for through work already underway on the zoning ordinance update. The value of this in-kind contribution is estimated at $74,700 and will be credited toward the overall project budget submitted by ARUP to NYSERDA.

For these reasons, we respectfully request that the City Council adopt legislation authorizing the Mayor to execute the Professional Services Agreement with ARUP for Phase II of the NYSERDA project. We appreciate your consideration and remain available to provide any additional information or respond to questions.

Sincerely,

JAMES RAUSSE, FAICP, WEDG

cc: Mayor Shawyn Patterson-Howard
Comptroller Darren M. Morton
Malcolm Clark, Chief of Staff

PON 5180 Attachment B - Budget Form & Instructions NYSERDA Budget			Solicitation/Contract No.	
Contractor:			Name of Project:	
Address:				
Location (where work is to be performed):			NYSERDA funding:	
			Total Project Cost:	
				Phase 2 Fundin
Cost Element			Total Project Cost:	Funding & Co-funding via NYSERDA
1. Labor (specify names or titles)	Hours	Rate/hr		
Lukas Herbert	440	61.45	$ 27,038	
William Hyland	440	44.47	$ 19,567	
Amelia Zaino	221	58.86	$ 13,008	
Marlon Molina	264	57.19	$ 15,098	
Total Labor			$ 74,711	
2. Direct Materials, Supplies, Equipment, and Other Costs				
Fringe Benefits for all City Employees listed above at 73%			$ 54,531	
Total Direct Materials, Supplies, Equipment and Other Costs			$ 54,531	
3. Travel				
Total Travel				
4. Final Deliverable				
5. Subcontractors/Consultants				
Total Subcontractors/Consultants				
Total Project Cost			**$ 129,242**	

☐ By checking this box I certify that hourly rates included in this budget are the same or less than the other government or commercial entities for similar work performed.

Supporting Schedule (Additional Information)		
Element No.	Item Description	Phase 2 Fundin

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Cost-sharing & Other Co-funding

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File #: TMP -2129 **Agenda Date:** 5/13/2026 **Agenda #:** 25.

City Council:

AN ORDINANCE AUTHORIZING THE MAYOR TO ENTER INTO A 24-MONTH MANAGED SERVER, STORAGE, AND BACKUP SERVICES AGREEMENT WITH HI-LINK TECHNOLOGY GROUP THROUGH SHI INTERNATIONAL CORP. PURSUANT TO SOURCEWELL COOPERATIVE PURCHASING CONTRACT NO. 121923-SHI

Whereas, by correspondence dated May 8, 2026, the Commissioner of the Department of Management Services formally requested that the City Council authorize the Mayor to enter into a twenty-four (24) month Managed Server, Storage, and Backup Services Agreement with Hi-Link Technology Group through SHI International Corp., pursuant to Sourcewell Cooperative Purchasing Contract No. 121923-SHI, together with such related documents as may be necessary to carry out the purposes of this Ordinance; and

Whereas, the Department of Management Services has requested authorization for the City of Mount Vernon to enter into a twenty-four (24) month Managed Server, Storage, and Backup Services Agreement with Hi-Link Technology Group through SHI International Corp. pursuant to Sourcewell Cooperative Purchasing Contract No. 121923-SHI; and

Whereas, the proposed agreement authorizes monthly payments in the amount of Four Thousand Six Hundred Fifty-Six Dollars and Ninety-One Cents ($4,656.91), for a total contract amount not to exceed One Hundred Eleven Thousand Seven Hundred Sixty-Five Dollars and Eighty-Four Cents ($111,765.84); and

Whereas, the agreement includes an option to extend on an annual basis upon mutual written agreement of the parties; and

Whereas, the City's current server infrastructure is operating in an unsupported and vulnerable condition, creating significant operational, cybersecurity, and continuity risks for municipal departments and the Mount Vernon Police Department; and

Whereas, the City's prior information technology support vendor, Softchoice, was awarded the server support contract through the City's competitive procurement process but was unable to perform required Dell VxRail firmware updates because such updates are restricted to Dell Technologies as the original equipment manufacturer; and

Whereas, the inability to maintain current firmware prevented the City from operating a supported virtualization platform and required the City to downgrade its VMware virtualization

environment; and

Whereas, following the downgrade, Broadcom, the VMware licensor, declined to provide technical support due to the unsupported software revision notwithstanding the existence of an active support agreement; and

Whereas, the City's support contract with Softchoice expired in April 2026, and the City's backup infrastructure support contract has also expired, leaving critical systems without vendor-backed support coverage; and

Whereas, the City explored restoring direct support services through Dell Technologies, but Dell required retroactive payment for the prior unsupported year before reinstating coverage, which the Department of Management Services determined would not provide sufficient operational value or fiscal justification; and

Whereas, Hi-Link Technology Group has proposed a comprehensive managed technology solution under Service Order No. HL09031 that addresses the City's infrastructure, virtualization, backup, and support needs through a single coordinated engagement; and

Whereas, the proposed services include:

1. The provision of three (3) Cisco Hyper-V server hosts and HPE SAN storage systems at both City Hall and the Mount Vernon Police Department under a rental model that eliminates the need for a substantial upfront capital expenditure;

2. A controlled and staged migration of all existing workloads from the current VMware environment to Microsoft Hyper-V infrastructure in order to minimize operational disruption;

3. Deployment and configuration of a new Veeam backup solution to replace the expired backup infrastructure; and

4. Twenty-four (24) hour per day, seven (7) day per week hardware and infrastructure support for all covered systems, including the Police Department environment; and

Whereas, the Department of Management Services recommends the twenty-four (24) month agreement term over a shorter twelve (12) month term because enterprise server infrastructure requires long-term operational stability, predictable budgeting, and continuity of support services; and

Whereas, the agreement provides the City with a predictable monthly operating expense and preserves flexibility through annual renewal options beyond the initial term; and

Whereas, this procurement is being conducted pursuant to Sourcewell Cooperative Purchasing Contract No. 121923-SHI (Technology Products & Solutions) through SHI International Corp., which satisfies all applicable procurement requirements without the necessity of a separate competitive bidding process; and

Whereas, Year One costs in the approximate amount of Fifty-Five Thousand Eight Hundred Eighty-Two Dollars and Ninety-Two Cents ($55,882.92) shall be charged to Budget Code A1680.203 (Equipment), and Year Two funding shall be incorporated into the Fiscal Year 2027 departmental budget request; and

Whereas, implementation of the project shall be coordinated between Hi-Link Technology

Group and the Department of Management Services, including migration scheduling, testing, and deployment activities; and

Whereas, all City departments utilizing the shared server infrastructure shall benefit from this agreement, and the Mount Vernon Police Department shall additionally receive dedicated local twenty -four (24) hour per day, seven (7) day per week vendor-backed hardware support; and

Whereas, this procurement utilizes a cooperative purchasing contract and therefore does not require a bid opening before the Board of Estimate and Contract, and no enforcement activity is associated with this agreement.

NOW, THEREFORE, BE IT ORDAINED BY THE CITY COUNCIL OF THE CITY OF MOUNT VERNON, NEW YORK, AS FOLLOWS:

Section 1. Authorization to Execute Agreement. The Mayor is hereby authorized and directed to execute a twenty-four (24) month Managed Server, Storage, and Backup Services Agreement with Hi-Link Technology Group through SHI International Corp., pursuant to Sourcewell Cooperative Purchasing Contract No. 121923-SHI, together with all related documents necessary to effectuate the purposes of this Ordinance.

Section 2. Term of Agreement. The agreement authorized herein shall commence upon execution and shall remain in effect for a period of twenty-four (24) months. The agreement may thereafter be extended on an annual basis by mutual written agreement of the parties, subject to any required approvals and appropriations.

Section 3. Contract Amount. The total amount authorized under this Ordinance shall not exceed One Hundred Eleven Thousand Seven Hundred Sixty-Five Dollars and Eighty-Four Cents ($111,765.84), payable in monthly installments of Four Thousand Six Hundred Fifty-Six Dollars and Ninety-One Cents ($4,656.91).

Section 4. Funding Authorization. Funding for the first year of the agreement shall be charged to Budget Code A1680.203 (Equipment). Funding for subsequent years shall be subject to appropriation through the City's annual budget process.

Section 5. Procurement Compliance. The City Council hereby determines that procurement through Sourcewell Cooperative Purchasing Contract No. 121923-SHI satisfies all applicable procurement and purchasing requirements of the City of Mount Vernon and applicable law.

Section 6. Implementation Authority. The Department of Management Services is hereby authorized to coordinate implementation of the agreement, including migration scheduling, system testing, deployment activities, and related operational planning with Hi-Link Technology Group.

Section 7. Severability. If any clause, sentence, paragraph, subdivision, section, or part of this Ordinance shall be adjudged by a court of competent jurisdiction to be invalid, such judgment shall not affect, impair, or invalidate the remainder thereof, but shall be confined in its operation to the specific provision directly involved in the controversy.

Section 8. Effective Date. This Ordinance shall take effect immediately upon adoption by the City Council and subsequent approval by the Board of Estimate and Contract.

CITY OF MOUNT VERNON, N.Y.
Mayor Office

SHAWYN PATTERSON-HOWARD, MPA
Mayor

City Hall, One Roosevelt Square
Mount Vernon, NY, 10550
(914) 665-2362 – Fax: (914) 665-6173

Juan Perez
Commissioner Management Services

May 8, 2026

VIA EMAIL:

Honorable City Council Members
City of Mount Vernon
1 Roosevelt Square
Mount Vernon, New York 10550

RE: Authorization to Enter into a 24-Month Managed Server, Storage, and Backup Services Agreement with Hi-Link Technology Group — FOR APPROVAL AT THE May 13, 2026 CITY COUNCIL MEETING

Honorable Councilmembers:

The Department of Management Services requests that the City Council authorize the Mayor to enter into a 24-month Managed Server, Storage, and Backup Services Agreement with Hi-Link Technology Group, procured through SHI International Corp. under Sourcewell Cooperative Purchasing Contract No. 121923-SHI, and to authorize the Mayor to make monthly payments of $4,656.91, for a total contract value not to exceed $111,765.84. The agreement shall include an option to extend on an annual basis upon mutual written agreement of the parties.

All supporting documentation, including Service Order No. HL09031 and the Master Services Agreement, is attached.

The City of Mount Vernon's server infrastructure is currently operating in an unsupported and vulnerable state, creating significant operational risk for all city departments and the Police Department. The following chain of events led to the present situation:

The City's prior IT support vendor, Softchoice, was awarded the server support contract through the City's competitive bid process. However, Softchoice was unable to perform required VxRail firmware updates — a capability exclusive to Dell as the original equipment manufacturer. This prevented the City from maintaining a current, supported software version on its virtualization platform.

As a result, the City was forced to downgrade its VMware virtualization environment. Following the downgrade, Broadcom (the VMware licensor) declined to provide technical support, citing the back-revision software, despite an active support contract being in effect. The City's Softchoice support contract also expired in April 2026.

We attempted to restore Dell's direct support. However, Dell required retroactive payment for the prior unsupported year before reinstating coverage — an expenditure that would yield no operational benefit and is not fiscally justified. Additionally, the City's backup infrastructure support contract has expired, leaving the backup environment without vendor coverage.

SHAWYN PATTERSON-HOWARD, MPA
Mayor

City Hall, One Roosevelt Square
Mount Vernon, NY, 10550
(914) 665-2362 – Fax: (914) 665-6173

Juan Perez
Commissioner Management Services

Hi-Link Technology Group, a local managed technology services provider, has proposed a comprehensive solution that resolves all the above challenges in a single engagement. Under Service Order No. HL09031, Hi-Link will provide the following:

- Three (3) Cisco Hyper-V server hosts and HPE SAN storage per site (City Hall and Police Department), provided on a rental model, eliminating the need for a large upfront capital investment;
- A controlled, staged migration of all existing workloads from the current VMware environment to Microsoft Hyper-V, minimizing operational disruption;
- Deployment and configuration of a new Veeam backup solution, replacing the expired backup infrastructure; and
- 24×7 hardware and infrastructure support for all covered systems, including the Police Department environment.

The Department recommends the 24-month agreement over the 12-month alternative because server infrastructure, once deployed, requires an extended commitment for stability and cost certainty. A 24-month term provides a predictable monthly expense, operational continuity, and a planning horizon for future budget cycles. The agreement includes an annual extension option, preserving the City's flexibility beyond the initial term.

This procurement is processed through the Sourcewell Cooperative Purchasing Contract No. 121923-SHI (Technology Products & Solutions) via SHI International Corp. Use of a cooperative purchasing contract satisfies applicable procurement requirements; no separate competitive bid process is required.

The 24-month agreement carries a monthly fee of $4,656.91 and a total contract value of $111,765.84. Year 1 costs (approximately $55,882.92) will be charged to budget code A1680.203 (Equipment). Year 2 funding will be incorporated into the FY2027 departmental budget request. No budget transfers are required at this time.

All city departments relying on the shared server infrastructure will benefit from this agreement. The Mount Vernon Police Department will additionally gain dedicated local 24×7 vendor-backed hardware support.

CITY OF MOUNT VERNON, N.Y.
Mayor Office

SHAWYN PATTERSON-HOWARD, MPA
Mayor

City Hall, One Roosevelt Square
Mount Vernon, NY, 10550
(914) 665-2362 – Fax: (914) 665-6173

Juan Perez
Commissioner Management Services

Implementation will be coordinated between Hi-Link and the Department of Management Services, including scheduling, migration windows, and system testing. This procurement utilizes the Sourcewell Cooperative Purchasing Contract and does not require a bid opening at the Board of Estimate & Contract. No enforcement activity is required.

I look forward to your favorable consideration of this request. Please do not hesitate to contact me with any questions.

Sincerely,

Juan Perez
Commissioner Management Services

cc: Shawyn Patterson-Howard, Mayor
cc: Corporation Counsel
cc: City Clerk

MASTER SERVICES AGREEMENT

This Master Services Agreement is between Hi-Link Technology Group LLC ("Service Provider") and the City of Mount Vernon NY ("Customer"). Service Provider and Customer agree as follows:

1. GOVERNING PROVISIONS.

1.1 This Agreement governs all orders executed by Customer and Service Provider ("Service Order(s)") providing for Customer's access to and use of any service ("Service") provided to it by Service Provider. The agreement ("Agreement") between Customer and Service Provider consists of this Master Services Agreement, Service Orders, and the Service Provider Addendum for each specific type of Service which Customer obtains from Service Provider ("Addendums"). Addendums for anticipated Services are attached hereto and incorporated herein by reference. Additional Addendums may be attached to Service Orders and shall be incorporated herein upon execution of such Service Orders. Note, if the terms are in direct conflict with other Agreement terms, the following order will prevail, Addendum terms, Customer Service Order, Amendments, Master Service Agreement, Statement of Work & Exhibits shall govern with respect to such Service to the extent required to resolve the conflict.

1.2. Customer may order additional Services pursuant to this Agreement. Service Provider may require execution of a Service Order for such additional Services which, upon execution by Customer and Service Provider, shall be deemed to be part of this Agreement. Service Provider may, at its option, permit Customer to add additional Services by Customer's e-mail request. Such additional Services shall be deemed to be provided pursuant to the terms of this Agreement upon Service Provider making such additional Service available to Customer. Unless otherwise specified by Service Provider or this Agreement, the price of such additional Services added without a Service Order shall be the Service Provider then standard rates and the Term of the Service shall not be affected.

1.3. Customer may purchase a support plan from Service Provider which will entitle Customer to specified support for issues which are not Service Interruptions as defined in the applicable addendums.

2. INVOICING AND PAYMENT.

2.1. CHARGES. Customer shall pay in U.S dollars for all charges for Services. Charges for a Service shall commence to accrue on the Billing Commencement Date for the Service (as specified in the applicable Addendum). Monthly recurring charges will be invoiced to Customer in advance at the beginning of the month for which the charges accrue. Payments for Monthly recurring charges are due upon receipt of invoice. Non-recurring charges are due upon Effective Date of this agreement.

2.2 TAXES. Customer shall pay applicable taxes imposed by any taxing authority with respect to the Services, excluding any tax on Service Provider's net income.

2.3. BILLING DISPUTES. If Customer believes a Service Provider bill contains an error, Customer shall notify Service Provider of the suspected error within sixty (60) days of the date of the disputed bill. Service Provider shall have no obligation to make any billing adjustment or refund for any errors for which Customer has not provided Service Provider timely notice. Disputed charges to the extent found to be in error shall not incur late fees.

2.4. LATE CHARGES AND COLLECTION COSTS. Charges not in dispute which are not paid by Customer within thirty (30) days of Service Provider's invoice shall accrue a late fee which shall accrue daily at the rate of one and one-half percent (1 1/2%) per month until paid. Customer shall pay Service Provider's reasonable costs of collection, including reasonable attorneys' fees, incurred by Service Provider in collecting any charges payable to it by Customer.

3. TERM AND TERMINATION OF SERVICES PURSUANT

TO A SERVICE ORDER.

3.1. TERM. The "Term" of Services provided pursuant to each Service Order shall initially be for the period specified in the applicable Service Order for such Services ("Initial Term"). The Initial Term of each Service Order shall commence on the date that Service Provider accepts the Service Order. Upon termination of its Term, the Service Order Term shall automatically renew for additional one-year Terms unless written notice of termination is provided by either party 30 days prior to the completion of a pending Term.

3.2. TERMINATION. Either Customer or Service Provider may terminate the Services pursuant to a Service Order for cause if: (1) the other party breaches a material term or condition of this Agreement or the Service Order and fails to cure the breach within thirty (30) days after receipt of written notice of the breach; (2) the other party fails to cure a payment default within five (5) days after written notice by Service Provider of the default; (3) the other party becomes the subject of a voluntary petition in bankruptcy or any voluntary proceeding relating to insolvency, receivership, liquidation, or composition for the benefit of creditors; or (4) the other party becomes the subject of an involuntary petition in bankruptcy or any involuntary proceeding relating to insolvency, receivership, liquidation, or composition for the benefit of creditors if such petition or proceeding is not dismissed within sixty (60) days of filing.

3.3. EARLY TERMINATION FEE. Except in the event of termination by Customer pursuant to section 3.2 or at the end of the Term by providing notice in accordance with section 3.1, Customer shall pay Service Provider, as liquidated damages and not as a penalty, an early termination fee equal to one hundred percent (100%) of the monthly service fee for the remaining portion of the Term.

3.4. EFFECT OF TERMINATION. At the end of the Term or upon termination of the Services by either party for any reason, Service Provider shall cease providing the Service pursuant to the affected Service Order. Customer's obligations, including without limitation, to pay sums due and protect Proprietary Information, shall survive.

4. PROHIBITED USE OF SERVICES AND LAW
ENFORCEMENT ACTIVITIES. Customer shall not use any Service in a manner prohibited by law or that Service Provider reasonably determines may adversely affect a Service, Service Provider's systems, Service Provider suppliers or other Customers, the integrity and operation of Service Provider's business, or Service Provider's ability to provide Services to other Service Provider customers. Service Provider may terminate any Service without notification if Service Provider determines to its reasonable satisfaction that Customer has used the Service to engage in any prohibited activity or a situation exists which may result in a similar threat (e.g. a denial-of-service attack). Any such Service Provider action shall not be deemed to be a Service Interruption. Service Provider may cooperate with law enforcement agencies in any investigation related to the use of a Service Provider Service and investigate any complaint or reported violation of law or Service Provider's policies and take any action it deems is reasonably appropriate as a result of such investigations.

5. EMERGENCY AND SCHEDULED MAINTENANCE. In the event of any change in Service Provider standard scheduled maintenance window, Service Provider will provide reasonable notice by email to Customer of scheduled maintenance affecting the Services and will use reasonable efforts to notify Customer of emergency maintenance affecting the Services, provided that Service Provider may perform emergency maintenance at any time, without advance notice to Customer. During scheduled and emergency maintenance periods, Service Provider's Services may be unavailable to Customer. Service unavailability during maintenance periods shall not be considered a Service Interruption for purposes of service level provisions.

6. DISCLAIMER OF WARRANTY. SERVICE PROVIDER PROVIDES THE SERVICES "AS IS" AND WITHOUT ANY WARRANTY, EXPRESS OR IMPLIED. SERVICE PROVIDER SPECIFICALLY DISCLAIMS ANY IMPLIED WARRANTIES OF MERCHANTABILITY, NON-INFRINGEMENT OR FITNESS FOR A PARTICULAR PURPOSE, INCLUDING ANY WARRANTIES THAT THE SERVICES WILL MEET CUSTOMER'S REQUIREMENTS OR EXPECTATIONS.

7. LIMITATIONS OF LIABILITY.
7.1 CUSTOMER'S EXCLUSIVE REMEDY FOR ANY FAILURE OF SERVICE PROVIDER'S OBLIGATIONS PURSUANT TO THIS AGREEMENT SHALL BE THE REMEDIES SET FORTH IN SECTION 3.2 ABOVE AND ANY CREDIT DUE PURSUANT TO ANY APPLICABLE SERVICE LEVEL AGREEMENT SET FORTH IN THE ADDENDUM FOR SUCH SERVICE.

7.2. IN NO EVENT SHALL SERVICE PROVIDER BE LIABLE OR RESPONSIBLE TO CUSTOMER FOR ANY TYPE OF INCIDENTAL, PUNITIVE, DIRECT, INDIRECT OR CONSEQUENTIAL DAMAGES, INCLUDING, BUT NOT LIMITED TO, LOST REVENUE, LOST PROFITS, REPLACEMENT GOODS, LOSS OF TECHNOLOGY, RIGHTS OR SERVICES, LOSS OF DATA, OR INTERRUPTION OR LOSS OF USE OF SERVICE OR EQUIPMENT, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGES, WHETHER ARISING UNDER THEORY OF CONTRACT, TORT (INCLUDING NEGLIGENCE), STRICT LIABILITY OR OTHERWISE.

7.3. IN NO EVENT SHALL SERVICE PROVIDER LIABILITY TO ANY CUSTOMER OR ANY THIRD PARTY IN ANY CIRCUMSTANCE EXCEED THE AMOUNT OF FEES CUSTOMER ACTUALLY PAID TO SERVICE PROVIDER FOR SERVICES IN THE MONTH PERIOD DIRECTLY PRIOR TO THE ACTION GIVING RISE TO ALLEGED LIABILITY.

8. POLICIES AND STATEMENTS. The Service Provider Acceptable Use Policy as modified from time to time and The Service Provider Privacy Statement as modified from time to time.

9. USE OF NAME AND MARKS. Neither party will, without the prior written consent of the other party, use any trademark, service mark, brand name, copyright, paten or any other intellectual property of the other party or its respective affiliates. Service Provider's and Customer's name and trademarks are proprietary and nothing herein constitutes a license authorizing its use by the other party.

10. INDEMNIFICATION. Each party shall indemnify, defend, and hold harmless the other party, its officers, employees, and agents from and against any and all third-party claims, damages, liabilities, losses, and reasonable attorneys' fees to the extent arising out of the negligence or willful misconduct of the indemnifying party, bodily injury or tangible property damage caused by the indemnifying party, or the indemnifying party's violation of applicable law. In addition, Customer shall indemnify, defend, and hold harmless Service Provider from and against any and all third-party claims, damages, liabilities, losses, and reasonable attorneys' fees arising out of Customer's unauthorized use of the Services or violation of the Service Provider Acceptable Use Policy. The party seeking indemnification shall promptly provide written notice of any claim and shall reasonably cooperate in the defense. The indemnifying party shall have the right to control the defense and settlement of the claim, provided that no settlement imposing non-monetary obligations on the indemnified party shall be entered into without the indemnified party's prior written consent, which shall not be unreasonably withheld. The obligations set forth in this Section shall survive termination or expiration of this Agreement.

11. CONFIDENTIALITY. Customer acknowledges that the following Service Provider information is Service Provider proprietary information "Proprietary Information" whether or not reduced to writing and whether or not specifically identified as "proprietary" or "confidential:"

11.1. All information obtained by Customer as a result of access to the Service Provider colocation facilities, including without limitation information which could facilitate a security breach or disruption of or endanger Service Provider facilities, operations or systems; and

11.2. All Service Provider pricing and other provisions of this Agreement except to the extent information is posted by Service Provider on areas of its website which are publically accessible without restriction. Customer shall not disclose any Proprietary Information or use it for its own benefit except as required to perform its obligations under this Agreement. Customer shall limit disclosure of Proprietary Information only to its employees and consultants having the need to know and shall take all reasonable steps to prevent any inadvertent or wrongful disclosure or use by such employees and consultants.

12. PCI COMPLIANCE
Service Provider acknowledges that it is responsible for the security of cardholder data to the extent that Service Provider has control of that data, and is responsible for the physical security of the systems that house cardholder data stored there by the customer. The customer acknowledges that they are responsible for determining the PCI DSS requirements applicable to them and their unique workloads.

13. TRANSFER; ASSIGNMENT. Customer will acquire Services solely for its own account, and not for resale or distribution in any manner. Customer may not assign or transfer its rights and obligations under this Agreement without the prior written consent of Service Provider, which consent Service Provider may condition on Customer's agreement to remaining bound by the Agreement to pay Service Provider for Services utilized by Customer's assignee or transferee. Service Provider may assign or transfer its rights and obligations under this Agreement without Customer's consent.

14. NOTICES. Notices and other communications between Service Provider and Customer related to this Agreement or a Service governed by it may be delivered by email. Communications may be directed to Service Provider at info@hi-link.com Customer shall provide Service Provider with a valid email address to be used by Service Provider for communications related to this Agreement and shall update that address as needed. Service Provider shall fulfill its notice obligations by providing Customer with notice at the email address most recently provided to Service Provider by Customer for use in providing notices pursuant to this Agreement.

15. DISPUTE RESOLUTION. This Agreement shall be governed by and construed in accordance with the laws of the State of New York, without regard to its conflict of law principles. Any legal action or proceeding arising out of or relating to this Agreement shall be brought in a court of competent jurisdiction located in Westchester County, New York. Nothing herein shall be deemed a waiver of any rights, defenses, or immunities available to the City under applicable law.

16. FORCE MAJEURE. Service Provider shall not be in default under any provision of this Agreement or be liable for any delay, failure of performance or interruption of any Service resulting, directly or indirectly, from causes beyond Service Provider's reasonable control, including but not limited to any of the following: earthquake, lightning or other acts of God; fire or explosion; electrical faults; vandalism; cable cut; water; fire; fire suppression activities, flood; weather conditions; action of any governmental or military authority; national emergency; insurrection; riot; war; acts of terrorism or civil disturbance; strikes; lockouts; work stoppages or other labor difficulties; supplier failure; shortage; or telecommunication or other Internet provider failure.

17. SEVERABILITY. If any part of this Agreement is found to be unenforceable or unlawful, then that provision shall be deemed severable and shall not affect the validity and enforceability of any remaining provisions of the Agreement.

18. ENTIRE AGREEMENT. This Agreement, including all referenced documents, constitutes the entire agreement and understanding between the parties. It supersedes all prior or contemporaneous negotiations or agreements, whether oral or written, relating to its subject matter.

This Agreement shall be effective the ____day of _____, 20___ ("Effective Date").
Service Provider: Hi-Link Computer Technology Group.
Located at 60 Long Ridge Rd. Suite 205 Stamford, CT 06902
Hi-Link Technology Group LLC, a Connecticut limited liability company

By: _____

Name: _____

Title: _____

Date: _____

This Agreement shall be effective the ____day of _____, 20___ ("Effective Date").
Customer: City of Mount Vernon NY

Located at _____

By: _____

Name: _____

Title: _____

Date: _____

Service Order No. HL09031

This Service Order is entered into by and between **Hi-Link Technology Group** ("Hi-Link") and **City of Mount Vernon NY** ("Client") and is governed by the applicable Master Services Agreement, Statement of Work, or other written agreement between the parties. If no such agreement exists, this Service Order will serve as the controlling scope and commercial document for the services described below, subject to mutual written acceptance by both parties.

1. Service Order Summary

Client requires an alternative infrastructure and migration path to avoid renewing the existing VxRail/VMware environment. Hi-Link will provide rental infrastructure, associated hardware support, backup components, and migration services to move workloads from the existing VMware environment to a new Microsoft Hyper-V environment.

Under this option, Hi-Link will provide a complete rental infrastructure solution using **Cisco server infrastructure** and **HPE SAN storage**, along with the required implementation, migration, and support services.

The intended outcome is to provide Client with a predictable monthly operating expense model, avoid a large upfront capital purchase, and establish single-vendor ownership for infrastructure delivery, migration execution, and support.

2. Scope of Services

Hi-Link will provide the following infrastructure and services under this Service Order.

2.1 Rental Infrastructure Provided by Hi-Link

Hi-Link will provide the required infrastructure on a rental model, including:

- Three (3) Cisco Hyper-V hosts per site.
- HPE SAN storage per site.
- Required host connectivity components based on the final storage connectivity design.
- Veeam backup licensing.
- Backup appliance as part of the all-in-one solution.
- 24×7 support for the rental hardware and covered infrastructure components.

Based on current utilization, Hi-Link anticipates that three (3) Hyper-V nodes per site will be sufficient. Hi-Link does not anticipate the need for four (4) nodes at the PD site due to improved workload density on newer hardware. Final sizing remains subject to validation during discovery and design.

2.2 Storage Connectivity Components

The final storage connectivity method will be determined during the technical design phase. Hi-Link will provide the required components based on the selected approach.
If **iSCSI** is selected, Hi-Link will provide dedicated iSCSI switching required for storage connectivity.
If **Fibre Channel** is selected, Hi-Link will provide Fibre Channel HBAs for the hosts and the required SAN fabric components necessary to connect the Cisco hosts to the HPE SAN storage.

2.3 Hyper-V Cluster Buildout

Hi-Link will build the full Hyper-V cluster environment before production workload migration begins.
This includes:

- Physical installation coordination and hardware preparation.
- Hyper-V host configuration.
- Cluster configuration.
- Storage presentation and validation.
- Network configuration required for cluster, management, VM, storage, and migration traffic.
- High availability configuration.
- Baseline validation and readiness testing.
- Coordination with Client for required Microsoft licensing, domain access, IP addressing, VLANs, firewall rules, and administrative access.

2.4 VMware-to-Hyper-V Migration Services

Hi-Link will perform a controlled migration of workloads from the existing VMware environment to the new Hyper-V environment in a planned and staged manner.
Migration services include:

- Migration planning and coordination.
- Workload discovery and grouping.
- Migration runbook development.
- Scheduling and coordination of migration windows.
- Staged workload migration from VMware to Hyper-V.
- Post-migration validation support.
- Issue remediation related to the migration process.
- Coordination with Client application owners and technical stakeholders.

Migration will be performed in phases to reduce operational risk and minimize business disruption where possible.

2.5 Backup Solution

Hi-Link will include Veeam backup licensing and a backup appliance as part of the rental solution.
Backup configuration will be designed to support the new Hyper-V environment.
Backup services include:

- Deployment and configuration of the Veeam backup solution for the new Hyper-V environment.
- Configuration of backup jobs based on mutually agreed retention and schedule requirements.
- Backup validation after deployment.
- Basic operational handoff for backup monitoring and support.

Unless otherwise agreed in writing, long-term offsite retention, cloud storage charges, immutable storage, tape, replication to a third-party site, or advanced disaster recovery orchestration are not included in this Service Order.

3. Client Responsibilities

Client will provide the following at no additional cost to Hi-Link:

- All required Microsoft licensing, including but not limited to Windows Server, Hyper-V rights, Datacenter licensing if applicable, CALs, SQL Server, Remote Desktop Services, and any other Microsoft or application-specific licenses required for the environment.
- Administrative access to the existing VMware environment.
- Administrative access to Active Directory, DNS, DHCP, firewall, network, and backup systems as required.

- Rack space, power, cooling, cabling pathways, and physical access required for equipment deployment.
- Network information, including VLANs, IP addresses, subnets, gateways, routing requirements, and firewall rules.
- Application owner participation for testing and validation.
- Maintenance windows and approval for workload cutovers.
- Timely review and approval of migration plans, schedules, and change requests.
- Confirmation of workload priority, dependencies, and acceptable downtime windows.
- Any third-party vendor support required for application-specific validation or remediation.

Client acknowledges that Microsoft licensing is not included in the monthly rental fee and remains the sole responsibility of Client.

4. Commercial Terms

4.1 Monthly Fee

The estimated monthly fee for this rental infrastructure and migration service is:

$4,250 per month

This monthly fee includes the rental infrastructure, covered hardware support, Veeam backup license, backup appliance, Hyper-V buildout, VMware-to-Hyper-V migration services, and 24×7 support as described in this Service Order.

4.2 Minimum Term

The minimum service term is:

Twelve (12) months

Client may extend the service beyond the initial twelve-month term upon mutual agreement between Client and Hi-Link.

4.3 Billing Start Date

Monthly billing will begin on the earlier of: TBD

- The date the rental infrastructure is delivered to Client site;
- The date Hi-Link begins buildout of the Hyper-V environment; or
- Another mutually agreed billing start date documented in writing.

4.4 Taxes, Shipping, and Other Charges

Unless expressly stated otherwise, applicable taxes, shipping, freight, expedited delivery charges, permits, or other governmental fees are not included and may be billed separately.

5. Support Terms

Hi-Link will provide 24×7 support for the covered rental hardware and migration-related infrastructure during the term of this Service Order.

Support includes:

- Hardware support coordination for Cisco server infrastructure and HPE storage provided by Hi-Link.
- Assistance with Hyper-V cluster issues related to the deployed rental infrastructure.
- Support for migration-related issues during the active migration phase.
- Support for Veeam backup functionality included in the rental solution.

Support does not include remediation of unrelated application issues, pre-existing operating system corruption, unsupported software, third-party application defects, or problems caused by changes made outside of Hi-Link's control unless separately agreed in writing.

6. Assumptions

This Service Order is based on the following assumptions:

- Three (3) Hyper-V hosts per site will be sufficient based on current utilization and improved hardware density.
- Client's existing workloads are technically suitable for migration from VMware to Hyper-V.
- Client will provide all required Microsoft licensing.
- Existing applications are supported on Microsoft Hyper-V by the applicable software vendors.
- Required rack space, power, cooling, and network connectivity are available at each site.
- Client will provide timely access to systems, personnel, and maintenance windows.
- Migration will be conducted in planned phases, and some downtime may be required for cutover activities.
- Any workload requiring special handling, application-level migration, major OS remediation, or vendor-specific professional services may require additional scope.

7. Exclusions

The following are excluded unless specifically added by written amendment or change order:

- Microsoft licensing.
- Application licensing.
- VMware renewal costs.
- End-user device support.
- Major application upgrades or application remediation.
- SQL Server redesign, database tuning, or application-specific database migration beyond standard VM-level migration.
- Network redesign unrelated to the Hyper-V cluster deployment.
- Firewall replacement or major firewall policy redesign.
- Long-term cloud backup storage charges.
- Disaster recovery site buildout unless specifically included.
- Compliance consulting, audit services, or formal risk assessment services.
- After-hours application owner testing by Hi-Link unless specifically scheduled and agreed.
- Any hardware, software, service, or labor not expressly described in this Service Order.

8. Change Management

Any material change to the scope, assumptions, number of hosts, storage capacity, migration complexity, support requirements, licensing responsibilities, backup retention requirements, or timeline may require a written change order.

Hi-Link will notify Client if a requested change or newly discovered condition may impact pricing, timeline, or scope.

9. Benefits of This Option

This option provides Client with the following benefits:

- Avoids immediate VxRail/VMware renewal.
- Avoids a large upfront capital purchase.
- Provides predictable monthly infrastructure costs.
- Includes migration services in the monthly model.
- Provides a single-vendor solution for infrastructure, migration, backup, and support.
- Enables a controlled and staged migration path from VMware to Hyper-V.

10. Acceptance

By signing below, the parties agree to the scope, responsibilities, assumptions, exclusions, and commercial terms described in this Service Order.

Hi-Link Technology Group

Authorized Signature: _____

Name: _____

Title: _____

Date: _____

City of Mount Vernon NY

Authorized Signature: _____

Name: _____

Title: _____

Date: _____

Pricing Proposal
Quotation #: 27505160
Created On: 5/7/2026
Valid Until: 5/14/2026

NY-City of Mount Vernon

Donald Rauhofer
1 Roosevelt Square
Mount Vernon, NY 10550
United States
Phone: (914) 665-2300
Email: DRauhofer@mountvernonny.gov

Inside Account Executive

Niall El-Adawy
300 Davidson Ave
Somerset, NJ 08873
Phone: 732-652-7686
Email: niall_eladawy@shi.com

All Prices are in US Dollar (USD)

	Product	Qty	Retail	Your Price	Total
1	Hi-Link Managed Server, Storage, and Backup Services for City and Police Hi-Link Technology Group - Part#: HL-MGT-5-1 Contract Name: Sourcewell- Technology Products & Solutions Contract #: 121923-SHI **Note:** Migration from VMware to Hyper-V	24	$0.00	$4,656.91	$111,765.84
				Total	$111,765.84

Additional Comments

Please send vouchers to 290 Davidson Ave, Somerset NJ 08873

Thank you for choosing SHI International Corp! The pricing offered on this quote proposal is valid through the expiration date listed above. To ensure the best level of service, please provide End User Name, Phone Number, Email Address and applicable Contract Number when submitting a Purchase Order. For any additional information including Hardware, Software and Services Contracts, please contact an SHI Inside Sales Representative at (888) 744-4084. SHI International Corp. is 100% Minority Owned, Woman Owned Business. TAX ID# 22-3009648; DUNS# 61-1429481; CCR# 61-243957G; CAGE 1HTF0

Thank you for choosing SHI International Corp! The pricing offered on this quote proposal is valid through the expiration date set above. To ensure the best level of service, please provide End User Name, Phone Number, Email Address and applicable Contract Number when submitting a Purchase Order.

SHI International Corp. is 100% Minority Owned, Woman Owned Business.
TAX ID# 22-3009648; DUNS# 61-1429481; CCR# 61-243957G; CAGE 1HTF0

The products offered under this proposal are resold in accordance with the terms and conditions of the Contract referenced under that applicable line item.

City Council:

AN ORDINANCE AUTHORIZING THE OFFICE OF THE CITY COMPTROLLER TO ESTABLISH A CUSTODIAL ACCOUNT FOR THE THE DEVELOPMENT PROJECT LOCATED AT 230 WEST THIRD STREET, MOUNT VERNON, NEW YORK

Whereas, in correspondence dated May 12, 2026, the Legislative Assistant to the Mount Vernon City Council formally requested authorization the Office of the City Comptroller to establish a custodial account the development project located at 230 West Third Street, Mount Vernon, New York 10550, for the purpose of receiving, holding, managing, and disbursing funds associated with the review and administration of the proposed project; and

Whereas, in correspondence submitted to the City Council, a request was made for authorization permitting the Office of the City Comptroller to establish a custodial account for the development project located at 230 West Third Street, Mount Vernon, New York 10550; and

Whereas, the proposed development project involves the construction and operation of a self-storage facility; and

Whereas, the custodial account shall serve as a temporary holding account for funds associated with the review, administration, and processing of the proposed development project; and

Whereas, the custodial account shall be utilized to receive, hold, manage, and disburse funds related to required project submissions, presentations before the City Council, application processing, and reimbursement of attorney fees and other professional expenses incurred by the City in connection with the development review process; and

Whereas, the proposed applicant and contact for the development project is:

Mark Blanchard
Blanchard Law Group, PLLC,
914-779-1100
mark@blanchardlawgroup.com; and

Whereas, the City Council finds that the establishment of such a custodial account is necessary and proper to ensure the orderly administration of development-related funds, compliance with municipal requirements, and the efficient processing of the proposed project.

NOW, THEREFORE, BE IT ORDAINED BY THE CITY COUNCIL OF THE CITY OF MOUNT VERNON, NEW YORK, AS FOLLOWS:

Section 1. Authorization to Establish Custodial Account. The Office of the City Comptroller is hereby authorized and directed to establish a custodial account for the development project located at 230 West Third Street, Mount Vernon, New York 10550, for the purpose of receiving, holding, managing,

and disbursing funds associated with the review and administration of the proposed project.

Section 2. Purpose of Account. The custodial account established pursuant to this Ordinance shall be utilized for costs and expenses related to the development review process, including but not limited to:

1. Reimbursement of attorney fees and professional consultant expenses incurred by the City;

2. Administrative and processing costs associated with project review;

3. Fees related to applications, submissions, and presentations before the City Council and applicable boards; and

4. Any other lawful expenditures associated with the proposed development project.

Section 3. Conditions of Use. The custodial account shall remain subject to all applicable laws, rules, regulations, and procedures of the City of Mount Vernon. No funds shall be disbursed except in accordance with the policies and procedures established by the Office of the City Comptroller and applicable municipal requirements.

Section 4. Authorization of City Officials. The Mayor, City Comptroller, Corporation Counsel, and any other appropriate City officials are hereby authorized to take all actions and execute any documents necessary to effectuate the purposes of this Ordinance.

Section 5. Severability. If any clause, sentence, paragraph, subdivision, section, or part of this Ordinance shall be adjudged by any court of competent jurisdiction to be invalid, such judgment shall not affect, impair, or invalidate the remainder thereof, but shall be confined in its operation to the clause, sentence, paragraph, subdivision, section, or part thereof directly involved in the controversy in which such judgment shall have been rendered.

Section 6. Effective Date. This Ordinance shall take effect immediately upon adoption by the City Council and subsequent approval by the Board of Estimate and Contract.

CITY COUNCIL
CITY OF MOUNT VERNON
ONE ROOSEVELT SQUARE
MOUNT VERNON, NY 10550
(914) 665-2352 · FAX (914) 668-6044

CITY COUNCIL MEMBERS
Derrick Thompson, President
Jaevon Boxhill
Cathlin B. Gleason
Cynthia Turnquest - Jones
André Wallace

May 12, 2026

Honorable City Council Members
City Of Mount Vernon
1 Roosevelt Square
Mount Vernon, NY 10550

Subject: Request to Establish Custodial Account – 230 West Third Street

This letter respectfully requests that the City Council approve legislation to allow the office of the City Comptroller to establish a custodial account to support the management of funds for the above-referenced development project. This custodial account will serve as a holding account until the developers of the project successfully completes their required presentation to the City Council, submits their applications, and reimburses attorney fees associated with their development.

The property for the custodial account is for:

230 West Third Street, Mount Vernon, NY 10550

- Self-storage facility

c/o Mark Blanchard, Blanchard Law Group, PLLC – (914)779 -1100, mark@blanchardlawgroup.com

The custodial accounts will be necessary to ensure proper management of funds and be in compliance with all city requirements. This measure will streamline the onboarding process for the project and facilitate a smoother transition once the developer is prepared to move forward with the City Council review process.
If this meets with the City Council's approval, I ask that the necessary legislation be enacted to reflect this request.

Thank you for your attention to this matter.

Sincerely,

Antoinette Anderson
Legislative Assistant to the
Mount Vernon City Council

Cc: Comptroller's Office

File #: TMP -2133 **Agenda Date:** 5/13/2026 **Agenda #:** 27.

City Council:

AN ORDINANCE AUTHORIZING THE ESTABLISHMENT OF A CUSTODIAL ACCOUNT FOR THE DEVELOPMENT PROJECT LOCATED AT 150 EAST FIRST STREET, MOUNT VERNON, NY

Whereas, in correspondence dated May 12, 2026, the Legislative Assistant to the Mount Vernon City Council formally requested authorization the Office of the City Comptroller to establish a custodial account for the development project located at 150 East First Street, Mount Vernon, New York 10550, for the purpose of receiving, holding, administering, and disbursing funds associated with the review and processing of the proposed development project; and

Whereas, the proposed project contemplates the demolition of an existing commercial structure and the construction of a new twenty-one (21) story, two hundred twenty-eight (228) unit mixed-use building; and

Whereas, the property owner is Richard Giacovas, c/o AA Air Filters, whose contact information is listed as (914) 663-1300 and email address aaairfilters33@aol.com; and

Whereas, legal representation for the proposed development project is being provided by Mark Blanchard, Blanchard Law Group, PLLC, located at (914) 779-1100; and

Whereas, the custodial account shall serve as a temporary holding account for deposits and reimbursements associated with the proposed development project, including but not limited to attorney review fees and other professional expenses incurred by the City; and

Whereas, the establishment of the custodial account is necessary to ensure proper management, safeguarding, and disbursement of funds in compliance with all applicable City requirements and procedures; and

Whereas, the custodial account will facilitate the orderly onboarding and review of the development project pending the developer's formal presentation before the City Council and submission of all required applications and documentation; and

Whereas, the City Council finds that authorizing the establishment of said custodial account is in the best interests of the City of Mount Vernon and promotes efficient administration of development review procedures.

NOW, THEREFORE, BE IT ORDAINED BY THE CITY COUNCIL OF THE CITY OF MOUNT VERNON AS FOLLOWS:

Section 1. Authorization to Establish Custodial Account. The Office of the City

Comptroller is hereby authorized and directed to establish a custodial account for the development project located at 150 East First Street, Mount Vernon, New York 10550, for the purpose of receiving, holding, managing, and disbursing funds associated with the review and administration of the proposed project.

Section 2. Purpose of Account. The custodial account shall be used to collect and administer funds for professional review costs, attorney fees, consultant fees, application-related expenses, and any other reimbursable costs incurred by the City in connection with the proposed development project.

Section 3. Conditions of Use. The funds maintained within the custodial account shall remain subject to all applicable City policies, procedures, rules, and regulations governing custodial and escrow accounts. No funds shall be released except in accordance with authorization by the Office of the City Comptroller and applicable law.

Section 4. Project Review Requirements. Nothing contained herein shall be construed as approval of the proposed development project. The developer shall remain responsible for completing all required presentations, applications, land use approvals, permits, environmental reviews, and any other approvals required by the City of Mount Vernon and any other governmental agency having jurisdiction.

Section 5. Severability. If any clause, sentence, paragraph, subdivision, Section, or part of this Ordinance shall be adjudged by any court of competent jurisdiction to be invalid, such judgment shall not affect, impair, or invalidate the remainder thereof, but shall be confined in its operation to the clause, sentence, paragraph, subdivision, Section, or part thereof directly involved in the controversy in which such judgment shall have been rendered.

Section 6. Effective Date. This Ordinance shall take effect immediately upon adoption by the City Council and subsequent approval by the Board of Estimate and Contract.

CITY COUNCIL
CITY OF MOUNT VERNON
ONE ROOSEVELT SQUARE
MOUNT VERNON, NY 10550
(914) 665-2352 · FAX (914) 668-6044

CITY COUNCIL MEMBERS
Derrick Thompson, President
Jaevon Boxhill
Cathlin B. Gleason
Cynthia Turnquest - Jones
André Wallace

May 12, 2026

Honorable City Council Members
City Of Mount Vernon
1 Roosevelt Square
Mount Vernon, NY 10550

Subject: Request to Establish Custodial Account – 150 East First Street

This letter respectfully requests that the City Council approve legislation to allow the office of the City Comptroller to establish a custodial account to support the management of funds for the above-referenced development project. This custodial account will serve as a holding account until the developers of the project successfully completes their required presentation to the City Council, submits their applications, and reimburses attorney fees associated with their development.

The property for the custodial account is for:

150 East First Street, Mount Vernon, NY 10550

- Demolishing of existing commercial structure
- Erect a new 21-story 228-unit mix use building

c/o Richard Giacovas (owner) – (914) 663-1300 email: aaairfilters33@aol.com
Mark Blanchard, Blanchard Law Group, PLLC – (914)779 -1100

The custodial accounts will be necessary to ensure proper management of funds and be in compliance with all city requirements. This measure will streamline the onboarding process for the project and facilitate a smoother transition once the developer is prepared to move forward with the City Council review process.
If this meets with the City Council's approval, I ask that the necessary legislation be enacted to reflect this request. Thank you for your attention to this matter.

Sincerely,

Antoinette Anderson
Legislative Assistant to the
Mount Vernon City Council

Cc: Comptroller's Office

File #: TMP -2134 **Agenda Date:** 5/13/2026 **Agenda #:** 28.

Station Plaza

20 S. West Street, Mount Vernon, New York

PREPARED FOR

MacQuesten Station Takeover, LLC
438 Fifth Avenue, Suite 100
Pelham, New York, 10803
914.667.7227

PREPARED BY

VHB Engineering, Surveying, Landscape Architecture and Geology, P.C.
One Penn Plaza, Suite 715
New York, NY 10119-0800
914.467.6613

August 2025
Revised December 2025

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Introduction

This Environmental Assessment Report is submitted on behalf of MacQuesten Station Takeover, LLC (the "Applicant") in support of an application for Expedited Review of the proposed redevelopment of 20 S. West Street, in the Mount Vernon West (MVW) District. The purpose of this Environmental Assessment Report is to document that the proposed redevelopment complies with all applicable criteria and requirements for a "Tower on Podium" building in the MVW-Hub District, and will not result in any impacts that exceed the thresholds established by the Generic Environmental Impact Statement for the MVW District and corresponding "form based" zoning code (the "MVW GEIS"). The MVW GEIS examined potential future build-out under the MVW zoning code and projected future development in the district, which could yield approximately 3,153 new residential units and approximately 263,700 square feet (sf) of commercial space. The MVW GEIS analyzed eighteen (18) parcels designated for potential development in the build-out scenario, including 20 South West Street.

Existing Conditions

Since the adoption of the MVW GEIS, one of the proposed development parcels has been redeveloped and another is currently undergoing construction. The site at 22 South West Street has been redeveloped with a 17-story mixed-use building (22 South West), featuring 189 affordable rental units and 4,157 sf of retail space. Meanwhile, construction is underway at 115 MacQuesten Parkway, where a new mixed-use development (Opal 115) will include 315 affordable units and 4,490 sf of retail space. Approval has also been given to a mixed-use development project located at 1 and 25 MacQuesten Parkway (QWest Towers). The development will consist of a 15-story, 115-unit building at 25 N. MacQuesten Parkway and a 12-story, 114-unit building at 1 N. MacQuesten Parkway.

Table 1 compares the existing conditions with the maximum build-out scenario outlined in the MVW GEIS.

Table 1 Comparison of Existing Conditions and Maximum Build-Out Scenario

Condition	Build-Out Scenario	22 S. West	Opal 115	QWest Towers	Percent of Build-Out
Residential Units	3,153	189*	315*	229*	23.2%
Commercial Space (sf)	263,700	4,157*	4,800*	3,066*	4.6%
Population Projection	7,930	394*	706[1]	433[2]	18.6%
Schools (PSAC)	394	110*	48[3]	41[4]	50.5%
Water Demand (gpd)	1,093,941	30,446**	53,280**	34,100**	10.8%
Sanitary Sewer (gpd)	1,093,941	30,446**	53,280**	34,100**	10.8%

[1] Storrs Associates. (2024 January 19). *115 S. Macquesten Parkway Financial Assistance and Impact Analysis*. Mount Vernon IDA. Available at: 02---Mount-Vernon-IDA---115-MacQuesten---Cost-Benefit-Analysis-dated-January-19-2024.

[2] Storrs Associates. (2024 November 26). *QWest Towers Project Financial Assistance and Impact Analysis* Mount Vernon IDA. Available at: Financial-Assistance-Analysis-All-New-Households-N-Macquesten.

[3] Storrs Associates, *115 S. Macquesten Parkway.*

[4] Storrs Associates, *QWest Towers.*

Solid Waste Generations (lb/day)	31,623	1,539	2,451	1,645	17.8%
Trip generation (A.M peak)	1,460	113	180	129	28.9%
Trip generation (P.M peak)	1,498	135	217	155	33.8%
Parking spaces (weekdays)	3,648	141*	291***	170	16.5%

Notes: Values are derived based on factors established in the MVW DGEIS, unless otherwise noted.

* Value provided by Macquesten Development, LLC.

** AKRF Inc., Sanitary Report for Station Plaza, dated December 11, 2025.

As shown above, the three mixed-use developments currently account for approximately 23.2 percent of the residential units and 4.6 percent of the commercial space projected in the MVW GEIS maximum build-out scenario. This represents a small fraction of the overall maximum build-out potential, leaving significant room for further redevelopment.

Project Description

The Proposed Project (the "Project") consists of a 13-story, tower on podium, mixed-use building on a 21,970 sf site, with 100 residential units, approximately 2,635 sf of commercial space with six parking spaces, and a 48,810-sf parking garage with 73 residential spaces (including five electric vehicle spaces). Of the 100 residential units proposed, there are 30 one-bedrooms, 60 two-bedrooms, and 10 three-bedrooms. Parking is distributed from the basement level up to the second level. The ground level will also include retail space, and the residential lobby which contains a mail room and concierge. The third floor includes sales and maintenance offices and tenant amenities such as a fitness room, community room, tenant storage, and roof terrace. The residential units are located from the fourth to the 13th level. There will be six surface parking spaces provided for the retail space.

The Proposed Project is located at 20 South West Street (**Figure 1**), adjacent to the Mount Vernon West Metro-North train station. It is located in the MVW-Hub District "Density Bonus Area" and follows the "Tower on Podium" building model permitted in the MVW-Hub District. While the Proposed Project is located within a density bonus zoning district, the Project Applicant will not be applying for a density bonus for this development. The Project's design complies with the existing parameters for the MVW-Hub District. The existing conditions and proposed conditions compared to the maximum build-out scenario outlined in the MVW GEIS are shown below.

Table 2 Comparison of Existing and Proposed Conditions against Maximum Build-Out Scenario

Condition	Build-Out Scenario	Existing Conditions	Proposed Project	Percent of Build-Out
Residential Units	3,153	733	100	26.4%
Commercial Space (sf)	263,700	12,023	2,635	5.6%
Population Generation	7,930	1,533	199	21.8%
Public School Children	394	199	14	54.1%

Water Demand (gpd)	1,093,941	117,826	21,250	12.7%
Sanitary Sewer (gpd)	1,093,941	117,826	21,250	12.7%
Solid Waste (lb/day)	30,134	5,635	756.2	21.2%
Weekday Peak AM (total)	1,460	422	64	33.3%
Weekday Peak PM (total)	1,498	507	76	38.9%
Parking Spaces	3,648	601	80	18.7%

As shown in **Table 2** above, with the existing conditions and the Proposed Project, the four developments would account for approximately 26.4 percent of the residential units and 5.6 percent of the commercial space projected in the MVW GEIS maximum build-out scenario. Even with the Project, there would still be significant capacity for further redevelopment of the parcels in the maximum build-out scenario under all conditions.

Figure 1: Site Location

Station Plaza | 20 S. West Street | 20 South West Street, City of Mount Vernon, New York

Project Site (boundaries are approximate)

Path: \\vhb.com\gis\proj\NewYorkCity\22789.00 20 S West-SEQRA\Project\EAF Figures\EAF Figures.aprx (ldrotman, 8/14/2025)

Source: Nearmap 2025; Westchester County GIS

1

Land Use and Zoning

The Project Site is located at 20 South West Street and is identified as Section 164.67 Block 1057 Lot 16 on the City's tax map. The site is located adjacent to the Mount Vernon West Metro-North train station. It is also located in the MVW-Hub District "Density Bonus Area" and follows the "Tower on Podium" building model permitted in the MVW-Hub District (**Figure 2**). As demonstrated in **Table 3** below, the Proposed Project complies with all zoning requirements for the MVW-Hub District.

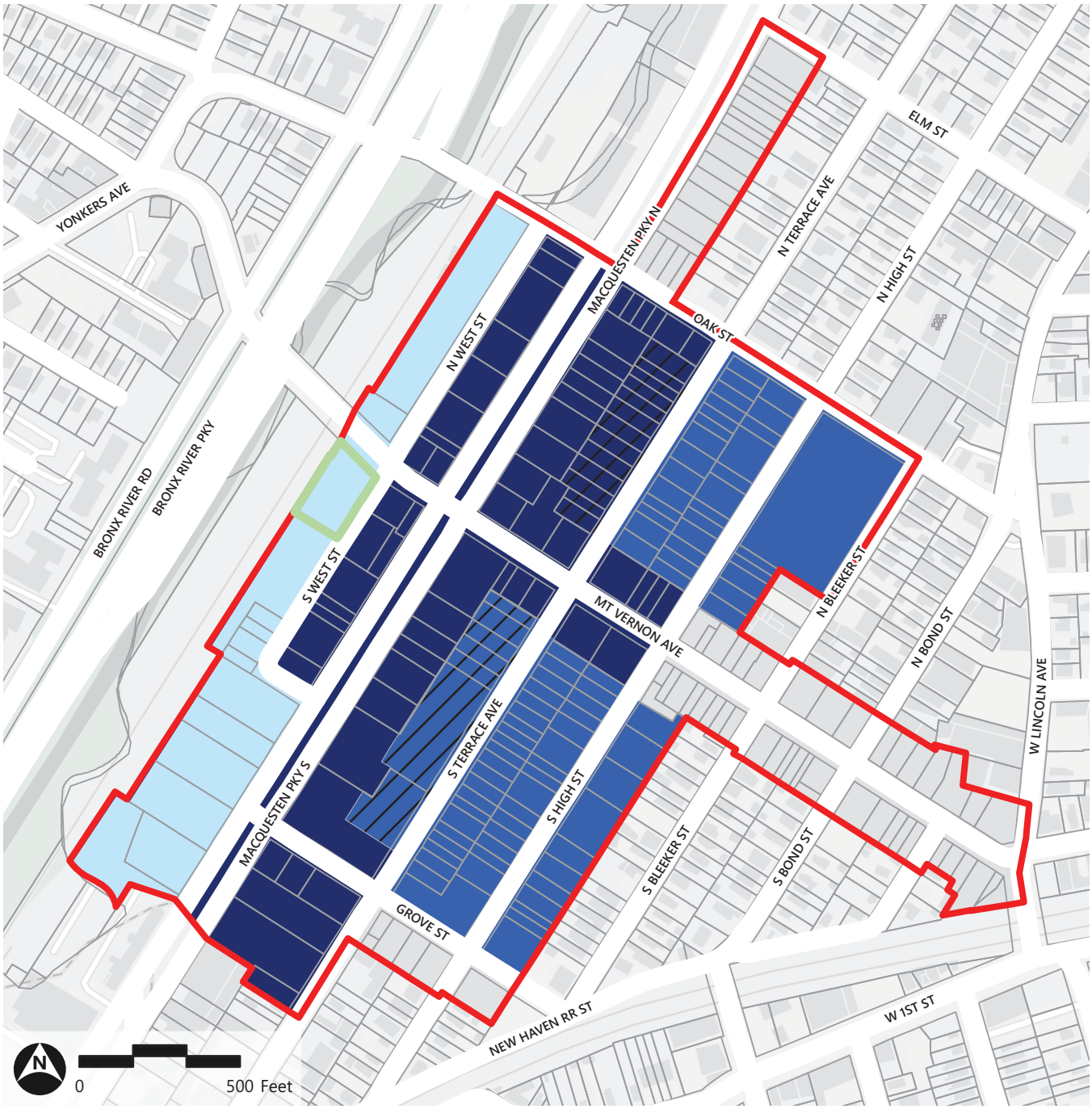
Table 3 Zoning Compliance – MVW-Hub District

Item	Required	Provided
A. Lot Standards		
Minimum Lot Area	15,000 sq. ft.	21,970 sq. ft.
Minimum Lot Width	100 ft.	118 ft.
Usable Open Space	130 sq ft / dwelling unit	130 sq ft / dwelling unit
B. Building Placement		
Common Lot Line Setback	0 ft. or 10 ft. if provided	10 ft.
Lot Line Abutting RMF	20 ft.	N/A
Podium – Primary Street	Min. 70% of lot width	70%
Podium – Side Street	Min. 35% of lot depth	94%
Parking Setback – Primary Street	30 ft.	30 ft.
Parking Setback – Side Street	10 ft.	10 ft.
Surface Parking Location	Behind building	Behind building
Parking Garage	Same as podium	Same as podium
C. Height and Mass		
Building Height	Max. 15 stories / 150 ft.	13 stories / 133 ft.
Ground Story Height	Min. 11 ft.	11 ft.
Upper Story Height	Min. 7 ft. 6 in.	9 ft.
Max. Ground-Floor Wall w/o Offset	75 ft.	75 ft.
Offset Depth (Ground Floor)	Min. 5 ft.	5 ft.
Offset Width (Ground Floor)	Min. 10 ft.	10 ft.
Max. Upper-Floor Wall w/o Offset	45 ft.	31 ft. 1 in.

Offset Depth (Upper Floor)	Min. 4 ft.	4 ft.
Offset Width (Upper Floor)	Min. 8 ft.	11 ft. 6 in.
Parking Garage Storefront Wrap	Required	Provided
D. Activation		
Ground Story Transparency (Primary Street)	Min. 60%	60%
Ground Story Transparency (Side Street)	Min. 20%	35.80%
Blank Wall – Primary Street	Max. 30 ft.	14 ft. 2 in.
Blank Wall – Side Street	Max. 40 ft.	15 ft. 7 in.
Functional Entries – Min. Length	90 ft.	90 ft.
Garage/Service Bay Openings	Max. 20%	20%
Permitted Building Elements	Porch, Stoop, Balcony, Gallery, Awning / Canopy, Forecourt	All Provided

Figure 2: Mount Vernon West Zoning Districts

Station Plaza | 20 South West Street, City of Mount Vernon, New York



Project Site (boundaries are approximate)

MVW District

MVW Zoning Districts

- MVW - Hub
- MVW - Hub (Non-Commercial)
- MVW - Transition
- MVW-T (Non-Commercial)
- MVW - C (Corridor)
- MVW-H - Density Bonus Area

Source: Esri; Westchester County GIS

2

Urban Design and Visual Character

The MVW zoning code identifies the permitted building types within the MVW district and the allowable locations for each type. The Proposed Project follows the "Tower on Podium" building model permitted in the MVW-Hub District.

The Project has been designed in accordance with the Design Guidelines of the MVW zoning code. While these Design Guidelines are not mandatory development standards, the Project fully embraces their intent, achieving the overarching objective of creating a high-quality, pedestrian-friendly urban environment surrounding the Mount Vernon West train station.

Design Features and Guidelines Integration

The Project incorporates many of the Design Guidelines, including but not limited to the following:

- **Ground-Level Transparency:** The ground floor façade features large storefront windows, creating a high degree of transparency and fostering a strong visual connection between interior uses and the public realm.
- **Articulated Podium Design:** Variation in textures, materials, and articulated entries at the podium level helps break up the mass of the lower floors, adding human scale and visual interest.
- **Defined and Accessible Entries:** Functional Portal style building entries are clearly identified, welcoming, and designed for universal accessibility.
- **Material and Color Variation:** The façades use pre-cast and metal panels in three distinct color fields, paired with other materials, to create a dynamic pattern. This variation in textures, materials, and colors visually breaks down the overall building mass, reducing perceived scale and adding architectural richness.
- **Mesh Railings and Metal Accents**: The building incorporates decorative mesh railings and refined metal panel detailing, providing a contemporary aesthetic while contributing to safety and durability.
- **Pedestrian-Oriented Promenade:** A pergola-covered promenade runs along the southern side of the Proposed Project, situated between the proposed development and the adjacent 22 South West development. The promenade will feature small shrubs and plants, offering a shaded and visually appealing pedestrian pathway. The promenade enhances the public

realm and provides direct, convenient access to the Mount Vernon West station for commuters. Within the pedestrian promenade, a plaque and historical photographs will be incorporated to commemorate and preserve the history of the former train station building.

- **Screened Service Areas:** Building services are strategically located out of public view to maintain a clean streetscape.
- **Integrated Parking:** Parking is located within the building and is fully screened from street view, minimizing visual impact. The commercial parking is provided is open and segregated from the residential, via a drive thru concept.
- **Resident Amenities:** The building offers two well-designed rooftop open-air terraces for residents: a 14,000-square-foot roof deck and a 4,412-square-foot lower terrace amenity space, supporting outdoor recreation and social interaction.

As the Proposed Project has been designed in accordance with the recommended Design Guidelines and the "form-based" dimensional requirements of the MVW zoning code, it will contribute a distinctive and contextually appropriate architectural presence. The use of varied materials, textures, and colors, along with pedestrian-oriented features like the pergola-covered promenade, ensures a visual and urban design character consistent with the MVW GEIS. As a result, the Project will not result in any adverse impacts to the visual character of the area and will strengthen the identity of the Mount Vernon West district as a vibrant, transit-oriented hub.

3

Socioeconomics

The MVW GEIS examined potential future build-out under the MVW zoning code and projected a future development yield of approximately 3,153 new residential units and approximately 263,700 sf of commercial space, which would result in a population increase of 7,930 residents and 677 new jobs in retail/restaurant services. The MVW DGEIS analyzed eighteen (18) parcels designated for potential development in the build-out scenario, including the Project Site.

To estimate the population generated by the Proposed Project, the multipliers for 5+ ownership units from Rutgers University, Center for Urban Policy Research, Residential Demographic Multipliers were used. Accordingly, the 100 new residential units are projected to generate approximately 199 residents (**Table 4**), which represents 2.5 percent of the population expected in maximum build-out scenario.

Table 4 Population Projections

Bedrooms	# of Units	Multiplier	Total Projected Population
1 BR	30	1.86	**56**
2 BR	60	1.88	**113**
3 BR	10	3.00	**30**
Total	**100**	**-**	**199**

Source: Rutgers University Center for Urban Policy Research, Residential Demographic Multipliers (5+ Units-Own), June 2006.

The adoption of the MVW zoning code allows for the redevelopment of higher density mixed-use, transit-oriented projects. This increases the residential population of the area, and likely reduces the number of industrial uses, while further stimulating the addition of retail and supporting retail service uses.

The Project Site currently contains a two-story commercial building occupied by a 7-Eleven in the north of the building and other small businesses. The Project will redevelop the commercial use of this site and replace it with a vibrant, mixed-use development with residential, commercial, and parking spaces. The residential development is expected to generate four full-time employees and two part-time employees. Applying the same methodology and standard generation rates as the MVW GEIS, the 2,635-sf retail space would generate approximately seven

new retail jobs. Additionally, the project will generate construction industry jobs and secondary "multiplier" jobs in industries supporting the area.

According to the MVW GEIS, Mount Vernon's housing stock predominantly consists of rental properties, with a smaller portion of owner-occupied units available. Additionally, the City faces high mortgage delinquency rates, highlighting the need for affordable ownership opportunities. This challenge is coupled with a rising demand for transit-oriented development throughout Westchester County, driven by the desire for accessible living options near transportation hubs. As the Project proposes the addition of 100 affordable condominiums to the City, it not only addresses the need for more affordable housing, but also diversifies the housing market by providing ownership opportunities near transit.

The Project will result in new workforce housing thereby improving the overall housing stock in the City of Mount Vernon and providing expanded housing options for existing residents and potential new residents. New residents will result in new retail spending on goods and services in Mount Vernon.

4

Municipal Services and Community Resources

The MVW GEIS examined potential future build-out under the MVW zoning code and projected a future development yield of approximately 3,153 new residential units with a projected population of 7,930 residents, and approximately 263,700 sf of commercial space. The Project yields roughly 3.2 percent of the total number of residential units and roughly 1.0 percent of the total commercial development analyzed under the MVW GEIS.

In evaluating the potential demographic impacts of the proposed residential development, the Residential Demographic Multipliers from the Rutgers University Center for Urban Policy Research *Residential Demographic Multipliers – Estimates of the Occupants of New Housing* ("Rutgers Study"), have been utilized. The Rutgers Study offers a more targeted set of data, specifically tailored for residential developments with five or more ownership units, providing a more accurate assessment aligned with the characteristics of the Project. According to the Rutgers Study, the Project would generate approximately 199 residents and 14 school-aged children that would attend the Mount Vernon public schools.[5]

The adoption of the MVW zoning code has the potential to facilitate development that may result in impacts on municipal services such as police service, fire protection, emergency services, health care, the school system and public works. However, the Project complies with all requirements of the MVSW zoning code, and will not result in any impacts on municipal services and community resources that exceed the thresholds established in the MVW GEIS.

Police Department

The MVW GEIS indicates that a population increase of 7,930 residents generated by the potential build-out of the MVW District would require 16 police officers based upon recommended national ratios of 2 officers per 1,000 people. According to the 2020 U.S. Census Bureau, the City of Mount Vernon has a total population of 73,893.[6] The Mount Vernon Police Department

[5] Rutgers University Center for Urban Policy Research, Residential Demographic Multipliers (5+ Units-Own), June 2006.

[6] U.S. Census Bureau, "RACE," *Decennial Census, DEC Redistricting Data (PL 94-171), Table P1*, accessed on August 14, 2025, https://data.census.gov/table/DECENNIALPL2020.P1?g=060XX00US3611949121.

employs 164 uniformed officers.[7] This exceeds the recommended national ratio by 16 officers, which is sufficient to accommodate the build-out of the MVW District.

One of the tangible benefits of developing higher density mixed-use neighborhoods is that there is often a reduction in crime rates due to the presence of residents and merchants that care about their neighborhood, and as such provide "eyes on the street".

Fire Department

According to the MVW GEIS, the potential opportunity to redevelop older industrial buildings, many of which do not meet current fire safety codes, with new fully code conforming structures, is a positive improvement from a fire protection perspective. The potential increase in population analyzed in the MVW DGEIS would require an additional 13 firefighters based on recommended national ratios of 1.65 firefighters per 1,000 people. The 131 uniformed firefighters currently employed by the Mount Vernon Fire Department exceeds the recommended national ratio by 9 firefighters, which is sufficient to accommodate the Proposed Project.[8] The Project will have enhanced communication capacity, which is required for any building over four stories in height.

Emergency Services

The MVW GEIS does not anticipate that the additional volume of emergency service calls will result in any adverse impacts.

Health Care

The standard planning ratio for hospital beds is 4 beds for every 1,000 in population. Based upon this ratio, the projected population generation of 199 would require one hospital bed. It is noted, however, that this ratio is very conservative and the actual demand for hospital beds is likely to be somewhat less than that contemplated by the standard ratio. The demand from the Project can be accommodated at area facilities.

Schools

It is estimated that the Project would generate approximately 14 public school-aged children that would attend the Mount Vernon public schools (**Table 5**). This amounts to one or two children per grade on average and would increase the total district enrollment by 0.2%.

Table 5 Public School Aged Children Generation Projections

Unit Type	# of Units	Multiplier	PSAC
1 BR	30	0.15	4
2 BR	60	0.09	5
3 BR	10	0.49	5
Total	100		**14**

Source: Rutgers University Center for Urban Policy Research, Residential Demographic Multipliers (5+ Units-Own), June 2006.

[7] City of Mount Vernon Police Department. (2024, June 3) Available at: Department Demographics | Mount Vernon, NY. Accessed August 2025.

[8] https://govsalaries.com/salaries/NY/mount-vernon/j/fire-fighter. Accessed August 2025.

The 2024-2025 school year district-wide enrollment was 6,875 students. This is 451 students less than the 2019-2020 school year district-wide enrollment of 7,326 students. Therefore, absorption of the 14 public school children from the Project would not present a capacity problem for the district.

Based on current property tax rates in the City of Mount Vernon, the School District receives 57.14% of property taxes. Based on this allocation, the Proposed Project would contribute approximately $202,686 in taxes for the Mount Vernon School District.

The cost to educate the estimated 14 Mount Vernon City School District students can be determined through a review of the current (2025-2026) School District Budget. The total Mount Vernon City School District budget for 2025-2025 is $272,206,615. Based on a total school district enrollment of 6,875 students, the cost per pupil for 2024/2025 would be approximately $39,594

To assess the fiscal impact of the development, the marginal cost of new students must be analyzed rather than solely using the per pupil cost as a basis for estimating the marginal cost of educating an additional student. The marginal cost is defined as all of the actual costs of educating these students. There are many items in the school budget that are fixed and would not be affected by a modest increase in additional students. These fixed items include all the administrative services such as district clerk, district meetings, central administration, business administration, auditing and treasurer, public information, data processing, curriculum development and supervision.

The budget specifies the costs for administrative, program and capital costs. Approximately 68.68% of the total budget, or $186,939,495, is allocated for program costs. Based on a total school district enrollment of 6,875 students, the program cost per pupil for 2024-2025 would be approximately $27,191.

Approximately 50 percent of the per pupil cost is paid by local tax levy; the remainder of the budget comes from the State and other sources.[9] Therefore the per pupil program costs paid by local tax levy is $13,596. For the proposed residential development with 14 public school students projected from the Development Project, the marginal cost would be an additional $190,344 per year.

Public Works

According to the MVW GEIS, the new residential spaces projected to be constructed in the MVW District will place an increased demand on certain bureaus of the City Public Works Department.

The Bureau of Sanitation would be most directly impacted by future redevelopment. The City collects residential solid waste only. Based on the solid waste generation ratios of 3.8 lbs/day/resident, the Project would result in the following solid waste generation:

199 residents x 3.8 lbs./day = 756.2 lbs/day (0.39 tons/day)

The City recycles 39% of its waste, so the volume of solid waste would be reduced by 295 lbs/day to account for recycling, resulting in a net solid waste generation of 461.2 lbs/day.

[9] Source: Westchester-Putnam School Boards Association, Facts & Figures for 2025.

The Project complies with all requirements of the MVSW zoning code, and will not result in impacts on municipal services and community resources that exceed the thresholds established in the MVW GEIS.

5

Utilities and Infrastructure

According to the MVW GEIS, redevelopment will place an additional demand on the City's utility and infrastructure network. Build-out of the area would result in an overall water demand of 1,093,941 gallons per day (gpd) and an estimated sewage generation of 1,093,941 gpd. However, the increase in water and sewage demand can be accommodated by the existing system. Additionally, an existing storm sewer system maintained by the City's DPW serves the District. The MVW project area is generally developed and has over 80% impervious cover. There are currently no significant drainage problems in the project area. The Project will address stormwater runoff and quality, and will not result in any impacts on utilities and infrastructure that exceed the thresholds established in the MVW GEIS.

Water Supply

According to the MVW GEIS, the MVW District is fully served by a gravity fed water system operated by the City of Mount Vernon Board of Water Supply. The existing system is in good condition with adequate pressure (although pumps are required to boost internal pressures in 7+ story buildings for their fire protection systems. These pumps are typical in taller buildings).

Full build-out of the MVW District is projected to generate a total water demand of 1,093,941 gallons per day (gpd). As shown in **Table 7**, under the existing conditions, the estimated water demand has increased by approximately 117,826 gpd. The Proposed Project would add on average approximately 20,064 gpd, representing 12.6 percent of the total Build-Out demand (**Table 8**). This additional demand can be accommodated by the existing system.

Table 6 Existing Conditions - Water Demand

Development	Water demand (gpd)	Percent of Build-Out
22 S. West	30,446	2.8%
Opal 115 (115 S. MacQuesten Pkwy)	53,280	4.9%
QWest Towers (1 & 25 N. MacQuesten Pkwy)	34,100	3.1%
Total	**117,826**	**10.8%**

Source: AKRF, Inc. Sanitary Report for 20 South West Street, prepared December 11, 2025.

Table 7 Proposed Conditions - Water Demand

Condition	Water demand (gpd)	Percent of Build-Out
Existing	117,826	10.8%
Proposed	20,064	1.8%
Total	**137,890**	**12.6%**

Source: AKRF, Inc. Sanitary Report for 20 South West Street prepared December 11, 2025.

Sanitary Sewer

The MVW District is located within the Bronx Valley Sewer District, and the City Department of Public Works maintains and repairs the sewer system. The City has undergone a comprehensive plan to identify and repair damaged sanitary and storm sewers and eliminate illicit discharges of sanitary sewage into stormwater sewers. To support the City's Comprehensive Sewer Investigation and Rehabilitation Program, the City has received state and federal funds for emergency sewer repairs and lead pipe replacement. Since 2022, many areas in Mount Vernon, including the Mount Vernon West area, have undergone sewer system cleaning, investigation, and rehabilitation, with work still ongoing throughout the City.[10]

As analyzed in the DGEIS, full build-out of the MVW District would result in total sewage generation of approximately 1,093,941 gpd. Sanitary sewer flow monitoring conducted in the summer of 2016 indicated that the existing system had sufficient capacity to accommodate the Proposed Project. Since the flow monitoring was performed, a residential development located at 22 South West Street has been completed, and two additional residential developments, Opal 115 at 115 South MacQuesten Parkway and QWest Towers at 1 & 25 North MacQuesten Parkway, are currently under construction. As shown in the *Sanitary Report* for Station Plaza, prepared by AKRF, Inc., these developments are expected to generate approximately 117,826 gpd of wastewater. The Proposed Project is estimated to contribute on average 20,064 gpd of wastewater (see **Appendix F**). This would result in a total projected increase of 137,890 gpd, representing 12.6 percent of the overall sewage generation projected in the DGEIS.

According to the *Sanitary Report* (**Appendix F**), wastewater flows from both residential developments are conveyed through the existing sanitary mains along South West Street and Mount Vernon Avenue. Based on flow monitoring and the contributions from these developments, the current peak flow rate is approximately 0.55 cubic feet per second (cfs) on South West Street and 8.40 cfs on Mount Vernon Avenue. With the addition of the Proposed Project, peak flow rates are expected to increase by 0.12 cfs on both streets, **Table 9.**

Table 8 Proposed Daily Flow Calculations

Description	South West St.	Mount Vernon Ave.
Existing Peak Flow Rate	0.55 cfs	8.40 cfs
Proposed Peak Flow Rate	0.12 cfs	0.12 cfs
Design Flow Rate	0.67 cfs	8.52 cfs

Source: AKRF, Inc. Sanitary Report for 20 South West Street prepared December 11, 2025.

[10] City of Mount Vernon. Bureau of Sanitary and Stormwater Sewers. Available at: Bureau of Sanitary and Stormwater Sewers | Mount Vernon, NY. Accessed August 2025.

The Project will include an 8-inch ductile iron sanitary lateral pipe and private sanitary manhole to service the new residential building. The proposed lateral will connect to the existing 18-inch sanitary main on South West Street using a doghouse sanitary manhole. As shown in **Table 10** the addition of the proposed sanitary flow to the existing sanitary mains at South West Street and Mount Vernon Avenue will result in a design flow depth that is less than half the diameter of the pipe. The existing sanitary mains will have adequate pipe capacity to accommodate the Proposed Project in accordance with the City of Mount Vernon DPW requirements.

Table 9 Summary of Calculated Flow Depths

Sanitary Main	Design Flow Rate (cfs)	Design Flow Depth, y (in)	Existing Pipe Diameter, D (in)	Percent Full
South West Street	0.67	4.81	18	21%
Mount Vernon Ave	8.52	8.86	21	40%

Source: AKRF, Inc. Sanitary Report for 20 South West Street prepared December 11, 2025.

Stormwater

An existing storm sewer system maintained by the City's DPW serves the District. There are currently no significant drainage problems in the MVW District. The Project site is vacant with mostly asphalt coverage. Redevelopment of the site will require disturbance to the entire 21,970 sf site. The Proposed Project will address stormwater runoff quality and quantity impacts through:

- Maintaining existing drainage patterns.
- Controlling increases in the rate of stormwater runoff.
- Reducing stormwater quality impacts and soil erosion from runoff generated during and after construction.

The condition of municipal storm sewers in the vicinity of the Project site has been studied by the Project Engineers and the results have been reported to the DPW Commissioner and Deputy Commissioner. According to the *Stormwater Management Report*, prepared by AKRF Inc., (see **Appendix G**), under the existing conditions at the site, drainage is collected via on-site drain inlets that convey surface runoff to the northern corner of the property where it ties into the existing stormwater conveyance system along Mount Vernon Avenue.

The Proposed drainage patterns will follow existing conditions in that proposed roof drains and internal plumbing will convey stormwater to connect to the same drainage manhole at the northern corner of the property. Prior to discharging to the existing drainage manhole, stormwater will be treated using a hydrodynamic separator designed to meet the NYSDEC performance criteria for proprietary practices for stormwater management. These measures will be implemented as part of the Project in an effort to improve water quality within the surrounding and downstream areas (**Appendix G**). Furthermore, by proposing alternative stormwater management practices with excess treatment capacity, the Project further mitigates potential impacts to water quality as a result of projected increases in severity of future rainfall events.

6

Historic, Cultural, and Archaeological Resources

No properties on the State or National Register of Historic Places would be impacted by redevelopment of the Project Site.

The Mount Vernon West Train Station, which is located on southern end of the Project Site, has been identified by the State Historic Preservation Office ("SHPO") as being "Not eligible" for listing in the Historic Register in 2017. The building no longer retains sufficient period integrity to meet the National Registrar criteria. In 1959, the station was sold and converted into a two-story building to serve commercial purposes. The waiting room was dismantled and the cavernous space was split into two floors. The express room at the north end was demolished and a two-floor office building erected in its stead. The north wing was also demolished and rebuilt, with very few original design details remaining inside the building. The significant alterations to the station building since 1959, and the deterioration of its architectural integrity diminishes its eligibility for inclusion on the Register.

Within the pedestrian promenade, a plaque and historical photographs will be incorporated to commemorate and preserve the history of the former train station building.

No archaeological resources or sensitive areas are located within the MVW District.

7

Open Space, Parks, and Recreation

The MVW zoning code includes a requirement for developers to provide on-site open space for residential uses. The usable open space requirement for the "Tower on Podium" building type is 130 sf per dwelling unit. The Project has 100 units, thereby requiring a minimum of 13,000 sf of open space.

The MVW zoning code states that usable open space can be provided in outdoor spaces such as courtyards, walkways, rooftops, balconies and terraces and garden plots. Indoor facilities such as fitness centers or swimming pools can also be used to meet the usable open space requirements of a project.

The third floor of the Project will contain tenant amenity spaces including a gym, party/community room, and 4,412 sf outdoor terrace. Additional amenity space will be available on the building's 14,000 sf rooftop deck, providing a total of 18,412 sf of outdoor space. This equates to approximately 184 sf per dwelling unit, exceeding the requirement by a total of 54 sf.

8

Traffic

The MVW GEIS confirms that there will be an increase in traffic beyond existing levels resulting from the build-out of the MVW District. However, the MVW zoning code is transit oriented, and is intended to induce and permit development that generates fewer vehicle trips based on the area's close proximity to the Metro-North Mount Vernon West station. The Proposed Project is adjacent to the Metro-North Mount Vernon West station providing ideal connectivity to mass transit for future residents.

According to the Traffic Study conducted for the MVW GEIS (See Draft GEIS Appendix F., Maser Consulting Traffic Study), MVW District build-out has the potential to add approximately 1,460 new AM peak hour trips and 1,498 new PM peak hour trips. These projections take into account mass transit credit, interplay between various uses and pass-by credit. Future parking demand in the MVW District will amount to 3,648 spaces during weekdays and 3,450 spaces on the weekends.

The Proposed Project is conservatively projected to add 16 arriving and 47 departing new trips to the surrounding roadway network during the Peak AM Highway Hour and 47 arriving and 28 departing new trips during the Peak PM Highway Hour.

The Proposed Project will provide 73 residential spaces. Parking is distributed from the basement level up to the second level. Based on the parking requirements for the MVW-Hub District, 72 parking spaces are required for the proposed residences. Furthermore, six surface-level parking spaces will be provided on the west side of the Subject Property for commercial uses. Based on the parking requirements for the MVW-Hub District, six parking spaces are required for the proposed commercial use. Additionally, the Project will have adequate pedestrian safety measures, including signage and notifications for vehicle garage entry and exit.

Maser Consulting prepared a Traffic Impact Study to evaluate the potential traffic impacts of the Proposed Project on the surrounding roadway network. The study shows that the Project will not significantly affect the area roadways. Similar Levels of Service and delays will be experienced under Future 2020 No-Build and Future 2020 Build Conditions. Signal timing adjustments can be implemented at the Mount Vernon Avenue/MacQuesten Parkway and Oak Street/MacQuesten Parkway traffic signals to improve future operation, if and/or when traffic thresholds warrant such adjustments.

9

Hazardous Materials

As stated in the MVW GEIS, the entire Mount Vernon West area is located within a State designated En-Zone. NYS Empire State Development Corporation has created the En-Zone program as a vehicle to encourage cleanup and redevelopment of brownfield sites in economically stressed areas across New York State by providing incentives such as liability relief and enhanced Brownfield Cleanup Program tax credits.

Two hazardous waste sites within one mile of the Project Site are listed on the New York State Hazardous Waste Sites List. The adjacent 22 South West development site was remediated under the NYS Brownfield Cleanup Program along with the Red Devil Paint site at 30 North West Street, located 0.11 miles northeast of the Project Site.

To determine the necessity of environmental remediation for the redevelopment of the Project Site, a Phase I and II Environmental Site Assessment (ESA) was conducted. A Phase I ESA was conducted in April 2016 on the Project Site (**Appendix D**), which concluded there were three recognized environmental concerns (REC) which included:

- **REC 1 - Current Use of the Site:** Suite 102 in the building was occupied by Artcraft Silversmith since the 1960s. It hosts workshops for plating and polishing of silver artifacts. The workshop stores various chemicals including copper sulphate, nickel sulphate, sodium hydroxide, potassium cyanide, and sodium cyanide and has multiple industrial sinks for chemical processing. The presence of the chemical processing industry at the Site constitutes a REC. The area around suite 102 needs further investigation to assess the subsurface conditions. However, no spills were reported in any databases from this REC and the business has proper discharge permits.
- **REC 2 - Historical Use of the Site - Environmental Laboratory:** One of the historic tenants on the Site included an environmental laboratory, whose operations involve the use of different solvents. In addition, the environmental samples may contain different hazardous material. The details of the laboratory operation are unknown. However, no spills or any discharges reported from this REC.
- **Historic REC (HREC) – 1,000-gallon AST:** A 1,000-gallon AST for heating oil is present in the basement of the building. A nine-gallon spill was reported and closed by NYSDEC.

Other potential REC identified during Phase I ESA include the use of the site as a train station and off-site up-gradient dry-cleaning facilities which were investigated in the Phase II ESA along with

the historic industrial uses of the Project Site. The Phase II ESA (**Appendix E**), conducted October 2016, found minor exceedances of contamination at the Project Site. Chloroform levels slightly exceeded the criteria in groundwater. Iron concentrations surpassed the NYSDEC Residential Soil Cleanup Criteria, while lead, mercury, nickel, and zinc marginally exceeded the NYSDEC Unrestricted Soil Cleanup Objectives but were below residential criteria. However, these findings are common for urban areas and historic fill.

Based on the results from the Phase I and II ESAs, the Project Site has been accepted into the New York State Brownfield Cleanup Program for the former Silversmith Site. All necessary environmental remediation will be completed before any work begins.

10

Natural Resources

Natural resources in the Mount Vernon West area were evaluated as part of the MVW GEIS to determine how the potential future build-out of the District would impact these resources.

Topography

According to the MVW GEIS, given the fact that virtually the entire area has been developed and disturbed, redevelopment under the MVW zoning code would likely not result in any significant adverse impacts to the area's topography.

Geology

The geologic conditions within the Mount Vernon West area do not present any significant impediments to the potential redevelopment allowable under the MVW zoning code. With regard to the Project Site, according the USDA Soil Survey, depth to bedrock on the Project Site is greater than 6.56 feet,[11] and bedrock would not be encountered during excavation. No blasting or mechanical rock removal is required.

Soils

According to the MVW GEIS, the entire area is fully developed and soils have already been disturbed. It is therefore unlikely that any unforeseen adverse soils impacts would result from redevelopment activities facilitated by the MVW zoning code. As discussed in the Hazardous Materials section of this Environmental Assessment Report, a Phase II Environmental Assessment was conducted on the Site. Investigations show no VOCs, SVOCs, PCBs, cyanide, or pesticides detected exceeding the NYSDEC Unrestricted Use Soil Cleanup Objectives (USCOs). Iron was detected in soil samples from SB-2, SB-2A, SB-3, and SB-4 exceeding NYSDEC Residential Soil Cleanup Criteria (RSCOs), lead and mercury were detected in sample SB-2 (2-3) exceeding the USCO but below the RSCO, and nickel and zinc were detected in sample SB-4 (2-3) slightly exceeding the USCO but below the RSCO. However, these detects represent typical background concentrations of metals in urban areas. Based on the investigations, remediation of soil was not found necessary.

[11] USDA Web Soil Survey (WSS). Available at: Web Soil Survey - Home. Accessed August 2025.

Habitats/Vegetation

No significant habitats, areas of significant vegetation or champion trees are located within the Project Area. No adverse impacts are anticipated.

Wildlife

No Endangered, Threatened or Species of Special Concern are located within the Mount Vernon West area, and no habitats that might support such species are present. Wildlife identified or expected to be in the area are those hardy species that are tolerant of dense urban environments. The redevelopment of the MVW District would maintain this existing urban setting.

According to the MVW GEIS, one potential impact that may occur is as a result of increased permitted building heights. Buildings reaching 15 or more stories, may result in additional bird collisions. As Mount Vernon lies within the Atlantic Flyway, the increased potential of bird – building collisions represents a potential adverse impact. Bird collisions will be mitigated through adherence to bird-safe strategies and best design practices.

Floodplains

The entire Mount Vernon West area lies outside of areas of flood hazard. There are no FEMA imposed building restrictions, and as such, no adverse impacts are anticipated.

11

Air Quality and Noise

Air quality and noise impacts associated with the implementation of the MVW zoning were assessed as part of the MVW GEIS. The existing air quality in the vicinity of the Mount Vernon West area is acceptable and poses no known threat to the health or welfare of the general public.

On the basis of the data contained in the MVW GEIS (see Chapter VI.H – Traffic), no air quality screening thresholds are exceeded, including the thresholds that would trigger a microscale air quality analysis of affected intersections.

Short term air quality impacts associated with the construction of the Proposed Project will be mitigated by following Westchester County Best Management Practices guidance, by maintaining all construction equipment in good condition and sound working order and by complying with the City of Mount Vernon's construction standards.

With regard to noise, the MVW GEIS states that adoption of the MVW zoning code may actually result in a reduction in long-term noise levels, as older industrial and manufacturing uses are replaced by mixed-use and residential developments.

The Proposed Project would not result in long-term noise impacts. The development will be built to Passive House standards which includes windows, insultation, ventilation, and high-tech buildings systems which enhance indoor air quality, control temperature, reduce energy consumption, and reduce outside noise.

Short-term construction related noise impacts will be mitigated to the maximum extent practicable. All construction activities will comply with the City's Noise Ordinance. The Applicant will incorporate appropriate mitigation measures to assure that adverse impacts are minimized, including:

- Installing construction noise barriers using temporary walls or piles of excavated material between noisy activities and noise sensitive receivers
- Routing of trucks through non-residential streets, to the extent possible
- Positioning site equipment as far away from noise sensitive locations as possible
- Combining noisy operations to occur during the same time period
- Avoiding nighttime activities.

Adherence to the above noise control measures will significantly reduce the likelihood of any significant adverse construction-related noise. Provisions would be made in the general contract to ensure that contractors make every reasonable effort to minimize construction noise through additional abatement measures such as work-hour controls, maintenance of muffler systems, public information regarding construction scheduling and limitations on idling equipment.

12

Green Building and Sustainability

According to the MVW GEIS, field reconnaissance of the Mount Vernon West area indicates that few buildings have been designed or have been retrofitted to include green building strategies or building elements. A review of the US Green Building Council LEED Project database indicates that 3 LEED certified projects are located in Mount Vernon but none of these projects are located in the Mount Vernon West area.

This Project will create healthy, comfortable spaces for living and working as it will be designed to Passive House standards. Through features like advanced insulation, airtight construction, and energy-efficient ventilation systems, the building will minimize energy use while maximizing indoor air quality. The Project will create an exemplary sustainable building that will provide residents with optimal indoor air quality, comfortable and even temperatures, significantly reduced energy bills and acoustically superior homes from reduced noise attenuation from neighbors and street noise. Additionally, the Project inherently promotes walkability and reduces reliance on automobiles as the site is adjacent to the Mount Vernon West train station.

Employing the design standards embedded in the MVW zoning code, combined with an emphasis on complying with green building certification standards, such as Passive House, it is anticipated the Proposed Project will be effectively “green” and sustainable.

Appendix

Appendix A - SEQR EAF Part I

Instructions for Completing Part 1

Part 1 is to be completed by the applicant or project sponsor. Responses become part of the application for approval or funding, are subject to public review, and may be subject to further verification.

Complete Part 1 based on information currently available. If additional research or investigation would be needed to fully respond to any item, please answer as thoroughly as possible based on current information; indicate whether missing information does not exist, or is not reasonably available to the sponsor; and, when possible, generally describe work or studies which would be necessary to update or fully develop that information.

Applicants/sponsors must complete all items in Sections A & B. In Sections C, D & E, most items contain an initial question that must be answered either "Yes" or "No". If the answer to the initial question is "Yes", complete the sub-questions that follow. If the answer to the initial question is "No", proceed to the next question. Section F allows the project sponsor to identify and attach any additional information. Section G requires the name and signature of the applicant or project sponsor to verify that the information contained in Part 1is accurate and complete.

A. Project and Applicant/Sponsor Information.

Name of Action or Project: Station Plaza		
Project Location (describe, and attach a general location map): 20 S. West Street, Mount Vernon, New York (Section 164.67 - Block 1057 - Lot 16) (see attached site location map)		
Brief Description of Proposed Action (include purpose or need): The Proposed Action involves the redevelopment of the property located at 20 S. West Street, also known and designated on the tax assessment map of the City of Mount Vernon as Section 164.67 - Block 1057 - Lot 16 (the "Project Site"). The Project Site currently contains a two-story brick structure occupied by a 7-Eleven, a temporary station for the Mount Vernon Fire Department, and other small businesses. The structure is located on the north and west portions of the Project Site, and the southern and eastern portions are covered with a paved parking lot. The proposed redevelopment would demolish the existing two-story structure and construct a new 13-story on podium, 172,817± square foot mixed-use residential building on a 21,970± square foot site, with 100 residential units, approximately 2,635 ± square feet of retail space with six parking spaces, and a 48,810± square foot parking garage with 73 residential spaces. Of the 100 residential units proposed, there are 30 one-bedrooms, 60 two-bedrooms, and 10 three-bedrooms. Parking is distributed from the basement level up to the second level of the mixed-use building. The ground level will also include the retail space and a residential lobby which contains a mail room and concierge. The third floor will include sales and maintenance offices and tenant amenities such as a fitness room, community room, tenant storage, and roof terrace. The residential units are located from the fourth to the 13th level.		
Name of Applicant/Sponsor: MacQuesten Station Takeover, LLC	Telephone: 914-667-7227 E-Mail: J_apicella@macquesten.com	
Address: 438 Fifth Avenue, Suite 100		
City/PO: Pelham	State: New York	Zip Code: 10803
Project Contact (if not same as sponsor; give name and title/role): Joe Apicella, Executive Vice President	Telephone: 914-667-7227 E-Mail: J_apicella@macquesten.com	
Address: 438 Fifth Avenue, Suite 100		
City/PO: Pelham	State: New York	Zip Code: 10803
Property Owner (if not same as sponsor):	Telephone: E-Mail:	
Address:		
City/PO:	State:	Zip Code:

B. Government Approvals

B. Government Approvals, Funding, or Sponsorship. ("Funding" includes grants, loans, tax relief, and any other forms of financial assistance.)

Government Entity	If Yes: Identify Agency and Approval(s) Required	Application Date (Actual or projected)
a. City Council, Town Board, or Village Board of Trustees ☑Yes ☐No	City Council Expedited Review (site plan) approval	
b. City, Town or Village Planning Board or Commission ☐Yes ☑No		
c. City, Town or Village Zoning Board of Appeals ☐Yes ☑No		
d. Other local agencies ☑Yes ☐No	Mount Vernon Architectural Review Board approval	
e. County agencies ☑Yes ☐No	Westchester County Planning Dept. (GML 239-m referral); County Dept. of Health (sanitary sewer and water);	Westchester County - New Homes Land Program - funding
f. Regional agencies ☐Yes ☑No		
g. State agencies ☐Yes ☑No	NYS HCR - Affordable Homeownership Opportunity Program - funding	
h. Federal agencies ☐Yes ☑No		

i. Coastal Resources.

i. Is the project site within a Coastal Area, or the waterfront area of a Designated Inland Waterway? ☐Yes ☑No

ii. Is the project site located in a community with an approved Local Waterfront Revitalization Program? ☐Yes ☑No

iii. Is the project site within a Coastal Erosion Hazard Area? ☐Yes ☑No

C. Planning and Zoning

C.1. Planning and zoning actions.

Will administrative or legislative adoption, or amendment of a plan, local law, ordinance, rule or regulation be the only approval(s) which must be granted to enable the proposed action to proceed? ☐Yes ☑No

- **If Yes,** complete sections C, F and G.
- **If No,** proceed to question C.2 and complete all remaining sections and questions in Part 1

C.2. Adopted land use plans.

a. Do any municipally- adopted (city, town, village or county) comprehensive land use plan(s) include the site where the proposed action would be located? ☑Yes ☐No

If Yes, does the comprehensive plan include specific recommendations for the site where the proposed action would be located? ☑Yes ☐No

b. Is the site of the proposed action within any local or regional special planning district (for example: Greenway; Brownfield Opportunity Area (BOA); designated State or Federal heritage area; watershed management plan; or other?) ☑Yes ☐No

If Yes, identify the plan(s):

NYS En-Zone

c. Is the proposed action located wholly or partially within an area listed in an adopted municipal open space plan, or an adopted municipal farmland protection plan? ☐Yes ☑No

If Yes, identify the plan(s):

C.3. Zoning

a. Is the site of the proposed action located in a municipality with an adopted zoning law or ordinance. ☑ Yes ☐ No
If Yes, what is the zoning classification(s) including any applicable overlay district?
MVW-H District

b. Is the use permitted or allowed by a special or conditional use permit? ☐ Yes ☑ No

c. Is a zoning change requested as part of the proposed action? ☐ Yes ☑ No
If Yes,
i. What is the proposed new zoning for the site? _____

C.4. Existing community services.

a. In what school district is the project site located? Mount Vernon City School District

b. What police or other public protection forces serve the project site?
City of Mount Vernon Police Department

c. Which fire protection and emergency medical services serve the project site?
The City of Mount Vernon Fire Department provides fire protection; Empress Ambulance Service provides emergency medical services.

d. What parks serve the project site?
Nearby public parks include: Hartley Park located approximately 0.70± miles northeast of the Project Site; Amenities/trails associated with Bronx River Parkway Reservation located approximately 0.03± miles west of the Project Site.

D. Project Details

D.1. Proposed and Potential Development

a. What is the general nature of the proposed action (e.g., residential, industrial, commercial, recreational; if mixed, include all components)? Mixed-use development (residential, retail, and parking)

b. a. Total acreage of the site of the proposed action? 0.50± acres
b. Total acreage to be physically disturbed? 0.50± acres *
c. Total acreage (project site and any contiguous properties) owned or controlled by the applicant or project sponsor? 0.50± acres

c. Is the proposed action an expansion of an existing project or use? ☐ Yes ☑ No
i. If Yes, what is the approximate percentage of the proposed expansion and identify the units (e.g., acres, miles, housing units, square feet)? % _____ Units: _____

d. Is the proposed action a subdivision, or does it include a subdivision? ☐ Yes ☑ No
If Yes,
i. Purpose or type of subdivision? (e.g., residential, industrial, commercial; if mixed, specify types)
_____
ii. Is a cluster/conservation layout proposed? ☐ Yes ☐ No
iii. Number of lots proposed? _____
iv. Minimum and maximum proposed lot sizes? Minimum _____ Maximum _____

e. Will the proposed action be constructed in multiple phases? ☐ Yes ☑ No
i. If No, anticipated period of construction: 36 months
ii. If Yes:
- Total number of phases anticipated _____
- Anticipated commencement date of phase 1 (including demolition) _____ month _____ year
- Anticipated completion date of final phase _____ month _____year
- Generally describe connections or relationships among phases, including any contingencies where progress of one phase may determine timing or duration of future phases: _____

* The Project Site is an infill site, no new disturbance is proposed.

f. Does the project include new residential uses? ☑ Yes ☐ No

If Yes, show numbers of units proposed.

	One Family	Two Family	Three Family	Multiple Family (four or more)
Initial Phase				100 dwelling units
At completion of all phases				100 dwelling units

g. Does the proposed action include new non-residential construction (including expansions)? ☑ Yes ☐ No

If Yes,

i. Total number of structures 1

ii. Dimensions (in feet) of largest proposed structure: 133'-5.5" height; 118'-4" width; and 162'-8" length

iii. Approximate extent of building space to be heated or cooled: 171,920 square feet

h. Does the proposed action include construction or other activities that will result in the impoundment of any liquids, such as creation of a water supply, reservoir, pond, lake, waste lagoon or other storage? ☐ Yes ☑ No

If Yes,

i. Purpose of the impoundment: _____

ii. If a water impoundment, the principal source of the water: ☐ Ground water ☐ Surface water streams ☐ Other specify:

_____

iii. If other than water, identify the type of impounded/contained liquids and their source.

_____

iv. Approximate size of the proposed impoundment. Volume: _____ million gallons; surface area: _____ acres

v. Dimensions of the proposed dam or impounding structure: _____ height; _____ length

vi. Construction method/materials for the proposed dam or impounding structure (e.g., earth fill, rock, wood, concrete):

_____

D.2. Project Operations

a. Does the proposed action include any excavation, mining, or dredging, during construction, operations, or both? (Not including general site preparation, grading or installation of utilities or foundations where all excavated materials will remain onsite) ☐ Yes ☑ No

If Yes:

i .What is the purpose of the excavation or dredging? _____

ii. How much material (including rock, earth, sediments, etc.) is proposed to be removed from the site?

- Volume (specify tons or cubic yards): _____
- Over what duration of time? _____

iii. Describe nature and characteristics of materials to be excavated or dredged, and plans to use, manage or dispose of them.

_____

_____

iv. Will there be onsite dewatering or processing of excavated materials? ☐ Yes ☐ No

If yes, describe. _____

_____

v. What is the total area to be dredged or excavated? _____ acres

vi. What is the maximum area to be worked at any one time? _____ acres

vii. What would be the maximum depth of excavation or dredging? _____ feet

viii. Will the excavation require blasting? ☐ Yes ☐ No

ix. Summarize site reclamation goals and plan: _____

_____

_____

b. Would the proposed action cause or result in alteration of, increase or decrease in size of, or encroachment into any existing wetland, waterbody, shoreline, beach or adjacent area? ☐ Yes ☑ No

If Yes:

i. Identify the wetland or waterbody which would be affected (by name, water index number, wetland map number or geographic description): _____

_____

ii. Describe how the proposed action would affect that waterbody or wetland, e.g. excavation, fill, placement of structures, or alteration of channels, banks and shorelines. Indicate extent of activities, alterations and additions in square feet or acres:

iii. Will the proposed action cause or result in disturbance to bottom sediments? ☐Yes ☐No
If Yes, describe:

iv. Will the proposed action cause or result in the destruction or removal of aquatic vegetation? ☐Yes ☐No
If Yes:

- acres of aquatic vegetation proposed to be removed:
- expected acreage of aquatic vegetation remaining after project completion:
- purpose of proposed removal (e.g. beach clearing, invasive species control, boat access):
- proposed method of plant removal:
- if chemical/herbicide treatment will be used, specify product(s):

v. Describe any proposed reclamation/mitigation following disturbance:

c. Will the proposed action use, or create a new demand for water? ☑Yes ☐No
If Yes:

i. Total anticipated water usage/demand per day: 21,250± gallons/day *

ii. Will the proposed action obtain water from an existing public water supply? ☑Yes ☐No
If Yes:

- Name of district or service area: Mount Vernon Water Department
- Does the existing public water supply have capacity to serve the proposal? ☑Yes ☐No
- Is the project site in the existing district? ☑Yes ☐No
- Is expansion of the district needed? ☐Yes ☑No
- Do existing lines serve the project site? ☑Yes ☐No

iii. Will line extension within an existing district be necessary to supply the project? ☐Yes ☑No
If Yes:

- Describe extensions or capacity expansions proposed to serve this project:
- Source(s) of supply for the district:

iv. Is a new water supply district or service area proposed to be formed to serve the project site? ☐Yes ☐No
If, Yes:

- Applicant/sponsor for new district:
- Date application submitted or anticipated:
- Proposed source(s) of supply for new district:

v. If a public water supply will not be used, describe plans to provide water supply for the project:

vi. If water supply will be from wells (public or private), what is the maximum pumping capacity: _____ gallons/minute.

d. Will the proposed action generate liquid wastes? ☑Yes ☐No
If Yes:

i. Total anticipated liquid waste generation per day: 1,250±gallons/day *

ii. Nature of liquid wastes to be generated (e.g., sanitary wastewater, industrial; if combination, describe all components and approximate volumes or proportions of each):
Sanitary wastewater

iii. Will the proposed action use any existing public wastewater treatment facilities? ☑Yes ☐No
If Yes:

- Name of wastewater treatment plant to be used: Yonkers Joint Wastewater Treatment Plant
- Name of district: Bronx Valley Sewer District
- Does the existing wastewater treatment plant have capacity to serve the project? ☑Yes ☐No
- Is the project site in the existing district? ☑Yes ☐No
- Is expansion of the district needed? ☐Yes ☑No

The average water demand/sewer flow for the proposed project is 21,250 GPD with a peak demand of 31,875 GPD. Water and wastewater demand calculations are based on assumptions provided by the City of Mount Vernon Department of Public Works, using a residential occupancy rate of 2.5 persons per dwelling unit and a per capita water use of 85 gallons per person per day (typical range: 65–100 gallons per person per day).

- Do existing sewer lines serve the project site? ☑ Yes ☐ No
- Will a line extension within an existing district be necessary to serve the project? ☐ Yes ☑ No

  If Yes:
  - Describe extensions or capacity expansions proposed to serve this project: _____

_____

_____

iv. Will a new wastewater (sewage) treatment district be formed to serve the project site? ☐ Yes ☑ No

If Yes:
- Applicant/sponsor for new district: _____
- Date application submitted or anticipated: _____
- What is the receiving water for the wastewater discharge? _____

v. If public facilities will not be used, describe plans to provide wastewater treatment for the project, including specifying proposed receiving water (name and classification if surface discharge or describe subsurface disposal plans):

_____

_____

vi. Describe any plans or designs to capture, recycle or reuse liquid waste: _____

_____

_____

e. Will the proposed action disturb more than one acre and create stormwater runoff, either from new point sources (i.e. ditches, pipes, swales, curbs, gutters or other concentrated flows of stormwater) or non-point source (i.e. sheet flow) during construction or post construction? ☐ Yes ☑ No

If Yes:

i. How much impervious surface will the project create in relation to total size of project parcel?

_____ Square feet or _____ acres (impervious surface)

_____ Square feet or _____ acres (parcel size)

ii. Describe types of new point sources. _____

_____

iii. Where will the stormwater runoff be directed (i.e. on-site stormwater management facility/structures, adjacent properties, groundwater, on-site surface water or off-site surface waters)?

_____

_____

- If to surface waters, identify receiving water bodies or wetlands: _____

_____

_____

- Will stormwater runoff flow to adjacent properties? ☐ Yes ☐ No

iv. Does the proposed plan minimize impervious surfaces, use pervious materials or collect and re-use stormwater? ☐ Yes ☐ No

f. Does the proposed action include, or will it use on-site, one or more sources of air emissions, including fuel combustion, waste incineration, or other processes or operations? ☐ Yes ☑ No

If Yes, identify:

i. Mobile sources during project operations (e.g., heavy equipment, fleet or delivery vehicles)

_____

ii. Stationary sources during construction (e.g., power generation, structural heating, batch plant, crushers)

_____

iii. Stationary sources during operations (e.g., process emissions, large boilers, electric generation)

_____

g. Will any air emission sources named in D.2.f (above), require a NY State Air Registration, Air Facility Permit, or Federal Clean Air Act Title IV or Title V Permit? ☐ Yes ☑ No

If Yes:

i. Is the project site located in an Air quality non-attainment area? (Area routinely or periodically fails to meet ambient air quality standards for all or some parts of the year) ☐ Yes ☐ No

ii. In addition to emissions as calculated in the application, the project will generate:
- _____Tons/year (short tons) of Carbon Dioxide (CO_2)
- _____Tons/year (short tons) of Nitrous Oxide (N_2O)
- _____Tons/year (short tons) of Perfluorocarbons (PFCs)
- _____Tons/year (short tons) of Sulfur Hexafluoride (SF_6)
- _____Tons/year (short tons) of Carbon Dioxide equivalent of Hydroflourocarbons (HFCs)
- _____Tons/year (short tons) of Hazardous Air Pollutants (HAPs)

h. Will the proposed action generate or emit methane (including, but not limited to, sewage treatment plants, landfills, composting facilities)? ☐Yes ☑No

If Yes:

i. Estimate methane generation in tons/year (metric): _____

ii. Describe any methane capture, control or elimination measures included in project design (e.g., combustion to generate heat or electricity, flaring): _____

_____

i. Will the proposed action result in the release of air pollutants from open-air operations or processes, such as quarry or landfill operations? ☐Yes ☑No

If Yes: Describe operations and nature of emissions (e.g., diesel exhaust, rock particulates/dust):

_____

_____

j. Will the proposed action result in a substantial increase in traffic above present levels or generate substantial new demand for transportation facilities or services? ☐Yes ☑No

If Yes:

i. When is the peak traffic expected (Check all that apply): ☐ Morning ☐ Evening ☐Weekend ☐ Randomly between hours of _____ to _____.

ii. For commercial activities only, projected number of truck trips/day and type (e.g., semi trailers and dump trucks): _____

_____

iii. Parking spaces: Existing _____ Proposed _____ Net increase/decrease _____

iv. Does the proposed action include any shared use parking? ☐Yes ☐No

v. If the proposed action includes any modification of existing roads, creation of new roads or change in existing access, describe:

_____

vi. Are public/private transportation service(s) or facilities available within ½ mile of the proposed site? ☐Yes ☐No

vii Will the proposed action include access to public transportation or accommodations for use of hybrid, electric or other alternative fueled vehicles? ☐Yes ☐No

viii. Will the proposed action include plans for pedestrian or bicycle accommodations for connections to existing pedestrian or bicycle routes? ☐Yes ☐No

k. Will the proposed action (for commercial or industrial projects only) generate new or additional demand for energy? ☐Yes ☑No

If Yes:

i. Estimate annual electricity demand during operation of the proposed action: _____

_____

ii. Anticipated sources/suppliers of electricity for the project (e.g., on-site combustion, on-site renewable, via grid/local utility, or other):

_____

iii. Will the proposed action require a new, or an upgrade, to an existing substation? ☐Yes ☐No

l. Hours of operation. Answer all items which apply.

i. During Construction:

- Monday - Friday: 7:00am - 6:00pm*
- Saturday: N/A
- Sunday: N/A
- Holidays: N/A

ii. During Operations:

- Monday - Friday: 24 hours
- Saturday: 24 hours
- Sunday: 24 hours
- Holidays: 24 hours

* Represents permitted construction hours per the City of Mount Vernon noise regulations at Chapter 178 of the City Code.

m. Will the proposed action produce noise that will exceed existing ambient noise levels during construction, operation, or both? ☑ Yes ☐ No

If yes:

i. Provide details including sources, time of day and duration:

Ambient noise levels may be temporarily exceeded during construction activities. Construction activities would not occur outside of the hours permitted by the Chapter 178 of the Mount Vernon City Code. Upon completion of construction, no increase above existing ambient noise levels is anticipated.

ii. Will the proposed action remove existing natural barriers that could act as a noise barrier or screen? ☐ Yes ☐ No

Describe: _____

n. Will the proposed action have outdoor lighting? ☑ Yes ☐ No

If yes:

i. Describe source(s), location(s), height of fixture(s), direction/aim, and proximity to nearest occupied structures:

It is anticipated that outdoor lighting fixtures would be installed throughout the Project Site for safety and security. It is expected that all lighting fixtures would be downward facing & shielded to prevent off-site light spill, in accordance with the City's exterior lighting standards. Fixtures types, heights and exact locations are TBD.

ii. Will proposed action remove existing natural barriers that could act as a light barrier or screen? ☐ Yes ☑ No

Describe: _____

o. Does the proposed action have the potential to produce odors for more than one hour per day? ☐ Yes ☑ No

If Yes, describe possible sources, potential frequency and duration of odor emissions, and proximity to nearest occupied structures: _____

p. Will the proposed action include any bulk storage of petroleum (combined capacity of over 1,100 gallons) or chemical products 185 gallons in above ground storage or any amount in underground storage? ☐ Yes ☑ No

If Yes:

i. Product(s) to be stored _____

ii. Volume(s) _____ per unit time _____ (e.g., month, year)

iii. Generally, describe the proposed storage facilities:_____

q. Will the proposed action (commercial, industrial and recreational projects only) use pesticides (i.e., herbicides, insecticides) during construction or operation? ☐ Yes ☑ No

If Yes:

i. Describe proposed treatment(s):

ii. Will the proposed action use Integrated Pest Management Practices? ☐ Yes ☐ No

r. Will the proposed action (commercial or industrial projects only) involve or require the management or disposal of solid waste (excluding hazardous materials)? ☐ Yes ☑ No

If Yes:

i. Describe any solid waste(s) to be generated during construction or operation of the facility:

- Construction: _____ tons per _____ (unit of time)
- Operation : _____ tons per _____ (unit of time)

ii. Describe any proposals for on-site minimization, recycling or reuse of materials to avoid disposal as solid waste:

- Construction: _____
- Operation: _____

iii. Proposed disposal methods/facilities for solid waste generated on-site:

- Construction: _____
- Operation: _____

s. Does the proposed action include construction or modification of a solid waste management facility? ☐ Yes ☑ No

If Yes:

i. Type of management or handling of waste proposed for the site (e.g., recycling or transfer station, composting, landfill, or other disposal activities): _____

ii. Anticipated rate of disposal/processing:

- _____ Tons/month, if transfer or other non-combustion/thermal treatment, or
- _____ Tons/hour, if combustion or thermal treatment

iii. If landfill, anticipated site life: _____ years

t. Will the proposed action at the site involve the commercial generation, treatment, storage, or disposal of hazardous waste? ☐ Yes ☑ No

If Yes:

i. Name(s) of all hazardous wastes or constituents to be generated, handled or managed at facility: _____

ii. Generally describe processes or activities involving hazardous wastes or constituents: _____

iii. Specify amount to be handled or generated _____ tons/month

iv. Describe any proposals for on-site minimization, recycling or reuse of hazardous constituents: _____

v. Will any hazardous wastes be disposed at an existing offsite hazardous waste facility? ☐ Yes ☐ No

If Yes: provide name and location of facility: _____

If No: describe proposed management of any hazardous wastes which will not be sent to a hazardous waste facility:

E. Site and Setting of Proposed Action

E.1. Land uses on and surrounding the project site

a. Existing land uses.

i. Check all uses that occur on, adjoining and near the project site.

☑ Urban ☐ Industrial ☑ Commercial ☑ Residential (suburban) ☐ Rural (non-farm)
☐ Forest ☐ Agriculture ☐ Aquatic ☑ Other (specify): Transportation; Recreation

ii. If mix of uses, generally describe:

The Project Site contains retail/commercial uses with associated parking. The Project Site is located in a dense urban area containing a mix of uses with residential, commercial, retail, and light industrial uses to the north, east, and south of the Project Site. The Metro-North Railroad runs adjacent to the western edge of the Project Site, with the Bronx River Parkway and Reservation Conservatory located further to the west.

b. Land uses and covertypes on the project site.

Land use or Covertype	Current Acreage	Acreage After Project Completion	Change (Acres +/-)
• Roads, buildings, and other paved or impervious surfaces	0.48±	0.48±	0±
• Forested			
• Meadows, grasslands or brushlands (non-agricultural, including abandoned agricultural)			
• Agricultural (includes active orchards, field, greenhouse etc.)			
• Surface water features (lakes, ponds, streams, rivers, etc.)			
• Wetlands (freshwater or tidal)			
• Non-vegetated (bare rock, earth or fill)			
• Other Describe: Vegetation/landscaping	0.02±	0.02±	0±

c. Is the project site presently used by members of the community for public recreation? ☐ Yes ☑ No

i. If Yes: explain: _____

d. Are there any facilities serving children, the elderly, people with disabilities (e.g., schools, hospitals, licensed day care centers, or group homes) within 1500 feet of the project site? ☑ Yes ☐ No

If Yes,

i. Identify Facilities: Nearby facilities include: Hamilton School located 1,135± feet northeast of the project site; St. Mary's Roman Catholic Church located 920± feet southeast of the project site; Fresh Start Christian Center is located 390± feet southeast of the project site; God's Little Giant Learning Center at 22 S. West Street, adjacent to the project site.

e. Does the project site contain an existing dam? ☐ Yes ☑ No

If Yes:

i. Dimensions of the dam and impoundment:

- Dam height: _____ feet
- Dam length: _____ feet
- Surface area: _____ acres
- Volume impounded: _____ gallons OR acre-feet

ii. Dam's existing hazard classification: _____

iii. Provide date and summarize results of last inspection:

_____

_____

f. Has the project site ever been used as a municipal, commercial or industrial solid waste management facility, or does the project site adjoin property which is now, or was at one time, used as a solid waste management facility? ☐ Yes ☑ No

If Yes:

i. Has the facility been formally closed? ☐ Yes ☐ No

- If yes, cite sources/documentation: _____

ii. Describe the location of the project site relative to the boundaries of the solid waste management facility:

_____

_____

iii. Describe any development constraints due to the prior solid waste activities: _____

_____

g. Have hazardous wastes been generated, treated and/or disposed of at the site, or does the project site adjoin property which is now or was at one time used to commercially treat, store and/or dispose of hazardous waste? ☐ Yes ☑ No

If Yes:

i. Describe waste(s) handled and waste management activities, including approximate time when activities occurred:

_____

_____

h. Potential contamination history. Has there been a reported spill at the proposed project site, or have any remedial actions been conducted at or adjacent to the proposed site? ☑ Yes ☐ No

If Yes:

i. Is any portion of the site listed on the NYSDEC Spills Incidents database or Environmental Site Remediation database? Check all that apply: ☑ Yes ☐ No

☐ Yes – Spills Incidents database — Provide DEC ID number(s): _____

☑ Yes – Environmental Site Remediation database — Provide DEC ID number(s): C360144

☐ Neither database

ii. If site has been subject of RCRA corrective activities, describe control measures: _____

_____

_____

iii. Is the project within 2000 feet of any site in the NYSDEC Environmental Site Remediation database? ☑ Yes ☐ No

If yes, provide DEC ID number(s): C360031, C360031A, C360141, C360141A, C360144, V00645, C360230

iv. If yes to (i), (ii) or (iii) above, describe current status of site(s):

C360031/C360031A (30 North West Street) - Brownfield Cleanup Program - Status: Completed; C360141/C360141A (1209-1217 Yonkers Ave and 445-453 Bronx River Rd) - Brownfield Cleanup Program - Status: Active - site conditions currently under review; V00645 (31 South Street) - Voluntary Cleanup Program - Status: Completed; C360144 (22 S. West Street) - Brownfield Cleanup Program - Status: Completed; C360230 (115 S.MacQuesten Pkwy) - Brownfield Cleanup Program - Status: Active.

v. Is the project site subject to an institutional control limiting property uses? ☐ Yes ☑ No

- If yes, DEC site ID number: _____
- Describe the type of institutional control (e.g., deed restriction or easement): _____
- Describe any use limitations: _____
- Describe any engineering controls: _____
- Will the project affect the institutional or engineering controls in place? ☐ Yes ☐ No
- Explain: _____

E.2. Natural Resources On or Near Project Site

a. What is the average depth to bedrock on the project site? >6.56 feet

b. Are there bedrock outcroppings on the project site? ☐ Yes ☑ No
If Yes, what proportion of the site is comprised of bedrock outcroppings? _____%

c. Predominant soil type(s) present on project site:

Urban Land Uf	100 %
	%
	%

d. What is the average depth to the water table on the project site? Average: >6.56 feet

e. Drainage status of project site soils:

☐	Well Drained:	% of site
☑	Moderately Well Drained:	100 % of site
☐	Poorly Drained	% of site

f. Approximate proportion of proposed action site with slopes:

☑	0-10%:	100 % of site
☐	10-15%:	% of site
☐	15% or greater:	% of site

g. Are there any unique geologic features on the project site? ☐ Yes ☑ No
If Yes, describe: _____

h. Surface water features.

i. Does any portion of the project site contain wetlands or other waterbodies (including streams, rivers, ponds or lakes)? ☐ Yes ☑ No

ii. Do any wetlands or other waterbodies adjoin the project site? ☐ Yes ☑ No

If Yes to either *i* or *ii*, continue. If No, skip to E.2.i.

iii. Are any of the wetlands or waterbodies within or adjoining the project site regulated by any federal, state or local agency? ☐ Yes ☐ No

iv. For each identified regulated wetland and waterbody on the project site, provide the following information:

- Streams: Name _____ Classification _____
- Lakes or Ponds: Name _____ Classification _____
- Wetlands: Name _____ Approximate Size _____
- Wetland No. (if regulated by DEC) _____

v. Are any of the above water bodies listed in the most recent compilation of NYS water quality-impaired waterbodies? ☐ Yes ☐ No

If yes, name of impaired water body/bodies and basis for listing as impaired: _____

i. Is the project site in a designated Floodway? ☐ Yes ☑ No

j. Is the project site in the 100-year Floodplain? ☐ Yes ☑ No

k. Is the project site in the 500-year Floodplain? ☐ Yes ☑ No

l. Is the project site located over, or immediately adjoining, a primary, principal or sole source aquifer? ☐ Yes ☑ No
If Yes:

i. Name of aquifer: _____

m. Identify the predominant wildlife species that occupy or use the project site: Site is located in an urban, built environment. Common urban species are present are (i.e. squirrels, song birds).

n. Does the project site contain a designated significant natural community? ☐ Yes ☑ No

If Yes:

i. Describe the habitat/community (composition, function, and basis for designation): _____

ii. Source(s) of description or evaluation: _____

iii. Extent of community/habitat:

- Currently: _____ acres
- Following completion of project as proposed: _____ acres
- Gain or loss (indicate + or -): _____ acres

o. Does project site contain any species of plant or animal that is listed by the federal government or NYS as endangered or threatened, or does it contain any areas identified as habitat for an endangered or threatened species? ☐ Yes ☑ No

If Yes:

i. Species and listing (endangered or threatened): _____

p. Does the project site contain any species of plant or animal that is listed by NYS as rare, or as a species of special concern? ☐ Yes ☑ No

If Yes:

i. Species and listing: _____

q. Is the project site or adjoining area currently used for hunting, trapping, fishing or shell fishing? ☐ Yes ☑ No

If yes, give a brief description of how the proposed action may affect that use: _____

E.3. Designated Public Resources On or Near Project Site

a. Is the project site, or any portion of it, located in a designated agricultural district certified pursuant to Agriculture and Markets Law, Article 25-AA, Section 303 and 304? ☐ Yes ☑ No

If Yes, provide county plus district name/number: _____

b. Are agricultural lands consisting of highly productive soils present? ☐ Yes ☑ No

i. If Yes: acreage(s) on project site? _____

ii. Source(s) of soil rating(s): _____

c. Does the project site contain all or part of, or is it substantially contiguous to, a registered National Natural Landmark? ☐ Yes ☑ No

If Yes:

i. Nature of the natural landmark: ☐ Biological Community ☐ Geological Feature

ii. Provide brief description of landmark, including values behind designation and approximate size/extent: _____

d. Is the project site located in or does it adjoin a state listed Critical Environmental Area? ☑ Yes ☐ No

If Yes:

i. CEA name: County & State Park Lands

ii. Basis for designation: Exceptional or unique character

iii. Designating agency and date: Agency: Westchester County; Date: 1-31-90

e. Does the project site contain, or is it substantially contiguous to, a building, archaeological site, or district which is listed on the National or State Register of Historic Places, or that has been determined by the Commissioner of the NYS Office of Parks, Recreation and Historic Preservation to be eligible for listing on the State Register of Historic Places? ☐ Yes ☑ No

If Yes:

i. Nature of historic/archaeological resource: ☐ Archaeological Site ☐ Historic Building or District

ii. Name: _____

iii. Brief description of attributes on which listing is based:

_____

f. Is the project site, or any portion of it, located in or adjacent to an area designated as sensitive for archaeological sites on the NY State Historic Preservation Office (SHPO) archaeological site inventory? ☐ Yes ☑ No

g. Have additional archaeological or historic site(s) or resources been identified on the project site? ☐ Yes ☑ No

If Yes:

i. Describe possible resource(s): _____

ii. Basis for identification: _____

h. Is the project site within fives miles of any officially designated and publicly accessible federal, state, or local scenic or aesthetic resource? ☑ Yes ☐ No

If Yes:

i. Identify resource: Bronx River Parkway

ii. Nature of, or basis for, designation (e.g., established highway overlook, state or local park, state historic trail or scenic byway, etc.): Scenic Byway

iii. Distance between project and resource: 0.03± miles.

i. Is the project site located within a designated river corridor under the Wild, Scenic and Recreational Rivers Program 6 NYCRR 666? ☐ Yes ☑ No

If Yes:

i. Identify the name of the river and its designation: _____

ii. Is the activity consistent with development restrictions contained in 6NYCRR Part 666? ☐ Yes ☐ No

F. Additional Information

Attach any additional information which may be needed to clarify your project.

If you have identified any adverse impacts which could be associated with your proposal, please describe those impacts plus any measures which you propose to avoid or minimize them.

G. Verification

I certify that the information provided is true to the best of my knowledge.

Applicant/Sponsor Name _____ Date_____

Signature_____ Title_____

PRINT FORM

Site Location

Station Plaza | 20 S. West Street | 20 South West Street, City of Mount Vernon, New York

Project Site (boundaries are approximate)

Source: Nearmap 2025; Westchester County GIS

Path: \\vhb.com\gis\proj\NewYorkCity\22789.00 20 S West-SEQRA\Project\EAF Figures\EAF Figures.aprx (ldrotman, 8/14/2025)

Appendix B - SEQRA EAF Part II

Full Environmental Assessment Form
Part 2 - Identification of Potential Project Impacts

Part 2 is to be completed by the lead agency. Part 2 is designed to help the lead agency inventory all potential resources that could be affected by a proposed project or action. We recognize that the lead agency's reviewer(s) will not necessarily be environmental professionals. So, the questions are designed to walk a reviewer through the assessment process by providing a series of questions that can be answered using the information found in Part 1. To further assist the lead agency in completing Part 2, the form identifies the most relevant questions in Part 1 that will provide the information needed to answer the Part 2 question. When Part 2 is completed, the lead agency will have identified the relevant environmental areas that may be impacted by the proposed activity.

If the lead agency is a state agency **and** the action is in any Coastal Area, complete the Coastal Assessment Form before proceeding with this assessment.

Tips for completing Part 2:

- Review all of the information provided in Part 1.
- Review any application, maps, supporting materials and the Full EAF Workbook.
- Answer each of the 18 questions in Part 2.
- If you answer "**Yes"** to a numbered question, please complete all the questions that follow in that section.
- If you answer "**No"** to a numbered question, move on to the next numbered question.
- Check appropriate column to indicate the anticipated size of the impact.
- Proposed projects that would exceed a numeric threshold contained in a question should result in the reviewing agency checking the box "Moderate to large impact may occur."
- The reviewer is not expected to be an expert in environmental analysis.
- If you are not sure or undecided about the size of an impact, it may help to review the sub-questions for the general question and consult the workbook.
- When answering a question consider all components of the proposed activity, that is, the "whole action".
- Consider the possibility for long-term and cumulative impacts as well as direct impacts.
- Answer the question in a reasonable manner considering the scale and context of the project.

1. Impact on Land
Proposed action may involve construction on, or physical alteration of, the land surface of the proposed site. (See Part 1. D.1)
If "Yes", answer questions a - j. If "No", move on to Section 2.

☑ NO ☐ YES

	Relevant Part I Question(s)	No, or small impact may occur	Moderate to large impact may occur
a. The proposed action may involve construction on land where depth to water table is less than 3 feet.	E2d	☐	☐
b. The proposed action may involve construction on slopes of 15% or greater.	E2f	☐	☐
c. The proposed action may involve construction on land where bedrock is exposed, or generally within 5 feet of existing ground surface.	E2a	☐	☐
d. The proposed action may involve the excavation and removal of more than 1,000 tons of natural material.	D2a	☐	☐
e. The proposed action may involve construction that continues for more than one year or in multiple phases.	D1e	☐	☐
f. The proposed action may result in increased erosion, whether from physical disturbance or vegetation removal (including from treatment by herbicides).	D2e, D2q	☐	☐
g. The proposed action is, or may be, located within a Coastal Erosion hazard area.	B1i	☐	☐
h. Other impacts: _____ _____		☐	☐

2. Impact on Geological Features

The proposed action may result in the modification or destruction of, or inhibit access to, any unique or unusual land forms on the site (e.g., cliffs, dunes, minerals, fossils, caves). (See Part 1. E.2.g) ☑ NO ☐ YES

If "Yes", answer questions a - c. If "No", move on to Section 3.

	Relevant Part I Question(s)	No, or small impact may occur	Moderate to large impact may occur
a. Identify the specific land form(s) attached: _____ _____	E2g	☐	☐
b. The proposed action may affect or is adjacent to a geological feature listed as a registered National Natural Landmark. Specific feature: _____	E3c	☐	☐
c. Other impacts: _____ _____		☐	☐

3. Impacts on Surface Water

The proposed action may affect one or more wetlands or other surface water bodies (e.g., streams, rivers, ponds or lakes). (See Part 1. D.2, E.2.h) ☑ NO ☐ YES

If "Yes", answer questions a - l. If "No", move on to Section 4.

	Relevant Part I Question(s)	No, or small impact may occur	Moderate to large impact may occur
a. The proposed action may create a new water body.	D2b, D1h	☐	☐
b. The proposed action may result in an increase or decrease of over 10% or more than a 10 acre increase or decrease in the surface area of any body of water.	D2b	☐	☐
c. The proposed action may involve dredging more than 100 cubic yards of material from a wetland or water body.	D2a	☐	☐
d. The proposed action may involve construction within or adjoining a freshwater or tidal wetland, or in the bed or banks of any other water body.	E2h	☐	☐
e. The proposed action may create turbidity in a waterbody, either from upland erosion, runoff or by disturbing bottom sediments.	D2a, D2h	☐	☐
f. The proposed action may include construction of one or more intake(s) for withdrawal of water from surface water.	D2c	☐	☐
g. The proposed action may include construction of one or more outfall(s) for discharge of wastewater to surface water(s).	D2d	☐	☐
h. The proposed action may cause soil erosion, or otherwise create a source of stormwater discharge that may lead to siltation or other degradation of receiving water bodies.	D2e	☐	☐
i. The proposed action may affect the water quality of any water bodies within or downstream of the site of the proposed action.	E2h	☐	☐
j. The proposed action may involve the application of pesticides or herbicides in or around any water body.	D2q, E2h	☐	☐
k. The proposed action may require the construction of new, or expansion of existing, wastewater treatment facilities.	D1a, D2d	☐	☐

l. Other impacts: _____ _____		□	□

4. Impact on groundwater

The proposed action may result in new or additional use of ground water, or may have the potential to introduce contaminants to ground water or an aquifer. (See Part 1. D.2.a, D.2.c, D.2.d, D.2.p, D.2.q, D.2.t) ☑ NO ☐ YES

If "Yes", answer questions a - h. If "No", move on to Section 5.

	Relevant Part I Question(s)	No, or small impact may occur	Moderate to large impact may occur
a. The proposed action may require new water supply wells, or create additional demand on supplies from existing water supply wells.	D2c	□	□
b. Water supply demand from the proposed action may exceed safe and sustainable withdrawal capacity rate of the local supply or aquifer. Cite Source: _____	D2c	□	□
c. The proposed action may allow or result in residential uses in areas without water and sewer services.	D1a, D2c	□	□
d. The proposed action may include or require wastewater discharged to groundwater.	D2d, E2l	□	□
e. The proposed action may result in the construction of water supply wells in locations where groundwater is, or is suspected to be, contaminated.	D2c, E1f, E1g, E1h	□	□
f. The proposed action may require the bulk storage of petroleum or chemical products over ground water or an aquifer.	D2p, E2l	□	□
g. The proposed action may involve the commercial application of pesticides within 100 feet of potable drinking water or irrigation sources.	E2h, D2q, E2l, D2c	□	□
h. Other impacts: _____ _____		□	□

5. Impact on Flooding

The proposed action may result in development on lands subject to flooding. (See Part 1. E.2) ☑ NO ☐ YES

If "Yes", answer questions a - g. If "No", move on to Section 6.

	Relevant Part I Question(s)	No, or small impact may occur	Moderate to large impact may occur
a. The proposed action may result in development in a designated floodway.	E2i	□	□
b. The proposed action may result in development within a 100 year floodplain.	E2j	□	□
c. The proposed action may result in development within a 500 year floodplain.	E2k	□	□
d. The proposed action may result in, or require, modification of existing drainage patterns.	D2b, D2e	□	□
e. The proposed action may change flood water flows that contribute to flooding.	D2b, E2i, E2j, E2k	□	□
f. If there is a dam located on the site of the proposed action, is the dam in need of repair, or upgrade?	E1e	□	□

g. Other impacts: _____ _____		☐	☐

6. Impacts on Air

The proposed action may include a state regulated air emission source. (See Part 1. D.2.f., D.2.h, D.2.g) ☑ NO ☐ YES

If "Yes", answer questions a - f. If "No", move on to Section 7.

	Relevant Part I Question(s)	No, or small impact may occur	Moderate to large impact may occur
a. If the proposed action requires federal or state air emission permits, the action may also emit one or more greenhouse gases at or above the following levels:			
i. More than 1000 tons/year of carbon dioxide (CO_2)	D2g	☐	☐
ii. More than 3.5 tons/year of nitrous oxide (N_2O)	D2g	☐	☐
iii. More than 1000 tons/year of carbon equivalent of perfluorocarbons (PFCs)	D2g	☐	☐
iv. More than .045 tons/year of sulfur hexafluoride (SF_6)	D2g	☐	☐
v. More than 1000 tons/year of carbon dioxide equivalent of hydrochloroflourocarbons (HFCs) emissions	D2g	☐	☐
vi. 43 tons/year or more of methane	D2h	☐	☐
b. The proposed action may generate 10 tons/year or more of any one designated hazardous air pollutant, or 25 tons/year or more of any combination of such hazardous air pollutants.	D2g	☐	☐
c. The proposed action may require a state air registration, or may produce an emissions rate of total contaminants that may exceed 5 lbs. per hour, or may include a heat source capable of producing more than 10 million BTU's per hour.	D2f, D2g	☐	☐
d. The proposed action may reach 50% of any of the thresholds in "a" through "c", above.	D2g	☐	☐
e. The proposed action may result in the combustion or thermal treatment of more than 1 ton of refuse per hour.	D2s	☐	☐
f. Other impacts: _____ _____		☐	☐

7. Impact on Plants and Animals

The proposed action may result in a loss of flora or fauna. (See Part 1. E.2. m.-q.) ☑ NO ☐ YES

If "Yes", answer questions a - j. If "No", move on to Section 8.

	Relevant Part I Question(s)	No, or small impact may occur	Moderate to large impact may occur
a. The proposed action may cause reduction in population or loss of individuals of any threatened or endangered species, as listed by New York State or the Federal government, that use the site, or are found on, over, or near the site.	E2o	☐	☐
b. The proposed action may result in a reduction or degradation of any habitat used by any rare, threatened or endangered species, as listed by New York State or the federal government.	E2o	☐	☐
c. The proposed action may cause reduction in population, or loss of individuals, of any species of special concern or conservation need, as listed by New York State or the Federal government, that use the site, or are found on, over, or near the site.	E2p	☐	☐
d. The proposed action may result in a reduction or degradation of any habitat used by any species of special concern and conservation need, as listed by New York State or the Federal government.	E2p	☐	☐

e. The proposed action may diminish the capacity of a registered National Natural Landmark to support the biological community it was established to protect.	E3c	☐	☐
f. The proposed action may result in the removal of, or ground disturbance in, any portion of a designated significant natural community. Source: _____	E2n	☐	☐
g. The proposed action may substantially interfere with nesting/breeding, foraging, or over-wintering habitat for the predominant species that occupy or use the project site.	E2m	☐	☐
h. The proposed action requires the conversion of more than 10 acres of forest, grassland or any other regionally or locally important habitat. Habitat type & information source: _____ _____	E1b	☐	☐
i. Proposed action (commercial, industrial or recreational projects, only) involves use of herbicides or pesticides.	D2q	☐	☐
j. Other impacts: _____ _____		☐	☐

8. Impact on Agricultural Resources

The proposed action may impact agricultural resources. (See Part 1. E.3.a. and b.) ☑ NO ☐ YES

If "Yes", answer questions a - h. If "No", move on to Section 9.

	Relevant Part I Question(s)	**No, or small impact may occur**	**Moderate to large impact may occur**
a. The proposed action may impact soil classified within soil group 1 through 4 of the NYS Land Classification System.	E2c, E3b	☐	☐
b. The proposed action may sever, cross or otherwise limit access to agricultural land (includes cropland, hayfields, pasture, vineyard, orchard, etc).	E1a, Elb	☐	☐
c. The proposed action may result in the excavation or compaction of the soil profile of active agricultural land.	E3b	☐	☐
d. The proposed action may irreversibly convert agricultural land to non-agricultural uses, either more than 2.5 acres if located in an Agricultural District, or more than 10 acres if not within an Agricultural District.	E1b, E3a	☐	☐
e. The proposed action may disrupt or prevent installation of an agricultural land management system.	El a, E1b	☐	☐
f. The proposed action may result, directly or indirectly, in increased development potential or pressure on farmland.	C2c, C3, D2c, D2d	☐	☐
g. The proposed project is not consistent with the adopted municipal Farmland Protection Plan.	C2c	☐	☐
h. Other impacts: _____		☐	☐

9. Impact on Aesthetic Resources
The land use of the proposed action are obviously different from, or are in sharp contrast to, current land use patterns between the proposed project and a scenic or aesthetic resource. (Part 1. E.1.a, E.1.b, E.3.h.) ☐ NO ☑ YES
If "Yes", answer questions a - g. If "No", go to Section 10.

	Relevant Part I Question(s)	No, or small impact may occur	Moderate to large impact may occur
a. Proposed action may be visible from any officially designated federal, state, or local scenic or aesthetic resource.	E3h	☑	☐
b. The proposed action may result in the obstruction, elimination or significant screening of one or more officially designated scenic views.	E3h, C2b	☑	☐
c. The proposed action may be visible from publicly accessible vantage points: i. Seasonally (e.g., screened by summer foliage, but visible during other seasons) ii. Year round	E3h	 ☑ ☑	 ☐ ☐
d. The situation or activity in which viewers are engaged while viewing the proposed action is: i. Routine travel by residents, including travel to and from work ii. Recreational or tourism based activities	E3h E2q, E1c	 ☑ ☑	 ☐ ☐
e. The proposed action may cause a diminishment of the public enjoyment and appreciation of the designated aesthetic resource.	E3h	☑	☐
f. There are similar projects visible within the following distance of the proposed project: 0-1/2 mile ½ -3 mile 3-5 mile 5+ mile	D1a, E1a, D1f, D1g	☑	☐
g. Other impacts: The site is located approximately 0.03+/- miles from the Bronx River Parkway, a designated Scenic Byway.		☑	☐

10. Impact on Historic and Archeological Resources
The proposed action may occur in or adjacent to a historic or archaeological resource. (Part 1. E.3.e, f. and g.) ☑ NO ☐ YES
If "Yes", answer questions a - e. If "No", go to Section 11.

	Relevant Part I Question(s)	No, or small impact may occur	Moderate to large impact may occur
a. The proposed action may occur wholly or partially within, or substantially contiguous to, any buildings, archaeological site or district which is listed on the National or State Register of Historical Places, or that has been determined by the Commissioner of the NYS Office of Parks, Recreation and Historic Preservation to be eligible for listing on the State Register of Historic Places.	E3e	☐	☐
b. The proposed action may occur wholly or partially within, or substantially contiguous to, an area designated as sensitive for archaeological sites on the NY State Historic Preservation Office (SHPO) archaeological site inventory.	E3f	☐	☐
c. The proposed action may occur wholly or partially within, or substantially contiguous to, an archaeological site not included on the NY SHPO inventory. Source: _____	E3g	☐	☐

d. Other impacts: _____ _____		☐	☐
e. If any of the above (a-d) are answered "Moderate to large impact may occur", continue with the following questions to help support conclusions in Part 3:			
i. The proposed action may result in the destruction or alteration of all or part of the site or property.	E3e, E3g, E3f	☐	☐
ii. The proposed action may result in the alteration of the property's setting or integrity.	E3e, E3f, E3g, E1a, E1b	☐	☐
iii. The proposed action may result in the introduction of visual elements which are out of character with the site or property, or may alter its setting.	E3e, E3f, E3g, E3h, C2, C3	☐	☐

11. Impact on Open Space and Recreation

The proposed action may result in a loss of recreational opportunities or a reduction of an open space resource as designated in any adopted municipal open space plan.
(See Part 1. C.2.c, E.1.c., E.2.q.)
If "Yes", answer questions a - e. If "No", go to Section 12.

☑ NO ☐ YES

	Relevant Part I Question(s)	No, or small impact may occur	Moderate to large impact may occur
a. The proposed action may result in an impairment of natural functions, or "ecosystem services", provided by an undeveloped area, including but not limited to stormwater storage, nutrient cycling, wildlife habitat.	D2e, E1b E2h, E2m, E2o, E2n, E2p	☐	☐
b. The proposed action may result in the loss of a current or future recreational resource.	C2a, E1c, C2c, E2q	☐	☐
c. The proposed action may eliminate open space or recreational resource in an area with few such resources.	C2a, C2c E1c, E2q	☐	☐
d. The proposed action may result in loss of an area now used informally by the community as an open space resource.	C2c, E1c	☐	☐
e. Other impacts: _____ _____		☐	☐

12. Impact on Critical Environmental Areas

The proposed action may be located within or adjacent to a critical environmental area (CEA). (See Part 1. E.3.d)
If "Yes", answer questions a - c. If "No", go to Section 13.

☐ NO ☑ YES

	Relevant Part I Question(s)	No, or small impact may occur	Moderate to large impact may occur
a. The proposed action may result in a reduction in the quantity of the resource or characteristic which was the basis for designation of the CEA.	E3d	☑	☐
b. The proposed action may result in a reduction in the quality of the resource or characteristic which was the basis for designation of the CEA.	E3d	☑	☐
c. Other impacts: _____ _____		☐	☐

13. Impact on Transportation

The proposed action may result in a change to existing transportation systems. ☑ NO ☐ YES
(See Part 1. D.2.j)
If "Yes", answer questions a - f. If "No", go to Section 14.

	Relevant Part I Question(s)	No, or small impact may occur	Moderate to large impact may occur
a. Projected traffic increase may exceed capacity of existing road network.	D2j	☐	☐
b. The proposed action may result in the construction of paved parking area for 500 or more vehicles.	D2j	☐	☐
c. The proposed action will degrade existing transit access.	D2j	☐	☐
d. The proposed action will degrade existing pedestrian or bicycle accommodations.	D2j	☐	☐
e. The proposed action may alter the present pattern of movement of people or goods.	D2j	☐	☐
f. Other impacts: _____ _____		☐	☐

14. Impact on Energy

The proposed action may cause an increase in the use of any form of energy. ☑ NO ☐ YES
(See Part 1. D.2.k)
If "Yes", answer questions a - e. If "No", go to Section 15.

	Relevant Part I Question(s)	No, or small impact may occur	Moderate to large impact may occur
a. The proposed action will require a new, or an upgrade to an existing, substation.	D2k	☐	☐
b. The proposed action will require the creation or extension of an energy transmission or supply system to serve more than 50 single or two-family residences or to serve a commercial or industrial use.	D1f, D1q, D2k	☐	☐
c. The proposed action may utilize more than 2,500 MWhrs per year of electricity.	D2k	☐	☐
d. The proposed action may involve heating and/or cooling of more than 100,000 square feet of building area when completed.	D1g	☐	☐
e. Other Impacts: _____ _____			

15. Impact on Noise, Odor, and Light

The proposed action may result in an increase in noise, odors, or outdoor lighting. ☑ NO ☐ YES
(See Part 1. D.2.m., n., and o.)
If "Yes", answer questions a - f. If "No", go to Section 16.

	Relevant Part I Question(s)	No, or small impact may occur	Moderate to large impact may occur
a. The proposed action may produce sound above noise levels established by local regulation.	D2m	☐	☐
b. The proposed action may result in blasting within 1,500 feet of any residence, hospital, school, licensed day care center, or nursing home.	D2m, E1d	☐	☐
c. The proposed action may result in routine odors for more than one hour per day.	D2o	☐	☐

d. The proposed action may result in light shining onto adjoining properties.	D2n	☐	☐
e. The proposed action may result in lighting creating sky-glow brighter than existing area conditions.	D2n, E1a	☐	☐
f. Other impacts: _____ _____		☐	☐

16. Impact on Human Health

The proposed action may have an impact on human health from exposure to new or existing sources of contaminants. (See Part 1.D.2.q., E.1. d. f. g. and h.) ☐ NO ☑ YES

If "Yes", answer questions a - m. If "No", go to Section 17.

	Relevant Part I Question(s)	No,or small impact may cccur	Moderate to large impact may occur
a. The proposed action is located within 1500 feet of a school, hospital, licensed day care center, group home, nursing home or retirement community.	E1d	☑	☐
b. The site of the proposed action is currently undergoing remediation.	E1g, E1h	☐	☐
c. There is a completed emergency spill remediation, or a completed environmental site remediation on, or adjacent to, the site of the proposed action.	E1g, E1h	☑	☐
d. The site of the action is subject to an institutional control limiting the use of the property (e.g., easement or deed restriction).	E1g, E1h	☐	☐
e. The proposed action may affect institutional control measures that were put in place to ensure that the site remains protective of the environment and human health.	E1g, E1h	☐	☐
f. The proposed action has adequate control measures in place to ensure that future generation, treatment and/or disposal of hazardous wastes will be protective of the environment and human health.	D2t	☐	☐
g. The proposed action involves construction or modification of a solid waste management facility.	D2q, E1f	☐	☐
h. The proposed action may result in the unearthing of solid or hazardous waste.	D2q, E1f	☐	☐
i. The proposed action may result in an increase in the rate of disposal, or processing, of solid waste.	D2r, D2s	☐	☐
j. The proposed action may result in excavation or other disturbance within 2000 feet of a site used for the disposal of solid or hazardous waste.	E1f, E1g E1h	☐	☐
k. The proposed action may result in the migration of explosive gases from a landfill site to adjacent off site structures.	E1f, E1g	☐	☐
l. The proposed action may result in the release of contaminated leachate from the project site.	D2s, E1f, D2r	☐	☐
m. Other impacts: _____ _____		☐	☐

17. Consistency with Community Plans

The proposed action is not consistent with adopted land use plans. ☑ NO ☐ YES
(See Part 1. C.1, C.2. and C.3.)
If "Yes", answer questions a - h. If "No", go to Section 18.

	Relevant Part I Question(s)	No, or small impact may occur	Moderate to large impact may occur
a. The proposed action's land use components may be different from, or in sharp contrast to, current surrounding land use pattern(s).	C2, C3, D1a E1a, E1b	☐	☐
b. The proposed action will cause the permanent population of the city, town or village in which the project is located to grow by more than 5%.	C2	☐	☐
c. The proposed action is inconsistent with local land use plans or zoning regulations.	C2, C2, C3	☐	☐
d. The proposed action is inconsistent with any County plans, or other regional land use plans.	C2, C2	☐	☐
e. The proposed action may cause a change in the density of development that is not supported by existing infrastructure or is distant from existing infrastructure.	C3, D1c, D1d, D1f, D1d, Elb	☐	☐
f. The proposed action is located in an area characterized by low density development that will require new or expanded public infrastructure.	C4, D2c, D2d D2j	☐	☐
g. The proposed action may induce secondary development impacts (e.g., residential or commercial development not included in the proposed action)	C2a	☐	☐
h. Other: _____ _____		☐	☐

18. Consistency with Community Character

The proposed project is inconsistent with the existing community character. ☑ NO ☐ YES
(See Part 1. C.2, C.3, D.2, E.3)
If "Yes", answer questions a - g. If "No", proceed to Part 3.

	Relevant Part I Question(s)	No, or small impact may occur	Moderate to large impact may occur
a. The proposed action may replace or eliminate existing facilities, structures, or areas of historic importance to the community.	E3e, E3f, E3g	☐	☐
b. The proposed action may create a demand for additional community services (e.g. schools, police and fire)	C4	☐	☐
c. The proposed action may displace affordable or low-income housing in an area where there is a shortage of such housing.	C2, C3, D1f D1g, E1a	☐	☐
d. The proposed action may interfere with the use or enjoyment of officially recognized or designated public resources.	C2, E3	☐	☐
e. The proposed action is inconsistent with the predominant architectural scale and character.	C2, C3	☐	☐
f. Proposed action is inconsistent with the character of the existing natural landscape.	C2, C3 E1a, E1b E2g, E2h	☐	☐
g. Other impacts: _____ _____		☐	☐

PRINT FULL FORM

Appendix C - SEQRA EAF Part III

Full Environmental Assessment Form
Part 3 - Evaluation of the Magnitude and Importance of Project Impacts and Determination of Significance

Part 3 provides the reasons in support of the determination of significance. The lead agency must complete Part 3 for every question in Part 2 where the impact has been identified as potentially moderate to large or where there is a need to explain why a particular element of the proposed action will not, or may, result in a significant adverse environmental impact.

Based on the analysis in Part 3, the lead agency must decide whether to require an environmental impact statement to further assess the proposed action or whether available information is sufficient for the lead agency to conclude that the proposed action will not have a significant adverse environmental impact. By completing the certification on the next page, the lead agency can complete its determination of significance.

Reasons Supporting This Determination:
To complete this section:

- Identify the impact based on the Part 2 responses and describe its magnitude. Magnitude considers factors such as severity, size or extent of an impact.
- Assess the importance of the impact. Importance relates to the geographic scope, duration, probability of the impact occurring, number of people affected by the impact and any additional environmental consequences if the impact were to occur.
- The assessment should take into consideration any design element or project changes.
- Repeat this process for each Part 2 question where the impact has been identified as potentially moderate to large or where there is a need to explain why a particular element of the proposed action will not, or may, result in a significant adverse environmental impact.
- Provide the reason(s) why the impact may, or will not, result in a significant adverse environmental impact
- For Conditional Negative Declarations identify the specific condition(s) imposed that will modify the proposed action so that no significant adverse environmental impacts will result.
- Attach additional sheets, as needed.

The proposed project complies with all applicable criteria and requirements for a "Tower on Podium" building in the MVW-Hub District and will not result in any impacts that exceed the thresholds established by the Generic Environmental Impact Statement for the MVW District and corresponding "form based" zoning code (the "MVW GEIS"). The MVW GEIS examined potential future build-out under the MVW zoning code and projected future development in the district, which could yield approximately 3,153 new residential units and approximately 263,700 square feet of commercial space. The MVW GEIS analyzed eighteen (18) parcels designated for potential development in the build-out scenario, including 20 S. West Street.

The EAF Part 2 identified no questions where the impact has been identified as potentially moderate to large. There is a need to explain why a particular element of the proposed action will not result in a significant adverse environmental impact for EAF Part 2 questions as follows:

The project is located within 5 miles of the Bronx River Parkway, which is an officially designated and publicly accessible scenic byway. Further, the project is located in a CEA (County & State Park Lands designated with exceptional or unique character by Westchester County). Based on the analysis in the Environmental Assessment Report for the project, since the proposed project has been designed in accordance with the recommended Design Guidelines and “form based” dimensional requirements of the MVW zoning code, the Project will have a visual and urban design character consistent with the MVW GEIS and the project, as proposed will not result in any adverse impacts to the visual character of the area.

The project is located within 1,500 feet of facilities serving children, however the project complies with all requirements of the MVSW zoning code, and will not result in any impacts on municipal services and community resources that exceed the thresholds established in the MVW GEIS.

Based upon the Environmental Assessment for the project, if has been determined that the project complies with all applicable laws, and is not anticipated to have a significant adverse effect upon the environment. The project complies with all applicable criteria and requirements and will not result in any impacts that exceed the thresholds established by the Generic Environmental Impact Statement for the MVW District and corresponding "form based" zoning code (the "MVW GEIS").

Determination of Significance - Type 1 and Unlisted Actions

SEQR Status: ☑ Type 1 ☐ Unlisted

Identify portions of EAF completed for this Project: ☑ Part 1 ☑ Part 2 ☑ Part 3

Upon review of the information recorded on this EAF, as noted, plus this additional support information
Generic Environmental Impact Statement for the Mount Vernon West Transit Oriented Form-Based Zoning District (MVW GEIS)

and considering both the magnitude and importance of each identified potential impact, it is the conclusion of the
City of Mount Vernon City Council as lead agency that:

☑ A. This project will result in no significant adverse impacts on the environment, and, therefore, an environmental impact statement need not be prepared. Accordingly, this negative declaration is issued.

☐ B. Although this project could have a significant adverse impact on the environment, that impact will be avoided or substantially mitigated because of the following conditions which will be required by the lead agency:

There will, therefore, be no significant adverse impacts from the project as conditioned, and, therefore, this conditioned negative declaration is issued. A conditioned negative declaration may be used only for UNLISTED actions (see 6 NYCRR 617.7(d)).

☐ C. This Project may result in one or more significant adverse impacts on the environment, and an environmental impact statement must be prepared to further assess the impact(s) and possible mitigation and to explore alternatives to avoid or reduce those impacts. Accordingly, this positive declaration is issued.

Name of Action: 20 S. West Street

Name of Lead Agency: City of Mount Vernon City Council

Name of Responsible Officer in Lead Agency: Danielle Browne, Esq.

Title of Responsible Officer: City Council President

Signature of Responsible Officer in Lead Agency: Date:

Signature of Preparer (if different from Responsible Officer): Nina Martin Date: 08/14/2025

For Further Information:

Contact Person: Nicole Bonilla, City Clerk

Address: 1 Roosevelt Square N, Mount Vernon, New York 10550

Telephone Number: (914)-665-2300

E-mail: cityclerk@mountvernonny.gov

For Type 1 Actions and Conditioned Negative Declarations, a copy of this Notice is sent to:

Chief Executive Officer of the political subdivision in which the action will be principally located (e.g., Town / City / Village of)
Other involved agencies (if any)
Applicant (if any)
Environmental Notice Bulletin: http://www.dec.ny.gov/enb/enb.html

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Appendix D – Phase I ESA

SESI
CONSULTING
ENGINEERS

PHASE I ENVIRONMENTAL SITE ASSESSMENT REPORT

FOR

20 S West Street (156 Mt Vernon Avenue)
Mount Vernon, NY

Prepared For:

MACQUESTEN STATION TAKEOVER, LLC
438 Fifth Avenue, Suite 100
Pelham, New York 10803

Prepared By:

SESI CONSULTING ENGINEERS, PC
12A Maple Avenue
Pine Brook, NJ 07058

Project No.: 9387

April 2016

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1.0 SUMMARY

SESI Consulting Engineers, D.P.C. (SESI), at the request of MacQuesten Station Takeover, LLC (User) has conducted a Phase I Environmental Site Assessment (Report) for the subject property located at 20 South West Street (a.k.a 156 Mt Vernon Ave), Mt. Vernon, New York (Site). Our services included a Site reconnaissance, a state and federal records search, and examination of available historic maps. The procedures used and conclusions of our investigation are outlined in this Phase I Report.

Based on our investigation of online databases, historic records, our Site reconnaissance, and research of current and historic records for the Site and properties within close proximity of the subject Site, there are conditions on the Site that warrant further investigation in order to satisfy the purpose of this report. These items are noted in the CONCLUSIONS section of this report.

2.0 INTRODUCTION

2.1 PURPOSE

The purpose of this study is to determine the recognized environmental conditions (RECs) at the Site prior to its use/reuse as a proposed residential development.

SESI has developed this Phase 1 ESA Report on behalf of the User. It has been developed in substantial conformance with the ASTM's International Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process E 1527-13.

2.2 SCOPE OF SERVICES

The Scope of Work and contract for services are outlined in a Professional Services Agreement (Agreement) dated March 03, 2016 and authorized by User on March 29, 2016.

2.3 SIGNIFICANT ASSUMPTIONS

Information obtained by SESI and by third parties is assumed to be accurate and/or true. SESI makes no warranty, either implied or expressed, regarding the accuracy or validity of information supplied by others.

2.4 LIMITATIONS/METHODOLOGY

This report was prepared for the exclusive use of MacQuesten Station Takeover, LLC. During our investigation, we have used methodologies that conform to generally accepted practices for this type of work. The scope and character of our environmental assessment were, in our professional judgment, sufficient to justify the stated conclusions, after giving due consideration to the purpose of the investigation, the data reviewed, the background history of the Site as found in historical records, and visual observation of the Site. No other investigation was performed other than that which is expressly noted in this Report.

2.5 TERMS AND CONDITIONS

The terms and conditions governing the services provided in preparing this report are detailed in the Agreement referenced in Section 2.2.

2.6 USER RELIANCE

This investigation was conducted for MacQuesten Station Takeover, LLC. It is intended to identify RECs in connection with the Property.

2.7 DISCLAIMER

This Report was prepared by SESI for the sole and exclusive use of MacQuesten Station Takeover, LLC. Nothing under the Agreement between SESI and the User shall be construed to give any rights or benefits to anyone other than the User and SESI, and all duties and responsibilities undertaken pursuant to the Agreement will be for the sole and exclusive benefit of the User and SESI and not for the benefit of any other party. SESI does not intend, without its written consent, for this Report to be disseminated to anyone other than the User, or to be used or relied upon by anyone other than the User. Use of the Report by any other person is unauthorized and such use is at their sole risk.

3.0 SITE DESCRIPTION

3.1 LOCATION/STRUCTURES/LEGAL DESCRIPTION

The Site consists of approximately a 0.45-acre (21,000 sq. ft.) parcel located at 20 South West Street, Mount Vernon, Westchester County, New York. The Site is currently occupied by a Chase bank office in the north of the building and other small businesses including a restaurant, silversmith, office space, and karate studio. A parking lot is located to the east of the building. South West Street is located to the east and Mt Vernon West train station is located to the west of the Site. The Site is identified on the tax map as section 164.67, block 1057, lot 13, and the property address is 20 South West Street, Mount Vernon, NY 10550.

3.2 SITE & VICINITY CHARACTERISTICS

The Site is located in highly urbanized area of Mt Vernon.

3.3 CURRENT USE OF THE PROPERTY

The Site is currently occupied by Mt. Vernon West Plaza, a commercial building that includes following businesses:

Suite #	Business	Business Type
101	Vacant	NA
102	Art-craft Silversmith	Metal plating and polishing
103	Vacant	NA
104	Vacant	NA
105	Vacant	NA
202	Baxter Karate	Karate studio
204	Vacant	NA
206	Vacant	NA
208	Vacant	NA
210	Celtic Services	Demolition company office
212	Vacant	NA
North portion of the building	Chase Bank	Bank

3.4 DESCRIPTION OF STRUCTURES, ROADS, AND SITE IMPROVEMENTS

3.4.1 Utilities

The City of Mount Vernon provides the utilities to the subject Site.

3.4.2 Building Description

The building at the Site is a two-storied concrete structure with brick finish constructed in 1916. The building has been used as train station till late 1950. Per Mr. Michael Levy (General Manger at Davenis Realty, Inc.), the building was later purchased by Davins Realty, Inc. and converted into a two-story commercial plaza (Mt Vernon West Plaza) and continues to have the same use to date.

3.5 Environmental Permits

Review of the EDR Radius Map Report for the Site indicates no environmental permits attributed to the Site.

3.6 CURRENT USES OF ADJOINING PROPERTIES

Direction	Adjacent Property
North	Mt Vernon Avenue is located to the north. Commercial buildings are located across the Mt. Vernon Avenue.
South	22 S West Street is located to the south. The property was a service station that is being remediated under the NYS Brownfield Program. It is proposed for a mixed residential/commercial development.
East	Metropolitan Transportation Authority Police Department and Animal Clinic of Mt Vernon are located across S West Street.
West	Mt. Vernon West Railroad and Bronx River is located to the west of the Site.

4.0 USER PROVIDED INFORMATION

4.1 TITLE INFORMATION

The title information is not available for review.

4.2 ENVIRONMENTAL LIENS OR ACTIVITY AND USE LIMITATIONS

SESI did not find any information regarding environmental liens or activity and use limitations.

4.3 SPECIALIZED KNOWLEDGE/OTHER USER PROVIDED INFORMATION

No information relating to specialized knowledge of the Site was provided by the User.

4.4 COMMONLY KNOWN OR REASONABLY ASCERTAINABLE RECORDS

The User provided no Commonly Known or Reasonably Ascertainable Records.

4.5 VALUATION REDUCTION FOR ENVIRONMENTAL ISSUES

The Report User indicated no knowledge of any valuation reduction related to environmental concerns.

4.6 OWNER, PROPERTY MANAGER, AND OCCUPANT INFORMATION

The Site is currently owned and managed by the Davenis Realty, Inc. and Cross County Parking, Inc. It is occupied by Mt. Vernon West Plaza, a commercial building that includes Chase Bank, Baxter Karate Dojo, Artcraft Silversmiths, and Celtic Services.

5.0 RECORDS REVIEW

5.1 STANDARD ENVIRONMENTAL RECORD SOURCES, FEDERAL CITY AND STATE

5.1.1 EDR Search

A search of available environmental records was conducted by Environmental Data Resources, Inc. (EDR) and reported in the EDR Radius Map Report with GeoCheck. The report meets the government records search requirements of ASTM Standard of Practice for Environmental Site Assessments, E-1527-13. Search distances are per ASTM standards. A Radius Map Check was performed by EDR. The results of all properties in the search area with environmental records are listed below:

Environmental Listing	Subject Property	<1/8 Miles	1/8-1/4 Miles	1/4-1/2 Miles	1/2–1 Miles
Federal RCRA-LQG	NA	1	1	NR	NR
Federal RCRA-SQG	NA	0	1	NR	NR
Federal RCRA-CESQG	NA	1	3	NR	NR
State and Tribal – NY SHWS	NA	0	1	3	NR
State and Tribal – NY SWF/LF	NA	0	1	1	NR
State and Tribal – NY LTANKS	NA	9	21	55	NR
State and Tribal – NY UST	NA	8	16	NR	NR
State and Tribal – NY CBS UST	NA	1	0	NR	NR
State and Tribal – NY CBS	NA	0	2	NR	NR
State and Tribal – NY AST	NA	2	9	NR	NR
State and Tribal – NY CBS AST	NA	1	2	NR	NR
State and Tribal – NY VCP	NA	1	0	1	NR
State and Tribal – NY BROWNFIELDS	NA	2	1	0	NR
RCRA NonGen /NLR	NA	11	14	NR	NR
NY DRYCLEANERS	NA	0	2	NR	NR
NY MANIFEST	NA	18	20	NR	NR
NJ MANIFEST	NA	0	3	NR	NR
RI MANIFEST	NA	1	0	NR	NR
PA MANIFEST	NA	1	0	NR	NR
EDR Hist Auto	NA	9		NR	NR

NA - Not Applicable
NR –Not Requested at this search distance

Based on the EDR Radius Map Report, the Artcraft Silversmith located on the first floor (Suite 102) was listed in NY LTANK, RCRA Non-Gen, FINDS/ECHO, and NY MANIFEST database. A spill of 10 gallons of #2 fuel oil resulting from tank overfill was reported on June 15, 1990 at Artcraft Silversmith/ Davenis Realty (Spill #900317). The spill was closed by NYSDEC on June 25, 1990 following the completion of necessary remedial activities. Artcraft Silversmith is presently listed on the RCRA Non-Generators list. SESI reviewed the EPA Enforcement and Compliant History (ECH) website and no violations were listed for the Site.

The Site has a National Pollutant Discharge Elimination System (NPDES) permit to discharge into the Yonkers Sanitary System.

NY Manifest database shows the off-site disposal of approximately 191 gallons of plating bath solution from electroplating operation in February 2002.

The 1,000 gallon AST located at the Site was not identified in the NYSDEC AST or bulk storage tank database. SESI has filed a Freedom Of Information Law (FOIL) request for additional information about the Site (FOIL request reference # W006308), no data resulted from this request.

5.1.2 Title and Prior Ownership Search

Previous deeds and title search reports were not available for SESI to review.

5.2 PHYSICAL SETTING SOURCES

Sources used to evaluate the physical setting of the property include:

- USGS Topographic Maps,
- Aerial Photographs,
- Site Reconnaissance, and,
- Sanborn Fire Insurance Maps.

5.2.1 Topography

According to the United States Geological Survey (USGS) MOUNT VERNON, NY, 2013, 7.5-minute Series topographic map, the Site's average topographic elevation is approximately 89' above mean sea level (msl). The topographic map indicates general topographic gradient at the Site is to northwest.

5.2.2 Surface Waters and Wetlands

There are no surface water bodies or streams on or directly adjacent to the Site. The closest open surface water to the Site is the Bronx River, which is located approximately 150-250 feet (ft) to the west.

5.2.3 Geology and Groundwater

The USDA NRCS Soil Survey for Westchester County indicates that the Site lies within a unit designated Urban Land (Uf). As such, no specific soil properties are defined by NRCS. A definition of Urban Soil by Bockheim (1974) is: *a soil material having a non-agricultural, man-made surface layer more than 50 cm thick that has been produced by mixing, filling, or by contamination of land surfaces in urban and suburban areas*.

The USDA NRCS Urban Land classification of the soil for the Site, does not result in any specific defined hydrogeologic properties. However, environmental investigations

conducted in the vicinity, documents that groundwater exists at depth 18-19 feet below ground surface.

5.3 HISTORICAL USE INFORMATION FOR THE PROPERTY

Sources used to determine the historical use of the property include:

- Aerial Photographs,
- EDR City Directory Abstract,
- USGS Topographic Maps,
- Sanborn Fire Insurance Maps,
- Environmental Lien and AUL Search Report,
- EDR Property Tax Map Report, and
- EDR Building Permit Report.

5.3.1 Aerial Photographs

Following is a summary of the EDR review of 13 Aerial Photographs dated 1941, 1946, 1951, 1954, 1962, 1974, 1976, 1985, 1989, 1994, 2006, 2009, and 2011:

Year	General Information	Observations
1941	Quality of the aerial photograph is poor	The Site is occupied by the Mt. Vernon Station building with the parking lot.
1946	Quality of the aerial photograph is poor	No significant changes are observed.
1951	Quality of the aerial photograph is fair	No significant changes are observed.
1954	Quality of the aerial photograph is fair	No significant changes are observed.
1962	Quality of the aerial photograph is fair	No significant changes are observed.
1974	Quality of the aerial photograph is fair	No significant changes are observed.
1976	Quality of the aerial photograph is poor	No significant changes are observed.
1985	Quality of the aerial photograph is fair	No significant changes are observed.
1989	Quality of the aerial photograph is poor	No significant changes are observed.
1994	Aerial photograph is in color and the quality is poor	No significant changes are observed.
2006	Quality of the aerial photograph is fair	No significant changes are observed.
2009	Quality of the aerial photograph is fair	No significant changes are observed.
2011	Quality of the aerial photograph is poor	No significant changes are observed.

5.3.2 EDR City Directory Abstract

SESI obtained historical city directory data from EDR for the Site. SESI review City Directory listing for the years 1973, 1978, 1983, 1988, 1992, 1995, 1999, 2003, 2008, and 2013. The Site has not been identified in the EDR City Directory listings.

Year	Occupant	Use
1973	A B C Drug Co Inc	Drug Store
	G Allen & Son Inc.	NA
	Artcraft Silversmith Inc.	Silver polishing and plating
	Bid Leasing Company	Leasing Company
	County Trust Co	NA
	Davenis Realty Inc.	Office
	Electronic Futures	Store
	F&D Enterprises	Store
	Soloff Motors	Office
	Harry N Troup, Pltg	NA
	Tynan Incinerator	Office

Year	Occupant	Use
1978	A B C Drug Co Inc	Drug Store
	Artcraft Silversmith Inc.	Silver polishing and plating
	The Bank of NY	Bank office
	Bid Leasing Company	Leasing Company
	Color by Leonard Studios	Art Studio
	Davenis Realty Inc.	Office
	Environmental Labs Inc.	Laboratory
	F&D Enterprises	Store
	Inter-City Ins Fnd	NA
	Inter-City Svc Sta	NA
	Gerard Lechieiter	NA
	R J Meiseiman Atty	Attorney office
	NY State Assn	NA
	Soloff Motors	Office
	Triangle Taxi	Taxi Service
	Harry N Troup, Pltg	NA
	Tynan Incinerator	Office
1983	A B C Drug Co Inc	Drug Store
	Artcraft Silversmith Inc.	Silver polishing and plating
	The Bank of NY	Bank office
	Bid Leasing Company	Leasing Company
	Color by Leonard Studios	Art Studio
	Davenis Realty Inc.	Office
	Environmental Labs Inc.	Laboratory
	F&D Enterprises	Office
	Inter-City Ins Fnd	NA
	Inter-City Svc Sta	NA
	Lark Associates Inc.	Office
	Gerard Lechieiter	NA
	Leonard Soloff Inc.	Photo Studio
	Miss Dorothy's Dance	Dance School
	Sigma Pharmacti Crp	Pharmacy
	Soloff Motors	Office
	Triangle Taxi	Taxi Service
	Harry N Troup, Pltg	NA
	Zelite Corp	Office
1988	A B C Drug Co Inc	Drug Store
	A B C Nursing Homes	Nursing home
	Artcraft Silversmith Inc.	Silver polishing and plating
	Bank of New York	Bank office
	Bid Leasing Company	Leasing Company
	Color by Leonard Studios	Art Studio
	Dante-Chester Pictures	Photo Studio
	Walker Dante Weddings	Photo Studio
	Davenis Realty Inc.	Office
	Environmental Labs Inc.	Laboratory
	F&D Enterprises	Office
	Lark Associates Inc.	Office
	Miss Dorothy's Creative Dance	Dance School
	Soloff Motors Inc.	Office
	Soloff Photography	Photo Studio
	Troup Harry N, Pltg	NA
	Walker Color NY	Photo Studio
	D Walker Weddings	Photo Studio

Year	Occupant	Use
1992	A B C Drug Co Inc	Drug Store
	Artcraft Silversmith Inc.	Silver polishing and plating
	Baxter Shorinryu Karate Dojo	Karate Studio
	Bid Leasing Company	Leasing Company
	Chester Color Studios incorporated	Art/ Photo Studio
	Color by Leonard Studios	Art Studio
	Dante Chester School Pictures	Photo Studio
	Dante Walker Weddings	Photo Studio
	Davenis Realty Inc.	Office
	Environmental Labs Inc.	Laboratory
	Lark Associates Inc.	Office
	Miss Dorothy's Creative Dance Center	Dance School
	Soloff Motors Inc.	Office
	Soloff Photography	Photo Studio
	Troup Harry N, Pltg	NA
	Walker Color of New York Inc.	Photo Studio
	Westchester Pharmacy Inc.	Pharmacy
1995	Artcraft Silversmith Inc.	Silver polishing and plating
	Baxter Shorinryu Karate Dojo	Karate Studio
	Bid Leasing Company	Leasing Company
	Color by Leonard Studios	Art Studio
	Dante Color Studios Incorporated	Art/Photo Studio
	Davenis Realty Inc.	Office
	Miss Dorothy's Creative Dance Center	Dance School
	Parkway Ride	Taxi Service
	Soloff Motors Inc.	Office
	Soloff Photography	Photo Studio
	Station Pharmacy	Pharmacy
	Troup Harry N, Pltg	NA
	Walker Color of New York Inc.	Photo Studio
1999	Artcraft Silversmith Inc.	Silver polishing and plating
	Bank of New York	Bank office
	Baxter Shorinryu Kart Dojo	Karate Studio
	Bid Leasing Company	Leasing Company
	Chester Color Studios incorporated	Art/Photo Studio
	Color by Leonard Studios	Art Studio
	Dante Color Studios Incorporated	Art Studio
	Miss Dorothy's Creative Dance	Dance School
	Parkway Ride	Taxi Service
	Soloff Motors Inc.	Office
	Soloff Photography	Photo Studio
	Walker Color of New York Incorporated	Art /Photo Studio
2003	Artcraft Silversmith Inc.	Silver polishing and plating
	Baxter Shorinryu Kart Dojo	Karate Studio
	Guru Transport Corp.	Transportation
	Millennium Drugs Inc.	Drug store
	Miss Dorothy's Crtv Dance Ctr	Dance School
	Soloff Motors Inc.	Office
	Soloff Photography	Photo Studio
2008	Artcraft Silversmith Inc.	Silver polishing and plating
	Bank of New York	Bank office
	Baxter Shorinryu Karate Dojo	Karate Studio
	Cross Country Parking Inc.	
	Davenis Realty Inc.	Office
	Miss Dorothy's Creative Dance	Dance School
	Onyes Mini Mart	Shop
	Sherwood Taxi	Taxi Service
	Soloff Photography	Photo Studio

Year	Occupant	Use
2013	Artcraft Silversmith Inc.	Silver polishing and plating
	Baxter Shorinryu Karate Dojo	Karate Studio
	Chase	Bank office
	Davenis Realty Inc.	Office
	Home & Away	
	Miss Dorothy's Creat	Dance School
	Onyes Mini Mart	Shop

Based on the review of the city directory records provided by EDR, the Site has been occupied by Artcraft Silversmith Inc., a polishing and plating facility since 1973 and Environmental Lab Inc. from 1973-1988. The use of the Site as industrial plating and environmental laboratory constitute a REC.

5.3.3 USGS Topographic Maps

SESI reviewed the USGS Mount Vernon, 7.5 Minute Series 24000 topographic map of the area, dated 1898, 1900, 1947, 1956, 1966, 1979, 1995, and 2013 provided by EDR. The topographic maps identify the Site as relatively flat area with approximate elevation 89 with general topographic gradient to northwest towards the Bronx River. No wetlands were observed within or adjacent to the Site.

5.3.4 Sanborn Fire Insurance Maps

Following is a summary of the EDR review of 17 Sanborn maps dated 1887, 1892, 1896, 1918, 1932, 1942, 1950, 1967, 1988, 1989, 1990, 1992, 1993, 1994, 1995, 1996, and 2006:

Year	General Information	Address	Block/Lot	Observations
1887	Quality of the map is good	20 S West Street	Block 1057/ Lot 13	The subject Site is occupied by a, two 2-story dwellings with garage.
1892	Quality of the map is good	20 S West Street	Block 1057/ Lot 13	The subject Site is occupied by a shed for carpenter shop, 2-story dwelling and a 3-story store building.
1896	Quality of the map is good	20 S West Street	Block 1057/ Lot 13	The subject Site is occupied by two 2-story dwelling and Bronx River Hotel along S West Street.
1918	Quality of the map is good	20 S West Street	Block 1057/ Lot 13	The subject Site is occupied by Mt. Vernon Station that includes express room, baggage room, store etc. New York Central Rail Road is on the west of the station building. Map indicates the building was built in 1916.
1932	Quality of the map is good	20 S West Street	Block 1057/ Lot 13	No significant changes observed.
1942	Quality of the map is fair	20 S West Street	Block 1057/ Lot 13	No significant changes observed.
1950		20 S West Street	Block 1057/ Lot 13	No significant changes observed.
1967	Quality of the map is fair	20 S West Street	Block 1057/ Lot 13	The subject Site shown as Mt. Vernon Station, bank and a parking lot. The north Side of building is 2-storied and depicted as bank office. A store is located in the south part of the building. NY Central Rail Road is located to the west of the building. South West Street is located to the east of the Site.
1988	Quality of the map is fair	20 S West Street	Block 1057/ Lot 13	No significant changes observed.
1989	Quality of the map is fair	20 S West Street	Block 1057/ Lot 13	No significant changes observed.
1990	Quality of the map is fair	20 S West Street	Block 1057/ Lot 13	No significant changes observed.
1992	Quality of the map is fair	20 S West Street	Block 1057/ Lot 13	No significant changes observed.
1993	Quality of the map is fair	20 S West Street	Block 1057/ Lot 13	No significant changes observed.
1994	Quality of the map is fair	20 S West Street	Block 1057/ Lot 13	No significant changes observed.
1995	Quality of the map is fair	20 S West Street	Block 1057/ Lot 13	No significant changes observed.
1996	Quality of the map is fair	20 S West Street	Block 1057/ Lot 13	No significant changes observed.
2006	Quality of the map is fair	20 S West Street	Block 1057/ Lot 13	No significant changes observed.

Based on review historical records, the Site has been used as a Mt. Vernon train station since 1916.

5.3.5 Land Title Deed Search

A chain of title was not provided.

5.3.6 Environmental Lien and AUL Search Report

No environmental liens or any other activity or use limitations were found.

5.4 HISTORICAL USE INFORMATION ON ADJOINING PROPERTIES

Sanborn maps from 1887, 1892, 1896, 1918, 1932, 1942, 1950, 1967, 1988, 1989, 1990, 1992, 1993, 1994, 1995, 1996, and 2006 were evaluated. A filling station is located to the south of the Site at 22 S West Street since 1950. The surround properties mainly include auto repair shops, stores, garages, restaurants, offices etc.

Aerial photographs from 1941, 1946, 1951, 1954, 1962, 1974, 1976, 1985, 1989, 1994, 2006, 2009, and 2011 were evaluated. As depicted in aerial photographs from 1941 to 2011, the Site is located in highly urbanized area.

Based on a review of the EDR Historical Topographic Map report, the surrounding properties have been topographically characterized as relatively flat. The number of man-made structures has increased over time. Bronx River is located approximately 150-200 feet to the west of the Site. No wetlands were observed within the general vicinity of the surrounding properties on the topographic maps.

Federal Resource Conservation and Recovery Act- Large Quantity Generators (RCRA-LQG):

Based on EDR Radius Map Report, Con Edison and Beacon Chemical Co, are identified as a RCRA-LQG that generate over 1,000 kilograms (kg) of hazardous waste, or over 1 kg of acutely hazardous waste per month. Con Edison facility does not have any violations and therefore do not constitutes a REC. However, Beacon Chemical Co. have few un-ceased violations regarding the generators under general category. Based on the nature of the violations, they do not constitute a REC.

Federal RCRA-Small Quantity Generators (SQG) and Conditionally Exempt (CE) SQG:
Based on EDR Radius Map Report, there is one (1) RCRA-SQG facility located approximately 0.24 miles to the south of the Site. Since there are no violations reported at the facility, it does not constitute a REC. In addition, there are four (4) RCRA-CESQG facilities located within 0.25 miles of the Site. None of these facilities have any open violations that would constitute a REC.

NY State Hazardous Waste Sites (NY SHWS):
As per the NY SHWS list, there are two (2) SHWS facilities located within approximately 1 mile of the Site. Remediation at one of the facilities has been completed, while the other facility named Red Devil Paint Inc. has been part of NYSDEC Brownfield Cleanup Program (BCP) and is currently undergoing remediation.

NY Solid Waste Facilities/Landfill Sites (NY SWF/LF)
A review of NY SWF/LF list, as provided by EDR has revealed that there are four (4) NY SWF/LF sites located approximately 0.5 mile of the Site. One of them is inactive, two are Construction & Demolition (C&D) material processing facilities, while the remaining one is waste cooking oil processing facility. Since there are no violations reported, the presence of these facilities does not constitutes a REC.

NY Leaking Storage Tanks (NY LTANKS)
A review of NY LTANKS list, as provided by EDR has revealed that there are 85 NY LTANKS sites within approximately 0.5 miles of the subject Site. However, all the spills at these sites have been closed, and therefore do not constitute a REC.

NY Underground Storage Tanks (USTs)
A review of NY UST list, as provided by EDR has revealed that there are twenty-four (24) NY UST sites within approximately 0.25 miles of the subject Site. Five (5) of these site currently have active USTs, while the USTs at 19 of the sites are closed and removed. Presence of these USTs does constitute a REC since no violations are associated with any of these USTs.

NY Aboveground Storage Tanks (ASTs)

A review of NY AST list, as provided by EDR has revealed that there are eleven (11) NY AST sites within approximately 0.25 miles of the subject Site. ASTs at four (4) of these sites have closed, while the seven (7) AST sites are currently active. Presence of these ASTs does constitute a REC since no violations are associated with any of these ASTs.

NY Chemical Bulk Storage (CBS) USTs and ASTs

As per the EDR report, 1 NY BCS UST and 3 NY BCS AST site are located approximately 0.25 miles of the subject Site. These CBS UST and ASTs are noted as either out of service or closed. Based on the status of these facilities, they do not constitute a REC.

NY Voluntary Cleanup Program (VCP)

A review of NY VCP list, as provided by EDR has revealed that there are two (2) VCP sites within approximately 0.5 miles of the Subject Site. One of these sites Red Devil Paint Inc., located 0.11 miles to the northeast of the subject Site is being addressed under Brownfield Cleanup Program (BCP) (Site No. C360031). Environmental problems that are being addressed are LNAPL, soil and groundwater, and Bronx River surface water and sediment contamination. Since the site is located at lower elevation compared to the subject Site, it does not constitute a REC.

Metal contaminated soil were identified at Ward Leonard Electric Company located 0.35 miles to the south of the subject Site. Based on the EDR report, the contaminated soil has been removed and no current or potential exposure pathways present and therefore it does not constitute a REC.

NY BROWNFIELDS

A review of NY BROWNFIELDS list, as provided by EDR has revealed that there are three (3) VCP sites within approximately 0.5 miles of the Subject Site. The Repetti's Service Station is the adjacent property to the southwest. The Red Devil Paint Inc. is at lower elevation compared to the subject Site. Kimball Residences located approximately 0.16 miles to north-northwest of the subject Site

NY Spills

A review of NY Spills list, as provided by EDR, has revealed that there are sixteen (16) spill sites within approximately 0.125 miles of the subject Site. Based on the EDR report review, all the spills are closed by NYSDEC and therefore do not constitute a REC.

RCRA Non-Generator (RCRA-NonGen):

According to the federal RCRA database provided by EDR, revealed that there are twenty-five (25) RCRA-NonGen sites located approximately 0.25 miles of the subject Site. Non-Generators do not presently generate hazardous waste and therefore do not constitute a REC.

NY DRYCLEANERS

Review of NY DRYCLEANERS, revealed that there are two (2) NYDRYCLEANERS sites located approximately 0.25 miles to the north/northeast of the subject Site. A-1 Drycleaners and Tivey's Cleaners both the facilities are located at higher elevations as compare to the subject Site. Presence of these facilities warrant a REC.

Manifests

A review of state Manifest databases for NY, New Jersey (NJ), and Rhode Island (RI), revealed that there are thirty-eight (38) NY MINFEST, three (3) NJ MANIFEST, and one (1) RI MANIFEST sites located within 0.25 miles of the subject Site. Manifest records indicate off-site shipment of waste, and the activity does not constitute a REC.

EDR City Directory:

The EDR City Directory review for properties in the area surrounding the subject Site included mainly commercial and residential listings. Adjacent property at 22 S West Street was occupied by Repetti's Service station between 1982 -2013. The property was previously occupied by Traci Auto Care prior to Repetti Service Station. Other surrounding properties include garage, offices, restaurants, furniture store, dental office, auto body, and residences.

6.0 SITE RECONNAISSANCE

6.1 METHODOLOGY AND LIMITING CONDITIONS

A professional from SESI visited the Site on April 18, 2016 in an effort to obtain information indicating any recognized environmental conditions (RECs). The Site was observed to the extent that it was accessible and not obstructed.

6.2 BUILDING OBSERVATIONS

The Site is currently occupied by 2-story concrete building with brick exterior. A parking lot is located to the east of the building. Based on the review of Sanborn maps the building was constructed in late 1910s. The building was converted into the commercial plaza in early 1960s. Concrete, carpet, and vinyl tiles were observed in various locations in the building. Concrete floor in the Artcraft Silversmith (Suite 102) was observed with some minor cracks. The building has a partial basement that has an Air Conditioning (AC) unit that serves Chase Bank and a 1,000 gallon AST for fuel oil that serves for heating the rest of the building. A fill port for the oil tank was observed along the west wall of the building.

6.3 CHEMICAL STORAGE AND USAGE

At the time of the Site reconnaissance visit, SESI did not observed any chemical containers. However, the industrial sinks were filled with various chemicals at the Artcraft Silversmith's workshop (Suite 102). The type of chemicals used for plating and polishing include copper sulphate, nickel sulphate, sodium hydroxide, potassium cyanide and sodium cyanide.

6.4 BULK STORAGE TANKS

A 1,000 gallon heating oil AST was observed in the basement of the building.

6.5 SITE WASTE AND WASTEWATER

Artcraft Silversmith (Suite 102) conducts plating and polishing of the silver artifacts and discharges wastewater from an outfall into Yonkers sanitary sewers. A wastewater

discharge permit issued by the Westchester County (permit no. 1953) is attached as Appendix D.

6.6 STAINED SOIL, STAINED PAVEMENT, OR STRESSED VEGETATION

No stained soil or stressed vegetation was observed during the SESI Site visit.

6.7 PITS, PONDS, OR LAGOONS

No pits, ponds or lagoons were identified at the Site.

6.8 WELLS

SESI did not identify on-site dry wells, irrigation wells, injection wells, observation wells, monitoring wells, potable water wells, recovery wells or abandoned wells.

6.9 FLOOR DRAINS AND SUMPS

A floor drain was observed in the basement.

6.10 PCB

At the time of our Site reconnaissance, SESI did not observed any potential sources for PCBs.

6.11 ASBESTOS-CONTAINING MATERIAL (ACM)

SESI did not observed any ACM in the areas available for inspection at the time of Site visit. Since the current building at the Site has constructed in 1916, presence of ACM cannot be ruled out.

6.12 RADON

U.S Environmental Protection Agency (EPA) has assigned Radon Zone of 1 for Westchester County. A radon zone of 3 predicts an average indoor radon screening level less than 2 picocuries per liter (pCi/L). Westchester County is located in a minimum risk area of the country.

6.13 LEAD-BASED PAINT (LBP)

Based on the construction date of the build at the Site, possibility of the lead base paint cannot be over ruled.

7.0 INTERVIEWS

7.1 INTERVIEW WITH OWNER

SESI conducted historic investigation and field investigation in addition to meetings with the current owner. Dipanjal Chavan, from SESI visited the Site on April 18, 2016 to conduct the Site reconnaissance and to take updated photos. Mr. Michael Levy, a General Manager from Davenis Realty, Inc. (the current owner) and Mr. Robert Vitulli from Ardtcraft Silversmith (tenant at Suite 201) were interviewed during the visit.

8.0 FINDINGS

Based on our investigation, we conclude that there is evidence to indicate areas of potential environmental concern on the Site due to the historical operations conducted at the Site and that additional investigation of these areas is warranted. See Section 10.0 *CONCLUSIONS* of this report.

9.0 OPINION

In our professional judgment, the scope and character of our environmental assessment were sufficient to justify the stated conclusions, after giving due consideration to the purpose of the investigation, the data reviewed, the background history of the Site as found in historical records, and visual observation of the Site.

10.0 CONCLUSIONS AND RECOMMENDATIONS

Based on our investigation, we conclude that there is evidence to indicate areas of recognized environmental concern on the Site and that additional investigation of these areas is warranted. Our conclusions and recommendations in this regard are as follows:

- **REC 1 - Current Use of the Site:** Suite 102 in the building is occupied by Artcraft Silversmith since the 1960s. It has on-Site workshop for plating and polishing of silver artifacts. The workshop stores various chemicals including copper sulphate, nickel sulphate, sodium hydroxide, potassium cyanide, and sodium cyanide and has multiple industrial sinks for chemical processing. Presence of chemical processing industry at the Site constitutes a REC. The area around suite 201 needs further investigation to assess the subsurface conditions. However, no spills were reported in any databases from this REC and this business has the proper discharge permit as shown in Appendix D.
- **REC 2 - Historical Use of the Site - Environmental Laboratory:** One of the historic tenants on the Site included an environmental laboratory, whose operations involve the use of different solvents. In addition, the environmental samples may contain different hazardous material. The details of the laboratory operation are unknown. However, no spills or any discharges reported from this REC.

Historic REC (HREC) – 1,000 gallon AST: A 1,000 gallon AST for heating oil is present in the basement of the building. As mentioned in section 5.1.1 of this report, a 9- gallon spill was reported and closed by the NYSDEC.

11.0 DEVIATIONS

This report was prepared with no significant deviation from ASTM Standard Practice E1527-13.

12.0 REFERENCES

Environmental Data Resources, Inc. – “Certified Sanborn Map Report”, Inquiry No 4578529.3, dated March 30, 2016

Environmental Data Resources, Inc. – “EDR – Historical Topographic Map Report”, 4578529.4, dated March 30, 2016

Environmental Data Resources, Inc. – “The EDR Aerial Photo Decade Package”, Inquiry No. 4578529.12, dated March 31, 2016

Environmental Data Resources, Inc. – “The EDR Radius Map Report”, Inquiry No. 4578529.2s, dated March 30, 2016

Environmental Data Resources, Inc. – “The EDR – City Directory Abstract”, Inquiry No. 4578529.5, dated March 31, 2016

Environmental Data Resources, Inc. – “The EDR Property Tax Map Report”, Inquiry No. 4578529.6, dated March 30, 2016

Environmental Data Resources, Inc. – “The EDR Building Permit Report”, Inquiry No. 4578529.8, dated March 30, 2016

13.0 SIGNATURE OF ENVIRONMENTAL PROFESSIONAL

As required in 40 CFR 312.21(d), this section includes statements made by the environmental professional conducting this assessment.

"I declare that, to the best of my professional knowledge and belief, I meet the definition of Environmental Professional as defined in §312.10 of 40 CFR Part 312."

"I declare that I have the specific qualifications based on education, training, and experience to assess a property of the nature, history, and setting of the subject property."

"I have developed and performed the 'all appropriate inquiry' in conformance with the standards, limitations, and practices set forth in 40 CFR Part 312."

This report incorporates the consultant's best professional judgment in conductance of this Phase One Environmental Site Assessment.

SESI CONSULTING ENGINEERS, PC

_____

Fuad Dahan, P.E.
Environmental Professional
April 2016

14.0 APPENDICES

APPENDIX A SITE LOCATION MAP

APPENDIX B SITE PHOTOS

APPENDIX C ENVIRONMENTAL DATA RESOURCES, INC. REPORT

APPENDIX A
SITE LOCATION MAP

APPENDIX B
PHOTO LOCATION PLAN AND SITE PHOTOS

Photo 1: General view of the Site.

Photo 2: View of the surrounding properties across South West Street to the east of the Site.

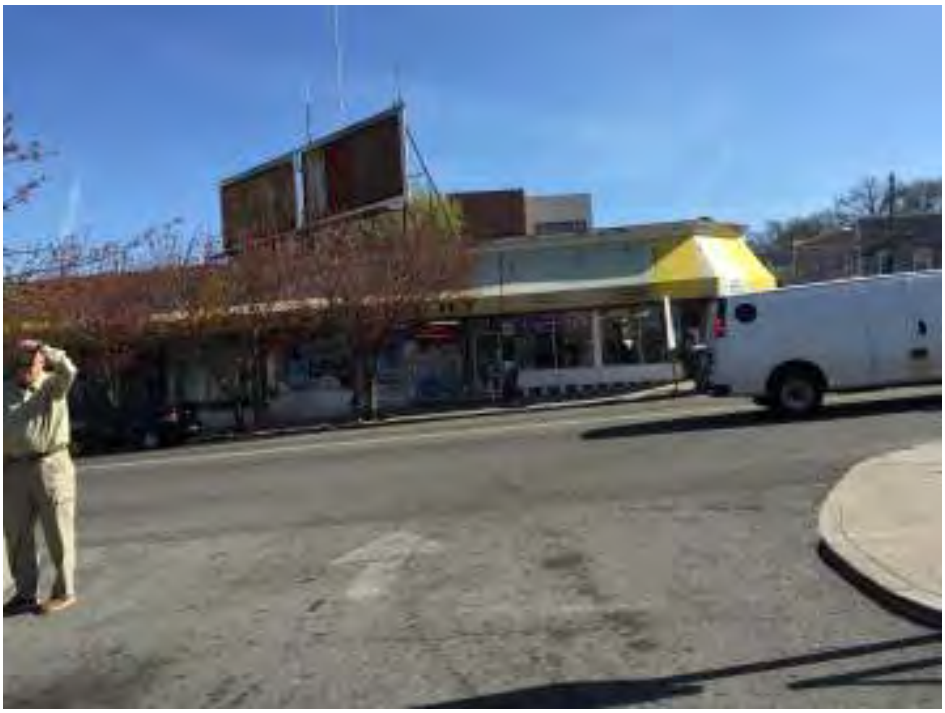

Photo 3: View of the surrounding properties across Mt. Vernon Avenue to the north of the Site.

Photo 4: View of the adjacent property to the south of the Site.

Photo 5: View of Mount Vernon West station located to the west of the Site.

Photo 6: Interior view of the Building

Photo 7: Interior view of the Artcraft Silversmith workshop located on the first floor.

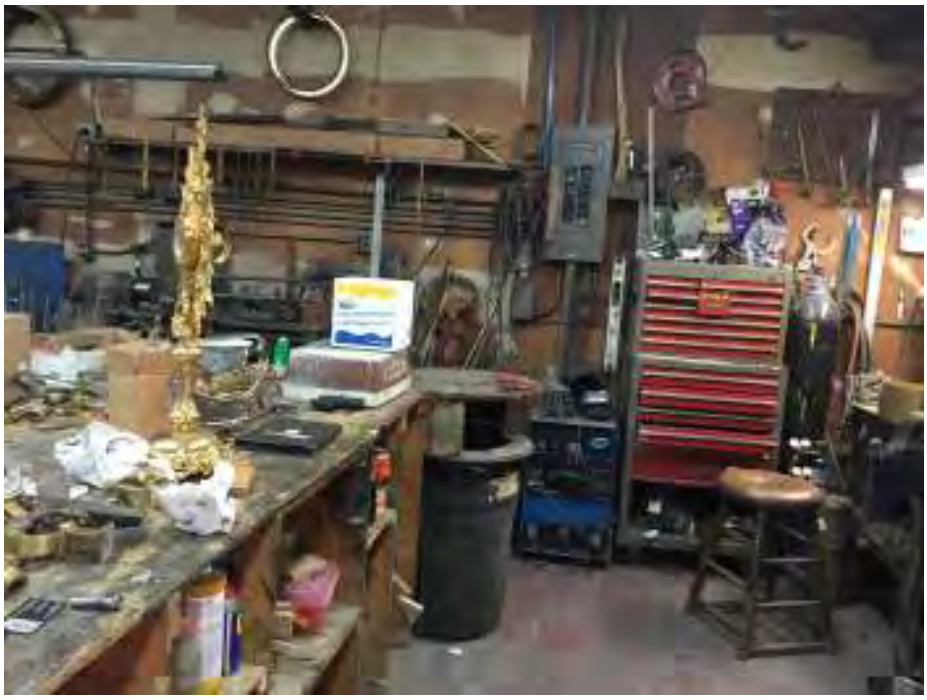

Photo 8: Additional view of the Artcraft Silversmith workshop.

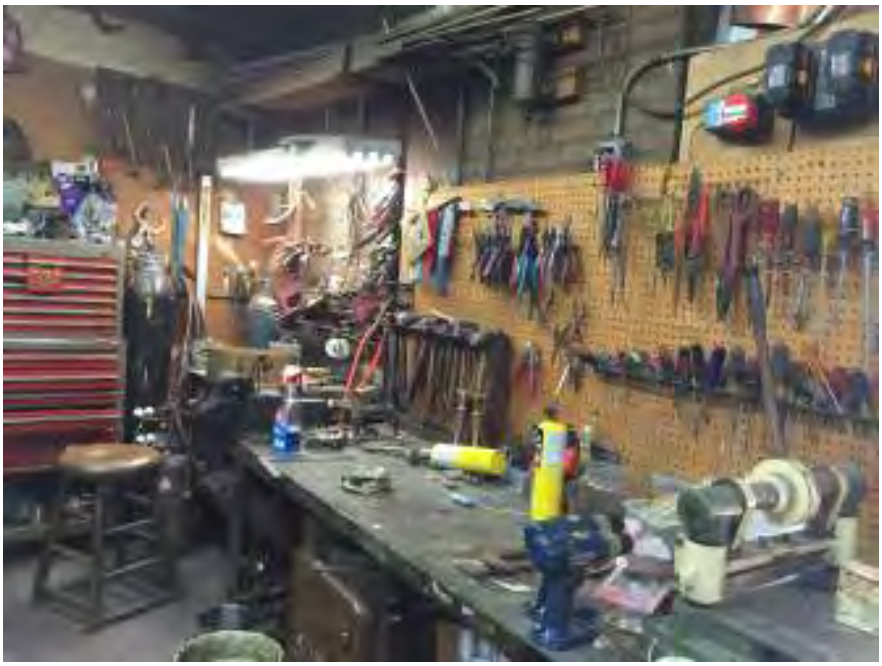

Photo 9: Additional view of the Artcraft Silversmith workshop.

Photo 10: One of the equipments located inside the Artcraft Silversmith workshop.

Photo 9: Karate studio located on the second floor.

Photo 10: Interior view of the karate studio.

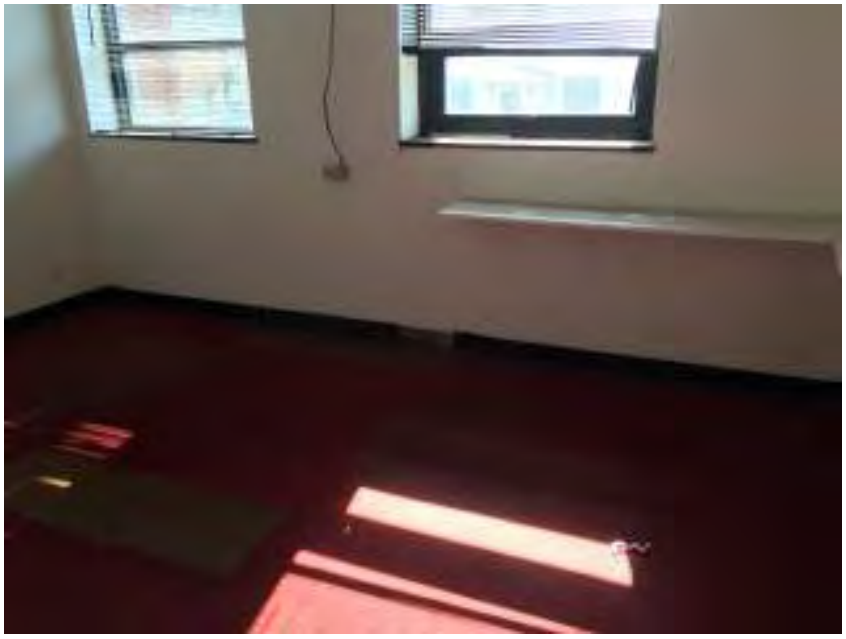

Photo 9: One of the vacant suites on in the building.

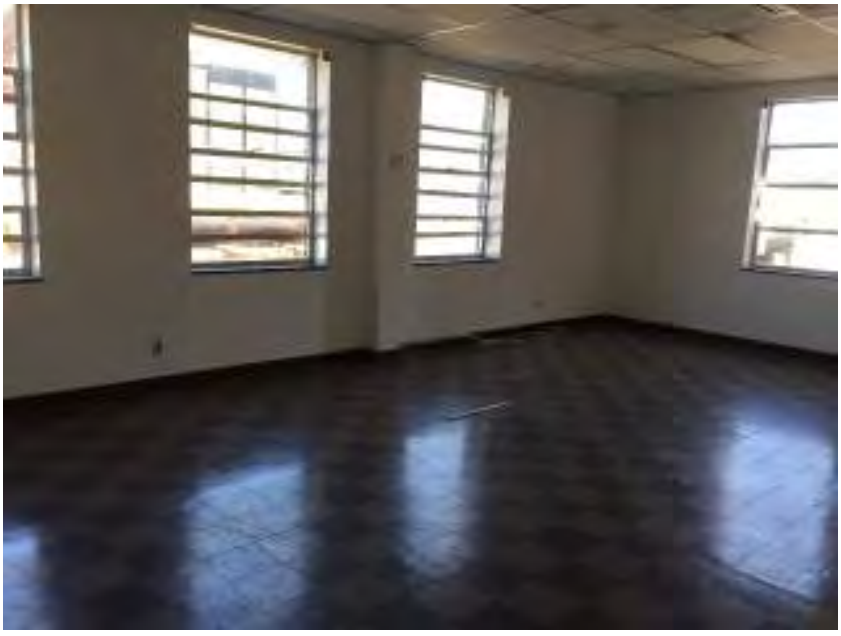

Photo 10: Additional vacant suite in the building.

Photo 10: office of Celtic Services located on the second floor.

Photo 10: View of the basement – oil staining on the floors.

Photo 10: Floor drain located in the basement.

Photo 10: Heating and air conditioning equipment serving CHASE bank suite.

Photo 10: A 1,000 gallon Above-ground Storage Tank (AST) located in the basement.

Photo 10: Fill port for the AST located in the east of the building.

APPENDIX C
ENVIRONMENTAL DATA RESOURCES, INC. REPORT

APPENDIX D
DISCHARGE PERMITS

Westchester gov.com

Robert P. Astorino
County Executive

Department of Environmental Facilities

Thomas J. Lauro, P.E.
Commissioner

February 12, 2016

ARTCRAFT SILVERSMITHS, INC.
156 MOUNT VERNON AVENUE
MOUNT VERNON, NY 10550

Attn: Mr. Robert Vitulli

RE: Pretreatment Sampling Bill for the year 2015

In accordance with the Westchester County's Industrial Pretreatment Program, all Significant Industrial Users (SIUs) are to be billed for Pretreatment samplings performed by the County for a calendar year. Our records indicate that your facility, located at the above-mentioned address was sampled for the parameters and amounts indicated on the "Billing Summary".

The total for the year 2015 is **$ 5858.00** Please submit a check payable to the County of Westchester to the following address:

The County of Westchester-DEF
270 North Avenue – 6th Floor
New Rochelle, NY 10801

Attn: Mr. James Arnett

3-4-16 - 500.00 CK# 22696

WASTEWATER DISCHARGE PERMIT

PART I

AUTHORIZATION

Permit No. 1953

Effective Dates:

From : 1/1/2015
To : 12/31/2016

Dates are Inclusive

In accordance with the provisions of the Westchester County Sewer Act:

ARTCRAFT SILVERSMITHS, INC.
156 MOUNT VERNON AVENUE
MOUNT VERNON, NY 10550

is hereby authorized to discharge industrial wastewater from the outfall(s) identified herein into the Yonkers sanitary sewer system in accordance with the conditions set forth in this permit. Compliance with this permit does not relieve the permittee of its obligations to comply with all applicable pretreatment regulations, standards, or requirements under County, State, and Federal laws that are, or may become, effective during the term of this permit.

Noncompliance with any term or condition of this permit shall constitute a violation of the Westchester County Sewer Act.

If the permittee wishes to continue to discharge after the expiration date of this permit, renewal request must be filed for a renewal permit a minimum of ninety (90) days prior to the expiration date.

This discharge permit supersedes any previously issued discharge permit.

By: Thomas J. Lauro
Thomas J. Lauro, P.E.
Commissioner

Date of issue: 1/8/15

Appendix E – Phase II ESA

Phase II Environmental Site Assessment Report

FOR

20 S West Street
Mt Vernon, New York

Prepared For:

MacQuesten Station Takeover Partners, LLC
438 Fifth Avenue
Suite 100
Pelham, NY 10803

Prepared By:

SESI CONSULTING ENGINEERS, PC
12A Maple Avenue
Pine Brook, NJ 07058

DATE:

October 18, 2016

_____

Fuad Dahan, P.E.

NY Lic. No. 090531

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1.2 Site Settings 2
2.0 SUBSURFACE INVESTIGATION 2
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4.0 CONCLUSIONS AND RECOMMENDATIONS 6

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Appendix A: Analytical Results

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Soil Sample Results Tables
Groundwater Sample Results Tables
Soil Gas Sample Results Table

Figures

Figure 1.1: Site Plan/REC Location Plan
Figure 2.1 Sample Location Plan
Figure 3.1: Groundwater Sampling Results

1.0 INTRODUCTION

SESI Consulting Engineers, DPC (SESI) has conducted this Phase II Environmental Site Assessment (Phase II ESA) on behalf of the Requestor, MacQuesten Station Takeover Partners, LLC, for the site located at 20 S West Street in White Plains, New York (Site). The Site consists of approximately a 0.45-acre parcel and is currently occupied by a Chase bank office in the north of the building and other small businesses including a restaurant, silversmith, office space, and karate studio. The Site is identified on the tax map as section 164.67, block 1057, lot 13. This report complies with the American Society for Testing and Materials standard (ASTM E1903).

SESI collected soil, groundwater, and sub slab soil vapor samples to further investigate the identified Recognized Environmental Concerns (RECs) at the Site as identified in the Phase I ESA.

1.1 Recognized Environmental Concerns

The Recognized Environmental Concerns (RECs) identified during the Phase I ESA prepared by SESI (April 2016) (Phase I ESA) included the following:

- **REC 1 - Current Use of the Site:** Suite 102 in the building is occupied by Artcraft Silversmith since the 1960s. It has on-Site workshop for plating and polishing of silver artifacts. The workshop stores various chemicals including copper sulphate, nickel sulphate, sodium hydroxide, potassium cyanide, and sodium cyanide and has multiple industrial sinks for chemical processing. Presence of chemical processing industry at the Site constitutes a REC. The area around suite 201 needs further investigation to assess the subsurface conditions. However, no spills were reported in any databases from this REC and this business has the proper discharge permit as shown in Appendix D.
- **REC 2 - Historical Use of the Site - Environmental Laboratory:** One of the historic tenants on the Site included an environmental laboratory, whose operations involve the use of different solvents. In addition, the environmental samples may contain different hazardous material. The details of the laboratory operation are unknown. However, no spills or any discharges reported from this REC.
- **Historic REC (HREC) – 1,000-gallon AST:** A 1,000-gallon AST for heating oil is present in the basement of the building. As mentioned in section 5.1.1 of this report, a 9- gallon spill was reported and closed by the NYSDEC.

Other potential REC identified during the Phase I ESA include the use of the site as a train station and off-site up-gradient dry cleaning facilities were also investigated as part of this Phase II ESA.

1.2 Site Settings

The Site consists of approximately a 0.45-acre (21,000 sq. ft.) parcel located at 20 South West Street, Mount Vernon, Westchester County, New York. The Site is currently occupied by a Chase bank office in the north of the building and other small businesses including a restaurant, silversmith, office space, and karate studio. A parking lot is located to the east of the building. South West Street is located to the east and Mt Vernon West train station is located to the west of the Site.

2.0 SUBSURFACE INVESTIGATION

The field work was conducted on August 30, 31 and October 3, 2016.

2.1 Borings

Five (5) borings were advanced at 5 different locations using a direct push Geoprobe® rig. Three (3) temporary wells (GW1, GW2, GW3) were installed during this field investigation. Three (3) soil vapor samples were collected from soil probes installed below the building slab at different locations of the property.

All the soil samples were collected from depths based on field screening, which includes screening with Photo Iodization Detector (PID), and visual and olfactory observations. A summary of the samples collected is presented in Table 2.1 and Figure 2.1 presents the sample locations.

Table 2.1 – Sample Summary Table

Sample ID	Boring No.	Depth (ft)	Analysis	Media	Date	Rationale
SB-1 (2-2.5)	SB-1	2-2.5	TCL+30/TAL	Soil	8/30/2016	Potential historic fill
SB-1 (10-12)	SB-1	10-12	TCL+30/TAL	Soil	8/30/2016	Potential historic fill
SB-2 (5-5.5)	SB-2	5-5.5	TCL+30/TAL	Soil	8/30/2016	Potential historic fill
SB-2 (24-25)	SB-2	24-25	TCL+30/TAL	Soil	8/30/2016	Potential historic fill
SB-2A (2-3)	SB-2A	2-3	TCL+30/TAL	Soil	10/3/2016	Potential historic fill
SB-2A (19-20)	SB-2A	19-20	TCL+30/TAL	Soil	10/3/2016	Potential historic fill
SB-3 (3-4)	SB-3	3-4	TCL+30/TAL	Soil	10/3/2016	Former silversmith
SB-3 (15-16)	SB-3	15-16	TCL+30/TAL	Soil	10/3/2016	Former silversmith
SB-4 (2-3)	SB-4	2-3	TCL+30/TAL	Soil	9/11/2019	Former AST and environmental lab
SB-4 (6-7)	SB-4	6-7	TCL+30/TAL	Soil	9/11/2019	Former AST and environmental lab
GW-1	SB-2		TCL+30/TAL	Water	8/31/2016	Potential historic fill
GW-2	SB-3		TCL+30/TAL	Water	10/3/2016	Former silversmith
GW-3	SB-4		TCL+30/TAL	Water	10/3/2016	Former AST and environmental lab
SS-1	SS_1	1	TCL+30/TAL	Vapor	8/30/2016	Former AST
SS-2	SS-2	1	TCL+30/TAL	Vapor	8/30/2016	Former environmental lab
SS-3	SS-3	1	TCL+30/TAL	Vapor	8/30/2016	Former silversmith

3.0 ANALYTICAL RESULTS

3.1 Soil Vapor Results

Three (3) sub-slab vapor (SS) samples were collected from the Site beneath the building slab. The samples were sent to an ELAP-Certified laboratory (TestAmerica) on a chain of custody (COC) for TO-15 analysis. All three samples were collected within the existing building footprint. Sub-slab vapor sample locations are shown in Figure 3.1. The laboratory reports for the sub-slab vapor samples are included electronically as Attachment A. Table 3.1 (attached electronically) contains the full results of the soil vapor sampling.

The sub-slab vapor samples did not contain any concentrations exceeding New York State Department of Health (NYSDOH) Sub-Slab Vapor Criteria.

3.2 Groundwater

Groundwater samples were collected from 3 temporary wells (GW1, GW2, and GW3). The GW samples were sent to TestAmerica for TCL+30/TAL analysis. The laboratory files for the groundwater results are included in Appendix A.

Chloroform resulted in 11 ug/L in the groundwater sample collected from GW1, which is a minor exceedance of the effluent Class GA TOGS value of 7 ug/L for chloroform. This exceedance is shown on Figure 3.1. No other VOCs, SVOCs, PCBs, Pesticides, or metals were detected in the groundwater samples exceeding Class GA TOGS values.

3.3 Soils

Ten (10) soil samples were collected from 5 borings as listed in Table 2.1. The soil samples were sent to TestAmerica for TCL/TAL+30 analyses. The laboratory files are included in Appendix A. Table 3.3 presents the soil results compared to NYSDEC soil clean up objectives (SCOs). Figure 2.1 shows the sample locations and table 3.1 shows a summary of the exceedances.

Table 3.1: Soil exceedances summary

	URSCO	RSCO	RRSCO	SB2-2.0-3.0 10/3/2016 mg/kg		SB2-19.0-20.0 10/3/2016 mg/kg		SB3-3.0-4.0 10/3/2016 mg/kg		SB3-15.0-16.0 10/3/2016 mg/kg		SB4-2.0-3.0 10/3/2016 mg/kg		SB4-6.0-7.0 10/3/2016 mg/kg	
Iron	NA	2000	NA	**14100**		**10300**		**24000**		**24300**		**28200**		**19300**	
Lead	63	400	400	**163**		1.9		21.4		3.6		6.5		2.8	
Nickel	30	140	310	11.7		9.5		22.3		20.4		**31**		19.2	
Vanadium	NA	100	NA	20.5		14		35.9		37.2		**45**		31.7	
Zinc	109	2200	10000	93.1		28.1		97.5		79.8		**141**		60.5	
Mercury	0.18	0.81	0.81	**0.57**		0.011	U	0.11		0.012	U	0.032		0.013	U

J : Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
U : Indicates the analyte w as analyzed for but not detected.
URSCO: Unrestricted Soil Clean-up Obejective
RSCO: Residential Soil Clean-up Obejective
RRSCO: Restricted Residential Soil Clean-up Obejective

No VOCs, SVOCs, PCBs, cyanide, or pesticides were detected exceeding the NYSDEC Unrestricted Use Soil Cleanup Objectives (USCOs).

Iron was detected in soil samples from SB-2, SB-2A, SB-3, and SB-4 exceeding NYSDEC Residential Soil Cleanup Criteria (RSCOs), lead and mercury were detected in sample SB-2 (2-3) exceeding the USCO but below the RSCO, and nickel and zinc were detected in sample SB-4 (2-3) slightly exceeding the USCO but below the RSCO. These detects represent typical background concentrations of metals in urban areas.

4.0 CONCLUSIONS AND RECOMMENDATIONS

The Site historic industrial uses were investigated in this report. The investigation results showed that historic uses resulted in no significant environmental impacts. The detects and the minor exceedances of the NYSDEC standards as reported in this investigation are common to urban areas and historic fill.

TABLES

Combined Soil Test Data
Mount Vernon, NY
SESI Consulting Engineers

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

SUMMARY OF ANALYTICAL RESULTS: 460-121319-1
Job Description: 20 S. West St., Mt. Vernon, NY
For:
SESI Consulting Engineers
12 A Maple Avenue
Pine Brook, New Jersey 07058

Client ID		NY 375-6.8(a)	NY 375-6.8(b)	NY 375-6.8(b)	NY 375-6.8(b)	NY 375-6.8(b)	NY 375-6.8(b)	NY 375-6.8(b)	**SB2-2.0-3.0**			**SB2-19.0-20.0**			**SB3-3.0-4.0**			**SB3-15.0-16.0**			**SB4-2.0-3.0**		
Lab Sample ID		UnRestricted	& CP-51 T-1	& CP-51 T-1	& CP-51 T-1	& CP-51 T-1	& CP-51 T-1	& CP-51 T-1	460-121319-1			460-121319-2			460-121319-3			460-121319-4			460-121319-5		
Sampling Date		Use Soil	Residential	Restricted Residentia	Commercial	Industrial	Ecological Resources	GW	10/3/2016			10/3/2016			10/3/2016			10/3/2016			10/3/2016		
Matrix		Cleanup	Soil Cleanup	Soil Cleanup	Soil Cleanup	Soil Cleanup	Soil Cleanup	Soil Cleanup	Soil			Soil			Soil			Soil			Soil		
Dilution Factor		Criteria	Criteria	Criteria	Criteria	Criteria	Criteria	Criteria	1			1			1			1			1		
Unit		ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg			ug/kg			ug/kg			ug/kg			ug/kg		
VOA-8260C-SOIL	CAS#								Result	Q	MDL	Result	Q	MDL	Result	Q	MDL	Result	Q	MDL	Result	Q	MDL
SOIL BY 8260C																							
1,1,1-Trichloroethane	71-55-6	680	100000	100000	500000	1000000	NA	680	0.6	U	0.6	0.8	U	0.8	0.57	U	0.57	0.54	U	0.54	0.51	U	0.51
1,1,2,2-Tetrachloroethane	79-34-5	NA	35000	NA	NA	NA	NA	600	0.27	U	0.27	0.36	U	0.36	0.26	U	0.26	0.24	U	0.24	0.23	U	0.23
1,1,2-Trichloro-1,2,2-trifluoroethane	76-13-1	NA	100000	NA	NA	NA	NA	6000	0.69	U	0.69	0.93	U	0.93	0.66	U	0.66	0.63	U	0.63	0.59	U	0.59
1,1,2-Trichloroethane	79-00-5	NA	NA	NA	NA	NA	NA	NA	0.44	U	0.44	0.59	U	0.59	0.42	U	0.42	0.4	U	0.4	0.38	U	0.38
1,1-Dichloroethane	75-34-3	270	19000	26000	240000	480000	NA	270	0.54	U	0.54	0.72	U	0.72	0.51	U	0.51	0.48	U	0.48	0.46	U	0.46
1,1-Dichloroethene	75-35-4	330	100000	100000	500000	1000000	NA	330	0.65	U	0.65	0.87	U	0.87	0.62	U	0.62	0.58	U	0.58	0.55	U	0.55
1,2,3-Trichlorobenzene	87-61-6	NA	NA	NA	NA	NA	20000	NA	0.17	U	0.17	0.23	U	0.23	0.17	U	0.17	0.16	U	0.16	0.15	U	0.15
1,2,4-Trichlorobenzene	120-82-1	NA	NA	NA	NA	NA	20000	3400	0.5	U	0.5	0.68	U	0.68	0.48	U	0.48	0.46	U	0.46	0.43	U	0.43
1,2-Dibromo-3-Chloropropane	96-12-8	NA	NA	NA	NA	NA	NA	NA	0.74	U	0.74	0.99	U	0.99	0.71	U	0.71	0.67	U	0.67	0.63	U	0.63
1,2-Dichlorobenzene	95-50-1	1100	100000	100000	500000	1000000	NA	1100	0.22	U	0.22	0.3	U	0.3	0.21	U	0.21	0.2	U	0.2	0.19	U	0.19
1,2-Dichloroethane	107-06-2	20	2300	3100	30000	60000	10000	20	0.17	U	0.17	0.23	U	0.23	0.17	U	0.17	0.16	U	0.16	0.15	U	0.15
1,2-Dichloropropane	78-87-5	NA	NA	NA	NA	NA	700000	NA	0.27	U	0.27	0.36	U	0.36	0.26	U	0.26	0.24	U	0.24	0.23	U	0.23
1,3-Dichlorobenzene	541-73-1	2400	17000	49000	280000	560000	NA	2400	0.19	U	0.19	0.25	U	0.25	0.18	U	0.18	0.17	U	0.17	0.16	U	0.16
1,4-Dichlorobenzene	106-46-7	1800	9800	13000	130000	250000	20000	1800	0.2	U	0.2	0.27	U	0.27	0.2	U	0.2	0.19	U	0.19	0.17	U	0.17
1,4-Dioxane	123-91-1	100	9800	13000	130000	250000	100	100	10	U	10	14	U	14	9.7	U	9.7	9.1	U	9.1	8.6	U	8.6
2-Butanone (MEK)	78-93-3	120	100000	NA	NA	NA	NA	300	1.2	U	1.2	1.6	U	1.6	1.2	U	1.2	1.1	U	1.1	1	U	1
2-Hexanone	591-78-6	NA	NA	NA	NA	NA	NA	NA	1.5	U	1.5	2	U	2	1.4	U	1.4	1.3	U	1.3	1.3	U	1.3
4-Methyl-2-pentanone (MIBK)	108-10-1	NA	NA	NA	NA	NA	NA	1000	3.5	U	3.5	4.7	U	4.7	3.4	U	3.4	3.2	U	3.2	3	U	3
Acetone	67-64-1	50	100000	100000	500000	1000000	2200	50	1.7	U	1.7	2.2	U	2.2	1.6	U	1.6	1.5	U	1.5	1.4	U	1.4
Benzene	71-43-2	60	2900	4800	44000	89000	70000	60	0.31	U	0.31	0.42	U	0.42	0.3	U	0.3	0.28	U	0.28	0.27	U	0.27
Bromoform	75-25-2	NA	NA	NA	NA	NA	NA	NA	0.2	U	0.2	0.27	U	0.27	0.2	U	0.2	0.19	U	0.19	0.17	U	0.17
Bromomethane	74-83-9	NA	NA	NA	NA	NA	NA	NA	0.5	U	0.5	0.68	U	0.68	0.48	U	0.48	0.46	U	0.46	0.43	U	0.43
Carbon disulfide	75-15-0	NA	100000	NA	NA	NA	NA	2700	0.68	U	0.68	0.91	U	0.91	0.65	U	0.65	0.61	U	0.61	0.58	U	0.58
Carbon tetrachloride	56-23-5	760	1400	2400	22000	44000	NA	760	0.68	U	0.68	0.91	U	0.91	0.65	U	0.65	0.61	U	0.61	0.58	U	0.58
Chlorobenzene	108-90-7	1100	100000	100000	500000	1000000	40000	1100	0.22	U	0.22	0.3	U	0.3	0.21	U	0.21	0.2	U	0.2	0.19	U	0.19
Chlorobromomethane	74-97-5	NA	NA	NA	NA	NA	NA	NA	0.27	U	0.27	0.36	U	0.36	0.26	U	0.26	0.24	U	0.24	0.23	U	0.23
Chlorodibromomethane	124-48-1	NA	NA	NA	NA	NA	10000	NA	0.24	U	0.24	0.32	U	0.32	0.23	U	0.23	0.21	U	0.21	0.2	U	0.2
Chloroethane	75-00-3	NA	NA	NA	NA	NA	NA	1900	0.55	U	0.55	0.74	U	0.74	0.53	U	0.53	0.5	U	0.5	0.47	U	0.47
Chloroform	67-66-3	370	10000	49000	350000	700000	12000	370	0.33	U	0.33	0.44	U	0.44	0.32	U	0.32	0.3	U	0.3	0.28	U	0.28
Chloromethane	74-87-3	NA	NA	NA	NA	NA	NA	NA	0.6	U *	0.6	0.8	U *	0.8	0.57	U *	0.57	0.54	U	0.54	0.51	U *	0.51
cis-1,2-Dichloroethene	156-59-2	250	59000	100000	500000	1000000	NA	250	0.35	U	0.35	0.47	U	0.47	0.33	U	0.33	0.31	U	0.31	0.29	U	0.29
cis-1,3-Dichloropropene	10061-01-5	NA	NA	NA	NA	NA	NA	NA	0.24	U	0.24	0.32	U	0.32	0.23	U	0.23	0.21	U	0.21	0.2	U	0.2
Cyclohexane	110-82-7	NA	NA	NA	NA	NA	NA	NA	0.72	U	0.72	0.97	U	0.97	0.69	U	0.69	0.65	U	0.65	0.62	U	0.62
Dichlorobromomethane	75-27-4	NA	NA	NA	NA	NA	NA	NA	0.6	U	0.6	0.8	U	0.8	0.57	U	0.57	0.54	U	0.54	0.51	U	0.51
Dichlorodifluoromethane	75-71-8	NA	NA	NA	NA	NA	NA	NA	0.5	U	0.5	0.68	U	0.68	0.48	U	0.48	0.46	U	0.46	0.43	U	0.43
Ethylbenzene	100-41-4	1000	30000	41000	390000	780000	NA	1000	0.28	U	0.28	0.38	U	0.38	0.27	U	0.27	0.26	U	0.26	0.24	U	0.24
Ethylene Dibromide	106-93-4	NA	NA	NA	NA	NA	NA	NA	0.19	U	0.19	0.25	U	0.25	0.18	U	0.18	0.17	U	0.17	0.16	U	0.16
Isopropylbenzene	98-82-8	NA	100000	NA	NA	NA	NA	2300	0.27	U	0.27	0.36	U	0.36	0.26	U	0.26	0.24	U	0.24	0.23	U	0.23
Methyl acetate	79-20-9	NA	NA	NA	NA	NA	NA	NA	1.4	U	1.4	1.9	U	1.9	1.4	U	1.4	1.3	U	1.3	1.2	U	1.2
Methyl tert-butyl ether	1634-04-4	930	62000	100000	500000	1000000	NA	930	0.27	U	0.27	0.36	U	0.36	0.26	U	0.26	0.24	U	0.24	0.23	U	0.23
Methylcyclohexane	108-87-2	NA	NA	NA	NA	NA	NA	NA	0.79	U	0.79	1.1	U	1.1	0.76	U	0.76	0.71	U	0.71	0.67	U	0.67
Methylene Chloride	75-09-2	50	51000	100000	500000	1000000	12000	50	0.82	J	0.5	0.68	U	0.68	0.48	U	0.48	0.46	U	0.46	0.43	U	0.43
Styrene	100-42-5	NA	NA	NA	NA	NA	300000	NA	0.24	U	0.24	0.32	U	0.32	0.23	U	0.23	0.21	U	0.21	0.2	U	0.2
Tetrachloroethene	127-18-4	1300	5500	19000	150000	300000	2000	1300	0.44	U	0.44	0.59	U	0.59	0.42	U	0.42	0.4	U	0.4	0.38	U	0.38
Toluene	108-88-3	700	100000	100000	500000	1000000	36000	700	0.3	U	0.3	0.4	U	0.4	0.29	U	0.29	0.27	U	0.27	0.25	U	0.25
trans-1,2-Dichloroethene	156-60-5	190	100000	100000	500000	1000000	NA	190	0.61	U	0.61	0.82	U	0.82	0.59	U	0.59	0.56	U	0.56	0.52	U	0.52
trans-1,3-Dichloropropene	10061-02-6	NA	NA	NA	NA	NA	NA	NA	0.16	U	0.16	0.21	U	0.21	0.15	U	0.15	0.14	U	0.14	0.13	U	0.13
Trichloroethene	79-01-6	470	10000	21000	200000	400000	2000	470	0.41	U	0.41	0.55	U	0.55	0.39	U	0.39	0.37	U	0.37	0.35	U	0.35
Trichlorofluoromethane	75-69-4	NA	NA	NA	NA	NA	NA	NA	0.54	U	0.54	0.72	U	0.72	0.51	U	0.51	0.48	U	0.48	0.46	U	0.46
Vinyl chloride	75-01-4	20	210	900	13000	27000	NA	20	0.61	U *	0.61	0.82	U *	0.82	0.59	U *	0.59	0.56	U	0.56	0.52	U *	0.52
Xylenes, Total	1330-20-7	260	100000	100000	500000	1000000	260	1600	0.17	U	0.17	0.23	U	0.23	0.17	U	0.17	0.16	U	0.16	0.15	U	0.15

*T There are no TICs reported for the sample
* : LCS or LCSD is outside acceptance limits.
J : Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
U : Indicates the analyte was analyzed for but not detected.
X : Surrogate is outside control limits

Lab Contact:
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TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

SUMMARY OF ANALYTICAL RESULTS: 460-121319-1
Job Description: 20 S. West St., Mt. Vernon, NY
For:
SESI Consulting Engineers
12 A Maple Avenue
Pine Brook, New Jersey 07058

Client ID		NY 375-6.8(a)	NY 375-6.8(b)	NY 375-6.8(b)	NY 375-6.8(b)	NY 375-6.8(b)	NY 375-6.8(b)	NY 375-6.8(b)	**SB4-6.0-7.0**			**SB1-2-2.5**			**SB1-10-12**			**SB2-5-5.5**			**SB2-24.25**		
Lab Sample ID		UnRestricted	& CP-51 T-1	& CP-51 T-1	& CP-51 T-1	& CP-51 T-1	& CP-51 T-1	& CP-51 T-1	460-121319-6			460-119390-1			460-119390-2			460-119390-3			460-119390-4		
Sampling Date		Use Soil	Residential	Restricted Residential	Commercial	Industrial	Ecological Resources	GW	10/3/2016			8/30/2016			8/30/2016			8/30/2016			8/30/2016		
Matrix		Cleanup	Soil Cleanup	Soil Cleanup	Soil Cleanup	Soil Cleanup	Soil Cleanup	Soil Cleanup	Soil			Soil			Soil			Soil			Soil		
Dilution Factor		Criteria	Criteria	Criteria	Criteria	Criteria	Criteria	Criteria	1			1			1			1			1		
Unit		ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg			ug/kg			ug/kg			ug/kg			ug/kg		
VOA-8260C-SOIL	CAS#								Result	Q	MDL	Result	Q	MDL	Result	Q	MDL	Result	Q	MDL	Result	Q	MDL
SOIL BY 8260C																							
1,1,1-Trichloroethane	71-55-6	680	100000	100000	500000	1000000	NA	680	0.51	U	0.51	0.82	U	0.82	0.65	U	0.65	0.51	U	0.51	0.69	U	0.69
1,1,2,2-Tetrachloroethane	79-34-5	NA	35000	NA	NA	NA	NA	600	0.23	U	0.23	0.37	U	0.37	0.29	U	0.29	0.23	U	0.23	0.31	U	0.31
1,1,2-Trichloro-1,2,2-trifluoroethane	76-13-1	NA	100000	NA	NA	NA	NA	6000	0.59	U	0.59	0.95	U	0.95	0.76	U	0.76	0.59	U	0.59	0.8	U	0.8
1,1,2-Trichloroethane	79-00-5	NA	NA	NA	NA	NA	NA	NA	0.38	U	0.38	0.6	U	0.6	0.48	U	0.48	0.38	U	0.38	0.51	U	0.51
1,1-Dichloroethane	75-34-3	270	19000	26000	240000	480000	NA	270	0.46	U	0.46	0.73	U	0.73	0.59	U	0.59	0.46	U	0.46	0.62	U	0.62
1,1-Dichloroethene	75-35-4	330	100000	100000	500000	1000000	NA	330	0.55	U	0.55	0.89	U	0.89	0.71	U	0.71	0.55	U	0.55	0.74	U	0.74
1,2,3-Trichlorobenzene	87-61-6	NA	NA	NA	NA	NA	20000	NA	0.15	U	0.15	0.24	U	0.24	0.19	U	0.19	0.15	U	0.15	0.2	U	0.2
1,2,4-Trichlorobenzene	120-82-1	NA	NA	NA	NA	NA	20000	3400	0.43	U	0.43	0.69	U	0.69	0.55	U	0.55	0.43	U	0.43	0.58	U	0.58
1,2-Dibromo-3-Chloropropane	96-12-8	NA	NA	NA	NA	NA	NA	NA	0.63	U	0.63	1	U	1	0.81	U	0.81	0.64	U	0.64	0.85	U	0.85
1,2-Dichlorobenzene	95-50-1	1100	100000	100000	500000	1000000	NA	1100	0.19	U	0.19	0.3	U	0.3	0.24	U	0.24	0.19	U	0.19	0.25	U	0.25
1,2-Dichloroethane	107-06-2	20	2300	3100	30000	60000	10000	20	0.15	U	0.15	0.24	U	0.24	0.19	U	0.19	0.15	U	0.15	0.2	U	0.2
1,2-Dichloropropane	78-87-5	NA	NA	NA	NA	NA	700000	NA	0.23	U	0.23	0.37	U	0.37	0.29	U	0.29	0.23	U	0.23	0.31	U	0.31
1,3-Dichlorobenzene	541-73-1	2400	17000	49000	280000	560000	NA	2400	0.16	U	0.16	0.26	U	0.26	0.21	U	0.21	0.16	U	0.16	0.22	U	0.22
1,4-Dichlorobenzene	106-46-7	1800	9800	13000	130000	250000	20000	1800	0.17	U	0.17	0.28	U	0.28	0.22	U	0.22	0.18	U	0.18	0.24	U	0.24
1,4-Dioxane	123-91-1	100	9800	13000	130000	250000	100	100	8.6	U	8.6	14	U	14	11	U	11	8.6	U	8.6	12	U	12
2-Butanone (MEK)	78-93-3	120	100000	NA	NA	NA	NA	300	1	U	1	1.7	U	1.7	1.3	U	1.3	1	U	1	1.4	U	1.4
2-Hexanone	591-78-6	NA	NA	NA	NA	NA	NA	NA	1.3	U	1.3	2	U	2	1.6	U	1.6	1.3	U	1.3	1.7	U	1.7
4-Methyl-2-pentanone (MIBK)	108-10-1	NA	NA	NA	NA	NA	NA	1000	3	U	3	4.8	U	4.8	3.8	U	3.8	3	U	3	4	U	4
Acetone	67-64-1	50	100000	100000	500000	1000000	2200	50	1.4	U	1.4	30		2.3	13		1.8	14		1.4	1.9	U	1.9
Benzene	71-43-2	60	2900	4800	44000	89000	70000	60	0.27	U	0.27	0.43	U	0.43	0.34	U	0.34	0.27	U	0.27	0.36	U	0.36
Bromoform	75-25-2	NA	NA	NA	NA	NA	NA	NA	0.17	U	0.17	0.28	U *	0.28	0.22	U *	0.22	0.18	U *	0.18	0.24	U	0.24
Bromomethane	74-83-9	NA	NA	NA	NA	NA	NA	NA	0.43	U	0.43	0.69	U *	0.69	0.55	U *	0.55	0.43	U *	0.43	0.58	U	0.58
Carbon disulfide	75-15-0	NA	100000	NA	NA	NA	NA	2700	0.58	U	0.58	0.93	U	0.93	0.74	U	0.74	0.58	U	0.58	0.78	U	0.78
Carbon tetrachloride	56-23-5	760	1400	2400	22000	44000	NA	760	0.58	U	0.58	0.93	U	0.93	0.74	U	0.74	0.58	U	0.58	0.78	U	0.78
Chlorobenzene	108-90-7	1100	100000	100000	500000	1000000	40000	1100	0.19	U	0.19	0.3	U	0.3	0.24	U	0.24	0.19	U	0.19	0.25	U	0.25
Chlorobromomethane	74-97-5	NA	NA	NA	NA	NA	NA	NA	0.23	U	0.23	0.37	U	0.37	0.29	U	0.29	0.23	U	0.23	0.31	U	0.31
Chlorodibromomethane	124-48-1	NA	NA	NA	NA	NA	10000	NA	0.2	U	0.2	0.32	U	0.32	0.26	U	0.26	0.2	U	0.2	0.27	U	0.27
Chloroethane	75-00-3	NA	NA	NA	NA	NA	NA	1900	0.47	U	0.47	0.76	U *	0.76	0.6	U *	0.6	0.47	U *	0.47	0.64	U *	0.64
Chloroform	67-66-3	370	10000	49000	350000	700000	12000	370	0.28	U	0.28	0.45	U	0.45	0.36	U	0.36	0.28	U	0.28	0.38	U	0.38
Chloromethane	74-87-3	NA	NA	NA	NA	NA	NA	NA	0.51	U *	0.51	0.82	U	0.82	0.65	U	0.65	0.51	U	0.51	0.69	U	0.69
cis-1,2-Dichloroethene	156-59-2	250	59000	100000	500000	1000000	NA	250	0.29	U	0.29	0.48	U	0.48	0.38	U	0.38	0.3	U	0.3	0.4	U	0.4
cis-1,3-Dichloropropene	10061-01-5	NA	NA	NA	NA	NA	NA	NA	0.2	U	0.2	0.32	U	0.32	0.26	U	0.26	0.2	U	0.2	0.27	U	0.27
Cyclohexane	110-82-7	NA	NA	NA	NA	NA	NA	NA	0.62	U	0.62	0.99	U	0.99	0.79	U	0.79	0.62	U	0.62	0.83	U	0.83
Dichlorobromomethane	75-27-4	NA	NA	NA	NA	NA	NA	NA	0.51	U	0.51	0.82	U	0.82	0.65	U	0.65	0.51	U	0.51	0.69	U	0.69
Dichlorodifluoromethane	75-71-8	NA	NA	NA	NA	NA	NA	NA	0.43	U	0.43	0.69	U	0.69	0.55	U	0.55	0.43	U	0.43	0.58	U	0.58
Ethylbenzene	100-41-4	1000	30000	41000	390000	780000	NA	1000	0.24	U	0.24	0.39	U	0.39	0.31	U	0.31	0.24	U	0.24	0.33	U	0.33
Ethylene Dibromide	106-93-4	NA	NA	NA	NA	NA	NA	NA	0.16	U	0.16	0.26	U	0.26	0.21	U	0.21	0.16	U	0.16	0.22	U	0.22
Isopropylbenzene	98-82-8	NA	100000	NA	NA	NA	NA	2300	0.23	U	0.23	0.37	U	0.37	0.29	U	0.29	0.23	U	0.23	0.31	U	0.31
Methyl acetate	79-20-9	NA	NA	NA	NA	NA	NA	NA	1.2	U	1.2	1.9	U	1.9	1.5	U	1.5	1.2	U	1.2	1.6	U	1.6
Methyl tert-butyl ether	1634-04-4	930	62000	100000	500000	1000000	NA	930	0.23	U	0.23	0.37	U	0.37	0.29	U	0.29	0.23	U	0.23	0.31	U	0.31
Methylcyclohexane	108-87-2	NA	NA	NA	NA	NA	NA	NA	0.67	U	0.67	1.1	U	1.1	0.86	U	0.86	0.68	U	0.68	0.91	U	0.91
Methylene Chloride	75-09-2	50	51000	100000	500000	1000000	12000	50	0.43	U	0.43	3.5		0.69	0.55	U	0.55	1.4		0.43	0.58	U	0.58
Styrene	100-42-5	NA	NA	NA	NA	NA	300000	NA	0.2	U	0.2	0.32	U	0.32	0.26	U	0.26	0.2	U	0.2	0.27	U	0.27
Tetrachloroethene	127-18-4	1300	5500	19000	150000	300000	2000	1300	0.38	U	0.38	0.6	U	0.6	0.48	U	0.48	0.38	U	0.38	1.2	J	0.51
Toluene	108-88-3	700	100000	100000	500000	1000000	36000	700	0.25	U	0.25	0.41	U	0.41	0.43	J	0.33	0.26	U	0.26	0.34	U	0.34
trans-1,2-Dichloroethene	156-60-5	190	100000	100000	500000	1000000	NA	190	0.52	U	0.52	0.84	U	0.84	0.67	U	0.67	0.53	U	0.53	0.71	U	0.71
trans-1,3-Dichloropropene	10061-02-6	NA	NA	NA	NA	NA	NA	NA	0.13	U	0.13	0.22	U	0.22	0.17	U	0.17	0.14	U	0.14	0.18	U	0.18
Trichloroethene	79-01-6	470	10000	21000	200000	400000	2000	470	0.35	U	0.35	0.56	U	0.56	0.45	U	0.45	0.35	U	0.35	0.47	U	0.47
Trichlorofluoromethane	75-69-4	NA	NA	NA	NA	NA	NA	NA	0.46	U	0.46	0.73	U	0.73	0.59	U	0.59	0.46	U	0.46	0.62	U	0.62
Vinyl chloride	75-01-4	20	210	900	13000	27000	NA	20	0.52	U *	0.52	0.84	U	0.84	0.67	U	0.67	0.53	U	0.53	0.71	U	0.71
Xylenes, Total	1330-20-7	260	100000	100000	500000	1000000	260	1600	0.15	U	0.15	0.24	U	0.24	0.84	J	0.19	0.15	U	0.15	0.2	U	0.2

*T There are no TICs reported for the sample
* : LCS or LCSD is outside acceptance limits.
J : Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
U : Indicates the analyte was analyzed for but not detected.
X : Surrogate is outside control limits

Lab Contact:
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Combined Soil Test Data
Mount Vernon, NY
SESI Consulting Engineers

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

SUMMARY OF ANALYTICAL RESULTS: 460-121319-1
Job Description: 20 S. West St., Mt. Vernon, NY
For:
SESI Consulting Engineers
12 A Maple Avenue
Pine Brook, New Jersey 07058

Client ID	NY 375-6.8(a)	NY 375-6.8(b)	NY 375-6.8(b)	NY 375-6.8(b)	NY 375-6.8(b)	NY 375-6.8(b)	NY 375-6.8(b)	SB2-2.0-3.0			SB2-19.0-20.0			SB3-3.0-4.0			SB3-15.0-16.0			SB4-2.0-3.0			SB4-6.0-7.0			SB1-2-2.5			SB1-10-12			SB2-5-5.5			SB2-24.25		
Lab Sample ID	UnRestricted	& CP-51 T-1	& CP-51 T-1	& CP-51 T-1	& CP-51 T-1	& CP-51 T-1	& CP-51 T-1	460-121319-1			460-121319-2			460-121319-3			460-121319-4			460-121319-5			460-121319-6			460-119390-1			460-119390-2			460-119390-3			460-119390-4		
Sampling Date	Use Soil	Residential	Restrict. Res.	Commercial	Industrial	Eco. Resrcs.	GW	10/3/2016			10/3/2016			10/3/2016			10/3/2016			10/3/2016			10/3/2016			8/30/2016			8/30/2016			8/30/2016			8/30/2016		
Matrix	Cleanup	Soil Cleanup	Soil Cleanup	Soil Cleanup	Soil Cleanup	Soil Cleanup	Soil Cleanup	Soil			Soil			Soil			Soil			Soil			Soil			Soil			Soil			Soil			Soil		
Dilution Factor	Criteria	Criteria	Criteria	Criteria	Criteria	Criteria	Criteria	1			1			1			1			1			1			1			1			1			1		
Unit	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg			ug/kg			ug/kg			ug/kg			ug/kg			ug/kg			ug/kg			ug/kg			ug/kg			ug/kg		
SVOA-8270D-SOIL								Result	Q	MDL	Result	Q	MDL	Result	Q	MDL	Result	Q	MDL	Result	Q	MDL	Result	Q	MDL	Result	Q	MDL	Result	Q	MDL	Result	Q	MDL	Result	Q	MDL
SOIL BY 8270D																																						
1,2,4,5-Tetrachlorobenzene	NA	NA	NA	NA	NA	NA	NA	26	U	26	27	U	27	28	U	28	30	U	30	35	U	35	31	U	31	26	U	26	32	U	32	29	U	29	32	U	32
2,2'-oxybis[1-chloropropane]	NA	NA	NA	NA	NA	NA	NA	15	U	15	15	U	15	15	U	15	16	U	16	19	U	19	17	U	17	14	U	14	18	U	18	16	U	16	18	U	18
2,3,4,6-Tetrachlorophenol	NA	NA	NA	NA	NA	NA	NA	33	U	33	34	U	34	35	U	35	37	U	37	44	U	44	39	U	39	33	U	33	40	U	40	36	U	36	40	U	40
2,4,5-Trichlorophenol	NA	100000	NA	NA	NA	4000	100	35	U *	35	36	U *	36	37	U *	37	40	U *	40	46	U *	46	41	U *	41	35	U	35	42	U	42	38	U	38	43	U	43
2,4,6-Trichlorophenol	NA	NA	NA	NA	NA	NA	NA	10	U	10	10	U	10	11	U	11	11	U	11	13	U	13	12	U	12	9.9	U	9.9	12	U	12	11	U	11	12	U	12
2,4-Dichlorophenol	NA	100000	NA	NA	NA	20000	400	8.4	U	8.4	8.5	U	8.5	8.8	U	8.8	9.4	U	9.4	11	U	11	9.7	U	9.7	8.2	U	8.2	10	U	10	9.1	U	9.1	10	U	10
2,4-Dimethylphenol	NA	NA	NA	NA	NA	NA	NA	78	U	78	79	U	79	82	U	82	87	U	87	100	U	100	90	U	90	76	U	76	94	U	94	85	U	85	94	U	94
2,4-Dinitrophenol	NA	100000	NA	NA	NA	20000	200	270	U	270	270	U	270	280	U	280	300	U	300	350	U	350	310	U	310	260	U	260	320	U	320	290	U	290	320	U	320
2,4-Dinitrotoluene	NA	NA	NA	NA	NA	NA	NA	14	U	14	14	U	14	15	U	15	16	U	16	18	U	18	16	U	16	14	U	14	17	U	17	15	U	15	17	U	17
2,6-Dinitrotoluene	NA	1030	NA	NA	NA	NA	NA	19	U	19	19	U	19	20	U	20	21	U	21	25	U	25	22	U	22	19	U	19	23	U	23	20	U	20	23	U	23
2-Chloronaphthalene	NA	NA	NA	NA	NA	NA	NA	8.1	U	8.1	8.1	U	8.1	8.5	U	8.5	9	U	9	11	U	11	9.3	U	9.3	7.9	U	7.9	9.7	U	9.7	8.7	U	8.7	9.7	U	9.7
2-Chlorophenol	NA	100000	NA	NA	NA	800	NA	9	U	9	9.1	U	9.1	9.5	U	9.5	10	U	10	12	U	12	10	U	10	8.8	U	8.8	11	U	11	9.8	U	9.8	11	U	11
2-Methylnaphthalene	NA	410	NA	NA	NA	NA	36400	10	J	7.9	7.9	U	7.9	8.3	U	8.3	8.8	U	8.8	10	U	10	9.1	U	9.1	16	J	7.7	9.4	U	9.4	21	J	8.5	9.5	U	9.5
2-Methylphenol	330	100000	100000	500000	1000000	NA	330	15	U	15	16	U	16	16	U	16	17	U	17	20	U	20	18	U	18	15	U	15	19	U	19	17	U	17	19	U	19
2-Nitroaniline	NA	NA	NA	NA	NA	NA	400	12	U	12	12	U	12	12	U	12	13	U	13	15	U	15	14	U	14	11	U	11	14	U	14	13	U	13	14	U	14
2-Nitrophenol	NA	NA	NA	NA	NA	7000	300	12	U	12	12	U	12	13	U	13	13	U	13	16	U	16	14	U	14	12	U	12	14	U	14	13	U	13	14	U	14
3,3'-Dichlorobenzidine	NA	NA	NA	NA	NA	NA	NA	40	U	40	40	U	40	42	U	42	44	U	44	52	U	52	46	U	46	39	U	39	48	U	48	43	U	43	48	U	48
3-Nitroaniline	NA	NA	NA	NA	NA	NA	500	11	U	11	11	U	11	11	U	11	12	U	12	14	U	14	12	U	12	10	U	10	13	U	13	11	U	11	13	U	13
4,6-Dinitro-2-methylphenol	NA	NA	NA	NA	NA	NA	NA	95	U	95	96	U	96	100	U	100	110	U	110	120	U	120	110	U	110	93	U	93	110	U	110	100	U	100	110	U	110
4-Bromophenyl phenyl ether	NA	NA	NA	NA	NA	NA	NA	11	U	11	11	U	11	12	U	12	13	U	13	15	U	15	13	U	13	11	U	11	13	U	13	12	U	12	13	U	13
4-Chloro-3-methylphenol	NA	NA	NA	NA	NA	NA	NA	15	U	15	15	U	15	16	U	16	17	U	17	20	U	20	18	U	18	15	U	15	18	U	18	17	U	17	18	U	18
4-Chloroaniline	NA	100000	NA	NA	NA	NA	220	9.1	U	9.1	9.2	U	9.2	9.6	U	9.6	10	U	10	12	U	12	11	U	11	8.9	U	8.9	11	U	11	9.9	U	9.9	11	U	11
4-Chlorophenyl phenyl ether	NA	NA	NA	NA	NA	NA	NA	11	U	11	11	U	11	11	U	11	12	U	12	14	U	14	12	U	12	10	U	10	13	U	13	12	U	12	13	U	13
4-Methylphenol	330	34000	100000	500000	1000000	NA	330	9.7	U	9.7	9.8	U	9.8	10	U	10	11	U	11	13	U	13	11	U	11	9.5	U	9.5	12	U	12	10	U	10	12	U	12
4-Nitroaniline	NA	NA	NA	NA	NA	NA	NA	13	U	13	14	U	14	14	U	14	15	U	15	18	U	18	16	U	16	13	U	13	16	U	16	15	U	15	16	U	16
4-Nitrophenol	NA	NA	NA	NA	NA	7000	100	170	U	170	170	U	170	180	U	180	190	U	190	220	U	220	200	U	200	170	U	170	200	U	200	190	U	190	210	U	210
Acenaphthene	20000	100000	100000	500000	1000000	20000	98000	15	J	8.6	8.7	U	8.7	9	U	9	9.6	U	9.6	11	U	11	9.9	U	9.9	8.4	U	8.4	10	U	10	9.3	U	9.3	10	U	10
Acenaphthylene	100000	100000	100000	500000	1000000	NA	107000	20	J	9.1	9.2	U	9.2	9.6	U	9.6	10	U	10	12	U	12	11	U	11	8.9	U	8.9	11	U	11	9.9	U	9.9	11	U	11
Acetophenone	NA	NA	NA	NA	NA	NA	NA	7.7	U	7.7	7.8	U	7.8	8.1	U	8.1	8.7	U	8.7	10	U	10	8.9	U	8.9	7.6	U	7.6	9.3	U	9.3	8.4	U	8.4	9.3	U	9.3
Anthracene	100000	100000	100000	500000	1000000	NA	1000000	59	J	34	34	U	34	36	U	36	38	U	38	44	U	44	39	U	39	33	U	33	40	U	40	37	U	37	41	U	41
Atrazine	NA	NA	NA	NA	NA	NA	NA	16	U	16	16	U	16	17	U	17	18	U	18	21	U	21	18	U	18	15	U	15	19	U	19	17	U	17	19	U	19
Benzaldehyde	NA	NA	NA	NA	NA	NA	NA	27	U	27	27	U	27	29	U	29	30	U	30	35	U	35	31	U	31	27	U	27	32	U	32	29	U	29	33	U	33
Benzo[a]anthracene	1000	1000	1000	5600	11000	NA	1000	510		30	30	U	30	77		31	33	U	33	39	U	39	34	U	34	63		29	36	U	36	32	U	32	36	U	36
Benzo[a]pyrene	1000	1000	1000	1000	1100	2600	22000	540		11	11	U	11	89		11	12	U	12	14	U	14	12	U	12	66		11	13	U	13	12	U	12	13	U	13
Benzo[b]fluoranthene	1000	1000	1000	5600	11000	NA	1700	680		14	14	U	14	110		15	16	U	16	18	U	18	16	U	16	92		14	17	U	17	15	U	15	17	U	17
Benzo[g,h,i]perylene	100000	100000	100000	500000	1000000	NA	1000000	390		20	21	U	21	70	J	21	23	U	23	27	U	27	24	U	24	48	J	20	24	U	24	22	U	22	25	U	25
Benzo[k]fluoranthene	800	1000	3900	56000	110000	NA	1700	240		15	16	U	16	38		16	17	U	17	20	U	20	18	U	18	45		15	19	U	19	17	U	17	19	U	19
Bis(2-chloroethoxy)methane	NA	NA	NA	NA	NA	NA	NA	11	U	11	11	U	11	12	U	12	12	U	12	14	U	14	13	U	13	11	U	11	13	U	13	12	U	12	13	U	13
Bis(2-chloroethyl)ether	NA	NA	NA	NA	NA	NA	NA	8.4	U	8.4	8.5	U	8.5	8.8	U	8.8	9.4	U	9.4	11	U	11	9.7	U	9.7	8.2	U	8.2	10	U	10	9.1	U	9.1	10	U	10
Bis(2-ethylhexyl) phthalate	NA	50000	NA	NA	NA	239000	435000	49	J	14	14	U	14	130	J	15	16	U	16	18	U	18	16	U	16	27	J	14	61	J	17	270	J	15	200	J	17
Butyl benzyl phthalate	NA	100000	NA	NA	NA	NA	122000	11	U	11	11	U	11	12	J	12	12	U	12	14	U	14	13	U	13	11	U	11	13	U	13	12	U	12	13	U	13
Caprolactam	NA	NA	NA	NA	NA	NA	NA	26	U	26	26	U	26	27	U	27	29	U	29	33	U	33	30	U	30	25	U	25	31	U	31	28	U	28	31	U	31
Carbazole	NA	NA	NA	NA	NA	NA	NA	14	J	8.8	8.9	U	8.9	9.3	U	9.3	9.9	U	9.9	12	U	12	10	U	10	8.6	U	8.6	11	U	11	9.5	U	9.5	11	U	11
Chrysene	1000	1000	3900	56000	110000	NA	1000	520		9.7	9.8	U	9.8	75	J	10	11	U	11	13	U	13	11	U	11	75	J	9.5	12	U	12	10	U	10	12	U	12
Dibenz(a,h)anthracene	330	330	330	560	1100	NA	1000000	110		19	19	U	19	19	J	19	21	U	21	24	U	24	21	U	21	18	U	18	22	U	22	20	U	20	22	U	22
Dibenzofuran	7000	14000	59000	350000	1000000	NA	6200	11	U	11	11	U	11	11	U	11	12	U	12	14	U	14	12	U	12	11	U	11	13	U	13	12	U	12	13	U	13
Diethyl phthalate	NA	100000	NA	NA	NA	100000	7100	10	U	10	10	U	10	11	U	11	11	U	11	13	U	13	12	U	12	9.9	U	9.9	12	U	12	11	U	11	12	U	12
Dimethyl phthalate	NA	100000	NA	NA	NA	200000	27000	10	U	10	10	U	10	11	U	11	12	U	12	14	U	14	12	U	12	10	U	10	12	U	12	11	U	11	12	U	12
Di-n-butyl phthalate	NA	100000	NA	NA	NA	14	8100	11	U	11	11	U	11	11	U	11	12	U	12	14	U	14	12	U	12	10	U	10	13	U	13	12	U	12	13	U	13
Di-n-octyl phthalate	NA	100000	NA	NA	NA	NA	120000	18	U	18	18	U	18	19	U	19	20	U	20	24	U	24	21	U	21	18	U	18	22	U	22	20	U	20	22	U	22
Diphenyl	NA	NA	NA	NA	NA	60000	NA	30	U	30	31	U	31	32	U	32	34	U	34	40	U	40	35	U	35	30	U	30	36	U	36	33	U	33	37	U	37
Fluoranthene	100000	100000	100000	500000	1000000	NA	1000000	720		11	11	U	11	93	J	11	12	U	12	14	U	14	12	U	12	83	J	10	13	U	13	11	U	11	13	U	13
Fluorene	30000	100000	100000	500000	1000000	30000	386000	12	J	7.7	7.8	U	7.8	8.1	U	8.1	8.7	U	8.7	10	U	10	8.9	U	8.9	7.6	U	7.6	9.3	U	9.3	8.4	U	8.4	9.3	U	9.3
Hexachlorobenzene	330	330	1200	6000	12000	NA	1400	14	U	14	15	U	15	15	U	15	16	U	16	19	U	19	17	U	17	14	U	14	17	U	17	16	U	16	17	U	17
Hexachlorobutadiene	NA	NA	NA	NA	NA	NA	NA	10	U	10	10	U	10	11	U	11	11	U	11	13	U	13	12	U	12	9.8	U *	9.8	12	U *	12	11	U *	11	12	U *	12
Hexachlorocyclopentadiene	NA	NA	NA	NA	NA	10000	NA	22	U	22	22	U	22	23	U	23	25	U	25	29	U	29	26	U	26	22	U	22	27	U	27	24	U	24	27	U	27
Hexachloroethane	NA	NA	NA	NA	NA	NA	NA	13	U	13	13	U	13	14	U	14	15	U	15	17	U	17	15	U	15	13	U	13	16	U	16	14	U	14	16	U	16
Indeno[1,2,3-cd]pyrene	500	500	500	5600	11000	NA	8200	400		24	24	U	24	68		25	26	U	26	31	U	31	27	U	27	50		23	28	U	28	26	U	26	29	U	29
Isophorone	NA	100000	NA	NA	NA	NA	4400	7.6	U	7.6	7.7	U	7.7	8	U	8	8.5	U	8.5	10	U	10	8.8	U	8.8	7.5	U	7.5	9.2	U	9.2	8.3	U	8.3	9.2	U	9.2
Naphthalene	12000	100000	100000	500000	1000000	NA	12000	16	J	9	9.1	U	9.1	9.5	U	9.5	10	U	10	12	U	12	10	U	10	20	J	8.8	11	U	11	13	J	9.8	11	U	11
Nitrobenzene	NA	3700	15000	69000	140000	NA	170	11	U	11	11	U	11	12	U	12	13	U	13	15	U	15	13	U	13	11	U	11	13	U	13	12	U	12	13	U	13
N-Nitrosodi-n-propylamine	NA	NA	NA	NA	NA	NA	NA	12	U	12	12	U	12	13	U	13	13	U	13	16	U	16	14	U	14	12	U	12	14	U	14	13	U	13	14	U	14
N-Nitrosodiphenylamine	NA	NA	NA	NA	NA	20000	NA	32	U	32	33	U	33	34	U	34	36	U	36	42	U	42	37	U	37	32	U	32	39	U	39	35	U	35	39	U	39
Pentachlorophenol	800	2400	6700	6700	55000	800	800	43	U	43	43	U	43	45	U	45	48	U	48	56	U	56	50	U	50	42	U	42	52	U	52	47	U	47	52	U	52
Phenanthrene	100000	100000	100000	500000	1000000	NA	1000000	250	J	9.5	9.6	U	9.6	27	J	10	11	U	11	12	U	12	11	U	11	32	J	9.3	11	U	11	10	U	10	11	U	11
Phenol	330	100000	100000	500000	1000000	30000	330	12	U	12	12	U	12	12	U	12	13	U	13	15	U	15	13	U	13	11	U	11	14	U	14	13	U	13	14	U	14
Pyrene	100000	100000	100000	500000	1000000	NA	1000000	640		16	16	U	16	100	J	17	18	U	18	21	U	21	19	U	19	88	J	16	19	U	19	17	U	17	19	U	19

*T There are no TICs reported for the sample
Highlighted Concentrations shown in bold type face exceed limits
* : LCS or LCSD is outside acceptance limits.
J : Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
U : Indicates the analyte was analyzed for but not detected.

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

SUMMARY OF ANALYTICAL RESULTS: 460-121319-1
Job Description: 20 S. West St., Mt. Vernon, NY
For:
SESI Consulting Engineers
12 A Maple Avenue
Pine Brook, New Jersey 07058

Client ID		NY 375-6.8(a)	NY 375-6.8(b)	NY 375-6.8(b)	NY 375-6.8(b)	NY 375-6.8(b)	NY 375-6.8(b)	NY 375-6.8(b)	**SB2-2.0-3.0**			**SB2-19.0-20.0**			**SB3-3.0-4.0**			**SB3-15.0-16.0**			**SB4-2.0-3.0**		
Lab Sample ID		UnRestricted	& CP-51 T-1	& CP-51 T-1	& CP-51 T-1	& CP-51 T-1	& CP-51 T-1	& CP-51 T-1	460-121319-1			460-121319-2			460-121319-3			460-121319-4			460-121319-5		
Sampling Date		Use Soil	Residential	Restricted Residential	Commercial	Industrial	Ecological Resources	GW	10/3/2016			10/3/2016			10/3/2016			10/3/2016			10/3/2016		
Matrix		Cleanup	Soil Cleanup	Soil Cleanup	Soil Cleanup	Soil Cleanup	Soil Cleanup	Soil Cleanup	Soil			Soil			Soil			Soil			Soil		
Dilution Factor		Criteria	Criteria	Criteria	Criteria	Criteria	Criteria	Criteria	1			1			1			1			1		
Unit		ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg			ug/kg			ug/kg			ug/kg			ug/kg		
GCSVOA-8081B-SOIL	CAS#								Result	Q	MDL	Result	Q	MDL	Result	Q	MDL	Result	Q	MDL	Result	Q	MDL
SOIL BY 8081B																							
4,4'-DDD	72-54-8	3.3	2600	13000	92000	180000	3.3	14000	0.95	U	0.95	0.95	U	0.95	1.0	U	1.0	1.1	U	1.1	1.2	U	1.2
4,4'-DDE	72-55-9	3.3	1800	8900	62000	120000	3.3	17000	1.0	U	1.0	1.1	U	1.1	1.1	U	1.1	1.2	U	1.2	1.4	U	1.4
4,4'-DDT	50-29-3	3.3	1700	7900	47000	94000	3.3	136000	0.74	U	0.74	0.75	U	0.75	0.78	U	0.78	0.83	U	0.83	0.97	U	0.97
Aldrin	309-00-2	5	19	97	680	1400	140	190	0.87	U	0.87	0.88	U	0.88	0.92	U	0.92	0.97	U	0.97	1.1	U	1.1
alpha-BHC	319-84-6	20	97	480	3400	6800	40	20	0.66	U	0.66	0.66	U	0.66	0.69	U	0.69	0.73	U	0.73	0.86	U	0.86
beta-BHC	319-85-7	36	72	360	3000	14000	600	90	0.70	U	0.70	0.70	U	0.70	0.73	U	0.73	0.78	U	0.78	0.92	U	0.92
Chlordane (technical)	57-74-9	NA	NA	NA	NA	NA	NA	NA	32	U	32	32	U	32	33	U	33	36	U	36	42	U	42
delta-BHC	319-86-8	40	100000	100000	500000	1000000	40	250	0.79	U	0.79	0.79	U	0.79	0.83	U	0.83	0.88	U	0.88	1.0	U	1.0
Dieldrin	60-57-1	5	39	200	1400	2800	6	100	0.94	U	0.94	0.94	U	0.94	0.98	U	0.98	1.0	U	1.0	1.2	U	1.2
Endosulfan I	959-98-8	2400	4800	24000	200000	920000	NA	102000	1.0	U	1.0	1.0	U	1.0	1.1	U	1.1	1.1	U	1.1	1.3	U	1.3
Endosulfan II	33213-65-9	2400	4800	24000	200000	920000	NA	102000	1.1	U	1.1	1.1	U	1.1	1.2	U	1.2	1.3	U	1.3	1.5	U	1.5
Endosulfan sulfate	1031-07-8	2400	4800	24000	200000	920000	NA	1000000	0.84	U	0.84	0.85	U	0.85	0.88	U	0.88	0.94	U	0.94	1.1	U	1.1
Endrin	72-20-8	14	2200	11000	89000	410000	14	60	0.92	U	0.92	0.92	U	0.92	0.96	U	0.96	1.0	U	1.0	1.2	U	1.2
Endrin aldehyde	7421-93-4	NA	NA	NA	NA	NA	NA	NA	0.90	U	0.90	0.90	U	0.90	0.94	U	0.94	1.0	U	1.0	1.2	U	1.2
Endrin ketone	53494-70-5	NA	NA	NA	NA	NA	NA	NA	1.0	U	1.0	1.0	U	1.0	1.1	U	1.1	1.1	U	1.1	1.3	U	1.3
gamma-BHC (Lindane)	58-89-9	100	280	1300	9200	23000	6000	100	0.65	U	0.65	0.65	U	0.65	0.68	U	0.68	0.72	U	0.72	0.85	U	0.85
Heptachlor	76-44-8	42	420	2100	15000	29000	140	380	0.93	U	0.93	0.93	U	0.93	0.97	U	0.97	1.0	U	1.0	1.2	U	1.2
Heptachlor epoxide	1024-57-3	NA	77	NA	NA	NA	NA	20	1.4	U	1.4	1.4	U	1.4	1.5	U	1.5	1.6	U	1.6	1.8	U	1.8
Methoxychlor	72-43-5	NA	100000	NA	NA	NA	1200	900000	1.5	U	1.5	1.5	U	1.5	1.6	U	1.6	1.7	U	1.7	2.0	U	2.0
Toxaphene	8001-35-2	NA	NA	NA	NA	NA	NA	NA	21	U	21	21	U	21	22	U	22	23	U	23	27	U	27

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Lab Contact:
Grace Chang
Project Manager II
(732)593-2579

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

SUMMARY OF ANALYTICAL RESULTS: 460-121319-1
Job Description: 20 S. West St., Mt. Vernon, NY
For:
SESI Consulting Engineers
12 A Maple Avenue
Pine Brook, New Jersey 07058

Client ID		NY 375-6.8(a)	NY 375-6.8(b)	NY 375-6.8(b)	NY 375-6.8(b)	NY 375-6.8(b)	NY 375-6.8(b)	NY 375-6.8(b)	**SB4-6.0-7.0**			**SB1-2-2.5**			**SB1-10-12**			**SB2-5-5.5**			**SB2-24.25**		
Lab Sample ID		UnRestricted	& CP-51 T-1	& CP-51 T-1	& CP-51 T-1	& CP-51 T-1	& CP-51 T-1	& CP-51 T-1	460-121319-6			460-119390-1			460-119390-2			460-119390-3			460-119390-4		
Sampling Date		Use Soil	Residential	Restricted Residential	Commercial	Industrial	Ecological Resources	GW	10/3/2016			8/30/2016			8/30/2016			8/30/2016			8/30/2016		
Matrix		Cleanup	Soil Cleanup	Soil Cleanup	Soil Cleanup	Soil Cleanup	Soil Cleanup	Soil Cleanup	Soil			Soil			Soil			Soil			Soil		
Dilution Factor		Criteria	Criteria	Criteria	Criteria	Criteria	Criteria	Criteria	1			1			1			1			1		
Unit		ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg			ug/kg			ug/kg			ug/kg			ug/kg		
GCSVOA-8081B-SOIL	CAS#								Result	Q	MDL	Result	Q	MDL	Result	Q	MDL	Result	Q	MDL	Result	Q	MDL
SOIL BY 8081B																							
4,4'-DDD	72-54-8	3.3	2600	13000	92000	180000	3.3	14000	1.1	U	1.1	0.93	U	0.93	1.1	U	1.1	1.0	U	1.0	1.1	U	1.1
4,4'-DDE	72-55-9	3.3	1800	8900	62000	120000	3.3	17000	1.2	U	1.2	1.0	U	1.0	1.3	U	1.3	1.1	U	1.1	1.3	U	1.3
4,4'-DDT	50-29-3	3.3	1700	7900	47000	94000	3.3	136000	0.86	U	0.86	0.73	U	0.73	0.89	U	0.89	0.80	U	0.80	0.90	U	0.90
Aldrin	309-00-2	5	19	97	680	1400	140	190	1.0	U	1.0	0.85	U	0.85	1.0	U	1.0	0.94	U	0.94	1.1	U	1.1
alpha-BHC	319-84-6	20	97	480	3400	6800	40	20	0.76	U	0.76	0.64	U	0.64	0.79	U	0.79	0.71	U	0.71	0.79	U	0.79
beta-BHC	319-85-7	36	72	360	3000	14000	600	90	0.81	U	0.81	0.68	U	0.68	0.84	U	0.84	0.76	U	0.76	0.84	U	0.84
Chlordane (technical)	57-74-9	NA	NA	NA	NA	NA	NA	NA	37	U	37	31	U	31	38	U	38	34	U	34	38	U	38
delta-BHC	319-86-8	40	100000	100000	500000	1000000	40	250	0.91	U	0.91	0.77	U	0.77	0.94	U	0.94	0.85	U	0.85	0.95	U	0.95
Dieldrin	60-57-1	5	39	200	1400	2800	6	100	1.1	U	1.1	0.92	U	0.92	1.1	U	1.1	1.0	U	1.0	1.1	U	1.1
Endosulfan I	959-98-8	2400	4800	24000	200000	920000	NA	102000	1.2	U	1.2	0.98	U	0.98	1.2	U	1.2	1.1	U	1.1	1.2	U	1.2
Endosulfan II	33213-65-9	2400	4800	24000	200000	920000	NA	102000	1.3	U	1.3	1.1	U	1.1	1.4	U	1.4	1.2	U	1.2	1.4	U	1.4
Endosulfan sulfate	1031-07-8	2400	4800	24000	200000	920000	NA	1000000	0.97	U	0.97	0.82	U	0.82	1.0	U	1.0	0.91	U	0.91	1.0	U	1.0
Endrin	72-20-8	14	2200	11000	89000	410000	14	60	1.1	U	1.1	0.90	U	0.90	1.1	U	1.1	0.99	U	0.99	1.1	U	1.1
Endrin aldehyde	7421-93-4	NA	NA	NA	NA	NA	NA	NA	1.0	U	1.0	0.87	U	0.87	1.1	U	1.1	0.97	U	0.97	1.1	U	1.1
Endrin ketone	53494-70-5	NA	NA	NA	NA	NA	NA	NA	1.2	U	1.2	0.98	U	0.98	1.2	U	1.2	1.1	U	1.1	1.2	U	1.2
gamma-BHC (Lindane)	58-89-9	100	280	1300	9200	23000	6000	100	0.75	U	0.75	0.63	U	0.63	0.77	U	0.77	0.70	U	0.70	0.78	U	0.78
Heptachlor	76-44-8	42	420	2100	15000	29000	140	380	1.1	U	1.1	0.91	U	0.91	1.1	U	1.1	1.0	U	1.0	1.1	U	1.1
Heptachlor epoxide	1024-57-3	NA	77	NA	NA	NA	NA	20	1.6	U	1.6	1.4	U	1.4	1.7	U	1.7	1.5	U	1.5	1.7	U	1.7
Methoxychlor	72-43-5	NA	100000	NA	NA	NA	1200	900000	1.8	U	1.8	1.5	U	1.5	1.8	U	1.8	1.7	U	1.7	1.8	U	1.8
Toxaphene	8001-35-2	NA	NA	NA	NA	NA	NA	NA	24	U	24	21	U	21	25	U	25	23	U	23	25	U	25

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Lab Contact:
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Project Manager II
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TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

SUMMARY OF ANALYTICAL RESULTS: 460-121319-1
Job Description: 20 S. West St., Mt. Vernon, NY
For:
SESI Consulting Engineers
12 A Maple Avenue
Pine Brook, New Jersey 07058

Client ID		NY 375-6.8(a)	NY 375-6.8(b)	NY 375-6.8(b)	NY 375-6.8(b)	NY 375-6.8(b)	NY 375-6.8(b)	NY 375-6.8(b)	**SB2-2.0-3.0**			**SB2-19.0-20.0**			**SB3-3.0-4.0**			**SB3-15.0-16.0**			**SB4-2.0-3.0**		
Lab Sample ID		UnRestricted	& CP-51 T-1	& CP-51 T-1	& CP-51 T-1	& CP-51 T-1	& CP-51 T-1	& CP-51 T-1	460-121319-1			460-121319-2			460-121319-3			460-121319-4			460-121319-5		
Sampling Date		Use Soil	Residential	Restricted Residential	Commercial	Industrial	Ecological Resources	GW	10/3/2016			10/3/2016			10/3/2016			10/3/2016			10/3/2016		
Matrix		Cleanup	Soil Cleanup	Soil Cleanup	Soil Cleanup	Soil Cleanup	Soil Cleanup	Soil Cleanup	Soil			Soil			Soil			Soil			Soil		
Dilution Factor		Criteria	Criteria	Criteria	Criteria	Criteria	Criteria	Criteria	1			1			1			1			1		
Unit		ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg			ug/kg			ug/kg			ug/kg			ug/kg		
GCSVOA-8082A-SOIL	CAS#								Result	Q	MDL	Result	Q	MDL	Result	Q	MDL	Result	Q	MDL	Result	Q	MDL
SOIL BY 8082A																							
Aroclor 1016	12674-11-2	NA	NA	NA	NA	NA	NA	NA	9.6	U	9.6	9.6	U	9.6	10	U	10	11	U	11	13	U	13
Aroclor 1221	11104-28-2	NA	NA	NA	NA	NA	NA	NA	9.6	U	9.6	9.6	U	9.6	10	U	10	11	U	11	13	U	13
Aroclor 1232	11141-16-5	NA	NA	NA	NA	NA	NA	NA	9.6	U	9.6	9.6	U	9.6	10	U	10	11	U	11	13	U	13
Aroclor 1242	53469-21-9	NA	NA	NA	NA	NA	NA	NA	9.6	U	9.6	9.6	U	9.6	10	U	10	11	U	11	13	U	13
Aroclor 1248	12672-29-6	NA	NA	NA	NA	NA	NA	NA	9.6	U	9.6	9.6	U	9.6	10	U	10	11	U	11	13	U	13
Aroclor 1254	11097-69-1	NA	NA	NA	NA	NA	NA	NA	9.9	U	9.9	10	U	10	10	U	10	11	U	11	13	U	13
Aroclor 1260	11096-82-5	NA	NA	NA	NA	NA	NA	NA	9.9	U	9.9	10	U	10	10	U	10	11	U	11	13	U	13
Aroclor 1268	11100-14-4	NA	NA	NA	NA	NA	NA	NA	9.9	U	9.9	10	U	10	10	U	10	11	U	11	13	U	13
Aroclor-1262	37324-23-5	NA	NA	NA	NA	NA	NA	NA	9.9	U	9.9	10	U	10	10	U	10	11	U	11	13	U	13
Total PCBs	1336-36-3	100	1000	1000	1000	25000	1000	3200	9.9	U	9.9	10	U	10	10	U	10	11	U	11	13	U	13

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TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

SUMMARY OF ANALYTICAL RESULTS: 460-121319-1
Job Description: 20 S. West St., Mt. Vernon, NY
For:
SESI Consulting Engineers
12 A Maple Avenue
Pine Brook, New Jersey 07058

Client ID		NY 375-6.8(a)	NY 375-6.8(b)	NY 375-6.8(b)	NY 375-6.8(b)	NY 375-6.8(b)	NY 375-6.8(b)	NY 375-6.8(b)	**SB4-6.0-7.0**			**SB1-2-2.5**			**SB1-10-12**			**SB2-5-5.5**			**SB2-24.25**		
Lab Sample ID		UnRestricted	& CP-51 T-1	& CP-51 T-1	& CP-51 T-1	& CP-51 T-1	& CP-51 T-1	& CP-51 T-1	460-121319-6			460-119390-1			460-119390-2			460-119390-3			460-119390-4		
Sampling Date		Use Soil	Residential	Restricted Residential	Commercial	Industrial	Ecological Resources	GW	10/3/2016			8/30/2016			8/30/2016			8/30/2016			8/30/2016		
Matrix		Cleanup	Soil Cleanup	Soil Cleanup	Soil Cleanup	Soil Cleanup	Soil Cleanup	Soil Cleanup	Soil			Soil			Soil			Soil			Soil		
Dilution Factor		Criteria	Criteria	Criteria	Criteria	Criteria	Criteria	Criteria	1			1			1			1			1		
Unit		ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg			ug/kg			ug/kg			ug/kg			ug/kg		
GCSVOA-8082A-SOIL	CAS#								Result	Q	MDL	Result	Q	MDL	Result	Q	MDL	Result	Q	MDL	Result	Q	MDL
SOIL BY 8082A																							
Aroclor 1016	12674-11-2	NA	NA	NA	NA	NA	NA	NA	11	U	11	9.4	U	9.4	11	U	11	10	U	10	12	U	12
Aroclor 1221	11104-28-2	NA	NA	NA	NA	NA	NA	NA	11	U	11	9.4	U	9.4	11	U	11	10	U	10	12	U	12
Aroclor 1232	11141-16-5	NA	NA	NA	NA	NA	NA	NA	11	U	11	9.4	U	9.4	11	U	11	10	U	10	12	U	12
Aroclor 1242	53469-21-9	NA	NA	NA	NA	NA	NA	NA	11	U	11	9.4	U	9.4	11	U	11	10	U	10	12	U	12
Aroclor 1248	12672-29-6	NA	NA	NA	NA	NA	NA	NA	11	U	11	9.4	U	9.4	11	U	11	10	U	10	12	U	12
Aroclor 1254	11097-69-1	NA	NA	NA	NA	NA	NA	NA	11	U	11	9.7	U	9.7	12	U	12	11	U	11	12	U	12
Aroclor 1260	11096-82-5	NA	NA	NA	NA	NA	NA	NA	11	U	11	9.7	U	9.7	12	U	12	11	U	11	12	U	12
Aroclor 1268	11100-14-4	NA	NA	NA	NA	NA	NA	NA	11	U	11	9.7	U	9.7	12	U	12	11	U	11	12	U	12
Aroclor-1262	37324-23-5	NA	NA	NA	NA	NA	NA	NA	11	U	11	9.7	U	9.7	12	U	12	11	U	11	12	U	12
Total PCBs	1336-36-3	100	1000	1000	1000	25000	1000	3200	11	U	11	9.7	U	9.7	12	U	12	11	U	11	12	U	12

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Job Description: 20 S. West St., Mt. Vernon, NY
For:
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Lab Sample ID		UnRestricted	& CP-51 T-1	& CP-51 T-1	& CP-51 T-1	& CP-51 T-1	& CP-51 T-1	& CP-51 T-1	460-121319-1			460-121319-2			460-121319-3			460-121319-4			460-121319-5		
Sampling Date		Use Soil	Residential	Restricted Residential	Commercial	Industrial	Ecological Resources	GW	10/3/2016			10/3/2016			10/3/2016			10/3/2016			10/3/2016		
Matrix		Cleanup	Soil Cleanup	Soil Cleanup	Soil Cleanup	Soil Cleanup	Soil Cleanup	Soil Cleanup	Soil			Soil			Soil			Soil			Soil		
		Criteria	Criteria	Criteria	Criteria	Criteria	Criteria	Criteria															
Unit											mg/kg			mg/kg			mg/kg			mg/kg			mg/kg
METALS-SOIL	CAS#								Result	Q	MDL	Result	Q	MDL	Result	Q	MDL	Result	Q	MDL	Result	Q	MDL
SOIL BY 6010C(MG/KG)																							
Aluminum	7429-90-5	NA	NA	NA	NA	NA	10000	NA	8680		17.0	5530		17.6	17200		18.7	11600		19.8	14900		21.5
Antimony	7440-36-0	NA	NA	NA	NA	NA	12	NA	1.3	U	1.3	1.4	U	1.4	1.4	U	1.4	1.5	U	1.5	1.7	U	1.7
Arsenic	7440-38-2	13	NA	16	16	16	13	16	3.7		0.81	1.5	J	0.84	2.5	J	0.89	2.3	J	0.95	4.2		1.0
Barium	7440-39-3	350	350	400	400	10000	433	820	88.7		1.2	51.3		1.2	86.5		1.3	111		1.4	132		1.5
Beryllium	7440-41-7	7.2	14	72	590	2700	10	47	0.41		0.28	0.29	U	0.29	0.73		0.31	0.64		0.33	0.86		0.35
Cadmium	7440-43-9	2.5	2.5	4.3	9.3	60	4	7.5	0.34	U	0.34	0.36	U	0.36	0.38	U	0.38	0.40	U	0.40	0.44	U	0.44
Calcium	7440-70-2	NA	NA	NA	NA	NA	10000	NA	1750		48.8	695	J	50.7	1160		53.7	2260		57.0	2990		61.9
Chromium	7440-47-3	NA	NA	NA	NA	NA	NA	NA	17.5		0.80	12.3		0.83	27.5		0.88	29.3		0.93	36.6		1.0
Cobalt	7440-48-4	NA	30	NA	NA	NA	20	NA	5.2	J	0.95	3.2	J	0.98	8.3	J	1.0	7.1	J	1.1	12.3		1.2
Copper	7440-50-8	50	270	270	270	10000	50	1720	44.7		1.1	11.5		1.1	21.7		1.2	20.2		1.3	27.8		1.4
Iron	7439-89-6	NA	2000	NA	NA	NA	NA	NA	**14100**		18.6	**10300**		19.3	**24000**		20.5	**24300**		21.8	**28200**		23.6
Lead	7439-92-1	63	400	400	1000	3900	63	450	**163**		0.65	1.9		0.67	21.4		0.71	3.6		0.76	6.5		0.82
Magnesium	7439-95-4	NA	NA	NA	NA	NA	NA	NA	2650		41.1	2440		42.7	5040		45.2	5370		48.1	6330		52.1
Manganese	7439-96-5	1600	2000	2000	10000	10000	1600	2000	246		0.87	195		0.90	357		0.95	435		1.0	555		1.1
Nickel	7440-02-0	30	140	310	310	10000	30	130	11.7		1.2	9.5		1.2	22.3		1.3	20.4		1.4	**31.0**		1.5
Potassium	7440-09-7	NA	NA	NA	NA	NA	NA	NA	1010		25.0	1270		25.9	2390		27.5	3000		29.2	3680		31.7
Selenium	7782-49-2	3.9	36	180	1500	6800	3.9	4	1.1	U	1.1	1.2	U	1.2	1.3	U	1.3	1.3	U	1.3	1.4	U	1.4
Silver	7440-22-4	2	36	180	1500	6800	2	8.3	0.29	U	0.29	0.30	U	0.30	0.32	U	0.32	0.34	U	0.34	0.37	U	0.37
Sodium	7440-23-5	NA	NA	NA	NA	NA	NA	NA	80.5	J	55.8	108	J	57.9	523	J	61.4	143	J	65.2	158	J	70.7
Thallium	7440-28-0	NA	NA	NA	NA	NA	5	NA	1.5	U	1.5	1.5	U	1.5	1.6	U	1.6	1.7	U	1.7	1.8	U	1.8
Vanadium	7440-62-2	NA	100	NA	NA	NA	39	NA	20.5		0.82	14.0		0.86	35.9		0.91	37.2		0.96	**45.0**		1.0
Zinc	7440-66-6	109	2200	10000	10000	10000	109	2480	93.1		1.2	28.1		1.2	97.5		1.3	79.8		1.4	**141**		1.5
SOIL BY 7471B(MG/KG)																							
Mercury	7439-97-6	0.18	0.81	0.81	2.8	5.7	0.18	0.73	**0.57**		0.012	0.011	U	0.011	0.11		0.011	0.012	U	0.012	0.032		0.014

Highlighted Concentrations shown in bold type face exceed limits
J : Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
U : Indicates the analyte was analyzed for but not detected.

Lab Contact:
Grace Chang
Project Manager II
(732)593-2579

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

SUMMARY OF ANALYTICAL RESULTS: 460-121319-1
Job Description: 20 S. West St., Mt. Vernon, NY
For:
SESI Consulting Engineers
12 A Maple Avenue
Pine Brook, New Jersey 07058

Client ID		NY 375-6.8(a)	NY 375-6.8(b)	NY 375-6.8(b)	NY 375-6.8(b)	NY 375-6.8(b)	NY 375-6.8(b)	NY 375-6.8(b)	**SB4-6.0-7.0**			**SB1-2-2.5**			**SB1-10-12**			**SB2-5-5.5**			**SB2-24.25**		
Lab Sample ID		UnRestricted	& CP-51 T-1	& CP-51 T-1	& CP-51 T-1	& CP-51 T-1	& CP-51 T-1	& CP-51 T-1	460-121319-6			460-119390-1			460-119390-2			460-119390-3			460-119390-4		
Sampling Date		Use Soil	Residential	Restricted Residential	Commercial	Industrial	Ecological Resources	GW	10/3/2016			8/30/2016			8/30/2016			8/30/2016			8/30/2016		
Matrix		Cleanup	Soil Cleanup	Soil Cleanup	Soil Cleanup	Soil Cleanup	Soil Cleanup	Soil Cleanup	Soil			Soil			Soil			Soil			Soil		
		Criteria	Criteria	Criteria	Criteria	Criteria	Criteria	Criteria															
Unit									mg/kg			mg/kg			mg/kg			mg/kg			mg/kg		
METALS-SOIL	CAS#								Result	Q	MDL	Result	Q	MDL	Result	Q	MDL	Result	Q	MDL	Result	Q	MDL
SOIL BY 6010C(MG/KG)																							
Aluminum	7429-90-5	NA	NA	NA	NA	NA	10000	NA	9000		19.2	11500		17.0	16900		21.6	14600		19.2	7530		20.9
Antimony	7440-36-0	NA	NA	NA	NA	NA	12	NA	1.5	U	1.5	1.3	U	1.3	1.7	U	1.7	1.5	U	1.5	1.6	U	1.6
Arsenic	7440-38-2	13	NA	16	16	16	13	16	1.9	J	0.91	2.4	J	0.81	2.2	J	1.0	2.6	J	0.92	2.0	J	1.0
Barium	7440-39-3	350	350	400	400	10000	433	820	107		1.3	102		1.2	119		1.5	67.3		1.3	104		1.5
Beryllium	7440-41-7	7.2	14	72	590	2700	10	47	0.49		0.32	0.50		0.28	0.66		0.36	0.48		0.32	0.39	J	0.34
Cadmium	7440-43-9	2.5	2.5	4.3	9.3	60	4	7.5	0.39	U	0.39	0.34	U	0.34	0.44	U	0.44	0.39	U	0.39	0.42	U	0.42
Calcium	7440-70-2	NA	NA	NA	NA	NA	10000	NA	1710		55.1	13300		48.7	1720		62.1	1850		55.2	11600		60.1
Chromium	7440-47-3	NA	NA	NA	NA	NA	NA	NA	26.0		0.90	19.8		0.80	40.4		1.0	25.5		0.90	26.0		0.98
Cobalt	7440-48-4	NA	30	NA	NA	NA	20	NA	5.9	J	1.1	8.7		0.95	10.6		1.2	9.1	J	1.1	5.2	J	1.2
Copper	7440-50-8	50	270	270	270	10000	50	1720	21.0		1.2	23.8		1.1	28.5		1.4	15.8		1.2	18.8		1.3
Iron	7439-89-6	NA	2000	NA	NA	NA	NA	NA	**19300**		21.0	19200		18.6	29400		23.7	22000		21.1	17600		22.9
Lead	7439-92-1	63	400	400	1000	3900	63	450	2.8		0.73	54.8		0.65	12.8		0.82	11.9		0.73	2.9		0.80
Magnesium	7439-95-4	NA	NA	NA	NA	NA	NA	NA	5010		46.4	4640		41.1	7510		52.4	5260		46.5	9060		50.7
Manganese	7439-96-5	1600	2000	2000	10000	10000	1600	2000	364		0.98	235		0.86	453		1.1	368		0.98	174		1.1
Nickel	7440-02-0	30	140	310	310	10000	30	130	19.2		1.4	19.7		1.2	25.9		1.5	18.1		1.4	18.6		1.5
Potassium	7440-09-7	NA	NA	NA	NA	NA	NA	NA	3640		28.2	3590		24.9	4320		31.8	1650		28.3	3540		30.8
Selenium	7782-49-2	3.9	36	180	1500	6800	3.9	4	1.3	U	1.3	1.1	U	1.1	1.4	U	1.4	1.3	U	1.3	1.4	U	1.4
Silver	7440-22-4	2	36	180	1500	6800	2	8.3	0.33	U	0.33	0.41	J	0.29	0.37	U	0.37	0.33	U	0.33	0.36	U	0.36
Sodium	7440-23-5	NA	NA	NA	NA	NA	NA	NA	435	J	63.0	675	J	55.7	625	J	71.0	372	J	63.1	170	J	68.7
Thallium	7440-28-0	NA	NA	NA	NA	NA	5	NA	1.6	U	1.6	1.5	U	1.5	1.9	U	1.9	1.7	U	1.7	1.8	U	1.8
Vanadium	7440-62-2	NA	100	NA	NA	NA	39	NA	31.7		0.93	25.2		0.82	49.8		1.0	35.2		0.93	27.2		1.0
Zinc	7440-66-6	109	2200	10000	10000	10000	109	2480	60.5		1.4	51.3		1.2	76.5		1.5	81.4		1.4	51.9		1.5
SOIL BY 7471B(MG/KG)																							
Mercury	7439-97-6	0.18	0.81	0.81	2.8	5.7	0.18	0.73	0.013	U	0.013	0.22		0.011	0.013	U	0.013	0.024		0.012	0.014	U	0.014

Highlighted Concentrations shown in bold type face exceed limits
J : Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
U : Indicates the analyte was analyzed for but not detected.

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TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

SUMMARY OF ANALYTICAL RESULTS: 460-121319-1
Job Description: 20 S. West St., Mt. Vernon, NY
For:
SESI Consulting Engineers
12 A Maple Avenue
Pine Brook, New Jersey 07058

Client ID	NY 375-6.8(a)	NY 375-6.8(b)	NY 375-6.8(b)	NY 375-6.8(b)	NY 375-6.8(b)	NY 375-6.8(b)	NY 375-6.8(b)	**SB2-2.0-3.0**			**SB2-19.0-20.0**			**SB3-3.0-4.0**			**SB3-15.0-16.0**			**SB4-2.0-3.0**			**SB4-6.0-7.0**		
Lab Sample ID	UnRestricted	& CP-51 T-1	& CP-51 T-1	& CP-51 T-1	& CP-51 T-1	& CP-51 T-1	& CP-51 T-1	460-121319-1			460-121319-2			460-121319-3			460-121319-4			460-121319-5			460-121319-6		
Sampling Date	Use Soil	Residential	Restricted Residential	Commercial	Industrial	Ecological Resources	GW	10/3/2016			10/3/2016			10/3/2016			10/3/2016			10/3/2016			10/3/2016		
Matrix	Cleanup	Soil Cleanup	Soil Cleanup	Soil Cleanup	Soil Cleanup	Soil Cleanup	Soil Cleanup	Soil			Soil			Soil			Soil			Soil			Soil		
	Criteria	Criteria	Criteria	Criteria	Criteria	Criteria	Criteria																		
Unit																									
WETCHEM-SOIL								Result	Q	MDL	Result	Q	MDL	Result	Q	MDL	Result	Q	MDL	Result	Q	MDL	Result	Q	MDL
SOIL BY 9012B																									
Cyanide, Total (mg/kg)	27	NA	NA	NA	NA	NA	NA	0.057	J	0.029	0.029	U	0.029	0.11		0.031	0.044	J	0.033	0.052	J	0.037	0.033	U	0.033

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TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

SUMMARY OF ANALYTICAL RESULTS: 460-119497-1
Job Description: Mt. Vernon, NY
For:
SESI Consulting Engineers
12 A Maple Avenue
Pine Brook, New Jersey 07058

Client ID	NY NYSDEC	**GW-1**			**GW02**			**GW03**			**Trip Blank**		
Lab Sample ID	Groundwater	460-119497-1			460-121319-7			460-121319-8			460-121319-9		
Sampling Date	Criteria	08/31/2016 10:20:00			10/03/2016 14:30:00			10/03/2016 11:00:00			10/03/2016 00:00:00		
Matrix		Water			Water			Water			Water		
Dilution Factor		1			1			1			1		
Unit	ug/l	ug/l			ug/l			ug/l			ug/l		
VOA-8260C-WATER		Result	Q	MDL	Result	Q	MDL	Result	Q	MDL	Result	Q	MDL
WATER BY 8260C													
1,1,1-Trichloroethane	5	0.28	U	0.28	0.28	U	0.28	0.3	J	0.28	0.28	U	0.28
1,1,2,2-Tetrachloroethane	5	0.19	U	0.19	0.19	U	0.19	0.19	U	0.19	0.19	U	0.19
1,1,2-Trichloroethane	NA	0.080	U	0.080	0.08	U	0.08	0.08	U	0.08	0.08	U	0.08
1,1-Dichloroethane	5	0.24	U	0.24	0.24	U	0.24	0.24	U	0.24	0.24	U	0.24
1,1-Dichloroethene	5	0.34	U	0.34	0.34	U	0.34	0.34	U	0.34	0.34	U	0.34
1,2,3-Trichlorobenzene	NA	0.35	U	0.35	0.35	U	0.35	0.35	U	0.35	0.35	U	0.35
1,2,4-Trichlorobenzene	5	0.27	U	0.27	0.27	U	0.27	0.27	U	0.27	0.27	U	0.27
1,2-Dibromo-3-Chloropropane	NA	0.23	U	0.23	0.23	U	0.23	0.23	U	0.23	0.23	U	0.23
1,2-Dibromoethane	NA	0.19	U	0.19	0.19	U	0.19	0.19	U	0.19	NR		
1,2-Dichlorobenzene	4.7	0.22	U	0.22	0.22	U	0.22	0.22	U	0.22	0.22	U	0.22
1,2-Dichloroethane	5	0.25	U	0.25	0.25	U	0.25	0.25	U	0.25	0.25	U	0.25
1,2-Dichloropropane	NA	0.18	U	0.18	0.18	U	0.18	0.18	U	0.18	0.18	U	0.18
1,3-Dichlorobenzene	5	0.33	U	0.33	0.33	U	0.33	0.33	U	0.33	0.33	U	0.33
1,4-Dichlorobenzene	5	0.33	U	0.33	0.33	U	0.33	0.33	U	0.33	0.33	U	0.33
1,4-Dioxane	NA	8.7	U *	8.7	8.7	U	8.7	8.7	U	8.7	8.7	U	8.7
2-Butanone	50	2.2	U	2.2	2.2	U	2.2	2.2	U	2.2	NR		
2-Hexanone	NA	0.72	U	0.72	0.72	U	0.72	0.72	U	0.72	0.72	U	0.72
4-Methyl-2-pentanone	50	0.63	U	0.63	0.63	U	0.63	0.63	U	0.63	NR		
Acetone	50	7.5		1.1	1.1	U	1.1	1.1	U	1.1	1.1	U	1.1
Benzene	0.7	0.090	U	0.090	0.09	U	0.09	0.09	U	0.09	0.09	U	0.09
Bromochloromethane	NA	0.30	U	0.30	0.3	U	0.3	0.3	U	0.3	NR		
Bromodichloromethane	NA	0.96	J	0.15	0.15	U	0.15	0.15	U	0.15	NR		
Bromoform	NA	0.18	U	0.18	0.18	U	0.18	0.18	U	0.18	0.18	U	0.18
Bromomethane	NA	0.18	U	0.18	0.18	U	0.18	0.18	U	0.18	0.18	U	0.18
Carbon disulfide	50	0.22	U	0.22	0.22	U	0.22	0.22	U	0.22	0.22	U	0.22
Carbon tetrachloride	5	0.33	U	0.33	0.33	U	0.33	0.33	U	0.33	0.33	U	0.33
Chlorobenzene	5	0.24	U	0.24	0.24	U	0.24	0.24	U	0.24	0.24	U	0.24
Chloroethane	50	0.37	U	0.37	0.37	U	0.37	0.37	U	0.37	0.37	U	0.37
Chloroform	7	**11**		0.22	0.64	J	0.22	1.9		0.22	0.22	U	0.22
Chloromethane	NA	0.22	U	0.22	0.22	U	0.22	0.22	U	0.22	0.22	U	0.22
cis-1,2-Dichloroethene	NA	0.26	U	0.26	0.26	U	0.26	0.26	U	0.26	0.26	U	0.26
cis-1,3-Dichloropropene	NA	0.16	U	0.16	0.16	U	0.16	0.16	U	0.16	0.16	U	0.16
Cyclohexane	NA	0.26	U	0.26	0.26	U	0.26	0.26	U	0.26	0.26	U	0.26
Dibromochloromethane	50	0.22	U	0.22	0.22	U	0.22	0.22	U	0.22	NR		
Dichlorodifluoromethane	NA	0.14	U	0.14	0.14	U	0.14	0.14	U	0.14	0.14	U	0.14
Ethylbenzene	5	0.30	U	0.30	0.3	U	0.3	0.3	U	0.3	0.3	U	0.3
Freon TF	NA	0.34	U	0.34	0.34	U	0.34	0.34	U	0.34	NR		
Isopropylbenzene	NA	0.32	U	0.32	0.32	U	0.32	0.32	U	0.32	0.32	U	0.32
m&p-Xylene	NA	0.28	U	0.28	0.28	U	0.28	0.28	U	0.28	NR		
Methyl acetate	NA	0.58	U	0.58	0.58	U	0.58	0.58	U	0.58	0.58	U	0.58
Methylcyclohexane	NA	0.22	U	0.22	0.22	U	0.22	0.22	U	0.22	0.22	U	0.22
Methylene Chloride	5	0.21	U	0.21	0.21	U	0.21	0.21	U	0.21	0.21	U	0.21
MTBE	NA	0.13	U	0.13	0.13	U	0.13	0.13	U	0.13	NR		
o-Xylene	NA	0.32	U	0.32	0.32	U	0.32	0.32	U	0.32	NR		
Styrene	NA	0.17	U	0.17	0.17	U	0.17	0.17	U	0.17	0.17	U	0.17
Tetrachloroethene	5	0.45	J	0.12	0.12	U	0.12	0.2	J	0.12	0.12	U	0.12
Toluene	5	0.25	U	0.25	0.25	U	0.25	0.67	J	0.25	0.25	U	0.25
trans-1,2-Dichloroethene	5	0.18	U	0.18	0.18	U	0.18	0.18	U	0.18	0.18	U	0.18
trans-1,3-Dichloropropene	NA	0.19	U	0.19	0.19	U	0.19	0.19	U	0.19	0.19	U	0.19
Trichloroethene	5	0.22	U	0.22	0.22	U	0.22	0.22	U	0.22	0.22	U	0.22
Trichlorofluoromethane	NA	0.15	U	0.15	0.15	U	0.15	0.15	U	0.15	0.15	U	0.15
Vinyl chloride	2	0.060	U	0.060	0.06	U	0.06	0.06	U	0.06	0.06	U	0.06
Total Conc	NA	19.91			0.64			3.07			0		
Total Estimated Conc. (TICs)	NA	0.0*T			0.0*T			0.0*T			0.0*T		

*T There are no TICs reported for the sample
Highlighted Concentrations shown in bold type face exceed limits
* : LCS or LCSD is outside acceptance limits.
J : Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
U : Indicates the analyte was analyzed for but not detected.

Lab Contact:
Elizabeth Flannery
Project Management Assistant I
(732)549-3900

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Project Manager II
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THE LEADER IN ENVIRONMENTAL TESTING

SUMMARY OF ANALYTICAL RESULTS: 460-119497-1
Job Description: Mt. Vernon, NY
For:
SESI Consulting Engineers
12 A Maple Avenue
Pine Brook, New Jersey 07058

Client ID	NY NYSDEC			**GW-1**
Lab Sample ID	Groundwater			460-119497-1
Sampling Date	Criteria			08/31/2016 10:20:00
Matrix				Water
Dilution Factor				1
Unit	ug/l			ug/l
SVOA-8270D-WATER		Result	Q	MDL
WATER BY 8270D				
1,2,4,5-Tetrachlorobenzene	NA	0.45	U	0.45
2,2'-oxybis[1-chloropropane]	NA	0.97	U	0.97
2,3,4,6-Tetrachlorophenol	NA	0.72	U	0.72
2,4,5-Trichlorophenol	1	0.51	U	0.51
2,4,6-Trichlorophenol	NA	0.55	U	0.55
2,4-Dichlorophenol	1	0.66	U	0.66
2,4-Dimethylphenol	NA	0.95	U	0.95
2,4-Dinitrophenol	5	2.5	U	2.5
2,4-Dinitrotoluene	NA	1.1	U	1.1
2,6-Dinitrotoluene	5	0.92	U	0.92
2-Chloronaphthalene	NA	0.64	U	0.64
2-Chlorophenol	50	0.77	U	0.77
2-Methylnaphthalene	50	1.8	J	0.92
2-Methylphenol	5	1.3	U	1.3
2-Nitroaniline	5	0.68	U	0.68
2-Nitrophenol	5	0.61	U	0.61
3,3'-Dichlorobenzidine	NA	1.1	U	1.1
3-Nitroaniline	5	0.85	U	0.85
4,6-Dinitro-2-methylphenol	NA	2.1	U	2.1
4-Bromophenyl phenyl ether	NA	1.1	U	1.1
4-Chloro-3-methylphenol	5	0.79	U	0.79
4-Chloroaniline	5	0.76	U	0.76
4-Chlorophenyl phenyl ether	NA	1.0	U	1.0
4-Methylphenol	50	0.91	U	0.91
4-Nitroaniline	NA	0.50	U	0.50
4-Nitrophenol	5	4.8	U	4.8
Acenaphthene	20	0.92	U	0.92
Acenaphthylene	20	0.68	U	0.68
Acetophenone	NA	1.1	U	1.1
Anthracene	50	0.59	U	0.59
Atrazine	NA	0.80	U	0.80
Benzaldehyde	NA	0.90	U	0.90
Benzo[a]anthracene	0.002	0.57	U	0.57
Benzo[a]pyrene	0.002	0.17	U	0.17
Benzo[b]fluoranthene	0.002	0.46	U	0.46
Benzo[g,h,i]perylene	5	0.78	U	0.78
Benzo[k]fluoranthene	0.002	0.19	U	0.19
Bis(2-chloroethoxy)methane	NA	0.72	U	0.72
Bis(2-chloroethyl)ether	NA	0.13	U	0.13
Bis(2-ethylhexyl) phthalate	50	1.1	J	0.75
Butyl benzyl phthalate	50	0.63	U	0.63
Caprolactam	NA	1.1	U	1.1
Carbazole	NA	0.89	U	0.89
Chrysene	0.002	0.70	U	0.70
Dibenz(a,h)anthracene	50	0.094	U	0.094
Dibenzofuran	5	0.89	U	0.89
Diethyl phthalate	50	1.0	U	1.0
Dimethyl phthalate	50	1.0	U	1.0
Di-n-butyl phthalate	50	0.85	U	0.85
Di-n-octyl phthalate	50	0.72	U	0.72
Diphenyl	NA	0.66	U	0.66
Fluoranthene	50	0.75	U	0.75
Fluorene	50	0.83	U	0.83
Hexachlorobenzene	0.35	0.49	U	0.49
Hexachlorobutadiene	NA	0.79	U	0.79
Hexachlorocyclopentadiene	NA	0.64	U	0.64
Hexachloroethane	NA	0.094	U	0.094
Indeno[1,2,3-cd]pyrene	0.002	0.22	U	0.22
Isophorone	50	0.70	U	0.70
Naphthalene	10	4.5	J	0.83
Nitrobenzene	5	0.51	U	0.51
N-Nitrosodi-n-propylamine	NA	0.86	U	0.86
N-Nitrosodiphenylamine	NA	0.77	U	0.77
Pentachlorophenol	1	2.3	U	2.3
Phenanthrene	50	0.68	U	0.68
Phenol	1	0.43	U	0.43
Pyrene	50	0.86	U	0.86
Total Conc.	NA	7.4		
Total Estimated Conc. (TICs)	NA	7.2		

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For:
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Client ID	NY NYSDEC			**GW-1**
Lab Sample ID	Groundwater			460-119497-1
Sampling Date	Criteria			08/31/2016 10:20:00
Matrix				Water
Dilution Factor				1
Unit	ug/l			ug/l
GCSVOA-8081B-WATER		Result	Q	MDL
WATER BY 8081B				
4,4'-DDD	0.01	0.0051	U	0.0051
4,4'-DDE	0.01	0.0041	U	0.0041
4,4'-DDT	0.01	0.0041	U	0.0041
Aldrin	0.01	0.0041	U	0.0041
alpha-BHC	0.05	0.0061	U	0.0061
beta-BHC	0.05	0.0051	U	0.0051
Chlordane (technical)	0.1	0.13	U	0.13
delta-BHC	0.05	0.0061	U	0.0061
Dieldrin	0.01	0.0041	U	0.0041
Endosulfan I	0.1	0.0051	U	0.0051
Endosulfan II	0.1	0.0041	U	0.0041
Endosulfan sulfate	0.1	0.0051	U	0.0051
Endrin	0.01	0.0041	U	0.0041
Endrin aldehyde	NA	0.0041	U	0.0041
Endrin ketone	NA	0.0041	U	0.0041
gamma-BHC (Lindane)	0.05	0.0041	U	0.0041
Heptachlor	0.01	0.0041	U	0.0041
Heptachlor epoxide	0.01	0.0041	U	0.0041
Methoxychlor	35	0.0041	U	0.0041
Toxaphene	NA	0.061	U	0.061

U : Indicates the analyte was analyzed for but not detected.

Lab Contact:
Elizabeth Flannery
Project Management Assistant I
(732)549-3900

Grace Chang
Project Manager II
(732)593-2579

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

SUMMARY OF ANALYTICAL RESULTS: 460-119497-1
Job Description: Mt. Vernon, NY
For:
SESI Consulting Engineers
12 A Maple Avenue
Pine Brook, New Jersey 07058

Client ID	NY NYSDEC	**GW-1**			**GW02**			**GW03**		
Lab Sample ID	Groundwater	460-119497-1			460-121319-7			460-121319-8		
Sampling Date	Criteria	08/31/2016 10:20:00			10/03/2016 14:30:00			10/03/2016 11:00:00		
Matrix		Water			Water			Water		
Dilution Factor		1			1			1		
Unit	ug/l	ug/l			ug/l			ug/l		
GCSVOA-8082A-WATER		Result	Q	MDL	Result	Q	MDL	Result	Q	MDL
WATER BY 8082A										
Aroclor 1016	NA	0.098	U	0.098	0.098	U H	0.098	0.098	U H	0.098
Aroclor 1221	NA	0.098	U	0.098	0.098	U H	0.098	0.098	U H	0.098
Aroclor 1232	NA	0.098	U	0.098	0.098	U H	0.098	0.098	U H	0.098
Aroclor 1242	NA	0.098	U	0.098	0.098	U H	0.098	0.098	U H	0.098
Aroclor 1248	NA	0.098	U	0.098	0.098	U H	0.098	0.098	U H	0.098
Aroclor 1254	NA	0.084	U	0.084	0.084	U H	0.084	0.084	U H	0.084
Aroclor 1260	NA	0.084	U	0.084	0.084	U H	0.084	0.084	U H	0.084
Aroclor 1268	NA	0.084	U	0.084	0.084	U H	0.084	0.084	U H	0.084
Aroclor-1262	NA	0.084	U	0.084	0.084	U H	0.084	0.084	U H	0.084
Total PCBs	0.1	0.098	U	0.098	0.098	U H	0.098	0.098	U H	0.098

U : Indicates the analyte was analyzed for but not detected.

Lab Contact:
Elizabeth Flannery
Project Management Assistant I
(732)549-3900

Grace Chang
Project Manager II
(732)593-2579

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

SUMMARY OF ANALYTICAL RESULTS: 460-119497-1
Job Description: Mt. Vernon, NY
For:
SESI Consulting Engineers
12 A Maple Avenue
Pine Brook, New Jersey 07058

Client ID	NY NYSDEC	**GW-1**			**GW02**			**GW03**		
Lab Sample ID	Groundwater	460-119497-1			460-121319-7			460-121319-8		
Sampling Date	Criteria	08/31/2016 10:20:00			10/03/2016 14:30:00			10/03/2016 11:00:00		
Matrix		Water			Water			Water		
Unit										
METALS-WATER		Result	Q	MDL	Result	Q	MDL	Result	Q	MDL
WATER BY 245.1(UG/L)										
Mercury	NA	0.17	U	0.17	0.17	U	0.17	1.3		0.17

WATER BY 6020A(UG/L)										
Aluminum	NA				NR			46800		18.2
Antimony	NA				NR			0.86	J	0.62
Arsenic	NA				NR			18.4	J	6.4
Barium	NA				NR			1590		1.2
Beryllium	NA				NR			4.8		0.24
Cadmium	NA				NR			12.7		0.71
Calcium	NA				NR			443000		60.5
Chromium	NA				NR			318		1.3
Cobalt	NA				NR			221		1.3
Copper	NA				NR			432		1.4
Iron	NA				NR			38200		42.4
Lead	NA				NR			198		0.38
Magnesium	NA				NR			38100		63.6
Manganese	NA				NR			28400		2.5
Nickel	NA				NR			297		1.4
Potassium	NA				NR			33200		91.4
Selenium	NA				NR			5.5	J	0.73
Silver	NA				NR			17.5		1.3
Sodium	NA				NR			635000		690
Thallium	NA				NR			0.58	J	0.26
Vanadium	NA				NR			32.3		1.9
Zinc	NA				NR			775		7.0

NR: Not Analyzed
J : Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
U : Indicates the analyte was analyzed for but not detected.

Lab Contact:
Grace Chang
Project Manager II
(732)593-2579

Project:
Field ID Number: SS-1
Laboratory ID Number: 200-35064-1

Combined Gas Test Data
Mount Vernon, NY
SESI Consulting Engineers
TARGET/NON TARGET ANALYTES-
AIR RESULTS

Sampling Date: 08/30/2016
Analysis Date: 09/03/2016

Chemical	SS-1 CAS Number	SS-1 Molecular Weight	SS-1 Q	SS-1 Corrected Results	SS-2 CAS Number	SS-2 Molecular Weight	SS-2 Q	SS-2 Corrected Results
TO15				*ug/m3*				*ug/m3*
Acetone	67-64-1	58.078		95	67-64-1	58.078		27
Allyl chloride	107-05-1	76.53	U	2.3	107-05-1	76.53	U	1.6
Benzene	71-43-2	78.108		1.3	71-43-2	78.108	U	0.64
Bromodichloromethane	75-27-4	163.83	U	2	75-27-4	163.83	U	1.3
Bromoform	75-25-2	252.75	U	3.1	75-25-2	252.75	U	2.1
Bromomethane	74-83-9	94.94	U	1.2	74-83-9	94.94	U	0.78
1,3-Butadiene	106-99-0	54.09		1.3	106-99-0	54.09	U	0.44
Chlorobenzene	108-90-7	112.557	U	1.4	108-90-7	112.557	U	0.92
Chloroethane	75-00-3	64.52	U	2	75-00-3	64.52	U	1.3
Chloroform	67-66-3	119.38		3.8	67-66-3	119.38	U	0.98
Chloromethane	74-87-3	50.49	U	1.5	74-87-3	50.49	U	1
Carbon disulfide	75-15-0	76.14		4.9	75-15-0	76.14	U	1.6
Carbon tetrachloride	56-23-5	153.81	U	0.38	56-23-5	153.81		1.2
2-Chlorotoluene	95-49-8	126.59	U	1.6	95-49-8	126.59	U	1
Cyclohexane	110-82-7	84.16	U	1	110-82-7	84.16	U	0.69
Dibromochloromethane	124-48-1	208.29	U	2.6	124-48-1	208.29	U	1.7
1,2-Dibromoethane	106-93-4	187.87	U	2.3	106-93-4	187.87	U	1.5
1,2-Dichlorobenzene	95-50-1	147	U	1.8	95-50-1	147	U	1.2
1,3-Dichlorobenzene	541-73-1	147	U	1.8	541-73-1	147	U	1.2
1,4-Dichlorobenzene	106-46-7	147	U	1.8	106-46-7	147	U	1.2
Dichlorodifluoromethane	75-71-8	120.91	U	3.7	75-71-8	120.91	U	2.5
1,1-Dichloroethane	75-34-3	98.96	U	1.2	75-34-3	98.96	U	0.81
1,2-Dichloroethane	107-06-2	98.96	U	1.2	107-06-2	98.96	U	0.81
1,1-Dichloroethene	75-35-4	96.94	U	1.2	75-35-4	96.94	U	0.79
1,2-Dichloroethene (cis)	156-59-2	96.94	U	1.2	156-59-2	96.94	U	0.79
1,2-Dichloroethene (trans)	156-60-5	96.94	U	1.2	156-60-5	96.94	U	0.79
1,2-Dichloropropane	78-87-5	112.99	U	1.4	78-87-5	112.99	U	0.92
1,3-Dichloropropene (cis)	10061-01-5	110.97	U	1.4	10061-01-5	110.97	U	0.91
1,3-Dichloropropene(trans)	10061-02-6	110.97	U	1.4	10061-02-6	110.97	U	0.91
1,2-Dichlorotetrafluoroethane	76-14-2	170.92	U	2.1	76-14-2	170.92	U	1.4
1,4-Dioxane	123-91-1	88.11	U	27	123-91-1	88.11	U	18
Ethylbenzene	100-41-4	106.17	U	1.3	100-41-4	106.17	U	0.87
4-Ethyltoluene	622-96-8	120.2	U	1.5	622-96-8	120.2	U	0.98
n-Heptane	142-82-5	100.21		6.9	142-82-5	100.21	U	0.82
1,3-Hexachlorobutadiene	87-68-3	260.76	U	3.2	87-68-3	260.76	U	2.1

Laboratory Name: TAL-Burlington
Laboratory City: South Burlington,VT

Project:
Field ID Number: SS-1
Laboratory ID Number: 200-35064-1

Combined Gas Test Data
Mount Vernon, NY
SESI Consulting Engineers
TARGET/NON TARGET ANALYTES-
AIR RESULTS

Sampling Date: 08/30/2016
Analysis Date: 09/03/2016

Chemical	SS-1 CAS Number	SS-1 Molecular Weight	SS-1 Q	SS-1 Corrected Results	SS-2 CAS Number	SS-2 Molecular Weight	SS-2 Q	SS-2 Corrected Results
TO15				***ug/m3***				***ug/m3***
n-Hexane	110-54-3	86.172		12	110-54-3	86.172	U	0.7
Isopropanol	67-63-0	60.1	U	18	67-63-0	60.1	U	12
Methylene chloride	75-09-2	84.93	U	2.6	75-09-2	84.93		2.2
Methyl ethyl ketone	78-93-3	72.11		18	78-93-3	72.11		2.3
Methyl isobutyl ketone	108-10-1	100.16	U	3.1	108-10-1	100.16	U	2
Methyl methacrylate	80-62-6	100.12	U	3.1	80-62-6	100.12	U	2
Methyl tert-butyl ether	1634-04-4	88.15	U	1.1	1634-04-4	88.15	U	0.72
Styrene	100-42-5	104.15	U	1.3	100-42-5	104.15	U	0.85
Tert-butyl alcohol	75-65-0	74.12	U	23	75-65-0	74.12	U	15
1,1,2,2-Tetrachloroethane	79-34-5	167.85	U	2.1	79-34-5	167.85	U	1.4
Tetrachloroethene	127-18-4	165.83		54	127-18-4	165.83		35
Tetrahydrofuran	109-99-9	72.11	U	22	109-99-9	72.11	U	15
Toluene	108-88-3	92.14		2	108-88-3	92.14		1.2
1,2,4-Trichlorobenzene	120-82-1	181.45	U	5.6	120-82-1	181.45	U	3.7
1,1,1-Trichloroethane	71-55-6	133.41		2.4	71-55-6	133.41	U	1.1
1,1,2-Trichloroethane	79-00-5	133.41	U	1.6	79-00-5	133.41	U	1.1
Trichloroethene	79-01-6	131.39	U	0.32	79-01-6	131.39		0.58
Trichlorofluoromethane	75-69-4	137.37		1.8	75-69-4	137.37		1.1
1,1,2-Trichloro-1,2,2-trifluoroethane	76-13-1	187.38	U	2.3	76-13-1	187.38	U	1.5
1,2,4-Trimethylbenzene	95-63-6	120.2	U	1.5	95-63-6	120.2	U	0.98
1,3,5-Trimethylbenzene	108-67-8	120.2	U	1.5	108-67-8	120.2	U	0.98
2,2,4-Trimethylpentane	540-84-1	114.23	U	1.4	540-84-1	114.23	U	0.93
Vinyl bromide	593-60-2	106.96	U	1.3	593-60-2	106.96	U	0.87
Vinyl chloride	75-01-4	62.5	U	0.15	75-01-4	62.5	U	0.1
Xylenes (m&p)	179601-23-1	106.17	U	3.3	179601-23	106.17	U	2.2
Xylenes (o)	95-47-6	106.17	U	1.3	95-47-6	106.17	U	0.87
Xylene (total)	1330-20-7T	106.17	U	4.6	1330-20-7T	106.17	U	3
1,2-Dichloroethene (total)	540-59-0	96.94	U	2.4	540-59-0	96.94	U	1.6
Methyl Butyl Ketone	591-78-6	100.2	U	3.1	591-78-6	100.2	U	2
Naphthalene	91-20-3	128.17	U	3.9	91-20-3	128.17	U	2.6
Difluorochloromethane (Freon 22)	75-45-6	86.47		7.7	75-45-6	86.47		1.8
Isopropylbenzene	98-82-8	120.19	U	1.5	98-82-8	120.19	U	0.98
n-Propylbenzene	103-65-1	120.19	U	1.5	103-65-1	120.19	U	0.98
tert-Butylbenzene	98-06-6	134.22	U	1.6	98-06-6	134.22	U	1.1
sec-Butylbenzene	135-98-8	134.22	U	1.6	135-98-8	134.22	U	1.1
4-Isopropyltoluene	99-87-6	134.22	U	1.6	99-87-6	134.22	U	1.1
n-Butylbenzene	104-51-8	134.22	U	1.6	104-51-8	134.22	U	1.1
n-Butane	106-97-8	58.12		29	106-97-8	58.12	U	1.2
Benzyl Chloride	100-44-7	126.58	U	1.6	100-44-7	126.58	U	1

Volatile Tentatively Identified Compounds (up to 30 compounds)

Laboratory Name: TAL-Burlington
Laboratory City: South Burlington,VT

Combined Gas Test Data
Mount Vernon, NY
SESI Consulting Engineers
TARGET/NON TARGET ANALYTES-
AIR RESULTS

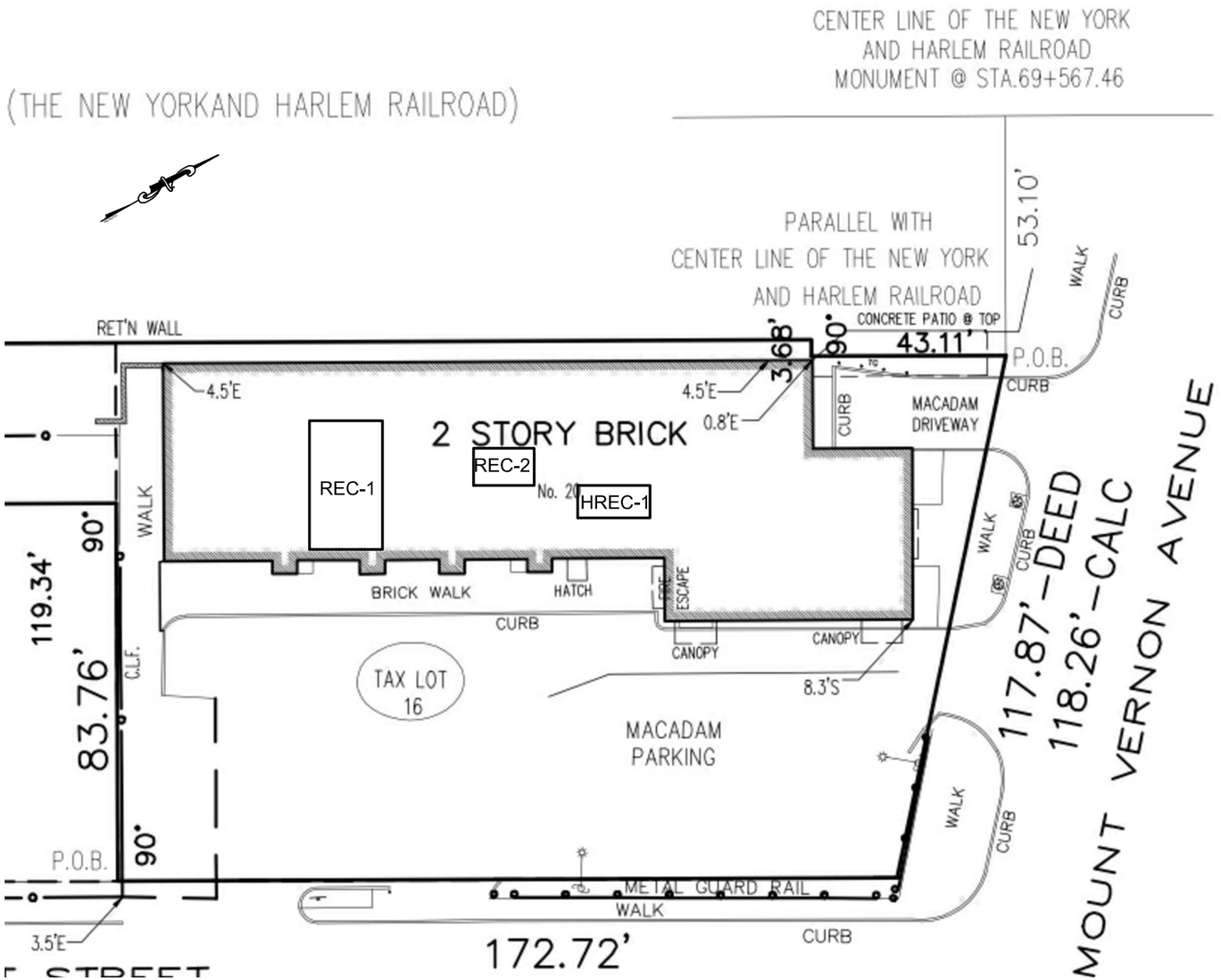
Chemical	SS-3 CAS Number	Molecular Weight	Q	Corrected Results
TO15				*ug/m3*
Acetone	67-64-1	58.078		54
Allyl chloride	107-05-1	76.53	U	1.6
Benzene	71-43-2	78.108	U	0.64
Bromodichloromethane	75-27-4	163.83	U	1.3
Bromoform	75-25-2	252.75	U	2.1
Bromomethane	74-83-9	94.94	U	0.78
1,3-Butadiene	106-99-0	54.09	U	0.44
Chlorobenzene	108-90-7	112.557	U	0.92
Chloroethane	75-00-3	64.52	U	1.3
Chloroform	67-66-3	119.38		17
Chloromethane	74-87-3	50.49	U	1
Carbon disulfide	75-15-0	76.14	U	1.6
Carbon tetrachloride	56-23-5	153.81		2.5
2-Chlorotoluene	95-49-8	126.59	U	1
Cyclohexane	110-82-7	84.16	U	0.69
Dibromochloromethane	124-48-1	208.29	U	1.7
1,2-Dibromoethane	106-93-4	187.87	U	1.5
1,2-Dichlorobenzene	95-50-1	147	U	1.2
1,3-Dichlorobenzene	541-73-1	147	U	1.2
1,4-Dichlorobenzene	106-46-7	147	U	1.2
Dichlorodifluoromethane	75-71-8	120.91	U	2.5
1,1-Dichloroethane	75-34-3	98.96	U	0.81
1,2-Dichloroethane	107-06-2	98.96	U	0.81
1,1-Dichloroethene	75-35-4	96.94	U	0.79
1,2-Dichloroethene (cis)	156-59-2	96.94	U	0.79
1,2-Dichloroethene (trans)	156-60-5	96.94	U	0.79
1,2-Dichloropropane	78-87-5	112.99	U	0.92
1,3-Dichloropropene (cis)	10061-01-5	110.97	U	0.91
1,3-Dichloropropene(trans)	10061-02-6	110.97	U	0.91
1,2-Dichlorotetrafluoroethane	76-14-2	170.92	U	1.4
1,4-Dioxane	123-91-1	88.11	U	18
Ethylbenzene	100-41-4	106.17	U	0.87
4-Ethyltoluene	622-96-8	120.2		3.3
n-Heptane	142-82-5	100.21	U	0.82
1,3-Hexachlorobutadiene	87-68-3	260.76	U	2.1

Chemical	SS-3 CAS Number	Molecular Weight	Q	Corrected Results
TO15				*ug/m3*
n-Hexane	110-54-3	86.172	U	0.7
Isopropanol	67-63-0	60.1	U	12
Methylene chloride	75-09-2	84.93		100
Methyl ethyl ketone	78-93-3	72.11		4.4
Methyl isobutyl ketone	108-10-1	100.16	U	2
Methyl methacrylate	80-62-6	100.12	U	2
Methyl tert-butyl ether	1634-04-4	88.15	U	0.72
Styrene	100-42-5	104.15	U	0.85
Tert-butyl alcohol	75-65-0	74.12	U	15
1,1,2,2-Tetrachloroethane	79-34-5	167.85	U	1.4
Tetrachloroethene	127-18-4	165.83		24
Tetrahydrofuran	109-99-9	72.11	U	15
Toluene	108-88-3	92.14		4.8
1,2,4-Trichlorobenzene	120-82-1	181.45	U	3.7
1,1,1-Trichloroethane	71-55-6	133.41	U	1.1
1,1,2-Trichloroethane	79-00-5	133.41	U	1.1
Trichloroethene	79-01-6	131.39		0.25
Trichlorofluoromethane	75-69-4	137.37		1.1
1,1,2-Trichloro-1,2,2-trifluoroethane	76-13-1	187.38	U	1.5
1,2,4-Trimethylbenzene	95-63-6	120.2		35
1,3,5-Trimethylbenzene	108-67-8	120.2		9.8
2,2,4-Trimethylpentane	540-84-1	114.23	U	0.93
Vinyl bromide	593-60-2	106.96	U	0.87
Vinyl chloride	75-01-4	62.5	U	0.1
Xylenes (m&p)	179601-23	106.17		3.2
Xylenes (o)	95-47-6	106.17		1.4
Xylene (total)	1330-20-7	106.17		4.6
1,2-Dichloroethene (total)	540-59-0	96.94	U	1.6
Methyl Butyl Ketone	591-78-6	100.2	U	2
Naphthalene	91-20-3	128.17		92
Difluorochloromethane (Freon 22)	75-45-6	86.47		1.8
Isopropylbenzene	98-82-8	120.19	U	0.98
n-Propylbenzene	103-65-1	120.19		1.7
tert-Butylbenzene	98-06-6	134.22	U	1.1
sec-Butylbenzene	135-98-8	134.22		2.3
4-Isopropyltoluene	99-87-6	134.22		4.5
n-Butylbenzene	104-51-8	134.22		7.1
n-Butane	106-97-8	58.12	U	1.2
Benzyl Chloride	100-44-7	126.58	U	1

Volatile Tentatively Identified Compounds

FIGURES

NOTES:
REC - RECOGNIZED ENVIRONMENTAL CONDITION
HREC - HISTORICAL RECOGNIZED ENVIRONMENTAL CONDITION
REC-1 - SILVERSMITH
HREC-1 - ABOVE GROUND STORAGE TANK (AST)
REC-2 - HISTORICAL ENVIRONMENTAL LAB



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REFERENCE
SITE INFORMATION TAKEN FROM "SURVEY OF TAX LOT 13 AND 16 IN BLOCK 1057 SECTION 164.67" PREPARED BY SUMMIT LAND SURVEYING P.C.. DATED JAN. 28, 2016.

SCALE: 1"=30'
0 30 60

SESI CONSULTING ENGINEERS, PC
SOILS / FOUNDATIONS
SITE DESIGN
ENVIRONMENTAL
12A MAPLE AVE. PINE BROOK, N.J. 07058 PH: 973-808-9050

dwg by: yy
chk by: DC
scale: 1" = 30'
date: 2/26/2020

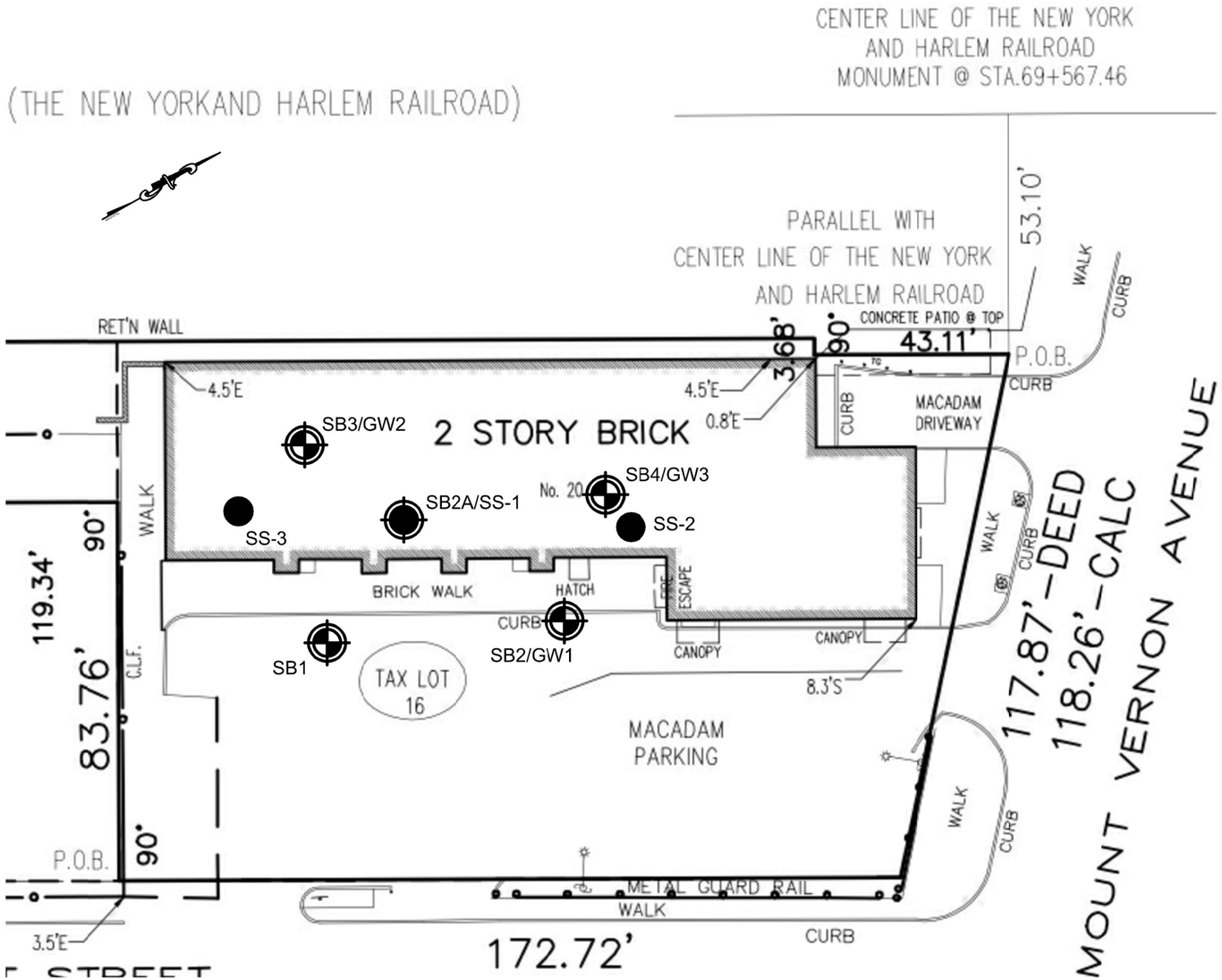
project: 20 SOUTH WEST STREET MOUNT VERNON, NY

drawing title: REC LOCATION MAP

job no: 9387
drawing no:

FIG 1.1

N:\ACAD\9387\9387 REC PLAN.DWG 02/26/20 11:59:18AM, gos, LAYOUT:FIG 1.1



LEGEND:

- SB - APPROX. LOCATION AND NO. OF SOIL BORING SAMPLES
- GW - APPROX. LOCATION AND NO. OF GROUNDWATER SAMPLES
- SS - APPROX. LOCATION AND NO. OF SUB-SOIL VAPOR SAMPLES

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SCALE: 1"=30'
0 30 60

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SOILS / FOUNDATIONS
SITE DESIGN
ENVIRONMENTAL
12A MAPLE AVE. PINE BROOK, N.J. 07058 PH: 973-808-9050

dwg by: yy
chk by: DC
scale: 1" = 30'
date: 11/02/16

project: 20 SOUTH WEST STREET MOUNT VERNON, NY

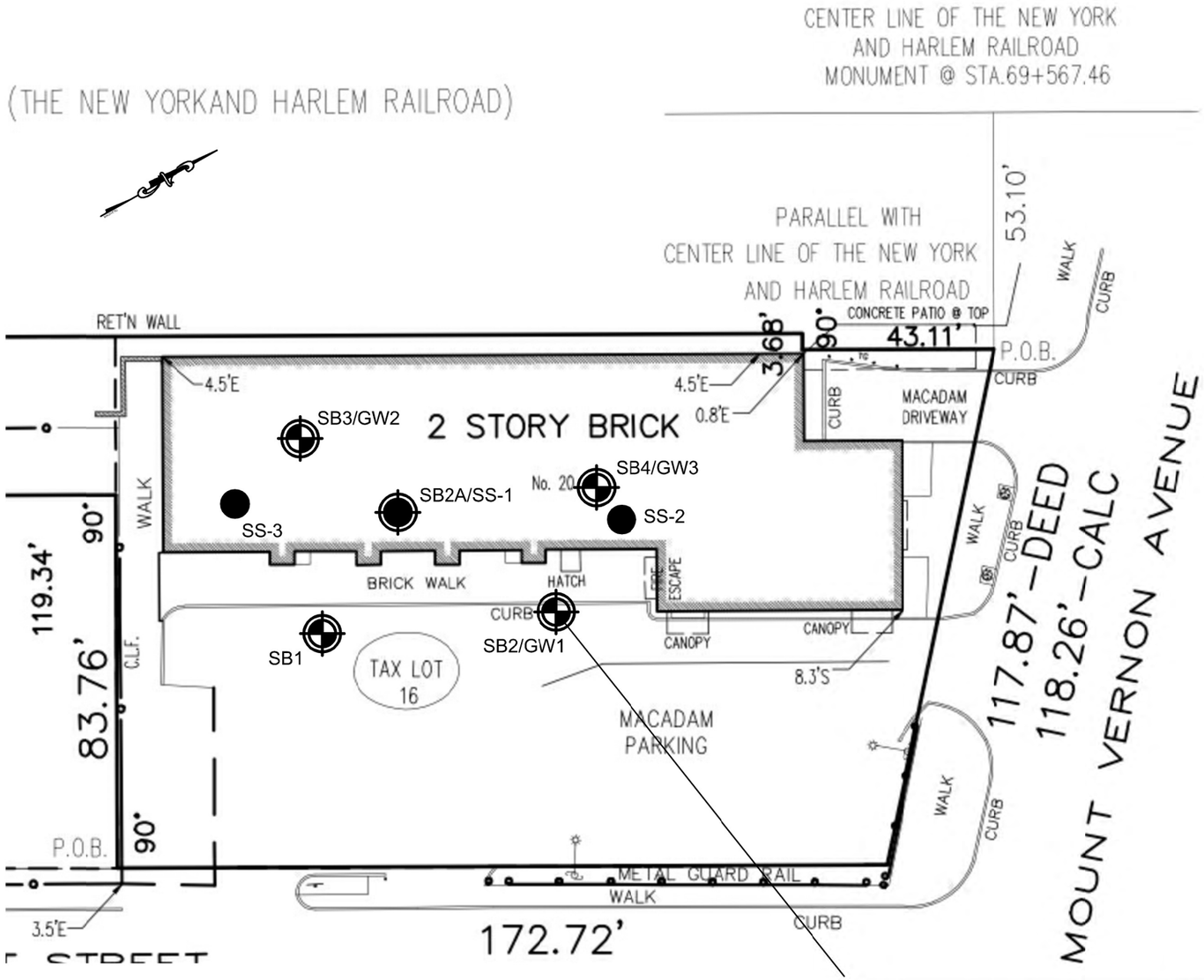
drawing title: SAMPLE LOCATION MAP

job no: 9387
drawing no:

FIG 2.1

N:\ACAD\9387\9387 SAMPLE LOCATION PLAN.DWG 11/02/16 10:12:17AM, jenny, LAYOUT:FIG 2.1

N:\ACAD\9387\9387 SAMPLE LOCATION PLAN.dwg, FIG 2.1, 11/2/2016 10:12:17 AM, 1:1



LEGEND:

- SB - APPROX. LOCATION AND NO. OF SOIL BORING SAMPLES
- GW - APPROX. LOCATION AND NO. OF GROUNDWATER SAMPLES
- SS - APPROX. LOCATION AND NO. OF SUB-SOIL VAPOR SAMPLES

Sample ID	NY NYSDEC Groundwater Criteria	GW-1		
Sampling Date		8/31/2016		
Matrix		Water		
Dilution Factor		1		
Unit	ug/l	ug/l		
VOA-8260C-WATER		Result	Q	MDL
Chloroform	7	11		0.22

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REFERENCE
SITE INFORMATION TAKEN FROM "SURVEY OF TAX LOT 13 AND 16 IN BLOCK 1057 SECTION 164.67" PREPARED BY SUMMIT LAND SURVEYING P.C.. DATED JAN. 28, 2016.

SCALE: 1"=30'
0 30 60

SESI CONSULTING ENGINEERS, PC
SOILS / FOUNDATIONS
SITE DESIGN
ENVIRONMENTAL
12A MAPLE AVE. PINE BROOK, N.J. 07058 PH: 973-808-9050

dwg by: yy
chk by: DC
scale: 1" = 30'
date: 11/02/16

project: 20 SOUTH WEST STREET MOUNT VERNON, NY

drawing title: GROUNDWATER SAMPLING RESULTS

job no: 9387
drawing no:

FIG 3.1

N:\ACAD\9387\9387 SAMPLE LOCATION PLAN.DWG 11/02/16 10:12:53AM, jenny, LAYOUT:FIG 3.1

N:\ACAD\9387\9387 SAMPLE LOCATION PLAN.dwg, FIG 3.1, 11/2/2016 10:12:53 AM, 1:1

APPENDIX A
Laboratory Results

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

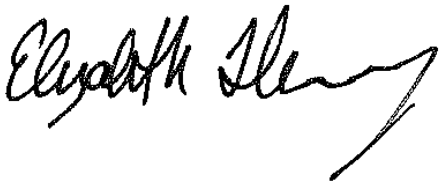
ANALYTICAL REPORT

Job Number: 460-119390-1

Job Description: 205 West St., Mt Vernon, NY

For:
SESI Consulting Engineers
12 A Maple Avenue
Pine Brook, NJ 07058

Attention: Fuad Dahan



Approved for release.
Elizabeth J Flannery
Project Management Assistant I
9/7/2016 2:24 PM

Designee for
Grace Chang, Project Manager II
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09/07/2016

The test results in this report meet all NELAP requirements unless specified within the case narrative. Pursuant to NELAP, this report may not be reproduced, except in full, without the written approval of the laboratory. All questions regarding this report should be directed to the TestAmerica Edison Project Manager.

TestAmerica Edison Certifications and Approvals: Connecticut: CTDOH #PH-0200, New Jersey: NJDEP (NELAP) #12028, New York: NYDOH (NELAP) #11452, NYDOH (ELAP) #11452, Pennsylvania: PADEP (NELAP) 68-00522 and Rhode Island: RIDOH LAO00132

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CASE NARRATIVE

Client: SESI Consulting Engineers

Project: 205 West St., Mt Vernon, NY

Report Number: 460-119390-1

This case narrative is in the form of an exception report, where only the anomalies related to this report, method specific performance and/or QA/QC issues are discussed. If there are no issues to report, this narrative will include a statement that documents that there are no relevant data issues.

It should be noted that samples with elevated Reporting Limits (RLs) as a result of a dilution may not be able to satisfy customer reporting limits in some cases. Such increases in the RLs are unavoidable but acceptable consequence of sample dilution that enables quantification of target analytes or interferences which exceed the calibration range of the instrument.

Calculations are performed before rounding to avoid round-off errors in calculated results.

All holding times were met and proper preservation noted for the methods performed on these samples, unless otherwise detailed in the individual sections below.

RECEIPT
The samples were received on 8/30/2016 6:35 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 5.5º C.

Note: All samples which require thermal preservation are considered acceptable if the arrival temperature is within 2C of the required temperature or method specified range. For samples with a specified temperature of 4C, samples with a temperature ranging from just above freezing temperature of water to 6C shall be acceptable. Samples that are hand delivered immediately following collection may not meet these criteria, however they will be deemed acceptable according to NELAC standards, if there is evidence that the chilling process has begun, such as arrival on ice, etc.

VOLATILE ORGANICS
Samples SB1-2-2.5 (460-119390-1), SB1-10-12 (460-119390-2), SB2-5-5.5 (460-119390-3) and SB2-24.25 (460-119390-4) were analyzed for Volatile organics in accordance with EPA SW-846 Method 8260C. The samples were prepared on 08/31/2016 and analyzed on 09/01/2016.

The continuing calibration verification (CCV) associated with batch 388063 recovered above the upper control limit for Bromomethane, Carbon tetrachloride and Bromoform. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported.

The continuing calibration verification (CCV) associated with batch 388214 recovered above the upper control limit for Carbon tetrachloride and Bromoform. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported.

The laboratory control sample (LCS) and / or laboratory control sample duplicate (LCSD) for batch 388063 recovered outside control limits for the following analytes: Bromomethane, Chloroethane and Bromoform. These analytes were biased high in the LCS/LCSD and were not detected in the associated samples; therefore, the data have been reported.

The %RPD of the laboratory control sample (LCS) and laboratory control standard duplicate (LCSD) for batch 388214 recovered outside control limits for the following analyte: Chloroethane.

Bromomethane and Chloroethane failed the recovery criteria high for LCS 460-388063/3. Bromoform, Bromomethane and Chloroethane failed the recovery criteria high for LCSD 460-388063/4. Chloroethane exceeded the RPD limit for LCSD 460-388214/4. Refer to the QC report for details.

No other difficulties were encountered during the Volatile organics analysis.

All other quality control parameters were within the acceptance limits.

PESTICIDES
Samples SB1-2-2.5 (460-119390-1), SB1-10-12 (460-119390-2), SB2-5-5.5 (460-119390-3) and SB2-24.25 (460-119390-4) were analyzed for Pesticides in accordance with EPA SW-846 Methods 8081B. The samples were prepared and analyzed on 09/01/2016.

No difficulties were encountered during the Pesticides analysis.

All quality control parameters were within the acceptance limits.

POLYCHLORINATED BIPHENYLS
Samples SB1-2-2.5 (460-119390-1), SB1-10-12 (460-119390-2), SB2-5-5.5 (460-119390-3) and SB2-24.25 (460-119390-4) were analyzed for polychlorinated biphenyls in accordance with EPA SW-846 Method 8082A. The samples were prepared on 09/01/2016 and analyzed on 09/02/2016.

No difficulties were encountered during the PCBs analysis.

All quality control parameters were within the acceptance limits.

SEMIVOLATILE ORGANIC COMPOUNDS
Samples SB1-2-2.5 (460-119390-1), SB1-10-12 (460-119390-2), SB2-5-5.5 (460-119390-3) and SB2-24.25 (460-119390-4) were analyzed for Semivolatile organic compounds in accordance with EPA SW-846 Method 8270D. The samples were prepared on 09/01/2016 and analyzed on 09/04/2016.

The continuing calibration verification (CCV) analyzed in batch 460-388312 was outside the method criteria for the following analyte(s): Benzaldehyde, 2,3,4,6-Tetrachlorophenol, 2,2'-oxybis[1-chloropropane], 1,2,4,5-Tetrachlorobenzene and Hexachlorobutadiene. A CCV standard at or below the reporting limit (RL) was analyzed with the affected samples and found to be acceptable. As indicated in the reference method, sample analysis may proceed; however, any detection for the affected analyte(s) is considered estimated.

The continuing calibration verification (CCV) analyzed in batch 460-388648 was outside the method criteria for the following analyte(s): Benzaldehyde, Butyl benzyl phthalate, 2,4,6-Tribromophenol, 2,4,6-Trichlorophenol, Hexachlorobenzene, Hexachlorobutadiene, Hexachlorocyclopentadiene, 1,2,4,5-Tetrachlorobenzene and 2-Nitroaniline. A CCV standard at or below the reporting limit (RL) was analyzed with the affected samples and found to be acceptable. As indicated in the reference method, sample analysis may proceed; however, any detection for the affected analyte(s) is considered estimated.

A full list spike was utilized for this method. Due to the large number of spiked analytes, there is a high probability that one or more analytes will recover outside acceptance limits. The laboratory's SOP allows for five analytes to recover outside criteria for this method when a full list spike is utilized. The LCS associated with batch 460-388164 had one analyte (Hexachlorobutadiene) outside control limits; therefore, re-extraction/re-analysis was not performed. These results have been reported and qualified.

Surrogates recoveries for the following laboratory control sample (LCS) associated with batch 460-388164 were outside limits. All spike recoveries were within limits. Sample has been qualified and reported.

2,4,6-Tribromophenol, 2-Fluorophenol and Phenol-d5 failed the surrogate recovery criteria high for LCS 460-388164/3-A. Refer to the QC report for details.

Hexachlorobutadiene failed the recovery criteria high for LCS 460-388164/2-A. Refer to the QC report for details.

Several analytes failed the recovery criteria low for the MS of sample 460-119139-2 in batch 460-388312.

Several analytes failed the recovery criteria low for the MSD of sample 460-119139-2 in batch 460-388312. 4,6-Dinitro-2-methylphenol and Bis(2-ethylhexyl) phthalate exceeded the RPD limit.

Refer to the QC report for details.

No other difficulties were encountered during the semivolatiles analysis.

All other quality control parameters were within the acceptance limits.

METALS
Samples SB1-2-2.5 (460-119390-1), SB1-10-12 (460-119390-2), SB2-5-5.5 (460-119390-3) and SB2-24.25 (460-119390-4) were analyzed for Metals in accordance with EPA SW-846 Methods 6010C. The samples were prepared on 09/01/2016 and 09/02/2016 and analyzed on 09/02/2016, 09/03/2016 and 09/06/2016.

Several analytes failed the recovery criteria low for the MS of sample 460-119404-13 in batch 460-388460. Several analytes failed the recovery criteria high.

Antimony and Cadmium failed the recovery criteria low for the MS of sample 460-119414-1 in batch 460-388464. Aluminum, Iron and Manganese failed the recovery criteria high.

Refer to the QC report for details.

Calcium, Manganese and Nickel exceeded the RPD limit for the duplicate of sample 460-119404-13. for the duplicate of sample 460-119414-1. Refer to the QC report for details.

Samples SB1-10-12 (460-119390-2)[4X], SB2-5-5.5 (460-119390-3)[4X] and SB2-24.25 (460-119390-4)[4X] required dilution prior to analysis. The reporting limits have been adjusted accordingly.

No other difficulties were encountered during the Metals analysis.

All other quality control parameters were within the acceptance limits.

TOTAL MERCURY

Samples SB1-2-2.5 (460-119390-1), SB1-10-12 (460-119390-2), SB2-5-5.5 (460-119390-3) and SB2-24.25 (460-119390-4) were analyzed for total mercury in accordance with EPA SW-846 Method 7471B. The samples were prepared and analyzed on 09/02/2016.

Mercury failed the recovery criteria high for the MS of sample 460-119469-6 in batch 460-388408.

The presence of the '4' qualifier in the data indicates analytes where the concentration in the unspiked sample exceeded four times the spiking amount.

Refer to the QC report for details.

Mercury exceeded the RPD limit for the duplicate of sample 460-119469-6. Refer to the QC report for details.

No other difficulties were encountered during the Hg analysis.

All other quality control parameters were within the acceptance limits.

PERCENT SOLIDS/PERCENT MOISTURE

Samples SB1-2-2.5 (460-119390-1), SB1-10-12 (460-119390-2), SB2-5-5.5 (460-119390-3) and SB2-24.25 (460-119390-4) were analyzed for percent solids/percent moisture in accordance with EPA Method CLPISM01.2 (Exhibit D) Modified. The samples were analyzed on 09/03/2016.

No difficulties were encountered during the %solids/moisture analysis.

All quality control parameters were within the acceptance limits.

Sample Summary

Client: SESI Consulting Engineers
Project/Site: 205 West St., Mt Vernon, NY

TestAmerica Job ID: 460-119390-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
460-119390-1	SB1-2-2.5	Solid	08/30/16 10:45	08/30/16 18:35
460-119390-2	SB1-10-12	Solid	08/30/16 11:45	08/30/16 18:35
460-119390-3	SB2-5-5.5	Solid	08/30/16 13:50	08/30/16 18:35
460-119390-4	SB2-24.25	Solid	08/30/16 14:15	08/30/16 18:35

Detection Summary

Client: SESI Consulting Engineers
Project/Site: 205 West St., Mt Vernon, NY

TestAmerica Job ID: 460-119390-1

Client Sample ID: SB1-2-2.5 — Lab Sample ID: 460-119390-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	30		11	2.3	ug/Kg	1	☼	8260C	Total/NA
Methylene Chloride	3.5		2.2	0.69	ug/Kg	1	☼	8260C	Total/NA
Naphthalene	20	J	350	8.8	ug/Kg	1	☼	8270D	Total/NA
2-Methylnaphthalene	16	J	350	7.7	ug/Kg	1	☼	8270D	Total/NA
Phenanthrene	32	J	350	9.3	ug/Kg	1	☼	8270D	Total/NA
Fluoranthene	83	J	350	10	ug/Kg	1	☼	8270D	Total/NA
Pyrene	88	J	350	16	ug/Kg	1	☼	8270D	Total/NA
Benzo[a]anthracene	63		35	29	ug/Kg	1	☼	8270D	Total/NA
Chrysene	75	J	350	9.5	ug/Kg	1	☼	8270D	Total/NA
Bis(2-ethylhexyl) phthalate	27	J	350	14	ug/Kg	1	☼	8270D	Total/NA
Benzo[b]fluoranthene	92		35	14	ug/Kg	1	☼	8270D	Total/NA
Benzo[k]fluoranthene	45		35	15	ug/Kg	1	☼	8270D	Total/NA
Benzo[a]pyrene	66		35	11	ug/Kg	1	☼	8270D	Total/NA
Indeno[1,2,3-cd]pyrene	50		35	23	ug/Kg	1	☼	8270D	Total/NA
Benzo[g,h,i]perylene	48	J	350	20	ug/Kg	1	☼	8270D	Total/NA
Aluminum	11500		32.9	17.0	mg/Kg	4	☼	6010C	Total/NA
Arsenic	2.4	J	2.5	0.81	mg/Kg	4	☼	6010C	Total/NA
Barium	102		32.9	1.2	mg/Kg	4	☼	6010C	Total/NA
Beryllium	0.50		0.33	0.28	mg/Kg	4	☼	6010C	Total/NA
Calcium	13300		823	48.7	mg/Kg	4	☼	6010C	Total/NA
Chromium	19.8		1.6	0.80	mg/Kg	4	☼	6010C	Total/NA
Cobalt	8.7		8.2	0.95	mg/Kg	4	☼	6010C	Total/NA
Copper	23.8		4.1	1.1	mg/Kg	4	☼	6010C	Total/NA
Iron	19200		24.7	18.6	mg/Kg	4	☼	6010C	Total/NA
Lead	54.8		1.6	0.65	mg/Kg	4	☼	6010C	Total/NA
Magnesium	4640		823	41.1	mg/Kg	4	☼	6010C	Total/NA
Manganese	235		2.5	0.86	mg/Kg	4	☼	6010C	Total/NA
Nickel	19.7		6.6	1.2	mg/Kg	4	☼	6010C	Total/NA
Potassium	3590		823	24.9	mg/Kg	4	☼	6010C	Total/NA
Silver	0.41	J	1.6	0.29	mg/Kg	4	☼	6010C	Total/NA
Sodium	675	J	823	55.7	mg/Kg	4	☼	6010C	Total/NA
Vanadium	25.2		8.2	0.82	mg/Kg	4	☼	6010C	Total/NA
Zinc	51.3		4.9	1.2	mg/Kg	4	☼	6010C	Total/NA
Mercury	0.22		0.017	0.011	mg/Kg	1	☼	7471B	Total/NA

Client Sample ID: SB1-10-12 — Lab Sample ID: 460-119390-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	13		8.6	1.8	ug/Kg	1	☼	8260C	Total/NA
Toluene	0.43	J	1.7	0.33	ug/Kg	1	☼	8260C	Total/NA
Xylenes, Total	0.84	J	3.4	0.19	ug/Kg	1	☼	8260C	Total/NA
Bis(2-ethylhexyl) phthalate	61	J	430	17	ug/Kg	1	☼	8270D	Total/NA
Aluminum	16900		42.0	21.6	mg/Kg	4	☼	6010C	Total/NA
Arsenic	2.2	J	3.1	1.0	mg/Kg	4	☼	6010C	Total/NA
Barium	119		42.0	1.5	mg/Kg	4	☼	6010C	Total/NA
Beryllium	0.66		0.42	0.36	mg/Kg	4	☼	6010C	Total/NA
Calcium	1720		1050	62.1	mg/Kg	4	☼	6010C	Total/NA
Chromium	40.4		2.1	1.0	mg/Kg	4	☼	6010C	Total/NA
Cobalt	10.6		10.5	1.2	mg/Kg	4	☼	6010C	Total/NA
Copper	28.5		5.2	1.4	mg/Kg	4	☼	6010C	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: SB1-10-12 (Continued) — Lab Sample ID: 460-119390-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Iron	29400		31.5	23.7	mg/Kg	4	☼	6010C	Total/NA
Lead	12.8		2.1	0.82	mg/Kg	4	☼	6010C	Total/NA
Magnesium	7510		1050	52.4	mg/Kg	4	☼	6010C	Total/NA
Manganese	453		3.1	1.1	mg/Kg	4	☼	6010C	Total/NA
Nickel	25.9		8.4	1.5	mg/Kg	4	☼	6010C	Total/NA
Potassium	4320		1050	31.8	mg/Kg	4	☼	6010C	Total/NA
Sodium	625	J	1050	71.0	mg/Kg	4	☼	6010C	Total/NA
Vanadium	49.8		10.5	1.0	mg/Kg	4	☼	6010C	Total/NA
Zinc	76.5		6.3	1.5	mg/Kg	4	☼	6010C	Total/NA

Client Sample ID: SB2-5-5.5 — Lab Sample ID: 460-119390-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	14		6.8	1.4	ug/Kg	1	☼	8260C	Total/NA
Methylene Chloride	1.4		1.4	0.43	ug/Kg	1	☼	8260C	Total/NA
Naphthalene	13	J	380	9.8	ug/Kg	1	☼	8270D	Total/NA
2-Methylnaphthalene	21	J	380	8.5	ug/Kg	1	☼	8270D	Total/NA
Bis(2-ethylhexyl) phthalate	270	J	380	15	ug/Kg	1	☼	8270D	Total/NA
Aluminum	14600		37.3	19.2	mg/Kg	4	☼	6010C	Total/NA
Arsenic	2.6	J	2.8	0.92	mg/Kg	4	☼	6010C	Total/NA
Barium	67.3		37.3	1.3	mg/Kg	4	☼	6010C	Total/NA
Beryllium	0.48		0.37	0.32	mg/Kg	4	☼	6010C	Total/NA
Calcium	1850		932	55.2	mg/Kg	4	☼	6010C	Total/NA
Chromium	25.5		1.9	0.90	mg/Kg	4	☼	6010C	Total/NA
Cobalt	9.1	J	9.3	1.1	mg/Kg	4	☼	6010C	Total/NA
Copper	15.8		4.7	1.2	mg/Kg	4	☼	6010C	Total/NA
Iron	22000		28.0	21.1	mg/Kg	4	☼	6010C	Total/NA
Lead	11.9		1.9	0.73	mg/Kg	4	☼	6010C	Total/NA
Magnesium	5260		932	46.5	mg/Kg	4	☼	6010C	Total/NA
Manganese	368		2.8	0.98	mg/Kg	4	☼	6010C	Total/NA
Nickel	18.1		7.5	1.4	mg/Kg	4	☼	6010C	Total/NA
Potassium	1650		932	28.3	mg/Kg	4	☼	6010C	Total/NA
Sodium	372	J	932	63.1	mg/Kg	4	☼	6010C	Total/NA
Vanadium	35.2		9.3	0.93	mg/Kg	4	☼	6010C	Total/NA
Zinc	81.4		5.6	1.4	mg/Kg	4	☼	6010C	Total/NA
Mercury	0.024		0.019	0.012	mg/Kg	1	☼	7471B	Total/NA

Client Sample ID: SB2-24.25 — Lab Sample ID: 460-119390-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Tetrachloroethene	1.2	J	1.8	0.51	ug/Kg	1	☼	8260C	Total/NA
Bis(2-ethylhexyl) phthalate	200	J	430	17	ug/Kg	1	☼	8270D	Total/NA
Aluminum	7530		40.6	20.9	mg/Kg	4	☼	6010C	Total/NA
Arsenic	2.0	J	3.0	1.0	mg/Kg	4	☼	6010C	Total/NA
Barium	104		40.6	1.5	mg/Kg	4	☼	6010C	Total/NA
Beryllium	0.39	J	0.41	0.34	mg/Kg	4	☼	6010C	Total/NA
Calcium	11600		1020	60.1	mg/Kg	4	☼	6010C	Total/NA
Chromium	26.0		2.0	0.98	mg/Kg	4	☼	6010C	Total/NA
Cobalt	5.2	J	10.2	1.2	mg/Kg	4	☼	6010C	Total/NA
Copper	18.8		5.1	1.3	mg/Kg	4	☼	6010C	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: SB2-24.25 (Continued)

Lab Sample ID: 460-119390-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Iron	17600		30.5	22.9	mg/Kg	4	☼	6010C	Total/NA
Lead	2.9		2.0	0.80	mg/Kg	4	☼	6010C	Total/NA
Magnesium	9060		1020	50.7	mg/Kg	4	☼	6010C	Total/NA
Manganese	174		3.0	1.1	mg/Kg	4	☼	6010C	Total/NA
Nickel	18.6		8.1	1.5	mg/Kg	4	☼	6010C	Total/NA
Potassium	3540		1020	30.8	mg/Kg	4	☼	6010C	Total/NA
Sodium	170	J	1020	68.7	mg/Kg	4	☼	6010C	Total/NA
Vanadium	27.2		10.2	1.0	mg/Kg	4	☼	6010C	Total/NA
Zinc	51.9		6.1	1.5	mg/Kg	4	☼	6010C	Total/NA

This Detection Summary does not include radiochemical test results.

Method Summary

Client: SESI Consulting Engineers
Project/Site: 205 West St., Mt Vernon, NY

TestAmerica Job ID: 460-119390-1

Method	Method Description	Protocol	Laboratory
8260C	Volatile Organic Compounds by GC/MS	SW846	TAL EDI
8270D	Semivolatile Organic Compounds (GC/MS)	SW846	TAL EDI
8081B	Organochlorine Pesticides (GC)	SW846	TAL EDI
8082A	Polychlorinated Biphenyls (PCBs) by Gas Chromatography	SW846	TAL EDI
6010C	Metals (ICP)	SW846	TAL EDI
7471B	Mercury (CVAA)	SW846	TAL EDI
Moisture	Percent Moisture	EPA	TAL EDI

Protocol References:

EPA = US Environmental Protection Agency

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

Laboratory References:

TAL EDI = TestAmerica Edison, 777 New Durham Road, Edison, NJ 08817, TEL (732)549-3900

Client Sample ID: SB1-2-2.5

Date Collected: 08/30/16 10:45
Date Received: 08/30/16 18:35

Lab Sample ID: 460-119390-1

Matrix: Solid
Percent Solids: 94.9

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	0.82	U	2.2	0.82	ug/Kg	☼	08/31/16 09:50	09/01/16 12:28	1
1,1,2,2-Tetrachloroethane	0.37	U	2.2	0.37	ug/Kg	☼	08/31/16 09:50	09/01/16 12:28	1
1,1,2-Trichloro-1,2,2-trifluoroethane	0.95	U	2.2	0.95	ug/Kg	☼	08/31/16 09:50	09/01/16 12:28	1
1,1,2-Trichloroethane	0.60	U	2.2	0.60	ug/Kg	☼	08/31/16 09:50	09/01/16 12:28	1
1,1-Dichloroethane	0.73	U	2.2	0.73	ug/Kg	☼	08/31/16 09:50	09/01/16 12:28	1
1,1-Dichloroethene	0.89	U	2.2	0.89	ug/Kg	☼	08/31/16 09:50	09/01/16 12:28	1
1,2,3-Trichlorobenzene	0.24	U	2.2	0.24	ug/Kg	☼	08/31/16 09:50	09/01/16 12:28	1
1,2,4-Trichlorobenzene	0.69	U	2.2	0.69	ug/Kg	☼	08/31/16 09:50	09/01/16 12:28	1
1,2-Dibromo-3-Chloropropane	1.0	U	2.2	1.0	ug/Kg	☼	08/31/16 09:50	09/01/16 12:28	1
1,2-Dichlorobenzene	0.30	U	2.2	0.30	ug/Kg	☼	08/31/16 09:50	09/01/16 12:28	1
1,2-Dichloroethane	0.24	U	2.2	0.24	ug/Kg	☼	08/31/16 09:50	09/01/16 12:28	1
1,2-Dichloropropane	0.37	U	2.2	0.37	ug/Kg	☼	08/31/16 09:50	09/01/16 12:28	1
1,3-Dichlorobenzene	0.26	U	2.2	0.26	ug/Kg	☼	08/31/16 09:50	09/01/16 12:28	1
1,4-Dichlorobenzene	0.28	U	2.2	0.28	ug/Kg	☼	08/31/16 09:50	09/01/16 12:28	1
1,4-Dioxane	14	U	43	14	ug/Kg	☼	08/31/16 09:50	09/01/16 12:28	1
2-Butanone (MEK)	1.7	U	11	1.7	ug/Kg	☼	08/31/16 09:50	09/01/16 12:28	1
2-Hexanone	2.0	U	11	2.0	ug/Kg	☼	08/31/16 09:50	09/01/16 12:28	1
4-Methyl-2-pentanone (MIBK)	4.8	U	11	4.8	ug/Kg	☼	08/31/16 09:50	09/01/16 12:28	1
Acetone	**30**		11	2.3	ug/Kg	☼	08/31/16 09:50	09/01/16 12:28	1
Benzene	0.43	U	2.2	0.43	ug/Kg	☼	08/31/16 09:50	09/01/16 12:28	1
Bromoform	0.28	U *	2.2	0.28	ug/Kg	☼	08/31/16 09:50	09/01/16 12:28	1
Bromomethane	0.69	U *	2.2	0.69	ug/Kg	☼	08/31/16 09:50	09/01/16 12:28	1
Carbon disulfide	0.93	U	2.2	0.93	ug/Kg	☼	08/31/16 09:50	09/01/16 12:28	1
Carbon tetrachloride	0.93	U	2.2	0.93	ug/Kg	☼	08/31/16 09:50	09/01/16 12:28	1
Chlorobenzene	0.30	U	2.2	0.30	ug/Kg	☼	08/31/16 09:50	09/01/16 12:28	1
Chlorobromomethane	0.37	U	2.2	0.37	ug/Kg	☼	08/31/16 09:50	09/01/16 12:28	1
Chlorodibromomethane	0.32	U	2.2	0.32	ug/Kg	☼	08/31/16 09:50	09/01/16 12:28	1
Chloroethane	0.76	U *	2.2	0.76	ug/Kg	☼	08/31/16 09:50	09/01/16 12:28	1
Chloroform	0.45	U	2.2	0.45	ug/Kg	☼	08/31/16 09:50	09/01/16 12:28	1
Chloromethane	0.82	U	2.2	0.82	ug/Kg	☼	08/31/16 09:50	09/01/16 12:28	1
cis-1,2-Dichloroethene	0.48	U	2.2	0.48	ug/Kg	☼	08/31/16 09:50	09/01/16 12:28	1
cis-1,3-Dichloropropene	0.32	U	2.2	0.32	ug/Kg	☼	08/31/16 09:50	09/01/16 12:28	1
Cyclohexane	0.99	U	2.2	0.99	ug/Kg	☼	08/31/16 09:50	09/01/16 12:28	1
Dichlorobromomethane	0.82	U	2.2	0.82	ug/Kg	☼	08/31/16 09:50	09/01/16 12:28	1
Dichlorodifluoromethane	0.69	U	2.2	0.69	ug/Kg	☼	08/31/16 09:50	09/01/16 12:28	1
Ethylbenzene	0.39	U	2.2	0.39	ug/Kg	☼	08/31/16 09:50	09/01/16 12:28	1
Ethylene Dibromide	0.26	U	2.2	0.26	ug/Kg	☼	08/31/16 09:50	09/01/16 12:28	1
Isopropylbenzene	0.37	U	2.2	0.37	ug/Kg	☼	08/31/16 09:50	09/01/16 12:28	1
Methyl acetate	1.9	U	11	1.9	ug/Kg	☼	08/31/16 09:50	09/01/16 12:28	1
Methyl tert-butyl ether	0.37	U	2.2	0.37	ug/Kg	☼	08/31/16 09:50	09/01/16 12:28	1
Methylcyclohexane	1.1	U	2.2	1.1	ug/Kg	☼	08/31/16 09:50	09/01/16 12:28	1
Methylene Chloride	**3.5**		2.2	0.69	ug/Kg	☼	08/31/16 09:50	09/01/16 12:28	1
Styrene	0.32	U	2.2	0.32	ug/Kg	☼	08/31/16 09:50	09/01/16 12:28	1
Tetrachloroethene	0.60	U	2.2	0.60	ug/Kg	☼	08/31/16 09:50	09/01/16 12:28	1
Toluene	0.41	U	2.2	0.41	ug/Kg	☼	08/31/16 09:50	09/01/16 12:28	1
trans-1,2-Dichloroethene	0.84	U	2.2	0.84	ug/Kg	☼	08/31/16 09:50	09/01/16 12:28	1
trans-1,3-Dichloropropene	0.22	U	2.2	0.22	ug/Kg	☼	08/31/16 09:50	09/01/16 12:28	1
Trichloroethene	0.56	U	2.2	0.56	ug/Kg	☼	08/31/16 09:50	09/01/16 12:28	1
Trichlorofluoromethane	0.73	U	2.2	0.73	ug/Kg	☼	08/31/16 09:50	09/01/16 12:28	1

Client Sample ID: SB1-2-2.5

Date Collected: 08/30/16 10:45
Date Received: 08/30/16 18:35

Lab Sample ID: 460-119390-1

Matrix: Solid
Percent Solids: 94.9

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Vinyl chloride	0.84	U	2.2	0.84	ug/Kg	☼	08/31/16 09:50	09/01/16 12:28	1
Xylenes, Total	0.24	U	4.3	0.24	ug/Kg	☼	08/31/16 09:50	09/01/16 12:28	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/Kg*	☼			*08/31/16 09:50*	*09/01/16 12:28*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*98*		*78 - 135*	*08/31/16 09:50*	*09/01/16 12:28*	*1*
4-Bromofluorobenzene	*112*		*67 - 126*	*08/31/16 09:50*	*09/01/16 12:28*	*1*
Dibromofluoromethane (Surr)	*113*		*61 - 149*	*08/31/16 09:50*	*09/01/16 12:28*	*1*
Toluene-d8 (Surr)	*102*		*73 - 121*	*08/31/16 09:50*	*09/01/16 12:28*	*1*

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	11	U	350	11	ug/Kg	☼	09/01/16 13:23	09/04/16 20:14	1
2-Chlorophenol	8.8	U	350	8.8	ug/Kg	☼	09/01/16 13:23	09/04/16 20:14	1
2-Methylphenol	15	U	350	15	ug/Kg	☼	09/01/16 13:23	09/04/16 20:14	1
4-Methylphenol	9.5	U	350	9.5	ug/Kg	☼	09/01/16 13:23	09/04/16 20:14	1
2-Nitrophenol	12	U	350	12	ug/Kg	☼	09/01/16 13:23	09/04/16 20:14	1
2,4-Dimethylphenol	76	U	350	76	ug/Kg	☼	09/01/16 13:23	09/04/16 20:14	1
2,4-Dichlorophenol	8.2	U	140	8.2	ug/Kg	☼	09/01/16 13:23	09/04/16 20:14	1
4-Chloro-3-methylphenol	15	U	350	15	ug/Kg	☼	09/01/16 13:23	09/04/16 20:14	1
2,4,6-Trichlorophenol	9.9	U	140	9.9	ug/Kg	☼	09/01/16 13:23	09/04/16 20:14	1
2,4,5-Trichlorophenol	35	U	350	35	ug/Kg	☼	09/01/16 13:23	09/04/16 20:14	1
2,4-Dinitrophenol	260	U	280	260	ug/Kg	☼	09/01/16 13:23	09/04/16 20:14	1
4-Nitrophenol	170	U	710	170	ug/Kg	☼	09/01/16 13:23	09/04/16 20:14	1
4,6-Dinitro-2-methylphenol	93	U	280	93	ug/Kg	☼	09/01/16 13:23	09/04/16 20:14	1
Pentachlorophenol	42	U	280	42	ug/Kg	☼	09/01/16 13:23	09/04/16 20:14	1
Bis(2-chloroethyl)ether	8.2	U	35	8.2	ug/Kg	☼	09/01/16 13:23	09/04/16 20:14	1
N-Nitrosodi-n-propylamine	12	U	35	12	ug/Kg	☼	09/01/16 13:23	09/04/16 20:14	1
Hexachloroethane	13	U	35	13	ug/Kg	☼	09/01/16 13:23	09/04/16 20:14	1
Nitrobenzene	11	U	35	11	ug/Kg	☼	09/01/16 13:23	09/04/16 20:14	1
Isophorone	7.5	U	140	7.5	ug/Kg	☼	09/01/16 13:23	09/04/16 20:14	1
Bis(2-chloroethoxy)methane	11	U	350	11	ug/Kg	☼	09/01/16 13:23	09/04/16 20:14	1
Naphthalene	**20**	**J**	350	8.8	ug/Kg	☼	09/01/16 13:23	09/04/16 20:14	1
4-Chloroaniline	8.9	U	350	8.9	ug/Kg	☼	09/01/16 13:23	09/04/16 20:14	1
Hexachlorobutadiene	9.8	U *	71	9.8	ug/Kg	☼	09/01/16 13:23	09/04/16 20:14	1
2-Methylnaphthalene	**16**	**J**	350	7.7	ug/Kg	☼	09/01/16 13:23	09/04/16 20:14	1
Hexachlorocyclopentadiene	22	U	350	22	ug/Kg	☼	09/01/16 13:23	09/04/16 20:14	1
2-Chloronaphthalene	7.9	U	350	7.9	ug/Kg	☼	09/01/16 13:23	09/04/16 20:14	1
2-Nitroaniline	11	U	350	11	ug/Kg	☼	09/01/16 13:23	09/04/16 20:14	1
Dimethyl phthalate	10	U	350	10	ug/Kg	☼	09/01/16 13:23	09/04/16 20:14	1
Acenaphthylene	8.9	U	350	8.9	ug/Kg	☼	09/01/16 13:23	09/04/16 20:14	1
2,6-Dinitrotoluene	19	U	71	19	ug/Kg	☼	09/01/16 13:23	09/04/16 20:14	1
3-Nitroaniline	10	U	350	10	ug/Kg	☼	09/01/16 13:23	09/04/16 20:14	1
Acenaphthene	8.4	U	350	8.4	ug/Kg	☼	09/01/16 13:23	09/04/16 20:14	1
Dibenzofuran	11	U	350	11	ug/Kg	☼	09/01/16 13:23	09/04/16 20:14	1
2,4-Dinitrotoluene	14	U	71	14	ug/Kg	☼	09/01/16 13:23	09/04/16 20:14	1
Diethyl phthalate	9.9	U	350	9.9	ug/Kg	☼	09/01/16 13:23	09/04/16 20:14	1
4-Chlorophenyl phenyl ether	10	U	350	10	ug/Kg	☼	09/01/16 13:23	09/04/16 20:14	1

Client Sample ID: SB1-2-2.5

Date Collected: 08/30/16 10:45
Date Received: 08/30/16 18:35

Lab Sample ID: 460-119390-1

Matrix: Solid
Percent Solids: 94.9

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluorene	7.6	U	350	7.6	ug/Kg	☼	09/01/16 13:23	09/04/16 20:14	1
4-Nitroaniline	13	U	350	13	ug/Kg	☼	09/01/16 13:23	09/04/16 20:14	1
N-Nitrosodiphenylamine	32	U	350	32	ug/Kg	☼	09/01/16 13:23	09/04/16 20:14	1
4-Bromophenyl phenyl ether	11	U	350	11	ug/Kg	☼	09/01/16 13:23	09/04/16 20:14	1
Hexachlorobenzene	14	U	35	14	ug/Kg	☼	09/01/16 13:23	09/04/16 20:14	1
Phenanthrene	**32**	**J**	350	9.3	ug/Kg	☼	09/01/16 13:23	09/04/16 20:14	1
Anthracene	33	U	350	33	ug/Kg	☼	09/01/16 13:23	09/04/16 20:14	1
Carbazole	8.6	U	350	8.6	ug/Kg	☼	09/01/16 13:23	09/04/16 20:14	1
Di-n-butyl phthalate	10	U	350	10	ug/Kg	☼	09/01/16 13:23	09/04/16 20:14	1
Fluoranthene	**83**	**J**	350	10	ug/Kg	☼	09/01/16 13:23	09/04/16 20:14	1
Pyrene	**88**	**J**	350	16	ug/Kg	☼	09/01/16 13:23	09/04/16 20:14	1
Butyl benzyl phthalate	11	U	350	11	ug/Kg	☼	09/01/16 13:23	09/04/16 20:14	1
3,3'-Dichlorobenzidine	39	U	140	39	ug/Kg	☼	09/01/16 13:23	09/04/16 20:14	1
Benzo[a]anthracene	**63**		35	29	ug/Kg	☼	09/01/16 13:23	09/04/16 20:14	1
Chrysene	**75**	**J**	350	9.5	ug/Kg	☼	09/01/16 13:23	09/04/16 20:14	1
Bis(2-ethylhexyl) phthalate	**27**	**J**	350	14	ug/Kg	☼	09/01/16 13:23	09/04/16 20:14	1
Di-n-octyl phthalate	18	U	350	18	ug/Kg	☼	09/01/16 13:23	09/04/16 20:14	1
Benzo[b]fluoranthene	**92**		35	14	ug/Kg	☼	09/01/16 13:23	09/04/16 20:14	1
Benzo[k]fluoranthene	**45**		35	15	ug/Kg	☼	09/01/16 13:23	09/04/16 20:14	1
Benzo[a]pyrene	**66**		35	11	ug/Kg	☼	09/01/16 13:23	09/04/16 20:14	1
Indeno[1,2,3-cd]pyrene	**50**		35	23	ug/Kg	☼	09/01/16 13:23	09/04/16 20:14	1
Dibenz(a,h)anthracene	18	U	35	18	ug/Kg	☼	09/01/16 13:23	09/04/16 20:14	1
Benzo[g,h,i]perylene	**48**	**J**	350	20	ug/Kg	☼	09/01/16 13:23	09/04/16 20:14	1
Diphenyl	30	U	350	30	ug/Kg	☼	09/01/16 13:23	09/04/16 20:14	1
Acetophenone	7.6	U	350	7.6	ug/Kg	☼	09/01/16 13:23	09/04/16 20:14	1
Benzaldehyde	27	U	350	27	ug/Kg	☼	09/01/16 13:23	09/04/16 20:14	1
Caprolactam	25	U	350	25	ug/Kg	☼	09/01/16 13:23	09/04/16 20:14	1
Atrazine	15	U	140	15	ug/Kg	☼	09/01/16 13:23	09/04/16 20:14	1
2,2'-oxybis[1-chloropropane]	14	U	350	14	ug/Kg	☼	09/01/16 13:23	09/04/16 20:14	1
1,2,4,5-Tetrachlorobenzene	26	U	350	26	ug/Kg	☼	09/01/16 13:23	09/04/16 20:14	1
2,3,4,6-Tetrachlorophenol	33	U	350	33	ug/Kg	☼	09/01/16 13:23	09/04/16 20:14	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/Kg*	☼			*09/01/16 13:23*	*09/04/16 20:14*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*68*		*37 - 94*	*09/01/16 13:23*	*09/04/16 20:14*	*1*
Phenol-d5	*68*		*32 - 91*	*09/01/16 13:23*	*09/04/16 20:14*	*1*
Terphenyl-d14	*79*		*24 - 109*	*09/01/16 13:23*	*09/04/16 20:14*	*1*
2,4,6-Tribromophenol	*63*		*10 - 103*	*09/01/16 13:23*	*09/04/16 20:14*	*1*
2-Fluorophenol	*68*		*25 - 92*	*09/01/16 13:23*	*09/04/16 20:14*	*1*
2-Fluorobiphenyl	*72*		*38 - 95*	*09/01/16 13:23*	*09/04/16 20:14*	*1*

Method: 8081B - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	0.93	U	7.1	0.93	ug/Kg	☼	09/01/16 02:48	09/01/16 16:41	1
4,4'-DDE	1.0	U	7.1	1.0	ug/Kg	☼	09/01/16 02:48	09/01/16 16:41	1
4,4'-DDT	0.73	U	7.1	0.73	ug/Kg	☼	09/01/16 02:48	09/01/16 16:41	1
Aldrin	0.85	U	7.1	0.85	ug/Kg	☼	09/01/16 02:48	09/01/16 16:41	1
alpha-BHC	0.64	U	2.1	0.64	ug/Kg	☼	09/01/16 02:48	09/01/16 16:41	1

Client Sample ID: SB1-2-2.5

Date Collected: 08/30/16 10:45
Date Received: 08/30/16 18:35

Lab Sample ID: 460-119390-1

Matrix: Solid
Percent Solids: 94.9

Method: 8081B - Organochlorine Pesticides (GC) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
beta-BHC	0.68	U	2.1	0.68	ug/Kg	☼	09/01/16 02:48	09/01/16 16:41	1
Chlordane (technical)	31	U	71	31	ug/Kg	☼	09/01/16 02:48	09/01/16 16:41	1
delta-BHC	0.77	U	2.1	0.77	ug/Kg	☼	09/01/16 02:48	09/01/16 16:41	1
Dieldrin	0.92	U	2.1	0.92	ug/Kg	☼	09/01/16 02:48	09/01/16 16:41	1
Endosulfan I	0.98	U	7.1	0.98	ug/Kg	☼	09/01/16 02:48	09/01/16 16:41	1
Endosulfan II	1.1	U	7.1	1.1	ug/Kg	☼	09/01/16 02:48	09/01/16 16:41	1
Endosulfan sulfate	0.82	U	7.1	0.82	ug/Kg	☼	09/01/16 02:48	09/01/16 16:41	1
Endrin	0.90	U	7.1	0.90	ug/Kg	☼	09/01/16 02:48	09/01/16 16:41	1
Endrin aldehyde	0.87	U	7.1	0.87	ug/Kg	☼	09/01/16 02:48	09/01/16 16:41	1
Endrin ketone	0.98	U	7.1	0.98	ug/Kg	☼	09/01/16 02:48	09/01/16 16:41	1
gamma-BHC (Lindane)	0.63	U	2.1	0.63	ug/Kg	☼	09/01/16 02:48	09/01/16 16:41	1
Heptachlor	0.91	U	7.1	0.91	ug/Kg	☼	09/01/16 02:48	09/01/16 16:41	1
Heptachlor epoxide	1.4	U	7.1	1.4	ug/Kg	☼	09/01/16 02:48	09/01/16 16:41	1
Methoxychlor	1.5	U	7.1	1.5	ug/Kg	☼	09/01/16 02:48	09/01/16 16:41	1
Toxaphene	21	U	71	21	ug/Kg	☼	09/01/16 02:48	09/01/16 16:41	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*100*		*50 - 150*	*09/01/16 02:48*	*09/01/16 16:41*	*1*
DCB Decachlorobiphenyl	*100*		*50 - 150*	*09/01/16 02:48*	*09/01/16 16:41*	*1*
Tetrachloro-m-xylene	*97*		*47 - 150*	*09/01/16 02:48*	*09/01/16 16:41*	*1*
Tetrachloro-m-xylene	*95*		*47 - 150*	*09/01/16 02:48*	*09/01/16 16:41*	*1*

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor 1016	9.4	U	71	9.4	ug/Kg	☼	09/01/16 03:13	09/02/16 02:51	1
Aroclor 1221	9.4	U	71	9.4	ug/Kg	☼	09/01/16 03:13	09/02/16 02:51	1
Aroclor 1232	9.4	U	71	9.4	ug/Kg	☼	09/01/16 03:13	09/02/16 02:51	1
Aroclor 1242	9.4	U	71	9.4	ug/Kg	☼	09/01/16 03:13	09/02/16 02:51	1
Aroclor 1248	9.4	U	71	9.4	ug/Kg	☼	09/01/16 03:13	09/02/16 02:51	1
Aroclor 1254	9.7	U	71	9.7	ug/Kg	☼	09/01/16 03:13	09/02/16 02:51	1
Aroclor 1260	9.7	U	71	9.7	ug/Kg	☼	09/01/16 03:13	09/02/16 02:51	1
Aroclor-1262	9.7	U	71	9.7	ug/Kg	☼	09/01/16 03:13	09/02/16 02:51	1
Aroclor 1268	9.7	U	71	9.7	ug/Kg	☼	09/01/16 03:13	09/02/16 02:51	1
Polychlorinated biphenyls, Total	9.7	U	71	9.7	ug/Kg	☼	09/01/16 03:13	09/02/16 02:51	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*104*		*35 - 150*	*09/01/16 03:13*	*09/02/16 02:51*	*1*
DCB Decachlorobiphenyl	*108*		*35 - 150*	*09/01/16 03:13*	*09/02/16 02:51*	*1*

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**11500**		32.9	17.0	mg/Kg	☼	09/02/16 19:17	09/03/16 18:28	4
Antimony	1.3	U	3.3	1.3	mg/Kg	☼	09/02/16 19:17	09/03/16 18:28	4
Arsenic	**2.4**	**J**	2.5	0.81	mg/Kg	☼	09/02/16 19:17	09/03/16 18:28	4
Barium	**102**		32.9	1.2	mg/Kg	☼	09/02/16 19:17	09/03/16 18:28	4
Beryllium	**0.50**		0.33	0.28	mg/Kg	☼	09/02/16 19:17	09/03/16 18:28	4
Cadmium	0.34	U	0.66	0.34	mg/Kg	☼	09/02/16 19:17	09/03/16 18:28	4
Calcium	**13300**		823	48.7	mg/Kg	☼	09/02/16 19:17	09/03/16 18:28	4
Chromium	**19.8**		1.6	0.80	mg/Kg	☼	09/02/16 19:17	09/03/16 18:28	4
Cobalt	**8.7**		8.2	0.95	mg/Kg	☼	09/02/16 19:17	09/03/16 18:28	4

Client Sample ID: SB1-2-2.5

Date Collected: 08/30/16 10:45
Date Received: 08/30/16 18:35

Lab Sample ID: 460-119390-1

Matrix: Solid
Percent Solids: 94.9

Method: 6010C - Metals (ICP) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Copper	23.8		4.1	1.1	mg/Kg	☼	09/02/16 19:17	09/03/16 18:28	4
Iron	19200		24.7	18.6	mg/Kg	☼	09/02/16 19:17	09/03/16 18:28	4
Lead	54.8		1.6	0.65	mg/Kg	☼	09/02/16 19:17	09/03/16 18:28	4
Magnesium	4640		823	41.1	mg/Kg	☼	09/02/16 19:17	09/03/16 18:28	4
Manganese	235		2.5	0.86	mg/Kg	☼	09/02/16 19:17	09/03/16 18:28	4
Nickel	19.7		6.6	1.2	mg/Kg	☼	09/02/16 19:17	09/03/16 18:28	4
Potassium	3590		823	24.9	mg/Kg	☼	09/02/16 19:17	09/03/16 18:28	4
Selenium	1.1	U	3.3	1.1	mg/Kg	☼	09/02/16 19:17	09/03/16 18:28	4
Silver	0.41	J	1.6	0.29	mg/Kg	☼	09/02/16 19:17	09/03/16 18:28	4
Sodium	675	J	823	55.7	mg/Kg	☼	09/02/16 19:17	09/03/16 18:28	4
Thallium	1.5	U	3.3	1.5	mg/Kg	☼	09/02/16 19:17	09/03/16 18:28	4
Vanadium	25.2		8.2	0.82	mg/Kg	☼	09/02/16 19:17	09/03/16 18:28	4
Zinc	51.3		4.9	1.2	mg/Kg	☼	09/02/16 19:17	09/03/16 18:28	4

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.22		0.017	0.011	mg/Kg	☼	09/02/16 04:21	09/02/16 08:47	1

Client Sample ID: SB1-10-12

Date Collected: 08/30/16 11:45
Date Received: 08/30/16 18:35

Lab Sample ID: 460-119390-2

Matrix: Solid
Percent Solids: 77.5

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	0.65	U	1.7	0.65	ug/Kg	☼	08/31/16 09:51	09/01/16 12:54	1
1,1,2,2-Tetrachloroethane	0.29	U	1.7	0.29	ug/Kg	☼	08/31/16 09:51	09/01/16 12:54	1
1,1,2-Trichloro-1,2,2-trifluoroethane	0.76	U	1.7	0.76	ug/Kg	☼	08/31/16 09:51	09/01/16 12:54	1
1,1,2-Trichloroethane	0.48	U	1.7	0.48	ug/Kg	☼	08/31/16 09:51	09/01/16 12:54	1
1,1-Dichloroethane	0.59	U	1.7	0.59	ug/Kg	☼	08/31/16 09:51	09/01/16 12:54	1
1,1-Dichloroethene	0.71	U	1.7	0.71	ug/Kg	☼	08/31/16 09:51	09/01/16 12:54	1
1,2,3-Trichlorobenzene	0.19	U	1.7	0.19	ug/Kg	☼	08/31/16 09:51	09/01/16 12:54	1
1,2,4-Trichlorobenzene	0.55	U	1.7	0.55	ug/Kg	☼	08/31/16 09:51	09/01/16 12:54	1
1,2-Dibromo-3-Chloropropane	0.81	U	1.7	0.81	ug/Kg	☼	08/31/16 09:51	09/01/16 12:54	1
1,2-Dichlorobenzene	0.24	U	1.7	0.24	ug/Kg	☼	08/31/16 09:51	09/01/16 12:54	1
1,2-Dichloroethane	0.19	U	1.7	0.19	ug/Kg	☼	08/31/16 09:51	09/01/16 12:54	1
1,2-Dichloropropane	0.29	U	1.7	0.29	ug/Kg	☼	08/31/16 09:51	09/01/16 12:54	1
1,3-Dichlorobenzene	0.21	U	1.7	0.21	ug/Kg	☼	08/31/16 09:51	09/01/16 12:54	1
1,4-Dichlorobenzene	0.22	U	1.7	0.22	ug/Kg	☼	08/31/16 09:51	09/01/16 12:54	1
1,4-Dioxane	11	U	34	11	ug/Kg	☼	08/31/16 09:51	09/01/16 12:54	1
2-Butanone (MEK)	1.3	U	8.6	1.3	ug/Kg	☼	08/31/16 09:51	09/01/16 12:54	1
2-Hexanone	1.6	U	8.6	1.6	ug/Kg	☼	08/31/16 09:51	09/01/16 12:54	1
4-Methyl-2-pentanone (MIBK)	3.8	U	8.6	3.8	ug/Kg	☼	08/31/16 09:51	09/01/16 12:54	1
Acetone	13		8.6	1.8	ug/Kg	☼	08/31/16 09:51	09/01/16 12:54	1
Benzene	0.34	U	1.7	0.34	ug/Kg	☼	08/31/16 09:51	09/01/16 12:54	1
Bromoform	0.22	U *	1.7	0.22	ug/Kg	☼	08/31/16 09:51	09/01/16 12:54	1
Bromomethane	0.55	U *	1.7	0.55	ug/Kg	☼	08/31/16 09:51	09/01/16 12:54	1
Carbon disulfide	0.74	U	1.7	0.74	ug/Kg	☼	08/31/16 09:51	09/01/16 12:54	1
Carbon tetrachloride	0.74	U	1.7	0.74	ug/Kg	☼	08/31/16 09:51	09/01/16 12:54	1
Chlorobenzene	0.24	U	1.7	0.24	ug/Kg	☼	08/31/16 09:51	09/01/16 12:54	1
Chlorobromomethane	0.29	U	1.7	0.29	ug/Kg	☼	08/31/16 09:51	09/01/16 12:54	1

Client Sample ID: SB1-10-12

Date Collected: 08/30/16 11:45
Date Received: 08/30/16 18:35

Lab Sample ID: 460-119390-2

Matrix: Solid
Percent Solids: 77.5

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chlorodibromomethane	0.26	U	1.7	0.26	ug/Kg	☼	08/31/16 09:51	09/01/16 12:54	1
Chloroethane	0.60	U *	1.7	0.60	ug/Kg	☼	08/31/16 09:51	09/01/16 12:54	1
Chloroform	0.36	U	1.7	0.36	ug/Kg	☼	08/31/16 09:51	09/01/16 12:54	1
Chloromethane	0.65	U	1.7	0.65	ug/Kg	☼	08/31/16 09:51	09/01/16 12:54	1
cis-1,2-Dichloroethene	0.38	U	1.7	0.38	ug/Kg	☼	08/31/16 09:51	09/01/16 12:54	1
cis-1,3-Dichloropropene	0.26	U	1.7	0.26	ug/Kg	☼	08/31/16 09:51	09/01/16 12:54	1
Cyclohexane	0.79	U	1.7	0.79	ug/Kg	☼	08/31/16 09:51	09/01/16 12:54	1
Dichlorobromomethane	0.65	U	1.7	0.65	ug/Kg	☼	08/31/16 09:51	09/01/16 12:54	1
Dichlorodifluoromethane	0.55	U	1.7	0.55	ug/Kg	☼	08/31/16 09:51	09/01/16 12:54	1
Ethylbenzene	0.31	U	1.7	0.31	ug/Kg	☼	08/31/16 09:51	09/01/16 12:54	1
Ethylene Dibromide	0.21	U	1.7	0.21	ug/Kg	☼	08/31/16 09:51	09/01/16 12:54	1
Isopropylbenzene	0.29	U	1.7	0.29	ug/Kg	☼	08/31/16 09:51	09/01/16 12:54	1
Methyl acetate	1.5	U	8.6	1.5	ug/Kg	☼	08/31/16 09:51	09/01/16 12:54	1
Methyl tert-butyl ether	0.29	U	1.7	0.29	ug/Kg	☼	08/31/16 09:51	09/01/16 12:54	1
Methylcyclohexane	0.86	U	1.7	0.86	ug/Kg	☼	08/31/16 09:51	09/01/16 12:54	1
Methylene Chloride	0.55	U	1.7	0.55	ug/Kg	☼	08/31/16 09:51	09/01/16 12:54	1
Styrene	0.26	U	1.7	0.26	ug/Kg	☼	08/31/16 09:51	09/01/16 12:54	1
Tetrachloroethene	0.48	U	1.7	0.48	ug/Kg	☼	08/31/16 09:51	09/01/16 12:54	1
Toluene	**0.43**	**J**	1.7	0.33	ug/Kg	☼	08/31/16 09:51	09/01/16 12:54	1
trans-1,2-Dichloroethene	0.67	U	1.7	0.67	ug/Kg	☼	08/31/16 09:51	09/01/16 12:54	1
trans-1,3-Dichloropropene	0.17	U	1.7	0.17	ug/Kg	☼	08/31/16 09:51	09/01/16 12:54	1
Trichloroethene	0.45	U	1.7	0.45	ug/Kg	☼	08/31/16 09:51	09/01/16 12:54	1
Trichlorofluoromethane	0.59	U	1.7	0.59	ug/Kg	☼	08/31/16 09:51	09/01/16 12:54	1
Vinyl chloride	0.67	U	1.7	0.67	ug/Kg	☼	08/31/16 09:51	09/01/16 12:54	1
Xylenes, Total	**0.84**	**J**	3.4	0.19	ug/Kg	☼	08/31/16 09:51	09/01/16 12:54	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/Kg*	☼			*08/31/16 09:51*	*09/01/16 12:54*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*92*		*78 - 135*	*08/31/16 09:51*	*09/01/16 12:54*	*1*
4-Bromofluorobenzene	*104*		*67 - 126*	*08/31/16 09:51*	*09/01/16 12:54*	*1*
Dibromofluoromethane (Surr)	*110*		*61 - 149*	*08/31/16 09:51*	*09/01/16 12:54*	*1*
Toluene-d8 (Surr)	*94*		*73 - 121*	*08/31/16 09:51*	*09/01/16 12:54*	*1*

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	14	U	430	14	ug/Kg	☼	09/01/16 13:23	09/04/16 17:26	1
2-Chlorophenol	11	U	430	11	ug/Kg	☼	09/01/16 13:23	09/04/16 17:26	1
2-Methylphenol	19	U	430	19	ug/Kg	☼	09/01/16 13:23	09/04/16 17:26	1
4-Methylphenol	12	U	430	12	ug/Kg	☼	09/01/16 13:23	09/04/16 17:26	1
2-Nitrophenol	14	U	430	14	ug/Kg	☼	09/01/16 13:23	09/04/16 17:26	1
2,4-Dimethylphenol	94	U	430	94	ug/Kg	☼	09/01/16 13:23	09/04/16 17:26	1
2,4-Dichlorophenol	10	U	170	10	ug/Kg	☼	09/01/16 13:23	09/04/16 17:26	1
4-Chloro-3-methylphenol	18	U	430	18	ug/Kg	☼	09/01/16 13:23	09/04/16 17:26	1
2,4,6-Trichlorophenol	12	U	170	12	ug/Kg	☼	09/01/16 13:23	09/04/16 17:26	1
2,4,5-Trichlorophenol	42	U	430	42	ug/Kg	☼	09/01/16 13:23	09/04/16 17:26	1
2,4-Dinitrophenol	320	U	340	320	ug/Kg	☼	09/01/16 13:23	09/04/16 17:26	1
4-Nitrophenol	200	U	860	200	ug/Kg	☼	09/01/16 13:23	09/04/16 17:26	1
4,6-Dinitro-2-methylphenol	110	U	340	110	ug/Kg	☼	09/01/16 13:23	09/04/16 17:26	1

Client Sample ID: SB1-10-12

Date Collected: 08/30/16 11:45
Date Received: 08/30/16 18:35

Lab Sample ID: 460-119390-2

Matrix: Solid
Percent Solids: 77.5

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Pentachlorophenol	52	U	340	52	ug/Kg	☼	09/01/16 13:23	09/04/16 17:26	1
Bis(2-chloroethyl)ether	10	U	43	10	ug/Kg	☼	09/01/16 13:23	09/04/16 17:26	1
N-Nitrosodi-n-propylamine	14	U	43	14	ug/Kg	☼	09/01/16 13:23	09/04/16 17:26	1
Hexachloroethane	16	U	43	16	ug/Kg	☼	09/01/16 13:23	09/04/16 17:26	1
Nitrobenzene	13	U	43	13	ug/Kg	☼	09/01/16 13:23	09/04/16 17:26	1
Isophorone	9.2	U	170	9.2	ug/Kg	☼	09/01/16 13:23	09/04/16 17:26	1
Bis(2-chloroethoxy)methane	13	U	430	13	ug/Kg	☼	09/01/16 13:23	09/04/16 17:26	1
Naphthalene	11	U	430	11	ug/Kg	☼	09/01/16 13:23	09/04/16 17:26	1
4-Chloroaniline	11	U	430	11	ug/Kg	☼	09/01/16 13:23	09/04/16 17:26	1
Hexachlorobutadiene	12	U *	86	12	ug/Kg	☼	09/01/16 13:23	09/04/16 17:26	1
2-Methylnaphthalene	9.4	U	430	9.4	ug/Kg	☼	09/01/16 13:23	09/04/16 17:26	1
Hexachlorocyclopentadiene	27	U	430	27	ug/Kg	☼	09/01/16 13:23	09/04/16 17:26	1
2-Chloronaphthalene	9.7	U	430	9.7	ug/Kg	☼	09/01/16 13:23	09/04/16 17:26	1
2-Nitroaniline	14	U	430	14	ug/Kg	☼	09/01/16 13:23	09/04/16 17:26	1
Dimethyl phthalate	12	U	430	12	ug/Kg	☼	09/01/16 13:23	09/04/16 17:26	1
Acenaphthylene	11	U	430	11	ug/Kg	☼	09/01/16 13:23	09/04/16 17:26	1
2,6-Dinitrotoluene	23	U	86	23	ug/Kg	☼	09/01/16 13:23	09/04/16 17:26	1
3-Nitroaniline	13	U	430	13	ug/Kg	☼	09/01/16 13:23	09/04/16 17:26	1
Acenaphthene	10	U	430	10	ug/Kg	☼	09/01/16 13:23	09/04/16 17:26	1
Dibenzofuran	13	U	430	13	ug/Kg	☼	09/01/16 13:23	09/04/16 17:26	1
2,4-Dinitrotoluene	17	U	86	17	ug/Kg	☼	09/01/16 13:23	09/04/16 17:26	1
Diethyl phthalate	12	U	430	12	ug/Kg	☼	09/01/16 13:23	09/04/16 17:26	1
4-Chlorophenyl phenyl ether	13	U	430	13	ug/Kg	☼	09/01/16 13:23	09/04/16 17:26	1
Fluorene	9.3	U	430	9.3	ug/Kg	☼	09/01/16 13:23	09/04/16 17:26	1
4-Nitroaniline	16	U	430	16	ug/Kg	☼	09/01/16 13:23	09/04/16 17:26	1
N-Nitrosodiphenylamine	39	U	430	39	ug/Kg	☼	09/01/16 13:23	09/04/16 17:26	1
4-Bromophenyl phenyl ether	13	U	430	13	ug/Kg	☼	09/01/16 13:23	09/04/16 17:26	1
Hexachlorobenzene	17	U	43	17	ug/Kg	☼	09/01/16 13:23	09/04/16 17:26	1
Phenanthrene	11	U	430	11	ug/Kg	☼	09/01/16 13:23	09/04/16 17:26	1
Anthracene	40	U	430	40	ug/Kg	☼	09/01/16 13:23	09/04/16 17:26	1
Carbazole	11	U	430	11	ug/Kg	☼	09/01/16 13:23	09/04/16 17:26	1
Di-n-butyl phthalate	13	U	430	13	ug/Kg	☼	09/01/16 13:23	09/04/16 17:26	1
Fluoranthene	13	U	430	13	ug/Kg	☼	09/01/16 13:23	09/04/16 17:26	1
Pyrene	19	U	430	19	ug/Kg	☼	09/01/16 13:23	09/04/16 17:26	1
Butyl benzyl phthalate	13	U	430	13	ug/Kg	☼	09/01/16 13:23	09/04/16 17:26	1
3,3'-Dichlorobenzidine	48	U	170	48	ug/Kg	☼	09/01/16 13:23	09/04/16 17:26	1
Benzo[a]anthracene	36	U	43	36	ug/Kg	☼	09/01/16 13:23	09/04/16 17:26	1
Chrysene	12	U	430	12	ug/Kg	☼	09/01/16 13:23	09/04/16 17:26	1
Bis(2-ethylhexyl) phthalate	**61**	**J**	430	17	ug/Kg	☼	09/01/16 13:23	09/04/16 17:26	1
Di-n-octyl phthalate	22	U	430	22	ug/Kg	☼	09/01/16 13:23	09/04/16 17:26	1
Benzo[b]fluoranthene	17	U	43	17	ug/Kg	☼	09/01/16 13:23	09/04/16 17:26	1
Benzo[k]fluoranthene	19	U	43	19	ug/Kg	☼	09/01/16 13:23	09/04/16 17:26	1
Benzo[a]pyrene	13	U	43	13	ug/Kg	☼	09/01/16 13:23	09/04/16 17:26	1
Indeno[1,2,3-cd]pyrene	28	U	43	28	ug/Kg	☼	09/01/16 13:23	09/04/16 17:26	1
Dibenz(a,h)anthracene	22	U	43	22	ug/Kg	☼	09/01/16 13:23	09/04/16 17:26	1
Benzo[g,h,i]perylene	24	U	430	24	ug/Kg	☼	09/01/16 13:23	09/04/16 17:26	1
Diphenyl	36	U	430	36	ug/Kg	☼	09/01/16 13:23	09/04/16 17:26	1
Acetophenone	9.3	U	430	9.3	ug/Kg	☼	09/01/16 13:23	09/04/16 17:26	1
Benzaldehyde	32	U	430	32	ug/Kg	☼	09/01/16 13:23	09/04/16 17:26	1

Client Sample ID: SB1-10-12

Date Collected: 08/30/16 11:45
Date Received: 08/30/16 18:35

Lab Sample ID: 460-119390-2

Matrix: Solid
Percent Solids: 77.5

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Caprolactam	31	U	430	31	ug/Kg	☼	09/01/16 13:23	09/04/16 17:26	1
Atrazine	19	U	170	19	ug/Kg	☼	09/01/16 13:23	09/04/16 17:26	1
2,2'-oxybis[1-chloropropane]	18	U	430	18	ug/Kg	☼	09/01/16 13:23	09/04/16 17:26	1
1,2,4,5-Tetrachlorobenzene	32	U	430	32	ug/Kg	☼	09/01/16 13:23	09/04/16 17:26	1
2,3,4,6-Tetrachlorophenol	40	U	430	40	ug/Kg	☼	09/01/16 13:23	09/04/16 17:26	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/Kg*	☼			*09/01/16 13:23*	*09/04/16 17:26*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*55*		*37 - 94*	*09/01/16 13:23*	*09/04/16 17:26*	*1*
Phenol-d5	*56*		*32 - 91*	*09/01/16 13:23*	*09/04/16 17:26*	*1*
Terphenyl-d14	*60*		*24 - 109*	*09/01/16 13:23*	*09/04/16 17:26*	*1*
2,4,6-Tribromophenol	*56*		*10 - 103*	*09/01/16 13:23*	*09/04/16 17:26*	*1*
2-Fluorophenol	*56*		*25 - 92*	*09/01/16 13:23*	*09/04/16 17:26*	*1*
2-Fluorobiphenyl	*56*		*38 - 95*	*09/01/16 13:23*	*09/04/16 17:26*	*1*

Method: 8081B - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	1.1	U	8.6	1.1	ug/Kg	☼	09/01/16 02:48	09/01/16 16:54	1
4,4'-DDE	1.3	U	8.6	1.3	ug/Kg	☼	09/01/16 02:48	09/01/16 16:54	1
4,4'-DDT	0.89	U	8.6	0.89	ug/Kg	☼	09/01/16 02:48	09/01/16 16:54	1
Aldrin	1.0	U	8.6	1.0	ug/Kg	☼	09/01/16 02:48	09/01/16 16:54	1
alpha-BHC	0.79	U	2.6	0.79	ug/Kg	☼	09/01/16 02:48	09/01/16 16:54	1
beta-BHC	0.84	U	2.6	0.84	ug/Kg	☼	09/01/16 02:48	09/01/16 16:54	1
Chlordane (technical)	38	U	86	38	ug/Kg	☼	09/01/16 02:48	09/01/16 16:54	1
delta-BHC	0.94	U	2.6	0.94	ug/Kg	☼	09/01/16 02:48	09/01/16 16:54	1
Dieldrin	1.1	U	2.6	1.1	ug/Kg	☼	09/01/16 02:48	09/01/16 16:54	1
Endosulfan I	1.2	U	8.6	1.2	ug/Kg	☼	09/01/16 02:48	09/01/16 16:54	1
Endosulfan II	1.4	U	8.6	1.4	ug/Kg	☼	09/01/16 02:48	09/01/16 16:54	1
Endosulfan sulfate	1.0	U	8.6	1.0	ug/Kg	☼	09/01/16 02:48	09/01/16 16:54	1
Endrin	1.1	U	8.6	1.1	ug/Kg	☼	09/01/16 02:48	09/01/16 16:54	1
Endrin aldehyde	1.1	U	8.6	1.1	ug/Kg	☼	09/01/16 02:48	09/01/16 16:54	1
Endrin ketone	1.2	U	8.6	1.2	ug/Kg	☼	09/01/16 02:48	09/01/16 16:54	1
gamma-BHC (Lindane)	0.77	U	2.6	0.77	ug/Kg	☼	09/01/16 02:48	09/01/16 16:54	1
Heptachlor	1.1	U	8.6	1.1	ug/Kg	☼	09/01/16 02:48	09/01/16 16:54	1
Heptachlor epoxide	1.7	U	8.6	1.7	ug/Kg	☼	09/01/16 02:48	09/01/16 16:54	1
Methoxychlor	1.8	U	8.6	1.8	ug/Kg	☼	09/01/16 02:48	09/01/16 16:54	1
Toxaphene	25	U	86	25	ug/Kg	☼	09/01/16 02:48	09/01/16 16:54	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*97*		*50 - 150*	*09/01/16 02:48*	*09/01/16 16:54*	*1*
DCB Decachlorobiphenyl	*96*		*50 - 150*	*09/01/16 02:48*	*09/01/16 16:54*	*1*
Tetrachloro-m-xylene	*95*		*47 - 150*	*09/01/16 02:48*	*09/01/16 16:54*	*1*
Tetrachloro-m-xylene	*94*		*47 - 150*	*09/01/16 02:48*	*09/01/16 16:54*	*1*

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor 1016	11	U	86	11	ug/Kg	☼	09/01/16 03:13	09/02/16 03:06	1
Aroclor 1221	11	U	86	11	ug/Kg	☼	09/01/16 03:13	09/02/16 03:06	1
Aroclor 1232	11	U	86	11	ug/Kg	☼	09/01/16 03:13	09/02/16 03:06	1

Client Sample ID: SB1-10-12

Date Collected: 08/30/16 11:45
Date Received: 08/30/16 18:35

Lab Sample ID: 460-119390-2

Matrix: Solid
Percent Solids: 77.5

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor 1242	11	U	86	11	ug/Kg	☼	09/01/16 03:13	09/02/16 03:06	1
Aroclor 1248	11	U	86	11	ug/Kg	☼	09/01/16 03:13	09/02/16 03:06	1
Aroclor 1254	12	U	86	12	ug/Kg	☼	09/01/16 03:13	09/02/16 03:06	1
Aroclor 1260	12	U	86	12	ug/Kg	☼	09/01/16 03:13	09/02/16 03:06	1
Aroclor-1262	12	U	86	12	ug/Kg	☼	09/01/16 03:13	09/02/16 03:06	1
Aroclor 1268	12	U	86	12	ug/Kg	☼	09/01/16 03:13	09/02/16 03:06	1
Polychlorinated biphenyls, Total	12	U	86	12	ug/Kg	☼	09/01/16 03:13	09/02/16 03:06	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*96*		*35 - 150*	*09/01/16 03:13*	*09/02/16 03:06*	*1*
DCB Decachlorobiphenyl	*101*		*35 - 150*	*09/01/16 03:13*	*09/02/16 03:06*	*1*

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**16900**		42.0	21.6	mg/Kg	☼	09/01/16 18:15	09/02/16 15:08	4
Antimony	1.7	U	4.2	1.7	mg/Kg	☼	09/01/16 18:15	09/02/16 15:08	4
Arsenic	**2.2**	**J**	3.1	1.0	mg/Kg	☼	09/01/16 18:15	09/02/16 15:08	4
Barium	**119**		42.0	1.5	mg/Kg	☼	09/01/16 18:15	09/02/16 15:08	4
Beryllium	**0.66**		0.42	0.36	mg/Kg	☼	09/01/16 18:15	09/06/16 17:20	4
Cadmium	0.44	U	0.84	0.44	mg/Kg	☼	09/01/16 18:15	09/02/16 15:08	4
Calcium	**1720**		1050	62.1	mg/Kg	☼	09/01/16 18:15	09/02/16 15:08	4
Chromium	**40.4**		2.1	1.0	mg/Kg	☼	09/01/16 18:15	09/02/16 15:08	4
Cobalt	**10.6**		10.5	1.2	mg/Kg	☼	09/01/16 18:15	09/02/16 15:08	4
Copper	**28.5**		5.2	1.4	mg/Kg	☼	09/01/16 18:15	09/02/16 15:08	4
Iron	**29400**		31.5	23.7	mg/Kg	☼	09/01/16 18:15	09/02/16 15:08	4
Lead	**12.8**		2.1	0.82	mg/Kg	☼	09/01/16 18:15	09/02/16 15:08	4
Magnesium	**7510**		1050	52.4	mg/Kg	☼	09/01/16 18:15	09/02/16 15:08	4
Manganese	**453**		3.1	1.1	mg/Kg	☼	09/01/16 18:15	09/02/16 15:08	4
Nickel	**25.9**		8.4	1.5	mg/Kg	☼	09/01/16 18:15	09/02/16 15:08	4
Potassium	**4320**		1050	31.8	mg/Kg	☼	09/01/16 18:15	09/02/16 15:08	4
Selenium	1.4	U	4.2	1.4	mg/Kg	☼	09/01/16 18:15	09/02/16 15:08	4
Silver	0.37	U	2.1	0.37	mg/Kg	☼	09/01/16 18:15	09/02/16 15:08	4
Sodium	**625**	**J**	1050	71.0	mg/Kg	☼	09/01/16 18:15	09/02/16 15:08	4
Thallium	1.9	U	4.2	1.9	mg/Kg	☼	09/01/16 18:15	09/02/16 15:08	4
Vanadium	**49.8**		10.5	1.0	mg/Kg	☼	09/01/16 18:15	09/02/16 15:08	4
Zinc	**76.5**		6.3	1.5	mg/Kg	☼	09/01/16 18:15	09/02/16 15:08	4

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.013	U	0.020	0.013	mg/Kg	☼	09/02/16 04:21	09/02/16 08:49	1

Client Sample ID: SB2-5-5.5

Date Collected: 08/30/16 13:50
Date Received: 08/30/16 18:35

Lab Sample ID: 460-119390-3

Matrix: Solid
Percent Solids: 85.8

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	0.51	U	1.4	0.51	ug/Kg	☼	08/31/16 09:52	09/01/16 13:20	1
1,1,2,2-Tetrachloroethane	0.23	U	1.4	0.23	ug/Kg	☼	08/31/16 09:52	09/01/16 13:20	1
1,1,2-Trichloro-1,2,2-trifluoroethane	0.59	U	1.4	0.59	ug/Kg	☼	08/31/16 09:52	09/01/16 13:20	1

Client Sample ID: SB2-5-5.5

Date Collected: 08/30/16 13:50
Date Received: 08/30/16 18:35

Lab Sample ID: 460-119390-3

Matrix: Solid
Percent Solids: 85.8

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2-Trichloroethane	0.38	U	1.4	0.38	ug/Kg	☼	08/31/16 09:52	09/01/16 13:20	1
1,1-Dichloroethane	0.46	U	1.4	0.46	ug/Kg	☼	08/31/16 09:52	09/01/16 13:20	1
1,1-Dichloroethene	0.55	U	1.4	0.55	ug/Kg	☼	08/31/16 09:52	09/01/16 13:20	1
1,2,3-Trichlorobenzene	0.15	U	1.4	0.15	ug/Kg	☼	08/31/16 09:52	09/01/16 13:20	1
1,2,4-Trichlorobenzene	0.43	U	1.4	0.43	ug/Kg	☼	08/31/16 09:52	09/01/16 13:20	1
1,2-Dibromo-3-Chloropropane	0.64	U	1.4	0.64	ug/Kg	☼	08/31/16 09:52	09/01/16 13:20	1
1,2-Dichlorobenzene	0.19	U	1.4	0.19	ug/Kg	☼	08/31/16 09:52	09/01/16 13:20	1
1,2-Dichloroethane	0.15	U	1.4	0.15	ug/Kg	☼	08/31/16 09:52	09/01/16 13:20	1
1,2-Dichloropropane	0.23	U	1.4	0.23	ug/Kg	☼	08/31/16 09:52	09/01/16 13:20	1
1,3-Dichlorobenzene	0.16	U	1.4	0.16	ug/Kg	☼	08/31/16 09:52	09/01/16 13:20	1
1,4-Dichlorobenzene	0.18	U	1.4	0.18	ug/Kg	☼	08/31/16 09:52	09/01/16 13:20	1
1,4-Dioxane	8.6	U	27	8.6	ug/Kg	☼	08/31/16 09:52	09/01/16 13:20	1
2-Butanone (MEK)	1.0	U	6.8	1.0	ug/Kg	☼	08/31/16 09:52	09/01/16 13:20	1
2-Hexanone	1.3	U	6.8	1.3	ug/Kg	☼	08/31/16 09:52	09/01/16 13:20	1
4-Methyl-2-pentanone (MIBK)	3.0	U	6.8	3.0	ug/Kg	☼	08/31/16 09:52	09/01/16 13:20	1
Acetone	**14**		6.8	1.4	ug/Kg	☼	08/31/16 09:52	09/01/16 13:20	1
Benzene	0.27	U	1.4	0.27	ug/Kg	☼	08/31/16 09:52	09/01/16 13:20	1
Bromoform	0.18	U *	1.4	0.18	ug/Kg	☼	08/31/16 09:52	09/01/16 13:20	1
Bromomethane	0.43	U *	1.4	0.43	ug/Kg	☼	08/31/16 09:52	09/01/16 13:20	1
Carbon disulfide	0.58	U	1.4	0.58	ug/Kg	☼	08/31/16 09:52	09/01/16 13:20	1
Carbon tetrachloride	0.58	U	1.4	0.58	ug/Kg	☼	08/31/16 09:52	09/01/16 13:20	1
Chlorobenzene	0.19	U	1.4	0.19	ug/Kg	☼	08/31/16 09:52	09/01/16 13:20	1
Chlorobromomethane	0.23	U	1.4	0.23	ug/Kg	☼	08/31/16 09:52	09/01/16 13:20	1
Chlorodibromomethane	0.20	U	1.4	0.20	ug/Kg	☼	08/31/16 09:52	09/01/16 13:20	1
Chloroethane	0.47	U *	1.4	0.47	ug/Kg	☼	08/31/16 09:52	09/01/16 13:20	1
Chloroform	0.28	U	1.4	0.28	ug/Kg	☼	08/31/16 09:52	09/01/16 13:20	1
Chloromethane	0.51	U	1.4	0.51	ug/Kg	☼	08/31/16 09:52	09/01/16 13:20	1
cis-1,2-Dichloroethene	0.30	U	1.4	0.30	ug/Kg	☼	08/31/16 09:52	09/01/16 13:20	1
cis-1,3-Dichloropropene	0.20	U	1.4	0.20	ug/Kg	☼	08/31/16 09:52	09/01/16 13:20	1
Cyclohexane	0.62	U	1.4	0.62	ug/Kg	☼	08/31/16 09:52	09/01/16 13:20	1
Dichlorobromomethane	0.51	U	1.4	0.51	ug/Kg	☼	08/31/16 09:52	09/01/16 13:20	1
Dichlorodifluoromethane	0.43	U	1.4	0.43	ug/Kg	☼	08/31/16 09:52	09/01/16 13:20	1
Ethylbenzene	0.24	U	1.4	0.24	ug/Kg	☼	08/31/16 09:52	09/01/16 13:20	1
Ethylene Dibromide	0.16	U	1.4	0.16	ug/Kg	☼	08/31/16 09:52	09/01/16 13:20	1
Isopropylbenzene	0.23	U	1.4	0.23	ug/Kg	☼	08/31/16 09:52	09/01/16 13:20	1
Methyl acetate	1.2	U	6.8	1.2	ug/Kg	☼	08/31/16 09:52	09/01/16 13:20	1
Methyl tert-butyl ether	0.23	U	1.4	0.23	ug/Kg	☼	08/31/16 09:52	09/01/16 13:20	1
Methylcyclohexane	0.68	U	1.4	0.68	ug/Kg	☼	08/31/16 09:52	09/01/16 13:20	1
Methylene Chloride	**1.4**		1.4	0.43	ug/Kg	☼	08/31/16 09:52	09/01/16 13:20	1
Styrene	0.20	U	1.4	0.20	ug/Kg	☼	08/31/16 09:52	09/01/16 13:20	1
Tetrachloroethene	0.38	U	1.4	0.38	ug/Kg	☼	08/31/16 09:52	09/01/16 13:20	1
Toluene	0.26	U	1.4	0.26	ug/Kg	☼	08/31/16 09:52	09/01/16 13:20	1
trans-1,2-Dichloroethene	0.53	U	1.4	0.53	ug/Kg	☼	08/31/16 09:52	09/01/16 13:20	1
trans-1,3-Dichloropropene	0.14	U	1.4	0.14	ug/Kg	☼	08/31/16 09:52	09/01/16 13:20	1
Trichloroethene	0.35	U	1.4	0.35	ug/Kg	☼	08/31/16 09:52	09/01/16 13:20	1
Trichlorofluoromethane	0.46	U	1.4	0.46	ug/Kg	☼	08/31/16 09:52	09/01/16 13:20	1
Vinyl chloride	0.53	U	1.4	0.53	ug/Kg	☼	08/31/16 09:52	09/01/16 13:20	1
Xylenes, Total	0.15	U	2.7	0.15	ug/Kg	☼	08/31/16 09:52	09/01/16 13:20	1

Client Sample ID: SB2-5-5.5

Date Collected: 08/30/16 13:50
Date Received: 08/30/16 18:35

Lab Sample ID: 460-119390-3

Matrix: Solid
Percent Solids: 85.8

Tentatively Identified Compound	Est. Result	Qualifier	Unit	D	RT	CAS No.	Prepared	Analyzed	Dil Fac
Benzene, 1,2,3,4-tetramethyl-	230	J N	ug/Kg	☼	12.55	488-23-3	08/31/16 09:52	09/01/16 13:20	1
Unknown	320	J	ug/Kg	☼	12.77		08/31/16 09:52	09/01/16 13:20	1
Benzene, 1,2,4,5-tetramethyl-	410	J N	ug/Kg	☼	12.88	95-93-2	08/31/16 09:52	09/01/16 13:20	1
Benzene, pentamethyl-	390	J N	ug/Kg	☼	13.17	700-12-9	08/31/16 09:52	09/01/16 13:20	1
Unknown	320	J	ug/Kg	☼	13.25		08/31/16 09:52	09/01/16 13:20	1
Unknown	180	J	ug/Kg	☼	13.32		08/31/16 09:52	09/01/16 13:20	1
Naphthalene	280	J N	ug/Kg	☼	13.42	91-20-3	08/31/16 09:52	09/01/16 13:20	1
Tridecane	640	J N	ug/Kg	☼	13.52	629-50-5	08/31/16 09:52	09/01/16 13:20	1
1H-Indene, 2,3-dihydro-4,7-dimethyl-	150	J N	ug/Kg	☼	13.67	6682-71-9	08/31/16 09:52	09/01/16 13:20	1
Benzene, 1,3-dimethyl-5-(1-methylethyl)-	210	J N	ug/Kg	☼	13.93	4706-90-5	08/31/16 09:52	09/01/16 13:20	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	100		78 - 135	08/31/16 09:52	09/01/16 13:20	1
4-Bromofluorobenzene	113		67 - 126	08/31/16 09:52	09/01/16 13:20	1
Dibromofluoromethane (Surr)	118		61 - 149	08/31/16 09:52	09/01/16 13:20	1
Toluene-d8 (Surr)	102		73 - 121	08/31/16 09:52	09/01/16 13:20	1

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	13	U	380	13	ug/Kg	☼	09/01/16 13:23	09/04/16 17:49	1
2-Chlorophenol	9.8	U	380	9.8	ug/Kg	☼	09/01/16 13:23	09/04/16 17:49	1
2-Methylphenol	17	U	380	17	ug/Kg	☼	09/01/16 13:23	09/04/16 17:49	1
4-Methylphenol	10	U	380	10	ug/Kg	☼	09/01/16 13:23	09/04/16 17:49	1
2-Nitrophenol	13	U	380	13	ug/Kg	☼	09/01/16 13:23	09/04/16 17:49	1
2,4-Dimethylphenol	85	U	380	85	ug/Kg	☼	09/01/16 13:23	09/04/16 17:49	1
2,4-Dichlorophenol	9.1	U	150	9.1	ug/Kg	☼	09/01/16 13:23	09/04/16 17:49	1
4-Chloro-3-methylphenol	17	U	380	17	ug/Kg	☼	09/01/16 13:23	09/04/16 17:49	1
2,4,6-Trichlorophenol	11	U	150	11	ug/Kg	☼	09/01/16 13:23	09/04/16 17:49	1
2,4,5-Trichlorophenol	38	U	380	38	ug/Kg	☼	09/01/16 13:23	09/04/16 17:49	1
2,4-Dinitrophenol	290	U	310	290	ug/Kg	☼	09/01/16 13:23	09/04/16 17:49	1
4-Nitrophenol	190	U	780	190	ug/Kg	☼	09/01/16 13:23	09/04/16 17:49	1
4,6-Dinitro-2-methylphenol	100	U	310	100	ug/Kg	☼	09/01/16 13:23	09/04/16 17:49	1
Pentachlorophenol	47	U	310	47	ug/Kg	☼	09/01/16 13:23	09/04/16 17:49	1
Bis(2-chloroethyl)ether	9.1	U	38	9.1	ug/Kg	☼	09/01/16 13:23	09/04/16 17:49	1
N-Nitrosodi-n-propylamine	13	U	38	13	ug/Kg	☼	09/01/16 13:23	09/04/16 17:49	1
Hexachloroethane	14	U	38	14	ug/Kg	☼	09/01/16 13:23	09/04/16 17:49	1
Nitrobenzene	12	U	38	12	ug/Kg	☼	09/01/16 13:23	09/04/16 17:49	1
Isophorone	8.3	U	150	8.3	ug/Kg	☼	09/01/16 13:23	09/04/16 17:49	1
Bis(2-chloroethoxy)methane	12	U	380	12	ug/Kg	☼	09/01/16 13:23	09/04/16 17:49	1
Naphthalene	**13**	**J**	380	9.8	ug/Kg	☼	09/01/16 13:23	09/04/16 17:49	1
4-Chloroaniline	9.9	U	380	9.9	ug/Kg	☼	09/01/16 13:23	09/04/16 17:49	1
Hexachlorobutadiene	11	U *	78	11	ug/Kg	☼	09/01/16 13:23	09/04/16 17:49	1
2-Methylnaphthalene	**21**	**J**	380	8.5	ug/Kg	☼	09/01/16 13:23	09/04/16 17:49	1
Hexachlorocyclopentadiene	24	U	380	24	ug/Kg	☼	09/01/16 13:23	09/04/16 17:49	1
2-Chloronaphthalene	8.7	U	380	8.7	ug/Kg	☼	09/01/16 13:23	09/04/16 17:49	1
2-Nitroaniline	13	U	380	13	ug/Kg	☼	09/01/16 13:23	09/04/16 17:49	1
Dimethyl phthalate	11	U	380	11	ug/Kg	☼	09/01/16 13:23	09/04/16 17:49	1
Acenaphthylene	9.9	U	380	9.9	ug/Kg	☼	09/01/16 13:23	09/04/16 17:49	1
2,6-Dinitrotoluene	20	U	78	20	ug/Kg	☼	09/01/16 13:23	09/04/16 17:49	1
3-Nitroaniline	11	U	380	11	ug/Kg	☼	09/01/16 13:23	09/04/16 17:49	1

Client Sample ID: SB2-5-5.5

Date Collected: 08/30/16 13:50
Date Received: 08/30/16 18:35

Lab Sample ID: 460-119390-3

Matrix: Solid
Percent Solids: 85.8

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	9.3	U	380	9.3	ug/Kg	☼	09/01/16 13:23	09/04/16 17:49	1
Dibenzofuran	12	U	380	12	ug/Kg	☼	09/01/16 13:23	09/04/16 17:49	1
2,4-Dinitrotoluene	15	U	78	15	ug/Kg	☼	09/01/16 13:23	09/04/16 17:49	1
Diethyl phthalate	11	U	380	11	ug/Kg	☼	09/01/16 13:23	09/04/16 17:49	1
4-Chlorophenyl phenyl ether	12	U	380	12	ug/Kg	☼	09/01/16 13:23	09/04/16 17:49	1
Fluorene	8.4	U	380	8.4	ug/Kg	☼	09/01/16 13:23	09/04/16 17:49	1
4-Nitroaniline	15	U	380	15	ug/Kg	☼	09/01/16 13:23	09/04/16 17:49	1
N-Nitrosodiphenylamine	35	U	380	35	ug/Kg	☼	09/01/16 13:23	09/04/16 17:49	1
4-Bromophenyl phenyl ether	12	U	380	12	ug/Kg	☼	09/01/16 13:23	09/04/16 17:49	1
Hexachlorobenzene	16	U	38	16	ug/Kg	☼	09/01/16 13:23	09/04/16 17:49	1
Phenanthrene	10	U	380	10	ug/Kg	☼	09/01/16 13:23	09/04/16 17:49	1
Anthracene	37	U	380	37	ug/Kg	☼	09/01/16 13:23	09/04/16 17:49	1
Carbazole	9.5	U	380	9.5	ug/Kg	☼	09/01/16 13:23	09/04/16 17:49	1
Di-n-butyl phthalate	12	U	380	12	ug/Kg	☼	09/01/16 13:23	09/04/16 17:49	1
Fluoranthene	11	U	380	11	ug/Kg	☼	09/01/16 13:23	09/04/16 17:49	1
Pyrene	17	U	380	17	ug/Kg	☼	09/01/16 13:23	09/04/16 17:49	1
Butyl benzyl phthalate	12	U	380	12	ug/Kg	☼	09/01/16 13:23	09/04/16 17:49	1
3,3'-Dichlorobenzidine	43	U	150	43	ug/Kg	☼	09/01/16 13:23	09/04/16 17:49	1
Benzo[a]anthracene	32	U	38	32	ug/Kg	☼	09/01/16 13:23	09/04/16 17:49	1
Chrysene	10	U	380	10	ug/Kg	☼	09/01/16 13:23	09/04/16 17:49	1
Bis(2-ethylhexyl) phthalate	**270**	**J**	380	15	ug/Kg	☼	09/01/16 13:23	09/04/16 17:49	1
Di-n-octyl phthalate	20	U	380	20	ug/Kg	☼	09/01/16 13:23	09/04/16 17:49	1
Benzo[b]fluoranthene	15	U	38	15	ug/Kg	☼	09/01/16 13:23	09/04/16 17:49	1
Benzo[k]fluoranthene	17	U	38	17	ug/Kg	☼	09/01/16 13:23	09/04/16 17:49	1
Benzo[a]pyrene	12	U	38	12	ug/Kg	☼	09/01/16 13:23	09/04/16 17:49	1
Indeno[1,2,3-cd]pyrene	26	U	38	26	ug/Kg	☼	09/01/16 13:23	09/04/16 17:49	1
Dibenz(a,h)anthracene	20	U	38	20	ug/Kg	☼	09/01/16 13:23	09/04/16 17:49	1
Benzo[g,h,i]perylene	22	U	380	22	ug/Kg	☼	09/01/16 13:23	09/04/16 17:49	1
Diphenyl	33	U	380	33	ug/Kg	☼	09/01/16 13:23	09/04/16 17:49	1
Acetophenone	8.4	U	380	8.4	ug/Kg	☼	09/01/16 13:23	09/04/16 17:49	1
Benzaldehyde	29	U	380	29	ug/Kg	☼	09/01/16 13:23	09/04/16 17:49	1
Caprolactam	28	U	380	28	ug/Kg	☼	09/01/16 13:23	09/04/16 17:49	1
Atrazine	17	U	150	17	ug/Kg	☼	09/01/16 13:23	09/04/16 17:49	1
2,2'-oxybis[1-chloropropane]	16	U	380	16	ug/Kg	☼	09/01/16 13:23	09/04/16 17:49	1
1,2,4,5-Tetrachlorobenzene	29	U	380	29	ug/Kg	☼	09/01/16 13:23	09/04/16 17:49	1
2,3,4,6-Tetrachlorophenol	36	U	380	36	ug/Kg	☼	09/01/16 13:23	09/04/16 17:49	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/Kg*	☼			*09/01/16 13:23*	*09/04/16 17:49*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*65*		*37 - 94*	*09/01/16 13:23*	*09/04/16 17:49*	*1*
Phenol-d5	*64*		*32 - 91*	*09/01/16 13:23*	*09/04/16 17:49*	*1*
Terphenyl-d14	*71*		*24 - 109*	*09/01/16 13:23*	*09/04/16 17:49*	*1*
2,4,6-Tribromophenol	*63*		*10 - 103*	*09/01/16 13:23*	*09/04/16 17:49*	*1*
2-Fluorophenol	*65*		*25 - 92*	*09/01/16 13:23*	*09/04/16 17:49*	*1*
2-Fluorobiphenyl	*67*		*38 - 95*	*09/01/16 13:23*	*09/04/16 17:49*	*1*

Client Sample ID: SB2-5-5.5
Date Collected: 08/30/16 13:50
Date Received: 08/30/16 18:35

Lab Sample ID: 460-119390-3
Matrix: Solid
Percent Solids: 85.8

Method: 8081B - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	1.0	U	7.8	1.0	ug/Kg	☼	09/01/16 02:48	09/01/16 17:07	1
4,4'-DDE	1.1	U	7.8	1.1	ug/Kg	☼	09/01/16 02:48	09/01/16 17:07	1
4,4'-DDT	0.80	U	7.8	0.80	ug/Kg	☼	09/01/16 02:48	09/01/16 17:07	1
Aldrin	0.94	U	7.8	0.94	ug/Kg	☼	09/01/16 02:48	09/01/16 17:07	1
alpha-BHC	0.71	U	2.3	0.71	ug/Kg	☼	09/01/16 02:48	09/01/16 17:07	1
beta-BHC	0.76	U	2.3	0.76	ug/Kg	☼	09/01/16 02:48	09/01/16 17:07	1
Chlordane (technical)	34	U	78	34	ug/Kg	☼	09/01/16 02:48	09/01/16 17:07	1
delta-BHC	0.85	U	2.3	0.85	ug/Kg	☼	09/01/16 02:48	09/01/16 17:07	1
Dieldrin	1.0	U	2.3	1.0	ug/Kg	☼	09/01/16 02:48	09/01/16 17:07	1
Endosulfan I	1.1	U	7.8	1.1	ug/Kg	☼	09/01/16 02:48	09/01/16 17:07	1
Endosulfan II	1.2	U	7.8	1.2	ug/Kg	☼	09/01/16 02:48	09/01/16 17:07	1
Endosulfan sulfate	0.91	U	7.8	0.91	ug/Kg	☼	09/01/16 02:48	09/01/16 17:07	1
Endrin	0.99	U	7.8	0.99	ug/Kg	☼	09/01/16 02:48	09/01/16 17:07	1
Endrin aldehyde	0.97	U	7.8	0.97	ug/Kg	☼	09/01/16 02:48	09/01/16 17:07	1
Endrin ketone	1.1	U	7.8	1.1	ug/Kg	☼	09/01/16 02:48	09/01/16 17:07	1
gamma-BHC (Lindane)	0.70	U	2.3	0.70	ug/Kg	☼	09/01/16 02:48	09/01/16 17:07	1
Heptachlor	1.0	U	7.8	1.0	ug/Kg	☼	09/01/16 02:48	09/01/16 17:07	1
Heptachlor epoxide	1.5	U	7.8	1.5	ug/Kg	☼	09/01/16 02:48	09/01/16 17:07	1
Methoxychlor	1.7	U	7.8	1.7	ug/Kg	☼	09/01/16 02:48	09/01/16 17:07	1
Toxaphene	23	U	78	23	ug/Kg	☼	09/01/16 02:48	09/01/16 17:07	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*107*		*50 - 150*	*09/01/16 02:48*	*09/01/16 17:07*	*1*
DCB Decachlorobiphenyl	*103*		*50 - 150*	*09/01/16 02:48*	*09/01/16 17:07*	*1*
Tetrachloro-m-xylene	*105*		*47 - 150*	*09/01/16 02:48*	*09/01/16 17:07*	*1*
Tetrachloro-m-xylene	*101*		*47 - 150*	*09/01/16 02:48*	*09/01/16 17:07*	*1*

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor 1016	10	U	78	10	ug/Kg	☼	09/01/16 03:13	09/02/16 03:21	1
Aroclor 1221	10	U	78	10	ug/Kg	☼	09/01/16 03:13	09/02/16 03:21	1
Aroclor 1232	10	U	78	10	ug/Kg	☼	09/01/16 03:13	09/02/16 03:21	1
Aroclor 1242	10	U	78	10	ug/Kg	☼	09/01/16 03:13	09/02/16 03:21	1
Aroclor 1248	10	U	78	10	ug/Kg	☼	09/01/16 03:13	09/02/16 03:21	1
Aroclor 1254	11	U	78	11	ug/Kg	☼	09/01/16 03:13	09/02/16 03:21	1
Aroclor 1260	11	U	78	11	ug/Kg	☼	09/01/16 03:13	09/02/16 03:21	1
Aroclor-1262	11	U	78	11	ug/Kg	☼	09/01/16 03:13	09/02/16 03:21	1
Aroclor 1268	11	U	78	11	ug/Kg	☼	09/01/16 03:13	09/02/16 03:21	1
Polychlorinated biphenyls, Total	11	U	78	11	ug/Kg	☼	09/01/16 03:13	09/02/16 03:21	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*100*		*35 - 150*	*09/01/16 03:13*	*09/02/16 03:21*	*1*
DCB Decachlorobiphenyl	*108*		*35 - 150*	*09/01/16 03:13*	*09/02/16 03:21*	*1*

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**14600**		37.3	19.2	mg/Kg	☼	09/01/16 18:15	09/02/16 15:12	4
Antimony	1.5	U	3.7	1.5	mg/Kg	☼	09/01/16 18:15	09/02/16 15:12	4
Arsenic	**2.6**	**J**	2.8	0.92	mg/Kg	☼	09/01/16 18:15	09/02/16 15:12	4
Barium	**67.3**		37.3	1.3	mg/Kg	☼	09/01/16 18:15	09/02/16 15:12	4

Client Sample ID: SB2-5-5.5

Date Collected: 08/30/16 13:50
Date Received: 08/30/16 18:35

Lab Sample ID: 460-119390-3

Matrix: Solid
Percent Solids: 85.8

Method: 6010C - Metals (ICP) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Beryllium	**0.48**		0.37	0.32	mg/Kg	☼	09/01/16 18:15	09/06/16 17:23	4
Cadmium	0.39	U	0.75	0.39	mg/Kg	☼	09/01/16 18:15	09/02/16 15:12	4
Calcium	**1850**		932	55.2	mg/Kg	☼	09/01/16 18:15	09/02/16 15:12	4
Chromium	**25.5**		1.9	0.90	mg/Kg	☼	09/01/16 18:15	09/02/16 15:12	4
Cobalt	**9.1**	**J**	9.3	1.1	mg/Kg	☼	09/01/16 18:15	09/02/16 15:12	4
Copper	**15.8**		4.7	1.2	mg/Kg	☼	09/01/16 18:15	09/02/16 15:12	4
Iron	**22000**		28.0	21.1	mg/Kg	☼	09/01/16 18:15	09/02/16 15:12	4
Lead	**11.9**		1.9	0.73	mg/Kg	☼	09/01/16 18:15	09/02/16 15:12	4
Magnesium	**5260**		932	46.5	mg/Kg	☼	09/01/16 18:15	09/02/16 15:12	4
Manganese	**368**		2.8	0.98	mg/Kg	☼	09/01/16 18:15	09/02/16 15:12	4
Nickel	**18.1**		7.5	1.4	mg/Kg	☼	09/01/16 18:15	09/02/16 15:12	4
Potassium	**1650**		932	28.3	mg/Kg	☼	09/01/16 18:15	09/02/16 15:12	4
Selenium	1.3	U	3.7	1.3	mg/Kg	☼	09/01/16 18:15	09/02/16 15:12	4
Silver	0.33	U	1.9	0.33	mg/Kg	☼	09/01/16 18:15	09/02/16 15:12	4
Sodium	**372**	**J**	932	63.1	mg/Kg	☼	09/01/16 18:15	09/02/16 15:12	4
Thallium	1.7	U	3.7	1.7	mg/Kg	☼	09/01/16 18:15	09/02/16 15:12	4
Vanadium	**35.2**		9.3	0.93	mg/Kg	☼	09/01/16 18:15	09/02/16 15:12	4
Zinc	**81.4**		5.6	1.4	mg/Kg	☼	09/01/16 18:15	09/02/16 15:12	4

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.024**		0.019	0.012	mg/Kg	☼	09/02/16 04:21	09/02/16 08:51	1

Client Sample ID: SB2-24.25

Date Collected: 08/30/16 14:15
Date Received: 08/30/16 18:35

Lab Sample ID: 460-119390-4

Matrix: Solid
Percent Solids: 76.9

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	0.69	U	1.8	0.69	ug/Kg	☼	08/31/16 09:53	09/01/16 20:58	1
1,1,2,2-Tetrachloroethane	0.31	U	1.8	0.31	ug/Kg	☼	08/31/16 09:53	09/01/16 20:58	1
1,1,2-Trichloro-1,2,2-trifluoroethane	0.80	U	1.8	0.80	ug/Kg	☼	08/31/16 09:53	09/01/16 20:58	1
1,1,2-Trichloroethane	0.51	U	1.8	0.51	ug/Kg	☼	08/31/16 09:53	09/01/16 20:58	1
1,1-Dichloroethane	0.62	U	1.8	0.62	ug/Kg	☼	08/31/16 09:53	09/01/16 20:58	1
1,1-Dichloroethene	0.74	U	1.8	0.74	ug/Kg	☼	08/31/16 09:53	09/01/16 20:58	1
1,2,3-Trichlorobenzene	0.20	U	1.8	0.20	ug/Kg	☼	08/31/16 09:53	09/01/16 20:58	1
1,2,4-Trichlorobenzene	0.58	U	1.8	0.58	ug/Kg	☼	08/31/16 09:53	09/01/16 20:58	1
1,2-Dibromo-3-Chloropropane	0.85	U	1.8	0.85	ug/Kg	☼	08/31/16 09:53	09/01/16 20:58	1
1,2-Dichlorobenzene	0.25	U	1.8	0.25	ug/Kg	☼	08/31/16 09:53	09/01/16 20:58	1
1,2-Dichloroethane	0.20	U	1.8	0.20	ug/Kg	☼	08/31/16 09:53	09/01/16 20:58	1
1,2-Dichloropropane	0.31	U	1.8	0.31	ug/Kg	☼	08/31/16 09:53	09/01/16 20:58	1
1,3-Dichlorobenzene	0.22	U	1.8	0.22	ug/Kg	☼	08/31/16 09:53	09/01/16 20:58	1
1,4-Dichlorobenzene	0.24	U	1.8	0.24	ug/Kg	☼	08/31/16 09:53	09/01/16 20:58	1
1,4-Dioxane	12	U	36	12	ug/Kg	☼	08/31/16 09:53	09/01/16 20:58	1
2-Butanone (MEK)	1.4	U	9.1	1.4	ug/Kg	☼	08/31/16 09:53	09/01/16 20:58	1
2-Hexanone	1.7	U	9.1	1.7	ug/Kg	☼	08/31/16 09:53	09/01/16 20:58	1
4-Methyl-2-pentanone (MIBK)	4.0	U	9.1	4.0	ug/Kg	☼	08/31/16 09:53	09/01/16 20:58	1
Acetone	1.9	U	9.1	1.9	ug/Kg	☼	08/31/16 09:53	09/01/16 20:58	1
Benzene	0.36	U	1.8	0.36	ug/Kg	☼	08/31/16 09:53	09/01/16 20:58	1
Bromoform	0.24	U	1.8	0.24	ug/Kg	☼	08/31/16 09:53	09/01/16 20:58	1

Client Sample ID: SB2-24.25

Date Collected: 08/30/16 14:15
Date Received: 08/30/16 18:35

Lab Sample ID: 460-119390-4

Matrix: Solid
Percent Solids: 76.9

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromomethane	0.58	U	1.8	0.58	ug/Kg	☼	08/31/16 09:53	09/01/16 20:58	1
Carbon disulfide	0.78	U	1.8	0.78	ug/Kg	☼	08/31/16 09:53	09/01/16 20:58	1
Carbon tetrachloride	0.78	U	1.8	0.78	ug/Kg	☼	08/31/16 09:53	09/01/16 20:58	1
Chlorobenzene	0.25	U	1.8	0.25	ug/Kg	☼	08/31/16 09:53	09/01/16 20:58	1
Chlorobromomethane	0.31	U	1.8	0.31	ug/Kg	☼	08/31/16 09:53	09/01/16 20:58	1
Chlorodibromomethane	0.27	U	1.8	0.27	ug/Kg	☼	08/31/16 09:53	09/01/16 20:58	1
Chloroethane	0.64	U *	1.8	0.64	ug/Kg	☼	08/31/16 09:53	09/01/16 20:58	1
Chloroform	0.38	U	1.8	0.38	ug/Kg	☼	08/31/16 09:53	09/01/16 20:58	1
Chloromethane	0.69	U	1.8	0.69	ug/Kg	☼	08/31/16 09:53	09/01/16 20:58	1
cis-1,2-Dichloroethene	0.40	U	1.8	0.40	ug/Kg	☼	08/31/16 09:53	09/01/16 20:58	1
cis-1,3-Dichloropropene	0.27	U	1.8	0.27	ug/Kg	☼	08/31/16 09:53	09/01/16 20:58	1
Cyclohexane	0.83	U	1.8	0.83	ug/Kg	☼	08/31/16 09:53	09/01/16 20:58	1
Dichlorobromomethane	0.69	U	1.8	0.69	ug/Kg	☼	08/31/16 09:53	09/01/16 20:58	1
Dichlorodifluoromethane	0.58	U	1.8	0.58	ug/Kg	☼	08/31/16 09:53	09/01/16 20:58	1
Ethylbenzene	0.33	U	1.8	0.33	ug/Kg	☼	08/31/16 09:53	09/01/16 20:58	1
Ethylene Dibromide	0.22	U	1.8	0.22	ug/Kg	☼	08/31/16 09:53	09/01/16 20:58	1
Isopropylbenzene	0.31	U	1.8	0.31	ug/Kg	☼	08/31/16 09:53	09/01/16 20:58	1
Methyl acetate	1.6	U	9.1	1.6	ug/Kg	☼	08/31/16 09:53	09/01/16 20:58	1
Methyl tert-butyl ether	0.31	U	1.8	0.31	ug/Kg	☼	08/31/16 09:53	09/01/16 20:58	1
Methylcyclohexane	0.91	U	1.8	0.91	ug/Kg	☼	08/31/16 09:53	09/01/16 20:58	1
Methylene Chloride	0.58	U	1.8	0.58	ug/Kg	☼	08/31/16 09:53	09/01/16 20:58	1
Styrene	0.27	U	1.8	0.27	ug/Kg	☼	08/31/16 09:53	09/01/16 20:58	1
Tetrachloroethene	**1.2**	**J**	1.8	0.51	ug/Kg	☼	08/31/16 09:53	09/01/16 20:58	1
Toluene	0.34	U	1.8	0.34	ug/Kg	☼	08/31/16 09:53	09/01/16 20:58	1
trans-1,2-Dichloroethene	0.71	U	1.8	0.71	ug/Kg	☼	08/31/16 09:53	09/01/16 20:58	1
trans-1,3-Dichloropropene	0.18	U	1.8	0.18	ug/Kg	☼	08/31/16 09:53	09/01/16 20:58	1
Trichloroethene	0.47	U	1.8	0.47	ug/Kg	☼	08/31/16 09:53	09/01/16 20:58	1
Trichlorofluoromethane	0.62	U	1.8	0.62	ug/Kg	☼	08/31/16 09:53	09/01/16 20:58	1
Vinyl chloride	0.71	U	1.8	0.71	ug/Kg	☼	08/31/16 09:53	09/01/16 20:58	1
Xylenes, Total	0.20	U	3.6	0.20	ug/Kg	☼	08/31/16 09:53	09/01/16 20:58	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/Kg*	☼			*08/31/16 09:53*	*09/01/16 20:58*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*89*		*78 - 135*	*08/31/16 09:53*	*09/01/16 20:58*	*1*
4-Bromofluorobenzene	*105*		*67 - 126*	*08/31/16 09:53*	*09/01/16 20:58*	*1*
Dibromofluoromethane (Surr)	*107*		*61 - 149*	*08/31/16 09:53*	*09/01/16 20:58*	*1*
Toluene-d8 (Surr)	*93*		*73 - 121*	*08/31/16 09:53*	*09/01/16 20:58*	*1*

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	14	U	430	14	ug/Kg	☼	09/01/16 13:23	09/04/16 18:13	1
2-Chlorophenol	11	U	430	11	ug/Kg	☼	09/01/16 13:23	09/04/16 18:13	1
2-Methylphenol	19	U	430	19	ug/Kg	☼	09/01/16 13:23	09/04/16 18:13	1
4-Methylphenol	12	U	430	12	ug/Kg	☼	09/01/16 13:23	09/04/16 18:13	1
2-Nitrophenol	14	U	430	14	ug/Kg	☼	09/01/16 13:23	09/04/16 18:13	1
2,4-Dimethylphenol	94	U	430	94	ug/Kg	☼	09/01/16 13:23	09/04/16 18:13	1
2,4-Dichlorophenol	10	U	170	10	ug/Kg	☼	09/01/16 13:23	09/04/16 18:13	1
4-Chloro-3-methylphenol	18	U	430	18	ug/Kg	☼	09/01/16 13:23	09/04/16 18:13	1

Client Sample ID: SB2-24.25
Date Collected: 08/30/16 14:15
Date Received: 08/30/16 18:35

Lab Sample ID: 460-119390-4
Matrix: Solid
Percent Solids: 76.9

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,6-Trichlorophenol	12	U	170	12	ug/Kg	☼	09/01/16 13:23	09/04/16 18:13	1
2,4,5-Trichlorophenol	43	U	430	43	ug/Kg	☼	09/01/16 13:23	09/04/16 18:13	1
2,4-Dinitrophenol	320	U	350	320	ug/Kg	☼	09/01/16 13:23	09/04/16 18:13	1
4-Nitrophenol	210	U	870	210	ug/Kg	☼	09/01/16 13:23	09/04/16 18:13	1
4,6-Dinitro-2-methylphenol	110	U	350	110	ug/Kg	☼	09/01/16 13:23	09/04/16 18:13	1
Pentachlorophenol	52	U	350	52	ug/Kg	☼	09/01/16 13:23	09/04/16 18:13	1
Bis(2-chloroethyl)ether	10	U	43	10	ug/Kg	☼	09/01/16 13:23	09/04/16 18:13	1
N-Nitrosodi-n-propylamine	14	U	43	14	ug/Kg	☼	09/01/16 13:23	09/04/16 18:13	1
Hexachloroethane	16	U	43	16	ug/Kg	☼	09/01/16 13:23	09/04/16 18:13	1
Nitrobenzene	13	U	43	13	ug/Kg	☼	09/01/16 13:23	09/04/16 18:13	1
Isophorone	9.2	U	170	9.2	ug/Kg	☼	09/01/16 13:23	09/04/16 18:13	1
Bis(2-chloroethoxy)methane	13	U	430	13	ug/Kg	☼	09/01/16 13:23	09/04/16 18:13	1
Naphthalene	11	U	430	11	ug/Kg	☼	09/01/16 13:23	09/04/16 18:13	1
4-Chloroaniline	11	U	430	11	ug/Kg	☼	09/01/16 13:23	09/04/16 18:13	1
Hexachlorobutadiene	12	U *	87	12	ug/Kg	☼	09/01/16 13:23	09/04/16 18:13	1
2-Methylnaphthalene	9.5	U	430	9.5	ug/Kg	☼	09/01/16 13:23	09/04/16 18:13	1
Hexachlorocyclopentadiene	27	U	430	27	ug/Kg	☼	09/01/16 13:23	09/04/16 18:13	1
2-Chloronaphthalene	9.7	U	430	9.7	ug/Kg	☼	09/01/16 13:23	09/04/16 18:13	1
2-Nitroaniline	14	U	430	14	ug/Kg	☼	09/01/16 13:23	09/04/16 18:13	1
Dimethyl phthalate	12	U	430	12	ug/Kg	☼	09/01/16 13:23	09/04/16 18:13	1
Acenaphthylene	11	U	430	11	ug/Kg	☼	09/01/16 13:23	09/04/16 18:13	1
2,6-Dinitrotoluene	23	U	87	23	ug/Kg	☼	09/01/16 13:23	09/04/16 18:13	1
3-Nitroaniline	13	U	430	13	ug/Kg	☼	09/01/16 13:23	09/04/16 18:13	1
Acenaphthene	10	U	430	10	ug/Kg	☼	09/01/16 13:23	09/04/16 18:13	1
Dibenzofuran	13	U	430	13	ug/Kg	☼	09/01/16 13:23	09/04/16 18:13	1
2,4-Dinitrotoluene	17	U	87	17	ug/Kg	☼	09/01/16 13:23	09/04/16 18:13	1
Diethyl phthalate	12	U	430	12	ug/Kg	☼	09/01/16 13:23	09/04/16 18:13	1
4-Chlorophenyl phenyl ether	13	U	430	13	ug/Kg	☼	09/01/16 13:23	09/04/16 18:13	1
Fluorene	9.3	U	430	9.3	ug/Kg	☼	09/01/16 13:23	09/04/16 18:13	1
4-Nitroaniline	16	U	430	16	ug/Kg	☼	09/01/16 13:23	09/04/16 18:13	1
N-Nitrosodiphenylamine	39	U	430	39	ug/Kg	☼	09/01/16 13:23	09/04/16 18:13	1
4-Bromophenyl phenyl ether	13	U	430	13	ug/Kg	☼	09/01/16 13:23	09/04/16 18:13	1
Hexachlorobenzene	17	U	43	17	ug/Kg	☼	09/01/16 13:23	09/04/16 18:13	1
Phenanthrene	11	U	430	11	ug/Kg	☼	09/01/16 13:23	09/04/16 18:13	1
Anthracene	41	U	430	41	ug/Kg	☼	09/01/16 13:23	09/04/16 18:13	1
Carbazole	11	U	430	11	ug/Kg	☼	09/01/16 13:23	09/04/16 18:13	1
Di-n-butyl phthalate	13	U	430	13	ug/Kg	☼	09/01/16 13:23	09/04/16 18:13	1
Fluoranthene	13	U	430	13	ug/Kg	☼	09/01/16 13:23	09/04/16 18:13	1
Pyrene	19	U	430	19	ug/Kg	☼	09/01/16 13:23	09/04/16 18:13	1
Butyl benzyl phthalate	13	U	430	13	ug/Kg	☼	09/01/16 13:23	09/04/16 18:13	1
3,3'-Dichlorobenzidine	48	U	170	48	ug/Kg	☼	09/01/16 13:23	09/04/16 18:13	1
Benzo[a]anthracene	36	U	43	36	ug/Kg	☼	09/01/16 13:23	09/04/16 18:13	1
Chrysene	12	U	430	12	ug/Kg	☼	09/01/16 13:23	09/04/16 18:13	1
Bis(2-ethylhexyl) phthalate	**200**	**J**	430	17	ug/Kg	☼	09/01/16 13:23	09/04/16 18:13	1
Di-n-octyl phthalate	22	U	430	22	ug/Kg	☼	09/01/16 13:23	09/04/16 18:13	1
Benzo[b]fluoranthene	17	U	43	17	ug/Kg	☼	09/01/16 13:23	09/04/16 18:13	1
Benzo[k]fluoranthene	19	U	43	19	ug/Kg	☼	09/01/16 13:23	09/04/16 18:13	1
Benzo[a]pyrene	13	U	43	13	ug/Kg	☼	09/01/16 13:23	09/04/16 18:13	1
Indeno[1,2,3-cd]pyrene	29	U	43	29	ug/Kg	☼	09/01/16 13:23	09/04/16 18:13	1

Client Sample ID: SB2-24.25
Date Collected: 08/30/16 14:15
Date Received: 08/30/16 18:35

Lab Sample ID: 460-119390-4
Matrix: Solid
Percent Solids: 76.9

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dibenz(a,h)anthracene	22	U	43	22	ug/Kg	☼	09/01/16 13:23	09/04/16 18:13	1
Benzo[g,h,i]perylene	25	U	430	25	ug/Kg	☼	09/01/16 13:23	09/04/16 18:13	1
Diphenyl	37	U	430	37	ug/Kg	☼	09/01/16 13:23	09/04/16 18:13	1
Acetophenone	9.3	U	430	9.3	ug/Kg	☼	09/01/16 13:23	09/04/16 18:13	1
Benzaldehyde	33	U	430	33	ug/Kg	☼	09/01/16 13:23	09/04/16 18:13	1
Caprolactam	31	U	430	31	ug/Kg	☼	09/01/16 13:23	09/04/16 18:13	1
Atrazine	19	U	170	19	ug/Kg	☼	09/01/16 13:23	09/04/16 18:13	1
2,2'-oxybis[1-chloropropane]	18	U	430	18	ug/Kg	☼	09/01/16 13:23	09/04/16 18:13	1
1,2,4,5-Tetrachlorobenzene	32	U	430	32	ug/Kg	☼	09/01/16 13:23	09/04/16 18:13	1
2,3,4,6-Tetrachlorophenol	40	U	430	40	ug/Kg	☼	09/01/16 13:23	09/04/16 18:13	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/Kg*	☼			*09/01/16 13:23*	*09/04/16 18:13*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*68*		*37 - 94*	*09/01/16 13:23*	*09/04/16 18:13*	*1*
Phenol-d5	*67*		*32 - 91*	*09/01/16 13:23*	*09/04/16 18:13*	*1*
Terphenyl-d14	*76*		*24 - 109*	*09/01/16 13:23*	*09/04/16 18:13*	*1*
2,4,6-Tribromophenol	*75*		*10 - 103*	*09/01/16 13:23*	*09/04/16 18:13*	*1*
2-Fluorophenol	*64*		*25 - 92*	*09/01/16 13:23*	*09/04/16 18:13*	*1*
2-Fluorobiphenyl	*70*		*38 - 95*	*09/01/16 13:23*	*09/04/16 18:13*	*1*

Method: 8081B - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	1.1	U	8.7	1.1	ug/Kg	☼	09/01/16 02:48	09/01/16 17:19	1
4,4'-DDE	1.3	U	8.7	1.3	ug/Kg	☼	09/01/16 02:48	09/01/16 17:19	1
4,4'-DDT	0.90	U	8.7	0.90	ug/Kg	☼	09/01/16 02:48	09/01/16 17:19	1
Aldrin	1.1	U	8.7	1.1	ug/Kg	☼	09/01/16 02:48	09/01/16 17:19	1
alpha-BHC	0.79	U	2.6	0.79	ug/Kg	☼	09/01/16 02:48	09/01/16 17:19	1
beta-BHC	0.84	U	2.6	0.84	ug/Kg	☼	09/01/16 02:48	09/01/16 17:19	1
Chlordane (technical)	38	U	87	38	ug/Kg	☼	09/01/16 02:48	09/01/16 17:19	1
delta-BHC	0.95	U	2.6	0.95	ug/Kg	☼	09/01/16 02:48	09/01/16 17:19	1
Dieldrin	1.1	U	2.6	1.1	ug/Kg	☼	09/01/16 02:48	09/01/16 17:19	1
Endosulfan I	1.2	U	8.7	1.2	ug/Kg	☼	09/01/16 02:48	09/01/16 17:19	1
Endosulfan II	1.4	U	8.7	1.4	ug/Kg	☼	09/01/16 02:48	09/01/16 17:19	1
Endosulfan sulfate	1.0	U	8.7	1.0	ug/Kg	☼	09/01/16 02:48	09/01/16 17:19	1
Endrin	1.1	U	8.7	1.1	ug/Kg	☼	09/01/16 02:48	09/01/16 17:19	1
Endrin aldehyde	1.1	U	8.7	1.1	ug/Kg	☼	09/01/16 02:48	09/01/16 17:19	1
Endrin ketone	1.2	U	8.7	1.2	ug/Kg	☼	09/01/16 02:48	09/01/16 17:19	1
gamma-BHC (Lindane)	0.78	U	2.6	0.78	ug/Kg	☼	09/01/16 02:48	09/01/16 17:19	1
Heptachlor	1.1	U	8.7	1.1	ug/Kg	☼	09/01/16 02:48	09/01/16 17:19	1
Heptachlor epoxide	1.7	U	8.7	1.7	ug/Kg	☼	09/01/16 02:48	09/01/16 17:19	1
Methoxychlor	1.8	U	8.7	1.8	ug/Kg	☼	09/01/16 02:48	09/01/16 17:19	1
Toxaphene	25	U	87	25	ug/Kg	☼	09/01/16 02:48	09/01/16 17:19	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*108*		*50 - 150*	*09/01/16 02:48*	*09/01/16 17:19*	*1*
DCB Decachlorobiphenyl	*107*		*50 - 150*	*09/01/16 02:48*	*09/01/16 17:19*	*1*
Tetrachloro-m-xylene	*105*		*47 - 150*	*09/01/16 02:48*	*09/01/16 17:19*	*1*
Tetrachloro-m-xylene	*105*		*47 - 150*	*09/01/16 02:48*	*09/01/16 17:19*	*1*

Client Sample ID: SB2-24.25

Date Collected: 08/30/16 14:15
Date Received: 08/30/16 18:35

Lab Sample ID: 460-119390-4

Matrix: Solid
Percent Solids: 76.9

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor 1016	12	U	87	12	ug/Kg	☼	09/01/16 03:13	09/02/16 03:35	1
Aroclor 1221	12	U	87	12	ug/Kg	☼	09/01/16 03:13	09/02/16 03:35	1
Aroclor 1232	12	U	87	12	ug/Kg	☼	09/01/16 03:13	09/02/16 03:35	1
Aroclor 1242	12	U	87	12	ug/Kg	☼	09/01/16 03:13	09/02/16 03:35	1
Aroclor 1248	12	U	87	12	ug/Kg	☼	09/01/16 03:13	09/02/16 03:35	1
Aroclor 1254	12	U	87	12	ug/Kg	☼	09/01/16 03:13	09/02/16 03:35	1
Aroclor 1260	12	U	87	12	ug/Kg	☼	09/01/16 03:13	09/02/16 03:35	1
Aroclor-1262	12	U	87	12	ug/Kg	☼	09/01/16 03:13	09/02/16 03:35	1
Aroclor 1268	12	U	87	12	ug/Kg	☼	09/01/16 03:13	09/02/16 03:35	1
Polychlorinated biphenyls, Total	12	U	87	12	ug/Kg	☼	09/01/16 03:13	09/02/16 03:35	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*106*		*35 - 150*	*09/01/16 03:13*	*09/02/16 03:35*	*1*
DCB Decachlorobiphenyl	*110*		*35 - 150*	*09/01/16 03:13*	*09/02/16 03:35*	*1*

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**7530**		40.6	20.9	mg/Kg	☼	09/01/16 18:15	09/02/16 16:19	4
Antimony	1.6	U	4.1	1.6	mg/Kg	☼	09/01/16 18:15	09/02/16 16:19	4
Arsenic	**2.0**	**J**	3.0	1.0	mg/Kg	☼	09/01/16 18:15	09/02/16 16:19	4
Barium	**104**		40.6	1.5	mg/Kg	☼	09/01/16 18:15	09/02/16 16:19	4
Beryllium	**0.39**	**J**	0.41	0.34	mg/Kg	☼	09/01/16 18:15	09/02/16 16:19	4
Cadmium	0.42	U	0.81	0.42	mg/Kg	☼	09/01/16 18:15	09/02/16 16:19	4
Calcium	**11600**		1020	60.1	mg/Kg	☼	09/01/16 18:15	09/02/16 16:19	4
Chromium	**26.0**		2.0	0.98	mg/Kg	☼	09/01/16 18:15	09/02/16 16:19	4
Cobalt	**5.2**	**J**	10.2	1.2	mg/Kg	☼	09/01/16 18:15	09/02/16 16:19	4
Copper	**18.8**		5.1	1.3	mg/Kg	☼	09/01/16 18:15	09/02/16 16:19	4
Iron	**17600**		30.5	22.9	mg/Kg	☼	09/01/16 18:15	09/02/16 16:19	4
Lead	**2.9**		2.0	0.80	mg/Kg	☼	09/01/16 18:15	09/02/16 16:19	4
Magnesium	**9060**		1020	50.7	mg/Kg	☼	09/01/16 18:15	09/02/16 16:19	4
Manganese	**174**		3.0	1.1	mg/Kg	☼	09/01/16 18:15	09/02/16 16:19	4
Nickel	**18.6**		8.1	1.5	mg/Kg	☼	09/01/16 18:15	09/02/16 16:19	4
Potassium	**3540**		1020	30.8	mg/Kg	☼	09/01/16 18:15	09/02/16 16:19	4
Selenium	1.4	U	4.1	1.4	mg/Kg	☼	09/01/16 18:15	09/02/16 16:19	4
Silver	0.36	U	2.0	0.36	mg/Kg	☼	09/01/16 18:15	09/02/16 16:19	4
Sodium	**170**	**J**	1020	68.7	mg/Kg	☼	09/01/16 18:15	09/02/16 16:19	4
Thallium	1.8	U	4.1	1.8	mg/Kg	☼	09/01/16 18:15	09/02/16 16:19	4
Vanadium	**27.2**		10.2	1.0	mg/Kg	☼	09/01/16 18:15	09/02/16 16:19	4
Zinc	**51.9**		6.1	1.5	mg/Kg	☼	09/01/16 18:15	09/02/16 16:19	4

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.014	U	0.021	0.014	mg/Kg	☼	09/02/16 04:21	09/02/16 08:53	1

Surrogate Summary

Client: SESI Consulting Engineers
Project/Site: 205 West St., Mt Vernon, NY

TestAmerica Job ID: 460-119390-1

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

Matrix: Solid — **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)			
		12DCE	BFB	DBFM	TOL
Lab Sample ID	Client Sample ID	(78-135)	(67-126)	(61-149)	(73-121)
460-119390-1	SB1-2-2.5	98	112	113	102
460-119390-2	SB1-10-12	92	104	110	94
460-119390-3	SB2-5-5.5	100	113	118	102
460-119390-4	SB2-24.25	89	105	107	93
LB3 460-387847/1-A	Method Blank	93	112	113	99
LCS 460-388063/3	Lab Control Sample	98	113	113	103
LCS 460-388214/3	Lab Control Sample	96	112	113	102
LCSD 460-388063/4	Lab Control Sample Dup	92	106	108	96
LCSD 460-388214/4	Lab Control Sample Dup	94	112	112	102
MB 460-388063/7	Method Blank	93	108	112	96
MB 460-388214/7	Method Blank	94	111	112	99

Surrogate Legend

12DCE = 1,2-Dichloroethane-d4 (Surr)
BFB = 4-Bromofluorobenzene
DBFM = Dibromofluoromethane (Surr)
TOL = Toluene-d8 (Surr)

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Matrix: Solid — **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)					
		NBZ	PHL	TPH	TBP	2FP	FBP
Lab Sample ID	Client Sample ID	(37-94)	(32-91)	(24-109)	(10-103)	(25-92)	(38-95)
460-119139-A-2-B MS	Matrix Spike	71	63	60	49	60	70
460-119139-A-2-C MSD	Matrix Spike Duplicate	69	69	63	43	63	72
460-119390-1	SB1-2-2.5	68	68	79	63	68	72
460-119390-2	SB1-10-12	55	56	60	56	56	56
460-119390-3	SB2-5-5.5	65	64	71	63	65	67
460-119390-4	SB2-24.25	68	67	76	75	64	70
LCS 460-388164/2-A	Lab Control Sample	81	81	78	98	81	84
LCS 460-388164/3-A	Lab Control Sample	90	92 X	95	104 X	93 X	90
MB 460-388164/1-A	Method Blank	88	83	89	83	87	88

Surrogate Legend

NBZ = Nitrobenzene-d5
PHL = Phenol-d5
TPH = Terphenyl-d14
TBP = 2,4,6-Tribromophenol
2FP = 2-Fluorophenol
FBP = 2-Fluorobiphenyl

Method: 8081B - Organochlorine Pesticides (GC)

Matrix: Solid — **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)			
		DCB1	DCB2	TCX1	TCX2
Lab Sample ID	Client Sample ID	(50-150)	(50-150)	(47-150)	(47-150)
460-119086-A-6-M MS	Matrix Spike	94	98	89	89
460-119086-A-6-N MSD	Matrix Spike Duplicate	85	89	82	82

Surrogate Summary

Client: SESI Consulting Engineers
Project/Site: 205 West St., Mt Vernon, NY

TestAmerica Job ID: 460-119390-1

Method: 8081B - Organochlorine Pesticides (GC) (Continued)

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)			
		DCB1	DCB2	TCX1	TCX2
Lab Sample ID	Client Sample ID	(50-150)	(50-150)	(47-150)	(47-150)
460-119390-1	SB1-2-2.5	100	100	97	95
460-119390-2	SB1-10-12	97	96	95	94
460-119390-3	SB2-5-5.5	107	103	105	101
460-119390-4	SB2-24.25	108	107	105	105
LCS 460-388038/2-A	Lab Control Sample	102	104	98	98
MB 460-388038/1-A	Method Blank	93	97	91	90

Surrogate Legend

DCB = DCB Decachlorobiphenyl

TCX = Tetrachloro-m-xylene

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)	
		DCB1	DCB2
Lab Sample ID	Client Sample ID	(35-150)	(35-150)
460-119355-B-1-B MS	Matrix Spike	88	95
460-119355-B-1-C MSD	Matrix Spike Duplicate	88	95
460-119390-1	SB1-2-2.5	104	108
460-119390-2	SB1-10-12	96	101
460-119390-3	SB2-5-5.5	100	108
460-119390-4	SB2-24.25	106	110
LCS 460-388043/2-A	Lab Control Sample	93	103
MB 460-388043/1-A	Method Blank	99	111

Surrogate Legend

DCB = DCB Decachlorobiphenyl

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

Lab Sample ID: LB3 460-387847/1-A
Matrix: Solid
Analysis Batch: 388063

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 387847

Analyte	LB3 Result	LB3 Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	0.38	U	1.0	0.38	ug/Kg		08/31/16 09:50	09/01/16 12:02	1
1,1,2,2-Tetrachloroethane	0.17	U	1.0	0.17	ug/Kg		08/31/16 09:50	09/01/16 12:02	1
1,1,2-Trichloro-1,2,2-trifluoroethane	0.44	U	1.0	0.44	ug/Kg		08/31/16 09:50	09/01/16 12:02	1
1,1,2-Trichloroethane	0.28	U	1.0	0.28	ug/Kg		08/31/16 09:50	09/01/16 12:02	1
1,1-Dichloroethane	0.34	U	1.0	0.34	ug/Kg		08/31/16 09:50	09/01/16 12:02	1
1,1-Dichloroethene	0.41	U	1.0	0.41	ug/Kg		08/31/16 09:50	09/01/16 12:02	1
1,2,3-Trichlorobenzene	0.11	U	1.0	0.11	ug/Kg		08/31/16 09:50	09/01/16 12:02	1
1,2,4-Trichlorobenzene	0.32	U	1.0	0.32	ug/Kg		08/31/16 09:50	09/01/16 12:02	1
1,2-Dibromo-3-Chloropropane	0.47	U	1.0	0.47	ug/Kg		08/31/16 09:50	09/01/16 12:02	1
1,2-Dichlorobenzene	0.14	U	1.0	0.14	ug/Kg		08/31/16 09:50	09/01/16 12:02	1
1,2-Dichloroethane	0.11	U	1.0	0.11	ug/Kg		08/31/16 09:50	09/01/16 12:02	1
1,2-Dichloropropane	0.17	U	1.0	0.17	ug/Kg		08/31/16 09:50	09/01/16 12:02	1
1,3-Dichlorobenzene	0.12	U	1.0	0.12	ug/Kg		08/31/16 09:50	09/01/16 12:02	1
1,4-Dichlorobenzene	0.13	U	1.0	0.13	ug/Kg		08/31/16 09:50	09/01/16 12:02	1
1,4-Dioxane	6.4	U	20	6.4	ug/Kg		08/31/16 09:50	09/01/16 12:02	1
2-Butanone (MEK)	0.77	U	5.0	0.77	ug/Kg		08/31/16 09:50	09/01/16 12:02	1
2-Hexanone	0.94	U	5.0	0.94	ug/Kg		08/31/16 09:50	09/01/16 12:02	1
4-Methyl-2-pentanone (MIBK)	2.2	U	5.0	2.2	ug/Kg		08/31/16 09:50	09/01/16 12:02	1
Acetone	1.1	U	5.0	1.1	ug/Kg		08/31/16 09:50	09/01/16 12:02	1
Benzene	0.20	U	1.0	0.20	ug/Kg		08/31/16 09:50	09/01/16 12:02	1
Bromoform	0.13	U	1.0	0.13	ug/Kg		08/31/16 09:50	09/01/16 12:02	1
Bromomethane	0.32	U	1.0	0.32	ug/Kg		08/31/16 09:50	09/01/16 12:02	1
Carbon disulfide	0.43	U	1.0	0.43	ug/Kg		08/31/16 09:50	09/01/16 12:02	1
Carbon tetrachloride	0.43	U	1.0	0.43	ug/Kg		08/31/16 09:50	09/01/16 12:02	1
Chlorobenzene	0.14	U	1.0	0.14	ug/Kg		08/31/16 09:50	09/01/16 12:02	1
Chlorobromomethane	0.17	U	1.0	0.17	ug/Kg		08/31/16 09:50	09/01/16 12:02	1
Chlorodibromomethane	0.15	U	1.0	0.15	ug/Kg		08/31/16 09:50	09/01/16 12:02	1
Chloroethane	0.35	U	1.0	0.35	ug/Kg		08/31/16 09:50	09/01/16 12:02	1
Chloroform	0.21	U	1.0	0.21	ug/Kg		08/31/16 09:50	09/01/16 12:02	1
Chloromethane	0.38	U	1.0	0.38	ug/Kg		08/31/16 09:50	09/01/16 12:02	1
cis-1,2-Dichloroethene	0.22	U	1.0	0.22	ug/Kg		08/31/16 09:50	09/01/16 12:02	1
cis-1,3-Dichloropropene	0.15	U	1.0	0.15	ug/Kg		08/31/16 09:50	09/01/16 12:02	1
Cyclohexane	0.46	U	1.0	0.46	ug/Kg		08/31/16 09:50	09/01/16 12:02	1
Dichlorobromomethane	0.38	U	1.0	0.38	ug/Kg		08/31/16 09:50	09/01/16 12:02	1
Dichlorodifluoromethane	0.32	U	1.0	0.32	ug/Kg		08/31/16 09:50	09/01/16 12:02	1
Ethylbenzene	0.18	U	1.0	0.18	ug/Kg		08/31/16 09:50	09/01/16 12:02	1
Ethylene Dibromide	0.12	U	1.0	0.12	ug/Kg		08/31/16 09:50	09/01/16 12:02	1
Isopropylbenzene	0.17	U	1.0	0.17	ug/Kg		08/31/16 09:50	09/01/16 12:02	1
Methyl acetate	0.90	U	5.0	0.90	ug/Kg		08/31/16 09:50	09/01/16 12:02	1
Methyl tert-butyl ether	0.17	U	1.0	0.17	ug/Kg		08/31/16 09:50	09/01/16 12:02	1
Methylcyclohexane	0.50	U	1.0	0.50	ug/Kg		08/31/16 09:50	09/01/16 12:02	1
Methylene Chloride	0.32	U	1.0	0.32	ug/Kg		08/31/16 09:50	09/01/16 12:02	1
Styrene	0.15	U	1.0	0.15	ug/Kg		08/31/16 09:50	09/01/16 12:02	1
Tetrachloroethene	0.28	U	1.0	0.28	ug/Kg		08/31/16 09:50	09/01/16 12:02	1
Toluene	0.19	U	1.0	0.19	ug/Kg		08/31/16 09:50	09/01/16 12:02	1
trans-1,2-Dichloroethene	0.39	U	1.0	0.39	ug/Kg		08/31/16 09:50	09/01/16 12:02	1
trans-1,3-Dichloropropene	0.10	U	1.0	0.10	ug/Kg		08/31/16 09:50	09/01/16 12:02	1
Trichloroethene	0.26	U	1.0	0.26	ug/Kg		08/31/16 09:50	09/01/16 12:02	1

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

Lab Sample ID: LB3 460-387847/1-A
Matrix: Solid
Analysis Batch: 388063

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 387847

Analyte	LB3 Result	LB3 Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Trichlorofluoromethane	0.34	U	1.0	0.34	ug/Kg		08/31/16 09:50	09/01/16 12:02	1
Vinyl chloride	0.39	U	1.0	0.39	ug/Kg		08/31/16 09:50	09/01/16 12:02	1
Xylenes, Total	0.11	U	2.0	0.11	ug/Kg		08/31/16 09:50	09/01/16 12:02	1

Tentatively Identified Compound	*LB3 Est. Result*	*LB3 Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/Kg*				*08/31/16 09:50*	*09/01/16 12:02*	*1*

Surrogate	*LB3 %Recovery*	*LB3 Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*93*		*78 - 135*	*08/31/16 09:50*	*09/01/16 12:02*	*1*
4-Bromofluorobenzene	*112*		*67 - 126*	*08/31/16 09:50*	*09/01/16 12:02*	*1*
Dibromofluoromethane (Surr)	*113*		*61 - 149*	*08/31/16 09:50*	*09/01/16 12:02*	*1*
Toluene-d8 (Surr)	*99*		*73 - 121*	*08/31/16 09:50*	*09/01/16 12:02*	*1*

Lab Sample ID: MB 460-388063/7
Matrix: Solid
Analysis Batch: 388063

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	0.38	U	1.0	0.38	ug/Kg			09/01/16 08:54	1
1,1,2,2-Tetrachloroethane	0.17	U	1.0	0.17	ug/Kg			09/01/16 08:54	1
1,1,2-Trichloro-1,2,2-trifluoroethane	0.44	U	1.0	0.44	ug/Kg			09/01/16 08:54	1
1,1,2-Trichloroethane	0.28	U	1.0	0.28	ug/Kg			09/01/16 08:54	1
1,1-Dichloroethane	0.34	U	1.0	0.34	ug/Kg			09/01/16 08:54	1
1,1-Dichloroethene	0.41	U	1.0	0.41	ug/Kg			09/01/16 08:54	1
1,2,3-Trichlorobenzene	0.11	U	1.0	0.11	ug/Kg			09/01/16 08:54	1
1,2,4-Trichlorobenzene	0.32	U	1.0	0.32	ug/Kg			09/01/16 08:54	1
1,2-Dibromo-3-Chloropropane	0.47	U	1.0	0.47	ug/Kg			09/01/16 08:54	1
1,2-Dichlorobenzene	0.14	U	1.0	0.14	ug/Kg			09/01/16 08:54	1
1,2-Dichloroethane	0.11	U	1.0	0.11	ug/Kg			09/01/16 08:54	1
1,2-Dichloropropane	0.17	U	1.0	0.17	ug/Kg			09/01/16 08:54	1
1,3-Dichlorobenzene	0.12	U	1.0	0.12	ug/Kg			09/01/16 08:54	1
1,4-Dichlorobenzene	0.13	U	1.0	0.13	ug/Kg			09/01/16 08:54	1
1,4-Dioxane	6.4	U	20	6.4	ug/Kg			09/01/16 08:54	1
2-Butanone (MEK)	0.77	U	5.0	0.77	ug/Kg			09/01/16 08:54	1
2-Hexanone	0.94	U	5.0	0.94	ug/Kg			09/01/16 08:54	1
4-Methyl-2-pentanone (MIBK)	2.2	U	5.0	2.2	ug/Kg			09/01/16 08:54	1
Acetone	1.1	U	5.0	1.1	ug/Kg			09/01/16 08:54	1
Benzene	0.20	U	1.0	0.20	ug/Kg			09/01/16 08:54	1
Bromoform	0.13	U	1.0	0.13	ug/Kg			09/01/16 08:54	1
Bromomethane	0.32	U	1.0	0.32	ug/Kg			09/01/16 08:54	1
Carbon disulfide	0.43	U	1.0	0.43	ug/Kg			09/01/16 08:54	1
Carbon tetrachloride	0.43	U	1.0	0.43	ug/Kg			09/01/16 08:54	1
Chlorobenzene	0.14	U	1.0	0.14	ug/Kg			09/01/16 08:54	1
Chlorobromomethane	0.17	U	1.0	0.17	ug/Kg			09/01/16 08:54	1
Chlorodibromomethane	0.15	U	1.0	0.15	ug/Kg			09/01/16 08:54	1
Chloroethane	0.35	U	1.0	0.35	ug/Kg			09/01/16 08:54	1
Chloroform	0.21	U	1.0	0.21	ug/Kg			09/01/16 08:54	1

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

Lab Sample ID: MB 460-388063/7
Matrix: Solid
Analysis Batch: 388063

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloromethane	0.38	U	1.0	0.38	ug/Kg			09/01/16 08:54	1
cis-1,2-Dichloroethene	0.22	U	1.0	0.22	ug/Kg			09/01/16 08:54	1
cis-1,3-Dichloropropene	0.15	U	1.0	0.15	ug/Kg			09/01/16 08:54	1
Cyclohexane	0.46	U	1.0	0.46	ug/Kg			09/01/16 08:54	1
Dichlorobromomethane	0.38	U	1.0	0.38	ug/Kg			09/01/16 08:54	1
Dichlorodifluoromethane	0.32	U	1.0	0.32	ug/Kg			09/01/16 08:54	1
Ethylbenzene	0.18	U	1.0	0.18	ug/Kg			09/01/16 08:54	1
Ethylene Dibromide	0.12	U	1.0	0.12	ug/Kg			09/01/16 08:54	1
Isopropylbenzene	0.17	U	1.0	0.17	ug/Kg			09/01/16 08:54	1
Methyl acetate	0.90	U	5.0	0.90	ug/Kg			09/01/16 08:54	1
Methyl tert-butyl ether	0.17	U	1.0	0.17	ug/Kg			09/01/16 08:54	1
Methylcyclohexane	0.50	U	1.0	0.50	ug/Kg			09/01/16 08:54	1
Methylene Chloride	0.32	U	1.0	0.32	ug/Kg			09/01/16 08:54	1
Styrene	0.15	U	1.0	0.15	ug/Kg			09/01/16 08:54	1
Tetrachloroethene	0.28	U	1.0	0.28	ug/Kg			09/01/16 08:54	1
Toluene	0.19	U	1.0	0.19	ug/Kg			09/01/16 08:54	1
trans-1,2-Dichloroethene	0.39	U	1.0	0.39	ug/Kg			09/01/16 08:54	1
trans-1,3-Dichloropropene	0.10	U	1.0	0.10	ug/Kg			09/01/16 08:54	1
Trichloroethene	0.26	U	1.0	0.26	ug/Kg			09/01/16 08:54	1
Trichlorofluoromethane	0.34	U	1.0	0.34	ug/Kg			09/01/16 08:54	1
Vinyl chloride	0.39	U	1.0	0.39	ug/Kg			09/01/16 08:54	1
Xylenes, Total	0.11	U	2.0	0.11	ug/Kg			09/01/16 08:54	1

Tentatively Identified Compound	*MB Est. Result*	*MB Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/Kg*					*09/01/16 08:54*	*1*

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*93*		*78 - 135*		*09/01/16 08:54*	*1*
4-Bromofluorobenzene	*108*		*67 - 126*		*09/01/16 08:54*	*1*
Dibromofluoromethane (Surr)	*112*		*61 - 149*		*09/01/16 08:54*	*1*
Toluene-d8 (Surr)	*96*		*73 - 121*		*09/01/16 08:54*	*1*

Lab Sample ID: LCS 460-388063/3
Matrix: Solid
Analysis Batch: 388063

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1-Trichloroethane	20.0	23.2		ug/Kg		116	80 - 125
1,1,2,2-Tetrachloroethane	20.0	17.5		ug/Kg		88	72 - 131
1,1,2-Trichloro-1,2,2-trifluoroethane	20.0	22.9		ug/Kg		115	78 - 132
1,1,2-Trichloroethane	20.0	18.4		ug/Kg		92	76 - 124
1,1-Dichloroethane	20.0	20.8		ug/Kg		104	80 - 124
1,1-Dichloroethene	20.0	20.8		ug/Kg		104	79 - 132
1,2,3-Trichlorobenzene	20.0	21.5		ug/Kg		108	75 - 123
1,2,4-Trichlorobenzene	20.0	19.0		ug/Kg		95	74 - 124
1,2-Dibromo-3-Chloropropane	20.0	18.7		ug/Kg		93	65 - 129
1,2-Dichlorobenzene	20.0	18.4		ug/Kg		92	80 - 121

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

Lab Sample ID: LCS 460-388063/3
Matrix: Solid
Analysis Batch: 388063

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2-Dichloroethane	20.0	20.5		ug/Kg		102	68 - 120
1,2-Dichloropropane	20.0	20.4		ug/Kg		102	77 - 124
1,3-Dichlorobenzene	20.0	17.7		ug/Kg		88	79 - 124
1,4-Dichlorobenzene	20.0	17.9		ug/Kg		90	79 - 121
1,4-Dioxane	400	373		ug/Kg		93	67 - 150
2-Butanone (MEK)	100	108		ug/Kg		108	61 - 140
2-Hexanone	100	103		ug/Kg		103	78 - 120
4-Methyl-2-pentanone (MIBK)	100	107		ug/Kg		107	80 - 120
Acetone	100	116		ug/Kg		116	75 - 120
Benzene	20.0	19.9		ug/Kg		100	75 - 127
Bromoform	20.0	30.1		ug/Kg		150	19 - 150
Bromomethane	20.0	31.5	*	ug/Kg		157	59 - 136
Carbon disulfide	20.0	20.5		ug/Kg		102	74 - 130
Carbon tetrachloride	20.0	27.5		ug/Kg		138	77 - 138
Chlorobenzene	20.0	19.8		ug/Kg		99	80 - 120
Chlorobromomethane	20.0	22.5		ug/Kg		112	80 - 125
Chlorodibromomethane	20.0	24.7		ug/Kg		123	67 - 143
Chloroethane	20.0	30.0	*	ug/Kg		150	50 - 139
Chloroform	20.0	21.7		ug/Kg		108	80 - 122
Chloromethane	20.0	23.6		ug/Kg		118	66 - 128
cis-1,2-Dichloroethene	20.0	21.6		ug/Kg		108	80 - 123
cis-1,3-Dichloropropene	20.0	18.3		ug/Kg		91	75 - 124
Cyclohexane	20.0	20.3		ug/Kg		102	67 - 135
Dichlorobromomethane	20.0	22.4		ug/Kg		112	76 - 129
Dichlorodifluoromethane	20.0	23.9		ug/Kg		120	72 - 127
Ethylbenzene	20.0	19.5		ug/Kg		97	79 - 124
Ethylene Dibromide	20.0	19.6		ug/Kg		98	80 - 122
Isopropylbenzene	20.0	20.0		ug/Kg		100	80 - 125
Methyl acetate	100	103		ug/Kg		103	73 - 123
Methyl tert-butyl ether	20.0	21.1		ug/Kg		106	80 - 120
Methylcyclohexane	20.0	21.6		ug/Kg		108	71 - 137
Methylene Chloride	20.0	21.8		ug/Kg		109	79 - 128
Styrene	20.0	18.7		ug/Kg		94	78 - 123
Tetrachloroethene	20.0	22.3		ug/Kg		112	73 - 130
Toluene	20.0	19.3		ug/Kg		96	75 - 122
trans-1,2-Dichloroethene	20.0	21.6		ug/Kg		108	80 - 129
trans-1,3-Dichloropropene	20.0	17.7		ug/Kg		88	72 - 121
Trichloroethene	20.0	20.9		ug/Kg		104	79 - 122
Trichlorofluoromethane	20.0	23.8		ug/Kg		119	68 - 136
Vinyl chloride	20.0	23.6		ug/Kg		118	70 - 134
Xylenes, Total	40.0	38.9		ug/Kg		97	79 - 122

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*98*		*78 - 135*
4-Bromofluorobenzene	*113*		*67 - 126*
Dibromofluoromethane (Surr)	*113*		*61 - 149*
Toluene-d8 (Surr)	*103*		*73 - 121*

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

Lab Sample ID: LCSD 460-388063/4
Matrix: Solid
Analysis Batch: 388063

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

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1,1-Trichloroethane	20.0	22.4		ug/Kg		112	80 - 125	3	30
1,1,2,2-Tetrachloroethane	20.0	18.2		ug/Kg		91	72 - 131	3	30
1,1,2-Trichloro-1,2,2-trifluoroethane	20.0	23.4		ug/Kg		117	78 - 132	2	30
1,1,2-Trichloroethane	20.0	18.0		ug/Kg		90	76 - 124	2	30
1,1-Dichloroethane	20.0	20.7		ug/Kg		104	80 - 124	0	30
1,1-Dichloroethene	20.0	21.8		ug/Kg		109	79 - 132	4	30
1,2,3-Trichlorobenzene	20.0	22.8		ug/Kg		114	75 - 123	6	30
1,2,4-Trichlorobenzene	20.0	19.7		ug/Kg		98	74 - 124	4	30
1,2-Dibromo-3-Chloropropane	20.0	20.2		ug/Kg		101	65 - 129	8	30
1,2-Dichlorobenzene	20.0	18.6		ug/Kg		93	80 - 121	1	30
1,2-Dichloroethane	20.0	20.0		ug/Kg		100	68 - 120	2	30
1,2-Dichloropropane	20.0	20.0		ug/Kg		100	77 - 124	2	30
1,3-Dichlorobenzene	20.0	17.6		ug/Kg		88	79 - 124	1	30
1,4-Dichlorobenzene	20.0	18.1		ug/Kg		90	79 - 121	1	30
1,4-Dioxane	400	363		ug/Kg		91	67 - 150	3	30
2-Butanone (MEK)	100	113		ug/Kg		113	61 - 140	4	30
2-Hexanone	100	106		ug/Kg		106	78 - 120	2	30
4-Methyl-2-pentanone (MIBK)	100	111		ug/Kg		111	80 - 120	3	30
Acetone	100	104		ug/Kg		104	75 - 120	11	30
Benzene	20.0	19.6		ug/Kg		98	75 - 127	2	30
Bromoform	20.0	30.2	*	ug/Kg		151	19 - 150	0	30
Bromomethane	20.0	30.2	*	ug/Kg		151	59 - 136	4	30
Carbon disulfide	20.0	20.6		ug/Kg		103	74 - 130	1	30
Carbon tetrachloride	20.0	26.8		ug/Kg		134	77 - 138	3	30
Chlorobenzene	20.0	19.6		ug/Kg		98	80 - 120	1	30
Chlorobromomethane	20.0	21.7		ug/Kg		108	80 - 125	4	30
Chlorodibromomethane	20.0	24.6		ug/Kg		123	67 - 143	0	30
Chloroethane	20.0	28.9	*	ug/Kg		144	50 - 139	4	30
Chloroform	20.0	21.2		ug/Kg		106	80 - 122	2	30
Chloromethane	20.0	23.4		ug/Kg		117	66 - 128	1	30
cis-1,2-Dichloroethene	20.0	21.2		ug/Kg		106	80 - 123	2	30
cis-1,3-Dichloropropene	20.0	17.7		ug/Kg		88	75 - 124	3	30
Cyclohexane	20.0	20.0		ug/Kg		100	67 - 135	2	30
Dichlorobromomethane	20.0	21.5		ug/Kg		108	76 - 129	4	30
Dichlorodifluoromethane	20.0	22.8		ug/Kg		114	72 - 127	5	30
Ethylbenzene	20.0	19.4		ug/Kg		97	79 - 124	0	30
Ethylene Dibromide	20.0	19.6		ug/Kg		98	80 - 122	0	30
Isopropylbenzene	20.0	20.1		ug/Kg		100	80 - 125	1	30
Methyl acetate	100	107		ug/Kg		107	73 - 123	4	30
Methyl tert-butyl ether	20.0	21.1		ug/Kg		105	80 - 120	0	30
Methylcyclohexane	20.0	21.5		ug/Kg		108	71 - 137	0	30
Methylene Chloride	20.0	21.3		ug/Kg		106	79 - 128	2	30
Styrene	20.0	18.7		ug/Kg		93	78 - 123	0	30
Tetrachloroethene	20.0	22.7		ug/Kg		114	73 - 130	2	30
Toluene	20.0	18.9		ug/Kg		95	75 - 122	2	30
trans-1,2-Dichloroethene	20.0	21.4		ug/Kg		107	80 - 129	1	30
trans-1,3-Dichloropropene	20.0	17.6		ug/Kg		88	72 - 121	1	30

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

Lab Sample ID: LCSD 460-388063/4
Matrix: Solid
Analysis Batch: 388063

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

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Trichloroethene			20.0	20.9		ug/Kg		104	79 - 122	0	30
Trichlorofluoromethane			20.0	22.9		ug/Kg		115	68 - 136	4	30
Vinyl chloride			20.0	23.2		ug/Kg		116	70 - 134	2	30
Xylenes, Total			40.0	39.2		ug/Kg		98	79 - 122	1	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*92*		*78 - 135*
4-Bromofluorobenzene	*106*		*67 - 126*
Dibromofluoromethane (Surr)	*108*		*61 - 149*
Toluene-d8 (Surr)	*96*		*73 - 121*

Lab Sample ID: MB 460-388214/7
Matrix: Solid
Analysis Batch: 388214

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	0.38	U	1.0	0.38	ug/Kg			09/01/16 20:32	1
1,1,2,2-Tetrachloroethane	0.17	U	1.0	0.17	ug/Kg			09/01/16 20:32	1
1,1,2-Trichloro-1,2,2-trifluoroethane	0.44	U	1.0	0.44	ug/Kg			09/01/16 20:32	1
1,1,2-Trichloroethane	0.28	U	1.0	0.28	ug/Kg			09/01/16 20:32	1
1,1-Dichloroethane	0.34	U	1.0	0.34	ug/Kg			09/01/16 20:32	1
1,1-Dichloroethene	0.41	U	1.0	0.41	ug/Kg			09/01/16 20:32	1
1,2,3-Trichlorobenzene	0.11	U	1.0	0.11	ug/Kg			09/01/16 20:32	1
1,2,4-Trichlorobenzene	0.32	U	1.0	0.32	ug/Kg			09/01/16 20:32	1
1,2-Dibromo-3-Chloropropane	0.47	U	1.0	0.47	ug/Kg			09/01/16 20:32	1
1,2-Dichlorobenzene	0.14	U	1.0	0.14	ug/Kg			09/01/16 20:32	1
1,2-Dichloroethane	0.11	U	1.0	0.11	ug/Kg			09/01/16 20:32	1
1,2-Dichloropropane	0.17	U	1.0	0.17	ug/Kg			09/01/16 20:32	1
1,3-Dichlorobenzene	0.12	U	1.0	0.12	ug/Kg			09/01/16 20:32	1
1,4-Dichlorobenzene	0.13	U	1.0	0.13	ug/Kg			09/01/16 20:32	1
1,4-Dioxane	6.4	U	20	6.4	ug/Kg			09/01/16 20:32	1
2-Butanone (MEK)	0.77	U	5.0	0.77	ug/Kg			09/01/16 20:32	1
2-Hexanone	0.94	U	5.0	0.94	ug/Kg			09/01/16 20:32	1
4-Methyl-2-pentanone (MIBK)	2.2	U	5.0	2.2	ug/Kg			09/01/16 20:32	1
Acetone	1.1	U	5.0	1.1	ug/Kg			09/01/16 20:32	1
Benzene	0.20	U	1.0	0.20	ug/Kg			09/01/16 20:32	1
Bromoform	0.13	U	1.0	0.13	ug/Kg			09/01/16 20:32	1
Bromomethane	0.32	U	1.0	0.32	ug/Kg			09/01/16 20:32	1
Carbon disulfide	0.43	U	1.0	0.43	ug/Kg			09/01/16 20:32	1
Carbon tetrachloride	0.43	U	1.0	0.43	ug/Kg			09/01/16 20:32	1
Chlorobenzene	0.14	U	1.0	0.14	ug/Kg			09/01/16 20:32	1
Chlorobromomethane	0.17	U	1.0	0.17	ug/Kg			09/01/16 20:32	1
Chlorodibromomethane	0.15	U	1.0	0.15	ug/Kg			09/01/16 20:32	1
Chloroethane	0.35	U	1.0	0.35	ug/Kg			09/01/16 20:32	1
Chloroform	0.21	U	1.0	0.21	ug/Kg			09/01/16 20:32	1
Chloromethane	0.38	U	1.0	0.38	ug/Kg			09/01/16 20:32	1
cis-1,2-Dichloroethene	0.22	U	1.0	0.22	ug/Kg			09/01/16 20:32	1
cis-1,3-Dichloropropene	0.15	U	1.0	0.15	ug/Kg			09/01/16 20:32	1

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

Lab Sample ID: MB 460-388214/7
Matrix: Solid
Analysis Batch: 388214

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyclohexane	0.46	U	1.0	0.46	ug/Kg			09/01/16 20:32	1
Dichlorobromomethane	0.38	U	1.0	0.38	ug/Kg			09/01/16 20:32	1
Dichlorodifluoromethane	0.32	U	1.0	0.32	ug/Kg			09/01/16 20:32	1
Ethylbenzene	0.18	U	1.0	0.18	ug/Kg			09/01/16 20:32	1
Ethylene Dibromide	0.12	U	1.0	0.12	ug/Kg			09/01/16 20:32	1
Isopropylbenzene	0.17	U	1.0	0.17	ug/Kg			09/01/16 20:32	1
Methyl acetate	0.90	U	5.0	0.90	ug/Kg			09/01/16 20:32	1
Methyl tert-butyl ether	0.17	U	1.0	0.17	ug/Kg			09/01/16 20:32	1
Methylcyclohexane	0.50	U	1.0	0.50	ug/Kg			09/01/16 20:32	1
Methylene Chloride	0.32	U	1.0	0.32	ug/Kg			09/01/16 20:32	1
Styrene	0.15	U	1.0	0.15	ug/Kg			09/01/16 20:32	1
Tetrachloroethene	0.28	U	1.0	0.28	ug/Kg			09/01/16 20:32	1
Toluene	0.19	U	1.0	0.19	ug/Kg			09/01/16 20:32	1
trans-1,2-Dichloroethene	0.39	U	1.0	0.39	ug/Kg			09/01/16 20:32	1
trans-1,3-Dichloropropene	0.10	U	1.0	0.10	ug/Kg			09/01/16 20:32	1
Trichloroethene	0.26	U	1.0	0.26	ug/Kg			09/01/16 20:32	1
Trichlorofluoromethane	0.34	U	1.0	0.34	ug/Kg			09/01/16 20:32	1
Vinyl chloride	0.39	U	1.0	0.39	ug/Kg			09/01/16 20:32	1
Xylenes, Total	0.11	U	2.0	0.11	ug/Kg			09/01/16 20:32	1

Tentatively Identified Compound	*MB Est. Result*	*MB Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/Kg*					*09/01/16 20:32*	*1*

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*94*		*78 - 135*		*09/01/16 20:32*	*1*
4-Bromofluorobenzene	*111*		*67 - 126*		*09/01/16 20:32*	*1*
Dibromofluoromethane (Surr)	*112*		*61 - 149*		*09/01/16 20:32*	*1*
Toluene-d8 (Surr)	*99*		*73 - 121*		*09/01/16 20:32*	*1*

Lab Sample ID: LCS 460-388214/3
Matrix: Solid
Analysis Batch: 388214

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1-Trichloroethane	20.0	21.8		ug/Kg		109	80 - 125
1,1,2,2-Tetrachloroethane	20.0	17.2		ug/Kg		86	72 - 131
1,1,2-Trichloro-1,2,2-trifluoroethane	20.0	22.5		ug/Kg		113	78 - 132
1,1,2-Trichloroethane	20.0	18.0		ug/Kg		90	76 - 124
1,1-Dichloroethane	20.0	19.6		ug/Kg		98	80 - 124
1,1-Dichloroethene	20.0	20.0		ug/Kg		100	79 - 132
1,2,3-Trichlorobenzene	20.0	21.0		ug/Kg		105	75 - 123
1,2,4-Trichlorobenzene	20.0	18.5		ug/Kg		93	74 - 124
1,2-Dibromo-3-Chloropropane	20.0	18.2		ug/Kg		91	65 - 129
1,2-Dichlorobenzene	20.0	17.8		ug/Kg		89	80 - 121
1,2-Dichloroethane	20.0	19.1		ug/Kg		95	68 - 120
1,2-Dichloropropane	20.0	19.0		ug/Kg		95	77 - 124
1,3-Dichlorobenzene	20.0	17.1		ug/Kg		86	79 - 124

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

Lab Sample ID: LCS 460-388214/3
Matrix: Solid
Analysis Batch: 388214

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,4-Dichlorobenzene	20.0	17.4		ug/Kg		87	79 - 121
1,4-Dioxane	400	348		ug/Kg		87	67 - 150
2-Butanone (MEK)	100	109		ug/Kg		109	61 - 140
2-Hexanone	100	101		ug/Kg		101	78 - 120
4-Methyl-2-pentanone (MIBK)	100	104		ug/Kg		104	80 - 120
Acetone	100	103		ug/Kg		103	75 - 120
Benzene	20.0	18.9		ug/Kg		95	75 - 127
Bromoform	20.0	29.5		ug/Kg		148	19 - 150
Bromomethane	20.0	24.2		ug/Kg		121	59 - 136
Carbon disulfide	20.0	19.7		ug/Kg		98	74 - 130
Carbon tetrachloride	20.0	25.8		ug/Kg		129	77 - 138
Chlorobenzene	20.0	18.9		ug/Kg		95	80 - 120
Chlorobromomethane	20.0	21.2		ug/Kg		106	80 - 125
Chlorodibromomethane	20.0	23.7		ug/Kg		118	67 - 143
Chloroethane	20.0	23.2		ug/Kg		116	50 - 139
Chloroform	20.0	20.3		ug/Kg		101	80 - 122
Chloromethane	20.0	21.7		ug/Kg		109	66 - 128
cis-1,2-Dichloroethene	20.0	20.6		ug/Kg		103	80 - 123
cis-1,3-Dichloropropene	20.0	17.3		ug/Kg		86	75 - 124
Cyclohexane	20.0	19.5		ug/Kg		98	67 - 135
Dichlorobromomethane	20.0	21.8		ug/Kg		109	76 - 129
Dichlorodifluoromethane	20.0	22.3		ug/Kg		112	72 - 127
Ethylbenzene	20.0	18.9		ug/Kg		94	79 - 124
Ethylene Dibromide	20.0	18.4		ug/Kg		92	80 - 122
Isopropylbenzene	20.0	19.2		ug/Kg		96	80 - 125
Methyl acetate	100	101		ug/Kg		101	73 - 123
Methyl tert-butyl ether	20.0	19.7		ug/Kg		98	80 - 120
Methylcyclohexane	20.0	20.8		ug/Kg		104	71 - 137
Methylene Chloride	20.0	20.7		ug/Kg		104	79 - 128
Styrene	20.0	18.2		ug/Kg		91	78 - 123
Tetrachloroethene	20.0	21.2		ug/Kg		106	73 - 130
Toluene	20.0	18.4		ug/Kg		92	75 - 122
trans-1,2-Dichloroethene	20.0	20.7		ug/Kg		103	80 - 129
trans-1,3-Dichloropropene	20.0	17.2		ug/Kg		86	72 - 121
Trichloroethene	20.0	20.2		ug/Kg		101	79 - 122
Trichlorofluoromethane	20.0	20.0		ug/Kg		100	68 - 136
Vinyl chloride	20.0	21.8		ug/Kg		109	70 - 134
Xylenes, Total	40.0	37.7		ug/Kg		94	79 - 122

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*96*		*78 - 135*
4-Bromofluorobenzene	*112*		*67 - 126*
Dibromofluoromethane (Surr)	*113*		*61 - 149*
Toluene-d8 (Surr)	*102*		*73 - 121*

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

Lab Sample ID: LCSD 460-388214/4
Matrix: Solid
Analysis Batch: 388214

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

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1,1-Trichloroethane	20.0	21.7		ug/Kg		108	80 - 125	1	30
1,1,2,2-Tetrachloroethane	20.0	17.1		ug/Kg		85	72 - 131	1	30
1,1,2-Trichloro-1,2,2-trifluoroethane	20.0	21.6		ug/Kg		108	78 - 132	4	30
1,1,2-Trichloroethane	20.0	17.6		ug/Kg		88	76 - 124	3	30
1,1-Dichloroethane	20.0	19.4		ug/Kg		97	80 - 124	1	30
1,1-Dichloroethene	20.0	20.2		ug/Kg		101	79 - 132	1	30
1,2,3-Trichlorobenzene	20.0	20.4		ug/Kg		102	75 - 123	3	30
1,2,4-Trichlorobenzene	20.0	18.4		ug/Kg		92	74 - 124	1	30
1,2-Dibromo-3-Chloropropane	20.0	19.4		ug/Kg		97	65 - 129	6	30
1,2-Dichlorobenzene	20.0	17.8		ug/Kg		89	80 - 121	0	30
1,2-Dichloroethane	20.0	18.8		ug/Kg		94	68 - 120	2	30
1,2-Dichloropropane	20.0	18.4		ug/Kg		92	77 - 124	3	30
1,3-Dichlorobenzene	20.0	17.1		ug/Kg		86	79 - 124	0	30
1,4-Dichlorobenzene	20.0	17.5		ug/Kg		88	79 - 121	1	30
1,4-Dioxane	400	356		ug/Kg		89	67 - 150	2	30
2-Butanone (MEK)	100	108		ug/Kg		108	61 - 140	1	30
2-Hexanone	100	101		ug/Kg		101	78 - 120	0	30
4-Methyl-2-pentanone (MIBK)	100	105		ug/Kg		105	80 - 120	1	30
Acetone	100	104		ug/Kg		104	75 - 120	1	30
Benzene	20.0	19.4		ug/Kg		97	75 - 127	3	30
Bromoform	20.0	29.2		ug/Kg		146	19 - 150	1	30
Bromomethane	20.0	23.3		ug/Kg		116	59 - 136	4	30
Carbon disulfide	20.0	19.9		ug/Kg		99	74 - 130	1	30
Carbon tetrachloride	20.0	26.0		ug/Kg		130	77 - 138	1	30
Chlorobenzene	20.0	18.7		ug/Kg		94	80 - 120	1	30
Chlorobromomethane	20.0	21.0		ug/Kg		105	80 - 125	1	30
Chlorodibromomethane	20.0	23.8		ug/Kg		119	67 - 143	1	30
Chloroethane	20.0	16.8	*	ug/Kg		84	50 - 139	32	30
Chloroform	20.0	20.3		ug/Kg		102	80 - 122	0	30
Chloromethane	20.0	22.0		ug/Kg		110	66 - 128	1	30
cis-1,2-Dichloroethene	20.0	20.4		ug/Kg		102	80 - 123	1	30
cis-1,3-Dichloropropene	20.0	17.6		ug/Kg		88	75 - 124	2	30
Cyclohexane	20.0	19.4		ug/Kg		97	67 - 135	1	30
Dichlorobromomethane	20.0	21.2		ug/Kg		106	76 - 129	3	30
Dichlorodifluoromethane	20.0	21.8		ug/Kg		109	72 - 127	2	30
Ethylbenzene	20.0	18.7		ug/Kg		93	79 - 124	1	30
Ethylene Dibromide	20.0	18.6		ug/Kg		93	80 - 122	1	30
Isopropylbenzene	20.0	19.3		ug/Kg		96	80 - 125	0	30
Methyl acetate	100	97.6		ug/Kg		98	73 - 123	3	30
Methyl tert-butyl ether	20.0	19.2		ug/Kg		96	80 - 120	2	30
Methylcyclohexane	20.0	20.8		ug/Kg		104	71 - 137	0	30
Methylene Chloride	20.0	20.2		ug/Kg		101	79 - 128	3	30
Styrene	20.0	18.0		ug/Kg		90	78 - 123	1	30
Tetrachloroethene	20.0	21.5		ug/Kg		108	73 - 130	2	30
Toluene	20.0	18.6		ug/Kg		93	75 - 122	1	30
trans-1,2-Dichloroethene	20.0	20.3		ug/Kg		101	80 - 129	2	30
trans-1,3-Dichloropropene	20.0	16.8		ug/Kg		84	72 - 121	2	30

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

Lab Sample ID: LCSD 460-388214/4
Matrix: Solid
Analysis Batch: 388214

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

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Trichloroethene			20.0	19.7		ug/Kg		99	79 - 122	3	30
Trichlorofluoromethane			20.0	18.7		ug/Kg		94	68 - 136	6	30
Vinyl chloride			20.0	22.0		ug/Kg		110	70 - 134	1	30
Xylenes, Total			40.0	37.4		ug/Kg		94	79 - 122	1	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*94*		*78 - 135*
4-Bromofluorobenzene	*112*		*67 - 126*
Dibromofluoromethane (Surr)	*112*		*61 - 149*
Toluene-d8 (Surr)	*102*		*73 - 121*

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Lab Sample ID: MB 460-388164/1-A
Matrix: Solid
Analysis Batch: 388312

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 388164

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	11	U	330	11	ug/Kg		09/01/16 13:23	09/02/16 08:05	1
2-Chlorophenol	8.4	U	330	8.4	ug/Kg		09/01/16 13:23	09/02/16 08:05	1
2-Methylphenol	14	U	330	14	ug/Kg		09/01/16 13:23	09/02/16 08:05	1
4-Methylphenol	9.0	U	330	9.0	ug/Kg		09/01/16 13:23	09/02/16 08:05	1
2-Nitrophenol	11	U	330	11	ug/Kg		09/01/16 13:23	09/02/16 08:05	1
2,4-Dimethylphenol	73	U	330	73	ug/Kg		09/01/16 13:23	09/02/16 08:05	1
2,4-Dichlorophenol	7.8	U	130	7.8	ug/Kg		09/01/16 13:23	09/02/16 08:05	1
4-Chloro-3-methylphenol	14	U	330	14	ug/Kg		09/01/16 13:23	09/02/16 08:05	1
2,4,6-Trichlorophenol	9.4	U	130	9.4	ug/Kg		09/01/16 13:23	09/02/16 08:05	1
2,4,5-Trichlorophenol	33	U	330	33	ug/Kg		09/01/16 13:23	09/02/16 08:05	1
2,4-Dinitrophenol	250	U	270	250	ug/Kg		09/01/16 13:23	09/02/16 08:05	1
4-Nitrophenol	160	U	670	160	ug/Kg		09/01/16 13:23	09/02/16 08:05	1
4,6-Dinitro-2-methylphenol	88	U	270	88	ug/Kg		09/01/16 13:23	09/02/16 08:05	1
Pentachlorophenol	40	U	270	40	ug/Kg		09/01/16 13:23	09/02/16 08:05	1
Bis(2-chloroethyl)ether	7.8	U	33	7.8	ug/Kg		09/01/16 13:23	09/02/16 08:05	1
N-Nitrosodi-n-propylamine	11	U	33	11	ug/Kg		09/01/16 13:23	09/02/16 08:05	1
Hexachloroethane	12	U	33	12	ug/Kg		09/01/16 13:23	09/02/16 08:05	1
Nitrobenzene	10	U	33	10	ug/Kg		09/01/16 13:23	09/02/16 08:05	1
Isophorone	7.1	U	130	7.1	ug/Kg		09/01/16 13:23	09/02/16 08:05	1
Bis(2-chloroethoxy)methane	10	U	330	10	ug/Kg		09/01/16 13:23	09/02/16 08:05	1
Naphthalene	8.4	U	330	8.4	ug/Kg		09/01/16 13:23	09/02/16 08:05	1
4-Chloroaniline	8.5	U	330	8.5	ug/Kg		09/01/16 13:23	09/02/16 08:05	1
Hexachlorobutadiene	9.3	U	67	9.3	ug/Kg		09/01/16 13:23	09/02/16 08:05	1
2-Methylnaphthalene	7.3	U	330	7.3	ug/Kg		09/01/16 13:23	09/02/16 08:05	1
Hexachlorocyclopentadiene	21	U	330	21	ug/Kg		09/01/16 13:23	09/02/16 08:05	1
2-Chloronaphthalene	7.5	U	330	7.5	ug/Kg		09/01/16 13:23	09/02/16 08:05	1
2-Nitroaniline	11	U	330	11	ug/Kg		09/01/16 13:23	09/02/16 08:05	1
Dimethyl phthalate	9.6	U	330	9.6	ug/Kg		09/01/16 13:23	09/02/16 08:05	1
Acenaphthylene	8.5	U	330	8.5	ug/Kg		09/01/16 13:23	09/02/16 08:05	1
2,6-Dinitrotoluene	18	U	67	18	ug/Kg		09/01/16 13:23	09/02/16 08:05	1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 460-388164/1-A
Matrix: Solid
Analysis Batch: 388312

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 388164

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
3-Nitroaniline	9.8	U	330	9.8	ug/Kg		09/01/16 13:23	09/02/16 08:05	1
Acenaphthene	8.0	U	330	8.0	ug/Kg		09/01/16 13:23	09/02/16 08:05	1
Dibenzofuran	10	U	330	10	ug/Kg		09/01/16 13:23	09/02/16 08:05	1
2,4-Dinitrotoluene	13	U	67	13	ug/Kg		09/01/16 13:23	09/02/16 08:05	1
Diethyl phthalate	9.4	U	330	9.4	ug/Kg		09/01/16 13:23	09/02/16 08:05	1
4-Chlorophenyl phenyl ether	9.9	U	330	9.9	ug/Kg		09/01/16 13:23	09/02/16 08:05	1
Fluorene	7.2	U	330	7.2	ug/Kg		09/01/16 13:23	09/02/16 08:05	1
4-Nitroaniline	13	U	330	13	ug/Kg		09/01/16 13:23	09/02/16 08:05	1
N-Nitrosodiphenylamine	30	U	330	30	ug/Kg		09/01/16 13:23	09/02/16 08:05	1
4-Bromophenyl phenyl ether	10	U	330	10	ug/Kg		09/01/16 13:23	09/02/16 08:05	1
Hexachlorobenzene	13	U	33	13	ug/Kg		09/01/16 13:23	09/02/16 08:05	1
Phenanthrene	8.8	U	330	8.8	ug/Kg		09/01/16 13:23	09/02/16 08:05	1
Anthracene	31	U	330	31	ug/Kg		09/01/16 13:23	09/02/16 08:05	1
Carbazole	8.2	U	330	8.2	ug/Kg		09/01/16 13:23	09/02/16 08:05	1
Di-n-butyl phthalate	9.9	U	330	9.9	ug/Kg		09/01/16 13:23	09/02/16 08:05	1
Fluoranthene	9.8	U	330	9.8	ug/Kg		09/01/16 13:23	09/02/16 08:05	1
Pyrene	15	U	330	15	ug/Kg		09/01/16 13:23	09/02/16 08:05	1
Butyl benzyl phthalate	10	U	330	10	ug/Kg		09/01/16 13:23	09/02/16 08:05	1
3,3'-Dichlorobenzidine	37	U	130	37	ug/Kg		09/01/16 13:23	09/02/16 08:05	1
Benzo[a]anthracene	28	U	33	28	ug/Kg		09/01/16 13:23	09/02/16 08:05	1
Chrysene	9.0	U	330	9.0	ug/Kg		09/01/16 13:23	09/02/16 08:05	1
Bis(2-ethylhexyl) phthalate	13	U	330	13	ug/Kg		09/01/16 13:23	09/02/16 08:05	1
Di-n-octyl phthalate	17	U	330	17	ug/Kg		09/01/16 13:23	09/02/16 08:05	1
Benzo[b]fluoranthene	13	U	33	13	ug/Kg		09/01/16 13:23	09/02/16 08:05	1
Benzo[k]fluoranthene	14	U	33	14	ug/Kg		09/01/16 13:23	09/02/16 08:05	1
Benzo[a]pyrene	10	U	33	10	ug/Kg		09/01/16 13:23	09/02/16 08:05	1
Indeno[1,2,3-cd]pyrene	22	U	33	22	ug/Kg		09/01/16 13:23	09/02/16 08:05	1
Dibenz(a,h)anthracene	17	U	33	17	ug/Kg		09/01/16 13:23	09/02/16 08:05	1
Benzo[g,h,i]perylene	19	U	330	19	ug/Kg		09/01/16 13:23	09/02/16 08:05	1
Diphenyl	28	U	330	28	ug/Kg		09/01/16 13:23	09/02/16 08:05	1
Acetophenone	7.2	U	330	7.2	ug/Kg		09/01/16 13:23	09/02/16 08:05	1
Benzaldehyde	25	U	330	25	ug/Kg		09/01/16 13:23	09/02/16 08:05	1
Caprolactam	24	U	330	24	ug/Kg		09/01/16 13:23	09/02/16 08:05	1
Atrazine	15	U	130	15	ug/Kg		09/01/16 13:23	09/02/16 08:05	1
2,2'-oxybis[1-chloropropane]	14	U	330	14	ug/Kg		09/01/16 13:23	09/02/16 08:05	1
1,2,4,5-Tetrachlorobenzene	25	U	330	25	ug/Kg		09/01/16 13:23	09/02/16 08:05	1
2,3,4,6-Tetrachlorophenol	31	U	330	31	ug/Kg		09/01/16 13:23	09/02/16 08:05	1

Tentatively Identified Compound	*MB Est. Result*	*MB Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Aldol condensation product	*5050*	*J A*	*ug/Kg*		*2.36*		*09/01/16 13:23*	*09/02/16 08:05*	*1*
2-Pentanone, 4-methoxy-4-methyl-	*3760*	*J N*	*ug/Kg*		*2.97*	*107-70-0*	*09/01/16 13:23*	*09/02/16 08:05*	*1*

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*88*		*37 - 94*	*09/01/16 13:23*	*09/02/16 08:05*	*1*
Phenol-d5	*83*		*32 - 91*	*09/01/16 13:23*	*09/02/16 08:05*	*1*
Terphenyl-d14	*89*		*24 - 109*	*09/01/16 13:23*	*09/02/16 08:05*	*1*
2,4,6-Tribromophenol	*83*		*10 - 103*	*09/01/16 13:23*	*09/02/16 08:05*	*1*

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 460-388164/1-A
Matrix: Solid
Analysis Batch: 388312

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 388164

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorophenol	87		25 - 92	09/01/16 13:23	09/02/16 08:05	1
2-Fluorobiphenyl	88		38 - 95	09/01/16 13:23	09/02/16 08:05	1

Lab Sample ID: LCS 460-388164/2-A
Matrix: Solid
Analysis Batch: 388312

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 388164

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Phenol	3330	2730		ug/Kg		82	58 - 103
2-Chlorophenol	3330	2630		ug/Kg		79	62 - 97
2-Methylphenol	3330	2720		ug/Kg		82	61 - 103
4-Methylphenol	3330	2660		ug/Kg		80	61 - 105
2-Nitrophenol	3330	2780		ug/Kg		83	65 - 104
2,4-Dimethylphenol	3330	2670		ug/Kg		80	63 - 101
2,4-Dichlorophenol	3330	2940		ug/Kg		88	61 - 103
4-Chloro-3-methylphenol	3330	2830		ug/Kg		85	62 - 111
2,4,6-Trichlorophenol	3330	3340		ug/Kg		100	62 - 110
2,4,5-Trichlorophenol	3330	3300		ug/Kg		99	60 - 106
2,4-Dinitrophenol	6670	5340		ug/Kg		80	56 - 122
4-Nitrophenol	6670	6040		ug/Kg		91	43 - 141
4,6-Dinitro-2-methylphenol	6670	6620		ug/Kg		99	67 - 120
Pentachlorophenol	6670	6590		ug/Kg		99	56 - 116
Bis(2-chloroethyl)ether	3330	2960		ug/Kg		89	64 - 105
N-Nitrosodi-n-propylamine	3330	3030		ug/Kg		91	63 - 117
Hexachloroethane	3330	2720		ug/Kg		82	63 - 99
Nitrobenzene	3330	2830		ug/Kg		85	66 - 108
Isophorone	3330	3010		ug/Kg		90	68 - 111
Bis(2-chloroethoxy)methane	3330	3010		ug/Kg		90	65 - 106
Naphthalene	3330	2680		ug/Kg		80	65 - 102
4-Chloroaniline	3330	1950		ug/Kg		59	18 - 94
Hexachlorobutadiene	3330	3730	*	ug/Kg		112	60 - 108
2-Methylnaphthalene	3330	2660		ug/Kg		80	65 - 104
Hexachlorocyclopentadiene	3330	3570		ug/Kg		107	50 - 129
2-Chloronaphthalene	3330	2820		ug/Kg		84	63 - 107
2-Nitroaniline	3330	2340		ug/Kg		70	57 - 114
Dimethyl phthalate	3330	2920		ug/Kg		88	68 - 112
Acenaphthylene	3330	2640		ug/Kg		79	67 - 107
2,6-Dinitrotoluene	3330	2930		ug/Kg		88	70 - 114
3-Nitroaniline	3330	2010		ug/Kg		60	30 - 94
Acenaphthene	3330	2650		ug/Kg		80	62 - 108
Dibenzofuran	3330	2830		ug/Kg		85	67 - 107
2,4-Dinitrotoluene	3330	2910		ug/Kg		87	66 - 122
Diethyl phthalate	3330	2770		ug/Kg		83	66 - 117
4-Chlorophenyl phenyl ether	3330	3360		ug/Kg		101	66 - 110
Fluorene	3330	2710		ug/Kg		81	66 - 110
4-Nitroaniline	3330	2350		ug/Kg		70	49 - 118
N-Nitrosodiphenylamine	3330	2560		ug/Kg		77	65 - 114
4-Bromophenyl phenyl ether	3330	3340		ug/Kg		100	59 - 122

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 460-388164/2-A
Matrix: Solid
Analysis Batch: 388312

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 388164

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Hexachlorobenzene	3330	3670		ug/Kg		110	57 - 128
Phenanthrene	3330	2790		ug/Kg		84	68 - 111
Anthracene	3330	2770		ug/Kg		83	69 - 111
Carbazole	3330	2640		ug/Kg		79	66 - 115
Di-n-butyl phthalate	3330	2790		ug/Kg		84	67 - 119
Fluoranthene	3330	3160		ug/Kg		95	64 - 114
Pyrene	3330	2640		ug/Kg		79	64 - 121
Butyl benzyl phthalate	3330	2370		ug/Kg		71	65 - 125
3,3'-Dichlorobenzidine	3330	1990		ug/Kg		60	18 - 88
Benzo[a]anthracene	3330	2930		ug/Kg		88	68 - 110
Chrysene	3330	2930		ug/Kg		88	70 - 111
Bis(2-ethylhexyl) phthalate	3330	2300		ug/Kg		69	63 - 125
Di-n-octyl phthalate	3330	2490		ug/Kg		75	57 - 138
Benzo[b]fluoranthene	3330	2960		ug/Kg		89	69 - 119
Benzo[k]fluoranthene	3330	3290		ug/Kg		99	70 - 115
Benzo[a]pyrene	3330	3080		ug/Kg		92	72 - 115
Indeno[1,2,3-cd]pyrene	3330	2750		ug/Kg		82	53 - 137
Dibenz(a,h)anthracene	3330	2840		ug/Kg		85	60 - 130
Benzo[g,h,i]perylene	3330	2720		ug/Kg		82	54 - 128
Diphenyl	3330	2670		ug/Kg		80	64 - 108
Acetophenone	3330	2630		ug/Kg		79	60 - 109
2,2'-oxybis[1-chloropropane]	3330	3490		ug/Kg		105	39 - 122
1,2,4,5-Tetrachlorobenzene	3330	3610		ug/Kg		108	57 - 112
2,3,4,6-Tetrachlorophenol	3330	3530		ug/Kg		106	60 - 114

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Nitrobenzene-d5	*81*		*37 - 94*
Phenol-d5	*81*		*32 - 91*
Terphenyl-d14	*78*		*24 - 109*
2,4,6-Tribromophenol	*98*		*10 - 103*
2-Fluorophenol	*81*		*25 - 92*
2-Fluorobiphenyl	*84*		*38 - 95*

Lab Sample ID: LCS 460-388164/3-A
Matrix: Solid
Analysis Batch: 388312

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 388164

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzaldehyde	6670	4180		ug/Kg		63	52 - 113
Caprolactam	6670	6760		ug/Kg		101	53 - 148
Atrazine	6670	7260		ug/Kg		109	62 - 137

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Nitrobenzene-d5	*90*		*37 - 94*
Phenol-d5	*92*	*X*	*32 - 91*
Terphenyl-d14	*95*		*24 - 109*
2,4,6-Tribromophenol	*104*	*X*	*10 - 103*

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 460-388164/3-A
Matrix: Solid
Analysis Batch: 388312

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 388164

Surrogate	LCS %Recovery	LCS Qualifier	Limits
2-Fluorophenol	93	X	25 - 92
2-Fluorobiphenyl	90		38 - 95

Lab Sample ID: 460-119139-A-2-B MS
Matrix: Solid
Analysis Batch: 388312

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 388164

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Phenol	280	J	3440	2290		ug/Kg	☼	59	58 - 103
2-Chlorophenol	8.7	U F1	3440	1810	F1	ug/Kg	☼	53	62 - 97
2-Methylphenol	26	J	3440	2110		ug/Kg	☼	61	61 - 103
4-Methylphenol	490		3440	2660		ug/Kg	☼	63	61 - 105
2-Nitrophenol	11	U F1	3440	1260	F1	ug/Kg	☼	37	65 - 104
2,4-Dimethylphenol	75	U	3440	2350		ug/Kg	☼	68	63 - 101
2,4-Dichlorophenol	8.0	U F1	3440	1920	F1	ug/Kg	☼	56	61 - 103
4-Chloro-3-methylphenol	15	U	3440	2190		ug/Kg	☼	64	62 - 111
2,4,6-Trichlorophenol	9.7	U F1	3440	1580	F1	ug/Kg	☼	46	62 - 110
2,4,5-Trichlorophenol	34	U F1	3440	1630	F1	ug/Kg	☼	47	60 - 106
2,4-Dinitrophenol	260	U F1	6880	311	F1	ug/Kg	☼	5	56 - 122
4-Nitrophenol	160	U F1	6880	2470	F1	ug/Kg	☼	36	43 - 141
4,6-Dinitro-2-methylphenol	91	U F2 F1	6880	143	J F1	ug/Kg	☼	2	67 - 120
Pentachlorophenol	41	U F1	6880	752	F1	ug/Kg	☼	11	56 - 116
Bis(2-chloroethyl)ether	8.0	U	3440	2350		ug/Kg	☼	68	64 - 105
N-Nitrosodi-n-propylamine	11	U	3440	2390		ug/Kg	☼	69	63 - 117
Hexachloroethane	12	U F1	3440	2080	F1	ug/Kg	☼	60	63 - 99
Nitrobenzene	11	U	3440	2310		ug/Kg	☼	67	66 - 108
Isophorone	400		3440	2930		ug/Kg	☼	74	68 - 111
Bis(2-chloroethoxy)methane	11	U	3440	2650		ug/Kg	☼	77	65 - 106
Naphthalene	19	J F1	3440	2180	F1	ug/Kg	☼	63	65 - 102
4-Chloroaniline	8.8	U	3440	1560		ug/Kg	☼	45	18 - 94
Hexachlorobutadiene	9.6	U *	3440	2900		ug/Kg	☼	84	60 - 108
2-Methylnaphthalene	17	J F1	3440	2170	F1	ug/Kg	☼	63	65 - 104
Hexachlorocyclopentadiene	21	U F1	3440	1220	F1	ug/Kg	☼	36	50 - 129
2-Chloronaphthalene	7.7	U	3440	2260		ug/Kg	☼	66	63 - 107
2-Nitroaniline	11	U	3440	1970		ug/Kg	☼	57	57 - 114
Dimethyl phthalate	9.9	U	3440	2520		ug/Kg	☼	73	68 - 112
Acenaphthylene	17	J F1	3440	2190	F1	ug/Kg	☼	63	67 - 107
2,6-Dinitrotoluene	18	U	3440	2550		ug/Kg	☼	74	70 - 114
3-Nitroaniline	10	U	3440	1870		ug/Kg	☼	54	30 - 94
Acenaphthene	17	J	3440	2200		ug/Kg	☼	63	62 - 108
Dibenzofuran	15	J	3440	2330		ug/Kg	☼	67	67 - 107
2,4-Dinitrotoluene	14	U	3440	2410		ug/Kg	☼	70	66 - 122
Diethyl phthalate	9.7	U	3440	2430		ug/Kg	☼	71	66 - 117
4-Chlorophenyl phenyl ether	10	U	3440	2650		ug/Kg	☼	77	66 - 110
Fluorene	17	J F1	3440	2190	F1	ug/Kg	☼	63	66 - 110
4-Nitroaniline	13	U F1	3440	1660	F1	ug/Kg	☼	48	49 - 118
N-Nitrosodiphenylamine	31	U F1	3440	2160	F1	ug/Kg	☼	63	65 - 114
4-Bromophenyl phenyl ether	11	U	3440	2700		ug/Kg	☼	78	59 - 122

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 460-119139-A-2-B MS
Matrix: Solid
Analysis Batch: 388312

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 388164

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Hexachlorobenzene	14	U	3440	2870		ug/Kg	☼	83	57 - 128
Phenanthrene	270	J	3440	2720		ug/Kg	☼	71	68 - 111
Anthracene	60	J F1	3440	2340	F1	ug/Kg	☼	66	69 - 111
Carbazole	18	J F1	3440	2140	F1	ug/Kg	☼	62	66 - 115
Di-n-butyl phthalate	10	U	3440	2520		ug/Kg	☼	73	67 - 119
Fluoranthene	550		3440	3470		ug/Kg	☼	85	64 - 114
Pyrene	440	F1	3440	2590	F1	ug/Kg	☼	63	64 - 121
Butyl benzyl phthalate	11	U F1	3440	1950	F1	ug/Kg	☼	57	65 - 125
3,3'-Dichlorobenzidine	38	U	3440	1460		ug/Kg	☼	42	18 - 88
Benzo[a]anthracene	300		3440	2780		ug/Kg	☼	72	68 - 110
Chrysene	360		3440	2830		ug/Kg	☼	72	70 - 111
Bis(2-ethylhexyl) phthalate	280	J F2 F1	3440	2260	F1	ug/Kg	☼	57	63 - 125
Di-n-octyl phthalate	17	U F1	3440	1730	F1	ug/Kg	☼	50	57 - 138
Benzo[b]fluoranthene	440		3440	2920		ug/Kg	☼	72	69 - 119
Benzo[k]fluoranthene	190		3440	2800		ug/Kg	☼	76	70 - 115
Benzo[a]pyrene	330		3440	2820		ug/Kg	☼	72	72 - 115
Indeno[1,2,3-cd]pyrene	230		3440	2250		ug/Kg	☼	59	53 - 137
Dibenz(a,h)anthracene	56	F1	3440	2070	F1	ug/Kg	☼	59	60 - 130
Benzo[g,h,i]perylene	230	J F1	3440	2050	F1	ug/Kg	☼	53	54 - 128
Diphenyl	29	U	3440	2220		ug/Kg	☼	65	64 - 108
Acetophenone	7.4	U	3440	2050		ug/Kg	☼	60	60 - 109
Benzaldehyde	26	U F1	6880	2630	F1	ug/Kg	☼	38	52 - 113
Caprolactam	25	U F1	6880	3130	F1	ug/Kg	☼	45	53 - 148
Atrazine	15	U	6880	5700		ug/Kg	☼	83	62 - 137
2,2'-oxybis[1-chloropropane]	14	U	3440	2870		ug/Kg	☼	84	39 - 122
1,2,4,5-Tetrachlorobenzene	25	U	3440	2740		ug/Kg	☼	80	57 - 112
2,3,4,6-Tetrachlorophenol	32	U F1	3440	799	F1	ug/Kg	☼	23	60 - 114

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
Nitrobenzene-d5	*71*		*37 - 94*
Phenol-d5	*63*		*32 - 91*
Terphenyl-d14	*60*		*24 - 109*
2,4,6-Tribromophenol	*49*		*10 - 103*
2-Fluorophenol	*60*		*25 - 92*
2-Fluorobiphenyl	*70*		*38 - 95*

Lab Sample ID: 460-119139-A-2-C MSD
Matrix: Solid
Analysis Batch: 388312

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 388164

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Phenol	280	J	3440	2700		ug/Kg	☼	71	58 - 103	16	30
2-Chlorophenol	8.7	U F1	3440	2060	F1	ug/Kg	☼	60	62 - 97	13	30
2-Methylphenol	26	J	3440	2530		ug/Kg	☼	73	61 - 103	18	30
4-Methylphenol	490		3440	3090		ug/Kg	☼	76	61 - 105	15	30
2-Nitrophenol	11	U F1	3440	1210	F1	ug/Kg	☼	35	65 - 104	4	30
2,4-Dimethylphenol	75	U	3440	2660		ug/Kg	☼	77	63 - 101	12	30
2,4-Dichlorophenol	8.0	U F1	3440	2180		ug/Kg	☼	63	61 - 103	13	30

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 460-119139-A-2-C MSD
Matrix: Solid
Analysis Batch: 388312

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 388164

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
4-Chloro-3-methylphenol	15	U	3440	2430		ug/Kg	☼	71	62 - 111	10	30
2,4,6-Trichlorophenol	9.7	U F1	3440	1690	F1	ug/Kg	☼	49	62 - 110	6	30
2,4,5-Trichlorophenol	34	U F1	3440	1800	F1	ug/Kg	☼	52	60 - 106	10	30
2,4-Dinitrophenol	260	U F1	6880	306	F1	ug/Kg	☼	4	56 - 122	2	30
4-Nitrophenol	160	U F1	6880	2420	F1	ug/Kg	☼	35	43 - 141	2	30
4,6-Dinitro-2-methylphenol	91	U F2 F1	6880	103	J F1 F2	ug/Kg	☼	1	67 - 120	33	30
Pentachlorophenol	41	U F1	6880	693	F1	ug/Kg	☼	10	56 - 116	8	30
Bis(2-chloroethyl)ether	8.0	U	3440	2710		ug/Kg	☼	79	64 - 105	14	30
N-Nitrosodi-n-propylamine	11	U	3440	2870		ug/Kg	☼	83	63 - 117	18	30
Hexachloroethane	12	U F1	3440	2330		ug/Kg	☼	68	63 - 99	11	30
Nitrobenzene	11	U	3440	2440		ug/Kg	☼	71	66 - 108	6	30
Isophorone	400		3440	2940		ug/Kg	☼	74	68 - 111	0	30
Bis(2-chloroethoxy)methane	11	U	3440	2850		ug/Kg	☼	83	65 - 106	7	30
Naphthalene	19	J F1	3440	2390		ug/Kg	☼	69	65 - 102	9	30
4-Chloroaniline	8.8	U	3440	1740		ug/Kg	☼	51	18 - 94	11	30
Hexachlorobutadiene	9.6	U *	3440	3080		ug/Kg	☼	90	60 - 108	6	30
2-Methylnaphthalene	17	J F1	3440	2440		ug/Kg	☼	70	65 - 104	12	30
Hexachlorocyclopentadiene	21	U F1	3440	1490	F1	ug/Kg	☼	43	50 - 129	20	30
2-Chloronaphthalene	7.7	U	3440	2400		ug/Kg	☼	70	63 - 107	6	30
2-Nitroaniline	11	U	3440	2170		ug/Kg	☼	63	57 - 114	10	30
Dimethyl phthalate	9.9	U	3440	2750		ug/Kg	☼	80	68 - 112	8	30
Acenaphthylene	17	J F1	3440	2350		ug/Kg	☼	68	67 - 107	7	30
2,6-Dinitrotoluene	18	U	3440	2750		ug/Kg	☼	80	70 - 114	7	30
3-Nitroaniline	10	U	3440	2080		ug/Kg	☼	61	30 - 94	11	30
Acenaphthene	17	J	3440	2350		ug/Kg	☼	68	62 - 108	7	30
Dibenzofuran	15	J	3440	2520		ug/Kg	☼	73	67 - 107	8	30
2,4-Dinitrotoluene	14	U	3440	2580		ug/Kg	☼	75	66 - 122	7	30
Diethyl phthalate	9.7	U	3440	2690		ug/Kg	☼	78	66 - 117	10	30
4-Chlorophenyl phenyl ether	10	U	3440	2970		ug/Kg	☼	86	66 - 110	11	30
Fluorene	17	J F1	3440	2330		ug/Kg	☼	67	66 - 110	6	30
4-Nitroaniline	13	U F1	3440	1740		ug/Kg	☼	50	49 - 118	4	30
N-Nitrosodiphenylamine	31	U F1	3440	2410		ug/Kg	☼	70	65 - 114	11	30
4-Bromophenyl phenyl ether	11	U	3440	3030		ug/Kg	☼	88	59 - 122	12	30
Hexachlorobenzene	14	U	3440	3080		ug/Kg	☼	89	57 - 128	7	30
Phenanthrene	270	J	3440	2730		ug/Kg	☼	72	68 - 111	0	30
Anthracene	60	J F1	3440	2440		ug/Kg	☼	69	69 - 111	4	30
Carbazole	18	J F1	3440	2180	F1	ug/Kg	☼	63	66 - 115	2	30
Di-n-butyl phthalate	10	U	3440	2680		ug/Kg	☼	78	67 - 119	6	30
Fluoranthene	550		3440	3150		ug/Kg	☼	76	64 - 114	9	30
Pyrene	440	F1	3440	2730		ug/Kg	☼	67	64 - 121	5	30
Butyl benzyl phthalate	11	U F1	3440	2210	F1	ug/Kg	☼	64	65 - 125	12	30
3,3'-Dichlorobenzidine	38	U	3440	1720		ug/Kg	☼	50	18 - 88	16	30
Benzo[a]anthracene	300		3440	2930		ug/Kg	☼	76	68 - 110	5	30
Chrysene	360		3440	3080		ug/Kg	☼	79	70 - 111	9	30
Bis(2-ethylhexyl) phthalate	280	J F2 F1	3440	3390	F2	ug/Kg	☼	90	63 - 125	40	30
Di-n-octyl phthalate	17	U F1	3440	1760	F1	ug/Kg	☼	51	57 - 138	1	30
Benzo[b]fluoranthene	440		3440	3050		ug/Kg	☼	76	69 - 119	4	30
Benzo[k]fluoranthene	190		3440	2930		ug/Kg	☼	80	70 - 115	5	30

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 460-119139-A-2-C MSD
Matrix: Solid
Analysis Batch: 388312

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 388164

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzo[a]pyrene	330		3440	3020		ug/Kg	☼	78	72 - 115	7	30
Indeno[1,2,3-cd]pyrene	230		3440	2670		ug/Kg	☼	71	53 - 137	17	30
Dibenz(a,h)anthracene	56	F1	3440	2540		ug/Kg	☼	72	60 - 130	20	30
Benzo[g,h,i]perylene	230	J F1	3440	2540		ug/Kg	☼	67	54 - 128	21	30
Diphenyl	29	U	3440	2320		ug/Kg	☼	68	64 - 108	5	30
Acetophenone	7.4	U	3440	2380		ug/Kg	☼	69	60 - 109	15	30
Benzaldehyde	26	U F1	6880	3130	F1	ug/Kg	☼	45	52 - 113	17	30
Caprolactam	25	U F1	6880	3080	F1	ug/Kg	☼	45	53 - 148	2	30
Atrazine	15	U	6880	6160		ug/Kg	☼	90	62 - 137	8	30
2,2'-oxybis[1-chloropropane]	14	U	3440	3250		ug/Kg	☼	94	39 - 122	12	30
1,2,4,5-Tetrachlorobenzene	25	U	3440	2920		ug/Kg	☼	85	57 - 112	6	30
2,3,4,6-Tetrachlorophenol	32	U F1	3440	774	F1	ug/Kg	☼	23	60 - 114	3	30

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
Nitrobenzene-d5	*69*		*37 - 94*
Phenol-d5	*69*		*32 - 91*
Terphenyl-d14	*63*		*24 - 109*
2,4,6-Tribromophenol	*43*		*10 - 103*
2-Fluorophenol	*63*		*25 - 92*
2-Fluorobiphenyl	*72*		*38 - 95*

Method: 8081B - Organochlorine Pesticides (GC)

Lab Sample ID: MB 460-388038/1-A
Matrix: Solid
Analysis Batch: 388154

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 388038

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	0.88	U	6.7	0.88	ug/Kg		09/01/16 02:48	09/01/16 13:53	1
4,4'-DDE	0.97	U	6.7	0.97	ug/Kg		09/01/16 02:48	09/01/16 13:53	1
4,4'-DDT	0.69	U	6.7	0.69	ug/Kg		09/01/16 02:48	09/01/16 13:53	1
Aldrin	0.81	U	6.7	0.81	ug/Kg		09/01/16 02:48	09/01/16 13:53	1
alpha-BHC	0.61	U	2.0	0.61	ug/Kg		09/01/16 02:48	09/01/16 13:53	1
beta-BHC	0.65	U	2.0	0.65	ug/Kg		09/01/16 02:48	09/01/16 13:53	1
Chlordane (technical)	30	U	67	30	ug/Kg		09/01/16 02:48	09/01/16 13:53	1
delta-BHC	0.73	U	2.0	0.73	ug/Kg		09/01/16 02:48	09/01/16 13:53	1
Dieldrin	0.87	U	2.0	0.87	ug/Kg		09/01/16 02:48	09/01/16 13:53	1
Endosulfan I	0.93	U	6.7	0.93	ug/Kg		09/01/16 02:48	09/01/16 13:53	1
Endosulfan II	1.1	U	6.7	1.1	ug/Kg		09/01/16 02:48	09/01/16 13:53	1
Endosulfan sulfate	0.78	U	6.7	0.78	ug/Kg		09/01/16 02:48	09/01/16 13:53	1
Endrin	0.85	U	6.7	0.85	ug/Kg		09/01/16 02:48	09/01/16 13:53	1
Endrin aldehyde	0.83	U	6.7	0.83	ug/Kg		09/01/16 02:48	09/01/16 13:53	1
Endrin ketone	0.93	U	6.7	0.93	ug/Kg		09/01/16 02:48	09/01/16 13:53	1
gamma-BHC (Lindane)	0.60	U	2.0	0.60	ug/Kg		09/01/16 02:48	09/01/16 13:53	1
Heptachlor	0.86	U	6.7	0.86	ug/Kg		09/01/16 02:48	09/01/16 13:53	1
Heptachlor epoxide	1.3	U	6.7	1.3	ug/Kg		09/01/16 02:48	09/01/16 13:53	1
Methoxychlor	1.4	U	6.7	1.4	ug/Kg		09/01/16 02:48	09/01/16 13:53	1
Toxaphene	20	U	67	20	ug/Kg		09/01/16 02:48	09/01/16 13:53	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl	93		50 - 150	09/01/16 02:48	09/01/16 13:53	1
DCB Decachlorobiphenyl	97		50 - 150	09/01/16 02:48	09/01/16 13:53	1
Tetrachloro-m-xylene	91		47 - 150	09/01/16 02:48	09/01/16 13:53	1
Tetrachloro-m-xylene	90		47 - 150	09/01/16 02:48	09/01/16 13:53	1

Lab Sample ID: LCS 460-388038/2-A
Matrix: Solid
Analysis Batch: 388154

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 388038

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
4,4'-DDD	133	125		ug/Kg		94	64 - 129
4,4'-DDD	133	134		ug/Kg		101	64 - 129
4,4'-DDE	133	125		ug/Kg		94	65 - 129
4,4'-DDE	133	127		ug/Kg		95	65 - 129
4,4'-DDT	133	120		ug/Kg		90	59 - 124
4,4'-DDT	133	127		ug/Kg		95	59 - 124
Aldrin	133	125		ug/Kg		94	66 - 127
Aldrin	133	130		ug/Kg		97	66 - 127
alpha-BHC	133	128		ug/Kg		96	69 - 131
alpha-BHC	133	134		ug/Kg		100	69 - 131
beta-BHC	133	127		ug/Kg		95	69 - 127
beta-BHC	133	131		ug/Kg		98	69 - 127
delta-BHC	133	127		ug/Kg		95	64 - 129
delta-BHC	133	136		ug/Kg		102	64 - 129
Dieldrin	133	127		ug/Kg		95	65 - 128
Dieldrin	133	130		ug/Kg		97	65 - 128
Endosulfan I	133	124		ug/Kg		93	66 - 126
Endosulfan I	133	129		ug/Kg		97	66 - 126
Endosulfan II	133	123		ug/Kg		92	64 - 124
Endosulfan II	133	128		ug/Kg		96	64 - 124
Endosulfan sulfate	133	131		ug/Kg		99	62 - 123
Endosulfan sulfate	133	141		ug/Kg		105	62 - 123
Endrin	133	112		ug/Kg		84	58 - 126
Endrin	133	117		ug/Kg		88	58 - 126
Endrin aldehyde	133	124		ug/Kg		93	69 - 131
Endrin aldehyde	133	139		ug/Kg		104	69 - 131
Endrin ketone	133	130		ug/Kg		98	62 - 125
Endrin ketone	133	141		ug/Kg		106	62 - 125
gamma-BHC (Lindane)	133	124		ug/Kg		93	67 - 126
gamma-BHC (Lindane)	133	131		ug/Kg		98	67 - 126
Heptachlor	133	123		ug/Kg		92	63 - 125
Heptachlor	133	127		ug/Kg		95	63 - 125
Heptachlor epoxide	133	120		ug/Kg		90	64 - 125
Heptachlor epoxide	133	125		ug/Kg		94	64 - 125
Methoxychlor	133	117		ug/Kg		88	56 - 123
Methoxychlor	133	134		ug/Kg		101	56 - 123

Surrogate	LCS %Recovery	LCS Qualifier	Limits
DCB Decachlorobiphenyl	102		50 - 150
DCB Decachlorobiphenyl	104		50 - 150
Tetrachloro-m-xylene	98		47 - 150
Tetrachloro-m-xylene	98		47 - 150

Method: 8081B - Organochlorine Pesticides (GC) (Continued)

Lab Sample ID: 460-119086-A-6-M MS
Matrix: Solid
Analysis Batch: 388154

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 388038

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
4,4'-DDD	0.96	U	145	126		ug/Kg	☼	87	64 - 129
4,4'-DDD	0.96	U	145	137		ug/Kg	☼	94	64 - 129
4,4'-DDE	1.1	U	145	125		ug/Kg	☼	86	65 - 129
4,4'-DDE	1.1	U	145	129		ug/Kg	☼	89	65 - 129
4,4'-DDT	0.75	U	145	123		ug/Kg	☼	85	59 - 124
4,4'-DDT	0.75	U	145	129		ug/Kg	☼	89	59 - 124
Aldrin	0.88	U	145	123		ug/Kg	☼	85	66 - 127
Aldrin	0.88	U	145	131		ug/Kg	☼	90	66 - 127
alpha-BHC	0.66	U	145	126		ug/Kg	☼	87	69 - 131
alpha-BHC	0.66	U	145	132		ug/Kg	☼	91	69 - 131
beta-BHC	0.71	U	145	126		ug/Kg	☼	87	69 - 127
beta-BHC	0.71	U	145	132		ug/Kg	☼	91	69 - 127
delta-BHC	0.80	U	145	126		ug/Kg	☼	87	64 - 129
delta-BHC	0.80	U	145	136		ug/Kg	☼	93	64 - 129
Dieldrin	0.95	U	145	127		ug/Kg	☼	87	65 - 128
Dieldrin	0.95	U	145	132		ug/Kg	☼	91	65 - 128
Endosulfan I	1.0	U	145	124		ug/Kg	☼	85	66 - 126
Endosulfan I	1.0	U	145	133		ug/Kg	☼	92	66 - 126
Endosulfan II	1.1	U	145	124		ug/Kg	☼	86	64 - 124
Endosulfan II	1.1	U	145	130		ug/Kg	☼	90	64 - 124
Endosulfan sulfate	0.85	U	145	135		ug/Kg	☼	93	62 - 123
Endosulfan sulfate	0.85	U	145	142		ug/Kg	☼	98	62 - 123
Endrin	0.93	U	145	112		ug/Kg	☼	77	58 - 126
Endrin	0.93	U	145	119		ug/Kg	☼	82	58 - 126
Endrin aldehyde	0.90	U	145	125		ug/Kg	☼	86	69 - 131
Endrin aldehyde	0.90	U	145	142		ug/Kg	☼	98	69 - 131
Endrin ketone	1.0	U	145	132		ug/Kg	☼	91	62 - 125
Endrin ketone	1.0	U	145	146		ug/Kg	☼	100	62 - 125
gamma-BHC (Lindane)	0.65	U	145	123		ug/Kg	☼	85	67 - 126
gamma-BHC (Lindane)	0.65	U	145	130		ug/Kg	☼	90	67 - 126
Heptachlor	0.94	U	145	122		ug/Kg	☼	84	63 - 125
Heptachlor	0.94	U	145	128		ug/Kg	☼	88	63 - 125
Heptachlor epoxide	1.4	U	145	120		ug/Kg	☼	83	64 - 125
Heptachlor epoxide	1.4	U	145	128		ug/Kg	☼	88	64 - 125
Methoxychlor	1.5	U	145	121		ug/Kg	☼	83	56 - 123
Methoxychlor	1.5	U	145	135		ug/Kg	☼	93	56 - 123

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
DCB Decachlorobiphenyl	*94*		*50 - 150*
DCB Decachlorobiphenyl	*98*		*50 - 150*
Tetrachloro-m-xylene	*89*		*47 - 150*
Tetrachloro-m-xylene	*89*		*47 - 150*

Method: 8081B - Organochlorine Pesticides (GC) (Continued)

Lab Sample ID: 460-119086-A-6-N MSD
Matrix: Solid
Analysis Batch: 388154

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 388038

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
4,4'-DDD	0.96	U	145	112		ug/Kg	☼	77	64 - 129	12	30
4,4'-DDD	0.96	U	145	124		ug/Kg	☼	85	64 - 129	10	30
4,4'-DDE	1.1	U	145	114		ug/Kg	☼	79	65 - 129	9	30
4,4'-DDE	1.1	U	145	116		ug/Kg	☼	80	65 - 129	10	30
4,4'-DDT	0.75	U	145	109		ug/Kg	☼	75	59 - 124	12	30
4,4'-DDT	0.75	U	145	118		ug/Kg	☼	81	59 - 124	9	30
Aldrin	0.88	U	145	114		ug/Kg	☼	79	66 - 127	8	30
Aldrin	0.88	U	145	120		ug/Kg	☼	83	66 - 127	8	30
alpha-BHC	0.66	U	145	116		ug/Kg	☼	80	69 - 131	8	30
alpha-BHC	0.66	U	145	121		ug/Kg	☼	84	69 - 131	8	30
beta-BHC	0.71	U	145	115		ug/Kg	☼	80	69 - 127	9	30
beta-BHC	0.71	U	145	122		ug/Kg	☼	84	69 - 127	8	30
delta-BHC	0.80	U	145	116		ug/Kg	☼	80	64 - 129	8	30
delta-BHC	0.80	U	145	124		ug/Kg	☼	86	64 - 129	9	30
Dieldrin	0.95	U	145	116		ug/Kg	☼	80	65 - 128	9	30
Dieldrin	0.95	U	145	120		ug/Kg	☼	83	65 - 128	9	30
Endosulfan I	1.0	U	145	113		ug/Kg	☼	78	66 - 126	9	30
Endosulfan I	1.0	U	145	120		ug/Kg	☼	83	66 - 126	10	30
Endosulfan II	1.1	U	145	109		ug/Kg	☼	75	64 - 124	13	30
Endosulfan II	1.1	U	145	118		ug/Kg	☼	81	64 - 124	10	30
Endosulfan sulfate	0.85	U	145	121		ug/Kg	☼	84	62 - 123	11	30
Endosulfan sulfate	0.85	U	145	131		ug/Kg	☼	90	62 - 123	8	30
Endrin	0.93	U	145	101		ug/Kg	☼	70	58 - 126	10	30
Endrin	0.93	U	145	108		ug/Kg	☼	74	58 - 126	10	30
Endrin aldehyde	0.90	U	145	111		ug/Kg	☼	77	69 - 131	12	30
Endrin aldehyde	0.90	U	145	128		ug/Kg	☼	88	69 - 131	10	30
Endrin ketone	1.0	U	145	115		ug/Kg	☼	80	62 - 125	13	30
Endrin ketone	1.0	U	145	132		ug/Kg	☼	91	62 - 125	9	30
gamma-BHC (Lindane)	0.65	U	145	113		ug/Kg	☼	78	67 - 126	8	30
gamma-BHC (Lindane)	0.65	U	145	120		ug/Kg	☼	83	67 - 126	8	30
Heptachlor	0.94	U	145	113		ug/Kg	☼	78	63 - 125	8	30
Heptachlor	0.94	U	145	117		ug/Kg	☼	81	63 - 125	9	30
Heptachlor epoxide	1.4	U	145	110		ug/Kg	☼	76	64 - 125	9	30
Heptachlor epoxide	1.4	U	145	117		ug/Kg	☼	81	64 - 125	9	30
Methoxychlor	1.5	U	145	110		ug/Kg	☼	76	56 - 123	9	30
Methoxychlor	1.5	U	145	127		ug/Kg	☼	87	56 - 123	7	30

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
DCB Decachlorobiphenyl	*85*		*50 - 150*
DCB Decachlorobiphenyl	*89*		*50 - 150*
Tetrachloro-m-xylene	*82*		*47 - 150*
Tetrachloro-m-xylene	*82*		*47 - 150*

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Lab Sample ID: MB 460-388043/1-A
Matrix: Solid
Analysis Batch: 388251

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 388043

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor 1016	8.9	U	67	8.9	ug/Kg		09/01/16 03:13	09/01/16 20:53	1
Aroclor 1221	8.9	U	67	8.9	ug/Kg		09/01/16 03:13	09/01/16 20:53	1
Aroclor 1232	8.9	U	67	8.9	ug/Kg		09/01/16 03:13	09/01/16 20:53	1
Aroclor 1242	8.9	U	67	8.9	ug/Kg		09/01/16 03:13	09/01/16 20:53	1
Aroclor 1248	8.9	U	67	8.9	ug/Kg		09/01/16 03:13	09/01/16 20:53	1
Aroclor 1254	9.2	U	67	9.2	ug/Kg		09/01/16 03:13	09/01/16 20:53	1
Aroclor 1260	9.2	U	67	9.2	ug/Kg		09/01/16 03:13	09/01/16 20:53	1
Aroclor-1262	9.2	U	67	9.2	ug/Kg		09/01/16 03:13	09/01/16 20:53	1
Aroclor 1268	9.2	U	67	9.2	ug/Kg		09/01/16 03:13	09/01/16 20:53	1
Polychlorinated biphenyls, Total	9.2	U	67	9.2	ug/Kg		09/01/16 03:13	09/01/16 20:53	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*99*		*35 - 150*	*09/01/16 03:13*	*09/01/16 20:53*	*1*
DCB Decachlorobiphenyl	*111*		*35 - 150*	*09/01/16 03:13*	*09/01/16 20:53*	*1*

Lab Sample ID: LCS 460-388043/2-A
Matrix: Solid
Analysis Batch: 388251

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 388043

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Aroclor 1016	333	333		ug/Kg		100	77 - 150
Aroclor 1016	333	370		ug/Kg		111	77 - 150
Aroclor 1260	333	336		ug/Kg		101	79 - 150
Aroclor 1260	333	374		ug/Kg		112	79 - 150

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
DCB Decachlorobiphenyl	*93*		*35 - 150*
DCB Decachlorobiphenyl	*103*		*35 - 150*

Lab Sample ID: 460-119355-B-1-B MS
Matrix: Solid
Analysis Batch: 388251

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 388043

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Aroclor 1016	9.2	U	346	335		ug/Kg	☼	97	77 - 150
Aroclor 1016	9.2	U	346	375		ug/Kg	☼	109	77 - 150
Aroclor 1260	9.5	U	346	322		ug/Kg	☼	93	79 - 150
Aroclor 1260	9.5	U	346	342		ug/Kg	☼	99	79 - 150

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
DCB Decachlorobiphenyl	*88*		*35 - 150*
DCB Decachlorobiphenyl	*95*		*35 - 150*

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography (Continued)

Lab Sample ID: 460-119355-B-1-C MSD
Matrix: Solid
Analysis Batch: 388251

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 388043

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Aroclor 1016	9.2	U	346	335		ug/Kg	☼	97	77 - 150	0	30
Aroclor 1016	9.2	U	346	374		ug/Kg	☼	108	77 - 150	0	30
Aroclor 1260	9.5	U	346	321		ug/Kg	☼	93	79 - 150	0	30
Aroclor 1260	9.5	U	346	344		ug/Kg	☼	99	79 - 150	0	30

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
DCB Decachlorobiphenyl	*88*		*35 - 150*
DCB Decachlorobiphenyl	*95*		*35 - 150*

Method: 6010C - Metals (ICP)

Lab Sample ID: MB 460-388254/1-A ^2
Matrix: Solid
Analysis Batch: 388460

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 388254

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	10.3	U	20.0	10.3	mg/Kg		09/01/16 18:15	09/02/16 14:37	2
Antimony	0.79	U	2.0	0.79	mg/Kg		09/01/16 18:15	09/02/16 14:37	2
Arsenic	0.49	U	1.5	0.49	mg/Kg		09/01/16 18:15	09/02/16 14:37	2
Barium	0.72	U	20.0	0.72	mg/Kg		09/01/16 18:15	09/02/16 14:37	2
Beryllium	0.17	U	0.20	0.17	mg/Kg		09/01/16 18:15	09/02/16 14:37	2
Cadmium	0.21	U	0.40	0.21	mg/Kg		09/01/16 18:15	09/02/16 14:37	2
Calcium	29.6	U	500	29.6	mg/Kg		09/01/16 18:15	09/02/16 14:37	2
Chromium	0.48	U	1.0	0.48	mg/Kg		09/01/16 18:15	09/02/16 14:37	2
Cobalt	0.58	U	5.0	0.58	mg/Kg		09/01/16 18:15	09/02/16 14:37	2
Copper	0.65	U	2.5	0.65	mg/Kg		09/01/16 18:15	09/02/16 14:37	2
Iron	11.3	U	15.0	11.3	mg/Kg		09/01/16 18:15	09/02/16 14:37	2
Lead	0.39	U	1.0	0.39	mg/Kg		09/01/16 18:15	09/02/16 14:37	2
Magnesium	25.0	U	500	25.0	mg/Kg		09/01/16 18:15	09/02/16 14:37	2
Manganese	0.53	U	1.5	0.53	mg/Kg		09/01/16 18:15	09/02/16 14:37	2
Nickel	0.73	U	4.0	0.73	mg/Kg		09/01/16 18:15	09/02/16 14:37	2
Potassium	15.2	U	500	15.2	mg/Kg		09/01/16 18:15	09/02/16 14:37	2
Selenium	0.69	U	2.0	0.69	mg/Kg		09/01/16 18:15	09/02/16 14:37	2
Silver	0.18	U	1.0	0.18	mg/Kg		09/01/16 18:15	09/02/16 14:37	2
Sodium	33.9	U	500	33.9	mg/Kg		09/01/16 18:15	09/02/16 14:37	2
Thallium	0.89	U	2.0	0.89	mg/Kg		09/01/16 18:15	09/02/16 14:37	2
Vanadium	0.50	U	5.0	0.50	mg/Kg		09/01/16 18:15	09/02/16 14:37	2
Zinc	0.73	U	3.0	0.73	mg/Kg		09/01/16 18:15	09/02/16 14:37	2

Lab Sample ID: LCSSRM 460-388254/2-A ^4
Matrix: Solid
Analysis Batch: 388460

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 388254

Analyte	Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec. Limits
Aluminum	8080	7679		mg/Kg		95.0	49.4 - 151.0
Antimony	88.2	48.00		mg/Kg		54.4	2.2 - 197.3

Method: 6010C - Metals (ICP) (Continued)

Lab Sample ID: LCSSRM 460-388254/2-A ^4
Matrix: Solid
Analysis Batch: 388460

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 388254

Analyte	Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	57.0	54.73		mg/Kg		96.0	75.1 - 124.9
Barium	110	117.1		mg/Kg		106.4	82.4 - 118.2
Beryllium	67.5	66.08		mg/Kg		97.9	82.8 - 117.2
Cadmium	77.8	78.18		mg/Kg		100.5	82.8 - 117.2
Calcium	6450	6250		mg/Kg		96.9	82.2 - 117.7
Chromium	65.0	65.78		mg/Kg		101.2	79.1 - 121.1
Cobalt	58.8	61.09		mg/Kg		103.9	83.8 - 116.3
Copper	56.4	53.45		mg/Kg		94.8	80.5 - 119.7
Iron	14700	14570		mg/Kg		99.1	45.6 - 154.4
Lead	85.6	92.04		mg/Kg		107.5	82.0 - 118.0
Magnesium	2710	2543		mg/Kg		93.8	75.6 - 124.0
Manganese	273	278.6		mg/Kg		102.1	81.0 - 118.7
Nickel	61.3	64.40		mg/Kg		105.1	82.5 - 117.5
Potassium	2420	2250		mg/Kg		93.0	69.4 - 131.0
Selenium	78.9	75.15		mg/Kg		95.2	77.6 - 122.4
Silver	54.2	51.60		mg/Kg		95.2	74.7 - 125.3
Sodium	914	837.0	J	mg/Kg		91.6	71.6 - 128.0
Thallium	178	189.9		mg/Kg		106.7	79.2 - 120.2
Vanadium	56.3	55.96		mg/Kg		99.4	77.1 - 122.9
Zinc	198	204.8		mg/Kg		103.4	82.3 - 117.2

Lab Sample ID: 460-119404-B-13-C MS ^4
Matrix: Solid
Analysis Batch: 388460

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 388254

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Aluminum	7780		171	10630	4	mg/Kg	☼	1664	75 - 125
Antimony	1.4	J F1	42.8	21.36	F1	mg/Kg	☼	50	75 - 125
Arsenic	7.6		171	180.4		mg/Kg	☼	101	75 - 125
Barium	67.1		171	254.3		mg/Kg	☼	109	75 - 125
Beryllium	0.30	J	4.28	4.85		mg/Kg	☼	106	75 - 125
Cadmium	0.36	U	4.28	4.78		mg/Kg	☼	112	75 - 125
Calcium	8610		1710	7089	4	mg/Kg	☼	-89	75 - 125

Method: 6010C - Metals (ICP) (Continued)

Lab Sample ID: 460-119404-B-13-C MS ^4
Matrix: Solid
Analysis Batch: 388460

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 388254

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Chromium	23.3	F1	17.1	47.41	F1	mg/Kg	☼	141	75 - 125		
Cobalt	10		42.8	56.81		mg/Kg	☼	109	75 - 125		
Copper	42.8		21.4	69.54		mg/Kg	☼	125	75 - 125		
Iron	15400		85.6	18060	4	mg/Kg	☼	3116	75 - 125		
Lead	196		42.8	910.2	4	mg/Kg	☼	1670	75 - 125		
Magnesium	7060		1710	7781	4	mg/Kg	☼	42	75 - 125		
Manganese	457		42.8	476.5	4	mg/Kg	☼	45	75 - 125		
Nickel	16.5		42.8	64.89		mg/Kg	☼	113	75 - 125		
Potassium	1260		1710	3293		mg/Kg	☼	119	75 - 125		
Selenium	1.2	U	171	169.2		mg/Kg	☼	99	75 - 125		
Silver	0.30	U	4.28	4.14		mg/Kg	☼	97	75 - 125		
Sodium	213	J	1710	1914		mg/Kg	☼	99	75 - 125		
Thallium	1.5	U	171	179.7		mg/Kg	☼	105	75 - 125		
Vanadium	55.9	F1	42.8	206.1	F1	mg/Kg	☼	351	75 - 125		
Zinc	258		42.8	281.2	4	mg/Kg	☼	55	75 - 125		

Lab Sample ID: 460-119404-B-13-B DU ^4
Matrix: Solid
Analysis Batch: 388460

Client Sample ID: Duplicate
Prep Type: Total/NA
Prep Batch: 388254

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Aluminum	7780			8418		mg/Kg	☼			8	20
Antimony	1.4	J F1		1.51	J	mg/Kg	☼			10	20
Arsenic	7.6			7.48		mg/Kg	☼			2	20
Barium	67.1			73.91		mg/Kg	☼			10	20
Beryllium	0.30	J		0.274	J	mg/Kg	☼			9	20
Cadmium	0.36	U		0.34	U	mg/Kg	☼			NC	20
Calcium	8610			5956	F3	mg/Kg	☼			36	20
Chromium	23.3	F1		25.39		mg/Kg	☼			8	20
Cobalt	10			10.92		mg/Kg	☼			9	20
Copper	42.8			42.21		mg/Kg	☼			1	20
Iron	15400			15890		mg/Kg	☼			3	20
Lead	196			189.6		mg/Kg	☼			3	20
Magnesium	7060			6192		mg/Kg	☼			13	20
Manganese	457			344.3	F3	mg/Kg	☼			28	20
Nickel	16.5			22.88	F5	mg/Kg	☼			32	20
Potassium	1260			1393		mg/Kg	☼			10	20
Selenium	1.2	U		1.1	U	mg/Kg	☼			NC	20
Silver	0.30	U		0.29	U	mg/Kg	☼			NC	20
Sodium	213	J		237.4	J	mg/Kg	☼			11	20
Thallium	1.5	U		1.4	U	mg/Kg	☼			NC	20
Vanadium	55.9	F1		60.24		mg/Kg	☼			7	20
Zinc	258			227.2		mg/Kg	☼			13	20

Method: 6010C - Metals (ICP) (Continued)

Lab Sample ID: MB 460-388261/1-A ^2
Matrix: Solid
Analysis Batch: 388464

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 388261

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	10.3	U	20.0	10.3	mg/Kg		09/01/16 18:15	09/02/16 15:25	2
Antimony	0.79	U	2.0	0.79	mg/Kg		09/01/16 18:15	09/02/16 15:25	2
Arsenic	0.49	U	1.5	0.49	mg/Kg		09/01/16 18:15	09/02/16 15:25	2
Barium	0.72	U	20.0	0.72	mg/Kg		09/01/16 18:15	09/02/16 15:25	2
Beryllium	0.17	U	0.20	0.17	mg/Kg		09/01/16 18:15	09/02/16 15:25	2
Cadmium	0.21	U	0.40	0.21	mg/Kg		09/01/16 18:15	09/02/16 15:25	2
Calcium	29.6	U	500	29.6	mg/Kg		09/01/16 18:15	09/02/16 15:25	2
Chromium	0.48	U	1.0	0.48	mg/Kg		09/01/16 18:15	09/02/16 15:25	2
Cobalt	0.58	U	5.0	0.58	mg/Kg		09/01/16 18:15	09/02/16 15:25	2
Copper	0.65	U	2.5	0.65	mg/Kg		09/01/16 18:15	09/02/16 15:25	2
Iron	11.3	U	15.0	11.3	mg/Kg		09/01/16 18:15	09/02/16 15:25	2
Lead	0.39	U	1.0	0.39	mg/Kg		09/01/16 18:15	09/02/16 15:25	2
Magnesium	25.0	U	500	25.0	mg/Kg		09/01/16 18:15	09/02/16 15:25	2
Manganese	0.53	U	1.5	0.53	mg/Kg		09/01/16 18:15	09/02/16 15:25	2
Nickel	0.73	U	4.0	0.73	mg/Kg		09/01/16 18:15	09/02/16 15:25	2
Potassium	15.2	U	500	15.2	mg/Kg		09/01/16 18:15	09/02/16 15:25	2
Selenium	0.69	U	2.0	0.69	mg/Kg		09/01/16 18:15	09/02/16 15:25	2
Silver	0.18	U	1.0	0.18	mg/Kg		09/01/16 18:15	09/02/16 15:25	2
Sodium	33.9	U	500	33.9	mg/Kg		09/01/16 18:15	09/02/16 15:25	2
Thallium	0.89	U	2.0	0.89	mg/Kg		09/01/16 18:15	09/02/16 15:25	2
Vanadium	0.50	U	5.0	0.50	mg/Kg		09/01/16 18:15	09/02/16 15:25	2
Zinc	0.73	U	3.0	0.73	mg/Kg		09/01/16 18:15	09/02/16 15:25	2

Lab Sample ID: LCSSRM 460-388261/2-A
Matrix: Solid
Analysis Batch: 388464

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 388261

Analyte	Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec. Limits
Aluminum	8080	7592		mg/Kg		94.0	49.4 - 151.0
Antimony	88.2	47.04		mg/Kg		53.3	2.2 - 197.3
Arsenic	57.0	52.48		mg/Kg		92.1	75.1 - 124.9
Barium	110	106.1		mg/Kg		96.4	82.4 - 118.2
Beryllium	67.5	62.74		mg/Kg		92.9	82.8 - 117.2
Cadmium	77.8	72.82		mg/Kg		93.6	82.8 - 117.2
Calcium	6450	6398		mg/Kg		99.2	82.2 - 117.7
Chromium	65.0	65.12		mg/Kg		100.2	79.1 - 121.1
Cobalt	58.8	57.70		mg/Kg		98.1	83.8 - 116.3
Copper	56.4	53.72		mg/Kg		95.2	80.5 - 119.7
Iron	14700	14320		mg/Kg		97.4	45.6 - 154.4

Method: 6010C - Metals (ICP) (Continued)

Lab Sample ID: LCSSRM 460-388261/2-A
Matrix: Solid
Analysis Batch: 388464

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 388261

Analyte	Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec. Limits
Lead	85.6	86.52		mg/Kg		101.1	82.0 - 118.0
Magnesium	2710	2514		mg/Kg		92.8	75.6 - 124.0
Manganese	273	275.6		mg/Kg		101.0	81.0 - 118.7
Nickel	61.3	60.84		mg/Kg		99.2	82.5 - 117.5
Potassium	2420	2252		mg/Kg		93.1	69.4 - 131.0
Selenium	78.9	73.00		mg/Kg		92.5	77.6 - 122.4
Silver	54.2	48.58		mg/Kg		89.6	74.7 - 125.3
Sodium	914	850.8	J	mg/Kg		93.1	71.6 - 128.0
Thallium	178	175.4		mg/Kg		98.5	79.2 - 120.2
Vanadium	56.3	55.14		mg/Kg		97.9	77.1 - 122.9
Zinc	198	194.1		mg/Kg		98.0	82.3 - 117.2

Lab Sample ID: 460-119414-A-1-C MS
Matrix: Solid
Analysis Batch: 388464

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 388261

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Aluminum	37000		183	39900	4	mg/Kg	☼	1575	75 - 125
Antimony	3.6	U F1	45.8	13.00	F1	mg/Kg	☼	28	75 - 125
Arsenic	2.2	U	183	156.9		mg/Kg	☼	86	75 - 125
Barium	475		183	683.4		mg/Kg	☼	113	75 - 125
Beryllium	1.8		4.58	5.98		mg/Kg	☼	92	75 - 125
Cadmium	0.95	U F1	4.58	2.36	F1	mg/Kg	☼	51	75 - 125
Calcium	438	J	1830	2116	J	mg/Kg	☼	92	75 - 125
Chromium	97.5		18.3	114.8	4	mg/Kg	☼	94	75 - 125
Cobalt	18.3	J	45.8	61.65		mg/Kg	☼	94	75 - 125
Copper	20.6		22.9	41.37		mg/Kg	☼	91	75 - 125
Iron	64200		91.7	66830	4	mg/Kg	☼	2839	75 - 125
Lead	14.4		45.8	57.57		mg/Kg	☼	94	75 - 125
Magnesium	10100		1830	11930	4	mg/Kg	☼	102	75 - 125
Manganese	740		45.8	798.0	4	mg/Kg	☼	127	75 - 125
Nickel	36.9		45.8	81.40		mg/Kg	☼	97	75 - 125
Potassium	9290		1830	11430	4	mg/Kg	☼	117	75 - 125
Selenium	3.1	U	183	153.6		mg/Kg	☼	84	75 - 125
Silver	0.80	U	4.58	3.60	J	mg/Kg	☼	79	75 - 125
Sodium	154	U	1830	1686	J	mg/Kg	☼	92	75 - 125
Thallium	4.0	U	183	165.2		mg/Kg	☼	90	75 - 125
Vanadium	106		45.8	151.7		mg/Kg	☼	100	75 - 125
Zinc	116		45.8	166.6		mg/Kg	☼	109	75 - 125

Method: 6010C - Metals (ICP) (Continued)

Lab Sample ID: 460-119414-A-1-B DU — **Client Sample ID: Duplicate**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 388464 — **Prep Batch: 388261**

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Aluminum	37000		38360		mg/Kg	☼	4	20
Antimony	3.6	U F1	3.7	U	mg/Kg	☼	NC	20
Arsenic	2.2	U	2.3	U	mg/Kg	☼	NC	20
Barium	475		494.2		mg/Kg	☼	4	20
Beryllium	1.8		1.82		mg/Kg	☼	2	20
Cadmium	0.95	U F1	0.99	U	mg/Kg	☼	NC	20
Calcium	438	J	457.5	J	mg/Kg	☼	4	20
Chromium	97.5		101.2		mg/Kg	☼	4	20
Cobalt	18.3	J	19.11	J	mg/Kg	☼	4	20
Copper	20.6		21.43		mg/Kg	☼	4	20
Iron	64200		66580		mg/Kg	☼	4	20
Lead	14.4		15.71		mg/Kg	☼	9	20
Magnesium	10100		10430		mg/Kg	☼	4	20
Manganese	740		767.5		mg/Kg	☼	4	20
Nickel	36.9		38.60		mg/Kg	☼	5	20
Potassium	9290		9633		mg/Kg	☼	4	20
Selenium	3.1	U	3.3	U	mg/Kg	☼	NC	20
Silver	0.80	U	0.83	U	mg/Kg	☼	NC	20
Sodium	154	U	160	U	mg/Kg	☼	NC	20
Thallium	4.0	U	4.2	U	mg/Kg	☼	NC	20
Vanadium	106		109.9		mg/Kg	☼	4	20
Zinc	116		120.6		mg/Kg	☼	4	20

Method: 7471B - Mercury (CVAA)

Lab Sample ID: MB 460-388333/10-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 388408 — **Prep Batch: 388333**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.011	U	0.017	0.011	mg/Kg		09/02/16 04:21	09/02/16 08:24	1

Lab Sample ID: LCSSRM 460-388333/11-A ^20 — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 388408 — **Prep Batch: 388333**

Analyte	Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	12.3	11.26		mg/Kg		91.6	64.1 - 135.8

Lab Sample ID: 460-119469-A-6-N MS — **Client Sample ID: Matrix Spike**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 388408 — **Prep Batch: 388333**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.77		0.167	1.22	4	mg/Kg	☼	269	75 - 125

Method: 7471B - Mercury (CVAA) (Continued)

Lab Sample ID: 460-119469-A-6-M DU
Matrix: Solid
Analysis Batch: 388408

Client Sample ID: Duplicate
Prep Type: Total/NA
Prep Batch: 388333

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Mercury	0.77			0.989	F3	mg/Kg	☼			25	20

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.
*	LCS or LCSD is outside acceptance limits.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
*	RPD of the LCS and LCSD exceeds the control limits

GC/MS VOA TICs

Qualifier	Qualifier Description
J	Indicates an Estimated Value for TICs
N	This flag indicates the presumptive evidence of a compound.

GC/MS Semi VOA

Qualifier	Qualifier Description
F1	MS and/or MSD Recovery is outside acceptance limits.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
F2	MS/MSD RPD exceeds control limits
U	Indicates the analyte was analyzed for but not detected.
*	LCS or LCSD is outside acceptance limits.
X	Surrogate is outside control limits

GC/MS Semi VOA TICs

Qualifier	Qualifier Description
J	Indicates an Estimated Value for TICs
N	This flag indicates the presumptive evidence of a compound.
A	The tentatively identified compound is a suspected aldol-condensation product.

GC Semi VOA

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.

Metals

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
F3	Duplicate RPD exceeds the control limit
F5	Duplicate RPD exceeds limit, and one or both sample results are less than 5 times RL. The data are considered valid because the absolute difference is less than the RL.
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.
F1	MS and/or MSD Recovery is outside acceptance limits.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration

Glossary (Continued)

Abbreviation	These commonly used abbreviations may or may not be present in this report.
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative error ratio
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

GC/MS VOA

Prep Batch: 387847

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-119390-1	SB1-2-2.5	Total/NA	Solid	5035	
460-119390-2	SB1-10-12	Total/NA	Solid	5035	
460-119390-3	SB2-5-5.5	Total/NA	Solid	5035	
460-119390-4	SB2-24.25	Total/NA	Solid	5035	
LB3 460-387847/1-A	Method Blank	Total/NA	Solid	5035	

Analysis Batch: 388063

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-119390-1	SB1-2-2.5	Total/NA	Solid	8260C	387847
460-119390-2	SB1-10-12	Total/NA	Solid	8260C	387847
460-119390-3	SB2-5-5.5	Total/NA	Solid	8260C	387847
LB3 460-387847/1-A	Method Blank	Total/NA	Solid	8260C	387847
MB 460-388063/7	Method Blank	Total/NA	Solid	8260C	
LCS 460-388063/3	Lab Control Sample	Total/NA	Solid	8260C	
LCSD 460-388063/4	Lab Control Sample Dup	Total/NA	Solid	8260C	

Analysis Batch: 388214

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-119390-4	SB2-24.25	Total/NA	Solid	8260C	387847
MB 460-388214/7	Method Blank	Total/NA	Solid	8260C	
LCS 460-388214/3	Lab Control Sample	Total/NA	Solid	8260C	
LCSD 460-388214/4	Lab Control Sample Dup	Total/NA	Solid	8260C	

GC/MS Semi VOA

Prep Batch: 388164

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-119390-1	SB1-2-2.5	Total/NA	Solid	3546	
460-119390-2	SB1-10-12	Total/NA	Solid	3546	
460-119390-3	SB2-5-5.5	Total/NA	Solid	3546	
460-119390-4	SB2-24.25	Total/NA	Solid	3546	
MB 460-388164/1-A	Method Blank	Total/NA	Solid	3546	
LCS 460-388164/2-A	Lab Control Sample	Total/NA	Solid	3546	
LCS 460-388164/3-A	Lab Control Sample	Total/NA	Solid	3546	
460-119139-A-2-B MS	Matrix Spike	Total/NA	Solid	3546	
460-119139-A-2-C MSD	Matrix Spike Duplicate	Total/NA	Solid	3546	

Analysis Batch: 388312

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 460-388164/1-A	Method Blank	Total/NA	Solid	8270D	388164
LCS 460-388164/2-A	Lab Control Sample	Total/NA	Solid	8270D	388164
LCS 460-388164/3-A	Lab Control Sample	Total/NA	Solid	8270D	388164
460-119139-A-2-B MS	Matrix Spike	Total/NA	Solid	8270D	388164
460-119139-A-2-C MSD	Matrix Spike Duplicate	Total/NA	Solid	8270D	388164

Analysis Batch: 388648

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-119390-1	SB1-2-2.5	Total/NA	Solid	8270D	388164
460-119390-2	SB1-10-12	Total/NA	Solid	8270D	388164
460-119390-3	SB2-5-5.5	Total/NA	Solid	8270D	388164

GC/MS Semi VOA (Continued)

Analysis Batch: 388648 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-119390-4	SB2-24.25	Total/NA	Solid	8270D	388164

GC Semi VOA

Prep Batch: 388038

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-119390-1	SB1-2-2.5	Total/NA	Solid	3546	
460-119390-2	SB1-10-12	Total/NA	Solid	3546	
460-119390-3	SB2-5-5.5	Total/NA	Solid	3546	
460-119390-4	SB2-24.25	Total/NA	Solid	3546	
MB 460-388038/1-A	Method Blank	Total/NA	Solid	3546	
LCS 460-388038/2-A	Lab Control Sample	Total/NA	Solid	3546	
460-119086-A-6-M MS	Matrix Spike	Total/NA	Solid	3546	
460-119086-A-6-N MSD	Matrix Spike Duplicate	Total/NA	Solid	3546	

Prep Batch: 388043

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-119390-1	SB1-2-2.5	Total/NA	Solid	3546	
460-119390-2	SB1-10-12	Total/NA	Solid	3546	
460-119390-3	SB2-5-5.5	Total/NA	Solid	3546	
460-119390-4	SB2-24.25	Total/NA	Solid	3546	
MB 460-388043/1-A	Method Blank	Total/NA	Solid	3546	
LCS 460-388043/2-A	Lab Control Sample	Total/NA	Solid	3546	
460-119355-B-1-B MS	Matrix Spike	Total/NA	Solid	3546	
460-119355-B-1-C MSD	Matrix Spike Duplicate	Total/NA	Solid	3546	

Analysis Batch: 388154

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-119390-1	SB1-2-2.5	Total/NA	Solid	8081B	388038
460-119390-2	SB1-10-12	Total/NA	Solid	8081B	388038
460-119390-3	SB2-5-5.5	Total/NA	Solid	8081B	388038
460-119390-4	SB2-24.25	Total/NA	Solid	8081B	388038
MB 460-388038/1-A	Method Blank	Total/NA	Solid	8081B	388038
LCS 460-388038/2-A	Lab Control Sample	Total/NA	Solid	8081B	388038
460-119086-A-6-M MS	Matrix Spike	Total/NA	Solid	8081B	388038
460-119086-A-6-N MSD	Matrix Spike Duplicate	Total/NA	Solid	8081B	388038

Analysis Batch: 388251

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-119390-1	SB1-2-2.5	Total/NA	Solid	8082A	388043
460-119390-2	SB1-10-12	Total/NA	Solid	8082A	388043
460-119390-3	SB2-5-5.5	Total/NA	Solid	8082A	388043
460-119390-4	SB2-24.25	Total/NA	Solid	8082A	388043
MB 460-388043/1-A	Method Blank	Total/NA	Solid	8082A	388043
LCS 460-388043/2-A	Lab Control Sample	Total/NA	Solid	8082A	388043
460-119355-B-1-B MS	Matrix Spike	Total/NA	Solid	8082A	388043
460-119355-B-1-C MSD	Matrix Spike Duplicate	Total/NA	Solid	8082A	388043

Metals

Prep Batch: 388254

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-119390-2	SB1-10-12	Total/NA	Solid	3050B	
460-119390-3	SB2-5-5.5	Total/NA	Solid	3050B	
MB 460-388254/1-A ^2	Method Blank	Total/NA	Solid	3050B	
LCSSRM 460-388254/2-A ^4	Lab Control Sample	Total/NA	Solid	3050B	
460-119404-B-13-C MS ^4	Matrix Spike	Total/NA	Solid	3050B	
460-119404-B-13-B DU ^4	Duplicate	Total/NA	Solid	3050B	

Prep Batch: 388261

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-119390-4	SB2-24.25	Total/NA	Solid	3050B	
MB 460-388261/1-A ^2	Method Blank	Total/NA	Solid	3050B	
LCSSRM 460-388261/2-A	Lab Control Sample	Total/NA	Solid	3050B	
460-119414-A-1-C MS	Matrix Spike	Total/NA	Solid	3050B	
460-119414-A-1-B DU	Duplicate	Total/NA	Solid	3050B	

Prep Batch: 388333

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-119390-1	SB1-2-2.5	Total/NA	Solid	7471B	
460-119390-2	SB1-10-12	Total/NA	Solid	7471B	
460-119390-3	SB2-5-5.5	Total/NA	Solid	7471B	
460-119390-4	SB2-24.25	Total/NA	Solid	7471B	
MB 460-388333/10-A	Method Blank	Total/NA	Solid	7471B	
LCSSRM 460-388333/11-A ^	Lab Control Sample	Total/NA	Solid	7471B	
460-119469-A-6-N MS	Matrix Spike	Total/NA	Solid	7471B	
460-119469-A-6-M DU	Duplicate	Total/NA	Solid	7471B	

Analysis Batch: 388408

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-119390-1	SB1-2-2.5	Total/NA	Solid	7471B	388333
460-119390-2	SB1-10-12	Total/NA	Solid	7471B	388333
460-119390-3	SB2-5-5.5	Total/NA	Solid	7471B	388333
460-119390-4	SB2-24.25	Total/NA	Solid	7471B	388333
MB 460-388333/10-A	Method Blank	Total/NA	Solid	7471B	388333
LCSSRM 460-388333/11-A ^	Lab Control Sample	Total/NA	Solid	7471B	388333
460-119469-A-6-N MS	Matrix Spike	Total/NA	Solid	7471B	388333
460-119469-A-6-M DU	Duplicate	Total/NA	Solid	7471B	388333

Analysis Batch: 388460

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-119390-2	SB1-10-12	Total/NA	Solid	6010C	388254
460-119390-3	SB2-5-5.5	Total/NA	Solid	6010C	388254
MB 460-388254/1-A ^2	Method Blank	Total/NA	Solid	6010C	388254
LCSSRM 460-388254/2-A ^4	Lab Control Sample	Total/NA	Solid	6010C	388254
460-119404-B-13-C MS ^4	Matrix Spike	Total/NA	Solid	6010C	388254
460-119404-B-13-B DU ^4	Duplicate	Total/NA	Solid	6010C	388254

Analysis Batch: 388464

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-119390-4	SB2-24.25	Total/NA	Solid	6010C	388261
MB 460-388261/1-A ^2	Method Blank	Total/NA	Solid	6010C	388261
LCSSRM 460-388261/2-A	Lab Control Sample	Total/NA	Solid	6010C	388261

Metals (Continued)

Analysis Batch: 388464 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-119414-A-1-C MS	Matrix Spike	Total/NA	Solid	6010C	388261
460-119414-A-1-B DU	Duplicate	Total/NA	Solid	6010C	388261

Prep Batch: 388512

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-119390-1	SB1-2-2.5	Total/NA	Solid	3050B	

Analysis Batch: 388630

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-119390-1	SB1-2-2.5	Total/NA	Solid	6010C	388512

Analysis Batch: 388826

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-119390-2	SB1-10-12	Total/NA	Solid	6010C	388254
460-119390-3	SB2-5-5.5	Total/NA	Solid	6010C	388254

General Chemistry

Analysis Batch: 388567

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-119390-1	SB1-2-2.5	Total/NA	Solid	Moisture	
460-119390-2	SB1-10-12	Total/NA	Solid	Moisture	
460-119390-3	SB2-5-5.5	Total/NA	Solid	Moisture	
460-119390-4	SB2-24.25	Total/NA	Solid	Moisture	
460-119404-A-1 DU	Duplicate	Total/NA	Solid	Moisture	

Client Sample ID: SB1-2-2.5
Date Collected: 08/30/16 10:45
Date Received: 08/30/16 18:35

Lab Sample ID: 460-119390-1
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	388567	09/03/16 07:23	RWC	TAL EDI

Client Sample ID: SB1-2-2.5
Date Collected: 08/30/16 10:45
Date Received: 08/30/16 18:35

Lab Sample ID: 460-119390-1
Matrix: Solid
Percent Solids: 94.9

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			387847	08/31/16 09:50	DBM	TAL EDI
Total/NA	Analysis	8260C		1	388063	09/01/16 12:28	MZS	TAL EDI
Total/NA	Prep	3546			388164	09/01/16 13:23	RAD	TAL EDI
Total/NA	Analysis	8270D		1	388648	09/04/16 20:14	FAM	TAL EDI
Total/NA	Prep	3546			388038	09/01/16 02:48	ARA	TAL EDI
Total/NA	Analysis	8081B		1	388154	09/01/16 16:41	SAK	TAL EDI
Total/NA	Prep	3546			388043	09/01/16 03:13	ARA	TAL EDI
Total/NA	Analysis	8082A		1	388251	09/02/16 02:51	JHP	TAL EDI
Total/NA	Prep	3050B			388512	09/02/16 19:17	EAE	TAL EDI
Total/NA	Analysis	6010C		4	388630	09/03/16 18:28	YZH	TAL EDI
Total/NA	Prep	7471B			388333	09/02/16 04:21	TJS	TAL EDI
Total/NA	Analysis	7471B		1	388408	09/02/16 08:47	TJS	TAL EDI

Client Sample ID: SB1-10-12
Date Collected: 08/30/16 11:45
Date Received: 08/30/16 18:35

Lab Sample ID: 460-119390-2
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	388567	09/03/16 07:23	RWC	TAL EDI

Client Sample ID: SB1-10-12
Date Collected: 08/30/16 11:45
Date Received: 08/30/16 18:35

Lab Sample ID: 460-119390-2
Matrix: Solid
Percent Solids: 77.5

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			387847	08/31/16 09:51	DBM	TAL EDI
Total/NA	Analysis	8260C		1	388063	09/01/16 12:54	MZS	TAL EDI
Total/NA	Prep	3546			388164	09/01/16 13:23	RAD	TAL EDI
Total/NA	Analysis	8270D		1	388648	09/04/16 17:26	FAM	TAL EDI
Total/NA	Prep	3546			388038	09/01/16 02:48	ARA	TAL EDI
Total/NA	Analysis	8081B		1	388154	09/01/16 16:54	SAK	TAL EDI
Total/NA	Prep	3546			388043	09/01/16 03:13	ARA	TAL EDI
Total/NA	Analysis	8082A		1	388251	09/02/16 03:06	JHP	TAL EDI
Total/NA	Prep	3050B			388254	09/01/16 18:15	EAE	TAL EDI
Total/NA	Analysis	6010C		4	388460	09/02/16 15:08	CDC	TAL EDI
Total/NA	Prep	3050B			388254	09/01/16 18:15	EAE	TAL EDI

Client Sample ID: SB1-10-12

Lab Sample ID: 460-119390-2

Date Collected: 08/30/16 11:45

Matrix: Solid

Date Received: 08/30/16 18:35

Percent Solids: 77.5

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	6010C		4	388826	09/06/16 17:20	CDC	TAL EDI
Total/NA	Prep	7471B			388333	09/02/16 04:21	TJS	TAL EDI
Total/NA	Analysis	7471B		1	388408	09/02/16 08:49	TJS	TAL EDI

Client Sample ID: SB2-5-5.5

Lab Sample ID: 460-119390-3

Date Collected: 08/30/16 13:50

Matrix: Solid

Date Received: 08/30/16 18:35

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	388567	09/03/16 07:23	RWC	TAL EDI

Client Sample ID: SB2-5-5.5

Lab Sample ID: 460-119390-3

Date Collected: 08/30/16 13:50

Matrix: Solid

Date Received: 08/30/16 18:35

Percent Solids: 85.8

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			387847	08/31/16 09:52	DBM	TAL EDI
Total/NA	Analysis	8260C		1	388063	09/01/16 13:20	MZS	TAL EDI
Total/NA	Prep	3546			388164	09/01/16 13:23	RAD	TAL EDI
Total/NA	Analysis	8270D		1	388648	09/04/16 17:49	FAM	TAL EDI
Total/NA	Prep	3546			388038	09/01/16 02:48	ARA	TAL EDI
Total/NA	Analysis	8081B		1	388154	09/01/16 17:07	SAK	TAL EDI
Total/NA	Prep	3546			388043	09/01/16 03:13	ARA	TAL EDI
Total/NA	Analysis	8082A		1	388251	09/02/16 03:21	JHP	TAL EDI
Total/NA	Prep	3050B			388254	09/01/16 18:15	EAE	TAL EDI
Total/NA	Analysis	6010C		4	388460	09/02/16 15:12	CDC	TAL EDI
Total/NA	Prep	3050B			388254	09/01/16 18:15	EAE	TAL EDI
Total/NA	Analysis	6010C		4	388826	09/06/16 17:23	CDC	TAL EDI
Total/NA	Prep	7471B			388333	09/02/16 04:21	TJS	TAL EDI
Total/NA	Analysis	7471B		1	388408	09/02/16 08:51	TJS	TAL EDI

Client Sample ID: SB2-24.25

Lab Sample ID: 460-119390-4

Date Collected: 08/30/16 14:15

Matrix: Solid

Date Received: 08/30/16 18:35

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	388567	09/03/16 07:23	RWC	TAL EDI

Lab Chronicle

Client: SESI Consulting Engineers
Project/Site: 205 West St., Mt Vernon, NY

TestAmerica Job ID: 460-119390-1

Client Sample ID: SB2-24.25
Date Collected: 08/30/16 14:15
Date Received: 08/30/16 18:35

Lab Sample ID: 460-119390-4
Matrix: Solid
Percent Solids: 76.9

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			387847	08/31/16 09:53	DBM	TAL EDI
Total/NA	Analysis	8260C		1	388214	09/01/16 20:58	AAT	TAL EDI
Total/NA	Prep	3546			388164	09/01/16 13:23	RAD	TAL EDI
Total/NA	Analysis	8270D		1	388648	09/04/16 18:13	FAM	TAL EDI
Total/NA	Prep	3546			388038	09/01/16 02:48	ARA	TAL EDI
Total/NA	Analysis	8081B		1	388154	09/01/16 17:19	SAK	TAL EDI
Total/NA	Prep	3546			388043	09/01/16 03:13	ARA	TAL EDI
Total/NA	Analysis	8082A		1	388251	09/02/16 03:35	JHP	TAL EDI
Total/NA	Prep	3050B			388261	09/01/16 18:15	EAE	TAL EDI
Total/NA	Analysis	6010C		4	388464	09/02/16 16:19	YZH	TAL EDI
Total/NA	Prep	7471B			388333	09/02/16 04:21	TJS	TAL EDI
Total/NA	Analysis	7471B		1	388408	09/02/16 08:53	TJS	TAL EDI

Laboratory References:

TAL EDI = TestAmerica Edison, 777 New Durham Road, Edison, NJ 08817, TEL (732)549-3900

Certification Summary

Client: SESI Consulting Engineers
Project/Site: 205 West St., Mt Vernon, NY

TestAmerica Job ID: 460-119390-1

Laboratory: TestAmerica Edison

Unless otherwise noted, all analytes for this laboratory were covered under each certification below.

Authority	Program	EPA Region	Certification ID	Expiration Date
New York	NELAP	2	11452	03-31-17

The following analytes are included in this report, but certification is not offered by the governing authority:

Analysis Method	Prep Method	Matrix	Analyte
8082A	3546	Solid	Polychlorinated biphenyls, Total
Moisture		Solid	Percent Moisture
Moisture		Solid	Percent Solids

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

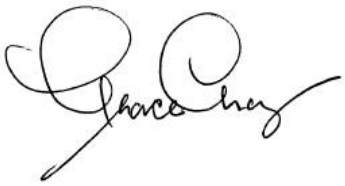
ANALYTICAL REPORT

Job Number: 460-119497-1

Job Description: Mt. Vernon, NY

For:
SESI Consulting Engineers
12 A Maple Avenue
Pine Brook, NJ 07058

Attention: Fuad Dahan



Approved for release.
Grace Chang
Project Manager II
9/9/2016 4:00 PM

Grace Chang, Project Manager II
777 New Durham Road, Edison, NJ, 08817
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09/09/2016

The test results in this report meet all NELAP requirements unless specified within the case narrative. Pursuant to NELAP, this report may not be reproduced, except in full, without the written approval of the laboratory. All questions regarding this report should be directed to the TestAmerica Edison Project Manager.

TestAmerica Edison Certifications and Approvals: Connecticut: CTDOH #PH-0200, New Jersey: NJDEP (NELAP) #12028, New York: NYDOH (NELAP) #11452, NYDOH (ELAP) #11452, Pennsylvania: PADEP (NELAP) 68-00522 and Rhode Island: RIDOH LAO00132

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CASE NARRATIVE

Client: SESI Consulting Engineers

Project: Mt. Vernon, NY

Report Number: 460-119497-1

This case narrative is in the form of an exception report, where only the anomalies related to this report, method specific performance and/or QA/QC issues are discussed. If there are no issues to report, this narrative will include a statement that documents that there are no relevant data issues.

It should be noted that samples with elevated Reporting Limits (RLs) as a result of a dilution may not be able to satisfy customer reporting limits in some cases. Such increases in the RLs are unavoidable but acceptable consequence of sample dilution that enables quantification of target analytes or interferences which exceed the calibration range of the instrument.

Calculations are performed before rounding to avoid round-off errors in calculated results.

All holding times were met and proper preservation noted for the methods performed on these samples, unless otherwise detailed in the individual sections below.

RECEIPT

The laboratory control sample duplicate (LCSD) for batch 388974 recovered outside control limits for the following analyte: 1,4-Dioxane. This analyte was biased high in the LCSD and was not detected in the associated samples; therefore, the data have been reported.

Note: All samples which require thermal preservation are considered acceptable if the arrival temperature is within 2C of the required temperature or method specified range. For samples with a specified temperature of 4C, samples with a temperature ranging from just above freezing temperature of water to 6C shall be acceptable. Samples that are hand delivered immediately following collection may not meet these criteria, however they will be deemed acceptable according to NELAC standards, if there is evidence that the chilling process has begun, such as arrival on ice, etc.

VOLATILE ORGANICS

Sample GW-1 (460-119497-1) was analyzed for Volatile organics in accordance with EPA SW-846 Methods 8260C. The samples were analyzed on 09/07/2016.

1,4-Dioxane failed the recovery criteria high for LCSD 460-388974/4. Refer to the QC report for details.

No other difficulties were encountered during the Volatile organics analysis.

All other quality control parameters were within the acceptance limits.

SEMIVOLATILE ORGANIC COMPOUNDS (GC/MS)

Sample GW-1 (460-119497-1) was analyzed for semivolatile organic compounds (GC/MS) in accordance with EPA SW-846 Method 8270D. The samples were prepared on 09/02/2016 and analyzed on 09/06/2016.

Phenol-d5 failed the surrogate recovery criteria low for LCS 460-388379/3-A. Refer to the QC report for details.

Several analytes failed the recovery criteria low for the MS of sample 460-119489-4 in batch 460-388719.

Several analytes failed the recovery criteria low for the MSD of sample 460-119489-4 in batch 460-388719. 3,3'-Dichlorobenzidine exceeded the RPD limit.

The presence of the '4' qualifier in the data indicates analytes where the concentration in the unspiked sample exceeded four times the spiking amount.

Refer to the QC report for details.

Six surrogates are used for this analysis. The laboratory's SOP allows one acid and one base of these surrogates to be outside acceptance criteria without performing re-extraction/re-analysis. The following sample contained an allowable number of surrogate compounds outside limits: (LCS 460-388379/3-A). These results have been reported and qualified.

No other difficulties were encountered during the semivolatiles analysis.

All other quality control parameters were within the acceptance limits.

PESTICIDES
Sample GW-1 (460-119497-1) was analyzed for Pesticides in accordance with EPA SW-846 Methods 8081B. The samples were prepared on 09/02/2016 and analyzed on 09/06/2016.

No difficulties were encountered during the pesticides analysis.

All quality control parameters were within the acceptance limits.

POLYCHLORINATED BIPHENYLS (PCBS)
Sample GW-1 (460-119497-1) was analyzed for polychlorinated biphenyls (PCBs) in accordance with EPA SW-846 Method 8082A. The samples were prepared on 09/02/2016 and analyzed on 09/06/2016.

No difficulties were encountered during the PCBs analysis.

All quality control parameters were within the acceptance limits.

TOTAL MERCURY
Sample GW-1 (460-119497-1) was analyzed for total mercury in accordance with EPA Method 245.1. The samples were prepared and analyzed on 09/06/2016.

No difficulties were encountered during the mercury analysis.

All quality control parameters were within the acceptance limits.

TOTAL METALS
Sample GW-1 (460-119497-1) was analyzed for total metals in accordance with EPA SW-846 Method 6020A. The samples were prepared on 09/01/2016 and analyzed on 09/06/2016 and 09/07/2016.

Sodium failed the recovery criteria low for the MS of sample 460-119174-10 in batch 460-389030.

Refer to the QC report for details.

for the duplicate of sample 460-119174-10. Refer to the QC report for details.

No other difficulties were encountered during the Metals analysis.

All other quality control parameters were within the acceptance limits.

Sample Summary

Client: SESI Consulting Engineers
Project/Site: Mt. Vernon, NY

TestAmerica Job ID: 460-119497-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
460-119497-1	GW-1	Water	08/31/16 10:20	08/31/16 19:04

Detection Summary

Client: SESI Consulting Engineers
Project/Site: Mt. Vernon, NY

TestAmerica Job ID: 460-119497-1

Client Sample ID: GW-1

Lab Sample ID: 460-119497-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	7.5		5.0	1.1	ug/L	1		8260C	Total/NA
Bromodichloromethane	0.96	J	1.0	0.15	ug/L	1		8260C	Total/NA
Chloroform	11		1.0	0.22	ug/L	1		8260C	Total/NA
Tetrachloroethene	0.45	J	1.0	0.12	ug/L	1		8260C	Total/NA
2-Methylnaphthalene	1.8	J	10	0.92	ug/L	1		8270D	Total/NA
Bis(2-ethylhexyl) phthalate	1.1	J	2.1	0.75	ug/L	1		8270D	Total/NA
Naphthalene	4.5	J	10	0.83	ug/L	1		8270D	Total/NA
Aluminum	10600		40.0	18.2	ug/L	2		6020A	Total/NA
Arsenic	2.0		2.0	0.64	ug/L	2		6020A	Total/NA
Barium	897		4.0	1.2	ug/L	2		6020A	Total/NA
Beryllium	0.46	J	0.80	0.24	ug/L	2		6020A	Total/NA
Cadmium	1.2	J	2.0	0.71	ug/L	2		6020A	Total/NA
Calcium	177000		200	60.5	ug/L	2		6020A	Total/NA
Chromium	39.8		4.0	1.3	ug/L	2		6020A	Total/NA
Cobalt	42.3		4.0	1.3	ug/L	2		6020A	Total/NA
Copper	93.8		4.0	1.4	ug/L	2		6020A	Total/NA
Iron	11400		120	42.4	ug/L	2		6020A	Total/NA
Lead	13.5		1.2	0.38	ug/L	2		6020A	Total/NA
Magnesium	54200		200	63.6	ug/L	2		6020A	Total/NA
Manganese	3250		8.0	2.5	ug/L	2		6020A	Total/NA
Nickel	80.8		4.0	1.4	ug/L	2		6020A	Total/NA
Potassium	17800		200	91.4	ug/L	2		6020A	Total/NA
Selenium	1.5	J	10.0	0.73	ug/L	2		6020A	Total/NA
Sodium	186000		200	69.0	ug/L	2		6020A	Total/NA
Thallium	0.28	J	0.80	0.26	ug/L	2		6020A	Total/NA
Vanadium	44.0		4.0	1.9	ug/L	2		6020A	Total/NA
Zinc	93.2		16.0	7.0	ug/L	2		6020A	Total/NA

This Detection Summary does not include radiochemical test results.

Method Summary

Client: SESI Consulting Engineers
Project/Site: Mt. Vernon, NY

TestAmerica Job ID: 460-119497-1

Method	Method Description	Protocol	Laboratory
8260C	Volatile Organic Compounds by GC/MS	SW846	TAL EDI
8270D	Semivolatile Organic Compounds (GC/MS)	SW846	TAL EDI
8081B	Organochlorine Pesticides (GC)	SW846	TAL EDI
8082A	Polychlorinated Biphenyls (PCBs) by Gas Chromatography	SW846	TAL EDI
245.1	Mercury (CVAA)	EPA	TAL EDI
6020A	Metals (ICP/MS)	SW846	TAL EDI

Protocol References:

EPA = US Environmental Protection Agency

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

Laboratory References:

TAL EDI = TestAmerica Edison, 777 New Durham Road, Edison, NJ 08817, TEL (732)549-3900

Client Sample ID: GW-1

Date Collected: 08/31/16 10:20
Date Received: 08/31/16 19:04

Lab Sample ID: 460-119497-1

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	0.28	U	1.0	0.28	ug/L			09/07/16 10:55	1
1,1,2,2-Tetrachloroethane	0.19	U	1.0	0.19	ug/L			09/07/16 10:55	1
1,1,2-Trichloroethane	0.080	U	1.0	0.080	ug/L			09/07/16 10:55	1
1,1-Dichloroethane	0.24	U	1.0	0.24	ug/L			09/07/16 10:55	1
1,1-Dichloroethene	0.34	U	1.0	0.34	ug/L			09/07/16 10:55	1
1,2,3-Trichlorobenzene	0.35	U	1.0	0.35	ug/L			09/07/16 10:55	1
1,2,4-Trichlorobenzene	0.27	U	1.0	0.27	ug/L			09/07/16 10:55	1
1,2-Dibromo-3-Chloropropane	0.23	U	1.0	0.23	ug/L			09/07/16 10:55	1
1,2-Dibromoethane	0.19	U	1.0	0.19	ug/L			09/07/16 10:55	1
1,2-Dichlorobenzene	0.22	U	1.0	0.22	ug/L			09/07/16 10:55	1
1,2-Dichloroethane	0.25	U	1.0	0.25	ug/L			09/07/16 10:55	1
1,2-Dichloropropane	0.18	U	1.0	0.18	ug/L			09/07/16 10:55	1
1,3-Dichlorobenzene	0.33	U	1.0	0.33	ug/L			09/07/16 10:55	1
1,4-Dichlorobenzene	0.33	U	1.0	0.33	ug/L			09/07/16 10:55	1
1,4-Dioxane	8.7	U *	50	8.7	ug/L			09/07/16 10:55	1
2-Butanone	2.2	U	5.0	2.2	ug/L			09/07/16 10:55	1
2-Hexanone	0.72	U	5.0	0.72	ug/L			09/07/16 10:55	1
4-Methyl-2-pentanone	0.63	U	5.0	0.63	ug/L			09/07/16 10:55	1
Acetone	**7.5**		5.0	1.1	ug/L			09/07/16 10:55	1
Benzene	0.090	U	1.0	0.090	ug/L			09/07/16 10:55	1
Bromochloromethane	0.30	U	1.0	0.30	ug/L			09/07/16 10:55	1
Bromodichloromethane	**0.96**	**J**	1.0	0.15	ug/L			09/07/16 10:55	1
Bromoform	0.18	U	1.0	0.18	ug/L			09/07/16 10:55	1
Bromomethane	0.18	U	1.0	0.18	ug/L			09/07/16 10:55	1
Carbon disulfide	0.22	U	1.0	0.22	ug/L			09/07/16 10:55	1
Carbon tetrachloride	0.33	U	1.0	0.33	ug/L			09/07/16 10:55	1
Chlorobenzene	0.24	U	1.0	0.24	ug/L			09/07/16 10:55	1
Chloroethane	0.37	U	1.0	0.37	ug/L			09/07/16 10:55	1
Chloroform	**11**		1.0	0.22	ug/L			09/07/16 10:55	1
Chloromethane	0.22	U	1.0	0.22	ug/L			09/07/16 10:55	1
cis-1,2-Dichloroethene	0.26	U	1.0	0.26	ug/L			09/07/16 10:55	1
cis-1,3-Dichloropropene	0.16	U	1.0	0.16	ug/L			09/07/16 10:55	1
Cyclohexane	0.26	U	1.0	0.26	ug/L			09/07/16 10:55	1
Dibromochloromethane	0.22	U	1.0	0.22	ug/L			09/07/16 10:55	1
Dichlorodifluoromethane	0.14	U	1.0	0.14	ug/L			09/07/16 10:55	1
Ethylbenzene	0.30	U	1.0	0.30	ug/L			09/07/16 10:55	1
Freon TF	0.34	U	1.0	0.34	ug/L			09/07/16 10:55	1
Isopropylbenzene	0.32	U	1.0	0.32	ug/L			09/07/16 10:55	1
m&p-Xylene	0.28	U	1.0	0.28	ug/L			09/07/16 10:55	1
Methyl acetate	0.58	U	5.0	0.58	ug/L			09/07/16 10:55	1
Methylcyclohexane	0.22	U	1.0	0.22	ug/L			09/07/16 10:55	1
Methylene Chloride	0.21	U	1.0	0.21	ug/L			09/07/16 10:55	1
MTBE	0.13	U	1.0	0.13	ug/L			09/07/16 10:55	1
o-Xylene	0.32	U	1.0	0.32	ug/L			09/07/16 10:55	1
Styrene	0.17	U	1.0	0.17	ug/L			09/07/16 10:55	1
Tetrachloroethene	**0.45**	**J**	1.0	0.12	ug/L			09/07/16 10:55	1
Toluene	0.25	U	1.0	0.25	ug/L			09/07/16 10:55	1
trans-1,2-Dichloroethene	0.18	U	1.0	0.18	ug/L			09/07/16 10:55	1
trans-1,3-Dichloropropene	0.19	U	1.0	0.19	ug/L			09/07/16 10:55	1

Client Sample ID: GW-1

Date Collected: 08/31/16 10:20
Date Received: 08/31/16 19:04

Lab Sample ID: 460-119497-1

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Trichloroethene	0.22	U	1.0	0.22	ug/L			09/07/16 10:55	1
Trichlorofluoromethane	0.15	U	1.0	0.15	ug/L			09/07/16 10:55	1
Vinyl chloride	0.060	U	1.0	0.060	ug/L			09/07/16 10:55	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*					*09/07/16 10:55*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*101*		*74 - 132*		*09/07/16 10:55*	*1*
Bromofluorobenzene	*96*		*77 - 124*		*09/07/16 10:55*	*1*
Dibromofluoromethane (Surr)	*100*		*72 - 131*		*09/07/16 10:55*	*1*
Toluene-d8 (Surr)	*99*		*80 - 120*		*09/07/16 10:55*	*1*

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4,5-Tetrachlorobenzene	0.45	U	10	0.45	ug/L		09/02/16 09:20	09/06/16 21:43	1
2,2'-oxybis[1-chloropropane]	0.97	U	10	0.97	ug/L		09/02/16 09:20	09/06/16 21:43	1
2,3,4,6-Tetrachlorophenol	0.72	U	10	0.72	ug/L		09/02/16 09:20	09/06/16 21:43	1
2,4,5-Trichlorophenol	0.51	U	10	0.51	ug/L		09/02/16 09:20	09/06/16 21:43	1
2,4,6-Trichlorophenol	0.55	U	10	0.55	ug/L		09/02/16 09:20	09/06/16 21:43	1
2,4-Dichlorophenol	0.66	U	10	0.66	ug/L		09/02/16 09:20	09/06/16 21:43	1
2,4-Dimethylphenol	0.95	U	10	0.95	ug/L		09/02/16 09:20	09/06/16 21:43	1
2,4-Dinitrophenol	2.5	U	21	2.5	ug/L		09/02/16 09:20	09/06/16 21:43	1
2,4-Dinitrotoluene	1.1	U	2.1	1.1	ug/L		09/02/16 09:20	09/06/16 21:43	1
2,6-Dinitrotoluene	0.92	U	2.1	0.92	ug/L		09/02/16 09:20	09/06/16 21:43	1
2-Chloronaphthalene	0.64	U	10	0.64	ug/L		09/02/16 09:20	09/06/16 21:43	1
2-Chlorophenol	0.77	U	10	0.77	ug/L		09/02/16 09:20	09/06/16 21:43	1
2-Methylnaphthalene	**1.8**	**J**	10	0.92	ug/L		09/02/16 09:20	09/06/16 21:43	1
2-Methylphenol	1.3	U	10	1.3	ug/L		09/02/16 09:20	09/06/16 21:43	1
2-Nitroaniline	0.68	U	10	0.68	ug/L		09/02/16 09:20	09/06/16 21:43	1
2-Nitrophenol	0.61	U	10	0.61	ug/L		09/02/16 09:20	09/06/16 21:43	1
3,3'-Dichlorobenzidine	1.1	U	10	1.1	ug/L		09/02/16 09:20	09/06/16 21:43	1
3-Nitroaniline	0.85	U	10	0.85	ug/L		09/02/16 09:20	09/06/16 21:43	1
4,6-Dinitro-2-methylphenol	2.1	U	21	2.1	ug/L		09/02/16 09:20	09/06/16 21:43	1
4-Bromophenyl phenyl ether	1.1	U	10	1.1	ug/L		09/02/16 09:20	09/06/16 21:43	1
4-Chloro-3-methylphenol	0.79	U	10	0.79	ug/L		09/02/16 09:20	09/06/16 21:43	1
4-Chloroaniline	0.76	U	10	0.76	ug/L		09/02/16 09:20	09/06/16 21:43	1
4-Chlorophenyl phenyl ether	1.0	U	10	1.0	ug/L		09/02/16 09:20	09/06/16 21:43	1
4-Methylphenol	0.91	U	10	0.91	ug/L		09/02/16 09:20	09/06/16 21:43	1
4-Nitroaniline	0.50	U	10	0.50	ug/L		09/02/16 09:20	09/06/16 21:43	1
4-Nitrophenol	4.8	U	21	4.8	ug/L		09/02/16 09:20	09/06/16 21:43	1
Acenaphthene	0.92	U	10	0.92	ug/L		09/02/16 09:20	09/06/16 21:43	1
Acenaphthylene	0.68	U	10	0.68	ug/L		09/02/16 09:20	09/06/16 21:43	1
Acetophenone	1.1	U	10	1.1	ug/L		09/02/16 09:20	09/06/16 21:43	1
Anthracene	0.59	U	10	0.59	ug/L		09/02/16 09:20	09/06/16 21:43	1
Atrazine	0.80	U	2.1	0.80	ug/L		09/02/16 09:20	09/06/16 21:43	1
Benzaldehyde	0.90	U	10	0.90	ug/L		09/02/16 09:20	09/06/16 21:43	1
Benzo[a]anthracene	0.57	U	1.0	0.57	ug/L		09/02/16 09:20	09/06/16 21:43	1
Benzo[a]pyrene	0.17	U	1.0	0.17	ug/L		09/02/16 09:20	09/06/16 21:43	1
Benzo[b]fluoranthene	0.46	U	1.0	0.46	ug/L		09/02/16 09:20	09/06/16 21:43	1

Client Sample ID: GW-1
Date Collected: 08/31/16 10:20
Date Received: 08/31/16 19:04

Lab Sample ID: 460-119497-1
Matrix: Water

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[g,h,i]perylene	0.78	U	10	0.78	ug/L		09/02/16 09:20	09/06/16 21:43	1
Benzo[k]fluoranthene	0.19	U	1.0	0.19	ug/L		09/02/16 09:20	09/06/16 21:43	1
Bis(2-chloroethoxy)methane	0.72	U	10	0.72	ug/L		09/02/16 09:20	09/06/16 21:43	1
Bis(2-chloroethyl)ether	0.13	U	1.0	0.13	ug/L		09/02/16 09:20	09/06/16 21:43	1
Bis(2-ethylhexyl) phthalate	**1.1**	**J**	2.1	0.75	ug/L		09/02/16 09:20	09/06/16 21:43	1
Butyl benzyl phthalate	0.63	U	10	0.63	ug/L		09/02/16 09:20	09/06/16 21:43	1
Caprolactam	1.1	U	10	1.1	ug/L		09/02/16 09:20	09/06/16 21:43	1
Carbazole	0.89	U	10	0.89	ug/L		09/02/16 09:20	09/06/16 21:43	1
Chrysene	0.70	U	2.1	0.70	ug/L		09/02/16 09:20	09/06/16 21:43	1
Dibenz(a,h)anthracene	0.094	U	1.0	0.094	ug/L		09/02/16 09:20	09/06/16 21:43	1
Dibenzofuran	0.89	U	10	0.89	ug/L		09/02/16 09:20	09/06/16 21:43	1
Diethyl phthalate	1.0	U	10	1.0	ug/L		09/02/16 09:20	09/06/16 21:43	1
Dimethyl phthalate	1.0	U	10	1.0	ug/L		09/02/16 09:20	09/06/16 21:43	1
Di-n-butyl phthalate	0.85	U	10	0.85	ug/L		09/02/16 09:20	09/06/16 21:43	1
Di-n-octyl phthalate	0.72	U	10	0.72	ug/L		09/02/16 09:20	09/06/16 21:43	1
Diphenyl	0.66	U	10	0.66	ug/L		09/02/16 09:20	09/06/16 21:43	1
Fluoranthene	0.75	U	10	0.75	ug/L		09/02/16 09:20	09/06/16 21:43	1
Fluorene	0.83	U	10	0.83	ug/L		09/02/16 09:20	09/06/16 21:43	1
Hexachlorobenzene	0.49	U	1.0	0.49	ug/L		09/02/16 09:20	09/06/16 21:43	1
Hexachlorobutadiene	0.79	U	1.0	0.79	ug/L		09/02/16 09:20	09/06/16 21:43	1
Hexachlorocyclopentadiene	0.64	U	10	0.64	ug/L		09/02/16 09:20	09/06/16 21:43	1
Hexachloroethane	0.094	U	1.0	0.094	ug/L		09/02/16 09:20	09/06/16 21:43	1
Indeno[1,2,3-cd]pyrene	0.22	U	1.0	0.22	ug/L		09/02/16 09:20	09/06/16 21:43	1
Isophorone	0.70	U	10	0.70	ug/L		09/02/16 09:20	09/06/16 21:43	1
Naphthalene	**4.5**	**J**	10	0.83	ug/L		09/02/16 09:20	09/06/16 21:43	1
Nitrobenzene	0.51	U	1.0	0.51	ug/L		09/02/16 09:20	09/06/16 21:43	1
N-Nitrosodi-n-propylamine	0.86	U	1.0	0.86	ug/L		09/02/16 09:20	09/06/16 21:43	1
N-Nitrosodiphenylamine	0.77	U	10	0.77	ug/L		09/02/16 09:20	09/06/16 21:43	1
Pentachlorophenol	2.3	U	21	2.3	ug/L		09/02/16 09:20	09/06/16 21:43	1
Phenanthrene	0.68	U	10	0.68	ug/L		09/02/16 09:20	09/06/16 21:43	1
Phenol	0.43	U	10	0.43	ug/L		09/02/16 09:20	09/06/16 21:43	1
Pyrene	0.86	U	10	0.86	ug/L		09/02/16 09:20	09/06/16 21:43	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Unknown	*7.2*	*J*	*ug/L*		*9.38*		*09/02/16 09:20*	*09/06/16 21:43*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol	*78*		*26 - 139*	*09/02/16 09:20*	*09/06/16 21:43*	*1*
2-Fluorobiphenyl	*69*		*45 - 107*	*09/02/16 09:20*	*09/06/16 21:43*	*1*
2-Fluorophenol	*38*		*25 - 58*	*09/02/16 09:20*	*09/06/16 21:43*	*1*
Nitrobenzene-d5	*75*		*51 - 108*	*09/02/16 09:20*	*09/06/16 21:43*	*1*
Phenol-d5	*17*		*14 - 39*	*09/02/16 09:20*	*09/06/16 21:43*	*1*
Terphenyl-d14	*78*		*40 - 148*	*09/02/16 09:20*	*09/06/16 21:43*	*1*

Method: 8081B - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	0.0051	U	0.020	0.0051	ug/L		09/02/16 08:22	09/06/16 08:43	1
4,4'-DDE	0.0041	U	0.020	0.0041	ug/L		09/02/16 08:22	09/06/16 08:43	1
4,4'-DDT	0.0041	U	0.020	0.0041	ug/L		09/02/16 08:22	09/06/16 08:43	1
Aldrin	0.0041	U	0.020	0.0041	ug/L		09/02/16 08:22	09/06/16 08:43	1

Client Sample ID: GW-1
Date Collected: 08/31/16 10:20
Date Received: 08/31/16 19:04

Lab Sample ID: 460-119497-1
Matrix: Water

Method: 8081B - Organochlorine Pesticides (GC) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
alpha-BHC	0.0061	U	0.020	0.0061	ug/L		09/02/16 08:22	09/06/16 08:43	1
beta-BHC	0.0051	U	0.020	0.0051	ug/L		09/02/16 08:22	09/06/16 08:43	1
Chlordane (technical)	0.13	U	0.51	0.13	ug/L		09/02/16 08:22	09/06/16 08:43	1
delta-BHC	0.0061	U	0.020	0.0061	ug/L		09/02/16 08:22	09/06/16 08:43	1
Dieldrin	0.0041	U	0.020	0.0041	ug/L		09/02/16 08:22	09/06/16 08:43	1
Endosulfan I	0.0051	U	0.020	0.0051	ug/L		09/02/16 08:22	09/06/16 08:43	1
Endosulfan II	0.0041	U	0.020	0.0041	ug/L		09/02/16 08:22	09/06/16 08:43	1
Endosulfan sulfate	0.0051	U	0.020	0.0051	ug/L		09/02/16 08:22	09/06/16 08:43	1
Endrin	0.0041	U	0.020	0.0041	ug/L		09/02/16 08:22	09/06/16 08:43	1
Endrin aldehyde	0.0041	U	0.020	0.0041	ug/L		09/02/16 08:22	09/06/16 08:43	1
Endrin ketone	0.0041	U	0.020	0.0041	ug/L		09/02/16 08:22	09/06/16 08:43	1
gamma-BHC (Lindane)	0.0041	U	0.020	0.0041	ug/L		09/02/16 08:22	09/06/16 08:43	1
Heptachlor	0.0041	U	0.020	0.0041	ug/L		09/02/16 08:22	09/06/16 08:43	1
Heptachlor epoxide	0.0041	U	0.020	0.0041	ug/L		09/02/16 08:22	09/06/16 08:43	1
Methoxychlor	0.0041	U	0.020	0.0041	ug/L		09/02/16 08:22	09/06/16 08:43	1
Toxaphene	0.061	U	0.51	0.061	ug/L		09/02/16 08:22	09/06/16 08:43	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*57*		*10 - 150*	*09/02/16 08:22*	*09/06/16 08:43*	*1*
DCB Decachlorobiphenyl	*56*		*10 - 150*	*09/02/16 08:22*	*09/06/16 08:43*	*1*
Tetrachloro-m-xylene	*54*		*16 - 150*	*09/02/16 08:22*	*09/06/16 08:43*	*1*
Tetrachloro-m-xylene	*53*		*16 - 150*	*09/02/16 08:22*	*09/06/16 08:43*	*1*

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor 1016	0.098	U	0.40	0.098	ug/L		09/02/16 08:16	09/06/16 10:31	1
Aroclor 1221	0.098	U	0.40	0.098	ug/L		09/02/16 08:16	09/06/16 10:31	1
Aroclor 1232	0.098	U	0.40	0.098	ug/L		09/02/16 08:16	09/06/16 10:31	1
Aroclor 1242	0.098	U	0.40	0.098	ug/L		09/02/16 08:16	09/06/16 10:31	1
Aroclor 1248	0.098	U	0.40	0.098	ug/L		09/02/16 08:16	09/06/16 10:31	1
Aroclor 1254	0.084	U	0.40	0.084	ug/L		09/02/16 08:16	09/06/16 10:31	1
Aroclor 1260	0.084	U	0.40	0.084	ug/L		09/02/16 08:16	09/06/16 10:31	1
Aroclor 1268	0.084	U	0.40	0.084	ug/L		09/02/16 08:16	09/06/16 10:31	1
Aroclor-1262	0.084	U	0.40	0.084	ug/L		09/02/16 08:16	09/06/16 10:31	1
Polychlorinated biphenyls, Total	0.098	U	0.40	0.098	ug/L		09/02/16 08:16	09/06/16 10:31	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*95*		*10 - 150*	*09/02/16 08:16*	*09/06/16 10:31*	*1*
DCB Decachlorobiphenyl	*95*		*10 - 150*	*09/02/16 08:16*	*09/06/16 10:31*	*1*

Method: 245.1 - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.17	U	0.20	0.17	ug/L		09/06/16 11:43	09/06/16 14:06	1

Method: 6020A - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**10600**		40.0	18.2	ug/L		09/01/16 20:27	09/06/16 22:32	2
Antimony	0.62	U	2.0	0.62	ug/L		09/01/16 20:27	09/06/16 22:32	2
Arsenic	**2.0**		2.0	0.64	ug/L		09/01/16 20:27	09/06/16 22:32	2
Barium	**897**		4.0	1.2	ug/L		09/01/16 20:27	09/06/16 22:32	2
Beryllium	**0.46**	**J**	0.80	0.24	ug/L		09/01/16 20:27	09/06/16 22:32	2

Client Sample ID: GW-1

Date Collected: 08/31/16 10:20
Date Received: 08/31/16 19:04

Lab Sample ID: 460-119497-1

Matrix: Water

Method: 6020A - Metals (ICP/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	1.2	J	2.0	0.71	ug/L		09/01/16 20:27	09/06/16 22:32	2
Calcium	177000		200	60.5	ug/L		09/01/16 20:27	09/06/16 22:32	2
Chromium	39.8		4.0	1.3	ug/L		09/01/16 20:27	09/06/16 22:32	2
Cobalt	42.3		4.0	1.3	ug/L		09/01/16 20:27	09/06/16 22:32	2
Copper	93.8		4.0	1.4	ug/L		09/01/16 20:27	09/06/16 22:32	2
Iron	11400		120	42.4	ug/L		09/01/16 20:27	09/06/16 22:32	2
Lead	13.5		1.2	0.38	ug/L		09/01/16 20:27	09/06/16 22:32	2
Magnesium	54200		200	63.6	ug/L		09/01/16 20:27	09/06/16 22:32	2
Manganese	3250		8.0	2.5	ug/L		09/01/16 20:27	09/06/16 22:32	2
Nickel	80.8		4.0	1.4	ug/L		09/01/16 20:27	09/06/16 22:32	2
Potassium	17800		200	91.4	ug/L		09/01/16 20:27	09/06/16 22:32	2
Selenium	1.5	J	10.0	0.73	ug/L		09/01/16 20:27	09/06/16 22:32	2
Silver	1.3	U	2.0	1.3	ug/L		09/01/16 20:27	09/07/16 22:29	2
Sodium	186000		200	69.0	ug/L		09/01/16 20:27	09/06/16 22:32	2
Thallium	0.28	J	0.80	0.26	ug/L		09/01/16 20:27	09/06/16 22:32	2
Vanadium	44.0		4.0	1.9	ug/L		09/01/16 20:27	09/06/16 22:32	2
Zinc	93.2		16.0	7.0	ug/L		09/01/16 20:27	09/06/16 22:32	2

Surrogate Summary

Client: SESI Consulting Engineers
Project/Site: Mt. Vernon, NY

TestAmerica Job ID: 460-119497-1

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

Matrix: Water — **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)			
		12DCE	BFB	DBFM	TOL
Lab Sample ID	Client Sample ID	(74-132)	(77-124)	(72-131)	(80-120)
460-119497-1	GW-1	101	96	100	99
LCS 460-388974/3	Lab Control Sample	100	98	101	101
LCSD 460-388974/4	Lab Control Sample Dup	98	97	98	99
MB 460-388974/6	Method Blank	99	95	99	98

Surrogate Legend

12DCE = 1,2-Dichloroethane-d4 (Surr)
BFB = Bromofluorobenzene
DBFM = Dibromofluoromethane (Surr)
TOL = Toluene-d8 (Surr)

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Matrix: Water — **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)					
		TBP	FBP	2FP	NBZ	PHL	TPH
Lab Sample ID	Client Sample ID	(26-139)	(45-107)	(25-58)	(51-108)	(14-39)	(40-148)
460-119489-J-4-A MS	Matrix Spike	86	76	34	61	21	71
460-119489-L-4-A MSD	Matrix Spike Duplicate	97	86	33	68	22	71
460-119497-1	GW-1	78	69	38	75	17	78
LCS 460-388379/2-A	Lab Control Sample	83	76	33	76	20	68
LCS 460-388379/3-A	Lab Control Sample	71	60	35	64	12 X	69
MB 460-388379/1-A	Method Blank	71	59	41	79	17	83

Surrogate Legend

TBP = 2,4,6-Tribromophenol
FBP = 2-Fluorobiphenyl
2FP = 2-Fluorophenol
NBZ = Nitrobenzene-d5
PHL = Phenol-d5
TPH = Terphenyl-d14

Method: 8081B - Organochlorine Pesticides (GC)

Matrix: Water — **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)			
		DCB1	DCB2	TCX1	TCX2
Lab Sample ID	Client Sample ID	(10-150)	(10-150)	(16-150)	(16-150)
460-119497-1	GW-1	57	56	54	53
LCS 460-388371/2-A	Lab Control Sample	68	66	76	79
LCSD 460-388371/3-A	Lab Control Sample Dup	64	63	70	72
MB 460-388371/1-A	Method Blank	76	72	81	83

Surrogate Legend

DCB = DCB Decachlorobiphenyl
TCX = Tetrachloro-m-xylene

Surrogate Summary

Client: SESI Consulting Engineers
Project/Site: Mt. Vernon, NY

TestAmerica Job ID: 460-119497-1

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)									
Lab Sample ID	Client Sample ID	DCB1 (10-150)	DCB2 (10-150)								
460-119497-1	GW-1	95	95								
LCS 460-388370/2-A	Lab Control Sample	92	91								
LCSD 460-388370/3-A	Lab Control Sample Dup	75	76								
MB 460-388370/1-A	Method Blank	104	79								

Surrogate Legend

DCB = DCB Decachlorobiphenyl

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

Lab Sample ID: MB 460-388974/6
Matrix: Water
Analysis Batch: 388974

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	0.28	U	1.0	0.28	ug/L			09/07/16 10:29	1
1,1,2,2-Tetrachloroethane	0.19	U	1.0	0.19	ug/L			09/07/16 10:29	1
1,1,2-Trichloroethane	0.080	U	1.0	0.080	ug/L			09/07/16 10:29	1
1,1-Dichloroethane	0.24	U	1.0	0.24	ug/L			09/07/16 10:29	1
1,1-Dichloroethene	0.34	U	1.0	0.34	ug/L			09/07/16 10:29	1
1,2,3-Trichlorobenzene	0.35	U	1.0	0.35	ug/L			09/07/16 10:29	1
1,2,4-Trichlorobenzene	0.27	U	1.0	0.27	ug/L			09/07/16 10:29	1
1,2-Dibromo-3-Chloropropane	0.23	U	1.0	0.23	ug/L			09/07/16 10:29	1
1,2-Dibromoethane	0.19	U	1.0	0.19	ug/L			09/07/16 10:29	1
1,2-Dichlorobenzene	0.22	U	1.0	0.22	ug/L			09/07/16 10:29	1
1,2-Dichloroethane	0.25	U	1.0	0.25	ug/L			09/07/16 10:29	1
1,2-Dichloropropane	0.18	U	1.0	0.18	ug/L			09/07/16 10:29	1
1,3-Dichlorobenzene	0.33	U	1.0	0.33	ug/L			09/07/16 10:29	1
1,4-Dichlorobenzene	0.33	U	1.0	0.33	ug/L			09/07/16 10:29	1
1,4-Dioxane	8.7	U	50	8.7	ug/L			09/07/16 10:29	1
2-Butanone	2.2	U	5.0	2.2	ug/L			09/07/16 10:29	1
2-Hexanone	0.72	U	5.0	0.72	ug/L			09/07/16 10:29	1
4-Methyl-2-pentanone	0.63	U	5.0	0.63	ug/L			09/07/16 10:29	1
Acetone	1.1	U	5.0	1.1	ug/L			09/07/16 10:29	1
Benzene	0.090	U	1.0	0.090	ug/L			09/07/16 10:29	1
Bromochloromethane	0.30	U	1.0	0.30	ug/L			09/07/16 10:29	1
Bromodichloromethane	0.15	U	1.0	0.15	ug/L			09/07/16 10:29	1
Bromoform	0.18	U	1.0	0.18	ug/L			09/07/16 10:29	1
Bromomethane	0.18	U	1.0	0.18	ug/L			09/07/16 10:29	1
Carbon disulfide	0.22	U	1.0	0.22	ug/L			09/07/16 10:29	1
Carbon tetrachloride	0.33	U	1.0	0.33	ug/L			09/07/16 10:29	1
Chlorobenzene	0.24	U	1.0	0.24	ug/L			09/07/16 10:29	1
Chloroethane	0.37	U	1.0	0.37	ug/L			09/07/16 10:29	1
Chloroform	0.22	U	1.0	0.22	ug/L			09/07/16 10:29	1
Chloromethane	0.22	U	1.0	0.22	ug/L			09/07/16 10:29	1
cis-1,2-Dichloroethene	0.26	U	1.0	0.26	ug/L			09/07/16 10:29	1
cis-1,3-Dichloropropene	0.16	U	1.0	0.16	ug/L			09/07/16 10:29	1
Cyclohexane	0.26	U	1.0	0.26	ug/L			09/07/16 10:29	1
Dibromochloromethane	0.22	U	1.0	0.22	ug/L			09/07/16 10:29	1
Dichlorodifluoromethane	0.14	U	1.0	0.14	ug/L			09/07/16 10:29	1
Ethylbenzene	0.30	U	1.0	0.30	ug/L			09/07/16 10:29	1
Freon TF	0.34	U	1.0	0.34	ug/L			09/07/16 10:29	1
Isopropylbenzene	0.32	U	1.0	0.32	ug/L			09/07/16 10:29	1
m&p-Xylene	0.28	U	1.0	0.28	ug/L			09/07/16 10:29	1
Methyl acetate	0.58	U	5.0	0.58	ug/L			09/07/16 10:29	1
Methylcyclohexane	0.22	U	1.0	0.22	ug/L			09/07/16 10:29	1
Methylene Chloride	0.21	U	1.0	0.21	ug/L			09/07/16 10:29	1
MTBE	0.13	U	1.0	0.13	ug/L			09/07/16 10:29	1
o-Xylene	0.32	U	1.0	0.32	ug/L			09/07/16 10:29	1
Styrene	0.17	U	1.0	0.17	ug/L			09/07/16 10:29	1
Tetrachloroethene	0.12	U	1.0	0.12	ug/L			09/07/16 10:29	1
Toluene	0.25	U	1.0	0.25	ug/L			09/07/16 10:29	1
trans-1,2-Dichloroethene	0.18	U	1.0	0.18	ug/L			09/07/16 10:29	1

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

Lab Sample ID: MB 460-388974/6
Matrix: Water
Analysis Batch: 388974

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
trans-1,3-Dichloropropene	0.19	U	1.0	0.19	ug/L			09/07/16 10:29	1
Trichloroethene	0.22	U	1.0	0.22	ug/L			09/07/16 10:29	1
Trichlorofluoromethane	0.15	U	1.0	0.15	ug/L			09/07/16 10:29	1
Vinyl chloride	0.060	U	1.0	0.060	ug/L			09/07/16 10:29	1

Tentatively Identified Compound	*MB Est. Result*	*MB Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*					*09/07/16 10:29*	*1*

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*99*		*74 - 132*		*09/07/16 10:29*	*1*
Bromofluorobenzene	*95*		*77 - 124*		*09/07/16 10:29*	*1*
Dibromofluoromethane (Surr)	*99*		*72 - 131*		*09/07/16 10:29*	*1*
Toluene-d8 (Surr)	*98*		*80 - 120*		*09/07/16 10:29*	*1*

Lab Sample ID: LCS 460-388974/3
Matrix: Water
Analysis Batch: 388974

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1-Trichloroethane	20.0	20.0		ug/L		100	75 - 125
1,1,2,2-Tetrachloroethane	20.0	21.0		ug/L		105	74 - 120
1,1,2-Trichloroethane	20.0	20.5		ug/L		103	78 - 120
1,1-Dichloroethane	20.0	20.6		ug/L		103	77 - 123
1,1-Dichloroethene	20.0	19.3		ug/L		97	74 - 123
1,2,3-Trichlorobenzene	20.0	24.2		ug/L		121	78 - 131
1,2,4-Trichlorobenzene	20.0	23.4		ug/L		117	80 - 124
1,2-Dibromo-3-Chloropropane	20.0	21.6		ug/L		108	55 - 134
1,2-Dibromoethane	20.0	19.5		ug/L		97	80 - 120
1,2-Dichlorobenzene	20.0	20.6		ug/L		103	80 - 120
1,2-Dichloroethane	20.0	20.1		ug/L		101	76 - 121
1,2-Dichloropropane	20.0	20.4		ug/L		102	77 - 123
1,3-Dichlorobenzene	20.0	21.6		ug/L		108	80 - 120
1,4-Dichlorobenzene	20.0	21.7		ug/L		108	80 - 120
1,4-Dioxane	400	577		ug/L		144	10 - 150
2-Butanone	100	103		ug/L		103	64 - 120
2-Hexanone	100	99.6		ug/L		100	71 - 125
4-Methyl-2-pentanone	100	105		ug/L		105	78 - 124
Acetone	100	87.5		ug/L		87	39 - 150
Benzene	20.0	20.7		ug/L		104	77 - 121
Bromochloromethane	20.0	20.0		ug/L		100	77 - 127
Bromodichloromethane	20.0	20.3		ug/L		102	76 - 120
Bromoform	20.0	18.6		ug/L		93	53 - 120
Bromomethane	20.0	18.2		ug/L		91	10 - 150
Carbon disulfide	20.0	20.7		ug/L		104	69 - 133
Carbon tetrachloride	20.0	20.7		ug/L		103	70 - 132
Chlorobenzene	20.0	20.9		ug/L		104	80 - 120
Chloroethane	20.0	21.1		ug/L		105	52 - 150

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

Lab Sample ID: LCS 460-388974/3
Matrix: Water
Analysis Batch: 388974

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloroform	20.0	20.1		ug/L		101	80 - 120
Chloromethane	20.0	21.0		ug/L		105	56 - 131
cis-1,2-Dichloroethene	20.0	20.6		ug/L		103	80 - 120
cis-1,3-Dichloropropene	20.0	20.6		ug/L		103	77 - 120
Cyclohexane	20.0	20.3		ug/L		101	56 - 150
Dibromochloromethane	20.0	20.0		ug/L		100	73 - 120
Dichlorodifluoromethane	20.0	17.2		ug/L		86	50 - 131
Ethylbenzene	20.0	21.0		ug/L		105	80 - 120
Freon TF	20.0	19.8		ug/L		99	59 - 150
Isopropylbenzene	20.0	21.8		ug/L		109	80 - 123
m&p-Xylene	20.0	21.1		ug/L		106	80 - 120
Methyl acetate	100	106		ug/L		106	66 - 144
Methylcyclohexane	20.0	21.3		ug/L		107	61 - 145
Methylene Chloride	20.0	19.7		ug/L		99	77 - 123
MTBE	20.0	21.0		ug/L		105	79 - 122
o-Xylene	20.0	21.3		ug/L		106	80 - 120
Styrene	20.0	21.5		ug/L		107	80 - 120
Tetrachloroethene	20.0	20.6		ug/L		103	78 - 122
Toluene	20.0	20.8		ug/L		104	80 - 120
trans-1,2-Dichloroethene	20.0	20.5		ug/L		103	79 - 120
trans-1,3-Dichloropropene	20.0	20.6		ug/L		103	76 - 120
Trichloroethene	20.0	19.5		ug/L		98	77 - 120
Trichlorofluoromethane	20.0	19.8		ug/L		99	71 - 143
Vinyl chloride	20.0	21.3		ug/L		106	62 - 138

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*100*		*74 - 132*
Bromofluorobenzene	*98*		*77 - 124*
Dibromofluoromethane (Surr)	*101*		*72 - 131*
Toluene-d8 (Surr)	*101*		*80 - 120*

Lab Sample ID: LCSD 460-388974/4
Matrix: Water
Analysis Batch: 388974

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

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1,1-Trichloroethane	20.0	19.4		ug/L		97	75 - 125	3	30
1,1,2,2-Tetrachloroethane	20.0	20.9		ug/L		104	74 - 120	1	30
1,1,2-Trichloroethane	20.0	19.9		ug/L		100	78 - 120	3	30
1,1-Dichloroethane	20.0	19.6		ug/L		98	77 - 123	5	30
1,1-Dichloroethene	20.0	18.6		ug/L		93	74 - 123	4	30
1,2,3-Trichlorobenzene	20.0	23.4		ug/L		117	78 - 131	3	30
1,2,4-Trichlorobenzene	20.0	22.8		ug/L		114	80 - 124	3	30
1,2-Dibromo-3-Chloropropane	20.0	21.4		ug/L		107	55 - 134	1	30
1,2-Dibromoethane	20.0	19.3		ug/L		97	80 - 120	1	30
1,2-Dichlorobenzene	20.0	19.3		ug/L		97	80 - 120	6	30
1,2-Dichloroethane	20.0	19.5		ug/L		98	76 - 121	3	30
1,2-Dichloropropane	20.0	19.4		ug/L		97	77 - 123	5	30

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

Lab Sample ID: LCSD 460-388974/4
Matrix: Water
Analysis Batch: 388974

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

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,3-Dichlorobenzene			20.0	20.4		ug/L		102	80 - 120	5	30
1,4-Dichlorobenzene			20.0	20.3		ug/L		101	80 - 120	6	30
1,4-Dioxane			400	635	*	ug/L		159	10 - 150	10	30
2-Butanone			100	99.5		ug/L		100	64 - 120	4	30
2-Hexanone			100	98.5		ug/L		98	71 - 125	1	30
4-Methyl-2-pentanone			100	104		ug/L		104	78 - 124	1	30
Acetone			100	90.5		ug/L		91	39 - 150	3	30
Benzene			20.0	19.9		ug/L		100	77 - 121	4	30
Bromochloromethane			20.0	19.4		ug/L		97	77 - 127	3	30
Bromodichloromethane			20.0	19.4		ug/L		97	76 - 120	4	30
Bromoform			20.0	18.3		ug/L		92	53 - 120	1	30
Bromomethane			20.0	17.4		ug/L		87	10 - 150	5	30
Carbon disulfide			20.0	19.6		ug/L		98	69 - 133	5	30
Carbon tetrachloride			20.0	19.7		ug/L		99	70 - 132	5	30
Chlorobenzene			20.0	19.5		ug/L		98	80 - 120	7	30
Chloroethane			20.0	20.2		ug/L		101	52 - 150	4	30
Chloroform			20.0	19.5		ug/L		98	80 - 120	3	30
Chloromethane			20.0	20.0		ug/L		100	56 - 131	5	30
cis-1,2-Dichloroethene			20.0	19.6		ug/L		98	80 - 120	5	30
cis-1,3-Dichloropropene			20.0	19.9		ug/L		99	77 - 120	3	30
Cyclohexane			20.0	19.5		ug/L		98	56 - 150	4	30
Dibromochloromethane			20.0	19.1		ug/L		95	73 - 120	5	30
Dichlorodifluoromethane			20.0	15.6		ug/L		78	50 - 131	9	30
Ethylbenzene			20.0	19.7		ug/L		99	80 - 120	6	30
Freon TF			20.0	18.2		ug/L		91	59 - 150	9	30
Isopropylbenzene			20.0	21.0		ug/L		105	80 - 123	4	30
m&p-Xylene			20.0	19.6		ug/L		98	80 - 120	8	30
Methyl acetate			100	105		ug/L		105	66 - 144	1	30
Methylcyclohexane			20.0	19.0		ug/L		95	61 - 145	11	30
Methylene Chloride			20.0	19.0		ug/L		95	77 - 123	4	30
MTBE			20.0	20.4		ug/L		102	79 - 122	3	30
o-Xylene			20.0	20.0		ug/L		100	80 - 120	6	30
Styrene			20.0	20.7		ug/L		103	80 - 120	4	30
Tetrachloroethene			20.0	19.3		ug/L		96	78 - 122	7	30
Toluene			20.0	20.0		ug/L		100	80 - 120	4	30
trans-1,2-Dichloroethene			20.0	19.5		ug/L		98	79 - 120	5	30
trans-1,3-Dichloropropene			20.0	20.0		ug/L		100	76 - 120	3	30
Trichloroethene			20.0	19.3		ug/L		96	77 - 120	1	30
Trichlorofluoromethane			20.0	18.3		ug/L		92	71 - 143	8	30
Vinyl chloride			20.0	19.8		ug/L		99	62 - 138	7	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*98*		*74 - 132*
Bromofluorobenzene	*97*		*77 - 124*
Dibromofluoromethane (Surr)	*98*		*72 - 131*
Toluene-d8 (Surr)	*99*		*80 - 120*

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Lab Sample ID: MB 460-388379/1-A
Matrix: Water
Analysis Batch: 388719

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 388379

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4,5-Tetrachlorobenzene	0.43	U	10	0.43	ug/L		09/02/16 09:20	09/06/16 08:14	1
2,2'-oxybis[1-chloropropane]	0.93	U	10	0.93	ug/L		09/02/16 09:20	09/06/16 08:14	1
2,3,4,6-Tetrachlorophenol	0.69	U	10	0.69	ug/L		09/02/16 09:20	09/06/16 08:14	1
2,4,5-Trichlorophenol	0.49	U	10	0.49	ug/L		09/02/16 09:20	09/06/16 08:14	1
2,4,6-Trichlorophenol	0.53	U	10	0.53	ug/L		09/02/16 09:20	09/06/16 08:14	1
2,4-Dichlorophenol	0.63	U	10	0.63	ug/L		09/02/16 09:20	09/06/16 08:14	1
2,4-Dimethylphenol	0.91	U	10	0.91	ug/L		09/02/16 09:20	09/06/16 08:14	1
2,4-Dinitrophenol	2.4	U	20	2.4	ug/L		09/02/16 09:20	09/06/16 08:14	1
2,4-Dinitrotoluene	1.0	U	2.0	1.0	ug/L		09/02/16 09:20	09/06/16 08:14	1
2,6-Dinitrotoluene	0.88	U	2.0	0.88	ug/L		09/02/16 09:20	09/06/16 08:14	1
2-Chloronaphthalene	0.61	U	10	0.61	ug/L		09/02/16 09:20	09/06/16 08:14	1
2-Chlorophenol	0.74	U	10	0.74	ug/L		09/02/16 09:20	09/06/16 08:14	1
2-Methylnaphthalene	0.88	U	10	0.88	ug/L		09/02/16 09:20	09/06/16 08:14	1
2-Methylphenol	1.3	U	10	1.3	ug/L		09/02/16 09:20	09/06/16 08:14	1
2-Nitroaniline	0.65	U	10	0.65	ug/L		09/02/16 09:20	09/06/16 08:14	1
2-Nitrophenol	0.59	U	10	0.59	ug/L		09/02/16 09:20	09/06/16 08:14	1
3,3'-Dichlorobenzidine	1.0	U	10	1.0	ug/L		09/02/16 09:20	09/06/16 08:14	1
3-Nitroaniline	0.82	U	10	0.82	ug/L		09/02/16 09:20	09/06/16 08:14	1
4,6-Dinitro-2-methylphenol	2.0	U	20	2.0	ug/L		09/02/16 09:20	09/06/16 08:14	1
4-Bromophenyl phenyl ether	1.0	U	10	1.0	ug/L		09/02/16 09:20	09/06/16 08:14	1
4-Chloro-3-methylphenol	0.76	U	10	0.76	ug/L		09/02/16 09:20	09/06/16 08:14	1
4-Chloroaniline	0.73	U	10	0.73	ug/L		09/02/16 09:20	09/06/16 08:14	1
4-Chlorophenyl phenyl ether	0.96	U	10	0.96	ug/L		09/02/16 09:20	09/06/16 08:14	1
4-Methylphenol	0.87	U	10	0.87	ug/L		09/02/16 09:20	09/06/16 08:14	1
4-Nitroaniline	0.48	U	10	0.48	ug/L		09/02/16 09:20	09/06/16 08:14	1
4-Nitrophenol	4.7	U	20	4.7	ug/L		09/02/16 09:20	09/06/16 08:14	1
Acenaphthene	0.88	U	10	0.88	ug/L		09/02/16 09:20	09/06/16 08:14	1
Acenaphthylene	0.65	U	10	0.65	ug/L		09/02/16 09:20	09/06/16 08:14	1
Acetophenone	1.0	U	10	1.0	ug/L		09/02/16 09:20	09/06/16 08:14	1
Anthracene	0.57	U	10	0.57	ug/L		09/02/16 09:20	09/06/16 08:14	1
Atrazine	0.77	U	2.0	0.77	ug/L		09/02/16 09:20	09/06/16 08:14	1
Benzaldehyde	0.86	U	10	0.86	ug/L		09/02/16 09:20	09/06/16 08:14	1
Benzo[a]anthracene	0.55	U	1.0	0.55	ug/L		09/02/16 09:20	09/06/16 08:14	1
Benzo[a]pyrene	0.16	U	1.0	0.16	ug/L		09/02/16 09:20	09/06/16 08:14	1
Benzo[b]fluoranthene	0.44	U	1.0	0.44	ug/L		09/02/16 09:20	09/06/16 08:14	1
Benzo[g,h,i]perylene	0.75	U	10	0.75	ug/L		09/02/16 09:20	09/06/16 08:14	1
Benzo[k]fluoranthene	0.18	U	1.0	0.18	ug/L		09/02/16 09:20	09/06/16 08:14	1
Bis(2-chloroethoxy)methane	0.69	U	10	0.69	ug/L		09/02/16 09:20	09/06/16 08:14	1
Bis(2-chloroethyl)ether	0.12	U	1.0	0.12	ug/L		09/02/16 09:20	09/06/16 08:14	1
Bis(2-ethylhexyl) phthalate	0.72	U	2.0	0.72	ug/L		09/02/16 09:20	09/06/16 08:14	1
Butyl benzyl phthalate	0.60	U	10	0.60	ug/L		09/02/16 09:20	09/06/16 08:14	1
Caprolactam	1.1	U	10	1.1	ug/L		09/02/16 09:20	09/06/16 08:14	1
Carbazole	0.85	U	10	0.85	ug/L		09/02/16 09:20	09/06/16 08:14	1
Chrysene	0.67	U	2.0	0.67	ug/L		09/02/16 09:20	09/06/16 08:14	1
Dibenz(a,h)anthracene	0.090	U	1.0	0.090	ug/L		09/02/16 09:20	09/06/16 08:14	1
Dibenzofuran	0.85	U	10	0.85	ug/L		09/02/16 09:20	09/06/16 08:14	1
Diethyl phthalate	1.0	U	10	1.0	ug/L		09/02/16 09:20	09/06/16 08:14	1
Dimethyl phthalate	0.98	U	10	0.98	ug/L		09/02/16 09:20	09/06/16 08:14	1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 460-388379/1-A
Matrix: Water
Analysis Batch: 388719

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 388379

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Di-n-butyl phthalate	0.82	U	10	0.82	ug/L		09/02/16 09:20	09/06/16 08:14	1
Di-n-octyl phthalate	0.69	U	10	0.69	ug/L		09/02/16 09:20	09/06/16 08:14	1
Diphenyl	0.63	U	10	0.63	ug/L		09/02/16 09:20	09/06/16 08:14	1
Fluoranthene	0.72	U	10	0.72	ug/L		09/02/16 09:20	09/06/16 08:14	1
Fluorene	0.80	U	10	0.80	ug/L		09/02/16 09:20	09/06/16 08:14	1
Hexachlorobenzene	0.47	U	1.0	0.47	ug/L		09/02/16 09:20	09/06/16 08:14	1
Hexachlorobutadiene	0.76	U	1.0	0.76	ug/L		09/02/16 09:20	09/06/16 08:14	1
Hexachlorocyclopentadiene	0.61	U	10	0.61	ug/L		09/02/16 09:20	09/06/16 08:14	1
Hexachloroethane	0.090	U	1.0	0.090	ug/L		09/02/16 09:20	09/06/16 08:14	1
Indeno[1,2,3-cd]pyrene	0.21	U	1.0	0.21	ug/L		09/02/16 09:20	09/06/16 08:14	1
Isophorone	0.67	U	10	0.67	ug/L		09/02/16 09:20	09/06/16 08:14	1
Naphthalene	0.80	U	10	0.80	ug/L		09/02/16 09:20	09/06/16 08:14	1
Nitrobenzene	0.49	U	1.0	0.49	ug/L		09/02/16 09:20	09/06/16 08:14	1
N-Nitrosodi-n-propylamine	0.83	U	1.0	0.83	ug/L		09/02/16 09:20	09/06/16 08:14	1
N-Nitrosodiphenylamine	0.74	U	10	0.74	ug/L		09/02/16 09:20	09/06/16 08:14	1
Pentachlorophenol	2.2	U	20	2.2	ug/L		09/02/16 09:20	09/06/16 08:14	1
Phenanthrene	0.65	U	10	0.65	ug/L		09/02/16 09:20	09/06/16 08:14	1
Phenol	0.41	U	10	0.41	ug/L		09/02/16 09:20	09/06/16 08:14	1
Pyrene	0.83	U	10	0.83	ug/L		09/02/16 09:20	09/06/16 08:14	1

Tentatively Identified Compound	*MB Est. Result*	*MB Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*				*09/02/16 09:20*	*09/06/16 08:14*	*1*

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol	*71*		*26 - 139*	*09/02/16 09:20*	*09/06/16 08:14*	*1*
2-Fluorobiphenyl	*59*		*45 - 107*	*09/02/16 09:20*	*09/06/16 08:14*	*1*
2-Fluorophenol	*41*		*25 - 58*	*09/02/16 09:20*	*09/06/16 08:14*	*1*
Nitrobenzene-d5	*79*		*51 - 108*	*09/02/16 09:20*	*09/06/16 08:14*	*1*
Phenol-d5	*17*		*14 - 39*	*09/02/16 09:20*	*09/06/16 08:14*	*1*
Terphenyl-d14	*83*		*40 - 148*	*09/02/16 09:20*	*09/06/16 08:14*	*1*

Lab Sample ID: LCS 460-388379/2-A
Matrix: Water
Analysis Batch: 388719

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 388379

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2,4,5-Tetrachlorobenzene	80.0	57.9		ug/L		72	46 - 105
2,2'-oxybis[1-chloropropane]	80.0	74.9		ug/L		94	50 - 108
2,3,4,6-Tetrachlorophenol	80.0	70.3		ug/L		88	57 - 122
2,4,5-Trichlorophenol	80.0	56.7		ug/L		71	59 - 117
2,4,6-Trichlorophenol	80.0	63.8		ug/L		80	62 - 120
2,4-Dichlorophenol	80.0	58.6		ug/L		73	62 - 102
2,4-Dimethylphenol	80.0	58.3		ug/L		73	61 - 95
2,4-Dinitrophenol	160	129		ug/L		81	45 - 125
2,4-Dinitrotoluene	80.0	69.3		ug/L		87	70 - 123
2,6-Dinitrotoluene	80.0	66.9		ug/L		84	68 - 121
2-Chloronaphthalene	80.0	60.6		ug/L		76	54 - 105

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 460-388379/2-A
Matrix: Water
Analysis Batch: 388719

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 388379

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
2-Chlorophenol	80.0	58.1		ug/L		73	54 - 92
2-Methylnaphthalene	80.0	54.8		ug/L		69	47 - 104
2-Methylphenol	80.0	43.6		ug/L		54	43 - 80
2-Nitroaniline	80.0	72.6		ug/L		91	46 - 124
2-Nitrophenol	80.0	56.2		ug/L		70	58 - 109
3,3'-Dichlorobenzidine	80.0	65.7		ug/L		82	68 - 123
3-Nitroaniline	80.0	58.3		ug/L		73	60 - 117
4,6-Dinitro-2-methylphenol	160	137		ug/L		85	59 - 132
4-Bromophenyl phenyl ether	80.0	65.9		ug/L		82	57 - 126
4-Chloro-3-methylphenol	80.0	61.0		ug/L		76	58 - 98
4-Chloroaniline	80.0	53.0		ug/L		66	51 - 108
4-Chlorophenyl phenyl ether	80.0	67.1		ug/L		84	60 - 114
4-Methylphenol	80.0	43.9		ug/L		55	34 - 78
4-Nitroaniline	80.0	61.8		ug/L		77	48 - 135
4-Nitrophenol	160	33.1		ug/L		21	11 - 47
Acenaphthene	80.0	62.6		ug/L		78	58 - 107
Acenaphthylene	80.0	64.5		ug/L		81	61 - 106
Acetophenone	80.0	75.2		ug/L		94	54 - 115
Anthracene	80.0	70.9		ug/L		89	70 - 118
Benzo[a]anthracene	80.0	68.4		ug/L		85	73 - 119
Benzo[a]pyrene	80.0	68.6		ug/L		86	76 - 125
Benzo[b]fluoranthene	80.0	66.8		ug/L		84	78 - 123
Benzo[g,h,i]perylene	80.0	66.2		ug/L		83	63 - 133
Benzo[k]fluoranthene	80.0	71.9		ug/L		90	71 - 126
Bis(2-chloroethoxy)methane	80.0	64.6		ug/L		81	67 - 104
Bis(2-chloroethyl)ether	80.0	58.8		ug/L		73	63 - 106
Bis(2-ethylhexyl) phthalate	80.0	67.6		ug/L		84	63 - 135
Butyl benzyl phthalate	80.0	71.7		ug/L		90	66 - 129
Carbazole	80.0	73.7		ug/L		92	68 - 121
Chrysene	80.0	74.8		ug/L		93	73 - 121
Dibenz(a,h)anthracene	80.0	69.1		ug/L		86	59 - 136
Dibenzofuran	80.0	63.2		ug/L		79	67 - 108
Diethyl phthalate	80.0	71.7		ug/L		90	61 - 129
Dimethyl phthalate	80.0	69.5		ug/L		87	65 - 121
Di-n-butyl phthalate	80.0	74.8		ug/L		93	64 - 130
Di-n-octyl phthalate	80.0	76.2		ug/L		95	64 - 131
Diphenyl	80.0	62.5		ug/L		78	54 - 108
Fluoranthene	80.0	86.2		ug/L		108	66 - 123
Fluorene	80.0	65.1		ug/L		81	67 - 112
Hexachlorobenzene	80.0	66.8		ug/L		83	63 - 125
Hexachlorobutadiene	80.0	51.5		ug/L		64	34 - 99
Hexachlorocyclopentadiene	80.0	41.9		ug/L		52	18 - 99
Hexachloroethane	80.0	50.0		ug/L		63	39 - 92
Indeno[1,2,3-cd]pyrene	80.0	64.5		ug/L		81	57 - 142
Isophorone	80.0	62.5		ug/L		78	55 - 105
Naphthalene	80.0	53.2		ug/L		67	51 - 98
Nitrobenzene	80.0	73.3		ug/L		92	56 - 106
N-Nitrosodi-n-propylamine	80.0	70.9		ug/L		89	48 - 118

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 460-388379/2-A
Matrix: Water
Analysis Batch: 388719

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 388379

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
N-Nitrosodiphenylamine	80.0	67.8		ug/L		85	69 - 118
Pentachlorophenol	160	137		ug/L		86	54 - 120
Phenanthrene	80.0	69.8		ug/L		87	70 - 117
Phenol	80.0	19.4		ug/L		24	16 - 43
Pyrene	80.0	68.1		ug/L		85	63 - 129

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2,4,6-Tribromophenol	*83*		*26 - 139*
2-Fluorobiphenyl	*76*		*45 - 107*
2-Fluorophenol	*33*		*25 - 58*
Nitrobenzene-d5	*76*		*51 - 108*
Phenol-d5	*20*		*14 - 39*
Terphenyl-d14	*68*		*40 - 148*

Lab Sample ID: LCS 460-388379/3-A
Matrix: Water
Analysis Batch: 388719

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 388379

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Atrazine	160	130		ug/L		81	38 - 146
Benzaldehyde	160	135		ug/L		84	46 - 111
Caprolactam	160	30.3		ug/L		19	10 - 43

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2,4,6-Tribromophenol	*71*		*26 - 139*
2-Fluorobiphenyl	*60*		*45 - 107*
2-Fluorophenol	*35*		*25 - 58*
Nitrobenzene-d5	*64*		*51 - 108*
Phenol-d5	*12*	*X*	*14 - 39*
Terphenyl-d14	*69*		*40 - 148*

Lab Sample ID: 460-119489-J-4-A MS
Matrix: Water
Analysis Batch: 388719

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 388379

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2,4,5-Tetrachlorobenzene	0.43	U	80.0	60.3		ug/L		75	46 - 105
2,2'-oxybis[1-chloropropane]	0.93	U	80.0	72.9		ug/L		91	50 - 108
2,3,4,6-Tetrachlorophenol	0.69	U	80.0	71.2		ug/L		89	57 - 122
2,4,5-Trichlorophenol	0.49	U	80.0	63.5		ug/L		79	59 - 117
2,4,6-Trichlorophenol	0.53	U	80.0	61.1		ug/L		76	62 - 120
2,4-Dichlorophenol	0.63	U F1	80.0	49.0	F1	ug/L		61	62 - 102
2,4-Dimethylphenol	0.91	U F1	80.0	46.0	F1	ug/L		58	61 - 95
2,4-Dinitrophenol	2.4	U	160	117		ug/L		73	45 - 125
2,4-Dinitrotoluene	1.0	U	80.0	62.6		ug/L		78	70 - 123
2,6-Dinitrotoluene	0.88	U	80.0	67.7		ug/L		85	68 - 121
2-Chloronaphthalene	0.61	U	80.0	63.0		ug/L		79	54 - 105
2-Chlorophenol	0.74	U	80.0	56.4		ug/L		70	54 - 92

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 460-119489-J-4-A MS
Matrix: Water
Analysis Batch: 388719

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 388379

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
2-Methylnaphthalene	0.88	U	80.0	51.9		ug/L		65	47 - 104
2-Methylphenol	1.3	U	80.0	39.4		ug/L		49	43 - 80
2-Nitroaniline	0.65	U	80.0	65.7		ug/L		82	46 - 124
2-Nitrophenol	0.59	U	80.0	51.1		ug/L		64	58 - 109
3,3'-Dichlorobenzidine	1.0	U F1 F2	80.0	14.9	F1	ug/L		19	68 - 123
3-Nitroaniline	0.82	U F1	80.0	37.5	F1	ug/L		47	60 - 117
4,6-Dinitro-2-methylphenol	2.0	U	160	98.1		ug/L		61	59 - 132
4-Bromophenyl phenyl ether	1.0	U	80.0	47.5		ug/L		59	57 - 126
4-Chloro-3-methylphenol	0.76	U	80.0	50.9		ug/L		64	58 - 98
4-Chloroaniline	0.73	U F1	80.0	37.4	F1	ug/L		47	51 - 108
4-Chlorophenyl phenyl ether	0.96	U	80.0	66.2		ug/L		83	60 - 114
4-Methylphenol	0.87	U	80.0	44.7		ug/L		56	34 - 78
4-Nitroaniline	0.48	U	80.0	41.7		ug/L		52	48 - 135
4-Nitrophenol	4.7	U	160	40.1		ug/L		25	11 - 47
Acenaphthene	0.88	U	80.0	61.0		ug/L		76	58 - 107
Acenaphthylene	0.65	U	80.0	61.5		ug/L		77	61 - 106
Acetophenone	1.0	U	80.0	72.5		ug/L		91	54 - 115
Anthracene	0.57	U F1	80.0	50.0	F1	ug/L		63	70 - 118
Atrazine	0.77	U	160	98.5		ug/L		62	38 - 146
Benzaldehyde	0.86	U	160	121		ug/L		76	46 - 111
Benzo[a]anthracene	0.55	U	80.0	68.1		ug/L		85	73 - 119
Benzo[a]pyrene	0.16	U	80.0	61.9		ug/L		77	76 - 125
Benzo[b]fluoranthene	0.44	U	80.0	65.2		ug/L		81	78 - 123
Benzo[g,h,i]perylene	0.75	U	80.0	64.3		ug/L		80	63 - 133
Benzo[k]fluoranthene	0.18	U	80.0	62.9		ug/L		79	71 - 126
Bis(2-chloroethoxy)methane	0.69	U	80.0	54.6		ug/L		68	67 - 104
Bis(2-chloroethyl)ether	0.12	U	80.0	58.2		ug/L		73	63 - 106
Bis(2-ethylhexyl) phthalate	0.72	U	80.0	66.6		ug/L		83	63 - 135
Butyl benzyl phthalate	0.60	U	80.0	69.5		ug/L		87	66 - 129
Caprolactam	1.1	U	160	27.6		ug/L		17	10 - 43
Carbazole	0.85	U F1	80.0	48.9	F1	ug/L		61	68 - 121
Chrysene	0.67	U	80.0	67.7		ug/L		85	73 - 121
Dibenz(a,h)anthracene	0.090	U	80.0	68.4		ug/L		85	59 - 136
Dibenzofuran	0.85	U	80.0	63.2		ug/L		79	67 - 108
Diethyl phthalate	1.0	U	80.0	64.0		ug/L		80	61 - 129
Dimethyl phthalate	0.98	U	80.0	67.3		ug/L		84	65 - 121
Di-n-butyl phthalate	0.82	U	80.0	53.2		ug/L		67	64 - 130
Di-n-octyl phthalate	0.69	U	80.0	65.8		ug/L		82	64 - 131
Diphenyl	0.63	U	80.0	67.0		ug/L		84	54 - 108
Fluoranthene	0.72	U F1	80.0	52.4	F1	ug/L		65	66 - 123
Fluorene	0.80	U	80.0	65.6		ug/L		82	67 - 112
Hexachlorobenzene	0.47	U	80.0	55.2		ug/L		69	63 - 125
Hexachlorobutadiene	0.76	U	80.0	48.8		ug/L		61	34 - 99
Hexachlorocyclopentadiene	0.61	U	80.0	47.9		ug/L		60	18 - 99
Hexachloroethane	0.090	U	80.0	55.7		ug/L		70	39 - 92
Indeno[1,2,3-cd]pyrene	0.21	U	80.0	64.2		ug/L		80	57 - 142
Isophorone	0.67	U	80.0	51.1		ug/L		64	55 - 105
Naphthalene	0.80	U	80.0	52.7		ug/L		66	51 - 98

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 460-119489-J-4-A MS
Matrix: Water
Analysis Batch: 388719

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 388379

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Nitrobenzene	0.49	U	80.0	57.1		ug/L		71	56 - 106
N-Nitrosodi-n-propylamine	0.83	U	80.0	75.9		ug/L		95	48 - 118
N-Nitrosodiphenylamine	0.74	U F1	80.0	46.5	F1	ug/L		58	69 - 118
Pentachlorophenol	2.2	U	160	107		ug/L		67	54 - 120
Phenanthrene	0.65	U	80.0	71.0		ug/L		89	70 - 117
Phenol	0.41	U	80.0	22.6		ug/L		28	16 - 43
Pyrene	0.83	U	80.0	67.4		ug/L		84	63 - 129

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
2,4,6-Tribromophenol	*86*		*26 - 139*
2-Fluorobiphenyl	*76*		*45 - 107*
2-Fluorophenol	*34*		*25 - 58*
Nitrobenzene-d5	*61*		*51 - 108*
Phenol-d5	*21*		*14 - 39*
Terphenyl-d14	*71*		*40 - 148*

Lab Sample ID: 460-119489-L-4-A MSD
Matrix: Water
Analysis Batch: 388719

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 388379

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,2,4,5-Tetrachlorobenzene	0.43	U	80.0	63.6		ug/L		79	46 - 105	5	30
2,2'-oxybis[1-chloropropane]	0.93	U	80.0	75.7		ug/L		95	50 - 108	4	30
2,3,4,6-Tetrachlorophenol	0.69	U	80.0	74.4		ug/L		93	57 - 122	4	30
2,4,5-Trichlorophenol	0.49	U	80.0	70.1		ug/L		88	59 - 117	10	30
2,4,6-Trichlorophenol	0.53	U	80.0	72.7		ug/L		91	62 - 120	17	30
2,4-Dichlorophenol	0.63	U F1	80.0	48.8	F1	ug/L		61	62 - 102	0	30
2,4-Dimethylphenol	0.91	U F1	80.0	52.8		ug/L		66	61 - 95	14	30
2,4-Dinitrophenol	2.4	U	160	131		ug/L		82	45 - 125	11	30
2,4-Dinitrotoluene	1.0	U	80.0	77.9		ug/L		97	70 - 123	22	30
2,6-Dinitrotoluene	0.88	U	80.0	72.9		ug/L		91	68 - 121	7	30
2-Chloronaphthalene	0.61	U	80.0	70.2		ug/L		88	54 - 105	11	30
2-Chlorophenol	0.74	U	80.0	63.3		ug/L		79	54 - 92	12	30
2-Methylnaphthalene	0.88	U	80.0	57.2		ug/L		71	47 - 104	10	30
2-Methylphenol	1.3	U	80.0	50.8		ug/L		63	43 - 80	25	30
2-Nitroaniline	0.65	U	80.0	63.0		ug/L		79	46 - 124	4	30
2-Nitrophenol	0.59	U	80.0	54.4		ug/L		68	58 - 109	6	30
3,3'-Dichlorobenzidine	1.0	U F1 F2	80.0	23.1	F1 F2	ug/L		29	68 - 123	43	30
3-Nitroaniline	0.82	U F1	80.0	45.1	F1	ug/L		56	60 - 117	18	30
4,6-Dinitro-2-methylphenol	2.0	U	160	106		ug/L		66	59 - 132	8	30
4-Bromophenyl phenyl ether	1.0	U	80.0	50.8		ug/L		63	57 - 126	7	30
4-Chloro-3-methylphenol	0.76	U	80.0	57.7		ug/L		72	58 - 98	13	30
4-Chloroaniline	0.73	U F1	80.0	40.5		ug/L		51	51 - 108	8	30
4-Chlorophenyl phenyl ether	0.96	U	80.0	66.4		ug/L		83	60 - 114	0	30
4-Methylphenol	0.87	U	80.0	41.6		ug/L		52	34 - 78	7	30
4-Nitroaniline	0.48	U	80.0	47.6		ug/L		59	48 - 135	13	30
4-Nitrophenol	4.7	U	160	43.9		ug/L		27	11 - 47	9	30
Acenaphthene	0.88	U	80.0	64.4		ug/L		80	58 - 107	5	30

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 460-119489-L-4-A MSD
Matrix: Water
Analysis Batch: 388719

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 388379

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Acenaphthylene	0.65	U	80.0	71.5		ug/L		89	61 - 106	15	30
Acetophenone	1.0	U	80.0	68.3		ug/L		85	54 - 115	6	30
Anthracene	0.57	U F1	80.0	53.4	F1	ug/L		67	70 - 118	7	30
Atrazine	0.77	U	160	107		ug/L		67	38 - 146	8	30
Benzaldehyde	0.86	U	160	128		ug/L		80	46 - 111	5	30
Benzo[a]anthracene	0.55	U	80.0	67.5		ug/L		84	73 - 119	1	30
Benzo[a]pyrene	0.16	U	80.0	63.8		ug/L		80	76 - 125	3	30
Benzo[b]fluoranthene	0.44	U	80.0	62.1		ug/L		78	78 - 123	5	30
Benzo[g,h,i]perylene	0.75	U	80.0	64.5		ug/L		81	63 - 133	0	30
Benzo[k]fluoranthene	0.18	U	80.0	64.2		ug/L		80	71 - 126	2	30
Bis(2-chloroethoxy)methane	0.69	U	80.0	57.4		ug/L		72	67 - 104	5	30
Bis(2-chloroethyl)ether	0.12	U	80.0	55.4		ug/L		69	63 - 106	5	30
Bis(2-ethylhexyl) phthalate	0.72	U	80.0	66.4		ug/L		83	63 - 135	0	30
Butyl benzyl phthalate	0.60	U	80.0	66.1		ug/L		83	66 - 129	5	30
Caprolactam	1.1	U	160	24.7		ug/L		15	10 - 43	11	30
Carbazole	0.85	U F1	80.0	50.2	F1	ug/L		63	68 - 121	3	30
Chrysene	0.67	U	80.0	63.7		ug/L		80	73 - 121	6	30
Dibenz(a,h)anthracene	0.090	U	80.0	70.6		ug/L		88	59 - 136	3	30
Dibenzofuran	0.85	U	80.0	69.0		ug/L		86	67 - 108	9	30
Diethyl phthalate	1.0	U	80.0	71.3		ug/L		89	61 - 129	11	30
Dimethyl phthalate	0.98	U	80.0	73.3		ug/L		92	65 - 121	9	30
Di-n-butyl phthalate	0.82	U	80.0	53.2		ug/L		66	64 - 130	0	30
Di-n-octyl phthalate	0.69	U	80.0	67.1		ug/L		84	64 - 131	2	30
Diphenyl	0.63	U	80.0	70.6		ug/L		88	54 - 108	5	30
Fluoranthene	0.72	U F1	80.0	55.6		ug/L		69	66 - 123	6	30
Fluorene	0.80	U	80.0	70.0		ug/L		88	67 - 112	6	30
Hexachlorobenzene	0.47	U	80.0	55.0		ug/L		69	63 - 125	0	30
Hexachlorobutadiene	0.76	U	80.0	52.1		ug/L		65	34 - 99	6	30
Hexachlorocyclopentadiene	0.61	U	80.0	55.2		ug/L		69	18 - 99	14	30
Hexachloroethane	0.090	U	80.0	54.3		ug/L		68	39 - 92	3	30
Indeno[1,2,3-cd]pyrene	0.21	U	80.0	61.5		ug/L		77	57 - 142	4	30
Isophorone	0.67	U	80.0	54.4		ug/L		68	55 - 105	6	30
Naphthalene	0.80	U	80.0	55.4		ug/L		69	51 - 98	5	30
Nitrobenzene	0.49	U	80.0	60.3		ug/L		75	56 - 106	5	30
N-Nitrosodi-n-propylamine	0.83	U	80.0	76.1		ug/L		95	48 - 118	0	30
N-Nitrosodiphenylamine	0.74	U F1	80.0	53.9	F1	ug/L		67	69 - 118	15	30
Pentachlorophenol	2.2	U	160	107		ug/L		67	54 - 120	1	30
Phenanthrene	0.65	U	80.0	76.4		ug/L		95	70 - 117	7	30
Phenol	0.41	U	80.0	21.9		ug/L		27	16 - 43	3	30
Pyrene	0.83	U	80.0	65.4		ug/L		82	63 - 129	3	30

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
2,4,6-Tribromophenol	*97*		*26 - 139*
2-Fluorobiphenyl	*86*		*45 - 107*
2-Fluorophenol	*33*		*25 - 58*
Nitrobenzene-d5	*68*		*51 - 108*
Phenol-d5	*22*		*14 - 39*
Terphenyl-d14	*71*		*40 - 148*

Method: 8081B - Organochlorine Pesticides (GC)

Lab Sample ID: MB 460-388371/1-A | **Client Sample ID: Method Blank**
Matrix: Water | **Prep Type: Total/NA**
Analysis Batch: 388763 | **Prep Batch: 388371**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	0.0050	U	0.020	0.0050	ug/L		09/02/16 08:22	09/06/16 08:03	1
4,4'-DDE	0.0040	U	0.020	0.0040	ug/L		09/02/16 08:22	09/06/16 08:03	1
4,4'-DDT	0.0040	U	0.020	0.0040	ug/L		09/02/16 08:22	09/06/16 08:03	1
Aldrin	0.0040	U	0.020	0.0040	ug/L		09/02/16 08:22	09/06/16 08:03	1
alpha-BHC	0.0060	U	0.020	0.0060	ug/L		09/02/16 08:22	09/06/16 08:03	1
beta-BHC	0.0050	U	0.020	0.0050	ug/L		09/02/16 08:22	09/06/16 08:03	1
Chlordane (technical)	0.13	U	0.50	0.13	ug/L		09/02/16 08:22	09/06/16 08:03	1
delta-BHC	0.0060	U	0.020	0.0060	ug/L		09/02/16 08:22	09/06/16 08:03	1
Dieldrin	0.0040	U	0.020	0.0040	ug/L		09/02/16 08:22	09/06/16 08:03	1
Endosulfan I	0.0050	U	0.020	0.0050	ug/L		09/02/16 08:22	09/06/16 08:03	1
Endosulfan II	0.0040	U	0.020	0.0040	ug/L		09/02/16 08:22	09/06/16 08:03	1
Endosulfan sulfate	0.0050	U	0.020	0.0050	ug/L		09/02/16 08:22	09/06/16 08:03	1
Endrin	0.0040	U	0.020	0.0040	ug/L		09/02/16 08:22	09/06/16 08:03	1
Endrin aldehyde	0.0040	U	0.020	0.0040	ug/L		09/02/16 08:22	09/06/16 08:03	1
Endrin ketone	0.0040	U	0.020	0.0040	ug/L		09/02/16 08:22	09/06/16 08:03	1
gamma-BHC (Lindane)	0.0040	U	0.020	0.0040	ug/L		09/02/16 08:22	09/06/16 08:03	1
Heptachlor	0.0040	U	0.020	0.0040	ug/L		09/02/16 08:22	09/06/16 08:03	1
Heptachlor epoxide	0.0040	U	0.020	0.0040	ug/L		09/02/16 08:22	09/06/16 08:03	1
Methoxychlor	0.0040	U	0.020	0.0040	ug/L		09/02/16 08:22	09/06/16 08:03	1
Toxaphene	0.060	U	0.50	0.060	ug/L		09/02/16 08:22	09/06/16 08:03	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*76*		*10 - 150*	*09/02/16 08:22*	*09/06/16 08:03*	*1*
DCB Decachlorobiphenyl	*72*		*10 - 150*	*09/02/16 08:22*	*09/06/16 08:03*	*1*
Tetrachloro-m-xylene	*81*		*16 - 150*	*09/02/16 08:22*	*09/06/16 08:03*	*1*
Tetrachloro-m-xylene	*83*		*16 - 150*	*09/02/16 08:22*	*09/06/16 08:03*	*1*

Lab Sample ID: LCS 460-388371/2-A | **Client Sample ID: Lab Control Sample**
Matrix: Water | **Prep Type: Total/NA**
Analysis Batch: 388763 | **Prep Batch: 388371**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
4,4'-DDD	0.800	0.790		ug/L		99	66 - 150
4,4'-DDD	0.800	0.781		ug/L		98	66 - 150
4,4'-DDE	0.800	0.780		ug/L		97	67 - 150
4,4'-DDE	0.800	0.773		ug/L		97	67 - 150
4,4'-DDT	0.800	0.803		ug/L		100	62 - 150
4,4'-DDT	0.800	0.793		ug/L		99	62 - 150
Aldrin	0.800	0.764		ug/L		95	48 - 144
Aldrin	0.800	0.783		ug/L		98	48 - 144
alpha-BHC	0.800	0.795		ug/L		99	68 - 150
alpha-BHC	0.800	0.849		ug/L		106	68 - 150
beta-BHC	0.800	0.808		ug/L		101	71 - 150
beta-BHC	0.800	0.830		ug/L		104	71 - 150
delta-BHC	0.800	0.727		ug/L		91	58 - 150
delta-BHC	0.800	0.765		ug/L		96	58 - 150
Dieldrin	0.800	0.814		ug/L		102	68 - 150
Dieldrin	0.800	0.799		ug/L		100	68 - 150

Method: 8081B - Organochlorine Pesticides (GC) (Continued)

Lab Sample ID: LCS 460-388371/2-A
Matrix: Water
Analysis Batch: 388763

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 388371

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Endosulfan I			0.800	0.794		ug/L		99	68 - 150		
Endosulfan I			0.800	0.809		ug/L		101	68 - 150		
Endosulfan II			0.800	0.802		ug/L		100	66 - 150		
Endosulfan II			0.800	0.776		ug/L		97	66 - 150		
Endosulfan sulfate			0.800	0.857		ug/L		107	64 - 150		
Endosulfan sulfate			0.800	0.859		ug/L		107	64 - 150		
Endrin			0.800	0.805		ug/L		101	61 - 150		
Endrin			0.800	0.789		ug/L		99	61 - 150		
Endrin aldehyde			0.800	0.744		ug/L		93	70 - 150		
Endrin aldehyde			0.800	0.788		ug/L		98	70 - 150		
Endrin ketone			0.800	0.795		ug/L		99	66 - 150		
Endrin ketone			0.800	0.851		ug/L		106	66 - 150		
gamma-BHC (Lindane)			0.800	0.782		ug/L		98	67 - 150		
gamma-BHC (Lindane)			0.800	0.818		ug/L		102	67 - 150		
Heptachlor			0.800	0.776		ug/L		97	53 - 145		
Heptachlor			0.800	0.785		ug/L		98	53 - 145		
Heptachlor epoxide			0.800	0.769		ug/L		96	66 - 150		
Heptachlor epoxide			0.800	0.786		ug/L		98	66 - 150		
Methoxychlor			0.800	0.822		ug/L		103	62 - 150		
Methoxychlor			0.800	0.880		ug/L		110	62 - 150		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
DCB Decachlorobiphenyl	*68*		*10 - 150*
DCB Decachlorobiphenyl	*66*		*10 - 150*
Tetrachloro-m-xylene	*76*		*16 - 150*
Tetrachloro-m-xylene	*79*		*16 - 150*

Lab Sample ID: LCSD 460-388371/3-A
Matrix: Water
Analysis Batch: 388763

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 388371

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
4,4'-DDD			0.800	0.748		ug/L		94	66 - 150	4	30
4,4'-DDD			0.800	0.752		ug/L		94	66 - 150	5	30
4,4'-DDE			0.800	0.730		ug/L		91	67 - 150	7	30
4,4'-DDE			0.800	0.710		ug/L		89	67 - 150	8	30
4,4'-DDT			0.800	0.773		ug/L		97	62 - 150	4	30
4,4'-DDT			0.800	0.752		ug/L		94	62 - 150	5	30
Aldrin			0.800	0.709		ug/L		89	48 - 144	7	30
Aldrin			0.800	0.723		ug/L		90	48 - 144	8	30
alpha-BHC			0.800	0.740		ug/L		92	68 - 150	7	30
alpha-BHC			0.800	0.776		ug/L		97	68 - 150	9	30
beta-BHC			0.800	0.746		ug/L		93	71 - 150	8	30
beta-BHC			0.800	0.759		ug/L		95	71 - 150	9	30
delta-BHC			0.800	0.670		ug/L		84	58 - 150	8	30
delta-BHC			0.800	0.698		ug/L		87	58 - 150	9	30
Dieldrin			0.800	0.767		ug/L		96	68 - 150	6	30
Dieldrin			0.800	0.754		ug/L		94	68 - 150	6	30

Method: 8081B - Organochlorine Pesticides (GC) (Continued)

Lab Sample ID: LCSD 460-388371/3-A
Matrix: Water
Analysis Batch: 388763

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 388371

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Endosulfan I			0.800	0.747		ug/L		93	68 - 150	6	30
Endosulfan I			0.800	0.752		ug/L		94	68 - 150	7	30
Endosulfan II			0.800	0.768		ug/L		96	66 - 150	4	30
Endosulfan II			0.800	0.744		ug/L		93	66 - 150	4	30
Endosulfan sulfate			0.800	0.845		ug/L		106	64 - 150	2	30
Endosulfan sulfate			0.800	0.817		ug/L		102	64 - 150	5	30
Endrin			0.800	0.759		ug/L		95	61 - 150	6	30
Endrin			0.800	0.755		ug/L		94	61 - 150	4	30
Endrin aldehyde			0.800	0.718		ug/L		90	70 - 150	4	30
Endrin aldehyde			0.800	0.756		ug/L		94	70 - 150	4	30
Endrin ketone			0.800	0.767		ug/L		96	66 - 150	3	30
Endrin ketone			0.800	0.792		ug/L		99	66 - 150	7	30
gamma-BHC (Lindane)			0.800	0.728		ug/L		91	67 - 150	7	30
gamma-BHC (Lindane)			0.800	0.744		ug/L		93	67 - 150	9	30
Heptachlor			0.800	0.717		ug/L		90	53 - 145	8	30
Heptachlor			0.800	0.720		ug/L		90	53 - 145	9	30
Heptachlor epoxide			0.800	0.717		ug/L		90	66 - 150	7	30
Heptachlor epoxide			0.800	0.729		ug/L		91	66 - 150	7	30
Methoxychlor			0.800	0.832		ug/L		104	62 - 150	1	30
Methoxychlor			0.800	0.843		ug/L		105	62 - 150	4	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
DCB Decachlorobiphenyl	*64*		*10 - 150*
DCB Decachlorobiphenyl	*63*		*10 - 150*
Tetrachloro-m-xylene	*70*		*16 - 150*
Tetrachloro-m-xylene	*72*		*16 - 150*

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Lab Sample ID: MB 460-388370/1-A
Matrix: Water
Analysis Batch: 388574

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 388370

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor 1016	0.098	U	0.40	0.098	ug/L		09/02/16 08:16	09/06/16 07:52	1
Aroclor 1221	0.098	U	0.40	0.098	ug/L		09/02/16 08:16	09/06/16 07:52	1
Aroclor 1232	0.098	U	0.40	0.098	ug/L		09/02/16 08:16	09/06/16 07:52	1
Aroclor 1242	0.098	U	0.40	0.098	ug/L		09/02/16 08:16	09/06/16 07:52	1
Aroclor 1248	0.098	U	0.40	0.098	ug/L		09/02/16 08:16	09/06/16 07:52	1
Aroclor 1254	0.084	U	0.40	0.084	ug/L		09/02/16 08:16	09/06/16 07:52	1
Aroclor 1260	0.084	U	0.40	0.084	ug/L		09/02/16 08:16	09/06/16 07:52	1
Aroclor 1268	0.084	U	0.40	0.084	ug/L		09/02/16 08:16	09/06/16 07:52	1
Aroclor-1262	0.084	U	0.40	0.084	ug/L		09/02/16 08:16	09/06/16 07:52	1
Polychlorinated biphenyls, Total	0.098	U	0.40	0.098	ug/L		09/02/16 08:16	09/06/16 07:52	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*104*		*10 - 150*	*09/02/16 08:16*	*09/06/16 07:52*	*1*

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography (Continued)

Lab Sample ID: MB 460-388370/1-A
Matrix: Water
Analysis Batch: 388574

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 388370

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl	79		10 - 150	09/02/16 08:16	09/06/16 07:52	1

Lab Sample ID: LCS 460-388370/2-A
Matrix: Water
Analysis Batch: 388574

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 388370

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Aroclor 1016	4.00	4.53		ug/L		113	77 - 150
Aroclor 1016	4.00	4.96		ug/L		124	77 - 150
Aroclor 1260	4.00	4.60		ug/L		115	80 - 150
Aroclor 1260	4.00	4.68		ug/L		117	80 - 150

Surrogate	LCS %Recovery	LCS Qualifier	Limits
DCB Decachlorobiphenyl	92		10 - 150
DCB Decachlorobiphenyl	91		10 - 150

Lab Sample ID: LCSD 460-388370/3-A
Matrix: Water
Analysis Batch: 388574

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 388370

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Aroclor 1016	4.00	3.84		ug/L		96	77 - 150	17	30
Aroclor 1016	4.00	4.20		ug/L		105	77 - 150	16	30
Aroclor 1260	4.00	3.80		ug/L		95	80 - 150	19	30
Aroclor 1260	4.00	3.89		ug/L		97	80 - 150	18	30

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
DCB Decachlorobiphenyl	75		10 - 150
DCB Decachlorobiphenyl	76		10 - 150

Method: 245.1 - Mercury (CVAA)

Lab Sample ID: MB 460-388820/1-A
Matrix: Water
Analysis Batch: 388881

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 388820

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.17	U	0.20	0.17	ug/L		09/06/16 11:43	09/06/16 13:27	1

Lab Sample ID: LCS 460-388820/2-A
Matrix: Water
Analysis Batch: 388881

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 388820

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	1.00	0.912		ug/L		91	85 - 115

Method: 245.1 - Mercury (CVAA) (Continued)

Lab Sample ID: 460-119333-E-3-F MS — **Client Sample ID: Matrix Spike**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 388881 — **Prep Batch: 388820**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.17	U	1.00	1.01		ug/L		101	70 - 130

Lab Sample ID: 460-119333-E-3-E DU — **Client Sample ID: Duplicate**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 388881 — **Prep Batch: 388820**

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Mercury	0.17	U	0.17	U	ug/L		NC	20

Method: 6020A - Metals (ICP/MS)

Lab Sample ID: MB 460-388270/1-A ^2 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 389030 — **Prep Batch: 388270**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	18.2	U	40.0	18.2	ug/L		09/01/16 20:27	09/06/16 21:17	2
Antimony	0.62	U	2.0	0.62	ug/L		09/01/16 20:27	09/06/16 21:17	2
Arsenic	0.64	U	2.0	0.64	ug/L		09/01/16 20:27	09/06/16 21:17	2
Barium	1.2	U	4.0	1.2	ug/L		09/01/16 20:27	09/06/16 21:17	2
Beryllium	0.24	U	0.80	0.24	ug/L		09/01/16 20:27	09/06/16 21:17	2
Cadmium	0.71	U	2.0	0.71	ug/L		09/01/16 20:27	09/06/16 21:17	2
Calcium	60.5	U	200	60.5	ug/L		09/01/16 20:27	09/06/16 21:17	2
Chromium	1.3	U	4.0	1.3	ug/L		09/01/16 20:27	09/06/16 21:17	2
Cobalt	1.3	U	4.0	1.3	ug/L		09/01/16 20:27	09/06/16 21:17	2
Copper	1.4	U	4.0	1.4	ug/L		09/01/16 20:27	09/06/16 21:17	2
Iron	42.4	U	120	42.4	ug/L		09/01/16 20:27	09/06/16 21:17	2
Lead	0.38	U	1.2	0.38	ug/L		09/01/16 20:27	09/06/16 21:17	2
Magnesium	63.6	U	200	63.6	ug/L		09/01/16 20:27	09/06/16 21:17	2
Manganese	2.5	U	8.0	2.5	ug/L		09/01/16 20:27	09/06/16 21:17	2
Nickel	1.4	U	4.0	1.4	ug/L		09/01/16 20:27	09/06/16 21:17	2
Potassium	91.4	U	200	91.4	ug/L		09/01/16 20:27	09/06/16 21:17	2
Selenium	0.73	U	10.0	0.73	ug/L		09/01/16 20:27	09/06/16 21:17	2
Sodium	69.0	U	200	69.0	ug/L		09/01/16 20:27	09/06/16 21:17	2
Thallium	0.26	U	0.80	0.26	ug/L		09/01/16 20:27	09/06/16 21:17	2
Vanadium	1.9	U	4.0	1.9	ug/L		09/01/16 20:27	09/06/16 21:17	2
Zinc	7.0	U	16.0	7.0	ug/L		09/01/16 20:27	09/06/16 21:17	2

Lab Sample ID: MB 460-388270/1-A ^2 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 389269 — **Prep Batch: 388270**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	1.3	U	2.0	1.3	ug/L		09/01/16 20:27	09/07/16 21:48	2

Method: 6020A - Metals (ICP/MS) (Continued)

Lab Sample ID: LCS 460-388270/2-A ^2
Matrix: Water
Analysis Batch: 389030

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 388270

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Aluminum	2500	2384		ug/L		95	80 - 120
Antimony	25.0	25.00		ug/L		100	80 - 120
Arsenic	50.0	45.96		ug/L		92	80 - 120
Barium	50.0	48.74		ug/L		97	80 - 120
Beryllium	25.0	26.79		ug/L		107	80 - 120
Cadmium	25.0	24.53		ug/L		98	80 - 120
Calcium	2500	2595		ug/L		104	80 - 120
Chromium	50.0	49.60		ug/L		99	80 - 120
Cobalt	25.0	24.62		ug/L		98	80 - 120
Copper	50.0	49.76		ug/L		100	80 - 120
Iron	2500	2543		ug/L		102	80 - 120
Lead	25.0	24.85		ug/L		99	80 - 120
Magnesium	2500	2125		ug/L		85	80 - 120
Manganese	250	235.5		ug/L		94	80 - 120
Nickel	50.0	49.88		ug/L		100	80 - 120
Potassium	2500	2114		ug/L		85	80 - 120
Selenium	50.0	45.77		ug/L		92	80 - 120
Sodium	2500	2211		ug/L		88	80 - 120
Thallium	20.0	19.51		ug/L		98	80 - 120
Vanadium	50.0	48.83		ug/L		98	80 - 120
Zinc	250	246.9		ug/L		99	80 - 120

Lab Sample ID: LCS 460-388270/2-A ^2
Matrix: Water
Analysis Batch: 389269

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 388270

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Silver	25.0	25.50		ug/L		102	80 - 120

Lab Sample ID: 460-119174-C-10-B MS ^2
Matrix: Water
Analysis Batch: 389030

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 388270

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Aluminum	18.2	U	2500	2400		ug/L		96	75 - 125
Antimony	0.62	U	25.0	25.72		ug/L		103	75 - 125
Arsenic	0.64	U	50.0	44.28		ug/L		89	75 - 125
Barium	113		50.0	160.0		ug/L		95	75 - 125
Beryllium	0.24	U	25.0	27.50		ug/L		110	75 - 125
Cadmium	0.71	U	25.0	25.18		ug/L		101	75 - 125
Calcium	39800		2500	42040	4	ug/L		90	75 - 125
Chromium	2.7	J	50.0	51.93		ug/L		98	75 - 125
Cobalt	1.3	U	25.0	24.18		ug/L		97	75 - 125
Copper	1.4	U	50.0	48.78		ug/L		98	75 - 125
Iron	42.4	U	2500	2552		ug/L		102	75 - 125
Lead	0.38	U	25.0	25.42		ug/L		102	75 - 125
Magnesium	18900		2500	21130	4	ug/L		88	75 - 125
Manganese	4.1	J	250	236.0		ug/L		93	75 - 125

Method: 6020A - Metals (ICP/MS) (Continued)

Lab Sample ID: 460-119174-C-10-B MS ^2
Matrix: Water
Analysis Batch: 389030

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 388270

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Nickel	3.6	J	50.0	52.03		ug/L		97	75 - 125
Potassium	2160		2500	4225		ug/L		83	75 - 125
Selenium	0.85	J	50.0	46.90		ug/L		92	75 - 125
Sodium	59800		2500	61560	4	ug/L		72	75 - 125
Thallium	0.26	U	20.0	20.03		ug/L		100	75 - 125
Vanadium	1.9	U	50.0	49.92		ug/L		100	75 - 125
Zinc	7.0	U	250	246.5		ug/L		99	75 - 125

Lab Sample ID: 460-119174-C-10-B MS ^2
Matrix: Water
Analysis Batch: 389269

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 388270

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Silver	1.3	U	25.0	25.18		ug/L		101	75 - 125

Lab Sample ID: 460-119174-F-10-A DU ^2
Matrix: Water
Analysis Batch: 389030

Client Sample ID: Duplicate
Prep Type: Total/NA
Prep Batch: 388270

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Aluminum	18.2	U	18.2	U	ug/L		NC	20
Antimony	0.62	U	0.62	U	ug/L		NC	20
Arsenic	0.64	U	0.64	U	ug/L		NC	20
Barium	113		109.9		ug/L		2	20
Beryllium	0.24	U	0.24	U	ug/L		NC	20
Cadmium	0.71	U	0.71	U	ug/L		NC	20
Calcium	39800		39300		ug/L		1	20
Chromium	2.7	J	2.65	J	ug/L		1	20
Cobalt	1.3	U	1.3	U	ug/L		NC	20
Copper	1.4	U	1.4	U	ug/L		NC	20
Iron	42.4	U	42.4	U	ug/L		NC	20
Lead	0.38	U	0.38	U	ug/L		NC	20
Magnesium	18900		18870		ug/L		0.3	20
Manganese	4.1	J	4.77	J	ug/L		15	20
Nickel	3.6	J	3.80	J	ug/L		6	20
Potassium	2160		2133		ug/L		1	20
Selenium	0.85	J	0.838	J	ug/L		1	20
Sodium	59800		59060		ug/L		1	20
Thallium	0.26	U	0.26	U	ug/L		NC	20
Vanadium	1.9	U	1.9	U	ug/L		NC	20
Zinc	7.0	U	7.0	U	ug/L		NC	20

Lab Sample ID: 460-119174-F-10-A DU ^2
Matrix: Water
Analysis Batch: 389269

Client Sample ID: Duplicate
Prep Type: Total/NA
Prep Batch: 388270

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Silver	1.3	U	1.3	U	ug/L		NC	20

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.
*	LCS or LCSD is outside acceptance limits.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

GC/MS Semi VOA

Qualifier	Qualifier Description
F1	MS and/or MSD Recovery is outside acceptance limits.
F2	MS/MSD RPD exceeds control limits
U	Indicates the analyte was analyzed for but not detected.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
X	Surrogate is outside control limits

GC/MS Semi VOA TICs

Qualifier	Qualifier Description
J	Indicates an Estimated Value for TICs

GC Semi VOA

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.

Metals

Qualifier	Qualifier Description
W	PS: Post-digestion spike was outside control limits
U	Indicates the analyte was analyzed for but not detected.
V	Serial Dilution exceeds the control limits
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Glossary

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

Glossary (Continued)

Abbreviation	These commonly used abbreviations may or may not be present in this report.
TEQ	Toxicity Equivalent Quotient (Dioxin)

GC/MS VOA

Analysis Batch: 388974

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-119497-1	GW-1	Total/NA	Water	8260C	
MB 460-388974/6	Method Blank	Total/NA	Water	8260C	
LCS 460-388974/3	Lab Control Sample	Total/NA	Water	8260C	
LCSD 460-388974/4	Lab Control Sample Dup	Total/NA	Water	8260C	

GC/MS Semi VOA

Prep Batch: 388379

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-119497-1	GW-1	Total/NA	Water	3510C	
MB 460-388379/1-A	Method Blank	Total/NA	Water	3510C	
LCS 460-388379/2-A	Lab Control Sample	Total/NA	Water	3510C	
LCS 460-388379/3-A	Lab Control Sample	Total/NA	Water	3510C	
460-119489-J-4-A MS	Matrix Spike	Total/NA	Water	3510C	
460-119489-L-4-A MSD	Matrix Spike Duplicate	Total/NA	Water	3510C	

Analysis Batch: 388719

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 460-388379/1-A	Method Blank	Total/NA	Water	8270D	388379
LCS 460-388379/2-A	Lab Control Sample	Total/NA	Water	8270D	388379
LCS 460-388379/3-A	Lab Control Sample	Total/NA	Water	8270D	388379
460-119489-J-4-A MS	Matrix Spike	Total/NA	Water	8270D	388379
460-119489-L-4-A MSD	Matrix Spike Duplicate	Total/NA	Water	8270D	388379

Analysis Batch: 388875

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-119497-1	GW-1	Total/NA	Water	8270D	388379

GC Semi VOA

Prep Batch: 388370

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-119497-1	GW-1	Total/NA	Water	3510C	
MB 460-388370/1-A	Method Blank	Total/NA	Water	3510C	
LCS 460-388370/2-A	Lab Control Sample	Total/NA	Water	3510C	
LCSD 460-388370/3-A	Lab Control Sample Dup	Total/NA	Water	3510C	

Prep Batch: 388371

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-119497-1	GW-1	Total/NA	Water	3510C	
MB 460-388371/1-A	Method Blank	Total/NA	Water	3510C	
LCS 460-388371/2-A	Lab Control Sample	Total/NA	Water	3510C	
LCSD 460-388371/3-A	Lab Control Sample Dup	Total/NA	Water	3510C	

Analysis Batch: 388574

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-119497-1	GW-1	Total/NA	Water	8082A	388370
MB 460-388370/1-A	Method Blank	Total/NA	Water	8082A	388370
LCS 460-388370/2-A	Lab Control Sample	Total/NA	Water	8082A	388370
LCSD 460-388370/3-A	Lab Control Sample Dup	Total/NA	Water	8082A	388370

GC Semi VOA (Continued)

Analysis Batch: 388763

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-119497-1	GW-1	Total/NA	Water	8081B	388371
MB 460-388371/1-A	Method Blank	Total/NA	Water	8081B	388371
LCS 460-388371/2-A	Lab Control Sample	Total/NA	Water	8081B	388371
LCSD 460-388371/3-A	Lab Control Sample Dup	Total/NA	Water	8081B	388371

Metals

Prep Batch: 388270

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-119497-1	GW-1	Total/NA	Water	3010A	
MB 460-388270/1-A ^2	Method Blank	Total/NA	Water	3010A	
LCS 460-388270/2-A ^2	Lab Control Sample	Total/NA	Water	3010A	
460-119174-C-10-B MS ^2	Matrix Spike	Total/NA	Water	3010A	
460-119174-F-10-A DU ^2	Duplicate	Total/NA	Water	3010A	

Prep Batch: 388820

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-119497-1	GW-1	Total/NA	Water	245.1	
MB 460-388820/1-A	Method Blank	Total/NA	Water	245.1	
LCS 460-388820/2-A	Lab Control Sample	Total/NA	Water	245.1	
460-119333-E-3-F MS	Matrix Spike	Total/NA	Water	245.1	
460-119333-E-3-E DU	Duplicate	Total/NA	Water	245.1	

Analysis Batch: 388881

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-119497-1	GW-1	Total/NA	Water	245.1	388820
MB 460-388820/1-A	Method Blank	Total/NA	Water	245.1	388820
LCS 460-388820/2-A	Lab Control Sample	Total/NA	Water	245.1	388820
460-119333-E-3-F MS	Matrix Spike	Total/NA	Water	245.1	388820
460-119333-E-3-E DU	Duplicate	Total/NA	Water	245.1	388820

Analysis Batch: 389030

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-119497-1	GW-1	Total/NA	Water	6020A	388270
MB 460-388270/1-A ^2	Method Blank	Total/NA	Water	6020A	388270
LCS 460-388270/2-A ^2	Lab Control Sample	Total/NA	Water	6020A	388270
460-119174-C-10-B MS ^2	Matrix Spike	Total/NA	Water	6020A	388270
460-119174-F-10-A DU ^2	Duplicate	Total/NA	Water	6020A	388270

Analysis Batch: 389269

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-119497-1	GW-1	Total/NA	Water	6020A	388270
MB 460-388270/1-A ^2	Method Blank	Total/NA	Water	6020A	388270
LCS 460-388270/2-A ^2	Lab Control Sample	Total/NA	Water	6020A	388270
460-119174-C-10-B MS ^2	Matrix Spike	Total/NA	Water	6020A	388270
460-119174-F-10-A DU ^2	Duplicate	Total/NA	Water	6020A	388270

Client Sample ID: GW-1

Date Collected: 08/31/16 10:20
Date Received: 08/31/16 19:04

Lab Sample ID: 460-119497-1

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	388974	09/07/16 10:55	SZD	TAL EDI
Total/NA	Prep	3510C			388379	09/02/16 09:20	GRB	TAL EDI
Total/NA	Analysis	8270D		1	388875	09/06/16 21:43	MMC	TAL EDI
Total/NA	Prep	3510C			388371	09/02/16 08:22	HAW	TAL EDI
Total/NA	Analysis	8081B		1	388763	09/06/16 08:43	SAK	TAL EDI
Total/NA	Prep	3510C			388370	09/02/16 08:16	HAW	TAL EDI
Total/NA	Analysis	8082A		1	388574	09/06/16 10:31	JHP	TAL EDI
Total/NA	Prep	245.1			388820	09/06/16 11:43	RBS	TAL EDI
Total/NA	Analysis	245.1		1	388881	09/06/16 14:06	RBS	TAL EDI
Total/NA	Prep	3010A			388270	09/01/16 20:27	EAE	TAL EDI
Total/NA	Analysis	6020A		2	389030	09/06/16 22:32	VAD	TAL EDI
Total/NA	Prep	3010A			388270	09/01/16 20:27	EAE	TAL EDI
Total/NA	Analysis	6020A		2	389269	09/07/16 22:29	VAD	TAL EDI

Laboratory References:

TAL EDI = TestAmerica Edison, 777 New Durham Road, Edison, NJ 08817, TEL (732)549-3900

Certification Summary

Client: SESI Consulting Engineers
Project/Site: Mt. Vernon, NY

TestAmerica Job ID: 460-119497-1

Laboratory: TestAmerica Edison

Unless otherwise noted, all analytes for this laboratory were covered under each certification below.

Authority	Program	EPA Region	Certification ID	Expiration Date
New York	NELAP	2	11452	03-31-17

The following analytes are included in this report, but certification is not offered by the governing authority:

Analysis Method	Prep Method	Matrix	Analyte
8082A	3510C	Water	Polychlorinated biphenyls, Total

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

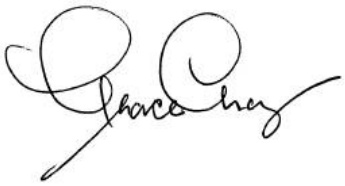
ANALYTICAL REPORT

Job Number: 460-121319-1

Job Description: 20 S. West St., Mt. Vernon, NY

For:
SESI Consulting Engineers
12 A Maple Avenue
Pine Brook, NJ 07058

Attention: Fuad Dahan



Approved for release.
Grace Chang
Project Manager II
10/20/2016 11:37 AM

Grace Chang, Project Manager II
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10/20/2016

The test results in this report meet all NELAP requirements unless specified within the case narrative. Pursuant to NELAP, this report may not be reproduced, except in full, without the written approval of the laboratory. All questions regarding this report should be directed to the TestAmerica Edison Project Manager.

TestAmerica Edison Certifications and Approvals: Connecticut: CTDOH #PH-0200, New Jersey: NJDEP (NELAP) #12028, New York: NYDOH (NELAP) #11452, NYDOH (ELAP) #11452, Pennsylvania: PADEP (NELAP) 68-00522 and Rhode Island: RIDOH LAO00132

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CASE NARRATIVE

Client: SESI Consulting Engineers

Project: 20 S. West St., Mt. Vernon, NY

Report Number: 460-121319-1

This case narrative is in the form of an exception report, where only the anomalies related to this report, method specific performance and/or QA/QC issues are discussed. If there are no issues to report, this narrative will include a statement that documents that there are no relevant data issues.

It should be noted that samples with elevated Reporting Limits (RLs) as a result of a dilution may not be able to satisfy customer reporting limits in some cases. Such increases in the RLs are unavoidable but acceptable consequence of sample dilution that enables quantification of target analytes or interferences which exceed the calibration range of the instrument.

Calculations are performed before rounding to avoid round-off errors in calculated results.

All holding times were met and proper preservation noted for the methods performed on these samples, unless otherwise detailed in the individual sections below.

RECEIPT

The samples were received on 10/3/2016 6:55 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 3.0º C.

Receipt Exceptions

Insufficient sample volume was provided for the following samples for the Cyanide, Pesticides, PCB, SVOC analysis: GW02 (460-121319-7) and GW03 (460-121319-8). Only received 2 containers for Pesticides/PCB/or SVOC, and no container received for Cyanide. Tests were placed on hold.

The following samples were activated outside of hold for SVOCs and PCBs by the client on 10/12/2016: GW02 (460-121319-7) and GW03 (460-121319-8).

Note: All samples which require thermal preservation are considered acceptable if the arrival temperature is within 2C of the required temperature or method specified range. For samples with a specified temperature of 4C, samples with a temperature ranging from just above freezing temperature of water to 6C shall be acceptable. Samples that are hand delivered immediately following collection may not meet these criteria, however they will be deemed acceptable according to NELAC standards, if there is evidence that the chilling process has begun, such as arrival on ice, etc.

Chloromethane and Vinyl chloride failed the recovery criteria low for LCSD 460-395007/4. Refer to the QC report for details.

VOLATILE ORGANICS

Samples SB2-2.0-3.0 (460-121319-1), SB2-19.0-20.0 (460-121319-2), SB3-3.0-4.0 (460-121319-3), SB3-15.0-16.0 (460-121319-4), SB4-2.0-3.0 (460-121319-5) and SB4-6.0-7.0 (460-121319-6) were analyzed for Volatile organics in accordance with EPA SW-846 Method 8260C. The samples were prepared on 10/04/2016 and analyzed on 10/05/2016 and 10/06/2016.

4-Bromofluorobenzene failed the surrogate recovery criteria high for SB2-19.0-20.0 (460-121319-2). Refer to the QC report for details.

Surrogate recovery for the following sample was outside the upper control limit: SB2-19.0-20.0 (460-121319-2). This sample did not contain any target analytes; therefore, re-analysis was not performed.

The continuing calibration verification (CCV) analyzed in batch 395007 was outside the method criteria for the following analytes: Chloromethane (biased low) and Dichlorodifluoromethane (biased high). A CCV standard at or below the reporting limit (RL) was analyzed with the affected samples and found to be acceptable. As indicated in the reference method, sample analysis may proceed; however, any detection for the affected analytes is considered estimated.

The laboratory control sample duplicate (LCSD) for batch 395007 recovered outside control limits for the following analyte: Vinyl chloride and Chloromethane.

The continuing calibration verification (CCV) analyzed in batch 460-396070 was outside the method criteria for the following analyte(s): Chloromethane and Bromoform. A CCV standard at or below the reporting limit (RL) was analyzed with the affected samples and found to be acceptable. As indicated in the reference method, sample analysis may proceed; however, any detection for the affected analyte(s) is considered estimated.

The continuing calibration verification (CCV) analyzed in batch 396938 was outside the method criteria for the following analyte: Bromoform. A CCV standard at or below the reporting limit (RL) was analyzed with the affected samples and found to be acceptable. As indicated in the reference method, sample analysis may proceed; however, any detection for the affected analyte is considered estimated.

No other difficulties were encountered during the Volatile organics analysis.

All other quality control parameters were within the acceptance limits.

VOLATILE ORGANICS

Samples GW02 (460-121319-7), GW03 (460-121319-8) and Trip Blank (460-121319-9) were analyzed for Volatile organics in accordance with EPA SW-846 Methods 8260C. The samples were analyzed on 10/09/2016 and 10/13/2016.

No difficulties were encountered during the Volatile organics analysis.

All quality control parameters were within the acceptance limits.

SEMIVOLATILE ORGANIC COMPOUNDS (GC/MS)

Samples GW02 (460-121319-7) and GW03 (460-121319-8) were analyzed for semivolatile organic compounds (GC/MS) in accordance with EPA SW-846 Method 8270D. The samples were prepared on 10/13/2016 and analyzed on 10/19/2016.

Benzaldehyde failed the recovery criteria high for LCSD 460-396950/5-A. Refer to the QC report for details.

The continuing calibration verification (CCV) analyzed in batch 460-395438 was outside the method criteria for the following analyte(s): Indeno[1,2,3-cd]pyrene and Pyrene<AffectedAnalytes>. A CCV standard at or below the reporting limit (RL) was analyzed with the affected samples and found to be acceptable. As indicated in the reference method, sample analysis may proceed; however, any detection for the affected analyte(s) is considered estimated.

Six surrogates are used for this analysis. The laboratory's SOP allows one acid and one base of these surrogates to be outside acceptance criteria without performing re-extraction/re-analysis. The following sample contained an allowable number of surrogate compounds outside limits: (LCS 460-395061/2-A). These results have been reported and qualified.

A full list spike was utilized for this method. Due to the large number of spiked analytes, there is a high probability that one or more analytes will recover outside acceptance limits. The laboratory's SOP allows for five analytes to recover outside criteria for this method when a full list spike is utilized. The LCS associated with batch 395061 had one analyte 2,4,5-Trichlorophenol outside control limits; therefore, re-extraction/re-analysis was not performed. These results have been reported and qualified.

Six surrogates are used for this analysis. The laboratory's SOP allows one acid and one base of these surrogates to be outside acceptance criteria without performing re-extraction/re-analysis. The following sample contained an allowable number of surrogate compounds outside limits: (LCS 460-395061/3-A). These results have been reported and qualified.

The continuing calibration verification (CCV) analyzed in batch 397149 was outside the method criteria for the following analyte(s): 4,6-Dinitro-2-methylphenol. A CCV standard at or below the reporting limit (RL) was analyzed with the affected samples and found to be acceptable. As indicated in the reference method, sample analysis may proceed; however, any detection for the affected analyte(s) is considered estimated.

The continuing calibration verification (CCV) analyzed in batch 398204 was outside the method criteria for the following analyte(s): 2,2-oxybis (1-chloropropane, 2,4-Dinitrophenol, 3-Nitroaniline, 4-Nitroaniline, Acetophenone, Hexachlorocyclopentadiene and N-Nitrosodi-n-propylamine. A CCV standard at or below the reporting limit (RL) was analyzed with the affected samples and found to be acceptable. As indicated in the reference method, sample analysis may proceed; however, any detection for the affected analyte(s) is considered estimated.

No other difficulties were encountered during the semivolatiles analysis.

All other quality control parameters were within the acceptance limits.

PESTICIDES

Samples SB2-2.0-3.0 (460-121319-1), SB2-19.0-20.0 (460-121319-2), SB3-3.0-4.0 (460-121319-3), SB3-15.0-16.0 (460-121319-4), SB4-2.0-3.0 (460-121319-5) and SB4-6.0-7.0 (460-121319-6) were analyzed for Pesticides in accordance with EPA SW-846 Methods 8081B. The samples were prepared and analyzed on 10/06/2016.

Tetrachloro-m-xylene failed the surrogate recovery criteria high for 460-121360-A-6-F MS. Tetrachloro-m-xylene failed the surrogate recovery criteria high for 460-121360-A-6-G MSD. Refer to the QC report for details.

Several analytes failed the recovery criteria low for the MS of sample 460-121360-6 in batch 460-395288.

Several analytes failed the recovery criteria low for the MSD of sample 460-121360-6 in batch 460-395288. alpha-BHC exceeded the RPD limit.

Tetrachloro-m-xylene surrogate recovery for the following sample, MS asnd MSD was outside the upper control limit: (460-121360-A-6-H), (460-121360-A-6-F MS) and (460-121360-A-6-G MSD). This sample did not contain any target analytes; therefore, re-extraction and/or re-analysis was not performed.

Refer to the QC report for details.

No other difficulties were encountered during the Pesticides analysis.

All other quality control parameters were within the acceptance limits.

POLYCHLORINATED BIPHENYLS

Samples SB2-2.0-3.0 (460-121319-1), SB2-19.0-20.0 (460-121319-2), SB3-3.0-4.0 (460-121319-3), SB3-15.0-16.0 (460-121319-4), SB4-2.0-3.0 (460-121319-5) and SB4-6.0-7.0 (460-121319-6) were analyzed for polychlorinated biphenyls in accordance with EPA SW-846 Method 8082A. The samples were prepared and analyzed on 10/06/2016.

No difficulties were encountered during the PCBs analysis.

All quality control parameters were within the acceptance limits.

POLYCHLORINATED BIPHENYLS (PCBS)

Samples GW02 (460-121319-7) and GW03 (460-121319-8) were analyzed for polychlorinated biphenyls (PCBs) in accordance with EPA SW-846 Method 8082A. The samples were prepared on 10/12/2016 and analyzed on 10/14/2016.

No difficulties were encountered during the PCBs analysis.

All quality control parameters were within the acceptance limits.

SEMIVOLATILE ORGANIC COMPOUNDS

Samples SB2-2.0-3.0 (460-121319-1), SB2-19.0-20.0 (460-121319-2), SB3-3.0-4.0 (460-121319-3), SB3-15.0-16.0 (460-121319-4), SB4-2.0-3.0 (460-121319-5) and SB4-6.0-7.0 (460-121319-6) were analyzed for Semivolatile organic compounds in accordance with EPA SW-846 Method 8270D. The samples were prepared on 10/05/2016 and analyzed on 10/06/2016.

2,4,6-Tribromophenol and 2-Fluorobiphenyl failed the surrogate recovery criteria high for LCS 460-395061/2-A. 2,4,6-Tribromophenol and 2-Fluorobiphenyl failed the surrogate recovery criteria high for LCS 460-395061/3-A. Refer to the QC report for details.

2,4,5-Trichlorophenol failed the recovery criteria high for LCS 460-395061/2-A. Refer to the QC report for details.

Several analytes failed the recovery criteria low for the MS of sample 460-121305-1 in batch 460-395438.

Several analytes failed the recovery criteria low for the MSD of sample 460-121305-1 in batch 460-395438.

Refer to the QC report for details.

No other difficulties were encountered during the semivolatiles analysis.

All other quality control parameters were within the acceptance limits.

TOTAL MERCURY

Samples GW02 (460-121319-7) and GW03 (460-121319-8) were analyzed for total mercury in accordance with EPA Method 245.1. The samples were prepared and analyzed on 10/05/2016.

No difficulties were encountered during the mercury analysis.

All quality control parameters were within the acceptance limits.

METALS

Samples SB2-2.0-3.0 (460-121319-1), SB2-19.0-20.0 (460-121319-2), SB3-3.0-4.0 (460-121319-3), SB3-15.0-16.0 (460-121319-4), SB4-2.0-3.0 (460-121319-5) and SB4-6.0-7.0 (460-121319-6) were analyzed for Metals in accordance with EPA SW-846 Methods 6010C. The samples were prepared on 10/05/2016 and analyzed on 10/08/2016.

Several analytes failed the recovery criteria low for the MS of sample 460-121317-12 in batch 460-395441. Aluminum failed the recovery criteria high.

Refer to the QC report for details.

Chromium, Iron and Zinc exceeded the RPD limit for the duplicate of sample 460-121317-12. Refer to the QC report for details.

Samples SB2-2.0-3.0 (460-121319-1)[4X], SB2-19.0-20.0 (460-121319-2)[4X], SB3-3.0-4.0 (460-121319-3)[4X], SB3-15.0-16.0 (460-121319-4)[4X], SB4-2.0-3.0 (460-121319-5)[4X] and SB4-6.0-7.0 (460-121319-6)[4X] required dilution prior to analysis. The

reporting limits have been adjusted accordingly.

No other difficulties were encountered during the Metals analysis.

All other quality control parameters were within the acceptance limits.

TOTAL METALS
Samples GW02 (460-121319-7) and GW03 (460-121319-8) were analyzed for total metals in accordance with EPA SW-846 Method 6020A. The samples were prepared on 10/08/2016 and analyzed on 10/09/2016 and 10/12/2016.

Calcium and Sodium failed the recovery criteria high for the MS of sample 460-121033-17 in batch 460-396064.

Refer to the QC report for details.

The presence of the '4' qualifier in the data indicates analytes where the concentration in the unspiked sample exceeded four times the spiking amount.

Refer to the QC report for details.

for the duplicate of sample 460-121033-17. Refer to the QC report for details.

Samples GW02 (460-121319-7)[5X] and GW03 (460-121319-8)[20X] required dilution prior to analysis. The reporting limits have been adjusted accordingly.

No other difficulties were encountered during the Metals analysis.

All other quality control parameters were within the acceptance limits.

TOTAL MERCURY
Samples SB2-2.0-3.0 (460-121319-1), SB2-19.0-20.0 (460-121319-2), SB3-3.0-4.0 (460-121319-3), SB3-15.0-16.0 (460-121319-4), SB4-2.0-3.0 (460-121319-5) and SB4-6.0-7.0 (460-121319-6) were analyzed for total mercury in accordance with EPA SW-846 Method 7471B. The samples were prepared and analyzed on 10/06/2016 and 10/10/2016.

Mercury failed the recovery criteria low for the MS of sample 460-120997-11 in batch 460-396226.

Mercury failed the recovery criteria high for the MS of sample 460-121278-6 in batch 460-395370.

Refer to the QC report for details.

Mercury exceeded the RPD limit for the duplicate of sample 460-120997-11. Refer to the QC report for details.

No other difficulties were encountered during the Hg analysis.

All other quality control parameters were within the acceptance limits.

TOTAL CYANIDE
Samples SB2-2.0-3.0 (460-121319-1), SB2-19.0-20.0 (460-121319-2), SB3-3.0-4.0 (460-121319-3), SB3-15.0-16.0 (460-121319-4), SB4-2.0-3.0 (460-121319-5) and SB4-6.0-7.0 (460-121319-6) were analyzed for total cyanide in accordance with EPA SW-846 Method 9012B. The samples were prepared on 10/13/2016 and analyzed on 10/14/2016.

No difficulties were encountered during the cyanide analysis.

All quality control parameters were within the acceptance limits.

PERCENT SOLIDS/PERCENT MOISTURE
Samples SB2-2.0-3.0 (460-121319-1), SB2-19.0-20.0 (460-121319-2), SB3-3.0-4.0 (460-121319-3), SB3-15.0-16.0 (460-121319-4), SB4-2.0-3.0 (460-121319-5) and SB4-6.0-7.0 (460-121319-6) were analyzed for percent solids/percent moisture in accordance with EPA Method CLPISM01.2 (Exhibit D) Modified. The samples were analyzed on 10/05/2016.

No difficulties were encountered during the %solids/moisture analysis.

All quality control parameters were within the acceptance limits.

Sample Summary

Client: SESI Consulting Engineers
Project/Site: 20 S. West St., Mt. Vernon, NY

TestAmerica Job ID: 460-121319-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
460-121319-1	SB2-2.0-3.0	Solid	10/03/16 10:05	10/03/16 18:55
460-121319-2	SB2-19.0-20.0	Solid	10/03/16 11:00	10/03/16 18:55
460-121319-3	SB3-3.0-4.0	Solid	10/03/16 12:25	10/03/16 18:55
460-121319-4	SB3-15.0-16.0	Solid	10/03/16 14:00	10/03/16 18:55
460-121319-5	SB4-2.0-3.0	Solid	10/03/16 16:00	10/03/16 18:55
460-121319-6	SB4-6.0-7.0	Solid	10/03/16 16:35	10/03/16 18:55
460-121319-7	GW02	Water	10/03/16 14:30	10/03/16 18:55
460-121319-8	GW03	Water	10/03/16 11:00	10/03/16 18:55
460-121319-9	Trip Blank	Water	10/03/16 00:00	10/03/16 18:55

Detection Summary

Client: SESI Consulting Engineers
Project/Site: 20 S. West St., Mt. Vernon, NY

TestAmerica Job ID: 460-121319-1

Client Sample ID: SB2-2.0-3.0 — Lab Sample ID: 460-121319-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Methylene Chloride	0.82	J	1.6	0.50	ug/Kg	1	☼	8260C	Total/NA
Naphthalene	16	J	360	9.0	ug/Kg	1	☼	8270D	Total/NA
2-Methylnaphthalene	10	J	360	7.9	ug/Kg	1	☼	8270D	Total/NA
Acenaphthylene	20	J	360	9.1	ug/Kg	1	☼	8270D	Total/NA
Acenaphthene	15	J	360	8.6	ug/Kg	1	☼	8270D	Total/NA
Fluorene	12	J	360	7.7	ug/Kg	1	☼	8270D	Total/NA
Phenanthrene	250	J	360	9.5	ug/Kg	1	☼	8270D	Total/NA
Anthracene	59	J	360	34	ug/Kg	1	☼	8270D	Total/NA
Carbazole	14	J	360	8.8	ug/Kg	1	☼	8270D	Total/NA
Fluoranthene	720		360	11	ug/Kg	1	☼	8270D	Total/NA
Pyrene	640		360	16	ug/Kg	1	☼	8270D	Total/NA
Benzo[a]anthracene	510		36	30	ug/Kg	1	☼	8270D	Total/NA
Chrysene	520		360	9.7	ug/Kg	1	☼	8270D	Total/NA
Bis(2-ethylhexyl) phthalate	49	J	360	14	ug/Kg	1	☼	8270D	Total/NA
Benzo[b]fluoranthene	680		36	14	ug/Kg	1	☼	8270D	Total/NA
Benzo[k]fluoranthene	240		36	15	ug/Kg	1	☼	8270D	Total/NA
Benzo[a]pyrene	540		36	11	ug/Kg	1	☼	8270D	Total/NA
Indeno[1,2,3-cd]pyrene	400		36	24	ug/Kg	1	☼	8270D	Total/NA
Dibenz(a,h)anthracene	110		36	19	ug/Kg	1	☼	8270D	Total/NA
Benzo[g,h,i]perylene	390		360	20	ug/Kg	1	☼	8270D	Total/NA
Aluminum	8680		33.0	17.0	mg/Kg	4	☼	6010C	Total/NA
Arsenic	3.7		2.5	0.81	mg/Kg	4	☼	6010C	Total/NA
Barium	88.7		33.0	1.2	mg/Kg	4	☼	6010C	Total/NA
Beryllium	0.41		0.33	0.28	mg/Kg	4	☼	6010C	Total/NA
Calcium	1750		824	48.8	mg/Kg	4	☼	6010C	Total/NA
Chromium	17.5		1.6	0.80	mg/Kg	4	☼	6010C	Total/NA
Cobalt	5.2	J	8.2	0.95	mg/Kg	4	☼	6010C	Total/NA
Copper	44.7		4.1	1.1	mg/Kg	4	☼	6010C	Total/NA
Iron	14100		24.7	18.6	mg/Kg	4	☼	6010C	Total/NA
Lead	163		1.6	0.65	mg/Kg	4	☼	6010C	Total/NA
Magnesium	2650		824	41.1	mg/Kg	4	☼	6010C	Total/NA
Manganese	246		2.5	0.87	mg/Kg	4	☼	6010C	Total/NA
Nickel	11.7		6.6	1.2	mg/Kg	4	☼	6010C	Total/NA
Potassium	1010		824	25.0	mg/Kg	4	☼	6010C	Total/NA
Sodium	80.5	J	824	55.8	mg/Kg	4	☼	6010C	Total/NA
Vanadium	20.5		8.2	0.82	mg/Kg	4	☼	6010C	Total/NA
Zinc	93.1		4.9	1.2	mg/Kg	4	☼	6010C	Total/NA
Mercury	0.57		0.018	0.012	mg/Kg	1	☼	7471B	Total/NA
Cyanide, Total	0.057	J	0.11	0.029	mg/Kg	1	☼	9012B	Total/NA

Client Sample ID: SB2-19.0-20.0 — Lab Sample ID: 460-121319-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Aluminum	5530		34.2	17.6	mg/Kg	4	☼	6010C	Total/NA
Arsenic	1.5	J	2.6	0.84	mg/Kg	4	☼	6010C	Total/NA
Barium	51.3		34.2	1.2	mg/Kg	4	☼	6010C	Total/NA
Calcium	695	J	856	50.7	mg/Kg	4	☼	6010C	Total/NA
Chromium	12.3		1.7	0.83	mg/Kg	4	☼	6010C	Total/NA
Cobalt	3.2	J	8.6	0.98	mg/Kg	4	☼	6010C	Total/NA
Copper	11.5		4.3	1.1	mg/Kg	4	☼	6010C	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: SB2-19.0-20.0 (Continued) — Lab Sample ID: 460-121319-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Iron	10300		25.7	19.3	mg/Kg	4	☼	6010C	Total/NA
Lead	1.9		1.7	0.67	mg/Kg	4	☼	6010C	Total/NA
Magnesium	2440		856	42.7	mg/Kg	4	☼	6010C	Total/NA
Manganese	195		2.6	0.90	mg/Kg	4	☼	6010C	Total/NA
Nickel	9.5		6.8	1.2	mg/Kg	4	☼	6010C	Total/NA
Potassium	1270		856	25.9	mg/Kg	4	☼	6010C	Total/NA
Sodium	108	J	856	57.9	mg/Kg	4	☼	6010C	Total/NA
Vanadium	14.0		8.6	0.86	mg/Kg	4	☼	6010C	Total/NA
Zinc	28.1		5.1	1.2	mg/Kg	4	☼	6010C	Total/NA

Client Sample ID: SB3-3.0-4.0 — Lab Sample ID: 460-121319-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Phenanthrene	27	J	370	10	ug/Kg	1	☼	8270D	Total/NA
Fluoranthene	93	J	370	11	ug/Kg	1	☼	8270D	Total/NA
Pyrene	100	J	370	17	ug/Kg	1	☼	8270D	Total/NA
Butyl benzyl phthalate	12	J	370	12	ug/Kg	1	☼	8270D	Total/NA
Benzo[a]anthracene	77		37	31	ug/Kg	1	☼	8270D	Total/NA
Chrysene	75	J	370	10	ug/Kg	1	☼	8270D	Total/NA
Bis(2-ethylhexyl) phthalate	130	J	370	15	ug/Kg	1	☼	8270D	Total/NA
Benzo[b]fluoranthene	110		37	15	ug/Kg	1	☼	8270D	Total/NA
Benzo[k]fluoranthene	38		37	16	ug/Kg	1	☼	8270D	Total/NA
Benzo[a]pyrene	89		37	11	ug/Kg	1	☼	8270D	Total/NA
Indeno[1,2,3-cd]pyrene	68		37	25	ug/Kg	1	☼	8270D	Total/NA
Dibenz(a,h)anthracene	19	J	37	19	ug/Kg	1	☼	8270D	Total/NA
Benzo[g,h,i]perylene	70	J	370	21	ug/Kg	1	☼	8270D	Total/NA
Aluminum	17200		36.3	18.7	mg/Kg	4	☼	6010C	Total/NA
Arsenic	2.5	J	2.7	0.89	mg/Kg	4	☼	6010C	Total/NA
Barium	86.5		36.3	1.3	mg/Kg	4	☼	6010C	Total/NA
Beryllium	0.73		0.36	0.31	mg/Kg	4	☼	6010C	Total/NA
Calcium	1160		906	53.7	mg/Kg	4	☼	6010C	Total/NA
Chromium	27.5		1.8	0.88	mg/Kg	4	☼	6010C	Total/NA
Cobalt	8.3	J	9.1	1.0	mg/Kg	4	☼	6010C	Total/NA
Copper	21.7		4.5	1.2	mg/Kg	4	☼	6010C	Total/NA
Iron	24000		27.2	20.5	mg/Kg	4	☼	6010C	Total/NA
Lead	21.4		1.8	0.71	mg/Kg	4	☼	6010C	Total/NA
Magnesium	5040		906	45.2	mg/Kg	4	☼	6010C	Total/NA
Manganese	357		2.7	0.95	mg/Kg	4	☼	6010C	Total/NA
Nickel	22.3		7.3	1.3	mg/Kg	4	☼	6010C	Total/NA
Potassium	2390		906	27.5	mg/Kg	4	☼	6010C	Total/NA
Sodium	523	J	906	61.4	mg/Kg	4	☼	6010C	Total/NA
Vanadium	35.9		9.1	0.91	mg/Kg	4	☼	6010C	Total/NA
Zinc	97.5		5.4	1.3	mg/Kg	4	☼	6010C	Total/NA
Mercury	0.11		0.018	0.011	mg/Kg	1	☼	7471B	Total/NA
Cyanide, Total	0.11		0.11	0.031	mg/Kg	1	☼	9012B	Total/NA

Client Sample ID: SB3-15.0-16.0 — Lab Sample ID: 460-121319-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Aluminum	11600		38.5	19.8	mg/Kg	4	☼	6010C	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: SB3-15.0-16.0 (Continued) — Lab Sample ID: 460-121319-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	2.3	J	2.9	0.95	mg/Kg	4	☼	6010C	Total/NA
Barium	111		38.5	1.4	mg/Kg	4	☼	6010C	Total/NA
Beryllium	0.64		0.39	0.33	mg/Kg	4	☼	6010C	Total/NA
Calcium	2260		963	57.0	mg/Kg	4	☼	6010C	Total/NA
Chromium	29.3		1.9	0.93	mg/Kg	4	☼	6010C	Total/NA
Cobalt	7.1	J	9.6	1.1	mg/Kg	4	☼	6010C	Total/NA
Copper	20.2		4.8	1.3	mg/Kg	4	☼	6010C	Total/NA
Iron	24300		28.9	21.8	mg/Kg	4	☼	6010C	Total/NA
Lead	3.6		1.9	0.76	mg/Kg	4	☼	6010C	Total/NA
Magnesium	5370		963	48.1	mg/Kg	4	☼	6010C	Total/NA
Manganese	435		2.9	1.0	mg/Kg	4	☼	6010C	Total/NA
Nickel	20.4		7.7	1.4	mg/Kg	4	☼	6010C	Total/NA
Potassium	3000		963	29.2	mg/Kg	4	☼	6010C	Total/NA
Sodium	143	J	963	65.2	mg/Kg	4	☼	6010C	Total/NA
Vanadium	37.2		9.6	0.96	mg/Kg	4	☼	6010C	Total/NA
Zinc	79.8		5.8	1.4	mg/Kg	4	☼	6010C	Total/NA
Cyanide, Total	0.044	J	0.12	0.033	mg/Kg	1	☼	9012B	Total/NA

Client Sample ID: SB4-2.0-3.0 — Lab Sample ID: 460-121319-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Aluminum	14900		41.8	21.5	mg/Kg	4	☼	6010C	Total/NA
Arsenic	4.2		3.1	1.0	mg/Kg	4	☼	6010C	Total/NA
Barium	132		41.8	1.5	mg/Kg	4	☼	6010C	Total/NA
Beryllium	0.86		0.42	0.35	mg/Kg	4	☼	6010C	Total/NA
Calcium	2990		1040	61.9	mg/Kg	4	☼	6010C	Total/NA
Chromium	36.6		2.1	1.0	mg/Kg	4	☼	6010C	Total/NA
Cobalt	12.3		10.4	1.2	mg/Kg	4	☼	6010C	Total/NA
Copper	27.8		5.2	1.4	mg/Kg	4	☼	6010C	Total/NA
Iron	28200		31.3	23.6	mg/Kg	4	☼	6010C	Total/NA
Lead	6.5		2.1	0.82	mg/Kg	4	☼	6010C	Total/NA
Magnesium	6330		1040	52.1	mg/Kg	4	☼	6010C	Total/NA
Manganese	555		3.1	1.1	mg/Kg	4	☼	6010C	Total/NA
Nickel	31.0		8.4	1.5	mg/Kg	4	☼	6010C	Total/NA
Potassium	3680		1040	31.7	mg/Kg	4	☼	6010C	Total/NA
Sodium	158	J	1040	70.7	mg/Kg	4	☼	6010C	Total/NA
Vanadium	45.0		10.4	1.0	mg/Kg	4	☼	6010C	Total/NA
Zinc	141		6.3	1.5	mg/Kg	4	☼	6010C	Total/NA
Mercury	0.032		0.021	0.014	mg/Kg	1	☼	7471B	Total/NA
Cyanide, Total	0.052	J	0.14	0.037	mg/Kg	1	☼	9012B	Total/NA

Client Sample ID: SB4-6.0-7.0 — Lab Sample ID: 460-121319-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Aluminum	9000		37.2	19.2	mg/Kg	4	☼	6010C	Total/NA
Arsenic	1.9	J	2.8	0.91	mg/Kg	4	☼	6010C	Total/NA
Barium	107		37.2	1.3	mg/Kg	4	☼	6010C	Total/NA
Beryllium	0.49		0.37	0.32	mg/Kg	4	☼	6010C	Total/NA
Calcium	1710		930	55.1	mg/Kg	4	☼	6010C	Total/NA
Chromium	26.0		1.9	0.90	mg/Kg	4	☼	6010C	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: SB4-6.0-7.0 (Continued) — Lab Sample ID: 460-121319-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Cobalt	5.9	J	9.3	1.1	mg/Kg	4	☼	6010C	Total/NA
Copper	21.0		4.7	1.2	mg/Kg	4	☼	6010C	Total/NA
Iron	19300		27.9	21.0	mg/Kg	4	☼	6010C	Total/NA
Lead	2.8		1.9	0.73	mg/Kg	4	☼	6010C	Total/NA
Magnesium	5010		930	46.4	mg/Kg	4	☼	6010C	Total/NA
Manganese	364		2.8	0.98	mg/Kg	4	☼	6010C	Total/NA
Nickel	19.2		7.4	1.4	mg/Kg	4	☼	6010C	Total/NA
Potassium	3640		930	28.2	mg/Kg	4	☼	6010C	Total/NA
Sodium	435	J	930	63.0	mg/Kg	4	☼	6010C	Total/NA
Vanadium	31.7		9.3	0.93	mg/Kg	4	☼	6010C	Total/NA
Zinc	60.5		5.6	1.4	mg/Kg	4	☼	6010C	Total/NA

Client Sample ID: GW02 — Lab Sample ID: 460-121319-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloroform	0.64	J	1.0	0.22	ug/L	1		8260C	Total/NA
Aluminum	9940		40.0	18.2	ug/L	2		6020A	Total/NA
Arsenic	2.6	J	5.0	1.6	ug/L	5		6020A	Total/NA
Barium	367		4.0	1.2	ug/L	2		6020A	Total/NA
Beryllium	0.72	J	0.80	0.24	ug/L	2		6020A	Total/NA
Calcium	12700		200	60.5	ug/L	2		6020A	Total/NA
Chromium	21.2		4.0	1.3	ug/L	2		6020A	Total/NA
Cobalt	13.3		4.0	1.3	ug/L	2		6020A	Total/NA
Copper	22.0		4.0	1.4	ug/L	2		6020A	Total/NA
Iron	10700		120	42.4	ug/L	2		6020A	Total/NA
Lead	8.1		1.2	0.38	ug/L	2		6020A	Total/NA
Magnesium	6350		200	63.6	ug/L	2		6020A	Total/NA
Manganese	879		8.0	2.5	ug/L	2		6020A	Total/NA
Nickel	14.2		4.0	1.4	ug/L	2		6020A	Total/NA
Potassium	2770		200	91.4	ug/L	2		6020A	Total/NA
Sodium	2310		200	69.0	ug/L	2		6020A	Total/NA
Vanadium	34.0		4.0	1.9	ug/L	2		6020A	Total/NA
Zinc	65.5		16.0	7.0	ug/L	2		6020A	Total/NA

Client Sample ID: GW03 — Lab Sample ID: 460-121319-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1,1-Trichloroethane	0.30	J	1.0	0.28	ug/L	1		8260C	Total/NA
Chloroform	1.9		1.0	0.22	ug/L	1		8260C	Total/NA
Tetrachloroethene	0.20	J	1.0	0.12	ug/L	1		8260C	Total/NA
Toluene	0.67	J	1.0	0.25	ug/L	1		8260C	Total/NA
Di-n-butyl phthalate	6.0	J H	11	0.87	ug/L	1		8270D	Total/NA
Mercury	1.3		0.20	0.17	ug/L	1		245.1	Total/NA
Aluminum	46800		40.0	18.2	ug/L	2		6020A	Total/NA
Antimony	0.86	J	2.0	0.62	ug/L	2		6020A	Total/NA
Arsenic	18.4	J	20.0	6.4	ug/L	20		6020A	Total/NA
Barium	1590		4.0	1.2	ug/L	2		6020A	Total/NA
Beryllium	4.8		0.80	0.24	ug/L	2		6020A	Total/NA
Cadmium	12.7		2.0	0.71	ug/L	2		6020A	Total/NA
Calcium	443000		200	60.5	ug/L	2		6020A	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: GW03 (Continued) — Lab Sample ID: 460-121319-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chromium	318		4.0	1.3	ug/L	2		6020A	Total/NA
Cobalt	221		4.0	1.3	ug/L	2		6020A	Total/NA
Copper	432		4.0	1.4	ug/L	2		6020A	Total/NA
Iron	38200		120	42.4	ug/L	2		6020A	Total/NA
Lead	198		1.2	0.38	ug/L	2		6020A	Total/NA
Magnesium	38100		200	63.6	ug/L	2		6020A	Total/NA
Manganese	28400		8.0	2.5	ug/L	2		6020A	Total/NA
Nickel	297		4.0	1.4	ug/L	2		6020A	Total/NA
Potassium	33200		200	91.4	ug/L	2		6020A	Total/NA
Selenium	5.5	J	10.0	0.73	ug/L	2		6020A	Total/NA
Silver	17.5		2.0	1.3	ug/L	2		6020A	Total/NA
Sodium	635000		2000	690	ug/L	20		6020A	Total/NA
Thallium	0.58	J	0.80	0.26	ug/L	2		6020A	Total/NA
Vanadium	32.3		4.0	1.9	ug/L	2		6020A	Total/NA
Zinc	775		16.0	7.0	ug/L	2		6020A	Total/NA

Client Sample ID: Trip Blank — Lab Sample ID: 460-121319-9

No Detections.

This Detection Summary does not include radiochemical test results.

Method Summary

Client: SESI Consulting Engineers
Project/Site: 20 S. West St., Mt. Vernon, NY

TestAmerica Job ID: 460-121319-1

Method	Method Description	Protocol	Laboratory
8260C	Volatile Organic Compounds by GC/MS	SW846	TAL EDI
8270D	Semivolatile Organic Compounds (GC/MS)	SW846	TAL EDI
8081B	Organochlorine Pesticides (GC)	SW846	TAL EDI
8082A	Polychlorinated Biphenyls (PCBs) by Gas Chromatography	SW846	TAL EDI
245.1	Mercury (CVAA)	EPA	TAL EDI
6010C	Metals (ICP)	SW846	TAL EDI
6020A	Metals (ICP/MS)	SW846	TAL EDI
7471B	Mercury (CVAA)	SW846	TAL EDI
9012B	Cyanide, Total andor Amenable	SW846	TAL EDI
Moisture	Percent Moisture	EPA	TAL EDI

Protocol References:

EPA = US Environmental Protection Agency

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

Laboratory References:

TAL EDI = TestAmerica Edison, 777 New Durham Road, Edison, NJ 08817, TEL (732)549-3900

Client Sample ID: SB2-2.0-3.0

Date Collected: 10/03/16 10:05
Date Received: 10/03/16 18:55

Lab Sample ID: 460-121319-1

Matrix: Solid
Percent Solids: 92.6

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	0.60	U	1.6	0.60	ug/Kg	☼	10/04/16 21:47	10/05/16 17:16	1
1,1,2,2-Tetrachloroethane	0.27	U	1.6	0.27	ug/Kg	☼	10/04/16 21:47	10/05/16 17:16	1
1,1,2-Trichloro-1,2,2-trifluoroethane	0.69	U	1.6	0.69	ug/Kg	☼	10/04/16 21:47	10/05/16 17:16	1
1,1,2-Trichloroethane	0.44	U	1.6	0.44	ug/Kg	☼	10/04/16 21:47	10/05/16 17:16	1
1,1-Dichloroethane	0.54	U	1.6	0.54	ug/Kg	☼	10/04/16 21:47	10/05/16 17:16	1
1,1-Dichloroethene	0.65	U	1.6	0.65	ug/Kg	☼	10/04/16 21:47	10/05/16 17:16	1
1,2,3-Trichlorobenzene	0.17	U	1.6	0.17	ug/Kg	☼	10/04/16 21:47	10/05/16 17:16	1
1,2,4-Trichlorobenzene	0.50	U	1.6	0.50	ug/Kg	☼	10/04/16 21:47	10/05/16 17:16	1
1,2-Dibromo-3-Chloropropane	0.74	U	1.6	0.74	ug/Kg	☼	10/04/16 21:47	10/05/16 17:16	1
1,2-Dichlorobenzene	0.22	U	1.6	0.22	ug/Kg	☼	10/04/16 21:47	10/05/16 17:16	1
1,2-Dichloroethane	0.17	U	1.6	0.17	ug/Kg	☼	10/04/16 21:47	10/05/16 17:16	1
1,2-Dichloropropane	0.27	U	1.6	0.27	ug/Kg	☼	10/04/16 21:47	10/05/16 17:16	1
1,3-Dichlorobenzene	0.19	U	1.6	0.19	ug/Kg	☼	10/04/16 21:47	10/05/16 17:16	1
1,4-Dichlorobenzene	0.20	U	1.6	0.20	ug/Kg	☼	10/04/16 21:47	10/05/16 17:16	1
1,4-Dioxane	10	U	31	10	ug/Kg	☼	10/04/16 21:47	10/05/16 17:16	1
2-Butanone (MEK)	1.2	U	7.9	1.2	ug/Kg	☼	10/04/16 21:47	10/05/16 17:16	1
2-Hexanone	1.5	U	7.9	1.5	ug/Kg	☼	10/04/16 21:47	10/05/16 17:16	1
4-Methyl-2-pentanone (MIBK)	3.5	U	7.9	3.5	ug/Kg	☼	10/04/16 21:47	10/05/16 17:16	1
Acetone	1.7	U	7.9	1.7	ug/Kg	☼	10/04/16 21:47	10/05/16 17:16	1
Benzene	0.31	U	1.6	0.31	ug/Kg	☼	10/04/16 21:47	10/05/16 17:16	1
Bromoform	0.20	U	1.6	0.20	ug/Kg	☼	10/04/16 21:47	10/05/16 17:16	1
Bromomethane	0.50	U	1.6	0.50	ug/Kg	☼	10/04/16 21:47	10/05/16 17:16	1
Carbon disulfide	0.68	U	1.6	0.68	ug/Kg	☼	10/04/16 21:47	10/05/16 17:16	1
Carbon tetrachloride	0.68	U	1.6	0.68	ug/Kg	☼	10/04/16 21:47	10/05/16 17:16	1
Chlorobenzene	0.22	U	1.6	0.22	ug/Kg	☼	10/04/16 21:47	10/05/16 17:16	1
Chlorobromomethane	0.27	U	1.6	0.27	ug/Kg	☼	10/04/16 21:47	10/05/16 17:16	1
Chlorodibromomethane	0.24	U	1.6	0.24	ug/Kg	☼	10/04/16 21:47	10/05/16 17:16	1
Chloroethane	0.55	U	1.6	0.55	ug/Kg	☼	10/04/16 21:47	10/05/16 17:16	1
Chloroform	0.33	U	1.6	0.33	ug/Kg	☼	10/04/16 21:47	10/05/16 17:16	1
Chloromethane	0.60	U *	1.6	0.60	ug/Kg	☼	10/04/16 21:47	10/05/16 17:16	1
cis-1,2-Dichloroethene	0.35	U	1.6	0.35	ug/Kg	☼	10/04/16 21:47	10/05/16 17:16	1
cis-1,3-Dichloropropene	0.24	U	1.6	0.24	ug/Kg	☼	10/04/16 21:47	10/05/16 17:16	1
Cyclohexane	0.72	U	1.6	0.72	ug/Kg	☼	10/04/16 21:47	10/05/16 17:16	1
Dichlorobromomethane	0.60	U	1.6	0.60	ug/Kg	☼	10/04/16 21:47	10/05/16 17:16	1
Dichlorodifluoromethane	0.50	U	1.6	0.50	ug/Kg	☼	10/04/16 21:47	10/05/16 17:16	1
Ethylbenzene	0.28	U	1.6	0.28	ug/Kg	☼	10/04/16 21:47	10/05/16 17:16	1
Ethylene Dibromide	0.19	U	1.6	0.19	ug/Kg	☼	10/04/16 21:47	10/05/16 17:16	1
Isopropylbenzene	0.27	U	1.6	0.27	ug/Kg	☼	10/04/16 21:47	10/05/16 17:16	1
Methyl acetate	1.4	U	7.9	1.4	ug/Kg	☼	10/04/16 21:47	10/05/16 17:16	1
Methyl tert-butyl ether	0.27	U	1.6	0.27	ug/Kg	☼	10/04/16 21:47	10/05/16 17:16	1
Methylcyclohexane	0.79	U	1.6	0.79	ug/Kg	☼	10/04/16 21:47	10/05/16 17:16	1
Methylene Chloride	**0.82**	**J**	1.6	0.50	ug/Kg	☼	10/04/16 21:47	10/05/16 17:16	1
Styrene	0.24	U	1.6	0.24	ug/Kg	☼	10/04/16 21:47	10/05/16 17:16	1
Tetrachloroethene	0.44	U	1.6	0.44	ug/Kg	☼	10/04/16 21:47	10/05/16 17:16	1
Toluene	0.30	U	1.6	0.30	ug/Kg	☼	10/04/16 21:47	10/05/16 17:16	1
trans-1,2-Dichloroethene	0.61	U	1.6	0.61	ug/Kg	☼	10/04/16 21:47	10/05/16 17:16	1
trans-1,3-Dichloropropene	0.16	U	1.6	0.16	ug/Kg	☼	10/04/16 21:47	10/05/16 17:16	1
Trichloroethene	0.41	U	1.6	0.41	ug/Kg	☼	10/04/16 21:47	10/05/16 17:16	1
Trichlorofluoromethane	0.54	U	1.6	0.54	ug/Kg	☼	10/04/16 21:47	10/05/16 17:16	1

Client Sample ID: SB2-2.0-3.0
Date Collected: 10/03/16 10:05
Date Received: 10/03/16 18:55

Lab Sample ID: 460-121319-1
Matrix: Solid
Percent Solids: 92.6

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Vinyl chloride	0.61	U *	1.6	0.61	ug/Kg	☼	10/04/16 21:47	10/05/16 17:16	1
Xylenes, Total	0.17	U	3.1	0.17	ug/Kg	☼	10/04/16 21:47	10/05/16 17:16	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/Kg*	☼			*10/04/16 21:47*	*10/05/16 17:16*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*97*		*78 - 135*	*10/04/16 21:47*	*10/05/16 17:16*	*1*
4-Bromofluorobenzene	*86*		*67 - 126*	*10/04/16 21:47*	*10/05/16 17:16*	*1*
Dibromofluoromethane (Surr)	*95*		*61 - 149*	*10/04/16 21:47*	*10/05/16 17:16*	*1*
Toluene-d8 (Surr)	*94*		*73 - 121*	*10/04/16 21:47*	*10/05/16 17:16*	*1*

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	12	U	360	12	ug/Kg	☼	10/05/16 10:34	10/06/16 23:41	1
2-Chlorophenol	9.0	U	360	9.0	ug/Kg	☼	10/05/16 10:34	10/06/16 23:41	1
2-Methylphenol	15	U	360	15	ug/Kg	☼	10/05/16 10:34	10/06/16 23:41	1
4-Methylphenol	9.7	U	360	9.7	ug/Kg	☼	10/05/16 10:34	10/06/16 23:41	1
2-Nitrophenol	12	U	360	12	ug/Kg	☼	10/05/16 10:34	10/06/16 23:41	1
2,4-Dimethylphenol	78	U	360	78	ug/Kg	☼	10/05/16 10:34	10/06/16 23:41	1
2,4-Dichlorophenol	8.4	U	140	8.4	ug/Kg	☼	10/05/16 10:34	10/06/16 23:41	1
4-Chloro-3-methylphenol	15	U	360	15	ug/Kg	☼	10/05/16 10:34	10/06/16 23:41	1
2,4,6-Trichlorophenol	10	U	140	10	ug/Kg	☼	10/05/16 10:34	10/06/16 23:41	1
2,4,5-Trichlorophenol	35	U *	360	35	ug/Kg	☼	10/05/16 10:34	10/06/16 23:41	1
2,4-Dinitrophenol	270	U	290	270	ug/Kg	☼	10/05/16 10:34	10/06/16 23:41	1
4-Nitrophenol	170	U	720	170	ug/Kg	☼	10/05/16 10:34	10/06/16 23:41	1
4,6-Dinitro-2-methylphenol	95	U	290	95	ug/Kg	☼	10/05/16 10:34	10/06/16 23:41	1
Pentachlorophenol	43	U	290	43	ug/Kg	☼	10/05/16 10:34	10/06/16 23:41	1
Bis(2-chloroethyl)ether	8.4	U	36	8.4	ug/Kg	☼	10/05/16 10:34	10/06/16 23:41	1
N-Nitrosodi-n-propylamine	12	U	36	12	ug/Kg	☼	10/05/16 10:34	10/06/16 23:41	1
Hexachloroethane	13	U	36	13	ug/Kg	☼	10/05/16 10:34	10/06/16 23:41	1
Nitrobenzene	11	U	36	11	ug/Kg	☼	10/05/16 10:34	10/06/16 23:41	1
Isophorone	7.6	U	140	7.6	ug/Kg	☼	10/05/16 10:34	10/06/16 23:41	1
Bis(2-chloroethoxy)methane	11	U	360	11	ug/Kg	☼	10/05/16 10:34	10/06/16 23:41	1
Naphthalene	**16**	**J**	360	9.0	ug/Kg	☼	10/05/16 10:34	10/06/16 23:41	1
4-Chloroaniline	9.1	U	360	9.1	ug/Kg	☼	10/05/16 10:34	10/06/16 23:41	1
Hexachlorobutadiene	10	U	72	10	ug/Kg	☼	10/05/16 10:34	10/06/16 23:41	1
2-Methylnaphthalene	**10**	**J**	360	7.9	ug/Kg	☼	10/05/16 10:34	10/06/16 23:41	1
Hexachlorocyclopentadiene	22	U	360	22	ug/Kg	☼	10/05/16 10:34	10/06/16 23:41	1
2-Chloronaphthalene	8.1	U	360	8.1	ug/Kg	☼	10/05/16 10:34	10/06/16 23:41	1
2-Nitroaniline	12	U	360	12	ug/Kg	☼	10/05/16 10:34	10/06/16 23:41	1
Dimethyl phthalate	10	U	360	10	ug/Kg	☼	10/05/16 10:34	10/06/16 23:41	1
Acenaphthylene	**20**	**J**	360	9.1	ug/Kg	☼	10/05/16 10:34	10/06/16 23:41	1
2,6-Dinitrotoluene	19	U	72	19	ug/Kg	☼	10/05/16 10:34	10/06/16 23:41	1
3-Nitroaniline	11	U	360	11	ug/Kg	☼	10/05/16 10:34	10/06/16 23:41	1
Acenaphthene	**15**	**J**	360	8.6	ug/Kg	☼	10/05/16 10:34	10/06/16 23:41	1
Dibenzofuran	11	U	360	11	ug/Kg	☼	10/05/16 10:34	10/06/16 23:41	1
2,4-Dinitrotoluene	14	U	72	14	ug/Kg	☼	10/05/16 10:34	10/06/16 23:41	1
Diethyl phthalate	10	U	360	10	ug/Kg	☼	10/05/16 10:34	10/06/16 23:41	1
4-Chlorophenyl phenyl ether	11	U	360	11	ug/Kg	☼	10/05/16 10:34	10/06/16 23:41	1

Client Sample ID: SB2-2.0-3.0

Date Collected: 10/03/16 10:05
Date Received: 10/03/16 18:55

Lab Sample ID: 460-121319-1

Matrix: Solid
Percent Solids: 92.6

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluorene	**12**	**J**	360	7.7	ug/Kg	☼	10/05/16 10:34	10/06/16 23:41	1
4-Nitroaniline	13	U	360	13	ug/Kg	☼	10/05/16 10:34	10/06/16 23:41	1
N-Nitrosodiphenylamine	32	U	360	32	ug/Kg	☼	10/05/16 10:34	10/06/16 23:41	1
4-Bromophenyl phenyl ether	11	U	360	11	ug/Kg	☼	10/05/16 10:34	10/06/16 23:41	1
Hexachlorobenzene	14	U	36	14	ug/Kg	☼	10/05/16 10:34	10/06/16 23:41	1
Phenanthrene	**250**	**J**	360	9.5	ug/Kg	☼	10/05/16 10:34	10/06/16 23:41	1
Anthracene	**59**	**J**	360	34	ug/Kg	☼	10/05/16 10:34	10/06/16 23:41	1
Carbazole	**14**	**J**	360	8.8	ug/Kg	☼	10/05/16 10:34	10/06/16 23:41	1
Di-n-butyl phthalate	11	U	360	11	ug/Kg	☼	10/05/16 10:34	10/06/16 23:41	1
Fluoranthene	**720**		360	11	ug/Kg	☼	10/05/16 10:34	10/06/16 23:41	1
Pyrene	**640**		360	16	ug/Kg	☼	10/05/16 10:34	10/06/16 23:41	1
Butyl benzyl phthalate	11	U	360	11	ug/Kg	☼	10/05/16 10:34	10/06/16 23:41	1
3,3'-Dichlorobenzidine	40	U	140	40	ug/Kg	☼	10/05/16 10:34	10/06/16 23:41	1
Benzo[a]anthracene	**510**		36	30	ug/Kg	☼	10/05/16 10:34	10/06/16 23:41	1
Chrysene	**520**		360	9.7	ug/Kg	☼	10/05/16 10:34	10/06/16 23:41	1
Bis(2-ethylhexyl) phthalate	**49**	**J**	360	14	ug/Kg	☼	10/05/16 10:34	10/06/16 23:41	1
Di-n-octyl phthalate	18	U	360	18	ug/Kg	☼	10/05/16 10:34	10/06/16 23:41	1
Benzo[b]fluoranthene	**680**		36	14	ug/Kg	☼	10/05/16 10:34	10/06/16 23:41	1
Benzo[k]fluoranthene	**240**		36	15	ug/Kg	☼	10/05/16 10:34	10/06/16 23:41	1
Benzo[a]pyrene	**540**		36	11	ug/Kg	☼	10/05/16 10:34	10/06/16 23:41	1
Indeno[1,2,3-cd]pyrene	**400**		36	24	ug/Kg	☼	10/05/16 10:34	10/06/16 23:41	1
Dibenz(a,h)anthracene	**110**		36	19	ug/Kg	☼	10/05/16 10:34	10/06/16 23:41	1
Benzo[g,h,i]perylene	**390**		360	20	ug/Kg	☼	10/05/16 10:34	10/06/16 23:41	1
Diphenyl	30	U	360	30	ug/Kg	☼	10/05/16 10:34	10/06/16 23:41	1
Acetophenone	7.7	U	360	7.7	ug/Kg	☼	10/05/16 10:34	10/06/16 23:41	1
Benzaldehyde	27	U	360	27	ug/Kg	☼	10/05/16 10:34	10/06/16 23:41	1
Caprolactam	26	U	360	26	ug/Kg	☼	10/05/16 10:34	10/06/16 23:41	1
Atrazine	16	U	140	16	ug/Kg	☼	10/05/16 10:34	10/06/16 23:41	1
2,2'-oxybis[1-chloropropane]	15	U	360	15	ug/Kg	☼	10/05/16 10:34	10/06/16 23:41	1
1,2,4,5-Tetrachlorobenzene	26	U	360	26	ug/Kg	☼	10/05/16 10:34	10/06/16 23:41	1
2,3,4,6-Tetrachlorophenol	33	U	360	33	ug/Kg	☼	10/05/16 10:34	10/06/16 23:41	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Benzo[e]pyrene	*410*	*J N*	*ug/Kg*	☼	*12.47*	*192-97-2*	*10/05/16 10:34*	*10/06/16 23:41*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*62*		*37 - 94*	*10/05/16 10:34*	*10/06/16 23:41*	*1*
Phenol-d5	*60*		*32 - 91*	*10/05/16 10:34*	*10/06/16 23:41*	*1*
Terphenyl-d14	*63*		*24 - 109*	*10/05/16 10:34*	*10/06/16 23:41*	*1*
2,4,6-Tribromophenol	*67*		*10 - 103*	*10/05/16 10:34*	*10/06/16 23:41*	*1*
2-Fluorophenol	*59*		*25 - 92*	*10/05/16 10:34*	*10/06/16 23:41*	*1*
2-Fluorobiphenyl	*74*		*38 - 95*	*10/05/16 10:34*	*10/06/16 23:41*	*1*

Method: 8081B - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	0.95	U	7.2	0.95	ug/Kg	☼	10/06/16 03:19	10/06/16 13:19	1
4,4'-DDE	1.0	U	7.2	1.0	ug/Kg	☼	10/06/16 03:19	10/06/16 13:19	1
4,4'-DDT	0.74	U	7.2	0.74	ug/Kg	☼	10/06/16 03:19	10/06/16 13:19	1
Aldrin	0.87	U	7.2	0.87	ug/Kg	☼	10/06/16 03:19	10/06/16 13:19	1
alpha-BHC	0.66	U	2.2	0.66	ug/Kg	☼	10/06/16 03:19	10/06/16 13:19	1

Client Sample ID: SB2-2.0-3.0
Date Collected: 10/03/16 10:05
Date Received: 10/03/16 18:55

Lab Sample ID: 460-121319-1
Matrix: Solid
Percent Solids: 92.6

Method: 8081B - Organochlorine Pesticides (GC) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
beta-BHC	0.70	U	2.2	0.70	ug/Kg	☼	10/06/16 03:19	10/06/16 13:19	1
Chlordane (technical)	32	U	72	32	ug/Kg	☼	10/06/16 03:19	10/06/16 13:19	1
delta-BHC	0.79	U	2.2	0.79	ug/Kg	☼	10/06/16 03:19	10/06/16 13:19	1
Dieldrin	0.94	U	2.2	0.94	ug/Kg	☼	10/06/16 03:19	10/06/16 13:19	1
Endosulfan I	1.0	U	7.2	1.0	ug/Kg	☼	10/06/16 03:19	10/06/16 13:19	1
Endosulfan II	1.1	U	7.2	1.1	ug/Kg	☼	10/06/16 03:19	10/06/16 13:19	1
Endosulfan sulfate	0.84	U	7.2	0.84	ug/Kg	☼	10/06/16 03:19	10/06/16 13:19	1
Endrin	0.92	U	7.2	0.92	ug/Kg	☼	10/06/16 03:19	10/06/16 13:19	1
Endrin aldehyde	0.90	U	7.2	0.90	ug/Kg	☼	10/06/16 03:19	10/06/16 13:19	1
Endrin ketone	1.0	U	7.2	1.0	ug/Kg	☼	10/06/16 03:19	10/06/16 13:19	1
gamma-BHC (Lindane)	0.65	U	2.2	0.65	ug/Kg	☼	10/06/16 03:19	10/06/16 13:19	1
Heptachlor	0.93	U	7.2	0.93	ug/Kg	☼	10/06/16 03:19	10/06/16 13:19	1
Heptachlor epoxide	1.4	U	7.2	1.4	ug/Kg	☼	10/06/16 03:19	10/06/16 13:19	1
Methoxychlor	1.5	U	7.2	1.5	ug/Kg	☼	10/06/16 03:19	10/06/16 13:19	1
Toxaphene	21	U	72	21	ug/Kg	☼	10/06/16 03:19	10/06/16 13:19	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*107*		*50 - 150*	*10/06/16 03:19*	*10/06/16 13:19*	*1*
DCB Decachlorobiphenyl	*112*		*50 - 150*	*10/06/16 03:19*	*10/06/16 13:19*	*1*
Tetrachloro-m-xylene	*111*		*47 - 150*	*10/06/16 03:19*	*10/06/16 13:19*	*1*
Tetrachloro-m-xylene	*110*		*47 - 150*	*10/06/16 03:19*	*10/06/16 13:19*	*1*

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor 1016	9.6	U	72	9.6	ug/Kg	☼	10/06/16 03:36	10/06/16 15:21	1
Aroclor 1221	9.6	U	72	9.6	ug/Kg	☼	10/06/16 03:36	10/06/16 15:21	1
Aroclor 1232	9.6	U	72	9.6	ug/Kg	☼	10/06/16 03:36	10/06/16 15:21	1
Aroclor 1242	9.6	U	72	9.6	ug/Kg	☼	10/06/16 03:36	10/06/16 15:21	1
Aroclor 1248	9.6	U	72	9.6	ug/Kg	☼	10/06/16 03:36	10/06/16 15:21	1
Aroclor 1254	9.9	U	72	9.9	ug/Kg	☼	10/06/16 03:36	10/06/16 15:21	1
Aroclor 1260	9.9	U	72	9.9	ug/Kg	☼	10/06/16 03:36	10/06/16 15:21	1
Aroclor-1262	9.9	U	72	9.9	ug/Kg	☼	10/06/16 03:36	10/06/16 15:21	1
Aroclor 1268	9.9	U	72	9.9	ug/Kg	☼	10/06/16 03:36	10/06/16 15:21	1
Polychlorinated biphenyls, Total	9.9	U	72	9.9	ug/Kg	☼	10/06/16 03:36	10/06/16 15:21	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*107*		*35 - 150*	*10/06/16 03:36*	*10/06/16 15:21*	*1*
DCB Decachlorobiphenyl	*109*		*35 - 150*	*10/06/16 03:36*	*10/06/16 15:21*	*1*

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**8680**		33.0	17.0	mg/Kg	☼	10/05/16 18:27	10/08/16 03:31	4
Antimony	1.3	U	3.3	1.3	mg/Kg	☼	10/05/16 18:27	10/08/16 03:31	4
Arsenic	**3.7**		2.5	0.81	mg/Kg	☼	10/05/16 18:27	10/08/16 03:31	4
Barium	**88.7**		33.0	1.2	mg/Kg	☼	10/05/16 18:27	10/08/16 03:31	4
Beryllium	**0.41**		0.33	0.28	mg/Kg	☼	10/05/16 18:27	10/08/16 03:31	4
Cadmium	0.34	U	0.66	0.34	mg/Kg	☼	10/05/16 18:27	10/08/16 03:31	4
Calcium	**1750**		824	48.8	mg/Kg	☼	10/05/16 18:27	10/08/16 03:31	4
Chromium	**17.5**		1.6	0.80	mg/Kg	☼	10/05/16 18:27	10/08/16 03:31	4
Cobalt	**5.2**	**J**	8.2	0.95	mg/Kg	☼	10/05/16 18:27	10/08/16 03:31	4

Client Sample ID: SB2-2.0-3.0

Date Collected: 10/03/16 10:05
Date Received: 10/03/16 18:55

Lab Sample ID: 460-121319-1

Matrix: Solid
Percent Solids: 92.6

Method: 6010C - Metals (ICP) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Copper	44.7		4.1	1.1	mg/Kg	☼	10/05/16 18:27	10/08/16 03:31	4
Iron	14100		24.7	18.6	mg/Kg	☼	10/05/16 18:27	10/08/16 03:31	4
Lead	163		1.6	0.65	mg/Kg	☼	10/05/16 18:27	10/08/16 03:31	4
Magnesium	2650		824	41.1	mg/Kg	☼	10/05/16 18:27	10/08/16 03:31	4
Manganese	246		2.5	0.87	mg/Kg	☼	10/05/16 18:27	10/08/16 03:31	4
Nickel	11.7		6.6	1.2	mg/Kg	☼	10/05/16 18:27	10/08/16 03:31	4
Potassium	1010		824	25.0	mg/Kg	☼	10/05/16 18:27	10/08/16 03:31	4
Selenium	1.1	U	3.3	1.1	mg/Kg	☼	10/05/16 18:27	10/08/16 03:31	4
Silver	0.29	U	1.6	0.29	mg/Kg	☼	10/05/16 18:27	10/08/16 03:31	4
Sodium	80.5	J	824	55.8	mg/Kg	☼	10/05/16 18:27	10/08/16 03:31	4
Thallium	1.5	U	3.3	1.5	mg/Kg	☼	10/05/16 18:27	10/08/16 03:31	4
Vanadium	20.5		8.2	0.82	mg/Kg	☼	10/05/16 18:27	10/08/16 03:31	4
Zinc	93.1		4.9	1.2	mg/Kg	☼	10/05/16 18:27	10/08/16 03:31	4

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.57		0.018	0.012	mg/Kg	☼	10/06/16 05:24	10/06/16 11:06	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	0.057	J	0.11	0.029	mg/Kg	☼	10/13/16 11:03	10/14/16 11:12	1

Client Sample ID: SB2-19.0-20.0

Date Collected: 10/03/16 11:00
Date Received: 10/03/16 18:55

Lab Sample ID: 460-121319-2

Matrix: Solid
Percent Solids: 92.0

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	0.80	U	2.1	0.80	ug/Kg	☼	10/04/16 21:48	10/05/16 17:41	1
1,1,2,2-Tetrachloroethane	0.36	U	2.1	0.36	ug/Kg	☼	10/04/16 21:48	10/05/16 17:41	1
1,1,2-Trichloro-1,2,2-trifluoroethane	0.93	U	2.1	0.93	ug/Kg	☼	10/04/16 21:48	10/05/16 17:41	1
1,1,2-Trichloroethane	0.59	U	2.1	0.59	ug/Kg	☼	10/04/16 21:48	10/05/16 17:41	1
1,1-Dichloroethane	0.72	U	2.1	0.72	ug/Kg	☼	10/04/16 21:48	10/05/16 17:41	1
1,1-Dichloroethene	0.87	U	2.1	0.87	ug/Kg	☼	10/04/16 21:48	10/05/16 17:41	1
1,2,3-Trichlorobenzene	0.23	U	2.1	0.23	ug/Kg	☼	10/04/16 21:48	10/05/16 17:41	1
1,2,4-Trichlorobenzene	0.68	U	2.1	0.68	ug/Kg	☼	10/04/16 21:48	10/05/16 17:41	1
1,2-Dibromo-3-Chloropropane	0.99	U	2.1	0.99	ug/Kg	☼	10/04/16 21:48	10/05/16 17:41	1
1,2-Dichlorobenzene	0.30	U	2.1	0.30	ug/Kg	☼	10/04/16 21:48	10/05/16 17:41	1
1,2-Dichloroethane	0.23	U	2.1	0.23	ug/Kg	☼	10/04/16 21:48	10/05/16 17:41	1
1,2-Dichloropropane	0.36	U	2.1	0.36	ug/Kg	☼	10/04/16 21:48	10/05/16 17:41	1
1,3-Dichlorobenzene	0.25	U	2.1	0.25	ug/Kg	☼	10/04/16 21:48	10/05/16 17:41	1
1,4-Dichlorobenzene	0.27	U	2.1	0.27	ug/Kg	☼	10/04/16 21:48	10/05/16 17:41	1
1,4-Dioxane	14	U	42	14	ug/Kg	☼	10/04/16 21:48	10/05/16 17:41	1
2-Butanone (MEK)	1.6	U	11	1.6	ug/Kg	☼	10/04/16 21:48	10/05/16 17:41	1
2-Hexanone	2.0	U	11	2.0	ug/Kg	☼	10/04/16 21:48	10/05/16 17:41	1
4-Methyl-2-pentanone (MIBK)	4.7	U	11	4.7	ug/Kg	☼	10/04/16 21:48	10/05/16 17:41	1
Acetone	2.2	U	11	2.2	ug/Kg	☼	10/04/16 21:48	10/05/16 17:41	1
Benzene	0.42	U	2.1	0.42	ug/Kg	☼	10/04/16 21:48	10/05/16 17:41	1
Bromoform	0.27	U	2.1	0.27	ug/Kg	☼	10/04/16 21:48	10/05/16 17:41	1
Bromomethane	0.68	U	2.1	0.68	ug/Kg	☼	10/04/16 21:48	10/05/16 17:41	1

Client Sample ID: SB2-19.0-20.0
Date Collected: 10/03/16 11:00
Date Received: 10/03/16 18:55

Lab Sample ID: 460-121319-2
Matrix: Solid
Percent Solids: 92.0

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Carbon disulfide	0.91	U	2.1	0.91	ug/Kg	☼	10/04/16 21:48	10/05/16 17:41	1
Carbon tetrachloride	0.91	U	2.1	0.91	ug/Kg	☼	10/04/16 21:48	10/05/16 17:41	1
Chlorobenzene	0.30	U	2.1	0.30	ug/Kg	☼	10/04/16 21:48	10/05/16 17:41	1
Chlorobromomethane	0.36	U	2.1	0.36	ug/Kg	☼	10/04/16 21:48	10/05/16 17:41	1
Chlorodibromomethane	0.32	U	2.1	0.32	ug/Kg	☼	10/04/16 21:48	10/05/16 17:41	1
Chloroethane	0.74	U	2.1	0.74	ug/Kg	☼	10/04/16 21:48	10/05/16 17:41	1
Chloroform	0.44	U	2.1	0.44	ug/Kg	☼	10/04/16 21:48	10/05/16 17:41	1
Chloromethane	0.80	U *	2.1	0.80	ug/Kg	☼	10/04/16 21:48	10/05/16 17:41	1
cis-1,2-Dichloroethene	0.47	U	2.1	0.47	ug/Kg	☼	10/04/16 21:48	10/05/16 17:41	1
cis-1,3-Dichloropropene	0.32	U	2.1	0.32	ug/Kg	☼	10/04/16 21:48	10/05/16 17:41	1
Cyclohexane	0.97	U	2.1	0.97	ug/Kg	☼	10/04/16 21:48	10/05/16 17:41	1
Dichlorobromomethane	0.80	U	2.1	0.80	ug/Kg	☼	10/04/16 21:48	10/05/16 17:41	1
Dichlorodifluoromethane	0.68	U	2.1	0.68	ug/Kg	☼	10/04/16 21:48	10/05/16 17:41	1
Ethylbenzene	0.38	U	2.1	0.38	ug/Kg	☼	10/04/16 21:48	10/05/16 17:41	1
Ethylene Dibromide	0.25	U	2.1	0.25	ug/Kg	☼	10/04/16 21:48	10/05/16 17:41	1
Isopropylbenzene	0.36	U	2.1	0.36	ug/Kg	☼	10/04/16 21:48	10/05/16 17:41	1
Methyl acetate	1.9	U	11	1.9	ug/Kg	☼	10/04/16 21:48	10/05/16 17:41	1
Methyl tert-butyl ether	0.36	U	2.1	0.36	ug/Kg	☼	10/04/16 21:48	10/05/16 17:41	1
Methylcyclohexane	1.1	U	2.1	1.1	ug/Kg	☼	10/04/16 21:48	10/05/16 17:41	1
Methylene Chloride	0.68	U	2.1	0.68	ug/Kg	☼	10/04/16 21:48	10/05/16 17:41	1
Styrene	0.32	U	2.1	0.32	ug/Kg	☼	10/04/16 21:48	10/05/16 17:41	1
Tetrachloroethene	0.59	U	2.1	0.59	ug/Kg	☼	10/04/16 21:48	10/05/16 17:41	1
Toluene	0.40	U	2.1	0.40	ug/Kg	☼	10/04/16 21:48	10/05/16 17:41	1
trans-1,2-Dichloroethene	0.82	U	2.1	0.82	ug/Kg	☼	10/04/16 21:48	10/05/16 17:41	1
trans-1,3-Dichloropropene	0.21	U	2.1	0.21	ug/Kg	☼	10/04/16 21:48	10/05/16 17:41	1
Trichloroethene	0.55	U	2.1	0.55	ug/Kg	☼	10/04/16 21:48	10/05/16 17:41	1
Trichlorofluoromethane	0.72	U	2.1	0.72	ug/Kg	☼	10/04/16 21:48	10/05/16 17:41	1
Vinyl chloride	0.82	U *	2.1	0.82	ug/Kg	☼	10/04/16 21:48	10/05/16 17:41	1
Xylenes, Total	0.23	U	4.2	0.23	ug/Kg	☼	10/04/16 21:48	10/05/16 17:41	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/Kg*	☼			*10/04/16 21:48*	*10/05/16 17:41*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*105*		*78 - 135*	*10/04/16 21:48*	*10/05/16 17:41*	*1*
4-Bromofluorobenzene	*139*	*X*	*67 - 126*	*10/04/16 21:48*	*10/05/16 17:41*	*1*
Dibromofluoromethane (Surr)	*104*		*61 - 149*	*10/04/16 21:48*	*10/05/16 17:41*	*1*
Toluene-d8 (Surr)	*104*		*73 - 121*	*10/04/16 21:48*	*10/05/16 17:41*	*1*

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	12	U	360	12	ug/Kg	☼	10/05/16 10:34	10/06/16 20:49	1
2-Chlorophenol	9.1	U	360	9.1	ug/Kg	☼	10/05/16 10:34	10/06/16 20:49	1
2-Methylphenol	16	U	360	16	ug/Kg	☼	10/05/16 10:34	10/06/16 20:49	1
4-Methylphenol	9.8	U	360	9.8	ug/Kg	☼	10/05/16 10:34	10/06/16 20:49	1
2-Nitrophenol	12	U	360	12	ug/Kg	☼	10/05/16 10:34	10/06/16 20:49	1
2,4-Dimethylphenol	79	U	360	79	ug/Kg	☼	10/05/16 10:34	10/06/16 20:49	1
2,4-Dichlorophenol	8.5	U	140	8.5	ug/Kg	☼	10/05/16 10:34	10/06/16 20:49	1
4-Chloro-3-methylphenol	15	U	360	15	ug/Kg	☼	10/05/16 10:34	10/06/16 20:49	1
2,4,6-Trichlorophenol	10	U	140	10	ug/Kg	☼	10/05/16 10:34	10/06/16 20:49	1

Client Sample ID: SB2-19.0-20.0
Date Collected: 10/03/16 11:00
Date Received: 10/03/16 18:55

Lab Sample ID: 460-121319-2
Matrix: Solid
Percent Solids: 92.0

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	36	U *	360	36	ug/Kg	☼	10/05/16 10:34	10/06/16 20:49	1
2,4-Dinitrophenol	270	U	290	270	ug/Kg	☼	10/05/16 10:34	10/06/16 20:49	1
4-Nitrophenol	170	U	730	170	ug/Kg	☼	10/05/16 10:34	10/06/16 20:49	1
4,6-Dinitro-2-methylphenol	96	U	290	96	ug/Kg	☼	10/05/16 10:34	10/06/16 20:49	1
Pentachlorophenol	43	U	290	43	ug/Kg	☼	10/05/16 10:34	10/06/16 20:49	1
Bis(2-chloroethyl)ether	8.5	U	36	8.5	ug/Kg	☼	10/05/16 10:34	10/06/16 20:49	1
N-Nitrosodi-n-propylamine	12	U	36	12	ug/Kg	☼	10/05/16 10:34	10/06/16 20:49	1
Hexachloroethane	13	U	36	13	ug/Kg	☼	10/05/16 10:34	10/06/16 20:49	1
Nitrobenzene	11	U	36	11	ug/Kg	☼	10/05/16 10:34	10/06/16 20:49	1
Isophorone	7.7	U	140	7.7	ug/Kg	☼	10/05/16 10:34	10/06/16 20:49	1
Bis(2-chloroethoxy)methane	11	U	360	11	ug/Kg	☼	10/05/16 10:34	10/06/16 20:49	1
Naphthalene	9.1	U	360	9.1	ug/Kg	☼	10/05/16 10:34	10/06/16 20:49	1
4-Chloroaniline	9.2	U	360	9.2	ug/Kg	☼	10/05/16 10:34	10/06/16 20:49	1
Hexachlorobutadiene	10	U	73	10	ug/Kg	☼	10/05/16 10:34	10/06/16 20:49	1
2-Methylnaphthalene	7.9	U	360	7.9	ug/Kg	☼	10/05/16 10:34	10/06/16 20:49	1
Hexachlorocyclopentadiene	22	U	360	22	ug/Kg	☼	10/05/16 10:34	10/06/16 20:49	1
2-Chloronaphthalene	8.1	U	360	8.1	ug/Kg	☼	10/05/16 10:34	10/06/16 20:49	1
2-Nitroaniline	12	U	360	12	ug/Kg	☼	10/05/16 10:34	10/06/16 20:49	1
Dimethyl phthalate	10	U	360	10	ug/Kg	☼	10/05/16 10:34	10/06/16 20:49	1
Acenaphthylene	9.2	U	360	9.2	ug/Kg	☼	10/05/16 10:34	10/06/16 20:49	1
2,6-Dinitrotoluene	19	U	73	19	ug/Kg	☼	10/05/16 10:34	10/06/16 20:49	1
3-Nitroaniline	11	U	360	11	ug/Kg	☼	10/05/16 10:34	10/06/16 20:49	1
Acenaphthene	8.7	U	360	8.7	ug/Kg	☼	10/05/16 10:34	10/06/16 20:49	1
Dibenzofuran	11	U	360	11	ug/Kg	☼	10/05/16 10:34	10/06/16 20:49	1
2,4-Dinitrotoluene	14	U	73	14	ug/Kg	☼	10/05/16 10:34	10/06/16 20:49	1
Diethyl phthalate	10	U	360	10	ug/Kg	☼	10/05/16 10:34	10/06/16 20:49	1
4-Chlorophenyl phenyl ether	11	U	360	11	ug/Kg	☼	10/05/16 10:34	10/06/16 20:49	1
Fluorene	7.8	U	360	7.8	ug/Kg	☼	10/05/16 10:34	10/06/16 20:49	1
4-Nitroaniline	14	U	360	14	ug/Kg	☼	10/05/16 10:34	10/06/16 20:49	1
N-Nitrosodiphenylamine	33	U	360	33	ug/Kg	☼	10/05/16 10:34	10/06/16 20:49	1
4-Bromophenyl phenyl ether	11	U	360	11	ug/Kg	☼	10/05/16 10:34	10/06/16 20:49	1
Hexachlorobenzene	15	U	36	15	ug/Kg	☼	10/05/16 10:34	10/06/16 20:49	1
Phenanthrene	9.6	U	360	9.6	ug/Kg	☼	10/05/16 10:34	10/06/16 20:49	1
Anthracene	34	U	360	34	ug/Kg	☼	10/05/16 10:34	10/06/16 20:49	1
Carbazole	8.9	U	360	8.9	ug/Kg	☼	10/05/16 10:34	10/06/16 20:49	1
Di-n-butyl phthalate	11	U	360	11	ug/Kg	☼	10/05/16 10:34	10/06/16 20:49	1
Fluoranthene	11	U	360	11	ug/Kg	☼	10/05/16 10:34	10/06/16 20:49	1
Pyrene	16	U	360	16	ug/Kg	☼	10/05/16 10:34	10/06/16 20:49	1
Butyl benzyl phthalate	11	U	360	11	ug/Kg	☼	10/05/16 10:34	10/06/16 20:49	1
3,3'-Dichlorobenzidine	40	U	140	40	ug/Kg	☼	10/05/16 10:34	10/06/16 20:49	1
Benzo[a]anthracene	30	U	36	30	ug/Kg	☼	10/05/16 10:34	10/06/16 20:49	1
Chrysene	9.8	U	360	9.8	ug/Kg	☼	10/05/16 10:34	10/06/16 20:49	1
Bis(2-ethylhexyl) phthalate	14	U	360	14	ug/Kg	☼	10/05/16 10:34	10/06/16 20:49	1
Di-n-octyl phthalate	18	U	360	18	ug/Kg	☼	10/05/16 10:34	10/06/16 20:49	1
Benzo[b]fluoranthene	14	U	36	14	ug/Kg	☼	10/05/16 10:34	10/06/16 20:49	1
Benzo[k]fluoranthene	16	U	36	16	ug/Kg	☼	10/05/16 10:34	10/06/16 20:49	1
Benzo[a]pyrene	11	U	36	11	ug/Kg	☼	10/05/16 10:34	10/06/16 20:49	1
Indeno[1,2,3-cd]pyrene	24	U	36	24	ug/Kg	☼	10/05/16 10:34	10/06/16 20:49	1
Dibenz(a,h)anthracene	19	U	36	19	ug/Kg	☼	10/05/16 10:34	10/06/16 20:49	1

Client Sample ID: SB2-19.0-20.0

Date Collected: 10/03/16 11:00
Date Received: 10/03/16 18:55

Lab Sample ID: 460-121319-2

Matrix: Solid
Percent Solids: 92.0

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[g,h,i]perylene	21	U	360	21	ug/Kg	☼	10/05/16 10:34	10/06/16 20:49	1
Diphenyl	31	U	360	31	ug/Kg	☼	10/05/16 10:34	10/06/16 20:49	1
Acetophenone	7.8	U	360	7.8	ug/Kg	☼	10/05/16 10:34	10/06/16 20:49	1
Benzaldehyde	27	U	360	27	ug/Kg	☼	10/05/16 10:34	10/06/16 20:49	1
Caprolactam	26	U	360	26	ug/Kg	☼	10/05/16 10:34	10/06/16 20:49	1
Atrazine	16	U	140	16	ug/Kg	☼	10/05/16 10:34	10/06/16 20:49	1
2,2'-oxybis[1-chloropropane]	15	U	360	15	ug/Kg	☼	10/05/16 10:34	10/06/16 20:49	1
1,2,4,5-Tetrachlorobenzene	27	U	360	27	ug/Kg	☼	10/05/16 10:34	10/06/16 20:49	1
2,3,4,6-Tetrachlorophenol	34	U	360	34	ug/Kg	☼	10/05/16 10:34	10/06/16 20:49	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/Kg*	☼			*10/05/16 10:34*	*10/06/16 20:49*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*58*		*37 - 94*	*10/05/16 10:34*	*10/06/16 20:49*	*1*
Phenol-d5	*53*		*32 - 91*	*10/05/16 10:34*	*10/06/16 20:49*	*1*
Terphenyl-d14	*54*		*24 - 109*	*10/05/16 10:34*	*10/06/16 20:49*	*1*
2,4,6-Tribromophenol	*61*		*10 - 103*	*10/05/16 10:34*	*10/06/16 20:49*	*1*
2-Fluorophenol	*53*		*25 - 92*	*10/05/16 10:34*	*10/06/16 20:49*	*1*
2-Fluorobiphenyl	*67*		*38 - 95*	*10/05/16 10:34*	*10/06/16 20:49*	*1*

Method: 8081B - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	0.95	U	7.3	0.95	ug/Kg	☼	10/06/16 03:19	10/06/16 13:32	1
4,4'-DDE	1.1	U	7.3	1.1	ug/Kg	☼	10/06/16 03:19	10/06/16 13:32	1
4,4'-DDT	0.75	U	7.3	0.75	ug/Kg	☼	10/06/16 03:19	10/06/16 13:32	1
Aldrin	0.88	U	7.3	0.88	ug/Kg	☼	10/06/16 03:19	10/06/16 13:32	1
alpha-BHC	0.66	U	2.2	0.66	ug/Kg	☼	10/06/16 03:19	10/06/16 13:32	1
beta-BHC	0.70	U	2.2	0.70	ug/Kg	☼	10/06/16 03:19	10/06/16 13:32	1
Chlordane (technical)	32	U	73	32	ug/Kg	☼	10/06/16 03:19	10/06/16 13:32	1
delta-BHC	0.79	U	2.2	0.79	ug/Kg	☼	10/06/16 03:19	10/06/16 13:32	1
Dieldrin	0.94	U	2.2	0.94	ug/Kg	☼	10/06/16 03:19	10/06/16 13:32	1
Endosulfan I	1.0	U	7.3	1.0	ug/Kg	☼	10/06/16 03:19	10/06/16 13:32	1
Endosulfan II	1.1	U	7.3	1.1	ug/Kg	☼	10/06/16 03:19	10/06/16 13:32	1
Endosulfan sulfate	0.85	U	7.3	0.85	ug/Kg	☼	10/06/16 03:19	10/06/16 13:32	1
Endrin	0.92	U	7.3	0.92	ug/Kg	☼	10/06/16 03:19	10/06/16 13:32	1
Endrin aldehyde	0.90	U	7.3	0.90	ug/Kg	☼	10/06/16 03:19	10/06/16 13:32	1
Endrin ketone	1.0	U	7.3	1.0	ug/Kg	☼	10/06/16 03:19	10/06/16 13:32	1
gamma-BHC (Lindane)	0.65	U	2.2	0.65	ug/Kg	☼	10/06/16 03:19	10/06/16 13:32	1
Heptachlor	0.93	U	7.3	0.93	ug/Kg	☼	10/06/16 03:19	10/06/16 13:32	1
Heptachlor epoxide	1.4	U	7.3	1.4	ug/Kg	☼	10/06/16 03:19	10/06/16 13:32	1
Methoxychlor	1.5	U	7.3	1.5	ug/Kg	☼	10/06/16 03:19	10/06/16 13:32	1
Toxaphene	21	U	73	21	ug/Kg	☼	10/06/16 03:19	10/06/16 13:32	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*92*		*50 - 150*	*10/06/16 03:19*	*10/06/16 13:32*	*1*
DCB Decachlorobiphenyl	*94*		*50 - 150*	*10/06/16 03:19*	*10/06/16 13:32*	*1*
Tetrachloro-m-xylene	*97*		*47 - 150*	*10/06/16 03:19*	*10/06/16 13:32*	*1*
Tetrachloro-m-xylene	*92*		*47 - 150*	*10/06/16 03:19*	*10/06/16 13:32*	*1*

Client Sample ID: SB2-19.0-20.0

Date Collected: 10/03/16 11:00
Date Received: 10/03/16 18:55

Lab Sample ID: 460-121319-2

Matrix: Solid
Percent Solids: 92.0

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor 1016	9.6	U	73	9.6	ug/Kg	☼	10/06/16 03:36	10/06/16 15:36	1
Aroclor 1221	9.6	U	73	9.6	ug/Kg	☼	10/06/16 03:36	10/06/16 15:36	1
Aroclor 1232	9.6	U	73	9.6	ug/Kg	☼	10/06/16 03:36	10/06/16 15:36	1
Aroclor 1242	9.6	U	73	9.6	ug/Kg	☼	10/06/16 03:36	10/06/16 15:36	1
Aroclor 1248	9.6	U	73	9.6	ug/Kg	☼	10/06/16 03:36	10/06/16 15:36	1
Aroclor 1254	10	U	73	10	ug/Kg	☼	10/06/16 03:36	10/06/16 15:36	1
Aroclor 1260	10	U	73	10	ug/Kg	☼	10/06/16 03:36	10/06/16 15:36	1
Aroclor-1262	10	U	73	10	ug/Kg	☼	10/06/16 03:36	10/06/16 15:36	1
Aroclor 1268	10	U	73	10	ug/Kg	☼	10/06/16 03:36	10/06/16 15:36	1
Polychlorinated biphenyls, Total	10	U	73	10	ug/Kg	☼	10/06/16 03:36	10/06/16 15:36	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*105*		*35 - 150*	*10/06/16 03:36*	*10/06/16 15:36*	*1*
DCB Decachlorobiphenyl	*107*		*35 - 150*	*10/06/16 03:36*	*10/06/16 15:36*	*1*

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**5530**		34.2	17.6	mg/Kg	☼	10/05/16 18:27	10/08/16 03:35	4
Antimony	1.4	U	3.4	1.4	mg/Kg	☼	10/05/16 18:27	10/08/16 03:35	4
Arsenic	**1.5**	**J**	2.6	0.84	mg/Kg	☼	10/05/16 18:27	10/08/16 03:35	4
Barium	**51.3**		34.2	1.2	mg/Kg	☼	10/05/16 18:27	10/08/16 03:35	4
Beryllium	0.29	U	0.34	0.29	mg/Kg	☼	10/05/16 18:27	10/08/16 03:35	4
Cadmium	0.36	U	0.68	0.36	mg/Kg	☼	10/05/16 18:27	10/08/16 03:35	4
Calcium	**695**	**J**	856	50.7	mg/Kg	☼	10/05/16 18:27	10/08/16 03:35	4
Chromium	**12.3**		1.7	0.83	mg/Kg	☼	10/05/16 18:27	10/08/16 03:35	4
Cobalt	**3.2**	**J**	8.6	0.98	mg/Kg	☼	10/05/16 18:27	10/08/16 03:35	4
Copper	**11.5**		4.3	1.1	mg/Kg	☼	10/05/16 18:27	10/08/16 03:35	4
Iron	**10300**		25.7	19.3	mg/Kg	☼	10/05/16 18:27	10/08/16 03:35	4
Lead	**1.9**		1.7	0.67	mg/Kg	☼	10/05/16 18:27	10/08/16 03:35	4
Magnesium	**2440**		856	42.7	mg/Kg	☼	10/05/16 18:27	10/08/16 03:35	4
Manganese	**195**		2.6	0.90	mg/Kg	☼	10/05/16 18:27	10/08/16 03:35	4
Nickel	**9.5**		6.8	1.2	mg/Kg	☼	10/05/16 18:27	10/08/16 03:35	4
Potassium	**1270**		856	25.9	mg/Kg	☼	10/05/16 18:27	10/08/16 03:35	4
Selenium	1.2	U	3.4	1.2	mg/Kg	☼	10/05/16 18:27	10/08/16 03:35	4
Silver	0.30	U	1.7	0.30	mg/Kg	☼	10/05/16 18:27	10/08/16 03:35	4
Sodium	**108**	**J**	856	57.9	mg/Kg	☼	10/05/16 18:27	10/08/16 03:35	4
Thallium	1.5	U	3.4	1.5	mg/Kg	☼	10/05/16 18:27	10/08/16 03:35	4
Vanadium	**14.0**		8.6	0.86	mg/Kg	☼	10/05/16 18:27	10/08/16 03:35	4
Zinc	**28.1**		5.1	1.2	mg/Kg	☼	10/05/16 18:27	10/08/16 03:35	4

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.011	U	0.017	0.011	mg/Kg	☼	10/06/16 05:24	10/06/16 11:08	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	0.029	U	0.11	0.029	mg/Kg	☼	10/13/16 11:03	10/14/16 11:13	1

Client Sample ID: SB3-3.0-4.0

Date Collected: 10/03/16 12:25
Date Received: 10/03/16 18:55

Lab Sample ID: 460-121319-3

Matrix: Solid
Percent Solids: 88.3

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	0.57	U	1.5	0.57	ug/Kg	☼	10/04/16 21:49	10/05/16 18:05	1
1,1,2,2-Tetrachloroethane	0.26	U	1.5	0.26	ug/Kg	☼	10/04/16 21:49	10/05/16 18:05	1
1,1,2-Trichloro-1,2,2-trifluoroethane	0.66	U	1.5	0.66	ug/Kg	☼	10/04/16 21:49	10/05/16 18:05	1
1,1,2-Trichloroethane	0.42	U	1.5	0.42	ug/Kg	☼	10/04/16 21:49	10/05/16 18:05	1
1,1-Dichloroethane	0.51	U	1.5	0.51	ug/Kg	☼	10/04/16 21:49	10/05/16 18:05	1
1,1-Dichloroethene	0.62	U	1.5	0.62	ug/Kg	☼	10/04/16 21:49	10/05/16 18:05	1
1,2,3-Trichlorobenzene	0.17	U	1.5	0.17	ug/Kg	☼	10/04/16 21:49	10/05/16 18:05	1
1,2,4-Trichlorobenzene	0.48	U	1.5	0.48	ug/Kg	☼	10/04/16 21:49	10/05/16 18:05	1
1,2-Dibromo-3-Chloropropane	0.71	U	1.5	0.71	ug/Kg	☼	10/04/16 21:49	10/05/16 18:05	1
1,2-Dichlorobenzene	0.21	U	1.5	0.21	ug/Kg	☼	10/04/16 21:49	10/05/16 18:05	1
1,2-Dichloroethane	0.17	U	1.5	0.17	ug/Kg	☼	10/04/16 21:49	10/05/16 18:05	1
1,2-Dichloropropane	0.26	U	1.5	0.26	ug/Kg	☼	10/04/16 21:49	10/05/16 18:05	1
1,3-Dichlorobenzene	0.18	U	1.5	0.18	ug/Kg	☼	10/04/16 21:49	10/05/16 18:05	1
1,4-Dichlorobenzene	0.20	U	1.5	0.20	ug/Kg	☼	10/04/16 21:49	10/05/16 18:05	1
1,4-Dioxane	9.7	U	30	9.7	ug/Kg	☼	10/04/16 21:49	10/05/16 18:05	1
2-Butanone (MEK)	1.2	U	7.6	1.2	ug/Kg	☼	10/04/16 21:49	10/05/16 18:05	1
2-Hexanone	1.4	U	7.6	1.4	ug/Kg	☼	10/04/16 21:49	10/05/16 18:05	1
4-Methyl-2-pentanone (MIBK)	3.4	U	7.6	3.4	ug/Kg	☼	10/04/16 21:49	10/05/16 18:05	1
Acetone	1.6	U	7.6	1.6	ug/Kg	☼	10/04/16 21:49	10/05/16 18:05	1
Benzene	0.30	U	1.5	0.30	ug/Kg	☼	10/04/16 21:49	10/05/16 18:05	1
Bromoform	0.20	U	1.5	0.20	ug/Kg	☼	10/04/16 21:49	10/05/16 18:05	1
Bromomethane	0.48	U	1.5	0.48	ug/Kg	☼	10/04/16 21:49	10/05/16 18:05	1
Carbon disulfide	0.65	U	1.5	0.65	ug/Kg	☼	10/04/16 21:49	10/05/16 18:05	1
Carbon tetrachloride	0.65	U	1.5	0.65	ug/Kg	☼	10/04/16 21:49	10/05/16 18:05	1
Chlorobenzene	0.21	U	1.5	0.21	ug/Kg	☼	10/04/16 21:49	10/05/16 18:05	1
Chlorobromomethane	0.26	U	1.5	0.26	ug/Kg	☼	10/04/16 21:49	10/05/16 18:05	1
Chlorodibromomethane	0.23	U	1.5	0.23	ug/Kg	☼	10/04/16 21:49	10/05/16 18:05	1
Chloroethane	0.53	U	1.5	0.53	ug/Kg	☼	10/04/16 21:49	10/05/16 18:05	1
Chloroform	0.32	U	1.5	0.32	ug/Kg	☼	10/04/16 21:49	10/05/16 18:05	1
Chloromethane	0.57	U *	1.5	0.57	ug/Kg	☼	10/04/16 21:49	10/05/16 18:05	1
cis-1,2-Dichloroethene	0.33	U	1.5	0.33	ug/Kg	☼	10/04/16 21:49	10/05/16 18:05	1
cis-1,3-Dichloropropene	0.23	U	1.5	0.23	ug/Kg	☼	10/04/16 21:49	10/05/16 18:05	1
Cyclohexane	0.69	U	1.5	0.69	ug/Kg	☼	10/04/16 21:49	10/05/16 18:05	1
Dichlorobromomethane	0.57	U	1.5	0.57	ug/Kg	☼	10/04/16 21:49	10/05/16 18:05	1
Dichlorodifluoromethane	0.48	U	1.5	0.48	ug/Kg	☼	10/04/16 21:49	10/05/16 18:05	1
Ethylbenzene	0.27	U	1.5	0.27	ug/Kg	☼	10/04/16 21:49	10/05/16 18:05	1
Ethylene Dibromide	0.18	U	1.5	0.18	ug/Kg	☼	10/04/16 21:49	10/05/16 18:05	1
Isopropylbenzene	0.26	U	1.5	0.26	ug/Kg	☼	10/04/16 21:49	10/05/16 18:05	1
Methyl acetate	1.4	U	7.6	1.4	ug/Kg	☼	10/04/16 21:49	10/05/16 18:05	1
Methyl tert-butyl ether	0.26	U	1.5	0.26	ug/Kg	☼	10/04/16 21:49	10/05/16 18:05	1
Methylcyclohexane	0.76	U	1.5	0.76	ug/Kg	☼	10/04/16 21:49	10/05/16 18:05	1
Methylene Chloride	0.48	U	1.5	0.48	ug/Kg	☼	10/04/16 21:49	10/05/16 18:05	1
Styrene	0.23	U	1.5	0.23	ug/Kg	☼	10/04/16 21:49	10/05/16 18:05	1
Tetrachloroethene	0.42	U	1.5	0.42	ug/Kg	☼	10/04/16 21:49	10/05/16 18:05	1
Toluene	0.29	U	1.5	0.29	ug/Kg	☼	10/04/16 21:49	10/05/16 18:05	1
trans-1,2-Dichloroethene	0.59	U	1.5	0.59	ug/Kg	☼	10/04/16 21:49	10/05/16 18:05	1
trans-1,3-Dichloropropene	0.15	U	1.5	0.15	ug/Kg	☼	10/04/16 21:49	10/05/16 18:05	1
Trichloroethene	0.39	U	1.5	0.39	ug/Kg	☼	10/04/16 21:49	10/05/16 18:05	1
Trichlorofluoromethane	0.51	U	1.5	0.51	ug/Kg	☼	10/04/16 21:49	10/05/16 18:05	1

Client Sample ID: SB3-3.0-4.0
Date Collected: 10/03/16 12:25
Date Received: 10/03/16 18:55

Lab Sample ID: 460-121319-3
Matrix: Solid
Percent Solids: 88.3

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Vinyl chloride	0.59	U *	1.5	0.59	ug/Kg	☼	10/04/16 21:49	10/05/16 18:05	1
Xylenes, Total	0.17	U	3.0	0.17	ug/Kg	☼	10/04/16 21:49	10/05/16 18:05	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/Kg*	☼			*10/04/16 21:49*	*10/05/16 18:05*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*110*		*78 - 135*	*10/04/16 21:49*	*10/05/16 18:05*	*1*
4-Bromofluorobenzene	*118*		*67 - 126*	*10/04/16 21:49*	*10/05/16 18:05*	*1*
Dibromofluoromethane (Surr)	*111*		*61 - 149*	*10/04/16 21:49*	*10/05/16 18:05*	*1*
Toluene-d8 (Surr)	*106*		*73 - 121*	*10/04/16 21:49*	*10/05/16 18:05*	*1*

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	12	U	370	12	ug/Kg	☼	10/05/16 10:34	10/06/16 23:16	1
2-Chlorophenol	9.5	U	370	9.5	ug/Kg	☼	10/05/16 10:34	10/06/16 23:16	1
2-Methylphenol	16	U	370	16	ug/Kg	☼	10/05/16 10:34	10/06/16 23:16	1
4-Methylphenol	10	U	370	10	ug/Kg	☼	10/05/16 10:34	10/06/16 23:16	1
2-Nitrophenol	13	U	370	13	ug/Kg	☼	10/05/16 10:34	10/06/16 23:16	1
2,4-Dimethylphenol	82	U	370	82	ug/Kg	☼	10/05/16 10:34	10/06/16 23:16	1
2,4-Dichlorophenol	8.8	U	150	8.8	ug/Kg	☼	10/05/16 10:34	10/06/16 23:16	1
4-Chloro-3-methylphenol	16	U	370	16	ug/Kg	☼	10/05/16 10:34	10/06/16 23:16	1
2,4,6-Trichlorophenol	11	U	150	11	ug/Kg	☼	10/05/16 10:34	10/06/16 23:16	1
2,4,5-Trichlorophenol	37	U *	370	37	ug/Kg	☼	10/05/16 10:34	10/06/16 23:16	1
2,4-Dinitrophenol	280	U	300	280	ug/Kg	☼	10/05/16 10:34	10/06/16 23:16	1
4-Nitrophenol	180	U	760	180	ug/Kg	☼	10/05/16 10:34	10/06/16 23:16	1
4,6-Dinitro-2-methylphenol	100	U	300	100	ug/Kg	☼	10/05/16 10:34	10/06/16 23:16	1
Pentachlorophenol	45	U	300	45	ug/Kg	☼	10/05/16 10:34	10/06/16 23:16	1
Bis(2-chloroethyl)ether	8.8	U	37	8.8	ug/Kg	☼	10/05/16 10:34	10/06/16 23:16	1
N-Nitrosodi-n-propylamine	13	U	37	13	ug/Kg	☼	10/05/16 10:34	10/06/16 23:16	1
Hexachloroethane	14	U	37	14	ug/Kg	☼	10/05/16 10:34	10/06/16 23:16	1
Nitrobenzene	12	U	37	12	ug/Kg	☼	10/05/16 10:34	10/06/16 23:16	1
Isophorone	8.0	U	150	8.0	ug/Kg	☼	10/05/16 10:34	10/06/16 23:16	1
Bis(2-chloroethoxy)methane	12	U	370	12	ug/Kg	☼	10/05/16 10:34	10/06/16 23:16	1
Naphthalene	9.5	U	370	9.5	ug/Kg	☼	10/05/16 10:34	10/06/16 23:16	1
4-Chloroaniline	9.6	U	370	9.6	ug/Kg	☼	10/05/16 10:34	10/06/16 23:16	1
Hexachlorobutadiene	11	U	76	11	ug/Kg	☼	10/05/16 10:34	10/06/16 23:16	1
2-Methylnaphthalene	8.3	U	370	8.3	ug/Kg	☼	10/05/16 10:34	10/06/16 23:16	1
Hexachlorocyclopentadiene	23	U	370	23	ug/Kg	☼	10/05/16 10:34	10/06/16 23:16	1
2-Chloronaphthalene	8.5	U	370	8.5	ug/Kg	☼	10/05/16 10:34	10/06/16 23:16	1
2-Nitroaniline	12	U	370	12	ug/Kg	☼	10/05/16 10:34	10/06/16 23:16	1
Dimethyl phthalate	11	U	370	11	ug/Kg	☼	10/05/16 10:34	10/06/16 23:16	1
Acenaphthylene	9.6	U	370	9.6	ug/Kg	☼	10/05/16 10:34	10/06/16 23:16	1
2,6-Dinitrotoluene	20	U	76	20	ug/Kg	☼	10/05/16 10:34	10/06/16 23:16	1
3-Nitroaniline	11	U	370	11	ug/Kg	☼	10/05/16 10:34	10/06/16 23:16	1
Acenaphthene	9.0	U	370	9.0	ug/Kg	☼	10/05/16 10:34	10/06/16 23:16	1
Dibenzofuran	11	U	370	11	ug/Kg	☼	10/05/16 10:34	10/06/16 23:16	1
2,4-Dinitrotoluene	15	U	76	15	ug/Kg	☼	10/05/16 10:34	10/06/16 23:16	1
Diethyl phthalate	11	U	370	11	ug/Kg	☼	10/05/16 10:34	10/06/16 23:16	1
4-Chlorophenyl phenyl ether	11	U	370	11	ug/Kg	☼	10/05/16 10:34	10/06/16 23:16	1

Client Sample ID: SB3-3.0-4.0

Date Collected: 10/03/16 12:25
Date Received: 10/03/16 18:55

Lab Sample ID: 460-121319-3

Matrix: Solid
Percent Solids: 88.3

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluorene	8.1	U	370	8.1	ug/Kg	☼	10/05/16 10:34	10/06/16 23:16	1
4-Nitroaniline	14	U	370	14	ug/Kg	☼	10/05/16 10:34	10/06/16 23:16	1
N-Nitrosodiphenylamine	34	U	370	34	ug/Kg	☼	10/05/16 10:34	10/06/16 23:16	1
4-Bromophenyl phenyl ether	12	U	370	12	ug/Kg	☼	10/05/16 10:34	10/06/16 23:16	1
Hexachlorobenzene	15	U	37	15	ug/Kg	☼	10/05/16 10:34	10/06/16 23:16	1
Phenanthrene	**27**	**J**	370	10	ug/Kg	☼	10/05/16 10:34	10/06/16 23:16	1
Anthracene	36	U	370	36	ug/Kg	☼	10/05/16 10:34	10/06/16 23:16	1
Carbazole	9.3	U	370	9.3	ug/Kg	☼	10/05/16 10:34	10/06/16 23:16	1
Di-n-butyl phthalate	11	U	370	11	ug/Kg	☼	10/05/16 10:34	10/06/16 23:16	1
Fluoranthene	**93**	**J**	370	11	ug/Kg	☼	10/05/16 10:34	10/06/16 23:16	1
Pyrene	**100**	**J**	370	17	ug/Kg	☼	10/05/16 10:34	10/06/16 23:16	1
Butyl benzyl phthalate	**12**	**J**	370	12	ug/Kg	☼	10/05/16 10:34	10/06/16 23:16	1
3,3'-Dichlorobenzidine	42	U	150	42	ug/Kg	☼	10/05/16 10:34	10/06/16 23:16	1
Benzo[a]anthracene	**77**		37	31	ug/Kg	☼	10/05/16 10:34	10/06/16 23:16	1
Chrysene	**75**	**J**	370	10	ug/Kg	☼	10/05/16 10:34	10/06/16 23:16	1
Bis(2-ethylhexyl) phthalate	**130**	**J**	370	15	ug/Kg	☼	10/05/16 10:34	10/06/16 23:16	1
Di-n-octyl phthalate	19	U	370	19	ug/Kg	☼	10/05/16 10:34	10/06/16 23:16	1
Benzo[b]fluoranthene	**110**		37	15	ug/Kg	☼	10/05/16 10:34	10/06/16 23:16	1
Benzo[k]fluoranthene	**38**		37	16	ug/Kg	☼	10/05/16 10:34	10/06/16 23:16	1
Benzo[a]pyrene	**89**		37	11	ug/Kg	☼	10/05/16 10:34	10/06/16 23:16	1
Indeno[1,2,3-cd]pyrene	**68**		37	25	ug/Kg	☼	10/05/16 10:34	10/06/16 23:16	1
Dibenz(a,h)anthracene	**19**	**J**	37	19	ug/Kg	☼	10/05/16 10:34	10/06/16 23:16	1
Benzo[g,h,i]perylene	**70**	**J**	370	21	ug/Kg	☼	10/05/16 10:34	10/06/16 23:16	1
Diphenyl	32	U	370	32	ug/Kg	☼	10/05/16 10:34	10/06/16 23:16	1
Acetophenone	8.1	U	370	8.1	ug/Kg	☼	10/05/16 10:34	10/06/16 23:16	1
Benzaldehyde	29	U	370	29	ug/Kg	☼	10/05/16 10:34	10/06/16 23:16	1
Caprolactam	27	U	370	27	ug/Kg	☼	10/05/16 10:34	10/06/16 23:16	1
Atrazine	17	U	150	17	ug/Kg	☼	10/05/16 10:34	10/06/16 23:16	1
2,2'-oxybis[1-chloropropane]	15	U	370	15	ug/Kg	☼	10/05/16 10:34	10/06/16 23:16	1
1,2,4,5-Tetrachlorobenzene	28	U	370	28	ug/Kg	☼	10/05/16 10:34	10/06/16 23:16	1
2,3,4,6-Tetrachlorophenol	35	U	370	35	ug/Kg	☼	10/05/16 10:34	10/06/16 23:16	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Unknown	*640*	*J*	*ug/Kg*	☼	*11.77*		*10/05/16 10:34*	*10/06/16 23:16*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*65*		*37 - 94*	*10/05/16 10:34*	*10/06/16 23:16*	*1*
Phenol-d5	*64*		*32 - 91*	*10/05/16 10:34*	*10/06/16 23:16*	*1*
Terphenyl-d14	*68*		*24 - 109*	*10/05/16 10:34*	*10/06/16 23:16*	*1*
2,4,6-Tribromophenol	*84*		*10 - 103*	*10/05/16 10:34*	*10/06/16 23:16*	*1*
2-Fluorophenol	*64*		*25 - 92*	*10/05/16 10:34*	*10/06/16 23:16*	*1*
2-Fluorobiphenyl	*79*		*38 - 95*	*10/05/16 10:34*	*10/06/16 23:16*	*1*

Method: 8081B - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	1.0	U	7.6	1.0	ug/Kg	☼	10/06/16 03:19	10/06/16 13:45	1
4,4'-DDE	1.1	U	7.6	1.1	ug/Kg	☼	10/06/16 03:19	10/06/16 13:45	1
4,4'-DDT	0.78	U	7.6	0.78	ug/Kg	☼	10/06/16 03:19	10/06/16 13:45	1
Aldrin	0.92	U	7.6	0.92	ug/Kg	☼	10/06/16 03:19	10/06/16 13:45	1
alpha-BHC	0.69	U	2.3	0.69	ug/Kg	☼	10/06/16 03:19	10/06/16 13:45	1

Client Sample ID: SB3-3.0-4.0

Date Collected: 10/03/16 12:25
Date Received: 10/03/16 18:55

Lab Sample ID: 460-121319-3

Matrix: Solid
Percent Solids: 88.3

Method: 8081B - Organochlorine Pesticides (GC) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
beta-BHC	0.73	U	2.3	0.73	ug/Kg	☼	10/06/16 03:19	10/06/16 13:45	1
Chlordane (technical)	33	U	76	33	ug/Kg	☼	10/06/16 03:19	10/06/16 13:45	1
delta-BHC	0.83	U	2.3	0.83	ug/Kg	☼	10/06/16 03:19	10/06/16 13:45	1
Dieldrin	0.98	U	2.3	0.98	ug/Kg	☼	10/06/16 03:19	10/06/16 13:45	1
Endosulfan I	1.1	U	7.6	1.1	ug/Kg	☼	10/06/16 03:19	10/06/16 13:45	1
Endosulfan II	1.2	U	7.6	1.2	ug/Kg	☼	10/06/16 03:19	10/06/16 13:45	1
Endosulfan sulfate	0.88	U	7.6	0.88	ug/Kg	☼	10/06/16 03:19	10/06/16 13:45	1
Endrin	0.96	U	7.6	0.96	ug/Kg	☼	10/06/16 03:19	10/06/16 13:45	1
Endrin aldehyde	0.94	U	7.6	0.94	ug/Kg	☼	10/06/16 03:19	10/06/16 13:45	1
Endrin ketone	1.1	U	7.6	1.1	ug/Kg	☼	10/06/16 03:19	10/06/16 13:45	1
gamma-BHC (Lindane)	0.68	U	2.3	0.68	ug/Kg	☼	10/06/16 03:19	10/06/16 13:45	1
Heptachlor	0.97	U	7.6	0.97	ug/Kg	☼	10/06/16 03:19	10/06/16 13:45	1
Heptachlor epoxide	1.5	U	7.6	1.5	ug/Kg	☼	10/06/16 03:19	10/06/16 13:45	1
Methoxychlor	1.6	U	7.6	1.6	ug/Kg	☼	10/06/16 03:19	10/06/16 13:45	1
Toxaphene	22	U	76	22	ug/Kg	☼	10/06/16 03:19	10/06/16 13:45	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*105*		*50 - 150*	*10/06/16 03:19*	*10/06/16 13:45*	*1*
DCB Decachlorobiphenyl	*105*		*50 - 150*	*10/06/16 03:19*	*10/06/16 13:45*	*1*
Tetrachloro-m-xylene	*117*		*47 - 150*	*10/06/16 03:19*	*10/06/16 13:45*	*1*
Tetrachloro-m-xylene	*105*		*47 - 150*	*10/06/16 03:19*	*10/06/16 13:45*	*1*

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor 1016	10	U	76	10	ug/Kg	☼	10/06/16 03:36	10/06/16 15:51	1
Aroclor 1221	10	U	76	10	ug/Kg	☼	10/06/16 03:36	10/06/16 15:51	1
Aroclor 1232	10	U	76	10	ug/Kg	☼	10/06/16 03:36	10/06/16 15:51	1
Aroclor 1242	10	U	76	10	ug/Kg	☼	10/06/16 03:36	10/06/16 15:51	1
Aroclor 1248	10	U	76	10	ug/Kg	☼	10/06/16 03:36	10/06/16 15:51	1
Aroclor 1254	10	U	76	10	ug/Kg	☼	10/06/16 03:36	10/06/16 15:51	1
Aroclor 1260	10	U	76	10	ug/Kg	☼	10/06/16 03:36	10/06/16 15:51	1
Aroclor-1262	10	U	76	10	ug/Kg	☼	10/06/16 03:36	10/06/16 15:51	1
Aroclor 1268	10	U	76	10	ug/Kg	☼	10/06/16 03:36	10/06/16 15:51	1
Polychlorinated biphenyls, Total	10	U	76	10	ug/Kg	☼	10/06/16 03:36	10/06/16 15:51	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*100*		*35 - 150*	*10/06/16 03:36*	*10/06/16 15:51*	*1*
DCB Decachlorobiphenyl	*103*		*35 - 150*	*10/06/16 03:36*	*10/06/16 15:51*	*1*

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**17200**		36.3	18.7	mg/Kg	☼	10/05/16 18:27	10/08/16 03:50	4
Antimony	1.4	U	3.6	1.4	mg/Kg	☼	10/05/16 18:27	10/08/16 03:50	4
Arsenic	**2.5**	**J**	2.7	0.89	mg/Kg	☼	10/05/16 18:27	10/08/16 03:50	4
Barium	**86.5**		36.3	1.3	mg/Kg	☼	10/05/16 18:27	10/08/16 03:50	4
Beryllium	**0.73**		0.36	0.31	mg/Kg	☼	10/05/16 18:27	10/08/16 03:50	4
Cadmium	0.38	U	0.73	0.38	mg/Kg	☼	10/05/16 18:27	10/08/16 03:50	4
Calcium	**1160**		906	53.7	mg/Kg	☼	10/05/16 18:27	10/08/16 03:50	4
Chromium	**27.5**		1.8	0.88	mg/Kg	☼	10/05/16 18:27	10/08/16 03:50	4
Cobalt	**8.3**	**J**	9.1	1.0	mg/Kg	☼	10/05/16 18:27	10/08/16 03:50	4

Client Sample ID: SB3-3.0-4.0

Date Collected: 10/03/16 12:25
Date Received: 10/03/16 18:55

Lab Sample ID: 460-121319-3

Matrix: Solid
Percent Solids: 88.3

Method: 6010C - Metals (ICP) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Copper	21.7		4.5	1.2	mg/Kg	☼	10/05/16 18:27	10/08/16 03:50	4
Iron	24000		27.2	20.5	mg/Kg	☼	10/05/16 18:27	10/08/16 03:50	4
Lead	21.4		1.8	0.71	mg/Kg	☼	10/05/16 18:27	10/08/16 03:50	4
Magnesium	5040		906	45.2	mg/Kg	☼	10/05/16 18:27	10/08/16 03:50	4
Manganese	357		2.7	0.95	mg/Kg	☼	10/05/16 18:27	10/08/16 03:50	4
Nickel	22.3		7.3	1.3	mg/Kg	☼	10/05/16 18:27	10/08/16 03:50	4
Potassium	2390		906	27.5	mg/Kg	☼	10/05/16 18:27	10/08/16 03:50	4
Selenium	1.3	U	3.6	1.3	mg/Kg	☼	10/05/16 18:27	10/08/16 03:50	4
Silver	0.32	U	1.8	0.32	mg/Kg	☼	10/05/16 18:27	10/08/16 03:50	4
Sodium	523	J	906	61.4	mg/Kg	☼	10/05/16 18:27	10/08/16 03:50	4
Thallium	1.6	U	3.6	1.6	mg/Kg	☼	10/05/16 18:27	10/08/16 03:50	4
Vanadium	35.9		9.1	0.91	mg/Kg	☼	10/05/16 18:27	10/08/16 03:50	4
Zinc	97.5		5.4	1.3	mg/Kg	☼	10/05/16 18:27	10/08/16 03:50	4

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.11		0.018	0.011	mg/Kg	☼	10/06/16 05:24	10/06/16 11:10	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	0.11		0.11	0.031	mg/Kg	☼	10/13/16 11:03	10/14/16 11:19	1

Client Sample ID: SB3-15.0-16.0

Date Collected: 10/03/16 14:00
Date Received: 10/03/16 18:55

Lab Sample ID: 460-121319-4

Matrix: Solid
Percent Solids: 83.0

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	0.54	U	1.4	0.54	ug/Kg	☼	10/04/16 21:50	10/06/16 11:38	1
1,1,2,2-Tetrachloroethane	0.24	U	1.4	0.24	ug/Kg	☼	10/04/16 21:50	10/06/16 11:38	1
1,1,2-Trichloro-1,2,2-trifluoroethane	0.63	U	1.4	0.63	ug/Kg	☼	10/04/16 21:50	10/06/16 11:38	1
1,1,2-Trichloroethane	0.40	U	1.4	0.40	ug/Kg	☼	10/04/16 21:50	10/06/16 11:38	1
1,1-Dichloroethane	0.48	U	1.4	0.48	ug/Kg	☼	10/04/16 21:50	10/06/16 11:38	1
1,1-Dichloroethene	0.58	U	1.4	0.58	ug/Kg	☼	10/04/16 21:50	10/06/16 11:38	1
1,2,3-Trichlorobenzene	0.16	U	1.4	0.16	ug/Kg	☼	10/04/16 21:50	10/06/16 11:38	1
1,2,4-Trichlorobenzene	0.46	U	1.4	0.46	ug/Kg	☼	10/04/16 21:50	10/06/16 11:38	1
1,2-Dibromo-3-Chloropropane	0.67	U	1.4	0.67	ug/Kg	☼	10/04/16 21:50	10/06/16 11:38	1
1,2-Dichlorobenzene	0.20	U	1.4	0.20	ug/Kg	☼	10/04/16 21:50	10/06/16 11:38	1
1,2-Dichloroethane	0.16	U	1.4	0.16	ug/Kg	☼	10/04/16 21:50	10/06/16 11:38	1
1,2-Dichloropropane	0.24	U	1.4	0.24	ug/Kg	☼	10/04/16 21:50	10/06/16 11:38	1
1,3-Dichlorobenzene	0.17	U	1.4	0.17	ug/Kg	☼	10/04/16 21:50	10/06/16 11:38	1
1,4-Dichlorobenzene	0.19	U	1.4	0.19	ug/Kg	☼	10/04/16 21:50	10/06/16 11:38	1
1,4-Dioxane	9.1	U	28	9.1	ug/Kg	☼	10/04/16 21:50	10/06/16 11:38	1
2-Butanone (MEK)	1.1	U	7.1	1.1	ug/Kg	☼	10/04/16 21:50	10/06/16 11:38	1
2-Hexanone	1.3	U	7.1	1.3	ug/Kg	☼	10/04/16 21:50	10/06/16 11:38	1
4-Methyl-2-pentanone (MIBK)	3.2	U	7.1	3.2	ug/Kg	☼	10/04/16 21:50	10/06/16 11:38	1
Acetone	1.5	U	7.1	1.5	ug/Kg	☼	10/04/16 21:50	10/06/16 11:38	1
Benzene	0.28	U	1.4	0.28	ug/Kg	☼	10/04/16 21:50	10/06/16 11:38	1
Bromoform	0.19	U	1.4	0.19	ug/Kg	☼	10/04/16 21:50	10/06/16 11:38	1
Bromomethane	0.46	U	1.4	0.46	ug/Kg	☼	10/04/16 21:50	10/06/16 11:38	1

Client Sample ID: SB3-15.0-16.0

Date Collected: 10/03/16 14:00
Date Received: 10/03/16 18:55

Lab Sample ID: 460-121319-4

Matrix: Solid
Percent Solids: 83.0

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Carbon disulfide	0.61	U	1.4	0.61	ug/Kg	☼	10/04/16 21:50	10/06/16 11:38	1
Carbon tetrachloride	0.61	U	1.4	0.61	ug/Kg	☼	10/04/16 21:50	10/06/16 11:38	1
Chlorobenzene	0.20	U	1.4	0.20	ug/Kg	☼	10/04/16 21:50	10/06/16 11:38	1
Chlorobromomethane	0.24	U	1.4	0.24	ug/Kg	☼	10/04/16 21:50	10/06/16 11:38	1
Chlorodibromomethane	0.21	U	1.4	0.21	ug/Kg	☼	10/04/16 21:50	10/06/16 11:38	1
Chloroethane	0.50	U	1.4	0.50	ug/Kg	☼	10/04/16 21:50	10/06/16 11:38	1
Chloroform	0.30	U	1.4	0.30	ug/Kg	☼	10/04/16 21:50	10/06/16 11:38	1
Chloromethane	0.54	U	1.4	0.54	ug/Kg	☼	10/04/16 21:50	10/06/16 11:38	1
cis-1,2-Dichloroethene	0.31	U	1.4	0.31	ug/Kg	☼	10/04/16 21:50	10/06/16 11:38	1
cis-1,3-Dichloropropene	0.21	U	1.4	0.21	ug/Kg	☼	10/04/16 21:50	10/06/16 11:38	1
Cyclohexane	0.65	U	1.4	0.65	ug/Kg	☼	10/04/16 21:50	10/06/16 11:38	1
Dichlorobromomethane	0.54	U	1.4	0.54	ug/Kg	☼	10/04/16 21:50	10/06/16 11:38	1
Dichlorodifluoromethane	0.46	U	1.4	0.46	ug/Kg	☼	10/04/16 21:50	10/06/16 11:38	1
Ethylbenzene	0.26	U	1.4	0.26	ug/Kg	☼	10/04/16 21:50	10/06/16 11:38	1
Ethylene Dibromide	0.17	U	1.4	0.17	ug/Kg	☼	10/04/16 21:50	10/06/16 11:38	1
Isopropylbenzene	0.24	U	1.4	0.24	ug/Kg	☼	10/04/16 21:50	10/06/16 11:38	1
Methyl acetate	1.3	U	7.1	1.3	ug/Kg	☼	10/04/16 21:50	10/06/16 11:38	1
Methyl tert-butyl ether	0.24	U	1.4	0.24	ug/Kg	☼	10/04/16 21:50	10/06/16 11:38	1
Methylcyclohexane	0.71	U	1.4	0.71	ug/Kg	☼	10/04/16 21:50	10/06/16 11:38	1
Methylene Chloride	0.46	U	1.4	0.46	ug/Kg	☼	10/04/16 21:50	10/06/16 11:38	1
Styrene	0.21	U	1.4	0.21	ug/Kg	☼	10/04/16 21:50	10/06/16 11:38	1
Tetrachloroethene	0.40	U	1.4	0.40	ug/Kg	☼	10/04/16 21:50	10/06/16 11:38	1
Toluene	0.27	U	1.4	0.27	ug/Kg	☼	10/04/16 21:50	10/06/16 11:38	1
trans-1,2-Dichloroethene	0.56	U	1.4	0.56	ug/Kg	☼	10/04/16 21:50	10/06/16 11:38	1
trans-1,3-Dichloropropene	0.14	U	1.4	0.14	ug/Kg	☼	10/04/16 21:50	10/06/16 11:38	1
Trichloroethene	0.37	U	1.4	0.37	ug/Kg	☼	10/04/16 21:50	10/06/16 11:38	1
Trichlorofluoromethane	0.48	U	1.4	0.48	ug/Kg	☼	10/04/16 21:50	10/06/16 11:38	1
Vinyl chloride	0.56	U	1.4	0.56	ug/Kg	☼	10/04/16 21:50	10/06/16 11:38	1
Xylenes, Total	0.16	U	2.8	0.16	ug/Kg	☼	10/04/16 21:50	10/06/16 11:38	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/Kg*	☼			*10/04/16 21:50*	*10/06/16 11:38*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*98*		*78 - 135*	*10/04/16 21:50*	*10/06/16 11:38*	*1*
4-Bromofluorobenzene	*103*		*67 - 126*	*10/04/16 21:50*	*10/06/16 11:38*	*1*
Dibromofluoromethane (Surr)	*103*		*61 - 149*	*10/04/16 21:50*	*10/06/16 11:38*	*1*
Toluene-d8 (Surr)	*101*		*73 - 121*	*10/04/16 21:50*	*10/06/16 11:38*	*1*

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	13	U	400	13	ug/Kg	☼	10/05/16 10:34	10/06/16 21:14	1
2-Chlorophenol	10	U	400	10	ug/Kg	☼	10/05/16 10:34	10/06/16 21:14	1
2-Methylphenol	17	U	400	17	ug/Kg	☼	10/05/16 10:34	10/06/16 21:14	1
4-Methylphenol	11	U	400	11	ug/Kg	☼	10/05/16 10:34	10/06/16 21:14	1
2-Nitrophenol	13	U	400	13	ug/Kg	☼	10/05/16 10:34	10/06/16 21:14	1
2,4-Dimethylphenol	87	U	400	87	ug/Kg	☼	10/05/16 10:34	10/06/16 21:14	1
2,4-Dichlorophenol	9.4	U	160	9.4	ug/Kg	☼	10/05/16 10:34	10/06/16 21:14	1
4-Chloro-3-methylphenol	17	U	400	17	ug/Kg	☼	10/05/16 10:34	10/06/16 21:14	1
2,4,6-Trichlorophenol	11	U	160	11	ug/Kg	☼	10/05/16 10:34	10/06/16 21:14	1

Client Sample ID: SB3-15.0-16.0

Date Collected: 10/03/16 14:00
Date Received: 10/03/16 18:55

Lab Sample ID: 460-121319-4

Matrix: Solid
Percent Solids: 83.0

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	40	U *	400	40	ug/Kg	☼	10/05/16 10:34	10/06/16 21:14	1
2,4-Dinitrophenol	300	U	320	300	ug/Kg	☼	10/05/16 10:34	10/06/16 21:14	1
4-Nitrophenol	190	U	810	190	ug/Kg	☼	10/05/16 10:34	10/06/16 21:14	1
4,6-Dinitro-2-methylphenol	110	U	320	110	ug/Kg	☼	10/05/16 10:34	10/06/16 21:14	1
Pentachlorophenol	48	U	320	48	ug/Kg	☼	10/05/16 10:34	10/06/16 21:14	1
Bis(2-chloroethyl)ether	9.4	U	40	9.4	ug/Kg	☼	10/05/16 10:34	10/06/16 21:14	1
N-Nitrosodi-n-propylamine	13	U	40	13	ug/Kg	☼	10/05/16 10:34	10/06/16 21:14	1
Hexachloroethane	15	U	40	15	ug/Kg	☼	10/05/16 10:34	10/06/16 21:14	1
Nitrobenzene	13	U	40	13	ug/Kg	☼	10/05/16 10:34	10/06/16 21:14	1
Isophorone	8.5	U	160	8.5	ug/Kg	☼	10/05/16 10:34	10/06/16 21:14	1
Bis(2-chloroethoxy)methane	12	U	400	12	ug/Kg	☼	10/05/16 10:34	10/06/16 21:14	1
Naphthalene	10	U	400	10	ug/Kg	☼	10/05/16 10:34	10/06/16 21:14	1
4-Chloroaniline	10	U	400	10	ug/Kg	☼	10/05/16 10:34	10/06/16 21:14	1
Hexachlorobutadiene	11	U	81	11	ug/Kg	☼	10/05/16 10:34	10/06/16 21:14	1
2-Methylnaphthalene	8.8	U	400	8.8	ug/Kg	☼	10/05/16 10:34	10/06/16 21:14	1
Hexachlorocyclopentadiene	25	U	400	25	ug/Kg	☼	10/05/16 10:34	10/06/16 21:14	1
2-Chloronaphthalene	9.0	U	400	9.0	ug/Kg	☼	10/05/16 10:34	10/06/16 21:14	1
2-Nitroaniline	13	U	400	13	ug/Kg	☼	10/05/16 10:34	10/06/16 21:14	1
Dimethyl phthalate	12	U	400	12	ug/Kg	☼	10/05/16 10:34	10/06/16 21:14	1
Acenaphthylene	10	U	400	10	ug/Kg	☼	10/05/16 10:34	10/06/16 21:14	1
2,6-Dinitrotoluene	21	U	81	21	ug/Kg	☼	10/05/16 10:34	10/06/16 21:14	1
3-Nitroaniline	12	U	400	12	ug/Kg	☼	10/05/16 10:34	10/06/16 21:14	1
Acenaphthene	9.6	U	400	9.6	ug/Kg	☼	10/05/16 10:34	10/06/16 21:14	1
Dibenzofuran	12	U	400	12	ug/Kg	☼	10/05/16 10:34	10/06/16 21:14	1
2,4-Dinitrotoluene	16	U	81	16	ug/Kg	☼	10/05/16 10:34	10/06/16 21:14	1
Diethyl phthalate	11	U	400	11	ug/Kg	☼	10/05/16 10:34	10/06/16 21:14	1
4-Chlorophenyl phenyl ether	12	U	400	12	ug/Kg	☼	10/05/16 10:34	10/06/16 21:14	1
Fluorene	8.7	U	400	8.7	ug/Kg	☼	10/05/16 10:34	10/06/16 21:14	1
4-Nitroaniline	15	U	400	15	ug/Kg	☼	10/05/16 10:34	10/06/16 21:14	1
N-Nitrosodiphenylamine	36	U	400	36	ug/Kg	☼	10/05/16 10:34	10/06/16 21:14	1
4-Bromophenyl phenyl ether	13	U	400	13	ug/Kg	☼	10/05/16 10:34	10/06/16 21:14	1
Hexachlorobenzene	16	U	40	16	ug/Kg	☼	10/05/16 10:34	10/06/16 21:14	1
Phenanthrene	11	U	400	11	ug/Kg	☼	10/05/16 10:34	10/06/16 21:14	1
Anthracene	38	U	400	38	ug/Kg	☼	10/05/16 10:34	10/06/16 21:14	1
Carbazole	9.9	U	400	9.9	ug/Kg	☼	10/05/16 10:34	10/06/16 21:14	1
Di-n-butyl phthalate	12	U	400	12	ug/Kg	☼	10/05/16 10:34	10/06/16 21:14	1
Fluoranthene	12	U	400	12	ug/Kg	☼	10/05/16 10:34	10/06/16 21:14	1
Pyrene	18	U	400	18	ug/Kg	☼	10/05/16 10:34	10/06/16 21:14	1
Butyl benzyl phthalate	12	U	400	12	ug/Kg	☼	10/05/16 10:34	10/06/16 21:14	1
3,3'-Dichlorobenzidine	44	U	160	44	ug/Kg	☼	10/05/16 10:34	10/06/16 21:14	1
Benzo[a]anthracene	33	U	40	33	ug/Kg	☼	10/05/16 10:34	10/06/16 21:14	1
Chrysene	11	U	400	11	ug/Kg	☼	10/05/16 10:34	10/06/16 21:14	1
Bis(2-ethylhexyl) phthalate	16	U	400	16	ug/Kg	☼	10/05/16 10:34	10/06/16 21:14	1
Di-n-octyl phthalate	20	U	400	20	ug/Kg	☼	10/05/16 10:34	10/06/16 21:14	1
Benzo[b]fluoranthene	16	U	40	16	ug/Kg	☼	10/05/16 10:34	10/06/16 21:14	1
Benzo[k]fluoranthene	17	U	40	17	ug/Kg	☼	10/05/16 10:34	10/06/16 21:14	1
Benzo[a]pyrene	12	U	40	12	ug/Kg	☼	10/05/16 10:34	10/06/16 21:14	1
Indeno[1,2,3-cd]pyrene	26	U	40	26	ug/Kg	☼	10/05/16 10:34	10/06/16 21:14	1
Dibenz(a,h)anthracene	21	U	40	21	ug/Kg	☼	10/05/16 10:34	10/06/16 21:14	1

Client Sample ID: SB3-15.0-16.0

Date Collected: 10/03/16 14:00
Date Received: 10/03/16 18:55

Lab Sample ID: 460-121319-4

Matrix: Solid
Percent Solids: 83.0

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[g,h,i]perylene	23	U	400	23	ug/Kg	☼	10/05/16 10:34	10/06/16 21:14	1
Diphenyl	34	U	400	34	ug/Kg	☼	10/05/16 10:34	10/06/16 21:14	1
Acetophenone	8.7	U	400	8.7	ug/Kg	☼	10/05/16 10:34	10/06/16 21:14	1
Benzaldehyde	30	U	400	30	ug/Kg	☼	10/05/16 10:34	10/06/16 21:14	1
Caprolactam	29	U	400	29	ug/Kg	☼	10/05/16 10:34	10/06/16 21:14	1
Atrazine	18	U	160	18	ug/Kg	☼	10/05/16 10:34	10/06/16 21:14	1
2,2'-oxybis[1-chloropropane]	16	U	400	16	ug/Kg	☼	10/05/16 10:34	10/06/16 21:14	1
1,2,4,5-Tetrachlorobenzene	30	U	400	30	ug/Kg	☼	10/05/16 10:34	10/06/16 21:14	1
2,3,4,6-Tetrachlorophenol	37	U	400	37	ug/Kg	☼	10/05/16 10:34	10/06/16 21:14	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Unknown	*990*	*J*	*ug/Kg*	☼	*4.75*		*10/05/16 10:34*	*10/06/16 21:14*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*56*		*37 - 94*	*10/05/16 10:34*	*10/06/16 21:14*	*1*
Phenol-d5	*53*		*32 - 91*	*10/05/16 10:34*	*10/06/16 21:14*	*1*
Terphenyl-d14	*54*		*24 - 109*	*10/05/16 10:34*	*10/06/16 21:14*	*1*
2,4,6-Tribromophenol	*49*		*10 - 103*	*10/05/16 10:34*	*10/06/16 21:14*	*1*
2-Fluorophenol	*51*		*25 - 92*	*10/05/16 10:34*	*10/06/16 21:14*	*1*
2-Fluorobiphenyl	*65*		*38 - 95*	*10/05/16 10:34*	*10/06/16 21:14*	*1*

Method: 8081B - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	1.1	U	8.1	1.1	ug/Kg	☼	10/06/16 03:19	10/06/16 13:59	1
4,4'-DDE	1.2	U	8.1	1.2	ug/Kg	☼	10/06/16 03:19	10/06/16 13:59	1
4,4'-DDT	0.83	U	8.1	0.83	ug/Kg	☼	10/06/16 03:19	10/06/16 13:59	1
Aldrin	0.97	U	8.1	0.97	ug/Kg	☼	10/06/16 03:19	10/06/16 13:59	1
alpha-BHC	0.73	U	2.4	0.73	ug/Kg	☼	10/06/16 03:19	10/06/16 13:59	1
beta-BHC	0.78	U	2.4	0.78	ug/Kg	☼	10/06/16 03:19	10/06/16 13:59	1
Chlordane (technical)	36	U	81	36	ug/Kg	☼	10/06/16 03:19	10/06/16 13:59	1
delta-BHC	0.88	U	2.4	0.88	ug/Kg	☼	10/06/16 03:19	10/06/16 13:59	1
Dieldrin	1.0	U	2.4	1.0	ug/Kg	☼	10/06/16 03:19	10/06/16 13:59	1
Endosulfan I	1.1	U	8.1	1.1	ug/Kg	☼	10/06/16 03:19	10/06/16 13:59	1
Endosulfan II	1.3	U	8.1	1.3	ug/Kg	☼	10/06/16 03:19	10/06/16 13:59	1
Endosulfan sulfate	0.94	U	8.1	0.94	ug/Kg	☼	10/06/16 03:19	10/06/16 13:59	1
Endrin	1.0	U	8.1	1.0	ug/Kg	☼	10/06/16 03:19	10/06/16 13:59	1
Endrin aldehyde	1.0	U	8.1	1.0	ug/Kg	☼	10/06/16 03:19	10/06/16 13:59	1
Endrin ketone	1.1	U	8.1	1.1	ug/Kg	☼	10/06/16 03:19	10/06/16 13:59	1
gamma-BHC (Lindane)	0.72	U	2.4	0.72	ug/Kg	☼	10/06/16 03:19	10/06/16 13:59	1
Heptachlor	1.0	U	8.1	1.0	ug/Kg	☼	10/06/16 03:19	10/06/16 13:59	1
Heptachlor epoxide	1.6	U	8.1	1.6	ug/Kg	☼	10/06/16 03:19	10/06/16 13:59	1
Methoxychlor	1.7	U	8.1	1.7	ug/Kg	☼	10/06/16 03:19	10/06/16 13:59	1
Toxaphene	23	U	81	23	ug/Kg	☼	10/06/16 03:19	10/06/16 13:59	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*102*		*50 - 150*	*10/06/16 03:19*	*10/06/16 13:59*	*1*
DCB Decachlorobiphenyl	*99*		*50 - 150*	*10/06/16 03:19*	*10/06/16 13:59*	*1*
Tetrachloro-m-xylene	*107*		*47 - 150*	*10/06/16 03:19*	*10/06/16 13:59*	*1*
Tetrachloro-m-xylene	*100*		*47 - 150*	*10/06/16 03:19*	*10/06/16 13:59*	*1*

Client Sample ID: SB3-15.0-16.0

Date Collected: 10/03/16 14:00
Date Received: 10/03/16 18:55

Lab Sample ID: 460-121319-4

Matrix: Solid
Percent Solids: 83.0

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor 1016	11	U	81	11	ug/Kg	☼	10/06/16 03:36	10/06/16 16:06	1
Aroclor 1221	11	U	81	11	ug/Kg	☼	10/06/16 03:36	10/06/16 16:06	1
Aroclor 1232	11	U	81	11	ug/Kg	☼	10/06/16 03:36	10/06/16 16:06	1
Aroclor 1242	11	U	81	11	ug/Kg	☼	10/06/16 03:36	10/06/16 16:06	1
Aroclor 1248	11	U	81	11	ug/Kg	☼	10/06/16 03:36	10/06/16 16:06	1
Aroclor 1254	11	U	81	11	ug/Kg	☼	10/06/16 03:36	10/06/16 16:06	1
Aroclor 1260	11	U	81	11	ug/Kg	☼	10/06/16 03:36	10/06/16 16:06	1
Aroclor-1262	11	U	81	11	ug/Kg	☼	10/06/16 03:36	10/06/16 16:06	1
Aroclor 1268	11	U	81	11	ug/Kg	☼	10/06/16 03:36	10/06/16 16:06	1
Polychlorinated biphenyls, Total	11	U	81	11	ug/Kg	☼	10/06/16 03:36	10/06/16 16:06	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*105*		*35 - 150*	*10/06/16 03:36*	*10/06/16 16:06*	*1*
DCB Decachlorobiphenyl	*106*		*35 - 150*	*10/06/16 03:36*	*10/06/16 16:06*	*1*

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**11600**		38.5	19.8	mg/Kg	☼	10/05/16 18:27	10/08/16 03:54	4
Antimony	1.5	U	3.9	1.5	mg/Kg	☼	10/05/16 18:27	10/08/16 03:54	4
Arsenic	**2.3**	**J**	2.9	0.95	mg/Kg	☼	10/05/16 18:27	10/08/16 03:54	4
Barium	**111**		38.5	1.4	mg/Kg	☼	10/05/16 18:27	10/08/16 03:54	4
Beryllium	**0.64**		0.39	0.33	mg/Kg	☼	10/05/16 18:27	10/08/16 03:54	4
Cadmium	0.40	U	0.77	0.40	mg/Kg	☼	10/05/16 18:27	10/08/16 03:54	4
Calcium	**2260**		963	57.0	mg/Kg	☼	10/05/16 18:27	10/08/16 03:54	4
Chromium	**29.3**		1.9	0.93	mg/Kg	☼	10/05/16 18:27	10/08/16 03:54	4
Cobalt	**7.1**	**J**	9.6	1.1	mg/Kg	☼	10/05/16 18:27	10/08/16 03:54	4
Copper	**20.2**		4.8	1.3	mg/Kg	☼	10/05/16 18:27	10/08/16 03:54	4
Iron	**24300**		28.9	21.8	mg/Kg	☼	10/05/16 18:27	10/08/16 03:54	4
Lead	**3.6**		1.9	0.76	mg/Kg	☼	10/05/16 18:27	10/08/16 03:54	4
Magnesium	**5370**		963	48.1	mg/Kg	☼	10/05/16 18:27	10/08/16 03:54	4
Manganese	**435**		2.9	1.0	mg/Kg	☼	10/05/16 18:27	10/08/16 03:54	4
Nickel	**20.4**		7.7	1.4	mg/Kg	☼	10/05/16 18:27	10/08/16 03:54	4
Potassium	**3000**		963	29.2	mg/Kg	☼	10/05/16 18:27	10/08/16 03:54	4
Selenium	1.3	U	3.9	1.3	mg/Kg	☼	10/05/16 18:27	10/08/16 03:54	4
Silver	0.34	U	1.9	0.34	mg/Kg	☼	10/05/16 18:27	10/08/16 03:54	4
Sodium	**143**	**J**	963	65.2	mg/Kg	☼	10/05/16 18:27	10/08/16 03:54	4
Thallium	1.7	U	3.9	1.7	mg/Kg	☼	10/05/16 18:27	10/08/16 03:54	4
Vanadium	**37.2**		9.6	0.96	mg/Kg	☼	10/05/16 18:27	10/08/16 03:54	4
Zinc	**79.8**		5.8	1.4	mg/Kg	☼	10/05/16 18:27	10/08/16 03:54	4

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.012	U	0.018	0.012	mg/Kg	☼	10/06/16 05:24	10/06/16 10:49	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	**0.044**	**J**	0.12	0.033	mg/Kg	☼	10/13/16 11:06	10/14/16 11:20	1

Client Sample ID: SB4-2.0-3.0

Date Collected: 10/03/16 16:00
Date Received: 10/03/16 18:55

Lab Sample ID: 460-121319-5

Matrix: Solid
Percent Solids: 70.9

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	0.51	U	1.3	0.51	ug/Kg	☼	10/04/16 21:51	10/05/16 18:53	1
1,1,2,2-Tetrachloroethane	0.23	U	1.3	0.23	ug/Kg	☼	10/04/16 21:51	10/05/16 18:53	1
1,1,2-Trichloro-1,2,2-trifluoroethane	0.59	U	1.3	0.59	ug/Kg	☼	10/04/16 21:51	10/05/16 18:53	1
1,1,2-Trichloroethane	0.38	U	1.3	0.38	ug/Kg	☼	10/04/16 21:51	10/05/16 18:53	1
1,1-Dichloroethane	0.46	U	1.3	0.46	ug/Kg	☼	10/04/16 21:51	10/05/16 18:53	1
1,1-Dichloroethene	0.55	U	1.3	0.55	ug/Kg	☼	10/04/16 21:51	10/05/16 18:53	1
1,2,3-Trichlorobenzene	0.15	U	1.3	0.15	ug/Kg	☼	10/04/16 21:51	10/05/16 18:53	1
1,2,4-Trichlorobenzene	0.43	U	1.3	0.43	ug/Kg	☼	10/04/16 21:51	10/05/16 18:53	1
1,2-Dibromo-3-Chloropropane	0.63	U	1.3	0.63	ug/Kg	☼	10/04/16 21:51	10/05/16 18:53	1
1,2-Dichlorobenzene	0.19	U	1.3	0.19	ug/Kg	☼	10/04/16 21:51	10/05/16 18:53	1
1,2-Dichloroethane	0.15	U	1.3	0.15	ug/Kg	☼	10/04/16 21:51	10/05/16 18:53	1
1,2-Dichloropropane	0.23	U	1.3	0.23	ug/Kg	☼	10/04/16 21:51	10/05/16 18:53	1
1,3-Dichlorobenzene	0.16	U	1.3	0.16	ug/Kg	☼	10/04/16 21:51	10/05/16 18:53	1
1,4-Dichlorobenzene	0.17	U	1.3	0.17	ug/Kg	☼	10/04/16 21:51	10/05/16 18:53	1
1,4-Dioxane	8.6	U	27	8.6	ug/Kg	☼	10/04/16 21:51	10/05/16 18:53	1
2-Butanone (MEK)	1.0	U	6.7	1.0	ug/Kg	☼	10/04/16 21:51	10/05/16 18:53	1
2-Hexanone	1.3	U	6.7	1.3	ug/Kg	☼	10/04/16 21:51	10/05/16 18:53	1
4-Methyl-2-pentanone (MIBK)	3.0	U	6.7	3.0	ug/Kg	☼	10/04/16 21:51	10/05/16 18:53	1
Acetone	1.4	U	6.7	1.4	ug/Kg	☼	10/04/16 21:51	10/05/16 18:53	1
Benzene	0.27	U	1.3	0.27	ug/Kg	☼	10/04/16 21:51	10/05/16 18:53	1
Bromoform	0.17	U	1.3	0.17	ug/Kg	☼	10/04/16 21:51	10/05/16 18:53	1
Bromomethane	0.43	U	1.3	0.43	ug/Kg	☼	10/04/16 21:51	10/05/16 18:53	1
Carbon disulfide	0.58	U	1.3	0.58	ug/Kg	☼	10/04/16 21:51	10/05/16 18:53	1
Carbon tetrachloride	0.58	U	1.3	0.58	ug/Kg	☼	10/04/16 21:51	10/05/16 18:53	1
Chlorobenzene	0.19	U	1.3	0.19	ug/Kg	☼	10/04/16 21:51	10/05/16 18:53	1
Chlorobromomethane	0.23	U	1.3	0.23	ug/Kg	☼	10/04/16 21:51	10/05/16 18:53	1
Chlorodibromomethane	0.20	U	1.3	0.20	ug/Kg	☼	10/04/16 21:51	10/05/16 18:53	1
Chloroethane	0.47	U	1.3	0.47	ug/Kg	☼	10/04/16 21:51	10/05/16 18:53	1
Chloroform	0.28	U	1.3	0.28	ug/Kg	☼	10/04/16 21:51	10/05/16 18:53	1
Chloromethane	0.51	U *	1.3	0.51	ug/Kg	☼	10/04/16 21:51	10/05/16 18:53	1
cis-1,2-Dichloroethene	0.29	U	1.3	0.29	ug/Kg	☼	10/04/16 21:51	10/05/16 18:53	1
cis-1,3-Dichloropropene	0.20	U	1.3	0.20	ug/Kg	☼	10/04/16 21:51	10/05/16 18:53	1
Cyclohexane	0.62	U	1.3	0.62	ug/Kg	☼	10/04/16 21:51	10/05/16 18:53	1
Dichlorobromomethane	0.51	U	1.3	0.51	ug/Kg	☼	10/04/16 21:51	10/05/16 18:53	1
Dichlorodifluoromethane	0.43	U	1.3	0.43	ug/Kg	☼	10/04/16 21:51	10/05/16 18:53	1
Ethylbenzene	0.24	U	1.3	0.24	ug/Kg	☼	10/04/16 21:51	10/05/16 18:53	1
Ethylene Dibromide	0.16	U	1.3	0.16	ug/Kg	☼	10/04/16 21:51	10/05/16 18:53	1
Isopropylbenzene	0.23	U	1.3	0.23	ug/Kg	☼	10/04/16 21:51	10/05/16 18:53	1
Methyl acetate	1.2	U	6.7	1.2	ug/Kg	☼	10/04/16 21:51	10/05/16 18:53	1
Methyl tert-butyl ether	0.23	U	1.3	0.23	ug/Kg	☼	10/04/16 21:51	10/05/16 18:53	1
Methylcyclohexane	0.67	U	1.3	0.67	ug/Kg	☼	10/04/16 21:51	10/05/16 18:53	1
Methylene Chloride	0.43	U	1.3	0.43	ug/Kg	☼	10/04/16 21:51	10/05/16 18:53	1
Styrene	0.20	U	1.3	0.20	ug/Kg	☼	10/04/16 21:51	10/05/16 18:53	1
Tetrachloroethene	0.38	U	1.3	0.38	ug/Kg	☼	10/04/16 21:51	10/05/16 18:53	1
Toluene	0.25	U	1.3	0.25	ug/Kg	☼	10/04/16 21:51	10/05/16 18:53	1
trans-1,2-Dichloroethene	0.52	U	1.3	0.52	ug/Kg	☼	10/04/16 21:51	10/05/16 18:53	1
trans-1,3-Dichloropropene	0.13	U	1.3	0.13	ug/Kg	☼	10/04/16 21:51	10/05/16 18:53	1
Trichloroethene	0.35	U	1.3	0.35	ug/Kg	☼	10/04/16 21:51	10/05/16 18:53	1
Trichlorofluoromethane	0.46	U	1.3	0.46	ug/Kg	☼	10/04/16 21:51	10/05/16 18:53	1

Client Sample ID: SB4-2.0-3.0

Date Collected: 10/03/16 16:00
Date Received: 10/03/16 18:55

Lab Sample ID: 460-121319-5

Matrix: Solid
Percent Solids: 70.9

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Vinyl chloride	0.52	U *	1.3	0.52	ug/Kg	☼	10/04/16 21:51	10/05/16 18:53	1
Xylenes, Total	0.15	U	2.7	0.15	ug/Kg	☼	10/04/16 21:51	10/05/16 18:53	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/Kg*	☼			*10/04/16 21:51*	*10/05/16 18:53*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*94*		*78 - 135*	*10/04/16 21:51*	*10/05/16 18:53*	*1*
4-Bromofluorobenzene	*82*		*67 - 126*	*10/04/16 21:51*	*10/05/16 18:53*	*1*
Dibromofluoromethane (Surr)	*93*		*61 - 149*	*10/04/16 21:51*	*10/05/16 18:53*	*1*
Toluene-d8 (Surr)	*89*		*73 - 121*	*10/04/16 21:51*	*10/05/16 18:53*	*1*

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	15	U	460	15	ug/Kg	☼	10/05/16 10:34	10/06/16 21:38	1
2-Chlorophenol	12	U	460	12	ug/Kg	☼	10/05/16 10:34	10/06/16 21:38	1
2-Methylphenol	20	U	460	20	ug/Kg	☼	10/05/16 10:34	10/06/16 21:38	1
4-Methylphenol	13	U	460	13	ug/Kg	☼	10/05/16 10:34	10/06/16 21:38	1
2-Nitrophenol	16	U	460	16	ug/Kg	☼	10/05/16 10:34	10/06/16 21:38	1
2,4-Dimethylphenol	100	U	460	100	ug/Kg	☼	10/05/16 10:34	10/06/16 21:38	1
2,4-Dichlorophenol	11	U	190	11	ug/Kg	☼	10/05/16 10:34	10/06/16 21:38	1
4-Chloro-3-methylphenol	20	U	460	20	ug/Kg	☼	10/05/16 10:34	10/06/16 21:38	1
2,4,6-Trichlorophenol	13	U	190	13	ug/Kg	☼	10/05/16 10:34	10/06/16 21:38	1
2,4,5-Trichlorophenol	46	U *	460	46	ug/Kg	☼	10/05/16 10:34	10/06/16 21:38	1
2,4-Dinitrophenol	350	U	370	350	ug/Kg	☼	10/05/16 10:34	10/06/16 21:38	1
4-Nitrophenol	220	U	940	220	ug/Kg	☼	10/05/16 10:34	10/06/16 21:38	1
4,6-Dinitro-2-methylphenol	120	U	370	120	ug/Kg	☼	10/05/16 10:34	10/06/16 21:38	1
Pentachlorophenol	56	U	370	56	ug/Kg	☼	10/05/16 10:34	10/06/16 21:38	1
Bis(2-chloroethyl)ether	11	U	46	11	ug/Kg	☼	10/05/16 10:34	10/06/16 21:38	1
N-Nitrosodi-n-propylamine	16	U	46	16	ug/Kg	☼	10/05/16 10:34	10/06/16 21:38	1
Hexachloroethane	17	U	46	17	ug/Kg	☼	10/05/16 10:34	10/06/16 21:38	1
Nitrobenzene	15	U	46	15	ug/Kg	☼	10/05/16 10:34	10/06/16 21:38	1
Isophorone	10	U	190	10	ug/Kg	☼	10/05/16 10:34	10/06/16 21:38	1
Bis(2-chloroethoxy)methane	14	U	460	14	ug/Kg	☼	10/05/16 10:34	10/06/16 21:38	1
Naphthalene	12	U	460	12	ug/Kg	☼	10/05/16 10:34	10/06/16 21:38	1
4-Chloroaniline	12	U	460	12	ug/Kg	☼	10/05/16 10:34	10/06/16 21:38	1
Hexachlorobutadiene	13	U	94	13	ug/Kg	☼	10/05/16 10:34	10/06/16 21:38	1
2-Methylnaphthalene	10	U	460	10	ug/Kg	☼	10/05/16 10:34	10/06/16 21:38	1
Hexachlorocyclopentadiene	29	U	460	29	ug/Kg	☼	10/05/16 10:34	10/06/16 21:38	1
2-Chloronaphthalene	11	U	460	11	ug/Kg	☼	10/05/16 10:34	10/06/16 21:38	1
2-Nitroaniline	15	U	460	15	ug/Kg	☼	10/05/16 10:34	10/06/16 21:38	1
Dimethyl phthalate	14	U	460	14	ug/Kg	☼	10/05/16 10:34	10/06/16 21:38	1
Acenaphthylene	12	U	460	12	ug/Kg	☼	10/05/16 10:34	10/06/16 21:38	1
2,6-Dinitrotoluene	25	U	94	25	ug/Kg	☼	10/05/16 10:34	10/06/16 21:38	1
3-Nitroaniline	14	U	460	14	ug/Kg	☼	10/05/16 10:34	10/06/16 21:38	1
Acenaphthene	11	U	460	11	ug/Kg	☼	10/05/16 10:34	10/06/16 21:38	1
Dibenzofuran	14	U	460	14	ug/Kg	☼	10/05/16 10:34	10/06/16 21:38	1
2,4-Dinitrotoluene	18	U	94	18	ug/Kg	☼	10/05/16 10:34	10/06/16 21:38	1
Diethyl phthalate	13	U	460	13	ug/Kg	☼	10/05/16 10:34	10/06/16 21:38	1
4-Chlorophenyl phenyl ether	14	U	460	14	ug/Kg	☼	10/05/16 10:34	10/06/16 21:38	1

Client Sample ID: SB4-2.0-3.0
Date Collected: 10/03/16 16:00
Date Received: 10/03/16 18:55

Lab Sample ID: 460-121319-5
Matrix: Solid
Percent Solids: 70.9

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluorene	10	U	460	10	ug/Kg	☼	10/05/16 10:34	10/06/16 21:38	1
4-Nitroaniline	18	U	460	18	ug/Kg	☼	10/05/16 10:34	10/06/16 21:38	1
N-Nitrosodiphenylamine	42	U	460	42	ug/Kg	☼	10/05/16 10:34	10/06/16 21:38	1
4-Bromophenyl phenyl ether	15	U	460	15	ug/Kg	☼	10/05/16 10:34	10/06/16 21:38	1
Hexachlorobenzene	19	U	46	19	ug/Kg	☼	10/05/16 10:34	10/06/16 21:38	1
Phenanthrene	12	U	460	12	ug/Kg	☼	10/05/16 10:34	10/06/16 21:38	1
Anthracene	44	U	460	44	ug/Kg	☼	10/05/16 10:34	10/06/16 21:38	1
Carbazole	12	U	460	12	ug/Kg	☼	10/05/16 10:34	10/06/16 21:38	1
Di-n-butyl phthalate	14	U	460	14	ug/Kg	☼	10/05/16 10:34	10/06/16 21:38	1
Fluoranthene	14	U	460	14	ug/Kg	☼	10/05/16 10:34	10/06/16 21:38	1
Pyrene	21	U	460	21	ug/Kg	☼	10/05/16 10:34	10/06/16 21:38	1
Butyl benzyl phthalate	14	U	460	14	ug/Kg	☼	10/05/16 10:34	10/06/16 21:38	1
3,3'-Dichlorobenzidine	52	U	190	52	ug/Kg	☼	10/05/16 10:34	10/06/16 21:38	1
Benzo[a]anthracene	39	U	46	39	ug/Kg	☼	10/05/16 10:34	10/06/16 21:38	1
Chrysene	13	U	460	13	ug/Kg	☼	10/05/16 10:34	10/06/16 21:38	1
Bis(2-ethylhexyl) phthalate	18	U	460	18	ug/Kg	☼	10/05/16 10:34	10/06/16 21:38	1
Di-n-octyl phthalate	24	U	460	24	ug/Kg	☼	10/05/16 10:34	10/06/16 21:38	1
Benzo[b]fluoranthene	18	U	46	18	ug/Kg	☼	10/05/16 10:34	10/06/16 21:38	1
Benzo[k]fluoranthene	20	U	46	20	ug/Kg	☼	10/05/16 10:34	10/06/16 21:38	1
Benzo[a]pyrene	14	U	46	14	ug/Kg	☼	10/05/16 10:34	10/06/16 21:38	1
Indeno[1,2,3-cd]pyrene	31	U	46	31	ug/Kg	☼	10/05/16 10:34	10/06/16 21:38	1
Dibenz(a,h)anthracene	24	U	46	24	ug/Kg	☼	10/05/16 10:34	10/06/16 21:38	1
Benzo[g,h,i]perylene	27	U	460	27	ug/Kg	☼	10/05/16 10:34	10/06/16 21:38	1
Diphenyl	40	U	460	40	ug/Kg	☼	10/05/16 10:34	10/06/16 21:38	1
Acetophenone	10	U	460	10	ug/Kg	☼	10/05/16 10:34	10/06/16 21:38	1
Benzaldehyde	35	U	460	35	ug/Kg	☼	10/05/16 10:34	10/06/16 21:38	1
Caprolactam	33	U	460	33	ug/Kg	☼	10/05/16 10:34	10/06/16 21:38	1
Atrazine	21	U	190	21	ug/Kg	☼	10/05/16 10:34	10/06/16 21:38	1
2,2'-oxybis[1-chloropropane]	19	U	460	19	ug/Kg	☼	10/05/16 10:34	10/06/16 21:38	1
1,2,4,5-Tetrachlorobenzene	35	U	460	35	ug/Kg	☼	10/05/16 10:34	10/06/16 21:38	1
2,3,4,6-Tetrachlorophenol	44	U	460	44	ug/Kg	☼	10/05/16 10:34	10/06/16 21:38	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/Kg*	☼			*10/05/16 10:34*	*10/06/16 21:38*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*58*		*37 - 94*	*10/05/16 10:34*	*10/06/16 21:38*	*1*
Phenol-d5	*56*		*32 - 91*	*10/05/16 10:34*	*10/06/16 21:38*	*1*
Terphenyl-d14	*58*		*24 - 109*	*10/05/16 10:34*	*10/06/16 21:38*	*1*
2,4,6-Tribromophenol	*60*		*10 - 103*	*10/05/16 10:34*	*10/06/16 21:38*	*1*
2-Fluorophenol	*55*		*25 - 92*	*10/05/16 10:34*	*10/06/16 21:38*	*1*
2-Fluorobiphenyl	*67*		*38 - 95*	*10/05/16 10:34*	*10/06/16 21:38*	*1*

Method: 8081B - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	1.2	U	9.4	1.2	ug/Kg	☼	10/06/16 03:19	10/06/16 14:12	1
4,4'-DDE	1.4	U	9.4	1.4	ug/Kg	☼	10/06/16 03:19	10/06/16 14:12	1
4,4'-DDT	0.97	U	9.4	0.97	ug/Kg	☼	10/06/16 03:19	10/06/16 14:12	1
Aldrin	1.1	U	9.4	1.1	ug/Kg	☼	10/06/16 03:19	10/06/16 14:12	1
alpha-BHC	0.86	U	2.8	0.86	ug/Kg	☼	10/06/16 03:19	10/06/16 14:12	1

Client Sample ID: SB4-2.0-3.0

Date Collected: 10/03/16 16:00
Date Received: 10/03/16 18:55

Lab Sample ID: 460-121319-5

Matrix: Solid
Percent Solids: 70.9

Method: 8081B - Organochlorine Pesticides (GC) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
beta-BHC	0.92	U	2.8	0.92	ug/Kg	☼	10/06/16 03:19	10/06/16 14:12	1
Chlordane (technical)	42	U	94	42	ug/Kg	☼	10/06/16 03:19	10/06/16 14:12	1
delta-BHC	1.0	U	2.8	1.0	ug/Kg	☼	10/06/16 03:19	10/06/16 14:12	1
Dieldrin	1.2	U	2.8	1.2	ug/Kg	☼	10/06/16 03:19	10/06/16 14:12	1
Endosulfan I	1.3	U	9.4	1.3	ug/Kg	☼	10/06/16 03:19	10/06/16 14:12	1
Endosulfan II	1.5	U	9.4	1.5	ug/Kg	☼	10/06/16 03:19	10/06/16 14:12	1
Endosulfan sulfate	1.1	U	9.4	1.1	ug/Kg	☼	10/06/16 03:19	10/06/16 14:12	1
Endrin	1.2	U	9.4	1.2	ug/Kg	☼	10/06/16 03:19	10/06/16 14:12	1
Endrin aldehyde	1.2	U	9.4	1.2	ug/Kg	☼	10/06/16 03:19	10/06/16 14:12	1
Endrin ketone	1.3	U	9.4	1.3	ug/Kg	☼	10/06/16 03:19	10/06/16 14:12	1
gamma-BHC (Lindane)	0.85	U	2.8	0.85	ug/Kg	☼	10/06/16 03:19	10/06/16 14:12	1
Heptachlor	1.2	U	9.4	1.2	ug/Kg	☼	10/06/16 03:19	10/06/16 14:12	1
Heptachlor epoxide	1.8	U	9.4	1.8	ug/Kg	☼	10/06/16 03:19	10/06/16 14:12	1
Methoxychlor	2.0	U	9.4	2.0	ug/Kg	☼	10/06/16 03:19	10/06/16 14:12	1
Toxaphene	27	U	94	27	ug/Kg	☼	10/06/16 03:19	10/06/16 14:12	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*96*		*50 - 150*	*10/06/16 03:19*	*10/06/16 14:12*	*1*
DCB Decachlorobiphenyl	*99*		*50 - 150*	*10/06/16 03:19*	*10/06/16 14:12*	*1*
Tetrachloro-m-xylene	*97*		*47 - 150*	*10/06/16 03:19*	*10/06/16 14:12*	*1*
Tetrachloro-m-xylene	*95*		*47 - 150*	*10/06/16 03:19*	*10/06/16 14:12*	*1*

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor 1016	13	U	94	13	ug/Kg	☼	10/06/16 03:36	10/06/16 16:20	1
Aroclor 1221	13	U	94	13	ug/Kg	☼	10/06/16 03:36	10/06/16 16:20	1
Aroclor 1232	13	U	94	13	ug/Kg	☼	10/06/16 03:36	10/06/16 16:20	1
Aroclor 1242	13	U	94	13	ug/Kg	☼	10/06/16 03:36	10/06/16 16:20	1
Aroclor 1248	13	U	94	13	ug/Kg	☼	10/06/16 03:36	10/06/16 16:20	1
Aroclor 1254	13	U	94	13	ug/Kg	☼	10/06/16 03:36	10/06/16 16:20	1
Aroclor 1260	13	U	94	13	ug/Kg	☼	10/06/16 03:36	10/06/16 16:20	1
Aroclor-1262	13	U	94	13	ug/Kg	☼	10/06/16 03:36	10/06/16 16:20	1
Aroclor 1268	13	U	94	13	ug/Kg	☼	10/06/16 03:36	10/06/16 16:20	1
Polychlorinated biphenyls, Total	13	U	94	13	ug/Kg	☼	10/06/16 03:36	10/06/16 16:20	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*112*		*35 - 150*	*10/06/16 03:36*	*10/06/16 16:20*	*1*
DCB Decachlorobiphenyl	*115*		*35 - 150*	*10/06/16 03:36*	*10/06/16 16:20*	*1*

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**14900**		41.8	21.5	mg/Kg	☼	10/05/16 18:27	10/08/16 03:58	4
Antimony	1.7	U	4.2	1.7	mg/Kg	☼	10/05/16 18:27	10/08/16 03:58	4
Arsenic	**4.2**		3.1	1.0	mg/Kg	☼	10/05/16 18:27	10/08/16 03:58	4
Barium	**132**		41.8	1.5	mg/Kg	☼	10/05/16 18:27	10/08/16 03:58	4
Beryllium	**0.86**		0.42	0.35	mg/Kg	☼	10/05/16 18:27	10/08/16 03:58	4
Cadmium	0.44	U	0.84	0.44	mg/Kg	☼	10/05/16 18:27	10/08/16 03:58	4
Calcium	**2990**		1040	61.9	mg/Kg	☼	10/05/16 18:27	10/08/16 03:58	4
Chromium	**36.6**		2.1	1.0	mg/Kg	☼	10/05/16 18:27	10/08/16 03:58	4
Cobalt	**12.3**		10.4	1.2	mg/Kg	☼	10/05/16 18:27	10/08/16 03:58	4

Client Sample ID: SB4-2.0-3.0

Date Collected: 10/03/16 16:00
Date Received: 10/03/16 18:55

Lab Sample ID: 460-121319-5

Matrix: Solid
Percent Solids: 70.9

Method: 6010C - Metals (ICP) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Copper	27.8		5.2	1.4	mg/Kg	☼	10/05/16 18:27	10/08/16 03:58	4
Iron	28200		31.3	23.6	mg/Kg	☼	10/05/16 18:27	10/08/16 03:58	4
Lead	6.5		2.1	0.82	mg/Kg	☼	10/05/16 18:27	10/08/16 03:58	4
Magnesium	6330		1040	52.1	mg/Kg	☼	10/05/16 18:27	10/08/16 03:58	4
Manganese	555		3.1	1.1	mg/Kg	☼	10/05/16 18:27	10/08/16 03:58	4
Nickel	31.0		8.4	1.5	mg/Kg	☼	10/05/16 18:27	10/08/16 03:58	4
Potassium	3680		1040	31.7	mg/Kg	☼	10/05/16 18:27	10/08/16 03:58	4
Selenium	1.4	U	4.2	1.4	mg/Kg	☼	10/05/16 18:27	10/08/16 03:58	4
Silver	0.37	U	2.1	0.37	mg/Kg	☼	10/05/16 18:27	10/08/16 03:58	4
Sodium	158	J	1040	70.7	mg/Kg	☼	10/05/16 18:27	10/08/16 03:58	4
Thallium	1.8	U	4.2	1.8	mg/Kg	☼	10/05/16 18:27	10/08/16 03:58	4
Vanadium	45.0		10.4	1.0	mg/Kg	☼	10/05/16 18:27	10/08/16 03:58	4
Zinc	141		6.3	1.5	mg/Kg	☼	10/05/16 18:27	10/08/16 03:58	4

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.032		0.021	0.014	mg/Kg	☼	10/10/16 04:01	10/10/16 08:13	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	0.052	J	0.14	0.037	mg/Kg	☼	10/13/16 11:06	10/14/16 11:21	1

Client Sample ID: SB4-6.0-7.0

Date Collected: 10/03/16 16:35
Date Received: 10/03/16 18:55

Lab Sample ID: 460-121319-6

Matrix: Solid
Percent Solids: 80.2

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	0.51	U	1.3	0.51	ug/Kg	☼	10/04/16 21:52	10/05/16 19:17	1
1,1,2,2-Tetrachloroethane	0.23	U	1.3	0.23	ug/Kg	☼	10/04/16 21:52	10/05/16 19:17	1
1,1,2-Trichloro-1,2,2-trifluoroethane	0.59	U	1.3	0.59	ug/Kg	☼	10/04/16 21:52	10/05/16 19:17	1
1,1,2-Trichloroethane	0.38	U	1.3	0.38	ug/Kg	☼	10/04/16 21:52	10/05/16 19:17	1
1,1-Dichloroethane	0.46	U	1.3	0.46	ug/Kg	☼	10/04/16 21:52	10/05/16 19:17	1
1,1-Dichloroethene	0.55	U	1.3	0.55	ug/Kg	☼	10/04/16 21:52	10/05/16 19:17	1
1,2,3-Trichlorobenzene	0.15	U	1.3	0.15	ug/Kg	☼	10/04/16 21:52	10/05/16 19:17	1
1,2,4-Trichlorobenzene	0.43	U	1.3	0.43	ug/Kg	☼	10/04/16 21:52	10/05/16 19:17	1
1,2-Dibromo-3-Chloropropane	0.63	U	1.3	0.63	ug/Kg	☼	10/04/16 21:52	10/05/16 19:17	1
1,2-Dichlorobenzene	0.19	U	1.3	0.19	ug/Kg	☼	10/04/16 21:52	10/05/16 19:17	1
1,2-Dichloroethane	0.15	U	1.3	0.15	ug/Kg	☼	10/04/16 21:52	10/05/16 19:17	1
1,2-Dichloropropane	0.23	U	1.3	0.23	ug/Kg	☼	10/04/16 21:52	10/05/16 19:17	1
1,3-Dichlorobenzene	0.16	U	1.3	0.16	ug/Kg	☼	10/04/16 21:52	10/05/16 19:17	1
1,4-Dichlorobenzene	0.17	U	1.3	0.17	ug/Kg	☼	10/04/16 21:52	10/05/16 19:17	1
1,4-Dioxane	8.6	U	27	8.6	ug/Kg	☼	10/04/16 21:52	10/05/16 19:17	1
2-Butanone (MEK)	1.0	U	6.7	1.0	ug/Kg	☼	10/04/16 21:52	10/05/16 19:17	1
2-Hexanone	1.3	U	6.7	1.3	ug/Kg	☼	10/04/16 21:52	10/05/16 19:17	1
4-Methyl-2-pentanone (MIBK)	3.0	U	6.7	3.0	ug/Kg	☼	10/04/16 21:52	10/05/16 19:17	1
Acetone	1.4	U	6.7	1.4	ug/Kg	☼	10/04/16 21:52	10/05/16 19:17	1
Benzene	0.27	U	1.3	0.27	ug/Kg	☼	10/04/16 21:52	10/05/16 19:17	1
Bromoform	0.17	U	1.3	0.17	ug/Kg	☼	10/04/16 21:52	10/05/16 19:17	1
Bromomethane	0.43	U	1.3	0.43	ug/Kg	☼	10/04/16 21:52	10/05/16 19:17	1

Client Sample ID: SB4-6.0-7.0
Date Collected: 10/03/16 16:35
Date Received: 10/03/16 18:55

Lab Sample ID: 460-121319-6
Matrix: Solid
Percent Solids: 80.2

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Carbon disulfide	0.58	U	1.3	0.58	ug/Kg	☼	10/04/16 21:52	10/05/16 19:17	1
Carbon tetrachloride	0.58	U	1.3	0.58	ug/Kg	☼	10/04/16 21:52	10/05/16 19:17	1
Chlorobenzene	0.19	U	1.3	0.19	ug/Kg	☼	10/04/16 21:52	10/05/16 19:17	1
Chlorobromomethane	0.23	U	1.3	0.23	ug/Kg	☼	10/04/16 21:52	10/05/16 19:17	1
Chlorodibromomethane	0.20	U	1.3	0.20	ug/Kg	☼	10/04/16 21:52	10/05/16 19:17	1
Chloroethane	0.47	U	1.3	0.47	ug/Kg	☼	10/04/16 21:52	10/05/16 19:17	1
Chloroform	0.28	U	1.3	0.28	ug/Kg	☼	10/04/16 21:52	10/05/16 19:17	1
Chloromethane	0.51	U *	1.3	0.51	ug/Kg	☼	10/04/16 21:52	10/05/16 19:17	1
cis-1,2-Dichloroethene	0.29	U	1.3	0.29	ug/Kg	☼	10/04/16 21:52	10/05/16 19:17	1
cis-1,3-Dichloropropene	0.20	U	1.3	0.20	ug/Kg	☼	10/04/16 21:52	10/05/16 19:17	1
Cyclohexane	0.62	U	1.3	0.62	ug/Kg	☼	10/04/16 21:52	10/05/16 19:17	1
Dichlorobromomethane	0.51	U	1.3	0.51	ug/Kg	☼	10/04/16 21:52	10/05/16 19:17	1
Dichlorodifluoromethane	0.43	U	1.3	0.43	ug/Kg	☼	10/04/16 21:52	10/05/16 19:17	1
Ethylbenzene	0.24	U	1.3	0.24	ug/Kg	☼	10/04/16 21:52	10/05/16 19:17	1
Ethylene Dibromide	0.16	U	1.3	0.16	ug/Kg	☼	10/04/16 21:52	10/05/16 19:17	1
Isopropylbenzene	0.23	U	1.3	0.23	ug/Kg	☼	10/04/16 21:52	10/05/16 19:17	1
Methyl acetate	1.2	U	6.7	1.2	ug/Kg	☼	10/04/16 21:52	10/05/16 19:17	1
Methyl tert-butyl ether	0.23	U	1.3	0.23	ug/Kg	☼	10/04/16 21:52	10/05/16 19:17	1
Methylcyclohexane	0.67	U	1.3	0.67	ug/Kg	☼	10/04/16 21:52	10/05/16 19:17	1
Methylene Chloride	0.43	U	1.3	0.43	ug/Kg	☼	10/04/16 21:52	10/05/16 19:17	1
Styrene	0.20	U	1.3	0.20	ug/Kg	☼	10/04/16 21:52	10/05/16 19:17	1
Tetrachloroethene	0.38	U	1.3	0.38	ug/Kg	☼	10/04/16 21:52	10/05/16 19:17	1
Toluene	0.25	U	1.3	0.25	ug/Kg	☼	10/04/16 21:52	10/05/16 19:17	1
trans-1,2-Dichloroethene	0.52	U	1.3	0.52	ug/Kg	☼	10/04/16 21:52	10/05/16 19:17	1
trans-1,3-Dichloropropene	0.13	U	1.3	0.13	ug/Kg	☼	10/04/16 21:52	10/05/16 19:17	1
Trichloroethene	0.35	U	1.3	0.35	ug/Kg	☼	10/04/16 21:52	10/05/16 19:17	1
Trichlorofluoromethane	0.46	U	1.3	0.46	ug/Kg	☼	10/04/16 21:52	10/05/16 19:17	1
Vinyl chloride	0.52	U *	1.3	0.52	ug/Kg	☼	10/04/16 21:52	10/05/16 19:17	1
Xylenes, Total	0.15	U	2.7	0.15	ug/Kg	☼	10/04/16 21:52	10/05/16 19:17	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/Kg*	☼			*10/04/16 21:52*	*10/05/16 19:17*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*93*		*78 - 135*	*10/04/16 21:52*	*10/05/16 19:17*	*1*
4-Bromofluorobenzene	*78*		*67 - 126*	*10/04/16 21:52*	*10/05/16 19:17*	*1*
Dibromofluoromethane (Surr)	*93*		*61 - 149*	*10/04/16 21:52*	*10/05/16 19:17*	*1*
Toluene-d8 (Surr)	*116*		*73 - 121*	*10/04/16 21:52*	*10/05/16 19:17*	*1*

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	13	U	410	13	ug/Kg	☼	10/05/16 10:34	10/06/16 22:03	1
2-Chlorophenol	10	U	410	10	ug/Kg	☼	10/05/16 10:34	10/06/16 22:03	1
2-Methylphenol	18	U	410	18	ug/Kg	☼	10/05/16 10:34	10/06/16 22:03	1
4-Methylphenol	11	U	410	11	ug/Kg	☼	10/05/16 10:34	10/06/16 22:03	1
2-Nitrophenol	14	U	410	14	ug/Kg	☼	10/05/16 10:34	10/06/16 22:03	1
2,4-Dimethylphenol	90	U	410	90	ug/Kg	☼	10/05/16 10:34	10/06/16 22:03	1
2,4-Dichlorophenol	9.7	U	170	9.7	ug/Kg	☼	10/05/16 10:34	10/06/16 22:03	1
4-Chloro-3-methylphenol	18	U	410	18	ug/Kg	☼	10/05/16 10:34	10/06/16 22:03	1
2,4,6-Trichlorophenol	12	U	170	12	ug/Kg	☼	10/05/16 10:34	10/06/16 22:03	1

Client Sample ID: SB4-6.0-7.0

Date Collected: 10/03/16 16:35
Date Received: 10/03/16 18:55

Lab Sample ID: 460-121319-6

Matrix: Solid
Percent Solids: 80.2

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	41	U *	410	41	ug/Kg	☼	10/05/16 10:34	10/06/16 22:03	1
2,4-Dinitrophenol	310	U	330	310	ug/Kg	☼	10/05/16 10:34	10/06/16 22:03	1
4-Nitrophenol	200	U	830	200	ug/Kg	☼	10/05/16 10:34	10/06/16 22:03	1
4,6-Dinitro-2-methylphenol	110	U	330	110	ug/Kg	☼	10/05/16 10:34	10/06/16 22:03	1
Pentachlorophenol	50	U	330	50	ug/Kg	☼	10/05/16 10:34	10/06/16 22:03	1
Bis(2-chloroethyl)ether	9.7	U	41	9.7	ug/Kg	☼	10/05/16 10:34	10/06/16 22:03	1
N-Nitrosodi-n-propylamine	14	U	41	14	ug/Kg	☼	10/05/16 10:34	10/06/16 22:03	1
Hexachloroethane	15	U	41	15	ug/Kg	☼	10/05/16 10:34	10/06/16 22:03	1
Nitrobenzene	13	U	41	13	ug/Kg	☼	10/05/16 10:34	10/06/16 22:03	1
Isophorone	8.8	U	170	8.8	ug/Kg	☼	10/05/16 10:34	10/06/16 22:03	1
Bis(2-chloroethoxy)methane	13	U	410	13	ug/Kg	☼	10/05/16 10:34	10/06/16 22:03	1
Naphthalene	10	U	410	10	ug/Kg	☼	10/05/16 10:34	10/06/16 22:03	1
4-Chloroaniline	11	U	410	11	ug/Kg	☼	10/05/16 10:34	10/06/16 22:03	1
Hexachlorobutadiene	12	U	83	12	ug/Kg	☼	10/05/16 10:34	10/06/16 22:03	1
2-Methylnaphthalene	9.1	U	410	9.1	ug/Kg	☼	10/05/16 10:34	10/06/16 22:03	1
Hexachlorocyclopentadiene	26	U	410	26	ug/Kg	☼	10/05/16 10:34	10/06/16 22:03	1
2-Chloronaphthalene	9.3	U	410	9.3	ug/Kg	☼	10/05/16 10:34	10/06/16 22:03	1
2-Nitroaniline	14	U	410	14	ug/Kg	☼	10/05/16 10:34	10/06/16 22:03	1
Dimethyl phthalate	12	U	410	12	ug/Kg	☼	10/05/16 10:34	10/06/16 22:03	1
Acenaphthylene	11	U	410	11	ug/Kg	☼	10/05/16 10:34	10/06/16 22:03	1
2,6-Dinitrotoluene	22	U	83	22	ug/Kg	☼	10/05/16 10:34	10/06/16 22:03	1
3-Nitroaniline	12	U	410	12	ug/Kg	☼	10/05/16 10:34	10/06/16 22:03	1
Acenaphthene	9.9	U	410	9.9	ug/Kg	☼	10/05/16 10:34	10/06/16 22:03	1
Dibenzofuran	12	U	410	12	ug/Kg	☼	10/05/16 10:34	10/06/16 22:03	1
2,4-Dinitrotoluene	16	U	83	16	ug/Kg	☼	10/05/16 10:34	10/06/16 22:03	1
Diethyl phthalate	12	U	410	12	ug/Kg	☼	10/05/16 10:34	10/06/16 22:03	1
4-Chlorophenyl phenyl ether	12	U	410	12	ug/Kg	☼	10/05/16 10:34	10/06/16 22:03	1
Fluorene	8.9	U	410	8.9	ug/Kg	☼	10/05/16 10:34	10/06/16 22:03	1
4-Nitroaniline	16	U	410	16	ug/Kg	☼	10/05/16 10:34	10/06/16 22:03	1
N-Nitrosodiphenylamine	37	U	410	37	ug/Kg	☼	10/05/16 10:34	10/06/16 22:03	1
4-Bromophenyl phenyl ether	13	U	410	13	ug/Kg	☼	10/05/16 10:34	10/06/16 22:03	1
Hexachlorobenzene	17	U	41	17	ug/Kg	☼	10/05/16 10:34	10/06/16 22:03	1
Phenanthrene	11	U	410	11	ug/Kg	☼	10/05/16 10:34	10/06/16 22:03	1
Anthracene	39	U	410	39	ug/Kg	☼	10/05/16 10:34	10/06/16 22:03	1
Carbazole	10	U	410	10	ug/Kg	☼	10/05/16 10:34	10/06/16 22:03	1
Di-n-butyl phthalate	12	U	410	12	ug/Kg	☼	10/05/16 10:34	10/06/16 22:03	1
Fluoranthene	12	U	410	12	ug/Kg	☼	10/05/16 10:34	10/06/16 22:03	1
Pyrene	19	U	410	19	ug/Kg	☼	10/05/16 10:34	10/06/16 22:03	1
Butyl benzyl phthalate	13	U	410	13	ug/Kg	☼	10/05/16 10:34	10/06/16 22:03	1
3,3'-Dichlorobenzidine	46	U	170	46	ug/Kg	☼	10/05/16 10:34	10/06/16 22:03	1
Benzo[a]anthracene	34	U	41	34	ug/Kg	☼	10/05/16 10:34	10/06/16 22:03	1
Chrysene	11	U	410	11	ug/Kg	☼	10/05/16 10:34	10/06/16 22:03	1
Bis(2-ethylhexyl) phthalate	16	U	410	16	ug/Kg	☼	10/05/16 10:34	10/06/16 22:03	1
Di-n-octyl phthalate	21	U	410	21	ug/Kg	☼	10/05/16 10:34	10/06/16 22:03	1
Benzo[b]fluoranthene	16	U	41	16	ug/Kg	☼	10/05/16 10:34	10/06/16 22:03	1
Benzo[k]fluoranthene	18	U	41	18	ug/Kg	☼	10/05/16 10:34	10/06/16 22:03	1
Benzo[a]pyrene	12	U	41	12	ug/Kg	☼	10/05/16 10:34	10/06/16 22:03	1
Indeno[1,2,3-cd]pyrene	27	U	41	27	ug/Kg	☼	10/05/16 10:34	10/06/16 22:03	1
Dibenz(a,h)anthracene	21	U	41	21	ug/Kg	☼	10/05/16 10:34	10/06/16 22:03	1

Client Sample ID: SB4-6.0-7.0
Date Collected: 10/03/16 16:35
Date Received: 10/03/16 18:55

Lab Sample ID: 460-121319-6
Matrix: Solid
Percent Solids: 80.2

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[g,h,i]perylene	24	U	410	24	ug/Kg	☼	10/05/16 10:34	10/06/16 22:03	1
Diphenyl	35	U	410	35	ug/Kg	☼	10/05/16 10:34	10/06/16 22:03	1
Acetophenone	8.9	U	410	8.9	ug/Kg	☼	10/05/16 10:34	10/06/16 22:03	1
Benzaldehyde	31	U	410	31	ug/Kg	☼	10/05/16 10:34	10/06/16 22:03	1
Caprolactam	30	U	410	30	ug/Kg	☼	10/05/16 10:34	10/06/16 22:03	1
Atrazine	18	U	170	18	ug/Kg	☼	10/05/16 10:34	10/06/16 22:03	1
2,2'-oxybis[1-chloropropane]	17	U	410	17	ug/Kg	☼	10/05/16 10:34	10/06/16 22:03	1
1,2,4,5-Tetrachlorobenzene	31	U	410	31	ug/Kg	☼	10/05/16 10:34	10/06/16 22:03	1
2,3,4,6-Tetrachlorophenol	39	U	410	39	ug/Kg	☼	10/05/16 10:34	10/06/16 22:03	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/Kg*	☼			*10/05/16 10:34*	*10/06/16 22:03*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*65*		*37 - 94*	*10/05/16 10:34*	*10/06/16 22:03*	*1*
Phenol-d5	*65*		*32 - 91*	*10/05/16 10:34*	*10/06/16 22:03*	*1*
Terphenyl-d14	*65*		*24 - 109*	*10/05/16 10:34*	*10/06/16 22:03*	*1*
2,4,6-Tribromophenol	*82*		*10 - 103*	*10/05/16 10:34*	*10/06/16 22:03*	*1*
2-Fluorophenol	*66*		*25 - 92*	*10/05/16 10:34*	*10/06/16 22:03*	*1*
2-Fluorobiphenyl	*76*		*38 - 95*	*10/05/16 10:34*	*10/06/16 22:03*	*1*

Method: 8081B - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	1.1	U	8.3	1.1	ug/Kg	☼	10/06/16 03:19	10/06/16 14:25	1
4,4'-DDE	1.2	U	8.3	1.2	ug/Kg	☼	10/06/16 03:19	10/06/16 14:25	1
4,4'-DDT	0.86	U	8.3	0.86	ug/Kg	☼	10/06/16 03:19	10/06/16 14:25	1
Aldrin	1.0	U	8.3	1.0	ug/Kg	☼	10/06/16 03:19	10/06/16 14:25	1
alpha-BHC	0.76	U	2.5	0.76	ug/Kg	☼	10/06/16 03:19	10/06/16 14:25	1
beta-BHC	0.81	U	2.5	0.81	ug/Kg	☼	10/06/16 03:19	10/06/16 14:25	1
Chlordane (technical)	37	U	83	37	ug/Kg	☼	10/06/16 03:19	10/06/16 14:25	1
delta-BHC	0.91	U	2.5	0.91	ug/Kg	☼	10/06/16 03:19	10/06/16 14:25	1
Dieldrin	1.1	U	2.5	1.1	ug/Kg	☼	10/06/16 03:19	10/06/16 14:25	1
Endosulfan I	1.2	U	8.3	1.2	ug/Kg	☼	10/06/16 03:19	10/06/16 14:25	1
Endosulfan II	1.3	U	8.3	1.3	ug/Kg	☼	10/06/16 03:19	10/06/16 14:25	1
Endosulfan sulfate	0.97	U	8.3	0.97	ug/Kg	☼	10/06/16 03:19	10/06/16 14:25	1
Endrin	1.1	U	8.3	1.1	ug/Kg	☼	10/06/16 03:19	10/06/16 14:25	1
Endrin aldehyde	1.0	U	8.3	1.0	ug/Kg	☼	10/06/16 03:19	10/06/16 14:25	1
Endrin ketone	1.2	U	8.3	1.2	ug/Kg	☼	10/06/16 03:19	10/06/16 14:25	1
gamma-BHC (Lindane)	0.75	U	2.5	0.75	ug/Kg	☼	10/06/16 03:19	10/06/16 14:25	1
Heptachlor	1.1	U	8.3	1.1	ug/Kg	☼	10/06/16 03:19	10/06/16 14:25	1
Heptachlor epoxide	1.6	U	8.3	1.6	ug/Kg	☼	10/06/16 03:19	10/06/16 14:25	1
Methoxychlor	1.8	U	8.3	1.8	ug/Kg	☼	10/06/16 03:19	10/06/16 14:25	1
Toxaphene	24	U	83	24	ug/Kg	☼	10/06/16 03:19	10/06/16 14:25	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*92*		*50 - 150*	*10/06/16 03:19*	*10/06/16 14:25*	*1*
DCB Decachlorobiphenyl	*95*		*50 - 150*	*10/06/16 03:19*	*10/06/16 14:25*	*1*
Tetrachloro-m-xylene	*94*		*47 - 150*	*10/06/16 03:19*	*10/06/16 14:25*	*1*
Tetrachloro-m-xylene	*91*		*47 - 150*	*10/06/16 03:19*	*10/06/16 14:25*	*1*

Client Sample ID: SB4-6.0-7.0

Date Collected: 10/03/16 16:35
Date Received: 10/03/16 18:55

Lab Sample ID: 460-121319-6

Matrix: Solid
Percent Solids: 80.2

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor 1016	11	U	83	11	ug/Kg	☼	10/06/16 03:36	10/06/16 16:35	1
Aroclor 1221	11	U	83	11	ug/Kg	☼	10/06/16 03:36	10/06/16 16:35	1
Aroclor 1232	11	U	83	11	ug/Kg	☼	10/06/16 03:36	10/06/16 16:35	1
Aroclor 1242	11	U	83	11	ug/Kg	☼	10/06/16 03:36	10/06/16 16:35	1
Aroclor 1248	11	U	83	11	ug/Kg	☼	10/06/16 03:36	10/06/16 16:35	1
Aroclor 1254	11	U	83	11	ug/Kg	☼	10/06/16 03:36	10/06/16 16:35	1
Aroclor 1260	11	U	83	11	ug/Kg	☼	10/06/16 03:36	10/06/16 16:35	1
Aroclor-1262	11	U	83	11	ug/Kg	☼	10/06/16 03:36	10/06/16 16:35	1
Aroclor 1268	11	U	83	11	ug/Kg	☼	10/06/16 03:36	10/06/16 16:35	1
Polychlorinated biphenyls, Total	11	U	83	11	ug/Kg	☼	10/06/16 03:36	10/06/16 16:35	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*114*		*35 - 150*	*10/06/16 03:36*	*10/06/16 16:35*	*1*
DCB Decachlorobiphenyl	*123*		*35 - 150*	*10/06/16 03:36*	*10/06/16 16:35*	*1*

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**9000**		37.2	19.2	mg/Kg	☼	10/05/16 18:27	10/08/16 04:02	4
Antimony	1.5	U	3.7	1.5	mg/Kg	☼	10/05/16 18:27	10/08/16 04:02	4
Arsenic	**1.9**	**J**	2.8	0.91	mg/Kg	☼	10/05/16 18:27	10/08/16 04:02	4
Barium	**107**		37.2	1.3	mg/Kg	☼	10/05/16 18:27	10/08/16 04:02	4
Beryllium	**0.49**		0.37	0.32	mg/Kg	☼	10/05/16 18:27	10/08/16 04:02	4
Cadmium	0.39	U	0.74	0.39	mg/Kg	☼	10/05/16 18:27	10/08/16 04:02	4
Calcium	**1710**		930	55.1	mg/Kg	☼	10/05/16 18:27	10/08/16 04:02	4
Chromium	**26.0**		1.9	0.90	mg/Kg	☼	10/05/16 18:27	10/08/16 04:02	4
Cobalt	**5.9**	**J**	9.3	1.1	mg/Kg	☼	10/05/16 18:27	10/08/16 04:02	4
Copper	**21.0**		4.7	1.2	mg/Kg	☼	10/05/16 18:27	10/08/16 04:02	4
Iron	**19300**		27.9	21.0	mg/Kg	☼	10/05/16 18:27	10/08/16 04:02	4
Lead	**2.8**		1.9	0.73	mg/Kg	☼	10/05/16 18:27	10/08/16 04:02	4
Magnesium	**5010**		930	46.4	mg/Kg	☼	10/05/16 18:27	10/08/16 04:02	4
Manganese	**364**		2.8	0.98	mg/Kg	☼	10/05/16 18:27	10/08/16 04:02	4
Nickel	**19.2**		7.4	1.4	mg/Kg	☼	10/05/16 18:27	10/08/16 04:02	4
Potassium	**3640**		930	28.2	mg/Kg	☼	10/05/16 18:27	10/08/16 04:02	4
Selenium	1.3	U	3.7	1.3	mg/Kg	☼	10/05/16 18:27	10/08/16 04:02	4
Silver	0.33	U	1.9	0.33	mg/Kg	☼	10/05/16 18:27	10/08/16 04:02	4
Sodium	**435**	**J**	930	63.0	mg/Kg	☼	10/05/16 18:27	10/08/16 04:02	4
Thallium	1.6	U	3.7	1.6	mg/Kg	☼	10/05/16 18:27	10/08/16 04:02	4
Vanadium	**31.7**		9.3	0.93	mg/Kg	☼	10/05/16 18:27	10/08/16 04:02	4
Zinc	**60.5**		5.6	1.4	mg/Kg	☼	10/05/16 18:27	10/08/16 04:02	4

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.013	U	0.021	0.013	mg/Kg	☼	10/10/16 04:01	10/10/16 08:15	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	0.033	U	0.12	0.033	mg/Kg	☼	10/13/16 11:06	10/14/16 11:22	1

Client Sample ID: GW02

Date Collected: 10/03/16 14:30
Date Received: 10/03/16 18:55

Lab Sample ID: 460-121319-7

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	0.28	U	1.0	0.28	ug/L			10/09/16 15:19	1
1,1,2,2-Tetrachloroethane	0.19	U	1.0	0.19	ug/L			10/09/16 15:19	1
1,1,2-Trichloro-1,2,2-trifluoroethane	0.34	U	1.0	0.34	ug/L			10/09/16 15:19	1
1,1,2-Trichloroethane	0.080	U	1.0	0.080	ug/L			10/09/16 15:19	1
1,1-Dichloroethane	0.24	U	1.0	0.24	ug/L			10/09/16 15:19	1
1,1-Dichloroethene	0.34	U	1.0	0.34	ug/L			10/09/16 15:19	1
1,2,3-Trichlorobenzene	0.35	U	1.0	0.35	ug/L			10/09/16 15:19	1
1,2,4-Trichlorobenzene	0.27	U	1.0	0.27	ug/L			10/09/16 15:19	1
1,2-Dibromo-3-Chloropropane	0.23	U	1.0	0.23	ug/L			10/09/16 15:19	1
1,2-Dichlorobenzene	0.22	U	1.0	0.22	ug/L			10/09/16 15:19	1
1,2-Dichloroethane	0.25	U	1.0	0.25	ug/L			10/09/16 15:19	1
1,2-Dichloropropane	0.18	U	1.0	0.18	ug/L			10/09/16 15:19	1
1,3-Dichlorobenzene	0.33	U	1.0	0.33	ug/L			10/09/16 15:19	1
1,4-Dichlorobenzene	0.33	U	1.0	0.33	ug/L			10/09/16 15:19	1
1,4-Dioxane	8.7	U	50	8.7	ug/L			10/09/16 15:19	1
2-Butanone (MEK)	2.2	U	5.0	2.2	ug/L			10/09/16 15:19	1
2-Hexanone	0.72	U	5.0	0.72	ug/L			10/09/16 15:19	1
4-Methyl-2-pentanone (MIBK)	0.63	U	5.0	0.63	ug/L			10/09/16 15:19	1
Acetone	1.1	U	5.0	1.1	ug/L			10/09/16 15:19	1
Benzene	0.090	U	1.0	0.090	ug/L			10/09/16 15:19	1
Bromoform	0.18	U	1.0	0.18	ug/L			10/09/16 15:19	1
Bromomethane	0.18	U	1.0	0.18	ug/L			10/09/16 15:19	1
Carbon disulfide	0.22	U	1.0	0.22	ug/L			10/09/16 15:19	1
Carbon tetrachloride	0.33	U	1.0	0.33	ug/L			10/09/16 15:19	1
Chlorobenzene	0.24	U	1.0	0.24	ug/L			10/09/16 15:19	1
Chlorobromomethane	0.30	U	1.0	0.30	ug/L			10/09/16 15:19	1
Chlorodibromomethane	0.22	U	1.0	0.22	ug/L			10/09/16 15:19	1
Chloroethane	0.37	U	1.0	0.37	ug/L			10/09/16 15:19	1
Chloroform	**0.64**	**J**	1.0	0.22	ug/L			10/09/16 15:19	1
Chloromethane	0.22	U	1.0	0.22	ug/L			10/09/16 15:19	1
cis-1,2-Dichloroethene	0.26	U	1.0	0.26	ug/L			10/09/16 15:19	1
cis-1,3-Dichloropropene	0.16	U	1.0	0.16	ug/L			10/09/16 15:19	1
Cyclohexane	0.26	U	1.0	0.26	ug/L			10/09/16 15:19	1
Dichlorobromomethane	0.15	U	1.0	0.15	ug/L			10/09/16 15:19	1
Dichlorodifluoromethane	0.14	U	1.0	0.14	ug/L			10/09/16 15:19	1
Ethylbenzene	0.30	U	1.0	0.30	ug/L			10/09/16 15:19	1
Ethylene Dibromide	0.19	U	1.0	0.19	ug/L			10/09/16 15:19	1
Isopropylbenzene	0.32	U	1.0	0.32	ug/L			10/09/16 15:19	1
m&p-Xylene	0.28	U	1.0	0.28	ug/L			10/09/16 15:19	1
Methyl acetate	0.58	U	5.0	0.58	ug/L			10/09/16 15:19	1
Methyl tert-butyl ether	0.13	U	1.0	0.13	ug/L			10/09/16 15:19	1
Methylcyclohexane	0.22	U	1.0	0.22	ug/L			10/09/16 15:19	1
Methylene Chloride	0.21	U	1.0	0.21	ug/L			10/09/16 15:19	1
o-Xylene	0.32	U	1.0	0.32	ug/L			10/09/16 15:19	1
Styrene	0.17	U	1.0	0.17	ug/L			10/09/16 15:19	1
Tetrachloroethene	0.12	U	1.0	0.12	ug/L			10/09/16 15:19	1
Toluene	0.25	U	1.0	0.25	ug/L			10/09/16 15:19	1
trans-1,2-Dichloroethene	0.18	U	1.0	0.18	ug/L			10/09/16 15:19	1
trans-1,3-Dichloropropene	0.19	U	1.0	0.19	ug/L			10/09/16 15:19	1

Client Sample ID: GW02

Date Collected: 10/03/16 14:30
Date Received: 10/03/16 18:55

Lab Sample ID: 460-121319-7

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Trichloroethene	0.22	U	1.0	0.22	ug/L			10/09/16 15:19	1
Trichlorofluoromethane	0.15	U	1.0	0.15	ug/L			10/09/16 15:19	1
Vinyl chloride	0.060	U	1.0	0.060	ug/L			10/09/16 15:19	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*					*10/09/16 15:19*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*97*		*74 - 132*		*10/09/16 15:19*	*1*
4-Bromofluorobenzene	*95*		*77 - 124*		*10/09/16 15:19*	*1*
Dibromofluoromethane (Surr)	*101*		*72 - 131*		*10/09/16 15:19*	*1*
Toluene-d8 (Surr)	*96*		*80 - 120*		*10/09/16 15:19*	*1*

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4,5-Tetrachlorobenzene	0.43	U H	10	0.43	ug/L		10/13/16 07:23	10/19/16 08:49	1
2,2'-oxybis[1-chloropropane]	0.93	U H	10	0.93	ug/L		10/13/16 07:23	10/19/16 08:49	1
2,3,4,6-Tetrachlorophenol	0.69	U H	10	0.69	ug/L		10/13/16 07:23	10/19/16 08:49	1
2,4,5-Trichlorophenol	0.49	U H	10	0.49	ug/L		10/13/16 07:23	10/19/16 08:49	1
2,4,6-Trichlorophenol	0.53	U H	10	0.53	ug/L		10/13/16 07:23	10/19/16 08:49	1
2,4-Dichlorophenol	0.63	U H	10	0.63	ug/L		10/13/16 07:23	10/19/16 08:49	1
2,4-Dimethylphenol	0.91	U H	10	0.91	ug/L		10/13/16 07:23	10/19/16 08:49	1
2,4-Dinitrophenol	2.4	U H	20	2.4	ug/L		10/13/16 07:23	10/19/16 08:49	1
2,4-Dinitrotoluene	1.0	U H	2.0	1.0	ug/L		10/13/16 07:23	10/19/16 08:49	1
2,6-Dinitrotoluene	0.88	U H	2.0	0.88	ug/L		10/13/16 07:23	10/19/16 08:49	1
2-Chloronaphthalene	0.61	U H	10	0.61	ug/L		10/13/16 07:23	10/19/16 08:49	1
2-Chlorophenol	0.74	U H	10	0.74	ug/L		10/13/16 07:23	10/19/16 08:49	1
2-Methylnaphthalene	0.88	U H	10	0.88	ug/L		10/13/16 07:23	10/19/16 08:49	1
2-Methylphenol	1.3	U H	10	1.3	ug/L		10/13/16 07:23	10/19/16 08:49	1
2-Nitroaniline	0.65	U H	10	0.65	ug/L		10/13/16 07:23	10/19/16 08:49	1
2-Nitrophenol	0.59	U H	10	0.59	ug/L		10/13/16 07:23	10/19/16 08:49	1
3,3'-Dichlorobenzidine	1.0	U H	10	1.0	ug/L		10/13/16 07:23	10/19/16 08:49	1
3-Nitroaniline	0.82	U H	10	0.82	ug/L		10/13/16 07:23	10/19/16 08:49	1
4,6-Dinitro-2-methylphenol	2.0	U H	20	2.0	ug/L		10/13/16 07:23	10/19/16 08:49	1
4-Bromophenyl phenyl ether	1.0	U H	10	1.0	ug/L		10/13/16 07:23	10/19/16 08:49	1
4-Chloro-3-methylphenol	0.76	U H	10	0.76	ug/L		10/13/16 07:23	10/19/16 08:49	1
4-Chloroaniline	0.73	U H	10	0.73	ug/L		10/13/16 07:23	10/19/16 08:49	1
4-Chlorophenyl phenyl ether	0.96	U H	10	0.96	ug/L		10/13/16 07:23	10/19/16 08:49	1
4-Methylphenol	0.87	U H	10	0.87	ug/L		10/13/16 07:23	10/19/16 08:49	1
4-Nitroaniline	0.48	U H	10	0.48	ug/L		10/13/16 07:23	10/19/16 08:49	1
4-Nitrophenol	4.7	U H	20	4.7	ug/L		10/13/16 07:23	10/19/16 08:49	1
Acenaphthene	0.88	U H	10	0.88	ug/L		10/13/16 07:23	10/19/16 08:49	1
Acenaphthylene	0.65	U H	10	0.65	ug/L		10/13/16 07:23	10/19/16 08:49	1
Acetophenone	1.0	U H	10	1.0	ug/L		10/13/16 07:23	10/19/16 08:49	1
Anthracene	0.57	U H	10	0.57	ug/L		10/13/16 07:23	10/19/16 08:49	1
Atrazine	0.77	U H	2.0	0.77	ug/L		10/13/16 07:23	10/19/16 08:49	1
Benzaldehyde	0.86	U * H	10	0.86	ug/L		10/13/16 07:23	10/19/16 08:49	1
Benzo[a]anthracene	0.55	U H	1.0	0.55	ug/L		10/13/16 07:23	10/19/16 08:49	1
Benzo[a]pyrene	0.16	U H	1.0	0.16	ug/L		10/13/16 07:23	10/19/16 08:49	1
Benzo[b]fluoranthene	0.44	U H	1.0	0.44	ug/L		10/13/16 07:23	10/19/16 08:49	1

Client Sample ID: GW02

Date Collected: 10/03/16 14:30
Date Received: 10/03/16 18:55

Lab Sample ID: 460-121319-7

Matrix: Water

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[g,h,i]perylene	0.75	U H	10	0.75	ug/L		10/13/16 07:23	10/19/16 08:49	1
Benzo[k]fluoranthene	0.18	U H	1.0	0.18	ug/L		10/13/16 07:23	10/19/16 08:49	1
Bis(2-chloroethoxy)methane	0.69	U H	10	0.69	ug/L		10/13/16 07:23	10/19/16 08:49	1
Bis(2-chloroethyl)ether	0.12	U H	1.0	0.12	ug/L		10/13/16 07:23	10/19/16 08:49	1
Bis(2-ethylhexyl) phthalate	0.72	U H	2.0	0.72	ug/L		10/13/16 07:23	10/19/16 08:49	1
Butyl benzyl phthalate	0.60	U H	10	0.60	ug/L		10/13/16 07:23	10/19/16 08:49	1
Caprolactam	1.1	U H	10	1.1	ug/L		10/13/16 07:23	10/19/16 08:49	1
Carbazole	0.85	U H	10	0.85	ug/L		10/13/16 07:23	10/19/16 08:49	1
Chrysene	0.67	U H	2.0	0.67	ug/L		10/13/16 07:23	10/19/16 08:49	1
Dibenz(a,h)anthracene	0.090	U H	1.0	0.090	ug/L		10/13/16 07:23	10/19/16 08:49	1
Dibenzofuran	0.85	U H	10	0.85	ug/L		10/13/16 07:23	10/19/16 08:49	1
Diethyl phthalate	1.0	U H	10	1.0	ug/L		10/13/16 07:23	10/19/16 08:49	1
Dimethyl phthalate	0.98	U H	10	0.98	ug/L		10/13/16 07:23	10/19/16 08:49	1
Di-n-butyl phthalate	0.82	U H	10	0.82	ug/L		10/13/16 07:23	10/19/16 08:49	1
Di-n-octyl phthalate	0.69	U H	10	0.69	ug/L		10/13/16 07:23	10/19/16 08:49	1
Diphenyl	0.63	U H	10	0.63	ug/L		10/13/16 07:23	10/19/16 08:49	1
Fluoranthene	0.72	U H	10	0.72	ug/L		10/13/16 07:23	10/19/16 08:49	1
Fluorene	0.80	U H	10	0.80	ug/L		10/13/16 07:23	10/19/16 08:49	1
Hexachlorobenzene	0.47	U H	1.0	0.47	ug/L		10/13/16 07:23	10/19/16 08:49	1
Hexachlorobutadiene	0.76	U H	1.0	0.76	ug/L		10/13/16 07:23	10/19/16 08:49	1
Hexachlorocyclopentadiene	0.61	U H	10	0.61	ug/L		10/13/16 07:23	10/19/16 08:49	1
Hexachloroethane	0.090	U H	1.0	0.090	ug/L		10/13/16 07:23	10/19/16 08:49	1
Indeno[1,2,3-cd]pyrene	0.21	U H	1.0	0.21	ug/L		10/13/16 07:23	10/19/16 08:49	1
Isophorone	0.67	U H	10	0.67	ug/L		10/13/16 07:23	10/19/16 08:49	1
Naphthalene	0.80	U H	10	0.80	ug/L		10/13/16 07:23	10/19/16 08:49	1
Nitrobenzene	0.49	U H	1.0	0.49	ug/L		10/13/16 07:23	10/19/16 08:49	1
N-Nitrosodi-n-propylamine	0.83	U H	1.0	0.83	ug/L		10/13/16 07:23	10/19/16 08:49	1
N-Nitrosodiphenylamine	0.74	U H	10	0.74	ug/L		10/13/16 07:23	10/19/16 08:49	1
Pentachlorophenol	2.2	U H	20	2.2	ug/L		10/13/16 07:23	10/19/16 08:49	1
Phenanthrene	0.65	U H	10	0.65	ug/L		10/13/16 07:23	10/19/16 08:49	1
Phenol	0.41	U H	10	0.41	ug/L		10/13/16 07:23	10/19/16 08:49	1
Pyrene	0.83	U H	10	0.83	ug/L		10/13/16 07:23	10/19/16 08:49	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*	*H*	*ug/L*				*10/13/16 07:23*	*10/19/16 08:49*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol	*85*		*26 - 139*	*10/13/16 07:23*	*10/19/16 08:49*	*1*
2-Fluorobiphenyl	*87*		*45 - 107*	*10/13/16 07:23*	*10/19/16 08:49*	*1*
2-Fluorophenol	*40*		*25 - 58*	*10/13/16 07:23*	*10/19/16 08:49*	*1*
Nitrobenzene-d5	*78*		*51 - 108*	*10/13/16 07:23*	*10/19/16 08:49*	*1*
Phenol-d5	*25*		*14 - 39*	*10/13/16 07:23*	*10/19/16 08:49*	*1*
Terphenyl-d14	*78*		*40 - 148*	*10/13/16 07:23*	*10/19/16 08:49*	*1*

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor 1016	0.098	U H	0.40	0.098	ug/L		10/12/16 20:28	10/14/16 03:02	1
Aroclor 1221	0.098	U H	0.40	0.098	ug/L		10/12/16 20:28	10/14/16 03:02	1
Aroclor 1232	0.098	U H	0.40	0.098	ug/L		10/12/16 20:28	10/14/16 03:02	1
Aroclor 1242	0.098	U H	0.40	0.098	ug/L		10/12/16 20:28	10/14/16 03:02	1

Client Sample ID: GW02

Date Collected: 10/03/16 14:30
Date Received: 10/03/16 18:55

Lab Sample ID: 460-121319-7

Matrix: Water

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor 1248	0.098	U H	0.40	0.098	ug/L		10/12/16 20:28	10/14/16 03:02	1
Aroclor 1254	0.084	U H	0.40	0.084	ug/L		10/12/16 20:28	10/14/16 03:02	1
Aroclor 1260	0.084	U H	0.40	0.084	ug/L		10/12/16 20:28	10/14/16 03:02	1
Aroclor 1268	0.084	U H	0.40	0.084	ug/L		10/12/16 20:28	10/14/16 03:02	1
Aroclor-1262	0.084	U H	0.40	0.084	ug/L		10/12/16 20:28	10/14/16 03:02	1
Polychlorinated biphenyls, Total	0.098	U H	0.40	0.098	ug/L		10/12/16 20:28	10/14/16 03:02	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*116*		*10 - 150*	*10/12/16 20:28*	*10/14/16 03:02*	*1*
DCB Decachlorobiphenyl	*127*		*10 - 150*	*10/12/16 20:28*	*10/14/16 03:02*	*1*

Method: 245.1 - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.17	U	0.20	0.17	ug/L		10/05/16 12:21	10/05/16 15:58	1

Method: 6020A - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**9940**		40.0	18.2	ug/L		10/08/16 01:40	10/09/16 00:29	2
Antimony	0.62	U	2.0	0.62	ug/L		10/08/16 01:40	10/09/16 00:29	2
Arsenic	**2.6**	**J**	5.0	1.6	ug/L		10/08/16 01:40	10/12/16 23:02	5
Barium	**367**		4.0	1.2	ug/L		10/08/16 01:40	10/09/16 00:29	2
Beryllium	**0.72**	**J**	0.80	0.24	ug/L		10/08/16 01:40	10/09/16 00:29	2
Cadmium	0.71	U	2.0	0.71	ug/L		10/08/16 01:40	10/09/16 00:29	2
Calcium	**12700**		200	60.5	ug/L		10/08/16 01:40	10/09/16 00:29	2
Chromium	**21.2**		4.0	1.3	ug/L		10/08/16 01:40	10/09/16 00:29	2
Cobalt	**13.3**		4.0	1.3	ug/L		10/08/16 01:40	10/09/16 00:29	2
Copper	**22.0**		4.0	1.4	ug/L		10/08/16 01:40	10/09/16 00:29	2
Iron	**10700**		120	42.4	ug/L		10/08/16 01:40	10/09/16 00:29	2
Lead	**8.1**		1.2	0.38	ug/L		10/08/16 01:40	10/09/16 00:29	2
Magnesium	**6350**		200	63.6	ug/L		10/08/16 01:40	10/09/16 00:29	2
Manganese	**879**		8.0	2.5	ug/L		10/08/16 01:40	10/09/16 00:29	2
Nickel	**14.2**		4.0	1.4	ug/L		10/08/16 01:40	10/09/16 00:29	2
Potassium	**2770**		200	91.4	ug/L		10/08/16 01:40	10/09/16 00:29	2
Selenium	0.73	U	10.0	0.73	ug/L		10/08/16 01:40	10/09/16 00:29	2
Silver	1.3	U	2.0	1.3	ug/L		10/08/16 01:40	10/09/16 00:29	2
Sodium	**2310**		200	69.0	ug/L		10/08/16 01:40	10/09/16 00:29	2
Thallium	0.26	U	0.80	0.26	ug/L		10/08/16 01:40	10/09/16 00:29	2
Vanadium	**34.0**		4.0	1.9	ug/L		10/08/16 01:40	10/09/16 00:29	2
Zinc	**65.5**		16.0	7.0	ug/L		10/08/16 01:40	10/09/16 00:29	2

Client Sample ID: GW03

Date Collected: 10/03/16 11:00
Date Received: 10/03/16 18:55

Lab Sample ID: 460-121319-8

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	**0.30**	**J**	1.0	0.28	ug/L			10/09/16 15:41	1
1,1,2,2-Tetrachloroethane	0.19	U	1.0	0.19	ug/L			10/09/16 15:41	1
1,1,2-Trichloro-1,2,2-trifluoroethane	0.34	U	1.0	0.34	ug/L			10/09/16 15:41	1
1,1,2-Trichloroethane	0.080	U	1.0	0.080	ug/L			10/09/16 15:41	1

Client Sample ID: GW03

Date Collected: 10/03/16 11:00
Date Received: 10/03/16 18:55

Lab Sample ID: 460-121319-8

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethane	0.24	U	1.0	0.24	ug/L			10/09/16 15:41	1
1,1-Dichloroethene	0.34	U	1.0	0.34	ug/L			10/09/16 15:41	1
1,2,3-Trichlorobenzene	0.35	U	1.0	0.35	ug/L			10/09/16 15:41	1
1,2,4-Trichlorobenzene	0.27	U	1.0	0.27	ug/L			10/09/16 15:41	1
1,2-Dibromo-3-Chloropropane	0.23	U	1.0	0.23	ug/L			10/09/16 15:41	1
1,2-Dichlorobenzene	0.22	U	1.0	0.22	ug/L			10/09/16 15:41	1
1,2-Dichloroethane	0.25	U	1.0	0.25	ug/L			10/09/16 15:41	1
1,2-Dichloropropane	0.18	U	1.0	0.18	ug/L			10/09/16 15:41	1
1,3-Dichlorobenzene	0.33	U	1.0	0.33	ug/L			10/09/16 15:41	1
1,4-Dichlorobenzene	0.33	U	1.0	0.33	ug/L			10/09/16 15:41	1
1,4-Dioxane	8.7	U	50	8.7	ug/L			10/09/16 15:41	1
2-Butanone (MEK)	2.2	U	5.0	2.2	ug/L			10/09/16 15:41	1
2-Hexanone	0.72	U	5.0	0.72	ug/L			10/09/16 15:41	1
4-Methyl-2-pentanone (MIBK)	0.63	U	5.0	0.63	ug/L			10/09/16 15:41	1
Acetone	1.1	U	5.0	1.1	ug/L			10/09/16 15:41	1
Benzene	0.090	U	1.0	0.090	ug/L			10/09/16 15:41	1
Bromoform	0.18	U	1.0	0.18	ug/L			10/09/16 15:41	1
Bromomethane	0.18	U	1.0	0.18	ug/L			10/09/16 15:41	1
Carbon disulfide	0.22	U	1.0	0.22	ug/L			10/09/16 15:41	1
Carbon tetrachloride	0.33	U	1.0	0.33	ug/L			10/09/16 15:41	1
Chlorobenzene	0.24	U	1.0	0.24	ug/L			10/09/16 15:41	1
Chlorobromomethane	0.30	U	1.0	0.30	ug/L			10/09/16 15:41	1
Chlorodibromomethane	0.22	U	1.0	0.22	ug/L			10/09/16 15:41	1
Chloroethane	0.37	U	1.0	0.37	ug/L			10/09/16 15:41	1
Chloroform	**1.9**		1.0	0.22	ug/L			10/09/16 15:41	1
Chloromethane	0.22	U	1.0	0.22	ug/L			10/09/16 15:41	1
cis-1,2-Dichloroethene	0.26	U	1.0	0.26	ug/L			10/09/16 15:41	1
cis-1,3-Dichloropropene	0.16	U	1.0	0.16	ug/L			10/09/16 15:41	1
Cyclohexane	0.26	U	1.0	0.26	ug/L			10/09/16 15:41	1
Dichlorobromomethane	0.15	U	1.0	0.15	ug/L			10/09/16 15:41	1
Dichlorodifluoromethane	0.14	U	1.0	0.14	ug/L			10/09/16 15:41	1
Ethylbenzene	0.30	U	1.0	0.30	ug/L			10/09/16 15:41	1
Ethylene Dibromide	0.19	U	1.0	0.19	ug/L			10/09/16 15:41	1
Isopropylbenzene	0.32	U	1.0	0.32	ug/L			10/09/16 15:41	1
m&p-Xylene	0.28	U	1.0	0.28	ug/L			10/09/16 15:41	1
Methyl acetate	0.58	U	5.0	0.58	ug/L			10/09/16 15:41	1
Methyl tert-butyl ether	0.13	U	1.0	0.13	ug/L			10/09/16 15:41	1
Methylcyclohexane	0.22	U	1.0	0.22	ug/L			10/09/16 15:41	1
Methylene Chloride	0.21	U	1.0	0.21	ug/L			10/09/16 15:41	1
o-Xylene	0.32	U	1.0	0.32	ug/L			10/09/16 15:41	1
Styrene	0.17	U	1.0	0.17	ug/L			10/09/16 15:41	1
Tetrachloroethene	**0.20**	**J**	1.0	0.12	ug/L			10/09/16 15:41	1
Toluene	**0.67**	**J**	1.0	0.25	ug/L			10/09/16 15:41	1
trans-1,2-Dichloroethene	0.18	U	1.0	0.18	ug/L			10/09/16 15:41	1
trans-1,3-Dichloropropene	0.19	U	1.0	0.19	ug/L			10/09/16 15:41	1
Trichloroethene	0.22	U	1.0	0.22	ug/L			10/09/16 15:41	1
Trichlorofluoromethane	0.15	U	1.0	0.15	ug/L			10/09/16 15:41	1
Vinyl chloride	0.060	U	1.0	0.060	ug/L			10/09/16 15:41	1

Client Sample ID: GW03

Date Collected: 10/03/16 11:00
Date Received: 10/03/16 18:55

Lab Sample ID: 460-121319-8

Matrix: Water

Tentatively Identified Compound	Est. Result	Qualifier	Unit	D	RT	CAS No.	Prepared	Analyzed	Dil Fac
Tentatively Identified Compound	None		ug/L					10/09/16 15:41	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	97		74 - 132		10/09/16 15:41	1
4-Bromofluorobenzene	94		77 - 124		10/09/16 15:41	1
Dibromofluoromethane (Surr)	101		72 - 131		10/09/16 15:41	1
Toluene-d8 (Surr)	98		80 - 120		10/09/16 15:41	1

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4,5-Tetrachlorobenzene	0.46	U H	11	0.46	ug/L		10/13/16 07:23	10/19/16 09:10	1
2,2'-oxybis[1-chloropropane]	0.99	U H	11	0.99	ug/L		10/13/16 07:23	10/19/16 09:10	1
2,3,4,6-Tetrachlorophenol	0.73	U H	11	0.73	ug/L		10/13/16 07:23	10/19/16 09:10	1
2,4,5-Trichlorophenol	0.52	U H	11	0.52	ug/L		10/13/16 07:23	10/19/16 09:10	1
2,4,6-Trichlorophenol	0.56	U H	11	0.56	ug/L		10/13/16 07:23	10/19/16 09:10	1
2,4-Dichlorophenol	0.67	U H	11	0.67	ug/L		10/13/16 07:23	10/19/16 09:10	1
2,4-Dimethylphenol	0.97	U H	11	0.97	ug/L		10/13/16 07:23	10/19/16 09:10	1
2,4-Dinitrophenol	2.5	U H	21	2.5	ug/L		10/13/16 07:23	10/19/16 09:10	1
2,4-Dinitrotoluene	1.1	U H	2.1	1.1	ug/L		10/13/16 07:23	10/19/16 09:10	1
2,6-Dinitrotoluene	0.94	U H	2.1	0.94	ug/L		10/13/16 07:23	10/19/16 09:10	1
2-Chloronaphthalene	0.65	U H	11	0.65	ug/L		10/13/16 07:23	10/19/16 09:10	1
2-Chlorophenol	0.79	U H	11	0.79	ug/L		10/13/16 07:23	10/19/16 09:10	1
2-Methylnaphthalene	0.94	U H	11	0.94	ug/L		10/13/16 07:23	10/19/16 09:10	1
2-Methylphenol	1.4	U H	11	1.4	ug/L		10/13/16 07:23	10/19/16 09:10	1
2-Nitroaniline	0.69	U H	11	0.69	ug/L		10/13/16 07:23	10/19/16 09:10	1
2-Nitrophenol	0.63	U H	11	0.63	ug/L		10/13/16 07:23	10/19/16 09:10	1
3,3'-Dichlorobenzidine	1.1	U H	11	1.1	ug/L		10/13/16 07:23	10/19/16 09:10	1
3-Nitroaniline	0.87	U H	11	0.87	ug/L		10/13/16 07:23	10/19/16 09:10	1
4,6-Dinitro-2-methylphenol	2.1	U H	21	2.1	ug/L		10/13/16 07:23	10/19/16 09:10	1
4-Bromophenyl phenyl ether	1.1	U H	11	1.1	ug/L		10/13/16 07:23	10/19/16 09:10	1
4-Chloro-3-methylphenol	0.81	U H	11	0.81	ug/L		10/13/16 07:23	10/19/16 09:10	1
4-Chloroaniline	0.78	U H	11	0.78	ug/L		10/13/16 07:23	10/19/16 09:10	1
4-Chlorophenyl phenyl ether	1.0	U H	11	1.0	ug/L		10/13/16 07:23	10/19/16 09:10	1
4-Methylphenol	0.93	U H	11	0.93	ug/L		10/13/16 07:23	10/19/16 09:10	1
4-Nitroaniline	0.51	U H	11	0.51	ug/L		10/13/16 07:23	10/19/16 09:10	1
4-Nitrophenol	4.9	U H	21	4.9	ug/L		10/13/16 07:23	10/19/16 09:10	1
Acenaphthene	0.94	U H	11	0.94	ug/L		10/13/16 07:23	10/19/16 09:10	1
Acenaphthylene	0.69	U H	11	0.69	ug/L		10/13/16 07:23	10/19/16 09:10	1
Acetophenone	1.1	U H	11	1.1	ug/L		10/13/16 07:23	10/19/16 09:10	1
Anthracene	0.61	U H	11	0.61	ug/L		10/13/16 07:23	10/19/16 09:10	1
Atrazine	0.82	U H	2.1	0.82	ug/L		10/13/16 07:23	10/19/16 09:10	1
Benzaldehyde	0.91	U * H	11	0.91	ug/L		10/13/16 07:23	10/19/16 09:10	1
Benzo[a]anthracene	0.59	U H	1.1	0.59	ug/L		10/13/16 07:23	10/19/16 09:10	1
Benzo[a]pyrene	0.17	U H	1.1	0.17	ug/L		10/13/16 07:23	10/19/16 09:10	1
Benzo[b]fluoranthene	0.47	U H	1.1	0.47	ug/L		10/13/16 07:23	10/19/16 09:10	1
Benzo[g,h,i]perylene	0.80	U H	11	0.80	ug/L		10/13/16 07:23	10/19/16 09:10	1
Benzo[k]fluoranthene	0.19	U H	1.1	0.19	ug/L		10/13/16 07:23	10/19/16 09:10	1
Bis(2-chloroethoxy)methane	0.73	U H	11	0.73	ug/L		10/13/16 07:23	10/19/16 09:10	1
Bis(2-chloroethyl)ether	0.13	U H	1.1	0.13	ug/L		10/13/16 07:23	10/19/16 09:10	1
Bis(2-ethylhexyl) phthalate	0.77	U H	2.1	0.77	ug/L		10/13/16 07:23	10/19/16 09:10	1

Client Sample ID: GW03

Date Collected: 10/03/16 11:00
Date Received: 10/03/16 18:55

Lab Sample ID: 460-121319-8

Matrix: Water

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Butyl benzyl phthalate	0.64	U H	11	0.64	ug/L		10/13/16 07:23	10/19/16 09:10	1
Caprolactam	1.1	U H	11	1.1	ug/L		10/13/16 07:23	10/19/16 09:10	1
Carbazole	0.90	U H	11	0.90	ug/L		10/13/16 07:23	10/19/16 09:10	1
Chrysene	0.71	U H	2.1	0.71	ug/L		10/13/16 07:23	10/19/16 09:10	1
Dibenz(a,h)anthracene	0.096	U H	1.1	0.096	ug/L		10/13/16 07:23	10/19/16 09:10	1
Dibenzofuran	0.90	U H	11	0.90	ug/L		10/13/16 07:23	10/19/16 09:10	1
Diethyl phthalate	1.1	U H	11	1.1	ug/L		10/13/16 07:23	10/19/16 09:10	1
Dimethyl phthalate	1.0	U H	11	1.0	ug/L		10/13/16 07:23	10/19/16 09:10	1
Di-n-butyl phthalate	**6.0**	**J H**	11	0.87	ug/L		10/13/16 07:23	10/19/16 09:10	1
Di-n-octyl phthalate	0.73	U H	11	0.73	ug/L		10/13/16 07:23	10/19/16 09:10	1
Diphenyl	0.67	U H	11	0.67	ug/L		10/13/16 07:23	10/19/16 09:10	1
Fluoranthene	0.77	U H	11	0.77	ug/L		10/13/16 07:23	10/19/16 09:10	1
Fluorene	0.85	U H	11	0.85	ug/L		10/13/16 07:23	10/19/16 09:10	1
Hexachlorobenzene	0.50	U H	1.1	0.50	ug/L		10/13/16 07:23	10/19/16 09:10	1
Hexachlorobutadiene	0.81	U H	1.1	0.81	ug/L		10/13/16 07:23	10/19/16 09:10	1
Hexachlorocyclopentadiene	0.65	U H	11	0.65	ug/L		10/13/16 07:23	10/19/16 09:10	1
Hexachloroethane	0.096	U H	1.1	0.096	ug/L		10/13/16 07:23	10/19/16 09:10	1
Indeno[1,2,3-cd]pyrene	0.22	U H	1.1	0.22	ug/L		10/13/16 07:23	10/19/16 09:10	1
Isophorone	0.71	U H	11	0.71	ug/L		10/13/16 07:23	10/19/16 09:10	1
Naphthalene	0.85	U H	11	0.85	ug/L		10/13/16 07:23	10/19/16 09:10	1
Nitrobenzene	0.52	U H	1.1	0.52	ug/L		10/13/16 07:23	10/19/16 09:10	1
N-Nitrosodi-n-propylamine	0.88	U H	1.1	0.88	ug/L		10/13/16 07:23	10/19/16 09:10	1
N-Nitrosodiphenylamine	0.79	U H	11	0.79	ug/L		10/13/16 07:23	10/19/16 09:10	1
Pentachlorophenol	2.3	U H	21	2.3	ug/L		10/13/16 07:23	10/19/16 09:10	1
Phenanthrene	0.69	U H	11	0.69	ug/L		10/13/16 07:23	10/19/16 09:10	1
Phenol	0.44	U H	11	0.44	ug/L		10/13/16 07:23	10/19/16 09:10	1
Pyrene	0.88	U H	11	0.88	ug/L		10/13/16 07:23	10/19/16 09:10	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Unknown	*7.9*	*H J*	*ug/L*		*5.42*		*10/13/16 07:23*	*10/19/16 09:10*	*1*
Nonanoic acid	*17*	*H J N*	*ug/L*		*6.05*	*112-05-0*	*10/13/16 07:23*	*10/19/16 09:10*	*1*
Dodecanoic acid	*40*	*H J N*	*ug/L*		*7.65*	*143-07-7*	*10/13/16 07:23*	*10/19/16 09:10*	*1*
Benzenesulfonamide, N-butyl-	*11*	*H J N*	*ug/L*		*8.74*	*3622-84-2*	*10/13/16 07:23*	*10/19/16 09:10*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol	*92*		*26 - 139*	*10/13/16 07:23*	*10/19/16 09:10*	*1*
2-Fluorobiphenyl	*92*		*45 - 107*	*10/13/16 07:23*	*10/19/16 09:10*	*1*
2-Fluorophenol	*50*		*25 - 58*	*10/13/16 07:23*	*10/19/16 09:10*	*1*
Nitrobenzene-d5	*80*		*51 - 108*	*10/13/16 07:23*	*10/19/16 09:10*	*1*
Phenol-d5	*33*		*14 - 39*	*10/13/16 07:23*	*10/19/16 09:10*	*1*
Terphenyl-d14	*81*		*40 - 148*	*10/13/16 07:23*	*10/19/16 09:10*	*1*

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor 1016	0.098	U H	0.40	0.098	ug/L		10/12/16 20:28	10/14/16 03:16	1
Aroclor 1221	0.098	U H	0.40	0.098	ug/L		10/12/16 20:28	10/14/16 03:16	1
Aroclor 1232	0.098	U H	0.40	0.098	ug/L		10/12/16 20:28	10/14/16 03:16	1
Aroclor 1242	0.098	U H	0.40	0.098	ug/L		10/12/16 20:28	10/14/16 03:16	1
Aroclor 1248	0.098	U H	0.40	0.098	ug/L		10/12/16 20:28	10/14/16 03:16	1
Aroclor 1254	0.084	U H	0.40	0.084	ug/L		10/12/16 20:28	10/14/16 03:16	1

Client Sample ID: GW03

Date Collected: 10/03/16 11:00
Date Received: 10/03/16 18:55

Lab Sample ID: 460-121319-8

Matrix: Water

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor 1260	0.084	U H	0.40	0.084	ug/L		10/12/16 20:28	10/14/16 03:16	1
Aroclor 1268	0.084	U H	0.40	0.084	ug/L		10/12/16 20:28	10/14/16 03:16	1
Aroclor-1262	0.084	U H	0.40	0.084	ug/L		10/12/16 20:28	10/14/16 03:16	1
Polychlorinated biphenyls, Total	0.098	U H	0.40	0.098	ug/L		10/12/16 20:28	10/14/16 03:16	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*138*		*10 - 150*	*10/12/16 20:28*	*10/14/16 03:16*	*1*
DCB Decachlorobiphenyl	*126*		*10 - 150*	*10/12/16 20:28*	*10/14/16 03:16*	*1*

Method: 245.1 - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**1.3**		0.20	0.17	ug/L		10/05/16 12:21	10/05/16 16:00	1

Method: 6020A - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**46800**		40.0	18.2	ug/L		10/08/16 01:40	10/09/16 00:34	2
Antimony	**0.86**	**J**	2.0	0.62	ug/L		10/08/16 01:40	10/09/16 00:34	2
Arsenic	**18.4**	**J**	20.0	6.4	ug/L		10/08/16 01:40	10/09/16 00:39	20
Barium	**1590**		4.0	1.2	ug/L		10/08/16 01:40	10/09/16 00:34	2
Beryllium	**4.8**		0.80	0.24	ug/L		10/08/16 01:40	10/09/16 00:34	2
Cadmium	**12.7**		2.0	0.71	ug/L		10/08/16 01:40	10/09/16 00:34	2
Calcium	**443000**		200	60.5	ug/L		10/08/16 01:40	10/09/16 00:34	2
Chromium	**318**		4.0	1.3	ug/L		10/08/16 01:40	10/09/16 00:34	2
Cobalt	**221**		4.0	1.3	ug/L		10/08/16 01:40	10/09/16 00:34	2
Copper	**432**		4.0	1.4	ug/L		10/08/16 01:40	10/09/16 00:34	2
Iron	**38200**		120	42.4	ug/L		10/08/16 01:40	10/09/16 00:34	2
Lead	**198**		1.2	0.38	ug/L		10/08/16 01:40	10/09/16 00:34	2
Magnesium	**38100**		200	63.6	ug/L		10/08/16 01:40	10/09/16 00:34	2
Manganese	**28400**		8.0	2.5	ug/L		10/08/16 01:40	10/09/16 00:34	2
Nickel	**297**		4.0	1.4	ug/L		10/08/16 01:40	10/09/16 00:34	2
Potassium	**33200**		200	91.4	ug/L		10/08/16 01:40	10/09/16 00:34	2
Selenium	**5.5**	**J**	10.0	0.73	ug/L		10/08/16 01:40	10/09/16 00:34	2
Silver	**17.5**		2.0	1.3	ug/L		10/08/16 01:40	10/09/16 00:34	2
Sodium	**635000**		2000	690	ug/L		10/08/16 01:40	10/09/16 00:39	20
Thallium	**0.58**	**J**	0.80	0.26	ug/L		10/08/16 01:40	10/09/16 00:34	2
Vanadium	**32.3**		4.0	1.9	ug/L		10/08/16 01:40	10/09/16 00:34	2
Zinc	**775**		16.0	7.0	ug/L		10/08/16 01:40	10/09/16 00:34	2

Client Sample ID: Trip Blank

Date Collected: 10/03/16 00:00
Date Received: 10/03/16 18:55

Lab Sample ID: 460-121319-9

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	0.28	U	1.0	0.28	ug/L			10/13/16 09:57	1
1,1,2,2-Tetrachloroethane	0.19	U	1.0	0.19	ug/L			10/13/16 09:57	1
1,1,2-Trichloro-1,2,2-trifluoroethane	0.34	U	1.0	0.34	ug/L			10/13/16 09:57	1
1,1,2-Trichloroethane	0.080	U	1.0	0.080	ug/L			10/13/16 09:57	1
1,1-Dichloroethane	0.24	U	1.0	0.24	ug/L			10/13/16 09:57	1
1,1-Dichloroethene	0.34	U	1.0	0.34	ug/L			10/13/16 09:57	1

Client Sample ID: Trip Blank

Date Collected: 10/03/16 00:00
Date Received: 10/03/16 18:55

Lab Sample ID: 460-121319-9

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,3-Trichlorobenzene	0.35	U	1.0	0.35	ug/L			10/13/16 09:57	1
1,2,4-Trichlorobenzene	0.27	U	1.0	0.27	ug/L			10/13/16 09:57	1
1,2-Dibromo-3-Chloropropane	0.23	U	1.0	0.23	ug/L			10/13/16 09:57	1
1,2-Dichlorobenzene	0.22	U	1.0	0.22	ug/L			10/13/16 09:57	1
1,2-Dichloroethane	0.25	U	1.0	0.25	ug/L			10/13/16 09:57	1
1,2-Dichloropropane	0.18	U	1.0	0.18	ug/L			10/13/16 09:57	1
1,3-Dichlorobenzene	0.33	U	1.0	0.33	ug/L			10/13/16 09:57	1
1,4-Dichlorobenzene	0.33	U	1.0	0.33	ug/L			10/13/16 09:57	1
1,4-Dioxane	8.7	U	50	8.7	ug/L			10/13/16 09:57	1
2-Butanone (MEK)	2.2	U	5.0	2.2	ug/L			10/13/16 09:57	1
2-Hexanone	0.72	U	5.0	0.72	ug/L			10/13/16 09:57	1
4-Methyl-2-pentanone (MIBK)	0.63	U	5.0	0.63	ug/L			10/13/16 09:57	1
Acetone	1.1	U	5.0	1.1	ug/L			10/13/16 09:57	1
Benzene	0.090	U	1.0	0.090	ug/L			10/13/16 09:57	1
Bromoform	0.18	U	1.0	0.18	ug/L			10/13/16 09:57	1
Bromomethane	0.18	U	1.0	0.18	ug/L			10/13/16 09:57	1
Carbon disulfide	0.22	U	1.0	0.22	ug/L			10/13/16 09:57	1
Carbon tetrachloride	0.33	U	1.0	0.33	ug/L			10/13/16 09:57	1
Chlorobenzene	0.24	U	1.0	0.24	ug/L			10/13/16 09:57	1
Chlorobromomethane	0.30	U	1.0	0.30	ug/L			10/13/16 09:57	1
Chlorodibromomethane	0.22	U	1.0	0.22	ug/L			10/13/16 09:57	1
Chloroethane	0.37	U	1.0	0.37	ug/L			10/13/16 09:57	1
Chloroform	0.22	U	1.0	0.22	ug/L			10/13/16 09:57	1
Chloromethane	0.22	U	1.0	0.22	ug/L			10/13/16 09:57	1
cis-1,2-Dichloroethene	0.26	U	1.0	0.26	ug/L			10/13/16 09:57	1
cis-1,3-Dichloropropene	0.16	U	1.0	0.16	ug/L			10/13/16 09:57	1
Cyclohexane	0.26	U	1.0	0.26	ug/L			10/13/16 09:57	1
Dichlorobromomethane	0.15	U	1.0	0.15	ug/L			10/13/16 09:57	1
Dichlorodifluoromethane	0.14	U	1.0	0.14	ug/L			10/13/16 09:57	1
Ethylbenzene	0.30	U	1.0	0.30	ug/L			10/13/16 09:57	1
Ethylene Dibromide	0.19	U	1.0	0.19	ug/L			10/13/16 09:57	1
Isopropylbenzene	0.32	U	1.0	0.32	ug/L			10/13/16 09:57	1
Methyl acetate	0.58	U	5.0	0.58	ug/L			10/13/16 09:57	1
Methyl tert-butyl ether	0.13	U	1.0	0.13	ug/L			10/13/16 09:57	1
Methylcyclohexane	0.22	U	1.0	0.22	ug/L			10/13/16 09:57	1
Methylene Chloride	0.21	U	1.0	0.21	ug/L			10/13/16 09:57	1
Styrene	0.17	U	1.0	0.17	ug/L			10/13/16 09:57	1
Tetrachloroethene	0.12	U	1.0	0.12	ug/L			10/13/16 09:57	1
Toluene	0.25	U	1.0	0.25	ug/L			10/13/16 09:57	1
trans-1,2-Dichloroethene	0.18	U	1.0	0.18	ug/L			10/13/16 09:57	1
trans-1,3-Dichloropropene	0.19	U	1.0	0.19	ug/L			10/13/16 09:57	1
Trichloroethene	0.22	U	1.0	0.22	ug/L			10/13/16 09:57	1
Trichlorofluoromethane	0.15	U	1.0	0.15	ug/L			10/13/16 09:57	1
Vinyl chloride	0.060	U	1.0	0.060	ug/L			10/13/16 09:57	1
Xylenes, Total	0.28	U	2.0	0.28	ug/L			10/13/16 09:57	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*					*10/13/16 09:57*	*1*

Client Sample ID: Trip Blank

Date Collected: 10/03/16 00:00
Date Received: 10/03/16 18:55

Lab Sample ID: 460-121319-9

Matrix: Water

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	106		74 - 132		10/13/16 09:57	1
4-Bromofluorobenzene	96		77 - 124		10/13/16 09:57	1
Dibromofluoromethane (Surr)	99		72 - 131		10/13/16 09:57	1
Toluene-d8 (Surr)	110		80 - 120		10/13/16 09:57	1

Surrogate Summary

Client: SESI Consulting Engineers
Project/Site: 20 S. West St., Mt. Vernon, NY

TestAmerica Job ID: 460-121319-1

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

Matrix: Solid — **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)			
Lab Sample ID	Client Sample ID	12DCE (78-135)	BFB (67-126)	DBFM (61-149)	TOL (73-121)
460-121319-1	SB2-2.0-3.0	97	86	95	94
460-121319-2	SB2-19.0-20.0	105	139 X	104	104
460-121319-3	SB3-3.0-4.0	110	118	111	106
460-121319-4	SB3-15.0-16.0	98	103	103	101
460-121319-5	SB4-2.0-3.0	94	82	93	89
460-121319-6	SB4-6.0-7.0	93	78	93	116
LB3 460-394942/1-A	Method Blank	82	75	83	80
LB3 460-394942/1-A	Method Blank	96	101	101	100
LCS 460-395007/3	Lab Control Sample	108	101	106	109
LCS 460-395272/3	Lab Control Sample	99	100	101	101
LCSD 460-395007/4	Lab Control Sample Dup	103	109	100	102
LCSD 460-395272/4	Lab Control Sample Dup	107	108	107	106
MB 460-395007/7	Method Blank	110	99	102	107
MB 460-395272/6	Method Blank	98	104	103	99

Surrogate Legend

12DCE = 1,2-Dichloroethane-d4 (Surr)
BFB = 4-Bromofluorobenzene
DBFM = Dibromofluoromethane (Surr)
TOL = Toluene-d8 (Surr)

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

Matrix: Water — **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)			
Lab Sample ID	Client Sample ID	12DCE (74-132)	BFB (77-124)	DBFM (72-131)	TOL (80-120)
460-121319-7	GW02	97	95	101	96
460-121319-8	GW03	97	94	101	98
460-121319-9	Trip Blank	106	96	99	110
460-121459-C-1 MS	Matrix Spike	105	94	100	103
460-121459-C-1 MSD	Matrix Spike Duplicate	107	96	99	103
LCS 460-396070/3	Lab Control Sample	96	96	101	99
LCS 460-396938/4	Lab Control Sample	105	103	98	106
LCSD 460-396070/4	Lab Control Sample Dup	98	97	99	100
MB 460-396070/7	Method Blank	99	94	101	97
MB 460-396938/8	Method Blank	105	93	101	109

Surrogate Legend

12DCE = 1,2-Dichloroethane-d4 (Surr)
BFB = 4-Bromofluorobenzene
DBFM = Dibromofluoromethane (Surr)
TOL = Toluene-d8 (Surr)

Surrogate Summary

Client: SESI Consulting Engineers
Project/Site: 20 S. West St., Mt. Vernon, NY

TestAmerica Job ID: 460-121319-1

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Matrix: Solid — **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)					
		NBZ	TBP	2FP	FBP	PHL	TPH
Lab Sample ID	Client Sample ID	(37-94)	(10-103)	(25-92)	(38-95)	(32-91)	(24-109)
460-121305-A-1-A MS	Matrix Spike	61	76	59	74	59	56
460-121305-A-1-B MSD	Matrix Spike Duplicate	62	81	61	77	64	61
460-121319-1	SB2-2.0-3.0	62	67	59	74	60	63
460-121319-2	SB2-19.0-20.0	58	61	53	67	53	54
460-121319-3	SB3-3.0-4.0	65	84	64	79	64	68
460-121319-4	SB3-15.0-16.0	56	49	51	65	53	54
460-121319-5	SB4-2.0-3.0	58	60	55	67	56	58
460-121319-6	SB4-6.0-7.0	65	82	66	76	65	65
LCS 460-395061/2-A	Lab Control Sample	85	114 X	86	102 X	83	75
LCS 460-395061/3-A	Lab Control Sample	86	112 X	87	99 X	83	81
MB 460-395061/1-A	Method Blank	86	93	88	94	84	92

Surrogate Legend

NBZ = Nitrobenzene-d5
TBP = 2,4,6-Tribromophenol
2FP = 2-Fluorophenol
FBP = 2-Fluorobiphenyl
PHL = Phenol-d5
TPH = Terphenyl-d14

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Matrix: Water — **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)					
		TBP	FBP	2FP	NBZ	PHL	TPH
Lab Sample ID	Client Sample ID	(26-139)	(45-107)	(25-58)	(51-108)	(14-39)	(40-148)
460-121319-7	GW02	85	87	40	78	25	78
460-121319-8	GW03	92	92	50	80	33	81
LCS 460-396950/2-A	Lab Control Sample	95	85	45	81	30	82
LCS 460-396950/4-A	Lab Control Sample	104	80	40	73	26	77
LCSD 460-396950/3-A	Lab Control Sample Dup	100	80	46	80	32	76
LCSD 460-396950/5-A	Lab Control Sample Dup	101	87	44	77	30	79
MB 460-396950/1-A	Method Blank	90	70	38	72	28	71

Surrogate Legend

TBP = 2,4,6-Tribromophenol
FBP = 2-Fluorobiphenyl
2FP = 2-Fluorophenol
NBZ = Nitrobenzene-d5
PHL = Phenol-d5
TPH = Terphenyl-d14

Method: 8081B - Organochlorine Pesticides (GC)

Matrix: Solid — **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)			
		DCB1	DCB2	TCX1	TCX2
Lab Sample ID	Client Sample ID	(50-150)	(50-150)	(47-150)	(47-150)
460-121319-1	SB2-2.0-3.0	107	112	111	110
460-121319-2	SB2-19.0-20.0	92	94	97	92

Method: 8081B - Organochlorine Pesticides (GC) (Continued)

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)			
		DCB1	DCB2	TCX1	TCX2
Lab Sample ID	Client Sample ID	(50-150)	(50-150)	(47-150)	(47-150)
460-121319-3	SB3-3.0-4.0	105	105	117	105
460-121319-4	SB3-15.0-16.0	102	99	107	100
460-121319-5	SB4-2.0-3.0	96	99	97	95
460-121319-6	SB4-6.0-7.0	92	95	94	91
460-121360-A-6-F MS	Matrix Spike	56	63	226 p X	986 X
460-121360-A-6-G MSD	Matrix Spike Duplicate	56	63	223 p X	947 X
LCS 460-395263/2-A	Lab Control Sample	102	105	98	99
MB 460-395263/1-A	Method Blank	103	102	101	99

Surrogate Legend

DCB = DCB Decachlorobiphenyl

TCX = Tetrachloro-m-xylene

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)	
		DCB1	DCB2
Lab Sample ID	Client Sample ID	(35-150)	(35-150)
460-121319-1	SB2-2.0-3.0	107	109
460-121319-2	SB2-19.0-20.0	105	107
460-121319-3	SB3-3.0-4.0	100	103
460-121319-4	SB3-15.0-16.0	105	106
460-121319-5	SB4-2.0-3.0	112	115
460-121319-6	SB4-6.0-7.0	114	123
LCS 460-395266/2-A	Lab Control Sample	97	101
MB 460-395266/1-A	Method Blank	100	110

Surrogate Legend

DCB = DCB Decachlorobiphenyl

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)	
		DCB1	DCB2
Lab Sample ID	Client Sample ID	(10-150)	(10-150)
460-121319-7	GW02	116	127
460-121319-8	GW03	138	126
LCS 460-396887/2-A	Lab Control Sample	147	142
LCSD 460-396887/3-A	Lab Control Sample Dup	124	117
MB 460-396887/1-A	Method Blank	120	122

Surrogate Legend

DCB = DCB Decachlorobiphenyl

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

Lab Sample ID: LB3 460-394942/1-A
Matrix: Solid
Analysis Batch: 395007

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 394942

Analyte	LB3 Result	LB3 Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	0.38	U	1.0	0.38	ug/Kg		10/04/16 21:40	10/05/16 16:51	1
1,1,2,2-Tetrachloroethane	0.17	U	1.0	0.17	ug/Kg		10/04/16 21:40	10/05/16 16:51	1
1,1,2-Trichloro-1,2,2-trifluoroethane	0.44	U	1.0	0.44	ug/Kg		10/04/16 21:40	10/05/16 16:51	1
1,1,2-Trichloroethane	0.28	U	1.0	0.28	ug/Kg		10/04/16 21:40	10/05/16 16:51	1
1,1-Dichloroethane	0.34	U	1.0	0.34	ug/Kg		10/04/16 21:40	10/05/16 16:51	1
1,1-Dichloroethene	0.41	U	1.0	0.41	ug/Kg		10/04/16 21:40	10/05/16 16:51	1
1,2,3-Trichlorobenzene	0.11	U	1.0	0.11	ug/Kg		10/04/16 21:40	10/05/16 16:51	1
1,2,4-Trichlorobenzene	0.32	U	1.0	0.32	ug/Kg		10/04/16 21:40	10/05/16 16:51	1
1,2-Dibromo-3-Chloropropane	0.47	U	1.0	0.47	ug/Kg		10/04/16 21:40	10/05/16 16:51	1
1,2-Dichlorobenzene	0.14	U	1.0	0.14	ug/Kg		10/04/16 21:40	10/05/16 16:51	1
1,2-Dichloroethane	0.11	U	1.0	0.11	ug/Kg		10/04/16 21:40	10/05/16 16:51	1
1,2-Dichloropropane	0.17	U	1.0	0.17	ug/Kg		10/04/16 21:40	10/05/16 16:51	1
1,3-Dichlorobenzene	0.12	U	1.0	0.12	ug/Kg		10/04/16 21:40	10/05/16 16:51	1
1,4-Dichlorobenzene	0.13	U	1.0	0.13	ug/Kg		10/04/16 21:40	10/05/16 16:51	1
1,4-Dioxane	6.4	U	20	6.4	ug/Kg		10/04/16 21:40	10/05/16 16:51	1
2-Butanone (MEK)	0.77	U	5.0	0.77	ug/Kg		10/04/16 21:40	10/05/16 16:51	1
2-Hexanone	0.94	U	5.0	0.94	ug/Kg		10/04/16 21:40	10/05/16 16:51	1
4-Methyl-2-pentanone (MIBK)	2.2	U	5.0	2.2	ug/Kg		10/04/16 21:40	10/05/16 16:51	1
Acetone	1.1	U	5.0	1.1	ug/Kg		10/04/16 21:40	10/05/16 16:51	1
Benzene	0.20	U	1.0	0.20	ug/Kg		10/04/16 21:40	10/05/16 16:51	1
Bromoform	0.13	U	1.0	0.13	ug/Kg		10/04/16 21:40	10/05/16 16:51	1
Bromomethane	0.32	U	1.0	0.32	ug/Kg		10/04/16 21:40	10/05/16 16:51	1
Carbon disulfide	0.43	U	1.0	0.43	ug/Kg		10/04/16 21:40	10/05/16 16:51	1
Carbon tetrachloride	0.43	U	1.0	0.43	ug/Kg		10/04/16 21:40	10/05/16 16:51	1
Chlorobenzene	0.14	U	1.0	0.14	ug/Kg		10/04/16 21:40	10/05/16 16:51	1
Chlorobromomethane	0.17	U	1.0	0.17	ug/Kg		10/04/16 21:40	10/05/16 16:51	1
Chlorodibromomethane	0.15	U	1.0	0.15	ug/Kg		10/04/16 21:40	10/05/16 16:51	1
Chloroethane	0.35	U	1.0	0.35	ug/Kg		10/04/16 21:40	10/05/16 16:51	1
Chloroform	0.21	U	1.0	0.21	ug/Kg		10/04/16 21:40	10/05/16 16:51	1
Chloromethane	0.38	U	1.0	0.38	ug/Kg		10/04/16 21:40	10/05/16 16:51	1
cis-1,2-Dichloroethene	0.22	U	1.0	0.22	ug/Kg		10/04/16 21:40	10/05/16 16:51	1
cis-1,3-Dichloropropene	0.15	U	1.0	0.15	ug/Kg		10/04/16 21:40	10/05/16 16:51	1
Cyclohexane	0.46	U	1.0	0.46	ug/Kg		10/04/16 21:40	10/05/16 16:51	1
Dichlorobromomethane	0.38	U	1.0	0.38	ug/Kg		10/04/16 21:40	10/05/16 16:51	1
Dichlorodifluoromethane	0.32	U	1.0	0.32	ug/Kg		10/04/16 21:40	10/05/16 16:51	1
Ethylbenzene	0.18	U	1.0	0.18	ug/Kg		10/04/16 21:40	10/05/16 16:51	1
Ethylene Dibromide	0.12	U	1.0	0.12	ug/Kg		10/04/16 21:40	10/05/16 16:51	1
Isopropylbenzene	0.17	U	1.0	0.17	ug/Kg		10/04/16 21:40	10/05/16 16:51	1
Methyl acetate	0.90	U	5.0	0.90	ug/Kg		10/04/16 21:40	10/05/16 16:51	1
Methyl tert-butyl ether	0.17	U	1.0	0.17	ug/Kg		10/04/16 21:40	10/05/16 16:51	1
Methylcyclohexane	0.50	U	1.0	0.50	ug/Kg		10/04/16 21:40	10/05/16 16:51	1
Methylene Chloride	0.32	U	1.0	0.32	ug/Kg		10/04/16 21:40	10/05/16 16:51	1
Styrene	0.15	U	1.0	0.15	ug/Kg		10/04/16 21:40	10/05/16 16:51	1
Tetrachloroethene	0.28	U	1.0	0.28	ug/Kg		10/04/16 21:40	10/05/16 16:51	1
Toluene	0.19	U	1.0	0.19	ug/Kg		10/04/16 21:40	10/05/16 16:51	1
trans-1,2-Dichloroethene	0.39	U	1.0	0.39	ug/Kg		10/04/16 21:40	10/05/16 16:51	1
trans-1,3-Dichloropropene	0.10	U	1.0	0.10	ug/Kg		10/04/16 21:40	10/05/16 16:51	1
Trichloroethene	0.26	U	1.0	0.26	ug/Kg		10/04/16 21:40	10/05/16 16:51	1

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

Lab Sample ID: LB3 460-394942/1-A
Matrix: Solid
Analysis Batch: 395007

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 394942

Analyte	LB3 Result	LB3 Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Trichlorofluoromethane	0.34	U	1.0	0.34	ug/Kg		10/04/16 21:40	10/05/16 16:51	1
Vinyl chloride	0.39	U	1.0	0.39	ug/Kg		10/04/16 21:40	10/05/16 16:51	1
Xylenes, Total	0.11	U	2.0	0.11	ug/Kg		10/04/16 21:40	10/05/16 16:51	1

Tentatively Identified Compound	*LB3 Est. Result*	*LB3 Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/Kg*				*10/04/16 21:40*	*10/05/16 16:51*	*1*

Surrogate	*LB3 %Recovery*	*LB3 Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*82*		*78 - 135*	*10/04/16 21:40*	*10/05/16 16:51*	*1*
4-Bromofluorobenzene	*75*		*67 - 126*	*10/04/16 21:40*	*10/05/16 16:51*	*1*
Dibromofluoromethane (Surr)	*83*		*61 - 149*	*10/04/16 21:40*	*10/05/16 16:51*	*1*
Toluene-d8 (Surr)	*80*		*73 - 121*	*10/04/16 21:40*	*10/05/16 16:51*	*1*

Lab Sample ID: LB3 460-394942/1-A
Matrix: Solid
Analysis Batch: 395272

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 394942

Analyte	LB3 Result	LB3 Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	0.38	U	1.0	0.38	ug/Kg		10/04/16 21:40	10/06/16 10:46	1
1,1,2,2-Tetrachloroethane	0.17	U	1.0	0.17	ug/Kg		10/04/16 21:40	10/06/16 10:46	1
1,1,2-Trichloro-1,2,2-trifluoroethane	0.44	U	1.0	0.44	ug/Kg		10/04/16 21:40	10/06/16 10:46	1
1,1,2-Trichloroethane	0.28	U	1.0	0.28	ug/Kg		10/04/16 21:40	10/06/16 10:46	1
1,1-Dichloroethane	0.34	U	1.0	0.34	ug/Kg		10/04/16 21:40	10/06/16 10:46	1
1,1-Dichloroethene	0.41	U	1.0	0.41	ug/Kg		10/04/16 21:40	10/06/16 10:46	1
1,2,3-Trichlorobenzene	0.11	U	1.0	0.11	ug/Kg		10/04/16 21:40	10/06/16 10:46	1
1,2,4-Trichlorobenzene	0.32	U	1.0	0.32	ug/Kg		10/04/16 21:40	10/06/16 10:46	1
1,2-Dibromo-3-Chloropropane	0.47	U	1.0	0.47	ug/Kg		10/04/16 21:40	10/06/16 10:46	1
1,2-Dichlorobenzene	0.14	U	1.0	0.14	ug/Kg		10/04/16 21:40	10/06/16 10:46	1
1,2-Dichloroethane	0.11	U	1.0	0.11	ug/Kg		10/04/16 21:40	10/06/16 10:46	1
1,2-Dichloropropane	0.17	U	1.0	0.17	ug/Kg		10/04/16 21:40	10/06/16 10:46	1
1,3-Dichlorobenzene	0.12	U	1.0	0.12	ug/Kg		10/04/16 21:40	10/06/16 10:46	1
1,4-Dichlorobenzene	0.13	U	1.0	0.13	ug/Kg		10/04/16 21:40	10/06/16 10:46	1
1,4-Dioxane	6.4	U	20	6.4	ug/Kg		10/04/16 21:40	10/06/16 10:46	1
2-Butanone (MEK)	0.77	U	5.0	0.77	ug/Kg		10/04/16 21:40	10/06/16 10:46	1
2-Hexanone	0.94	U	5.0	0.94	ug/Kg		10/04/16 21:40	10/06/16 10:46	1
4-Methyl-2-pentanone (MIBK)	2.2	U	5.0	2.2	ug/Kg		10/04/16 21:40	10/06/16 10:46	1
Acetone	1.1	U	5.0	1.1	ug/Kg		10/04/16 21:40	10/06/16 10:46	1
Benzene	0.20	U	1.0	0.20	ug/Kg		10/04/16 21:40	10/06/16 10:46	1
Bromoform	0.13	U	1.0	0.13	ug/Kg		10/04/16 21:40	10/06/16 10:46	1
Bromomethane	0.32	U	1.0	0.32	ug/Kg		10/04/16 21:40	10/06/16 10:46	1
Carbon disulfide	0.43	U	1.0	0.43	ug/Kg		10/04/16 21:40	10/06/16 10:46	1
Carbon tetrachloride	0.43	U	1.0	0.43	ug/Kg		10/04/16 21:40	10/06/16 10:46	1
Chlorobenzene	0.14	U	1.0	0.14	ug/Kg		10/04/16 21:40	10/06/16 10:46	1
Chlorobromomethane	0.17	U	1.0	0.17	ug/Kg		10/04/16 21:40	10/06/16 10:46	1
Chlorodibromomethane	0.15	U	1.0	0.15	ug/Kg		10/04/16 21:40	10/06/16 10:46	1
Chloroethane	0.35	U	1.0	0.35	ug/Kg		10/04/16 21:40	10/06/16 10:46	1
Chloroform	0.21	U	1.0	0.21	ug/Kg		10/04/16 21:40	10/06/16 10:46	1

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

Lab Sample ID: LB3 460-394942/1-A
Matrix: Solid
Analysis Batch: 395272

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 394942

Analyte	LB3 Result	LB3 Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloromethane	0.38	U	1.0	0.38	ug/Kg		10/04/16 21:40	10/06/16 10:46	1
cis-1,2-Dichloroethene	0.22	U	1.0	0.22	ug/Kg		10/04/16 21:40	10/06/16 10:46	1
cis-1,3-Dichloropropene	0.15	U	1.0	0.15	ug/Kg		10/04/16 21:40	10/06/16 10:46	1
Cyclohexane	0.46	U	1.0	0.46	ug/Kg		10/04/16 21:40	10/06/16 10:46	1
Dichlorobromomethane	0.38	U	1.0	0.38	ug/Kg		10/04/16 21:40	10/06/16 10:46	1
Dichlorodifluoromethane	0.32	U	1.0	0.32	ug/Kg		10/04/16 21:40	10/06/16 10:46	1
Ethylbenzene	0.18	U	1.0	0.18	ug/Kg		10/04/16 21:40	10/06/16 10:46	1
Ethylene Dibromide	0.12	U	1.0	0.12	ug/Kg		10/04/16 21:40	10/06/16 10:46	1
Isopropylbenzene	0.17	U	1.0	0.17	ug/Kg		10/04/16 21:40	10/06/16 10:46	1
Methyl acetate	0.90	U	5.0	0.90	ug/Kg		10/04/16 21:40	10/06/16 10:46	1
Methyl tert-butyl ether	0.17	U	1.0	0.17	ug/Kg		10/04/16 21:40	10/06/16 10:46	1
Methylcyclohexane	0.50	U	1.0	0.50	ug/Kg		10/04/16 21:40	10/06/16 10:46	1
Methylene Chloride	0.32	U	1.0	0.32	ug/Kg		10/04/16 21:40	10/06/16 10:46	1
Styrene	0.15	U	1.0	0.15	ug/Kg		10/04/16 21:40	10/06/16 10:46	1
Tetrachloroethene	0.28	U	1.0	0.28	ug/Kg		10/04/16 21:40	10/06/16 10:46	1
Toluene	0.19	U	1.0	0.19	ug/Kg		10/04/16 21:40	10/06/16 10:46	1
trans-1,2-Dichloroethene	0.39	U	1.0	0.39	ug/Kg		10/04/16 21:40	10/06/16 10:46	1
trans-1,3-Dichloropropene	0.10	U	1.0	0.10	ug/Kg		10/04/16 21:40	10/06/16 10:46	1
Trichloroethene	0.26	U	1.0	0.26	ug/Kg		10/04/16 21:40	10/06/16 10:46	1
Trichlorofluoromethane	0.34	U	1.0	0.34	ug/Kg		10/04/16 21:40	10/06/16 10:46	1
Vinyl chloride	0.39	U	1.0	0.39	ug/Kg		10/04/16 21:40	10/06/16 10:46	1
Xylenes, Total	0.11	U	2.0	0.11	ug/Kg		10/04/16 21:40	10/06/16 10:46	1

Tentatively Identified Compound	*LB3 Est. Result*	*LB3 Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/Kg*				*10/04/16 21:40*	*10/06/16 10:46*	*1*

Surrogate	*LB3 %Recovery*	*LB3 Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*96*		*78 - 135*	*10/04/16 21:40*	*10/06/16 10:46*	*1*
4-Bromofluorobenzene	*101*		*67 - 126*	*10/04/16 21:40*	*10/06/16 10:46*	*1*
Dibromofluoromethane (Surr)	*101*		*61 - 149*	*10/04/16 21:40*	*10/06/16 10:46*	*1*
Toluene-d8 (Surr)	*100*		*73 - 121*	*10/04/16 21:40*	*10/06/16 10:46*	*1*

Lab Sample ID: MB 460-395007/7
Matrix: Solid
Analysis Batch: 395007

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	0.38	U	1.0	0.38	ug/Kg			10/05/16 10:42	1
1,1,2,2-Tetrachloroethane	0.17	U	1.0	0.17	ug/Kg			10/05/16 10:42	1
1,1,2-Trichloro-1,2,2-trifluoroethane	0.44	U	1.0	0.44	ug/Kg			10/05/16 10:42	1
1,1,2-Trichloroethane	0.28	U	1.0	0.28	ug/Kg			10/05/16 10:42	1
1,1-Dichloroethane	0.34	U	1.0	0.34	ug/Kg			10/05/16 10:42	1
1,1-Dichloroethene	0.41	U	1.0	0.41	ug/Kg			10/05/16 10:42	1
1,2,3-Trichlorobenzene	0.11	U	1.0	0.11	ug/Kg			10/05/16 10:42	1
1,2,4-Trichlorobenzene	0.32	U	1.0	0.32	ug/Kg			10/05/16 10:42	1
1,2-Dibromo-3-Chloropropane	0.47	U	1.0	0.47	ug/Kg			10/05/16 10:42	1
1,2-Dichlorobenzene	0.14	U	1.0	0.14	ug/Kg			10/05/16 10:42	1

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

Lab Sample ID: MB 460-395007/7
Matrix: Solid
Analysis Batch: 395007

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane	0.11	U	1.0	0.11	ug/Kg			10/05/16 10:42	1
1,2-Dichloropropane	0.17	U	1.0	0.17	ug/Kg			10/05/16 10:42	1
1,3-Dichlorobenzene	0.12	U	1.0	0.12	ug/Kg			10/05/16 10:42	1
1,4-Dichlorobenzene	0.13	U	1.0	0.13	ug/Kg			10/05/16 10:42	1
1,4-Dioxane	6.4	U	20	6.4	ug/Kg			10/05/16 10:42	1
2-Butanone (MEK)	0.77	U	5.0	0.77	ug/Kg			10/05/16 10:42	1
2-Hexanone	0.94	U	5.0	0.94	ug/Kg			10/05/16 10:42	1
4-Methyl-2-pentanone (MIBK)	2.2	U	5.0	2.2	ug/Kg			10/05/16 10:42	1
Acetone	1.1	U	5.0	1.1	ug/Kg			10/05/16 10:42	1
Benzene	0.20	U	1.0	0.20	ug/Kg			10/05/16 10:42	1
Bromoform	0.13	U	1.0	0.13	ug/Kg			10/05/16 10:42	1
Bromomethane	0.32	U	1.0	0.32	ug/Kg			10/05/16 10:42	1
Carbon disulfide	0.43	U	1.0	0.43	ug/Kg			10/05/16 10:42	1
Carbon tetrachloride	0.43	U	1.0	0.43	ug/Kg			10/05/16 10:42	1
Chlorobenzene	0.14	U	1.0	0.14	ug/Kg			10/05/16 10:42	1
Chlorobromomethane	0.17	U	1.0	0.17	ug/Kg			10/05/16 10:42	1
Chlorodibromomethane	0.15	U	1.0	0.15	ug/Kg			10/05/16 10:42	1
Chloroethane	0.35	U	1.0	0.35	ug/Kg			10/05/16 10:42	1
Chloroform	0.21	U	1.0	0.21	ug/Kg			10/05/16 10:42	1
Chloromethane	0.38	U	1.0	0.38	ug/Kg			10/05/16 10:42	1
cis-1,2-Dichloroethene	0.22	U	1.0	0.22	ug/Kg			10/05/16 10:42	1
cis-1,3-Dichloropropene	0.15	U	1.0	0.15	ug/Kg			10/05/16 10:42	1
Cyclohexane	0.46	U	1.0	0.46	ug/Kg			10/05/16 10:42	1
Dichlorobromomethane	0.38	U	1.0	0.38	ug/Kg			10/05/16 10:42	1
Dichlorodifluoromethane	0.32	U	1.0	0.32	ug/Kg			10/05/16 10:42	1
Ethylbenzene	0.18	U	1.0	0.18	ug/Kg			10/05/16 10:42	1
Ethylene Dibromide	0.12	U	1.0	0.12	ug/Kg			10/05/16 10:42	1
Isopropylbenzene	0.17	U	1.0	0.17	ug/Kg			10/05/16 10:42	1
Methyl acetate	0.90	U	5.0	0.90	ug/Kg			10/05/16 10:42	1
Methyl tert-butyl ether	0.17	U	1.0	0.17	ug/Kg			10/05/16 10:42	1
Methylcyclohexane	0.50	U	1.0	0.50	ug/Kg			10/05/16 10:42	1
Methylene Chloride	0.32	U	1.0	0.32	ug/Kg			10/05/16 10:42	1
Styrene	0.15	U	1.0	0.15	ug/Kg			10/05/16 10:42	1
Tetrachloroethene	0.28	U	1.0	0.28	ug/Kg			10/05/16 10:42	1
Toluene	0.19	U	1.0	0.19	ug/Kg			10/05/16 10:42	1
trans-1,2-Dichloroethene	0.39	U	1.0	0.39	ug/Kg			10/05/16 10:42	1
trans-1,3-Dichloropropene	0.10	U	1.0	0.10	ug/Kg			10/05/16 10:42	1
Trichloroethene	0.26	U	1.0	0.26	ug/Kg			10/05/16 10:42	1
Trichlorofluoromethane	0.34	U	1.0	0.34	ug/Kg			10/05/16 10:42	1
Vinyl chloride	0.39	U	1.0	0.39	ug/Kg			10/05/16 10:42	1
Xylenes, Total	0.11	U	2.0	0.11	ug/Kg			10/05/16 10:42	1

Tentatively Identified Compound	*MB Est. Result*	*MB Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/Kg*					*10/05/16 10:42*	*1*

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*110*		*78 - 135*		*10/05/16 10:42*	*1*

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

Lab Sample ID: MB 460-395007/7
Matrix: Solid
Analysis Batch: 395007

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

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	*99*		*67 - 126*		*10/05/16 10:42*	*1*
Dibromofluoromethane (Surr)	*102*		*61 - 149*		*10/05/16 10:42*	*1*
Toluene-d8 (Surr)	*107*		*73 - 121*		*10/05/16 10:42*	*1*

Lab Sample ID: LCS 460-395007/3
Matrix: Solid
Analysis Batch: 395007

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1-Trichloroethane	20.0	18.5		ug/Kg		92	80 - 125
1,1,2,2-Tetrachloroethane	20.0	19.3		ug/Kg		96	72 - 131
1,1,2-Trichloro-1,2,2-trifluoroethane	20.0	19.0		ug/Kg		95	78 - 132
1,1,2-Trichloroethane	20.0	19.0		ug/Kg		95	76 - 124
1,1-Dichloroethane	20.0	18.4		ug/Kg		92	80 - 124
1,1-Dichloroethene	20.0	18.3		ug/Kg		92	79 - 132
1,2,3-Trichlorobenzene	20.0	18.8		ug/Kg		94	75 - 123
1,2,4-Trichlorobenzene	20.0	18.8		ug/Kg		94	74 - 124
1,2-Dibromo-3-Chloropropane	20.0	20.3		ug/Kg		101	65 - 129
1,2-Dichlorobenzene	20.0	19.0		ug/Kg		95	80 - 121
1,2-Dichloroethane	20.0	18.5		ug/Kg		92	68 - 120
1,2-Dichloropropane	20.0	18.6		ug/Kg		93	77 - 124
1,3-Dichlorobenzene	20.0	19.0		ug/Kg		95	79 - 124
1,4-Dichlorobenzene	20.0	18.4		ug/Kg		92	79 - 121
1,4-Dioxane	400	396		ug/Kg		99	67 - 150
2-Butanone (MEK)	100	99.1		ug/Kg		99	61 - 140
2-Hexanone	100	107		ug/Kg		107	78 - 120
4-Methyl-2-pentanone (MIBK)	100	107		ug/Kg		107	80 - 120
Acetone	100	108		ug/Kg		108	75 - 120
Benzene	20.0	18.6		ug/Kg		93	75 - 127
Bromoform	20.0	18.8		ug/Kg		94	19 - 150
Bromomethane	20.0	16.1		ug/Kg		81	59 - 136
Carbon disulfide	20.0	18.0		ug/Kg		90	74 - 130
Carbon tetrachloride	20.0	18.0		ug/Kg		90	77 - 138
Chlorobenzene	20.0	18.2		ug/Kg		91	80 - 120
Chlorobromomethane	20.0	18.6		ug/Kg		93	80 - 125
Chlorodibromomethane	20.0	18.8		ug/Kg		94	67 - 143
Chloroethane	20.0	14.7		ug/Kg		74	50 - 139
Chloroform	20.0	18.2		ug/Kg		91	80 - 122
Chloromethane	20.0	13.5		ug/Kg		67	66 - 128
cis-1,2-Dichloroethene	20.0	17.7		ug/Kg		88	80 - 123
cis-1,3-Dichloropropene	20.0	19.4		ug/Kg		97	75 - 124
Cyclohexane	20.0	19.0		ug/Kg		95	67 - 135
Dichlorobromomethane	20.0	17.8		ug/Kg		89	76 - 129
Dichlorodifluoromethane	20.0	21.8		ug/Kg		109	72 - 127
Ethylbenzene	20.0	18.8		ug/Kg		94	79 - 124
Ethylene Dibromide	20.0	19.0		ug/Kg		95	80 - 122
Isopropylbenzene	20.0	19.1		ug/Kg		96	80 - 125

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

Lab Sample ID: LCS 460-395007/3
Matrix: Solid
Analysis Batch: 395007

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Methyl acetate	100	103		ug/Kg		103	73 - 123
Methyl tert-butyl ether	20.0	19.6		ug/Kg		98	80 - 120
Methylcyclohexane	20.0	18.8		ug/Kg		94	71 - 137
Methylene Chloride	20.0	18.4		ug/Kg		92	79 - 128
Styrene	20.0	19.4		ug/Kg		97	78 - 123
Tetrachloroethene	20.0	18.1		ug/Kg		90	73 - 130
Toluene	20.0	18.1		ug/Kg		91	75 - 122
trans-1,2-Dichloroethene	20.0	18.2		ug/Kg		91	80 - 129
trans-1,3-Dichloropropene	20.0	18.8		ug/Kg		94	72 - 121
Trichloroethene	20.0	18.4		ug/Kg		92	79 - 122
Trichlorofluoromethane	20.0	19.3		ug/Kg		97	68 - 136
Vinyl chloride	20.0	14.5		ug/Kg		72	70 - 134
Xylenes, Total	40.0	37.9		ug/Kg		95	79 - 122

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*108*		*78 - 135*
4-Bromofluorobenzene	*101*		*67 - 126*
Dibromofluoromethane (Surr)	*106*		*61 - 149*
Toluene-d8 (Surr)	*109*		*73 - 121*

Lab Sample ID: LCSD 460-395007/4
Matrix: Solid
Analysis Batch: 395007

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

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1,1-Trichloroethane	20.0	17.7		ug/Kg		89	80 - 125	4	30
1,1,2,2-Tetrachloroethane	20.0	18.9		ug/Kg		95	72 - 131	2	30
1,1,2-Trichloro-1,2,2-trifluoroethane	20.0	18.6		ug/Kg		93	78 - 132	2	30
1,1,2-Trichloroethane	20.0	17.3		ug/Kg		86	76 - 124	10	30
1,1-Dichloroethane	20.0	17.3		ug/Kg		86	80 - 124	6	30
1,1-Dichloroethene	20.0	17.8		ug/Kg		89	79 - 132	3	30
1,2,3-Trichlorobenzene	20.0	19.9		ug/Kg		99	75 - 123	6	30
1,2,4-Trichlorobenzene	20.0	19.4		ug/Kg		97	74 - 124	3	30
1,2-Dibromo-3-Chloropropane	20.0	16.2		ug/Kg		81	65 - 129	22	30
1,2-Dichlorobenzene	20.0	17.9		ug/Kg		89	80 - 121	6	30
1,2-Dichloroethane	20.0	17.5		ug/Kg		88	68 - 120	5	30
1,2-Dichloropropane	20.0	17.7		ug/Kg		88	77 - 124	5	30
1,3-Dichlorobenzene	20.0	17.6		ug/Kg		88	79 - 124	8	30
1,4-Dichlorobenzene	20.0	17.1		ug/Kg		86	79 - 121	7	30
1,4-Dioxane	400	381		ug/Kg		95	67 - 150	4	30
2-Butanone (MEK)	100	87.5		ug/Kg		87	61 - 140	12	30
2-Hexanone	100	91.1		ug/Kg		91	78 - 120	16	30
4-Methyl-2-pentanone (MIBK)	100	92.1		ug/Kg		92	80 - 120	15	30
Acetone	100	96.7		ug/Kg		97	75 - 120	11	30
Benzene	20.0	17.2		ug/Kg		86	75 - 127	8	30
Bromoform	20.0	16.1		ug/Kg		81	19 - 150	15	30
Bromomethane	20.0	15.4		ug/Kg		77	59 - 136	5	30

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

Lab Sample ID: LCSD 460-395007/4
Matrix: Solid
Analysis Batch: 395007

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

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Carbon disulfide	20.0	17.0		ug/Kg		85	74 - 130	6	30
Carbon tetrachloride	20.0	17.3		ug/Kg		87	77 - 138	4	30
Chlorobenzene	20.0	16.7		ug/Kg		84	80 - 120	8	30
Chlorobromomethane	20.0	17.0		ug/Kg		85	80 - 125	9	30
Chlorodibromomethane	20.0	16.5		ug/Kg		83	67 - 143	13	30
Chloroethane	20.0	13.6		ug/Kg		68	50 - 139	8	30
Chloroform	20.0	17.2		ug/Kg		86	80 - 122	6	30
Chloromethane	20.0	12.1	*	ug/Kg		60	66 - 128	11	30
cis-1,2-Dichloroethene	20.0	16.8		ug/Kg		84	80 - 123	5	30
cis-1,3-Dichloropropene	20.0	17.7		ug/Kg		88	75 - 124	10	30
Cyclohexane	20.0	18.6		ug/Kg		93	67 - 135	2	30
Dichlorobromomethane	20.0	16.8		ug/Kg		84	76 - 129	6	30
Dichlorodifluoromethane	20.0	18.6		ug/Kg		93	72 - 127	16	30
Ethylbenzene	20.0	17.3		ug/Kg		86	79 - 124	9	30
Ethylene Dibromide	20.0	17.3		ug/Kg		86	80 - 122	9	30
Isopropylbenzene	20.0	17.9		ug/Kg		89	80 - 125	7	30
Methyl acetate	100	95.2		ug/Kg		95	73 - 123	8	30
Methyl tert-butyl ether	20.0	19.7		ug/Kg		99	80 - 120	1	30
Methylcyclohexane	20.0	18.2		ug/Kg		91	71 - 137	3	30
Methylene Chloride	20.0	17.4		ug/Kg		87	79 - 128	6	30
Styrene	20.0	17.6		ug/Kg		88	78 - 123	10	30
Tetrachloroethene	20.0	16.8		ug/Kg		84	73 - 130	7	30
Toluene	20.0	16.9		ug/Kg		85	75 - 122	7	30
trans-1,2-Dichloroethene	20.0	17.1		ug/Kg		86	80 - 129	6	30
trans-1,3-Dichloropropene	20.0	17.3		ug/Kg		86	72 - 121	8	30
Trichloroethene	20.0	17.3		ug/Kg		86	79 - 122	6	30
Trichlorofluoromethane	20.0	15.3		ug/Kg		77	68 - 136	23	30
Vinyl chloride	20.0	13.0	*	ug/Kg		65	70 - 134	11	30
Xylenes, Total	40.0	35.3		ug/Kg		88	79 - 122	7	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*103*		*78 - 135*
4-Bromofluorobenzene	*109*		*67 - 126*
Dibromofluoromethane (Surr)	*100*		*61 - 149*
Toluene-d8 (Surr)	*102*		*73 - 121*

Lab Sample ID: MB 460-395272/6
Matrix: Solid
Analysis Batch: 395272

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	0.38	U	1.0	0.38	ug/Kg			10/06/16 10:20	1
1,1,2,2-Tetrachloroethane	0.17	U	1.0	0.17	ug/Kg			10/06/16 10:20	1
1,1,2-Trichloro-1,2,2-trifluoroethane	0.44	U	1.0	0.44	ug/Kg			10/06/16 10:20	1
1,1,2-Trichloroethane	0.28	U	1.0	0.28	ug/Kg			10/06/16 10:20	1
1,1-Dichloroethane	0.34	U	1.0	0.34	ug/Kg			10/06/16 10:20	1
1,1-Dichloroethene	0.41	U	1.0	0.41	ug/Kg			10/06/16 10:20	1
1,2,3-Trichlorobenzene	0.11	U	1.0	0.11	ug/Kg			10/06/16 10:20	1

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

Lab Sample ID: MB 460-395272/6
Matrix: Solid
Analysis Batch: 395272

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	0.32	U	1.0	0.32	ug/Kg			10/06/16 10:20	1
1,2-Dibromo-3-Chloropropane	0.47	U	1.0	0.47	ug/Kg			10/06/16 10:20	1
1,2-Dichlorobenzene	0.14	U	1.0	0.14	ug/Kg			10/06/16 10:20	1
1,2-Dichloroethane	0.11	U	1.0	0.11	ug/Kg			10/06/16 10:20	1
1,2-Dichloropropane	0.17	U	1.0	0.17	ug/Kg			10/06/16 10:20	1
1,3-Dichlorobenzene	0.12	U	1.0	0.12	ug/Kg			10/06/16 10:20	1
1,4-Dichlorobenzene	0.13	U	1.0	0.13	ug/Kg			10/06/16 10:20	1
1,4-Dioxane	6.4	U	20	6.4	ug/Kg			10/06/16 10:20	1
2-Butanone (MEK)	0.77	U	5.0	0.77	ug/Kg			10/06/16 10:20	1
2-Hexanone	0.94	U	5.0	0.94	ug/Kg			10/06/16 10:20	1
4-Methyl-2-pentanone (MIBK)	2.2	U	5.0	2.2	ug/Kg			10/06/16 10:20	1
Acetone	1.1	U	5.0	1.1	ug/Kg			10/06/16 10:20	1
Benzene	0.20	U	1.0	0.20	ug/Kg			10/06/16 10:20	1
Bromoform	0.13	U	1.0	0.13	ug/Kg			10/06/16 10:20	1
Bromomethane	0.32	U	1.0	0.32	ug/Kg			10/06/16 10:20	1
Carbon disulfide	0.43	U	1.0	0.43	ug/Kg			10/06/16 10:20	1
Carbon tetrachloride	0.43	U	1.0	0.43	ug/Kg			10/06/16 10:20	1
Chlorobenzene	0.14	U	1.0	0.14	ug/Kg			10/06/16 10:20	1
Chlorobromomethane	0.17	U	1.0	0.17	ug/Kg			10/06/16 10:20	1
Chlorodibromomethane	0.15	U	1.0	0.15	ug/Kg			10/06/16 10:20	1
Chloroethane	0.35	U	1.0	0.35	ug/Kg			10/06/16 10:20	1
Chloroform	0.21	U	1.0	0.21	ug/Kg			10/06/16 10:20	1
Chloromethane	0.38	U	1.0	0.38	ug/Kg			10/06/16 10:20	1
cis-1,2-Dichloroethene	0.22	U	1.0	0.22	ug/Kg			10/06/16 10:20	1
cis-1,3-Dichloropropene	0.15	U	1.0	0.15	ug/Kg			10/06/16 10:20	1
Cyclohexane	0.46	U	1.0	0.46	ug/Kg			10/06/16 10:20	1
Dichlorobromomethane	0.38	U	1.0	0.38	ug/Kg			10/06/16 10:20	1
Dichlorodifluoromethane	0.32	U	1.0	0.32	ug/Kg			10/06/16 10:20	1
Ethylbenzene	0.18	U	1.0	0.18	ug/Kg			10/06/16 10:20	1
Ethylene Dibromide	0.12	U	1.0	0.12	ug/Kg			10/06/16 10:20	1
Isopropylbenzene	0.17	U	1.0	0.17	ug/Kg			10/06/16 10:20	1
Methyl acetate	0.90	U	5.0	0.90	ug/Kg			10/06/16 10:20	1
Methyl tert-butyl ether	0.17	U	1.0	0.17	ug/Kg			10/06/16 10:20	1
Methylcyclohexane	0.50	U	1.0	0.50	ug/Kg			10/06/16 10:20	1
Methylene Chloride	0.32	U	1.0	0.32	ug/Kg			10/06/16 10:20	1
Styrene	0.15	U	1.0	0.15	ug/Kg			10/06/16 10:20	1
Tetrachloroethene	0.28	U	1.0	0.28	ug/Kg			10/06/16 10:20	1
Toluene	0.19	U	1.0	0.19	ug/Kg			10/06/16 10:20	1
trans-1,2-Dichloroethene	0.39	U	1.0	0.39	ug/Kg			10/06/16 10:20	1
trans-1,3-Dichloropropene	0.10	U	1.0	0.10	ug/Kg			10/06/16 10:20	1
Trichloroethene	0.26	U	1.0	0.26	ug/Kg			10/06/16 10:20	1
Trichlorofluoromethane	0.34	U	1.0	0.34	ug/Kg			10/06/16 10:20	1
Vinyl chloride	0.39	U	1.0	0.39	ug/Kg			10/06/16 10:20	1
Xylenes, Total	0.11	U	2.0	0.11	ug/Kg			10/06/16 10:20	1

Tentatively Identified Compound	*Est. Result*	*MB Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/Kg*					*10/06/16 10:20*	*1*

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

Lab Sample ID: MB 460-395272/6
Matrix: Solid
Analysis Batch: 395272

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

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	98		78 - 135		10/06/16 10:20	1
4-Bromofluorobenzene	104		67 - 126		10/06/16 10:20	1
Dibromofluoromethane (Surr)	103		61 - 149		10/06/16 10:20	1
Toluene-d8 (Surr)	99		73 - 121		10/06/16 10:20	1

Lab Sample ID: LCS 460-395272/3
Matrix: Solid
Analysis Batch: 395272

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1-Trichloroethane	20.0	20.5		ug/Kg		103	80 - 125
1,1,2,2-Tetrachloroethane	20.0	21.1		ug/Kg		105	72 - 131
1,1,2-Trichloro-1,2,2-trifluoroethane	20.0	22.3		ug/Kg		111	78 - 132
1,1,2-Trichloroethane	20.0	20.3		ug/Kg		102	76 - 124
1,1-Dichloroethane	20.0	20.9		ug/Kg		104	80 - 124
1,1-Dichloroethene	20.0	21.8		ug/Kg		109	79 - 132
1,2,3-Trichlorobenzene	20.0	20.7		ug/Kg		103	75 - 123
1,2,4-Trichlorobenzene	20.0	21.4		ug/Kg		107	74 - 124
1,2-Dibromo-3-Chloropropane	20.0	19.9		ug/Kg		99	65 - 129
1,2-Dichlorobenzene	20.0	21.2		ug/Kg		106	80 - 121
1,2-Dichloroethane	20.0	20.2		ug/Kg		101	68 - 120
1,2-Dichloropropane	20.0	20.0		ug/Kg		100	77 - 124
1,3-Dichlorobenzene	20.0	21.4		ug/Kg		107	79 - 124
1,4-Dichlorobenzene	20.0	21.4		ug/Kg		107	79 - 121
1,4-Dioxane	400	376		ug/Kg		94	67 - 150
2-Butanone (MEK)	100	100		ug/Kg		100	61 - 140
2-Hexanone	100	99.5		ug/Kg		100	78 - 120
4-Methyl-2-pentanone (MIBK)	100	104		ug/Kg		104	80 - 120
Acetone	100	105		ug/Kg		105	75 - 120
Benzene	20.0	21.6		ug/Kg		108	75 - 127
Bromoform	20.0	18.7		ug/Kg		93	19 - 150
Bromomethane	20.0	23.2		ug/Kg		116	59 - 136
Carbon disulfide	20.0	21.1		ug/Kg		106	74 - 130
Carbon tetrachloride	20.0	21.1		ug/Kg		105	77 - 138
Chlorobenzene	20.0	20.9		ug/Kg		104	80 - 120
Chlorobromomethane	20.0	20.5		ug/Kg		102	80 - 125
Chlorodibromomethane	20.0	19.6		ug/Kg		98	67 - 143
Chloroethane	20.0	22.6		ug/Kg		113	50 - 139
Chloroform	20.0	20.6		ug/Kg		103	80 - 122
Chloromethane	20.0	21.8		ug/Kg		109	66 - 128
cis-1,2-Dichloroethene	20.0	21.2		ug/Kg		106	80 - 123
cis-1,3-Dichloropropene	20.0	19.6		ug/Kg		98	75 - 124
Cyclohexane	20.0	21.3		ug/Kg		106	67 - 135
Dichlorobromomethane	20.0	19.6		ug/Kg		98	76 - 129
Dichlorodifluoromethane	20.0	19.9		ug/Kg		100	72 - 127
Ethylbenzene	20.0	21.9		ug/Kg		109	79 - 124
Ethylene Dibromide	20.0	19.9		ug/Kg		100	80 - 122

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

Lab Sample ID: LCS 460-395272/3
Matrix: Solid
Analysis Batch: 395272

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Isopropylbenzene	20.0	22.8		ug/Kg		114	80 - 125
Methyl acetate	100	109		ug/Kg		109	73 - 123
Methyl tert-butyl ether	20.0	20.2		ug/Kg		101	80 - 120
Methylcyclohexane	20.0	21.7		ug/Kg		108	71 - 137
Methylene Chloride	20.0	19.6		ug/Kg		98	79 - 128
Styrene	20.0	20.9		ug/Kg		105	78 - 123
Tetrachloroethene	20.0	21.4		ug/Kg		107	73 - 130
Toluene	20.0	21.3		ug/Kg		106	75 - 122
trans-1,2-Dichloroethene	20.0	21.5		ug/Kg		108	80 - 129
trans-1,3-Dichloropropene	20.0	19.3		ug/Kg		97	72 - 121
Trichloroethene	20.0	21.2		ug/Kg		106	79 - 122
Trichlorofluoromethane	20.0	21.2		ug/Kg		106	68 - 136
Vinyl chloride	20.0	22.6		ug/Kg		113	70 - 134
Xylenes, Total	40.0	43.9		ug/Kg		110	79 - 122

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*99*		*78 - 135*
4-Bromofluorobenzene	*100*		*67 - 126*
Dibromofluoromethane (Surr)	*101*		*61 - 149*
Toluene-d8 (Surr)	*101*		*73 - 121*

Lab Sample ID: LCSD 460-395272/4
Matrix: Solid
Analysis Batch: 395272

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

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1,1-Trichloroethane	20.0	21.4		ug/Kg		107	80 - 125	4	30
1,1,2,2-Tetrachloroethane	20.0	21.5		ug/Kg		108	72 - 131	2	30
1,1,2-Trichloro-1,2,2-trifluoroethane	20.0	23.5		ug/Kg		117	78 - 132	5	30
1,1,2-Trichloroethane	20.0	20.9		ug/Kg		105	76 - 124	3	30
1,1-Dichloroethane	20.0	21.8		ug/Kg		109	80 - 124	4	30
1,1-Dichloroethene	20.0	22.4		ug/Kg		112	79 - 132	3	30
1,2,3-Trichlorobenzene	20.0	20.6		ug/Kg		103	75 - 123	0	30
1,2,4-Trichlorobenzene	20.0	21.6		ug/Kg		108	74 - 124	1	30
1,2-Dibromo-3-Chloropropane	20.0	19.3		ug/Kg		96	65 - 129	3	30
1,2-Dichlorobenzene	20.0	21.7		ug/Kg		109	80 - 121	2	30
1,2-Dichloroethane	20.0	20.8		ug/Kg		104	68 - 120	3	30
1,2-Dichloropropane	20.0	21.5		ug/Kg		107	77 - 124	7	30
1,3-Dichlorobenzene	20.0	22.8		ug/Kg		114	79 - 124	6	30
1,4-Dichlorobenzene	20.0	22.4		ug/Kg		112	79 - 121	5	30
1,4-Dioxane	400	416		ug/Kg		104	67 - 150	10	30
2-Butanone (MEK)	100	104		ug/Kg		104	61 - 140	4	30
2-Hexanone	100	105		ug/Kg		105	78 - 120	6	30
4-Methyl-2-pentanone (MIBK)	100	109		ug/Kg		109	80 - 120	4	30
Acetone	100	109		ug/Kg		109	75 - 120	3	30
Benzene	20.0	22.4		ug/Kg		112	75 - 127	3	30
Bromoform	20.0	19.3		ug/Kg		96	19 - 150	3	30

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

Lab Sample ID: LCSD 460-395272/4
Matrix: Solid
Analysis Batch: 395272

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

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Bromomethane	20.0	23.6		ug/Kg		118	59 - 136	2	30
Carbon disulfide	20.0	21.9		ug/Kg		110	74 - 130	4	30
Carbon tetrachloride	20.0	21.9		ug/Kg		110	77 - 138	4	30
Chlorobenzene	20.0	21.9		ug/Kg		109	80 - 120	5	30
Chlorobromomethane	20.0	21.1		ug/Kg		105	80 - 125	3	30
Chlorodibromomethane	20.0	20.1		ug/Kg		100	67 - 143	2	30
Chloroethane	20.0	22.4		ug/Kg		112	50 - 139	1	30
Chloroform	20.0	21.5		ug/Kg		108	80 - 122	4	30
Chloromethane	20.0	21.4		ug/Kg		107	66 - 128	2	30
cis-1,2-Dichloroethene	20.0	21.4		ug/Kg		107	80 - 123	1	30
cis-1,3-Dichloropropene	20.0	20.5		ug/Kg		103	75 - 124	5	30
Cyclohexane	20.0	22.1		ug/Kg		111	67 - 135	4	30
Dichlorobromomethane	20.0	20.6		ug/Kg		103	76 - 129	5	30
Dichlorodifluoromethane	20.0	19.9		ug/Kg		99	72 - 127	0	30
Ethylbenzene	20.0	22.9		ug/Kg		114	79 - 124	5	30
Ethylene Dibromide	20.0	20.8		ug/Kg		104	80 - 122	4	30
Isopropylbenzene	20.0	23.7		ug/Kg		119	80 - 125	4	30
Methyl acetate	100	109		ug/Kg		109	73 - 123	0	30
Methyl tert-butyl ether	20.0	20.6		ug/Kg		103	80 - 120	2	30
Methylcyclohexane	20.0	22.6		ug/Kg		113	71 - 137	4	30
Methylene Chloride	20.0	19.5		ug/Kg		97	79 - 128	1	30
Styrene	20.0	22.0		ug/Kg		110	78 - 123	5	30
Tetrachloroethene	20.0	22.4		ug/Kg		112	73 - 130	5	30
Toluene	20.0	22.3		ug/Kg		112	75 - 122	5	30
trans-1,2-Dichloroethene	20.0	22.7		ug/Kg		113	80 - 129	5	30
trans-1,3-Dichloropropene	20.0	20.3		ug/Kg		101	72 - 121	5	30
Trichloroethene	20.0	21.9		ug/Kg		110	79 - 122	3	30
Trichlorofluoromethane	20.0	21.9		ug/Kg		110	68 - 136	3	30
Vinyl chloride	20.0	22.7		ug/Kg		113	70 - 134	0	30
Xylenes, Total	40.0	46.5		ug/Kg		116	79 - 122	6	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*107*		*78 - 135*
4-Bromofluorobenzene	*108*		*67 - 126*
Dibromofluoromethane (Surr)	*107*		*61 - 149*
Toluene-d8 (Surr)	*106*		*73 - 121*

Lab Sample ID: MB 460-396070/7
Matrix: Water
Analysis Batch: 396070

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	0.28	U	1.0	0.28	ug/L			10/09/16 13:57	1
1,1,2,2-Tetrachloroethane	0.19	U	1.0	0.19	ug/L			10/09/16 13:57	1
1,1,2-Trichloro-1,2,2-trifluoroethane	0.34	U	1.0	0.34	ug/L			10/09/16 13:57	1
1,1,2-Trichloroethane	0.080	U	1.0	0.080	ug/L			10/09/16 13:57	1
1,1-Dichloroethane	0.24	U	1.0	0.24	ug/L			10/09/16 13:57	1
1,1-Dichloroethene	0.34	U	1.0	0.34	ug/L			10/09/16 13:57	1

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

Lab Sample ID: MB 460-396070/7
Matrix: Water
Analysis Batch: 396070

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,3-Trichlorobenzene	0.35	U	1.0	0.35	ug/L			10/09/16 13:57	1
1,2,4-Trichlorobenzene	0.27	U	1.0	0.27	ug/L			10/09/16 13:57	1
1,2-Dibromo-3-Chloropropane	0.23	U	1.0	0.23	ug/L			10/09/16 13:57	1
1,2-Dichlorobenzene	0.22	U	1.0	0.22	ug/L			10/09/16 13:57	1
1,2-Dichloroethane	0.25	U	1.0	0.25	ug/L			10/09/16 13:57	1
1,2-Dichloropropane	0.18	U	1.0	0.18	ug/L			10/09/16 13:57	1
1,3-Dichlorobenzene	0.33	U	1.0	0.33	ug/L			10/09/16 13:57	1
1,4-Dichlorobenzene	0.33	U	1.0	0.33	ug/L			10/09/16 13:57	1
1,4-Dioxane	8.7	U	50	8.7	ug/L			10/09/16 13:57	1
2-Butanone (MEK)	2.2	U	5.0	2.2	ug/L			10/09/16 13:57	1
2-Hexanone	0.72	U	5.0	0.72	ug/L			10/09/16 13:57	1
4-Methyl-2-pentanone (MIBK)	0.63	U	5.0	0.63	ug/L			10/09/16 13:57	1
Acetone	1.1	U	5.0	1.1	ug/L			10/09/16 13:57	1
Benzene	0.090	U	1.0	0.090	ug/L			10/09/16 13:57	1
Bromoform	0.18	U	1.0	0.18	ug/L			10/09/16 13:57	1
Bromomethane	0.18	U	1.0	0.18	ug/L			10/09/16 13:57	1
Carbon disulfide	0.22	U	1.0	0.22	ug/L			10/09/16 13:57	1
Carbon tetrachloride	0.33	U	1.0	0.33	ug/L			10/09/16 13:57	1
Chlorobenzene	0.24	U	1.0	0.24	ug/L			10/09/16 13:57	1
Chlorobromomethane	0.30	U	1.0	0.30	ug/L			10/09/16 13:57	1
Chlorodibromomethane	0.22	U	1.0	0.22	ug/L			10/09/16 13:57	1
Chloroethane	0.37	U	1.0	0.37	ug/L			10/09/16 13:57	1
Chloroform	0.22	U	1.0	0.22	ug/L			10/09/16 13:57	1
Chloromethane	0.22	U	1.0	0.22	ug/L			10/09/16 13:57	1
cis-1,2-Dichloroethene	0.26	U	1.0	0.26	ug/L			10/09/16 13:57	1
cis-1,3-Dichloropropene	0.16	U	1.0	0.16	ug/L			10/09/16 13:57	1
Cyclohexane	0.26	U	1.0	0.26	ug/L			10/09/16 13:57	1
Dichlorobromomethane	0.15	U	1.0	0.15	ug/L			10/09/16 13:57	1
Dichlorodifluoromethane	0.14	U	1.0	0.14	ug/L			10/09/16 13:57	1
Ethylbenzene	0.30	U	1.0	0.30	ug/L			10/09/16 13:57	1
Ethylene Dibromide	0.19	U	1.0	0.19	ug/L			10/09/16 13:57	1
Isopropylbenzene	0.32	U	1.0	0.32	ug/L			10/09/16 13:57	1
m&p-Xylene	0.28	U	1.0	0.28	ug/L			10/09/16 13:57	1
Methyl acetate	0.58	U	5.0	0.58	ug/L			10/09/16 13:57	1
Methyl tert-butyl ether	0.13	U	1.0	0.13	ug/L			10/09/16 13:57	1
Methylcyclohexane	0.22	U	1.0	0.22	ug/L			10/09/16 13:57	1
Methylene Chloride	0.21	U	1.0	0.21	ug/L			10/09/16 13:57	1
o-Xylene	0.32	U	1.0	0.32	ug/L			10/09/16 13:57	1
Styrene	0.17	U	1.0	0.17	ug/L			10/09/16 13:57	1
Tetrachloroethene	0.12	U	1.0	0.12	ug/L			10/09/16 13:57	1
Toluene	0.25	U	1.0	0.25	ug/L			10/09/16 13:57	1
trans-1,2-Dichloroethene	0.18	U	1.0	0.18	ug/L			10/09/16 13:57	1
trans-1,3-Dichloropropene	0.19	U	1.0	0.19	ug/L			10/09/16 13:57	1
Trichloroethene	0.22	U	1.0	0.22	ug/L			10/09/16 13:57	1
Trichlorofluoromethane	0.15	U	1.0	0.15	ug/L			10/09/16 13:57	1
Vinyl chloride	0.060	U	1.0	0.060	ug/L			10/09/16 13:57	1

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

Lab Sample ID: MB 460-396070/7
Matrix: Water
Analysis Batch: 396070

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

Tentatively Identified Compound	MB Est. Result	MB Qualifier	Unit	D	RT	CAS No.	Prepared	Analyzed	Dil Fac
Tentatively Identified Compound	None		ug/L					10/09/16 13:57	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	99		74 - 132		10/09/16 13:57	1
4-Bromofluorobenzene	94		77 - 124		10/09/16 13:57	1
Dibromofluoromethane (Surr)	101		72 - 131		10/09/16 13:57	1
Toluene-d8 (Surr)	97		80 - 120		10/09/16 13:57	1

Lab Sample ID: LCS 460-396070/3
Matrix: Water
Analysis Batch: 396070

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1-Trichloroethane	20.0	17.7		ug/L		88	75 - 125
1,1,2,2-Tetrachloroethane	20.0	19.5		ug/L		97	74 - 120
1,1,2-Trichloro-1,2,2-trifluoroethane	20.0	20.4		ug/L		102	59 - 150
1,1,2-Trichloroethane	20.0	19.2		ug/L		96	78 - 120
1,1-Dichloroethane	20.0	19.6		ug/L		98	77 - 123
1,1-Dichloroethene	20.0	18.6		ug/L		93	74 - 123
1,2,3-Trichlorobenzene	20.0	22.3		ug/L		111	78 - 131
1,2,4-Trichlorobenzene	20.0	20.2		ug/L		101	80 - 124
1,2-Dibromo-3-Chloropropane	20.0	17.5		ug/L		87	55 - 134
1,2-Dichlorobenzene	20.0	20.7		ug/L		104	80 - 120
1,2-Dichloroethane	20.0	18.3		ug/L		91	76 - 121
1,2-Dichloropropane	20.0	18.1		ug/L		91	77 - 123
1,3-Dichlorobenzene	20.0	20.6		ug/L		103	80 - 120
1,4-Dichlorobenzene	20.0	20.5		ug/L		102	80 - 120
1,4-Dioxane	400	445		ug/L		111	10 - 150
2-Butanone (MEK)	100	103		ug/L		103	64 - 120
2-Hexanone	100	94.9		ug/L		95	71 - 125
4-Methyl-2-pentanone (MIBK)	100	96.6		ug/L		97	78 - 124
Acetone	100	119		ug/L		119	39 - 150
Benzene	20.0	19.7		ug/L		99	77 - 121
Bromoform	20.0	14.8		ug/L		74	53 - 120
Bromomethane	20.0	15.1		ug/L		76	10 - 150
Carbon disulfide	20.0	17.3		ug/L		86	69 - 133
Carbon tetrachloride	20.0	17.7		ug/L		89	70 - 132
Chlorobenzene	20.0	19.5		ug/L		97	80 - 120
Chlorobromomethane	20.0	20.0		ug/L		100	77 - 127
Chlorodibromomethane	20.0	16.9		ug/L		84	73 - 120
Chloroethane	20.0	13.1		ug/L		65	52 - 150
Chloroform	20.0	19.6		ug/L		98	80 - 120
Chloromethane	20.0	14.1		ug/L		70	56 - 131
cis-1,2-Dichloroethene	20.0	19.8		ug/L		99	80 - 120
cis-1,3-Dichloropropene	20.0	17.0		ug/L		85	77 - 120
Cyclohexane	20.0	20.4		ug/L		102	56 - 150
Dichlorobromomethane	20.0	17.2		ug/L		86	76 - 120

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

Lab Sample ID: LCS 460-396070/3
Matrix: Water
Analysis Batch: 396070

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Dichlorodifluoromethane	20.0	16.1		ug/L		80	50 - 131
Ethylbenzene	20.0	19.5		ug/L		98	80 - 120
Ethylene Dibromide	20.0	18.7		ug/L		94	80 - 120
Isopropylbenzene	20.0	18.9		ug/L		94	80 - 123
m&p-Xylene	20.0	19.1		ug/L		95	80 - 120
Methyl acetate	100	95.4		ug/L		95	66 - 144
Methyl tert-butyl ether	20.0	18.1		ug/L		91	79 - 122
Methylcyclohexane	20.0	18.8		ug/L		94	61 - 145
Methylene Chloride	20.0	19.7		ug/L		98	77 - 123
o-Xylene	20.0	19.2		ug/L		96	80 - 120
Styrene	20.0	18.7		ug/L		93	80 - 120
Tetrachloroethene	20.0	19.4		ug/L		97	78 - 122
Toluene	20.0	19.3		ug/L		96	80 - 120
trans-1,2-Dichloroethene	20.0	19.5		ug/L		97	79 - 120
trans-1,3-Dichloropropene	20.0	16.3		ug/L		82	76 - 120
Trichloroethene	20.0	19.2		ug/L		96	77 - 120
Trichlorofluoromethane	20.0	15.9		ug/L		80	71 - 143
Vinyl chloride	20.0	15.6		ug/L		78	62 - 138

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*96*		*74 - 132*
4-Bromofluorobenzene	*96*		*77 - 124*
Dibromofluoromethane (Surr)	*101*		*72 - 131*
Toluene-d8 (Surr)	*99*		*80 - 120*

Lab Sample ID: LCSD 460-396070/4
Matrix: Water
Analysis Batch: 396070

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

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1,1-Trichloroethane	20.0	17.2		ug/L		86	75 - 125	3	30
1,1,2,2-Tetrachloroethane	20.0	18.5		ug/L		93	74 - 120	5	30
1,1,2-Trichloro-1,2,2-trifluoroethane	20.0	20.3		ug/L		101	59 - 150	1	30
1,1,2-Trichloroethane	20.0	18.8		ug/L		94	78 - 120	2	30
1,1-Dichloroethane	20.0	18.9		ug/L		95	77 - 123	4	30
1,1-Dichloroethene	20.0	17.8		ug/L		89	74 - 123	5	30
1,2,3-Trichlorobenzene	20.0	22.2		ug/L		111	78 - 131	0	30
1,2,4-Trichlorobenzene	20.0	19.6		ug/L		98	80 - 124	3	30
1,2-Dibromo-3-Chloropropane	20.0	17.1		ug/L		86	55 - 134	2	30
1,2-Dichlorobenzene	20.0	19.6		ug/L		98	80 - 120	6	30
1,2-Dichloroethane	20.0	18.2		ug/L		91	76 - 121	1	30
1,2-Dichloropropane	20.0	17.7		ug/L		89	77 - 123	2	30
1,3-Dichlorobenzene	20.0	19.4		ug/L		97	80 - 120	6	30
1,4-Dichlorobenzene	20.0	19.7		ug/L		99	80 - 120	4	30
1,4-Dioxane	400	417		ug/L		104	10 - 150	7	30
2-Butanone (MEK)	100	100		ug/L		100	64 - 120	3	30
2-Hexanone	100	89.4		ug/L		89	71 - 125	6	30

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

Lab Sample ID: LCSD 460-396070/4
Matrix: Water
Analysis Batch: 396070

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

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
4-Methyl-2-pentanone (MIBK)	100	90.3		ug/L		90	78 - 124	7	30
Acetone	100	109		ug/L		109	39 - 150	9	30
Benzene	20.0	19.5		ug/L		98	77 - 121	1	30
Bromoform	20.0	15.1		ug/L		75	53 - 120	2	30
Bromomethane	20.0	14.4		ug/L		72	10 - 150	5	30
Carbon disulfide	20.0	16.2		ug/L		81	69 - 133	7	30
Carbon tetrachloride	20.0	17.1		ug/L		86	70 - 132	4	30
Chlorobenzene	20.0	19.1		ug/L		95	80 - 120	2	30
Chlorobromomethane	20.0	19.4		ug/L		97	77 - 127	3	30
Chlorodibromomethane	20.0	16.6		ug/L		83	73 - 120	2	30
Chloroethane	20.0	12.3		ug/L		61	52 - 150	6	30
Chloroform	20.0	18.8		ug/L		94	80 - 120	4	30
Chloromethane	20.0	13.4		ug/L		67	56 - 131	5	30
cis-1,2-Dichloroethene	20.0	19.4		ug/L		97	80 - 120	2	30
cis-1,3-Dichloropropene	20.0	17.4		ug/L		87	77 - 120	3	30
Cyclohexane	20.0	19.2		ug/L		96	56 - 150	6	30
Dichlorobromomethane	20.0	16.7		ug/L		83	76 - 120	3	30
Dichlorodifluoromethane	20.0	14.3		ug/L		71	50 - 131	12	30
Ethylbenzene	20.0	18.9		ug/L		95	80 - 120	3	30
Ethylene Dibromide	20.0	18.8		ug/L		94	80 - 120	0	30
Isopropylbenzene	20.0	18.0		ug/L		90	80 - 123	4	30
m&p-Xylene	20.0	18.6		ug/L		93	80 - 120	2	30
Methyl acetate	100	93.1		ug/L		93	66 - 144	2	30
Methyl tert-butyl ether	20.0	17.7		ug/L		89	79 - 122	2	30
Methylcyclohexane	20.0	17.3		ug/L		86	61 - 145	8	30
Methylene Chloride	20.0	19.3		ug/L		96	77 - 123	2	30
o-Xylene	20.0	18.4		ug/L		92	80 - 120	4	30
Styrene	20.0	18.2		ug/L		91	80 - 120	3	30
Tetrachloroethene	20.0	19.3		ug/L		96	78 - 122	1	30
Toluene	20.0	18.9		ug/L		94	80 - 120	2	30
trans-1,2-Dichloroethene	20.0	18.8		ug/L		94	79 - 120	3	30
trans-1,3-Dichloropropene	20.0	16.1		ug/L		80	76 - 120	1	30
Trichloroethene	20.0	18.4		ug/L		92	77 - 120	4	30
Trichlorofluoromethane	20.0	14.6		ug/L		73	71 - 143	8	30
Vinyl chloride	20.0	14.7		ug/L		74	62 - 138	6	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*98*		*74 - 132*
4-Bromofluorobenzene	*97*		*77 - 124*
Dibromofluoromethane (Surr)	*99*		*72 - 131*
Toluene-d8 (Surr)	*100*		*80 - 120*

Lab Sample ID: MB 460-396938/8
Matrix: Water
Analysis Batch: 396938

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	0.28	U	1.0	0.28	ug/L			10/13/16 09:34	1

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

Lab Sample ID: MB 460-396938/8
Matrix: Water
Analysis Batch: 396938

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2,2-Tetrachloroethane	0.19	U	1.0	0.19	ug/L			10/13/16 09:34	1
1,1,2-Trichloro-1,2,2-trifluoroethane	0.34	U	1.0	0.34	ug/L			10/13/16 09:34	1
1,1,2-Trichloroethane	0.080	U	1.0	0.080	ug/L			10/13/16 09:34	1
1,1-Dichloroethane	0.24	U	1.0	0.24	ug/L			10/13/16 09:34	1
1,1-Dichloroethene	0.34	U	1.0	0.34	ug/L			10/13/16 09:34	1
1,2,3-Trichlorobenzene	0.35	U	1.0	0.35	ug/L			10/13/16 09:34	1
1,2,4-Trichlorobenzene	0.27	U	1.0	0.27	ug/L			10/13/16 09:34	1
1,2-Dibromo-3-Chloropropane	0.23	U	1.0	0.23	ug/L			10/13/16 09:34	1
1,2-Dichlorobenzene	0.22	U	1.0	0.22	ug/L			10/13/16 09:34	1
1,2-Dichloroethane	0.25	U	1.0	0.25	ug/L			10/13/16 09:34	1
1,2-Dichloropropane	0.18	U	1.0	0.18	ug/L			10/13/16 09:34	1
1,3-Dichlorobenzene	0.33	U	1.0	0.33	ug/L			10/13/16 09:34	1
1,4-Dichlorobenzene	0.33	U	1.0	0.33	ug/L			10/13/16 09:34	1
1,4-Dioxane	8.7	U	50	8.7	ug/L			10/13/16 09:34	1
2-Butanone (MEK)	2.2	U	5.0	2.2	ug/L			10/13/16 09:34	1
2-Hexanone	0.72	U	5.0	0.72	ug/L			10/13/16 09:34	1
4-Methyl-2-pentanone (MIBK)	0.63	U	5.0	0.63	ug/L			10/13/16 09:34	1
Acetone	1.1	U	5.0	1.1	ug/L			10/13/16 09:34	1
Benzene	0.090	U	1.0	0.090	ug/L			10/13/16 09:34	1
Bromoform	0.18	U	1.0	0.18	ug/L			10/13/16 09:34	1
Bromomethane	0.18	U	1.0	0.18	ug/L			10/13/16 09:34	1
Carbon disulfide	0.22	U	1.0	0.22	ug/L			10/13/16 09:34	1
Carbon tetrachloride	0.33	U	1.0	0.33	ug/L			10/13/16 09:34	1
Chlorobenzene	0.24	U	1.0	0.24	ug/L			10/13/16 09:34	1
Chlorobromomethane	0.30	U	1.0	0.30	ug/L			10/13/16 09:34	1
Chlorodibromomethane	0.22	U	1.0	0.22	ug/L			10/13/16 09:34	1
Chloroethane	0.37	U	1.0	0.37	ug/L			10/13/16 09:34	1
Chloroform	0.22	U	1.0	0.22	ug/L			10/13/16 09:34	1
Chloromethane	0.22	U	1.0	0.22	ug/L			10/13/16 09:34	1
cis-1,2-Dichloroethene	0.26	U	1.0	0.26	ug/L			10/13/16 09:34	1
cis-1,3-Dichloropropene	0.16	U	1.0	0.16	ug/L			10/13/16 09:34	1
Cyclohexane	0.26	U	1.0	0.26	ug/L			10/13/16 09:34	1
Dichlorobromomethane	0.15	U	1.0	0.15	ug/L			10/13/16 09:34	1
Dichlorodifluoromethane	0.14	U	1.0	0.14	ug/L			10/13/16 09:34	1
Ethylbenzene	0.30	U	1.0	0.30	ug/L			10/13/16 09:34	1
Ethylene Dibromide	0.19	U	1.0	0.19	ug/L			10/13/16 09:34	1
Isopropylbenzene	0.32	U	1.0	0.32	ug/L			10/13/16 09:34	1
Methyl acetate	0.58	U	5.0	0.58	ug/L			10/13/16 09:34	1
Methyl tert-butyl ether	0.13	U	1.0	0.13	ug/L			10/13/16 09:34	1
Methylcyclohexane	0.22	U	1.0	0.22	ug/L			10/13/16 09:34	1
Methylene Chloride	0.21	U	1.0	0.21	ug/L			10/13/16 09:34	1
Styrene	0.17	U	1.0	0.17	ug/L			10/13/16 09:34	1
Tetrachloroethene	0.12	U	1.0	0.12	ug/L			10/13/16 09:34	1
Toluene	0.25	U	1.0	0.25	ug/L			10/13/16 09:34	1
trans-1,2-Dichloroethene	0.18	U	1.0	0.18	ug/L			10/13/16 09:34	1
trans-1,3-Dichloropropene	0.19	U	1.0	0.19	ug/L			10/13/16 09:34	1
Trichloroethene	0.22	U	1.0	0.22	ug/L			10/13/16 09:34	1
Trichlorofluoromethane	0.15	U	1.0	0.15	ug/L			10/13/16 09:34	1

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

Lab Sample ID: MB 460-396938/8
Matrix: Water
Analysis Batch: 396938

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Vinyl chloride	0.060	U	1.0	0.060	ug/L			10/13/16 09:34	1
Xylenes, Total	0.28	U	2.0	0.28	ug/L			10/13/16 09:34	1

Tentatively Identified Compound	*MB Est. Result*	*MB Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*					*10/13/16 09:34*	*1*

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*105*		*74 - 132*		*10/13/16 09:34*	*1*
4-Bromofluorobenzene	*93*		*77 - 124*		*10/13/16 09:34*	*1*
Dibromofluoromethane (Surr)	*101*		*72 - 131*		*10/13/16 09:34*	*1*
Toluene-d8 (Surr)	*109*		*80 - 120*		*10/13/16 09:34*	*1*

Lab Sample ID: LCS 460-396938/4
Matrix: Water
Analysis Batch: 396938

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1-Trichloroethane	20.0	19.9		ug/L		99	75 - 125
1,1,2,2-Tetrachloroethane	20.0	24.0		ug/L		120	74 - 120
1,1,2-Trichloro-1,2,2-trifluoroethane	20.0	23.1		ug/L		116	59 - 150
1,1,2-Trichloroethane	20.0	20.5		ug/L		103	78 - 120
1,1-Dichloroethane	20.0	19.0		ug/L		95	77 - 123
1,1-Dichloroethene	20.0	20.0		ug/L		100	74 - 123
1,2,3-Trichlorobenzene	20.0	16.4		ug/L		82	78 - 131
1,2,4-Trichlorobenzene	20.0	17.7		ug/L		88	80 - 124
1,2-Dibromo-3-Chloropropane	20.0	19.8		ug/L		99	55 - 134
1,2-Dichlorobenzene	20.0	20.4		ug/L		102	80 - 120
1,2-Dichloroethane	20.0	20.5		ug/L		102	76 - 121
1,2-Dichloropropane	20.0	19.0		ug/L		95	77 - 123
1,3-Dichlorobenzene	20.0	20.5		ug/L		102	80 - 120
1,4-Dichlorobenzene	20.0	21.5		ug/L		108	80 - 120
1,4-Dioxane	400	489		ug/L		122	10 - 150
2-Butanone (MEK)	100	98.8		ug/L		99	64 - 120
2-Hexanone	100	104		ug/L		104	71 - 125
4-Methyl-2-pentanone (MIBK)	100	98.0		ug/L		98	78 - 124
Acetone	100	74.7		ug/L		75	39 - 150
Benzene	20.0	19.0		ug/L		95	77 - 121
Bromoform	20.0	15.3		ug/L		76	53 - 120
Bromomethane	20.0	21.7		ug/L		109	10 - 150
Carbon disulfide	20.0	18.7		ug/L		94	69 - 133
Carbon tetrachloride	20.0	18.8		ug/L		94	70 - 132
Chlorobenzene	20.0	20.3		ug/L		101	80 - 120
Chlorobromomethane	20.0	18.0		ug/L		90	77 - 127
Chlorodibromomethane	20.0	17.4		ug/L		87	73 - 120
Chloroethane	20.0	21.2		ug/L		106	52 - 150
Chloroform	20.0	19.8		ug/L		99	80 - 120
Chloromethane	20.0	21.6		ug/L		108	56 - 131

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

Lab Sample ID: LCS 460-396938/4
Matrix: Water
Analysis Batch: 396938

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
cis-1,2-Dichloroethene	20.0	18.4		ug/L		92	80 - 120
cis-1,3-Dichloropropene	20.0	21.2		ug/L		106	77 - 120
Cyclohexane	20.0	20.8		ug/L		104	56 - 150
Dichlorobromomethane	20.0	18.5		ug/L		92	76 - 120
Dichlorodifluoromethane	20.0	22.8		ug/L		114	50 - 131
Ethylbenzene	20.0	19.6		ug/L		98	80 - 120
Ethylene Dibromide	20.0	22.0		ug/L		110	80 - 120
Isopropylbenzene	20.0	19.6		ug/L		98	80 - 123
Methyl acetate	100	106		ug/L		106	66 - 144
Methyl tert-butyl ether	20.0	19.8		ug/L		99	79 - 122
Methylcyclohexane	20.0	21.5		ug/L		108	61 - 145
Methylene Chloride	20.0	18.3		ug/L		92	77 - 123
Styrene	20.0	19.8		ug/L		99	80 - 120
Tetrachloroethene	20.0	21.2		ug/L		106	78 - 122
Toluene	20.0	20.8		ug/L		104	80 - 120
trans-1,2-Dichloroethene	20.0	19.1		ug/L		96	79 - 120
trans-1,3-Dichloropropene	20.0	20.5		ug/L		103	76 - 120
Trichloroethene	20.0	17.8		ug/L		89	77 - 120
Trichlorofluoromethane	20.0	22.9		ug/L		114	71 - 143
Vinyl chloride	20.0	21.6		ug/L		108	62 - 138
Xylenes, Total	40.0	38.3		ug/L		96	80 - 120

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*105*		*74 - 132*
4-Bromofluorobenzene	*103*		*77 - 124*
Dibromofluoromethane (Surr)	*98*		*72 - 131*
Toluene-d8 (Surr)	*106*		*80 - 120*

Lab Sample ID: 460-121459-C-1 MS
Matrix: Water
Analysis Batch: 396938

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1-Trichloroethane	0.28	U	200	194		ug/L		97	75 - 125
1,1,2,2-Tetrachloroethane	0.19	U	200	227		ug/L		113	74 - 120
1,1,2-Trichloro-1,2,2-trifluoroethane	0.34	U	200	228		ug/L		114	59 - 150
1,1,2-Trichloroethane	0.080	U	200	185		ug/L		92	78 - 120
1,1-Dichloroethane	0.24	U	200	184		ug/L		92	77 - 123
1,1-Dichloroethene	0.34	U	200	203		ug/L		102	74 - 123
1,2,3-Trichlorobenzene	0.35	U	200	166		ug/L		83	78 - 131
1,2,4-Trichlorobenzene	0.27	U	200	173		ug/L		87	80 - 124
1,2-Dibromo-3-Chloropropane	0.23	U	200	189		ug/L		94	55 - 134
1,2-Dichlorobenzene	0.22	U	200	191		ug/L		95	80 - 120
1,2-Dichloroethane	0.25	U	200	193		ug/L		96	76 - 121
1,2-Dichloropropane	0.18	U	200	181		ug/L		90	77 - 123
1,3-Dichlorobenzene	0.33	U	200	191		ug/L		96	80 - 120
1,4-Dichlorobenzene	0.33	U	200	193		ug/L		97	80 - 120

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

Lab Sample ID: 460-121459-C-1 MS
Matrix: Water
Analysis Batch: 396938

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
1,4-Dioxane	8.7	U	4000	4370		ug/L		109	10 - 150
2-Butanone (MEK)	2.2	U	1000	865		ug/L		87	64 - 120
2-Hexanone	0.72	U	1000	940		ug/L		94	71 - 125
4-Methyl-2-pentanone (MIBK)	0.63	U	1000	988		ug/L		99	78 - 124
Acetone	1.1	U	1000	747		ug/L		75	39 - 150
Benzene	0.090	U	200	184		ug/L		92	77 - 121
Bromoform	0.18	U	200	136		ug/L		68	53 - 120
Bromomethane	0.18	U	200	232		ug/L		116	10 - 150
Carbon disulfide	0.22	U	200	179		ug/L		89	69 - 133
Carbon tetrachloride	0.33	U	200	179		ug/L		90	70 - 132
Chlorobenzene	0.24	U	200	186		ug/L		93	80 - 120
Chlorobromomethane	0.30	U	200	173		ug/L		86	77 - 127
Chlorodibromomethane	0.22	U	200	158		ug/L		79	73 - 120
Chloroethane	0.37	U	200	224		ug/L		112	52 - 150
Chloroform	0.22	U	200	195		ug/L		97	80 - 120
Chloromethane	0.22	U	200	221		ug/L		111	56 - 131
cis-1,2-Dichloroethene	0.26	U	200	188		ug/L		94	80 - 120
cis-1,3-Dichloropropene	0.16	U	200	193		ug/L		96	77 - 120
Cyclohexane	0.26	U	200	205		ug/L		103	56 - 150
Dichlorobromomethane	0.15	U	200	174		ug/L		87	76 - 120
Dichlorodifluoromethane	0.14	U	200	228		ug/L		114	50 - 131
Ethylbenzene	0.30	U	200	184		ug/L		92	80 - 120
Ethylene Dibromide	0.19	U	200	187		ug/L		94	80 - 120
Isopropylbenzene	0.32	U	200	189		ug/L		94	80 - 123
Methyl acetate	0.58	U	1000	952		ug/L		95	66 - 144
Methyl tert-butyl ether	0.13	U	200	194		ug/L		97	79 - 122
Methylcyclohexane	0.22	U	200	213		ug/L		106	61 - 145
Methylene Chloride	0.21	U	200	184		ug/L		92	77 - 123
Styrene	0.17	U	200	177		ug/L		88	80 - 120
Tetrachloroethene	0.12	U	200	193		ug/L		96	78 - 122
Toluene	0.25	U	200	196		ug/L		98	80 - 120
trans-1,2-Dichloroethene	0.18	U	200	186		ug/L		93	79 - 120
trans-1,3-Dichloropropene	0.19	U	200	184		ug/L		92	76 - 120
Trichloroethene	0.22	U	200	172		ug/L		86	77 - 120
Trichlorofluoromethane	0.15	U	200	244		ug/L		122	71 - 143
Vinyl chloride	0.060	U	200	225		ug/L		112	62 - 138
Xylenes, Total	0.28	U	400	365		ug/L		91	80 - 120

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*105*		*74 - 132*
4-Bromofluorobenzene	*94*		*77 - 124*
Dibromofluoromethane (Surr)	*100*		*72 - 131*
Toluene-d8 (Surr)	*103*		*80 - 120*

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

Lab Sample ID: 460-121459-C-1 MSD
Matrix: Water
Analysis Batch: 396938

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1,1-Trichloroethane	0.28	U	200	195		ug/L		97	75 - 125	0	30
1,1,2,2-Tetrachloroethane	0.19	U	200	223		ug/L		111	74 - 120	2	30
1,1,2-Trichloro-1,2,2-trifluoroethane	0.34	U	200	232		ug/L		116	59 - 150	2	30
1,1,2-Trichloroethane	0.080	U	200	184		ug/L		92	78 - 120	0	30
1,1-Dichloroethane	0.24	U	200	186		ug/L		93	77 - 123	1	30
1,1-Dichloroethene	0.34	U	200	204		ug/L		102	74 - 123	0	30
1,2,3-Trichlorobenzene	0.35	U	200	165		ug/L		83	78 - 131	1	30
1,2,4-Trichlorobenzene	0.27	U	200	172		ug/L		86	80 - 124	0	30
1,2-Dibromo-3-Chloropropane	0.23	U	200	171		ug/L		85	55 - 134	10	30
1,2-Dichlorobenzene	0.22	U	200	193		ug/L		97	80 - 120	1	30
1,2-Dichloroethane	0.25	U	200	191		ug/L		95	76 - 121	1	30
1,2-Dichloropropane	0.18	U	200	183		ug/L		92	77 - 123	2	30
1,3-Dichlorobenzene	0.33	U	200	194		ug/L		97	80 - 120	1	30
1,4-Dichlorobenzene	0.33	U	200	197		ug/L		98	80 - 120	2	30
1,4-Dioxane	8.7	U	4000	4400		ug/L		110	10 - 150	1	30
2-Butanone (MEK)	2.2	U	1000	850		ug/L		85	64 - 120	2	30
2-Hexanone	0.72	U	1000	948		ug/L		95	71 - 125	1	30
4-Methyl-2-pentanone (MIBK)	0.63	U	1000	975		ug/L		98	78 - 124	1	30
Acetone	1.1	U	1000	752		ug/L		75	39 - 150	1	30
Benzene	0.090	U	200	181		ug/L		91	77 - 121	2	30
Bromoform	0.18	U	200	132		ug/L		66	53 - 120	3	30
Bromomethane	0.18	U	200	222		ug/L		111	10 - 150	4	30
Carbon disulfide	0.22	U	200	177		ug/L		88	69 - 133	1	30
Carbon tetrachloride	0.33	U	200	178		ug/L		89	70 - 132	1	30
Chlorobenzene	0.24	U	200	186		ug/L		93	80 - 120	0	30
Chlorobromomethane	0.30	U	200	173		ug/L		87	77 - 127	0	30
Chlorodibromomethane	0.22	U	200	157		ug/L		79	73 - 120	0	30
Chloroethane	0.37	U	200	224		ug/L		112	52 - 150	0	30
Chloroform	0.22	U	200	190		ug/L		95	80 - 120	2	30
Chloromethane	0.22	U	200	219		ug/L		109	56 - 131	1	30
cis-1,2-Dichloroethene	0.26	U	200	184		ug/L		92	80 - 120	2	30
cis-1,3-Dichloropropene	0.16	U	200	192		ug/L		96	77 - 120	0	30
Cyclohexane	0.26	U	200	206		ug/L		103	56 - 150	0	30
Dichlorobromomethane	0.15	U	200	173		ug/L		86	76 - 120	1	30
Dichlorodifluoromethane	0.14	U	200	223		ug/L		111	50 - 131	2	30
Ethylbenzene	0.30	U	200	183		ug/L		91	80 - 120	1	30
Ethylene Dibromide	0.19	U	200	190		ug/L		95	80 - 120	2	30
Isopropylbenzene	0.32	U	200	188		ug/L		94	80 - 123	0	30
Methyl acetate	0.58	U	1000	975		ug/L		98	66 - 144	2	30
Methyl tert-butyl ether	0.13	U	200	192		ug/L		96	79 - 122	1	30
Methylcyclohexane	0.22	U	200	207		ug/L		104	61 - 145	2	30
Methylene Chloride	0.21	U	200	183		ug/L		91	77 - 123	1	30
Styrene	0.17	U	200	177		ug/L		89	80 - 120	1	30
Tetrachloroethene	0.12	U	200	193		ug/L		97	78 - 122	0	30
Toluene	0.25	U	200	195		ug/L		97	80 - 120	1	30
trans-1,2-Dichloroethene	0.18	U	200	186		ug/L		93	79 - 120	0	30
trans-1,3-Dichloropropene	0.19	U	200	185		ug/L		92	76 - 120	1	30

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

Lab Sample ID: 460-121459-C-1 MSD
Matrix: Water
Analysis Batch: 396938

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Trichloroethene	0.22	U	200	170		ug/L		85	77 - 120	1	30
Trichlorofluoromethane	0.15	U	200	245		ug/L		123	71 - 143	0	30
Vinyl chloride	0.060	U	200	223		ug/L		112	62 - 138	1	30
Xylenes, Total	0.28	U	400	369		ug/L		92	80 - 120	1	30

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*107*		*74 - 132*
4-Bromofluorobenzene	*96*		*77 - 124*
Dibromofluoromethane (Surr)	*99*		*72 - 131*
Toluene-d8 (Surr)	*103*		*80 - 120*

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Lab Sample ID: MB 460-395061/1-A
Matrix: Solid
Analysis Batch: 395602

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 395061

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4-Dichlorophenol	7.8	U	130	7.8	ug/Kg		10/05/16 10:34	10/07/16 12:44	1
2,4-Dimethylphenol	73	U	330	73	ug/Kg		10/05/16 10:34	10/07/16 12:44	1
2,4,6-Trichlorophenol	9.4	U	130	9.4	ug/Kg		10/05/16 10:34	10/07/16 12:44	1
2,4,5-Trichlorophenol	33	U	330	33	ug/Kg		10/05/16 10:34	10/07/16 12:44	1
2,4-Dinitrophenol	250	U	270	250	ug/Kg		10/05/16 10:34	10/07/16 12:44	1
2-Chlorophenol	8.4	U	330	8.4	ug/Kg		10/05/16 10:34	10/07/16 12:44	1
2-Methylphenol	14	U	330	14	ug/Kg		10/05/16 10:34	10/07/16 12:44	1
2-Nitrophenol	11	U	330	11	ug/Kg		10/05/16 10:34	10/07/16 12:44	1
4,6-Dinitro-2-methylphenol	88	U	270	88	ug/Kg		10/05/16 10:34	10/07/16 12:44	1
2-Methylnaphthalene	7.3	U	330	7.3	ug/Kg		10/05/16 10:34	10/07/16 12:44	1
4-Chloro-3-methylphenol	14	U	330	14	ug/Kg		10/05/16 10:34	10/07/16 12:44	1
4-Chloroaniline	8.5	U	330	8.5	ug/Kg		10/05/16 10:34	10/07/16 12:44	1
2-Chloronaphthalene	7.5	U	330	7.5	ug/Kg		10/05/16 10:34	10/07/16 12:44	1
2-Nitroaniline	11	U	330	11	ug/Kg		10/05/16 10:34	10/07/16 12:44	1
4-Methylphenol	9.0	U	330	9.0	ug/Kg		10/05/16 10:34	10/07/16 12:44	1
4-Nitrophenol	160	U	670	160	ug/Kg		10/05/16 10:34	10/07/16 12:44	1
2,6-Dinitrotoluene	18	U	67	18	ug/Kg		10/05/16 10:34	10/07/16 12:44	1
3-Nitroaniline	9.8	U	330	9.8	ug/Kg		10/05/16 10:34	10/07/16 12:44	1
Acenaphthylene	8.5	U	330	8.5	ug/Kg		10/05/16 10:34	10/07/16 12:44	1
Acenaphthene	8.0	U	330	8.0	ug/Kg		10/05/16 10:34	10/07/16 12:44	1
2,4-Dinitrotoluene	13	U	67	13	ug/Kg		10/05/16 10:34	10/07/16 12:44	1
4-Chlorophenyl phenyl ether	9.9	U	330	9.9	ug/Kg		10/05/16 10:34	10/07/16 12:44	1
4-Nitroaniline	13	U	330	13	ug/Kg		10/05/16 10:34	10/07/16 12:44	1
4-Bromophenyl phenyl ether	10	U	330	10	ug/Kg		10/05/16 10:34	10/07/16 12:44	1
Bis(2-chloroethoxy)methane	10	U	330	10	ug/Kg		10/05/16 10:34	10/07/16 12:44	1
Bis(2-chloroethyl)ether	7.8	U	33	7.8	ug/Kg		10/05/16 10:34	10/07/16 12:44	1
Anthracene	31	U	330	31	ug/Kg		10/05/16 10:34	10/07/16 12:44	1
Carbazole	8.2	U	330	8.2	ug/Kg		10/05/16 10:34	10/07/16 12:44	1
Butyl benzyl phthalate	10	U	330	10	ug/Kg		10/05/16 10:34	10/07/16 12:44	1
3,3'-Dichlorobenzidine	37	U	130	37	ug/Kg		10/05/16 10:34	10/07/16 12:44	1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 460-395061/1-A
Matrix: Solid
Analysis Batch: 395602

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 395061

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dibenzofuran	10	U	330	10	ug/Kg		10/05/16 10:34	10/07/16 12:44	1
Benzo[a]anthracene	28	U	33	28	ug/Kg		10/05/16 10:34	10/07/16 12:44	1
Diethyl phthalate	9.4	U	330	9.4	ug/Kg		10/05/16 10:34	10/07/16 12:44	1
Chrysene	9.0	U	330	9.0	ug/Kg		10/05/16 10:34	10/07/16 12:44	1
Dimethyl phthalate	9.6	U	330	9.6	ug/Kg		10/05/16 10:34	10/07/16 12:44	1
Bis(2-ethylhexyl) phthalate	13	U	330	13	ug/Kg		10/05/16 10:34	10/07/16 12:44	1
Di-n-butyl phthalate	9.9	U	330	9.9	ug/Kg		10/05/16 10:34	10/07/16 12:44	1
Di-n-octyl phthalate	17	U	330	17	ug/Kg		10/05/16 10:34	10/07/16 12:44	1
Benzo[b]fluoranthene	13	U	33	13	ug/Kg		10/05/16 10:34	10/07/16 12:44	1
Benzo[k]fluoranthene	14	U	33	14	ug/Kg		10/05/16 10:34	10/07/16 12:44	1
Fluoranthene	9.8	U	330	9.8	ug/Kg		10/05/16 10:34	10/07/16 12:44	1
Benzo[a]pyrene	10	U	33	10	ug/Kg		10/05/16 10:34	10/07/16 12:44	1
Fluorene	7.2	U	330	7.2	ug/Kg		10/05/16 10:34	10/07/16 12:44	1
Hexachlorobenzene	13	U	33	13	ug/Kg		10/05/16 10:34	10/07/16 12:44	1
Dibenz(a,h)anthracene	17	U	33	17	ug/Kg		10/05/16 10:34	10/07/16 12:44	1
Hexachlorobutadiene	9.3	U	67	9.3	ug/Kg		10/05/16 10:34	10/07/16 12:44	1
Benzo[g,h,i]perylene	19	U	330	19	ug/Kg		10/05/16 10:34	10/07/16 12:44	1
Hexachlorocyclopentadiene	21	U	330	21	ug/Kg		10/05/16 10:34	10/07/16 12:44	1
Diphenyl	28	U	330	28	ug/Kg		10/05/16 10:34	10/07/16 12:44	1
Hexachloroethane	12	U	33	12	ug/Kg		10/05/16 10:34	10/07/16 12:44	1
Acetophenone	7.2	U	330	7.2	ug/Kg		10/05/16 10:34	10/07/16 12:44	1
Indeno[1,2,3-cd]pyrene	22	U	33	22	ug/Kg		10/05/16 10:34	10/07/16 12:44	1
Benzaldehyde	25	U	330	25	ug/Kg		10/05/16 10:34	10/07/16 12:44	1
Isophorone	7.1	U	130	7.1	ug/Kg		10/05/16 10:34	10/07/16 12:44	1
Caprolactam	24	U	330	24	ug/Kg		10/05/16 10:34	10/07/16 12:44	1
Naphthalene	8.4	U	330	8.4	ug/Kg		10/05/16 10:34	10/07/16 12:44	1
Atrazine	15	U	130	15	ug/Kg		10/05/16 10:34	10/07/16 12:44	1
Nitrobenzene	10	U	33	10	ug/Kg		10/05/16 10:34	10/07/16 12:44	1
N-Nitrosodi-n-propylamine	11	U	33	11	ug/Kg		10/05/16 10:34	10/07/16 12:44	1
N-Nitrosodiphenylamine	30	U	330	30	ug/Kg		10/05/16 10:34	10/07/16 12:44	1
Pentachlorophenol	40	U	270	40	ug/Kg		10/05/16 10:34	10/07/16 12:44	1
Phenanthrene	8.8	U	330	8.8	ug/Kg		10/05/16 10:34	10/07/16 12:44	1
Phenol	11	U	330	11	ug/Kg		10/05/16 10:34	10/07/16 12:44	1
2,2'-oxybis[1-chloropropane]	14	U	330	14	ug/Kg		10/05/16 10:34	10/07/16 12:44	1
Pyrene	15	U	330	15	ug/Kg		10/05/16 10:34	10/07/16 12:44	1
1,2,4,5-Tetrachlorobenzene	25	U	330	25	ug/Kg		10/05/16 10:34	10/07/16 12:44	1
2,3,4,6-Tetrachlorophenol	31	U	330	31	ug/Kg		10/05/16 10:34	10/07/16 12:44	1

Tentatively Identified Compound	*MB Est. Result*	*MB Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Aldol condensation product	*1580*	*A J*	*ug/Kg*		*2.18*		*10/05/16 10:34*	*10/07/16 12:44*	*1*

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*86*		*37 - 94*	*10/05/16 10:34*	*10/07/16 12:44*	*1*
2,4,6-Tribromophenol	*93*		*10 - 103*	*10/05/16 10:34*	*10/07/16 12:44*	*1*
2-Fluorophenol	*88*		*25 - 92*	*10/05/16 10:34*	*10/07/16 12:44*	*1*
2-Fluorobiphenyl	*94*		*38 - 95*	*10/05/16 10:34*	*10/07/16 12:44*	*1*
Phenol-d5	*84*		*32 - 91*	*10/05/16 10:34*	*10/07/16 12:44*	*1*

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 460-395061/1-A
Matrix: Solid
Analysis Batch: 395602

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 395061

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Terphenyl-d14	92		24 - 109	10/05/16 10:34	10/07/16 12:44	1

Lab Sample ID: LCS 460-395061/2-A
Matrix: Solid
Analysis Batch: 395438

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 395061

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
2,4-Dichlorophenol	3330	3220		ug/Kg		96	61 - 103
2,4-Dimethylphenol	3330	2940		ug/Kg		88	63 - 101
2,4,6-Trichlorophenol	3330	3650		ug/Kg		109	62 - 110
2,4,5-Trichlorophenol	3330	3580	*	ug/Kg		107	60 - 106
2,4-Dinitrophenol	6670	6980		ug/Kg		105	56 - 122
2-Chlorophenol	3330	2980		ug/Kg		89	62 - 97
2-Methylphenol	3330	2810		ug/Kg		84	61 - 103
2-Nitrophenol	3330	3090		ug/Kg		93	65 - 104
4,6-Dinitro-2-methylphenol	6670	6700		ug/Kg		100	67 - 120
2-Methylnaphthalene	3330	3130		ug/Kg		94	65 - 104
4-Chloro-3-methylphenol	3330	3000		ug/Kg		90	62 - 111
4-Chloroaniline	3330	2160		ug/Kg		65	18 - 94
2-Chloronaphthalene	3330	3490		ug/Kg		105	63 - 107
2-Nitroaniline	3330	3110		ug/Kg		93	57 - 114
4-Methylphenol	3330	2840		ug/Kg		85	61 - 105
4-Nitrophenol	6670	7390		ug/Kg		111	43 - 141
2,6-Dinitrotoluene	3330	3570		ug/Kg		107	70 - 114
3-Nitroaniline	3330	2530		ug/Kg		76	30 - 94
Acenaphthylene	3330	3370		ug/Kg		101	67 - 107
Acenaphthene	3330	3430		ug/Kg		103	62 - 108
2,4-Dinitrotoluene	3330	3610		ug/Kg		108	66 - 122
4-Chlorophenyl phenyl ether	3330	3670		ug/Kg		110	66 - 110
4-Nitroaniline	3330	3370		ug/Kg		101	49 - 118
4-Bromophenyl phenyl ether	3330	3300		ug/Kg		99	59 - 122
Bis(2-chloroethoxy)methane	3330	2940		ug/Kg		88	65 - 106
Bis(2-chloroethyl)ether	3330	2830		ug/Kg		85	64 - 105
Anthracene	3330	3240		ug/Kg		97	69 - 111
Carbazole	3330	3160		ug/Kg		95	66 - 115
Butyl benzyl phthalate	3330	3090		ug/Kg		93	65 - 125
3,3'-Dichlorobenzidine	3330	2630		ug/Kg		79	18 - 88
Dibenzofuran	3330	3470		ug/Kg		104	67 - 107
Benzo[a]anthracene	3330	3100		ug/Kg		93	68 - 110
Diethyl phthalate	3330	3710		ug/Kg		111	66 - 117
Chrysene	3330	3180		ug/Kg		95	70 - 111
Dimethyl phthalate	3330	3660		ug/Kg		110	68 - 112
Bis(2-ethylhexyl) phthalate	3330	3190		ug/Kg		96	63 - 125
Di-n-butyl phthalate	3330	3410		ug/Kg		102	67 - 119
Di-n-octyl phthalate	3330	3140		ug/Kg		94	57 - 138
Benzo[b]fluoranthene	3330	3160		ug/Kg		95	69 - 119
Benzo[k]fluoranthene	3330	3100		ug/Kg		93	70 - 115
Fluoranthene	3330	3420		ug/Kg		103	64 - 114

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 460-395061/2-A
Matrix: Solid
Analysis Batch: 395438

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 395061

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzo[a]pyrene	3330	3180		ug/Kg		95	72 - 115
Fluorene	3330	3490		ug/Kg		105	66 - 110
Hexachlorobenzene	3330	3450		ug/Kg		103	57 - 128
Dibenz(a,h)anthracene	3330	3420		ug/Kg		103	60 - 130
Hexachlorobutadiene	3330	3380		ug/Kg		101	60 - 108
Benzo[g,h,i]perylene	3330	3010		ug/Kg		90	54 - 128
Hexachlorocyclopentadiene	3330	3400		ug/Kg		102	50 - 129
Diphenyl	3330	3470		ug/Kg		104	64 - 108
Hexachloroethane	3330	2910		ug/Kg		87	63 - 99
Acetophenone	3330	2860		ug/Kg		86	60 - 109
Indeno[1,2,3-cd]pyrene	3330	3950		ug/Kg		118	53 - 137
Isophorone	3330	2900		ug/Kg		87	68 - 111
Naphthalene	3330	3000		ug/Kg		90	65 - 102
Nitrobenzene	3330	3030		ug/Kg		91	66 - 108
N-Nitrosodi-n-propylamine	3330	2850		ug/Kg		86	63 - 117
N-Nitrosodiphenylamine	3330	3070		ug/Kg		92	65 - 114
Pentachlorophenol	6670	6810		ug/Kg		102	56 - 116
Phenanthrene	3330	3150		ug/Kg		95	68 - 111
Phenol	3330	2600		ug/Kg		78	58 - 103
2,2'-oxybis[1-chloropropane]	3330	2760		ug/Kg		83	39 - 122
Pyrene	3330	2680		ug/Kg		80	64 - 121
1,2,4,5-Tetrachlorobenzene	3330	3660		ug/Kg		110	57 - 112
2,3,4,6-Tetrachlorophenol	3330	3740		ug/Kg		112	60 - 114

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Nitrobenzene-d5	*85*		*37 - 94*
2,4,6-Tribromophenol	*114*	*X*	*10 - 103*
2-Fluorophenol	*86*		*25 - 92*
2-Fluorobiphenyl	*102*	*X*	*38 - 95*
Phenol-d5	*83*		*32 - 91*
Terphenyl-d14	*75*		*24 - 109*

Lab Sample ID: LCS 460-395061/3-A
Matrix: Solid
Analysis Batch: 395438

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 395061

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzaldehyde	6670	5120		ug/Kg		77	52 - 113
Caprolactam	6670	6500		ug/Kg		98	53 - 148
Atrazine	6670	7060		ug/Kg		106	62 - 137

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Nitrobenzene-d5	*86*		*37 - 94*
2,4,6-Tribromophenol	*112*	*X*	*10 - 103*
2-Fluorophenol	*87*		*25 - 92*
2-Fluorobiphenyl	*99*	*X*	*38 - 95*
Phenol-d5	*83*		*32 - 91*

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 460-395061/3-A
Matrix: Solid
Analysis Batch: 395438

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 395061

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Terphenyl-d14	*81*		*24 - 109*

Lab Sample ID: 460-121305-A-1-A MS
Matrix: Solid
Analysis Batch: 395438

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 395061

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
2,4-Dichlorophenol	8.7	U	3720	2460		ug/Kg	☼	66	61 - 103
2,4-Dimethylphenol	81	U F1	3720	2280	F1	ug/Kg	☼	61	63 - 101
2,4,6-Trichlorophenol	10	U	3720	2710		ug/Kg	☼	73	62 - 110
2,4,5-Trichlorophenol	37	U *	3720	2550		ug/Kg	☼	69	60 - 106
2,4-Dinitrophenol	280	U F1	7440	1350	F1	ug/Kg	☼	18	56 - 122
2-Chlorophenol	9.4	U	3720	2360		ug/Kg	☼	63	62 - 97
2-Methylphenol	16	U	3720	2300		ug/Kg	☼	62	61 - 103
2-Nitrophenol	12	U F1	3720	2230	F1	ug/Kg	☼	60	65 - 104
4,6-Dinitro-2-methylphenol	98	U F1	7440	2830	F1	ug/Kg	☼	38	67 - 120
2-Methylnaphthalene	8.1	U	3720	2560		ug/Kg	☼	69	65 - 104
4-Chloro-3-methylphenol	16	U	3720	2450		ug/Kg	☼	66	62 - 111
4-Chloroaniline	9.5	U	3720	1290		ug/Kg	☼	35	18 - 94
2-Chloronaphthalene	8.4	U	3720	2820		ug/Kg	☼	76	63 - 107
2-Nitroaniline	12	U	3720	2410		ug/Kg	☼	65	57 - 114
4-Methylphenol	10	U	3720	2340		ug/Kg	☼	63	61 - 105
4-Nitrophenol	180	U	7440	5190		ug/Kg	☼	70	43 - 141
2,6-Dinitrotoluene	20	U	3720	2970		ug/Kg	☼	80	70 - 114
3-Nitroaniline	11	U	3720	2300		ug/Kg	☼	62	30 - 94
Acenaphthylene	9.5	U	3720	2760		ug/Kg	☼	74	67 - 107
Acenaphthene	8.9	U	3720	2780		ug/Kg	☼	75	62 - 108
2,4-Dinitrotoluene	15	U	3720	2940		ug/Kg	☼	79	66 - 122
4-Chlorophenyl phenyl ether	11	U	3720	2910		ug/Kg	☼	78	66 - 110
4-Nitroaniline	14	U	3720	2390		ug/Kg	☼	64	49 - 118
4-Bromophenyl phenyl ether	12	U	3720	2660		ug/Kg	☼	71	59 - 122
Bis(2-chloroethoxy)methane	11	U	3720	2460		ug/Kg	☼	66	65 - 106
Bis(2-chloroethyl)ether	8.7	U F1	3720	2260	F1	ug/Kg	☼	61	64 - 105
Anthracene	35	U	3720	2620		ug/Kg	☼	70	69 - 111
Carbazole	9.1	U	3720	2560		ug/Kg	☼	69	66 - 115
Butyl benzyl phthalate	11	U	3720	2550		ug/Kg	☼	69	65 - 125
3,3'-Dichlorobenzidine	41	U	3720	1490		ug/Kg	☼	40	18 - 88
Dibenzofuran	11	U	3720	2820		ug/Kg	☼	76	67 - 107
Benzo[a]anthracene	31	U	3720	2580		ug/Kg	☼	69	68 - 110
Diethyl phthalate	10	U	3720	2990		ug/Kg	☼	80	66 - 117
Chrysene	14	J	3720	2630		ug/Kg	☼	70	70 - 111
Dimethyl phthalate	11	U	3720	2970		ug/Kg	☼	80	68 - 112
Bis(2-ethylhexyl) phthalate	14	U	3720	2570		ug/Kg	☼	69	63 - 125
Di-n-butyl phthalate	11	U	3720	2810		ug/Kg	☼	76	67 - 119
Di-n-octyl phthalate	19	U	3720	2560		ug/Kg	☼	69	57 - 138
Benzo[b]fluoranthene	18	J F1	3720	2510	F1	ug/Kg	☼	67	69 - 119
Benzo[k]fluoranthene	16	U	3720	2640		ug/Kg	☼	71	70 - 115
Fluoranthene	22	J	3720	2850		ug/Kg	☼	76	64 - 114

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 460-121305-A-1-A MS
Matrix: Solid
Analysis Batch: 395438

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 395061

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzo[a]pyrene	13	J F1	3720	2600	F1	ug/Kg	☼	69	72 - 115
Fluorene	8.0	U	3720	2860		ug/Kg	☼	77	66 - 110
Hexachlorobenzene	15	U	3720	2770		ug/Kg	☼	75	57 - 128
Dibenz(a,h)anthracene	19	U	3720	2690		ug/Kg	☼	72	60 - 130
Hexachlorobutadiene	10	U	3720	2740		ug/Kg	☼	74	60 - 108
Benzo[g,h,i]perylene	21	U	3720	2390		ug/Kg	☼	64	54 - 128
Hexachlorocyclopentadiene	23	U	3720	2510		ug/Kg	☼	68	50 - 129
Diphenyl	31	U	3720	2850		ug/Kg	☼	77	64 - 108
Hexachloroethane	14	U F1	3720	2280	F1	ug/Kg	☼	61	63 - 99
Acetophenone	8.0	U	3720	2430		ug/Kg	☼	65	60 - 109
Indeno[1,2,3-cd]pyrene	25	U	3720	3130		ug/Kg	☼	84	53 - 137
Benzaldehyde	28	U F1	7440	3730	F1	ug/Kg	☼	50	52 - 113
Isophorone	7.9	U F1	3720	2420	F1	ug/Kg	☼	65	68 - 111
Caprolactam	27	U F1	7440	3280	F1	ug/Kg	☼	44	53 - 148
Naphthalene	9.4	U	3720	2460		ug/Kg	☼	66	65 - 102
Atrazine	16	U	7440	5420		ug/Kg	☼	73	62 - 137
Nitrobenzene	12	U F1	3720	2210	F1	ug/Kg	☼	59	66 - 108
N-Nitrosodi-n-propylamine	12	U	3720	2370		ug/Kg	☼	64	63 - 117
N-Nitrosodiphenylamine	33	U	3720	2410		ug/Kg	☼	65	65 - 114
Pentachlorophenol	45	U F1	7440	3340	F1	ug/Kg	☼	45	56 - 116
Phenanthrene	9.8	U	3720	2620		ug/Kg	☼	70	68 - 111
Phenol	12	U F1	3720	2170		ug/Kg	☼	58	58 - 103
2,2'-oxybis[1-chloropropane]	15	U	3720	2240		ug/Kg	☼	60	39 - 122
Pyrene	17	J F1	3720	2340	F1	ug/Kg	☼	63	64 - 121
1,2,4,5-Tetrachlorobenzene	27	U	3720	2920		ug/Kg	☼	78	57 - 112
2,3,4,6-Tetrachlorophenol	35	U	3720	2460		ug/Kg	☼	66	60 - 114

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
Nitrobenzene-d5	*61*		*37 - 94*
2,4,6-Tribromophenol	*76*		*10 - 103*
2-Fluorophenol	*59*		*25 - 92*
2-Fluorobiphenyl	*74*		*38 - 95*
Phenol-d5	*59*		*32 - 91*
Terphenyl-d14	*56*		*24 - 109*

Lab Sample ID: 460-121305-A-1-B MSD
Matrix: Solid
Analysis Batch: 395438

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 395061

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
2,4-Dichlorophenol	8.7	U	3710	2630		ug/Kg	☼	71	61 - 103	7	30
2,4-Dimethylphenol	81	U F1	3710	2380		ug/Kg	☼	64	63 - 101	4	30
2,4,6-Trichlorophenol	10	U	3710	2880		ug/Kg	☼	78	62 - 110	6	30
2,4,5-Trichlorophenol	37	U *	3710	2720		ug/Kg	☼	73	60 - 106	6	30
2,4-Dinitrophenol	280	U F1	7430	1060	F1	ug/Kg	☼	14	56 - 122	24	30
2-Chlorophenol	9.4	U	3710	2490		ug/Kg	☼	67	62 - 97	5	30
2-Methylphenol	16	U	3710	2430		ug/Kg	☼	65	61 - 103	6	30
2-Nitrophenol	12	U F1	3710	2360	F1	ug/Kg	☼	64	65 - 104	6	30

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 460-121305-A-1-B MSD
Matrix: Solid
Analysis Batch: 395438

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 395061

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
4,6-Dinitro-2-methylphenol	98	U F1	7430	2700	F1	ug/Kg	☼	36	67 - 120	5	30
2-Methylnaphthalene	8.1	U	3710	2690		ug/Kg	☼	72	65 - 104	5	30
4-Chloro-3-methylphenol	16	U	3710	2640		ug/Kg	☼	71	62 - 111	8	30
4-Chloroaniline	9.5	U	3710	1360		ug/Kg	☼	37	18 - 94	6	30
2-Chloronaphthalene	8.4	U	3710	2970		ug/Kg	☼	80	63 - 107	5	30
2-Nitroaniline	12	U	3710	2650		ug/Kg	☼	71	57 - 114	10	30
4-Methylphenol	10	U	3710	2540		ug/Kg	☼	68	61 - 105	8	30
4-Nitrophenol	180	U	7430	5940		ug/Kg	☼	80	43 - 141	14	30
2,6-Dinitrotoluene	20	U	3710	3140		ug/Kg	☼	84	70 - 114	6	30
3-Nitroaniline	11	U	3710	2470		ug/Kg	☼	67	30 - 94	7	30
Acenaphthylene	9.5	U	3710	2900		ug/Kg	☼	78	67 - 107	5	30
Acenaphthene	8.9	U	3710	2900		ug/Kg	☼	78	62 - 108	4	30
2,4-Dinitrotoluene	15	U	3710	3130		ug/Kg	☼	84	66 - 122	6	30
4-Chlorophenyl phenyl ether	11	U	3710	3150		ug/Kg	☼	85	66 - 110	8	30
4-Nitroaniline	14	U	3710	2540		ug/Kg	☼	68	49 - 118	6	30
4-Bromophenyl phenyl ether	12	U	3710	2790		ug/Kg	☼	75	59 - 122	5	30
Bis(2-chloroethoxy)methane	11	U	3710	2550		ug/Kg	☼	69	65 - 106	4	30
Bis(2-chloroethyl)ether	8.7	U F1	3710	2350	F1	ug/Kg	☼	63	64 - 105	4	30
Anthracene	35	U	3710	2680		ug/Kg	☼	72	69 - 111	2	30
Carbazole	9.1	U	3710	2690		ug/Kg	☼	72	66 - 115	5	30
Butyl benzyl phthalate	11	U	3710	2750		ug/Kg	☼	74	65 - 125	7	30
3,3'-Dichlorobenzidine	41	U	3710	1380		ug/Kg	☼	37	18 - 88	8	30
Dibenzofuran	11	U	3710	2980		ug/Kg	☼	80	67 - 107	6	30
Benzo[a]anthracene	31	U	3710	2720		ug/Kg	☼	73	68 - 110	5	30
Diethyl phthalate	10	U	3710	3170		ug/Kg	☼	85	66 - 117	6	30
Chrysene	14	J	3710	2700		ug/Kg	☼	72	70 - 111	3	30
Dimethyl phthalate	11	U	3710	3160		ug/Kg	☼	85	68 - 112	6	30
Bis(2-ethylhexyl) phthalate	14	U	3710	2720		ug/Kg	☼	73	63 - 125	6	30
Di-n-butyl phthalate	11	U	3710	2960		ug/Kg	☼	80	67 - 119	5	30
Di-n-octyl phthalate	19	U	3710	2820		ug/Kg	☼	76	57 - 138	10	30
Benzo[b]fluoranthene	18	J F1	3710	2610		ug/Kg	☼	70	69 - 119	4	30
Benzo[k]fluoranthene	16	U	3710	2870		ug/Kg	☼	77	70 - 115	9	30
Fluoranthene	22	J	3710	2970		ug/Kg	☼	79	64 - 114	4	30
Benzo[a]pyrene	13	J F1	3710	2730		ug/Kg	☼	73	72 - 115	5	30
Fluorene	8.0	U	3710	3020		ug/Kg	☼	81	66 - 110	6	30
Hexachlorobenzene	15	U	3710	2930		ug/Kg	☼	79	57 - 128	5	30
Dibenz(a,h)anthracene	19	U	3710	2700		ug/Kg	☼	73	60 - 130	0	30
Hexachlorobutadiene	10	U	3710	2790		ug/Kg	☼	75	60 - 108	2	30
Benzo[g,h,i]perylene	21	U	3710	2440		ug/Kg	☼	66	54 - 128	2	30
Hexachlorocyclopentadiene	23	U	3710	2580		ug/Kg	☼	69	50 - 129	3	30
Diphenyl	31	U	3710	2930		ug/Kg	☼	79	64 - 108	3	30
Hexachloroethane	14	U F1	3710	2390		ug/Kg	☼	64	63 - 99	5	30
Acetophenone	8.0	U	3710	2540		ug/Kg	☼	68	60 - 109	4	30
Indeno[1,2,3-cd]pyrene	25	U	3710	3130		ug/Kg	☼	84	53 - 137	0	30
Benzaldehyde	28	U F1	7430	3970		ug/Kg	☼	53	52 - 113	6	30
Isophorone	7.9	U F1	3710	2500	F1	ug/Kg	☼	67	68 - 111	3	30
Caprolactam	27	U F1	7430	3530	F1	ug/Kg	☼	48	53 - 148	7	30
Naphthalene	9.4	U	3710	2560		ug/Kg	☼	69	65 - 102	4	30

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 460-121305-A-1-B MSD
Matrix: Solid
Analysis Batch: 395438

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 395061

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Atrazine	16	U	7430	5800		ug/Kg	☼	78	62 - 137	7	30
Nitrobenzene	12	U F1	3710	2220	F1	ug/Kg	☼	60	66 - 108	1	30
N-Nitrosodi-n-propylamine	12	U	3710	2520		ug/Kg	☼	68	63 - 117	6	30
N-Nitrosodiphenylamine	33	U	3710	2470		ug/Kg	☼	67	65 - 114	2	30
Pentachlorophenol	45	U F1	7430	3470	F1	ug/Kg	☼	47	56 - 116	4	30
Phenanthrene	9.8	U	3710	2690		ug/Kg	☼	72	68 - 111	2	30
Phenol	12	U F1	3710	2070	F1	ug/Kg	☼	56	58 - 103	5	30
2,2'-oxybis[1-chloropropane]	15	U	3710	2330		ug/Kg	☼	63	39 - 122	4	30
Pyrene	17	J F1	3710	2460		ug/Kg	☼	66	64 - 121	5	30
1,2,4,5-Tetrachlorobenzene	27	U	3710	3080		ug/Kg	☼	83	57 - 112	5	30
2,3,4,6-Tetrachlorophenol	35	U	3710	2580		ug/Kg	☼	69	60 - 114	5	30

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
Nitrobenzene-d5	*62*		*37 - 94*
2,4,6-Tribromophenol	*81*		*10 - 103*
2-Fluorophenol	*61*		*25 - 92*
2-Fluorobiphenyl	*77*		*38 - 95*
Phenol-d5	*64*		*32 - 91*
Terphenyl-d14	*61*		*24 - 109*

Lab Sample ID: MB 460-396950/1-A
Matrix: Water
Analysis Batch: 397149

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 396950

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4-Dichlorophenol	0.63	U	10	0.63	ug/L		10/13/16 06:23	10/13/16 20:13	1
2,4-Dimethylphenol	0.91	U	10	0.91	ug/L		10/13/16 06:23	10/13/16 20:13	1
2,4,6-Trichlorophenol	0.53	U	10	0.53	ug/L		10/13/16 06:23	10/13/16 20:13	1
2,4,5-Trichlorophenol	0.49	U	10	0.49	ug/L		10/13/16 06:23	10/13/16 20:13	1
2,4-Dinitrophenol	2.4	U	20	2.4	ug/L		10/13/16 06:23	10/13/16 20:13	1
2-Chlorophenol	0.74	U	10	0.74	ug/L		10/13/16 06:23	10/13/16 20:13	1
2-Methylphenol	1.3	U	10	1.3	ug/L		10/13/16 06:23	10/13/16 20:13	1
2-Nitrophenol	0.59	U	10	0.59	ug/L		10/13/16 06:23	10/13/16 20:13	1
4,6-Dinitro-2-methylphenol	2.0	U	20	2.0	ug/L		10/13/16 06:23	10/13/16 20:13	1
2-Methylnaphthalene	0.88	U	10	0.88	ug/L		10/13/16 06:23	10/13/16 20:13	1
4-Chloro-3-methylphenol	0.76	U	10	0.76	ug/L		10/13/16 06:23	10/13/16 20:13	1
4-Chloroaniline	0.73	U	10	0.73	ug/L		10/13/16 06:23	10/13/16 20:13	1
2-Chloronaphthalene	0.61	U	10	0.61	ug/L		10/13/16 06:23	10/13/16 20:13	1
2-Nitroaniline	0.65	U	10	0.65	ug/L		10/13/16 06:23	10/13/16 20:13	1
4-Methylphenol	0.87	U	10	0.87	ug/L		10/13/16 06:23	10/13/16 20:13	1
4-Nitrophenol	4.7	U	20	4.7	ug/L		10/13/16 06:23	10/13/16 20:13	1
2,6-Dinitrotoluene	0.88	U	2.0	0.88	ug/L		10/13/16 06:23	10/13/16 20:13	1
3-Nitroaniline	0.82	U	10	0.82	ug/L		10/13/16 06:23	10/13/16 20:13	1
Acenaphthylene	0.65	U	10	0.65	ug/L		10/13/16 06:23	10/13/16 20:13	1
Acenaphthene	0.88	U	10	0.88	ug/L		10/13/16 06:23	10/13/16 20:13	1
2,4-Dinitrotoluene	1.0	U	2.0	1.0	ug/L		10/13/16 06:23	10/13/16 20:13	1
4-Chlorophenyl phenyl ether	0.96	U	10	0.96	ug/L		10/13/16 06:23	10/13/16 20:13	1
4-Nitroaniline	0.48	U	10	0.48	ug/L		10/13/16 06:23	10/13/16 20:13	1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 460-396950/1-A
Matrix: Water
Analysis Batch: 397149

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 396950

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4-Bromophenyl phenyl ether	1.0	U	10	1.0	ug/L		10/13/16 06:23	10/13/16 20:13	1
Bis(2-chloroethoxy)methane	0.69	U	10	0.69	ug/L		10/13/16 06:23	10/13/16 20:13	1
Bis(2-chloroethyl)ether	0.12	U	1.0	0.12	ug/L		10/13/16 06:23	10/13/16 20:13	1
Anthracene	0.57	U	10	0.57	ug/L		10/13/16 06:23	10/13/16 20:13	1
Carbazole	0.85	U	10	0.85	ug/L		10/13/16 06:23	10/13/16 20:13	1
Butyl benzyl phthalate	0.60	U	10	0.60	ug/L		10/13/16 06:23	10/13/16 20:13	1
3,3'-Dichlorobenzidine	1.0	U	10	1.0	ug/L		10/13/16 06:23	10/13/16 20:13	1
Dibenzofuran	0.85	U	10	0.85	ug/L		10/13/16 06:23	10/13/16 20:13	1
Benzo[a]anthracene	0.55	U	1.0	0.55	ug/L		10/13/16 06:23	10/13/16 20:13	1
Diethyl phthalate	1.0	U	10	1.0	ug/L		10/13/16 06:23	10/13/16 20:13	1
Chrysene	0.67	U	2.0	0.67	ug/L		10/13/16 06:23	10/13/16 20:13	1
Dimethyl phthalate	0.98	U	10	0.98	ug/L		10/13/16 06:23	10/13/16 20:13	1
Bis(2-ethylhexyl) phthalate	0.72	U	2.0	0.72	ug/L		10/13/16 06:23	10/13/16 20:13	1
Di-n-butyl phthalate	0.82	U	10	0.82	ug/L		10/13/16 06:23	10/13/16 20:13	1
Di-n-octyl phthalate	0.69	U	10	0.69	ug/L		10/13/16 06:23	10/13/16 20:13	1
Benzo[b]fluoranthene	0.44	U	1.0	0.44	ug/L		10/13/16 06:23	10/13/16 20:13	1
Benzo[k]fluoranthene	0.18	U	1.0	0.18	ug/L		10/13/16 06:23	10/13/16 20:13	1
Fluoranthene	0.72	U	10	0.72	ug/L		10/13/16 06:23	10/13/16 20:13	1
Benzo[a]pyrene	0.16	U	1.0	0.16	ug/L		10/13/16 06:23	10/13/16 20:13	1
Fluorene	0.80	U	10	0.80	ug/L		10/13/16 06:23	10/13/16 20:13	1
Hexachlorobenzene	0.47	U	1.0	0.47	ug/L		10/13/16 06:23	10/13/16 20:13	1
Dibenz(a,h)anthracene	0.090	U	1.0	0.090	ug/L		10/13/16 06:23	10/13/16 20:13	1
Hexachlorobutadiene	0.76	U	1.0	0.76	ug/L		10/13/16 06:23	10/13/16 20:13	1
Benzo[g,h,i]perylene	0.75	U	10	0.75	ug/L		10/13/16 06:23	10/13/16 20:13	1
Hexachlorocyclopentadiene	0.61	U	10	0.61	ug/L		10/13/16 06:23	10/13/16 20:13	1
Diphenyl	0.63	U	10	0.63	ug/L		10/13/16 06:23	10/13/16 20:13	1
Hexachloroethane	0.090	U	1.0	0.090	ug/L		10/13/16 06:23	10/13/16 20:13	1
Acetophenone	1.0	U	10	1.0	ug/L		10/13/16 06:23	10/13/16 20:13	1
Indeno[1,2,3-cd]pyrene	0.21	U	1.0	0.21	ug/L		10/13/16 06:23	10/13/16 20:13	1
Benzaldehyde	0.86	U	10	0.86	ug/L		10/13/16 06:23	10/13/16 20:13	1
Isophorone	0.67	U	10	0.67	ug/L		10/13/16 06:23	10/13/16 20:13	1
Caprolactam	1.1	U	10	1.1	ug/L		10/13/16 06:23	10/13/16 20:13	1
Naphthalene	0.80	U	10	0.80	ug/L		10/13/16 06:23	10/13/16 20:13	1
Atrazine	0.77	U	2.0	0.77	ug/L		10/13/16 06:23	10/13/16 20:13	1
Nitrobenzene	0.49	U	1.0	0.49	ug/L		10/13/16 06:23	10/13/16 20:13	1
N-Nitrosodi-n-propylamine	0.83	U	1.0	0.83	ug/L		10/13/16 06:23	10/13/16 20:13	1
N-Nitrosodiphenylamine	0.74	U	10	0.74	ug/L		10/13/16 06:23	10/13/16 20:13	1
Pentachlorophenol	2.2	U	20	2.2	ug/L		10/13/16 06:23	10/13/16 20:13	1
Phenanthrene	0.65	U	10	0.65	ug/L		10/13/16 06:23	10/13/16 20:13	1
Phenol	0.41	U	10	0.41	ug/L		10/13/16 06:23	10/13/16 20:13	1
2,2'-oxybis[1-chloropropane]	0.93	U	10	0.93	ug/L		10/13/16 06:23	10/13/16 20:13	1
Pyrene	0.83	U	10	0.83	ug/L		10/13/16 06:23	10/13/16 20:13	1
1,2,4,5-Tetrachlorobenzene	0.43	U	10	0.43	ug/L		10/13/16 06:23	10/13/16 20:13	1
2,3,4,6-Tetrachlorophenol	0.69	U	10	0.69	ug/L		10/13/16 06:23	10/13/16 20:13	1

Tentatively Identified Compound	*MB Est. Result*	*MB Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Unknown	*14.0*	*J*	*ug/L*		*8.00*		*10/13/16 06:23*	*10/13/16 20:13*	*1*

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 460-396950/1-A
Matrix: Water
Analysis Batch: 397149

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 396950

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Nitrobenzene-d5	*72*		*51 - 108*	*10/13/16 06:23*	*10/13/16 20:13*	*1*
2,4,6-Tribromophenol	*90*		*26 - 139*	*10/13/16 06:23*	*10/13/16 20:13*	*1*
2-Fluorophenol	*38*		*25 - 58*	*10/13/16 06:23*	*10/13/16 20:13*	*1*
2-Fluorobiphenyl	*70*		*45 - 107*	*10/13/16 06:23*	*10/13/16 20:13*	*1*
Phenol-d5	*28*		*14 - 39*	*10/13/16 06:23*	*10/13/16 20:13*	*1*
Terphenyl-d14	*71*		*40 - 148*	*10/13/16 06:23*	*10/13/16 20:13*	*1*

Lab Sample ID: LCS 460-396950/2-A
Matrix: Water
Analysis Batch: 397149

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 396950

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
2,4-Dichlorophenol	80.0	76.9		ug/L		96	62 - 102
2,4-Dimethylphenol	80.0	72.0		ug/L		90	61 - 95
2,4,6-Trichlorophenol	80.0	79.1		ug/L		99	62 - 120
2,4,5-Trichlorophenol	80.0	88.0		ug/L		110	59 - 117
2,4-Dinitrophenol	160	176		ug/L		110	45 - 125
2-Chlorophenol	80.0	65.3		ug/L		82	54 - 92
2-Methylphenol	80.0	54.8		ug/L		69	43 - 80
2-Nitrophenol	80.0	79.2		ug/L		99	58 - 109
4,6-Dinitro-2-methylphenol	160	168		ug/L		105	59 - 132
2-Methylnaphthalene	80.0	71.2		ug/L		89	47 - 104
4-Chloro-3-methylphenol	80.0	78.3		ug/L		98	58 - 98
4-Chloroaniline	80.0	72.2		ug/L		90	51 - 108
2-Chloronaphthalene	80.0	75.7		ug/L		95	54 - 105
2-Nitroaniline	80.0	88.2		ug/L		110	46 - 124
4-Methylphenol	80.0	52.5		ug/L		66	34 - 78
4-Nitrophenol	160	58.2		ug/L		36	11 - 47
2,6-Dinitrotoluene	80.0	85.9		ug/L		107	68 - 121
3-Nitroaniline	80.0	81.8		ug/L		102	60 - 117
Acenaphthylene	80.0	75.5		ug/L		94	61 - 106
Acenaphthene	80.0	70.1		ug/L		88	58 - 107
2,4-Dinitrotoluene	80.0	85.0		ug/L		106	70 - 123
4-Chlorophenyl phenyl ether	80.0	74.8		ug/L		94	60 - 114
4-Nitroaniline	80.0	80.3		ug/L		100	48 - 135
4-Bromophenyl phenyl ether	80.0	81.0		ug/L		101	57 - 126
Bis(2-chloroethoxy)methane	80.0	69.2		ug/L		86	67 - 104
Bis(2-chloroethyl)ether	80.0	66.5		ug/L		83	63 - 106
Anthracene	80.0	80.1		ug/L		100	70 - 118
Carbazole	80.0	73.1		ug/L		91	68 - 121
Butyl benzyl phthalate	80.0	76.1		ug/L		95	66 - 129
3,3'-Dichlorobenzidine	80.0	85.7		ug/L		107	68 - 123
Dibenzofuran	80.0	84.0		ug/L		105	67 - 108
Benzo[a]anthracene	80.0	73.9		ug/L		92	73 - 119
Diethyl phthalate	80.0	74.2		ug/L		93	61 - 129
Chrysene	80.0	75.7		ug/L		95	73 - 121
Dimethyl phthalate	80.0	83.9		ug/L		105	65 - 121
Bis(2-ethylhexyl) phthalate	80.0	77.2		ug/L		97	63 - 135

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 460-396950/2-A
Matrix: Water
Analysis Batch: 397149

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 396950

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Di-n-butyl phthalate	80.0	85.3		ug/L		107	64 - 130
Di-n-octyl phthalate	80.0	71.9		ug/L		90	64 - 131
Benzo[b]fluoranthene	80.0	72.0		ug/L		90	78 - 123
Benzo[k]fluoranthene	80.0	67.6		ug/L		85	71 - 126
Fluoranthene	80.0	72.3		ug/L		90	66 - 123
Benzo[a]pyrene	80.0	74.6		ug/L		93	76 - 125
Fluorene	80.0	71.1		ug/L		89	67 - 112
Hexachlorobenzene	80.0	83.8		ug/L		105	63 - 125
Dibenz(a,h)anthracene	80.0	81.1		ug/L		101	59 - 136
Hexachlorobutadiene	80.0	60.5		ug/L		76	34 - 99
Benzo[g,h,i]perylene	80.0	80.8		ug/L		101	63 - 133
Hexachlorocyclopentadiene	80.0	61.7		ug/L		77	18 - 99
Diphenyl	80.0	75.9		ug/L		95	54 - 108
Hexachloroethane	80.0	50.7		ug/L		63	39 - 92
Acetophenone	80.0	81.0		ug/L		101	54 - 115
Indeno[1,2,3-cd]pyrene	80.0	91.1		ug/L		114	57 - 142
Isophorone	80.0	65.1		ug/L		81	55 - 105
Naphthalene	80.0	69.9		ug/L		87	51 - 98
Nitrobenzene	80.0	63.2		ug/L		79	56 - 106
N-Nitrosodi-n-propylamine	80.0	78.1		ug/L		98	48 - 118
N-Nitrosodiphenylamine	80.0	77.5		ug/L		97	69 - 118
Pentachlorophenol	160	158		ug/L		99	54 - 120
Phenanthrene	80.0	88.8		ug/L		111	70 - 117
Phenol	80.0	25.0		ug/L		31	16 - 43
2,2'-oxybis[1-chloropropane]	80.0	73.9		ug/L		92	50 - 108
Pyrene	80.0	75.9		ug/L		95	63 - 129
1,2,4,5-Tetrachlorobenzene	80.0	72.7		ug/L		91	46 - 105
2,3,4,6-Tetrachlorophenol	80.0	90.4		ug/L		113	57 - 122

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Nitrobenzene-d5	*81*		*51 - 108*
2,4,6-Tribromophenol	*95*		*26 - 139*
2-Fluorophenol	*45*		*25 - 58*
2-Fluorobiphenyl	*85*		*45 - 107*
Phenol-d5	*30*		*14 - 39*
Terphenyl-d14	*82*		*40 - 148*

Lab Sample ID: LCS 460-396950/4-A
Matrix: Water
Analysis Batch: 397149

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 396950

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzaldehyde	160	161		ug/L		100	46 - 111
Caprolactam	160	51.2		ug/L		32	10 - 43
Atrazine	160	205	E	ug/L		128	38 - 146

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 460-396950/4-A
Matrix: Water
Analysis Batch: 397149

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 396950

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Nitrobenzene-d5	*73*		*51 - 108*
2,4,6-Tribromophenol	*104*		*26 - 139*
2-Fluorophenol	*40*		*25 - 58*
2-Fluorobiphenyl	*80*		*45 - 107*
Phenol-d5	*26*		*14 - 39*
Terphenyl-d14	*77*		*40 - 148*

Lab Sample ID: LCSD 460-396950/3-A
Matrix: Water
Analysis Batch: 397149

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 396950

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
2,4-Dichlorophenol			80.0	74.7		ug/L		93	62 - 102	NaN	30
2,4-Dimethylphenol			80.0	67.2		ug/L		84	61 - 95	NaN	30
2,4,6-Trichlorophenol			80.0	79.7		ug/L		100	62 - 120	NaN	30
2,4,5-Trichlorophenol			80.0	85.8		ug/L		107	59 - 117	NaN	30
2,4-Dinitrophenol			160	176		ug/L		110	45 - 125	NaN	30
2-Chlorophenol			80.0	64.5		ug/L		81	54 - 92	NaN	30
2-Methylphenol			80.0	57.7		ug/L		72	43 - 80	NaN	30
2-Nitrophenol			80.0	73.4		ug/L		92	58 - 109	NaN	30
4,6-Dinitro-2-methylphenol			160	175		ug/L		110	59 - 132	NaN	30
2-Methylnaphthalene			80.0	68.7		ug/L		86	47 - 104	NaN	30
4-Chloro-3-methylphenol			80.0	76.4		ug/L		96	58 - 98	NaN	30
4-Chloroaniline			80.0	74.6		ug/L		93	51 - 108	NaN	30
2-Chloronaphthalene			80.0	70.7		ug/L		88	54 - 105	NaN	30
2-Nitroaniline			80.0	79.6		ug/L		99	46 - 124	NaN	30
4-Methylphenol			80.0	55.3		ug/L		69	34 - 78	NaN	30
4-Nitrophenol			160	65.2		ug/L		41	11 - 47	NaN	30
2,6-Dinitrotoluene			80.0	88.3		ug/L		110	68 - 121	NaN	30
3-Nitroaniline			80.0	86.9		ug/L		109	60 - 117	NaN	30
Acenaphthylene			80.0	72.9		ug/L		91	61 - 106	NaN	30
Acenaphthene			80.0	67.8		ug/L		85	58 - 107	NaN	30
2,4-Dinitrotoluene			80.0	79.4		ug/L		99	70 - 123	NaN	30
4-Chlorophenyl phenyl ether			80.0	78.9		ug/L		99	60 - 114	NaN	30
4-Nitroaniline			80.0	84.3		ug/L		105	48 - 135	NaN	30
4-Bromophenyl phenyl ether			80.0	80.0		ug/L		100	57 - 126	NaN	30
Bis(2-chloroethoxy)methane			80.0	68.2		ug/L		85	67 - 104	NaN	30
Bis(2-chloroethyl)ether			80.0	62.4		ug/L		78	63 - 106	NaN	30
Anthracene			80.0	83.8		ug/L		105	70 - 118	NaN	30
Carbazole			80.0	72.2		ug/L		90	68 - 121	NaN	30
Butyl benzyl phthalate			80.0	77.5		ug/L		97	66 - 129	NaN	30
3,3'-Dichlorobenzidine			80.0	79.8		ug/L		100	68 - 123	NaN	30
Dibenzofuran			80.0	78.1		ug/L		98	67 - 108	NaN	30
Benzo[a]anthracene			80.0	70.8		ug/L		88	73 - 119	NaN	30
Diethyl phthalate			80.0	73.2		ug/L		92	61 - 129	NaN	30
Chrysene			80.0	77.1		ug/L		96	73 - 121	NaN	30
Dimethyl phthalate			80.0	78.9		ug/L		99	65 - 121	NaN	30
Bis(2-ethylhexyl) phthalate			80.0	76.2		ug/L		95	63 - 135	NaN	30

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 460-396950/3-A
Matrix: Water
Analysis Batch: 397149

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 396950

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Di-n-butyl phthalate	80.0	86.4		ug/L		108	64 - 130	NaN	30
Di-n-octyl phthalate	80.0	74.2		ug/L		93	64 - 131	NaN	30
Benzo[b]fluoranthene	80.0	83.5		ug/L		104	78 - 123	NaN	30
Benzo[k]fluoranthene	80.0	70.5		ug/L		88	71 - 126	NaN	30
Fluoranthene	80.0	74.6		ug/L		93	66 - 123	NaN	30
Benzo[a]pyrene	80.0	79.9		ug/L		100	76 - 125	NaN	30
Fluorene	80.0	70.1		ug/L		88	67 - 112	NaN	30
Hexachlorobenzene	80.0	84.7		ug/L		106	63 - 125	NaN	30
Dibenz(a,h)anthracene	80.0	86.5		ug/L		108	59 - 136	NaN	30
Hexachlorobutadiene	80.0	62.4		ug/L		78	34 - 99	NaN	30
Benzo[g,h,i]perylene	80.0	84.7		ug/L		106	63 - 133	NaN	30
Hexachlorocyclopentadiene	80.0	66.3		ug/L		83	18 - 99	NaN	30
Diphenyl	80.0	84.8		ug/L		106	54 - 108	NaN	30
Hexachloroethane	80.0	51.9		ug/L		65	39 - 92	NaN	30
Acetophenone	80.0	85.5		ug/L		107	54 - 115	NaN	30
Indeno[1,2,3-cd]pyrene	80.0	95.1		ug/L		119	57 - 142	NaN	30
Isophorone	80.0	63.7		ug/L		80	55 - 105	NaN	30
Naphthalene	80.0	66.3		ug/L		83	51 - 98	NaN	30
Nitrobenzene	80.0	61.8		ug/L		77	56 - 106	NaN	30
N-Nitrosodi-n-propylamine	80.0	87.4		ug/L		109	48 - 118	NaN	30
N-Nitrosodiphenylamine	80.0	79.7		ug/L		100	69 - 118	NaN	30
Pentachlorophenol	160	162		ug/L		101	54 - 120	NaN	30
Phenanthrene	80.0	87.6		ug/L		110	70 - 117	NaN	30
Phenol	80.0	27.8		ug/L		35	16 - 43	NaN	30
2,2'-oxybis[1-chloropropane]	80.0	77.0		ug/L		96	50 - 108	NaN	30
Pyrene	80.0	77.7		ug/L		97	63 - 129	NaN	30
1,2,4,5-Tetrachlorobenzene	80.0	71.9		ug/L		90	46 - 105	NaN	30
2,3,4,6-Tetrachlorophenol	80.0	90.7		ug/L		113	57 - 122	NaN	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
Nitrobenzene-d5	*80*		*51 - 108*
2,4,6-Tribromophenol	*100*		*26 - 139*
2-Fluorophenol	*46*		*25 - 58*
2-Fluorobiphenyl	*80*		*45 - 107*
Phenol-d5	*32*		*14 - 39*
Terphenyl-d14	*76*		*40 - 148*

Lab Sample ID: LCSD 460-396950/5-A
Matrix: Water
Analysis Batch: 397149

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 396950

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzaldehyde	160	180	*	ug/L		112	46 - 111	11	30
Caprolactam	160	56.3		ug/L		35	10 - 43	10	30
Atrazine	160	187		ug/L		117	38 - 146	9	30

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 460-396950/5-A
Matrix: Water
Analysis Batch: 397149

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 396950

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
Nitrobenzene-d5	*77*		*51 - 108*
2,4,6-Tribromophenol	*101*		*26 - 139*
2-Fluorophenol	*44*		*25 - 58*
2-Fluorobiphenyl	*87*		*45 - 107*
Phenol-d5	*30*		*14 - 39*
Terphenyl-d14	*79*		*40 - 148*

Method: 8081B - Organochlorine Pesticides (GC)

Lab Sample ID: MB 460-395263/1-A
Matrix: Solid
Analysis Batch: 395288

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 395263

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	0.88	U	6.7	0.88	ug/Kg		10/06/16 03:19	10/06/16 07:56	1
4,4'-DDE	0.97	U	6.7	0.97	ug/Kg		10/06/16 03:19	10/06/16 07:56	1
4,4'-DDT	0.69	U	6.7	0.69	ug/Kg		10/06/16 03:19	10/06/16 07:56	1
Aldrin	0.81	U	6.7	0.81	ug/Kg		10/06/16 03:19	10/06/16 07:56	1
alpha-BHC	0.61	U	2.0	0.61	ug/Kg		10/06/16 03:19	10/06/16 07:56	1
beta-BHC	0.65	U	2.0	0.65	ug/Kg		10/06/16 03:19	10/06/16 07:56	1
Chlordane (technical)	30	U	67	30	ug/Kg		10/06/16 03:19	10/06/16 07:56	1
delta-BHC	0.73	U	2.0	0.73	ug/Kg		10/06/16 03:19	10/06/16 07:56	1
Dieldrin	0.87	U	2.0	0.87	ug/Kg		10/06/16 03:19	10/06/16 07:56	1
Endosulfan I	0.93	U	6.7	0.93	ug/Kg		10/06/16 03:19	10/06/16 07:56	1
Endosulfan II	1.1	U	6.7	1.1	ug/Kg		10/06/16 03:19	10/06/16 07:56	1
Endosulfan sulfate	0.78	U	6.7	0.78	ug/Kg		10/06/16 03:19	10/06/16 07:56	1
Endrin	0.85	U	6.7	0.85	ug/Kg		10/06/16 03:19	10/06/16 07:56	1
Endrin aldehyde	0.83	U	6.7	0.83	ug/Kg		10/06/16 03:19	10/06/16 07:56	1
Endrin ketone	0.93	U	6.7	0.93	ug/Kg		10/06/16 03:19	10/06/16 07:56	1
gamma-BHC (Lindane)	0.60	U	2.0	0.60	ug/Kg		10/06/16 03:19	10/06/16 07:56	1
Heptachlor	0.86	U	6.7	0.86	ug/Kg		10/06/16 03:19	10/06/16 07:56	1
Heptachlor epoxide	1.3	U	6.7	1.3	ug/Kg		10/06/16 03:19	10/06/16 07:56	1
Methoxychlor	1.4	U	6.7	1.4	ug/Kg		10/06/16 03:19	10/06/16 07:56	1
Toxaphene	20	U	67	20	ug/Kg		10/06/16 03:19	10/06/16 07:56	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*103*		*50 - 150*	*10/06/16 03:19*	*10/06/16 07:56*	*1*
DCB Decachlorobiphenyl	*102*		*50 - 150*	*10/06/16 03:19*	*10/06/16 07:56*	*1*
Tetrachloro-m-xylene	*101*		*47 - 150*	*10/06/16 03:19*	*10/06/16 07:56*	*1*
Tetrachloro-m-xylene	*99*		*47 - 150*	*10/06/16 03:19*	*10/06/16 07:56*	*1*

Lab Sample ID: LCS 460-395263/2-A
Matrix: Solid
Analysis Batch: 395288

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 395263

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
4,4'-DDD			133	116		ug/Kg		87	64 - 129		

Method: 8081B - Organochlorine Pesticides (GC) (Continued)

Lab Sample ID: LCS 460-395263/2-A
Matrix: Solid
Analysis Batch: 395288

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 395263

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
4,4'-DDD	133	128		ug/Kg		96	64 - 129
4,4'-DDE	133	122		ug/Kg		92	65 - 129
4,4'-DDE	133	119		ug/Kg		89	65 - 129
4,4'-DDT	133	110		ug/Kg		82	59 - 124
4,4'-DDT	133	113		ug/Kg		84	59 - 124
Aldrin	133	118		ug/Kg		88	66 - 127
Aldrin	133	122		ug/Kg		92	66 - 127
alpha-BHC	133	122		ug/Kg		91	69 - 131
alpha-BHC	133	126		ug/Kg		95	69 - 131
beta-BHC	133	123		ug/Kg		92	69 - 127
beta-BHC	133	124		ug/Kg		93	69 - 127
delta-BHC	133	122		ug/Kg		92	64 - 129
delta-BHC	133	123		ug/Kg		93	64 - 129
Dieldrin	133	119		ug/Kg		89	65 - 128
Dieldrin	133	121		ug/Kg		91	65 - 128
Endosulfan I	133	122		ug/Kg		91	66 - 126
Endosulfan I	133	119		ug/Kg		89	66 - 126
Endosulfan II	133	113		ug/Kg		85	64 - 124
Endosulfan II	133	117		ug/Kg		87	64 - 124
Endosulfan sulfate	133	116		ug/Kg		87	62 - 123
Endosulfan sulfate	133	122		ug/Kg		92	62 - 123
Endrin	133	110		ug/Kg		82	58 - 126
Endrin	133	115		ug/Kg		87	58 - 126
Endrin aldehyde	133	119		ug/Kg		89	69 - 131
Endrin aldehyde	133	124		ug/Kg		93	69 - 131
Endrin ketone	133	127		ug/Kg		95	62 - 125
Endrin ketone	133	126		ug/Kg		94	62 - 125
gamma-BHC (Lindane)	133	119		ug/Kg		89	67 - 126
gamma-BHC (Lindane)	133	124		ug/Kg		93	67 - 126
Heptachlor	133	118		ug/Kg		88	63 - 125
Heptachlor	133	119		ug/Kg		89	63 - 125
Heptachlor epoxide	133	114		ug/Kg		85	64 - 125
Heptachlor epoxide	133	114		ug/Kg		86	64 - 125
Methoxychlor	133	110		ug/Kg		83	56 - 123
Methoxychlor	133	111		ug/Kg		84	56 - 123

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
DCB Decachlorobiphenyl	*102*		*50 - 150*
DCB Decachlorobiphenyl	*105*		*50 - 150*
Tetrachloro-m-xylene	*98*		*47 - 150*
Tetrachloro-m-xylene	*99*		*47 - 150*

Lab Sample ID: 460-121360-A-6-F MS
Matrix: Solid
Analysis Batch: 395288

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 395263

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
4,4'-DDD	1.7	U F1	260	140	F1	ug/Kg	☼	54	64 - 129

Method: 8081B - Organochlorine Pesticides (GC) (Continued)

Lab Sample ID: 460-121360-A-6-F MS
Matrix: Solid
Analysis Batch: 395288

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 395263

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
4,4'-DDD	1.7	U	260	169		ug/Kg	☼	65	64 - 129
4,4'-DDE	1.9	U F1	260	137	F1	ug/Kg	☼	53	65 - 129
4,4'-DDE	1.9	U F1	260	153	F1	ug/Kg	☼	59	65 - 129
4,4'-DDT	1.3	U F1	260	138	F1	ug/Kg	☼	53	59 - 124
4,4'-DDT	1.3	U F1	260	150	F1	ug/Kg	☼	58	59 - 124
Aldrin	1.6	U F1	260	136	F1	ug/Kg	☼	52	66 - 127
Aldrin	1.6	U F1	260	160	F1	ug/Kg	☼	62	66 - 127
alpha-BHC	1.2	U F2	260	263		ug/Kg	☼	101	69 - 131
alpha-BHC	1.2	U F1 F2	260	164	p F1	ug/Kg	☼	63	69 - 131
beta-BHC	1.3	U F1	260	143	F1	ug/Kg	☼	55	69 - 127
beta-BHC	1.3	U F1	260	171	F1	ug/Kg	☼	66	69 - 127
delta-BHC	1.4	U F1	260	150	F1	ug/Kg	☼	58	64 - 129
delta-BHC	1.4	U	260	179		ug/Kg	☼	69	64 - 129
Dieldrin	1.7	U F1	260	133	F1	ug/Kg	☼	51	65 - 128
Dieldrin	1.7	U F1	260	152	F1	ug/Kg	☼	58	65 - 128
Endosulfan I	1.8	U F1	260	136	F1	ug/Kg	☼	52	66 - 126
Endosulfan I	1.8	U F1	260	145	F1	ug/Kg	☼	56	66 - 126
Endosulfan II	2.0	U F1	260	135	F1	ug/Kg	☼	52	64 - 124
Endosulfan II	2.0	U F1	260	145	F1	ug/Kg	☼	56	64 - 124
Endosulfan sulfate	1.5	U F1	260	142	F1	ug/Kg	☼	55	62 - 123
Endosulfan sulfate	1.5	U F1	260	148	F1	ug/Kg	☼	57	62 - 123
Endrin	1.7	U F1	260	132	F1	ug/Kg	☼	51	58 - 126
Endrin	1.7	U	260	154		ug/Kg	☼	59	58 - 126
Endrin aldehyde	1.6	U F1	260	139	F1	ug/Kg	☼	54	69 - 131
Endrin aldehyde	1.6	U F1	260	150	F1	ug/Kg	☼	58	69 - 131
Endrin ketone	1.8	U F1	260	140	F1	ug/Kg	☼	54	62 - 125
Endrin ketone	1.8	U F1	260	152	F1	ug/Kg	☼	58	62 - 125
gamma-BHC (Lindane)	1.2	U	260	133	p F1	ug/Kg	☼	51	67 - 126
gamma-BHC (Lindane)	1.2	U F1	260	258		ug/Kg	☼	99	67 - 126
Heptachlor	1.7	U F1	260	148	F1	ug/Kg	☼	57	63 - 125
Heptachlor	1.7	U	260	174		ug/Kg	☼	67	63 - 125
Heptachlor epoxide	2.5	U F1	260	128	F1	ug/Kg	☼	49	64 - 125
Heptachlor epoxide	2.5	U F1	260	144	F1	ug/Kg	☼	56	64 - 125
Methoxychlor	2.8	U F1	260	141	F1	ug/Kg	☼	54	56 - 123
Methoxychlor	2.8	U	260	151		ug/Kg	☼	58	56 - 123

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
DCB Decachlorobiphenyl	*56*		*50 - 150*
DCB Decachlorobiphenyl	*63*		*50 - 150*
Tetrachloro-m-xylene	*226*	*p X*	*47 - 150*
Tetrachloro-m-xylene	*986*	*X*	*47 - 150*

Lab Sample ID: 460-121360-A-6-G MSD
Matrix: Solid
Analysis Batch: 395288

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 395263

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
4,4'-DDD	1.7	U F1	259	136	F1	ug/Kg	☼	52	64 - 129	3	30

Method: 8081B - Organochlorine Pesticides (GC) (Continued)

Lab Sample ID: 460-121360-A-6-G MSD
Matrix: Solid
Analysis Batch: 395288

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 395263

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
4,4'-DDD	1.7	U	259	177		ug/Kg	☼	68	64 - 129	4	30
4,4'-DDE	1.9	U F1	259	141	F1	ug/Kg	☼	54	65 - 129	3	30
4,4'-DDE	1.9	U F1	259	159	F1	ug/Kg	☼	61	65 - 129	4	30
4,4'-DDT	1.3	U F1	259	133	F1	ug/Kg	☼	51	59 - 124	3	30
4,4'-DDT	1.3	U F1	259	158		ug/Kg	☼	61	59 - 124	5	30
Aldrin	1.6	U F1	259	139	F1	ug/Kg	☼	53	66 - 127	2	30
Aldrin	1.6	U F1	259	175		ug/Kg	☼	67	66 - 127	9	30
alpha-BHC	1.2	U F1 F2	259	246	F2	ug/Kg	☼	95	69 - 131	40	30
alpha-BHC	1.2	U F2	259	176	F1 F2	ug/Kg	☼	68	69 - 131	40	30
beta-BHC	1.3	U F1	259	146	F1	ug/Kg	☼	56	69 - 127	2	30
beta-BHC	1.3	U F1	259	174	F1	ug/Kg	☼	67	69 - 127	2	30
delta-BHC	1.4	U F1	259	154	F1	ug/Kg	☼	59	64 - 129	2	30
delta-BHC	1.4	U	259	181		ug/Kg	☼	70	64 - 129	1	30
Dieldrin	1.7	U F1	259	137	F1	ug/Kg	☼	53	65 - 128	3	30
Dieldrin	1.7	U F1	259	157	F1	ug/Kg	☼	61	65 - 128	4	30
Endosulfan I	1.8	U F1	259	140	F1	ug/Kg	☼	54	66 - 126	3	30
Endosulfan I	1.8	U F1	259	150	F1	ug/Kg	☼	58	66 - 126	3	30
Endosulfan II	2.0	U F1	259	129	F1	ug/Kg	☼	50	64 - 124	4	30
Endosulfan II	2.0	U F1	259	152	F1	ug/Kg	☼	59	64 - 124	5	30
Endosulfan sulfate	1.5	U F1	259	130	F1	ug/Kg	☼	50	62 - 123	9	30
Endosulfan sulfate	1.5	U F1	259	160		ug/Kg	☼	62	62 - 123	8	30
Endrin	1.7	U F1	259	133	F1	ug/Kg	☼	51	58 - 126	1	30
Endrin	1.7	U	259	160		ug/Kg	☼	62	58 - 126	4	30
Endrin aldehyde	1.6	U F1	259	132	F1	ug/Kg	☼	51	69 - 131	5	30
Endrin aldehyde	1.6	U F1	259	157	F1	ug/Kg	☼	61	69 - 131	5	30
Endrin ketone	1.8	U F1	259	135	F1	ug/Kg	☼	52	62 - 125	4	30
Endrin ketone	1.8	U F1	259	161		ug/Kg	☼	62	62 - 125	6	30
gamma-BHC (Lindane)	1.2	U	259	136	p F1	ug/Kg	☼	52	67 - 126	2	30
gamma-BHC (Lindane)	1.2	U F1	259	248		ug/Kg	☼	96	67 - 126	4	30
Heptachlor	1.7	U F1	259	151	F1	ug/Kg	☼	58	63 - 125	2	30
Heptachlor	1.7	U	259	179		ug/Kg	☼	69	63 - 125	3	30
Heptachlor epoxide	2.5	U F1	259	132	F1	ug/Kg	☼	51	64 - 125	3	30
Heptachlor epoxide	2.5	U F1	259	151	F1	ug/Kg	☼	58	64 - 125	4	30
Methoxychlor	2.8	U F1	259	132	F1	ug/Kg	☼	51	56 - 123	7	30
Methoxychlor	2.8	U	259	165		ug/Kg	☼	64	56 - 123	9	30

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
DCB Decachlorobiphenyl	*56*		*50 - 150*
DCB Decachlorobiphenyl	*63*		*50 - 150*
Tetrachloro-m-xylene	*223*	*p X*	*47 - 150*
Tetrachloro-m-xylene	*947*	*X*	*47 - 150*

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Lab Sample ID: MB 460-395266/1-A
Matrix: Solid
Analysis Batch: 395389

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 395266

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor 1016	8.9	U	67	8.9	ug/Kg		10/06/16 03:36	10/06/16 13:40	1
Aroclor 1221	8.9	U	67	8.9	ug/Kg		10/06/16 03:36	10/06/16 13:40	1
Aroclor 1232	8.9	U	67	8.9	ug/Kg		10/06/16 03:36	10/06/16 13:40	1
Aroclor 1242	8.9	U	67	8.9	ug/Kg		10/06/16 03:36	10/06/16 13:40	1
Aroclor 1248	8.9	U	67	8.9	ug/Kg		10/06/16 03:36	10/06/16 13:40	1
Aroclor 1254	9.2	U	67	9.2	ug/Kg		10/06/16 03:36	10/06/16 13:40	1
Aroclor 1260	9.2	U	67	9.2	ug/Kg		10/06/16 03:36	10/06/16 13:40	1
Aroclor 1268	9.2	U	67	9.2	ug/Kg		10/06/16 03:36	10/06/16 13:40	1
Aroclor-1262	9.2	U	67	9.2	ug/Kg		10/06/16 03:36	10/06/16 13:40	1
Polychlorinated biphenyls, Total	9.2	U	67	9.2	ug/Kg		10/06/16 03:36	10/06/16 13:40	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*100*		*35 - 150*	*10/06/16 03:36*	*10/06/16 13:40*	*1*
DCB Decachlorobiphenyl	*110*		*35 - 150*	*10/06/16 03:36*	*10/06/16 13:40*	*1*

Lab Sample ID: LCS 460-395266/2-A
Matrix: Solid
Analysis Batch: 395389

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 395266

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Aroclor 1016	333	346		ug/Kg		104	77 - 150
Aroclor 1016	333	362		ug/Kg		109	77 - 150
Aroclor 1260	333	344		ug/Kg		103	79 - 150
Aroclor 1260	333	352		ug/Kg		106	79 - 150

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
DCB Decachlorobiphenyl	*97*		*35 - 150*
DCB Decachlorobiphenyl	*101*		*35 - 150*

Lab Sample ID: MB 460-396887/1-A
Matrix: Water
Analysis Batch: 397167

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 396887

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor 1016	0.098	U	0.40	0.098	ug/L		10/12/16 20:28	10/14/16 00:48	1
Aroclor 1221	0.098	U	0.40	0.098	ug/L		10/12/16 20:28	10/14/16 00:48	1
Aroclor 1232	0.098	U	0.40	0.098	ug/L		10/12/16 20:28	10/14/16 00:48	1
Aroclor 1242	0.098	U	0.40	0.098	ug/L		10/12/16 20:28	10/14/16 00:48	1
Aroclor 1248	0.098	U	0.40	0.098	ug/L		10/12/16 20:28	10/14/16 00:48	1
Aroclor 1254	0.084	U	0.40	0.084	ug/L		10/12/16 20:28	10/14/16 00:48	1
Aroclor 1260	0.084	U	0.40	0.084	ug/L		10/12/16 20:28	10/14/16 00:48	1
Aroclor 1268	0.084	U	0.40	0.084	ug/L		10/12/16 20:28	10/14/16 00:48	1
Aroclor-1262	0.084	U	0.40	0.084	ug/L		10/12/16 20:28	10/14/16 00:48	1
Polychlorinated biphenyls, Total	0.098	U	0.40	0.098	ug/L		10/12/16 20:28	10/14/16 00:48	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*120*		*10 - 150*	*10/12/16 20:28*	*10/14/16 00:48*	*1*

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography (Continued)

Lab Sample ID: MB 460-396887/1-A
Matrix: Water
Analysis Batch: 397167

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 396887

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl	122		10 - 150	10/12/16 20:28	10/14/16 00:48	1

Lab Sample ID: LCS 460-396887/2-A
Matrix: Water
Analysis Batch: 397167

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 396887

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Aroclor 1016	4.00	4.66		ug/L		117	77 - 150
Aroclor 1016	4.00	4.63		ug/L		116	77 - 150
Aroclor 1260	4.00	5.20		ug/L		130	80 - 150
Aroclor 1260	4.00	5.12		ug/L		128	80 - 150

Surrogate	LCS %Recovery	LCS Qualifier	Limits
DCB Decachlorobiphenyl	147		10 - 150
DCB Decachlorobiphenyl	142		10 - 150

Lab Sample ID: LCSD 460-396887/3-A
Matrix: Water
Analysis Batch: 397167

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 396887

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Aroclor 1016	4.00	4.25		ug/L		106	77 - 150	9	30
Aroclor 1016	4.00	4.02		ug/L		100	77 - 150	14	30
Aroclor 1260	4.00	4.87		ug/L		122	80 - 150	7	30
Aroclor 1260	4.00	4.70		ug/L		117	80 - 150	9	30

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
DCB Decachlorobiphenyl	124		10 - 150
DCB Decachlorobiphenyl	117		10 - 150

Method: 245.1 - Mercury (CVAA)

Lab Sample ID: MB 460-395100/1-A
Matrix: Water
Analysis Batch: 395184

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 395100

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.17	U	0.20	0.17	ug/L		10/05/16 12:21	10/05/16 15:43	1

Lab Sample ID: LCS 460-395100/2-A
Matrix: Water
Analysis Batch: 395184

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 395100

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	1.00	0.938		ug/L		94	85 - 115

Method: 245.1 - Mercury (CVAA) (Continued)

Lab Sample ID: 460-121336-D-1-C MS — **Client Sample ID: Matrix Spike**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 395184 — **Prep Batch: 395100**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.17	U	1.00	1.12		ug/L		112	70 - 130

Lab Sample ID: 460-121336-D-1-B DU — **Client Sample ID: Duplicate**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 395184 — **Prep Batch: 395100**

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Mercury	0.17	U	0.17	U	ug/L		NC	20

Method: 6010C - Metals (ICP)

Lab Sample ID: MB 460-395193/1-A ^2 — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 395441 — **Prep Batch: 395193**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	10.3	U	20.0	10.3	mg/Kg		10/05/16 18:27	10/06/16 17:24	2
Antimony	0.79	U	2.0	0.79	mg/Kg		10/05/16 18:27	10/06/16 17:24	2
Arsenic	0.49	U	1.5	0.49	mg/Kg		10/05/16 18:27	10/06/16 17:24	2
Barium	0.72	U	20.0	0.72	mg/Kg		10/05/16 18:27	10/06/16 17:24	2
Beryllium	0.17	U	0.20	0.17	mg/Kg		10/05/16 18:27	10/06/16 17:24	2
Cadmium	0.21	U	0.40	0.21	mg/Kg		10/05/16 18:27	10/06/16 17:24	2
Calcium	29.6	U	500	29.6	mg/Kg		10/05/16 18:27	10/06/16 17:24	2
Chromium	0.48	U	1.0	0.48	mg/Kg		10/05/16 18:27	10/06/16 17:24	2
Cobalt	0.58	U	5.0	0.58	mg/Kg		10/05/16 18:27	10/06/16 17:24	2
Copper	0.65	U	2.5	0.65	mg/Kg		10/05/16 18:27	10/06/16 17:24	2
Iron	11.3	U	15.0	11.3	mg/Kg		10/05/16 18:27	10/06/16 17:24	2
Lead	0.39	U	1.0	0.39	mg/Kg		10/05/16 18:27	10/06/16 17:24	2
Magnesium	25.0	U	500	25.0	mg/Kg		10/05/16 18:27	10/06/16 17:24	2
Manganese	0.53	U	1.5	0.53	mg/Kg		10/05/16 18:27	10/06/16 17:24	2
Nickel	0.73	U	4.0	0.73	mg/Kg		10/05/16 18:27	10/06/16 17:24	2
Potassium	15.2	U	500	15.2	mg/Kg		10/05/16 18:27	10/06/16 17:24	2
Selenium	0.69	U	2.0	0.69	mg/Kg		10/05/16 18:27	10/06/16 17:24	2
Silver	0.18	U	1.0	0.18	mg/Kg		10/05/16 18:27	10/06/16 17:24	2
Sodium	33.9	U	500	33.9	mg/Kg		10/05/16 18:27	10/06/16 17:24	2
Thallium	0.89	U	2.0	0.89	mg/Kg		10/05/16 18:27	10/06/16 17:24	2
Vanadium	0.50	U	5.0	0.50	mg/Kg		10/05/16 18:27	10/06/16 17:24	2
Zinc	0.73	U	3.0	0.73	mg/Kg		10/05/16 18:27	10/06/16 17:24	2

Lab Sample ID: LCSSRM 460-395193/2-A ^4 — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 395441 — **Prep Batch: 395193**

Analyte	Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec. Limits
Aluminum	8080	8112		mg/Kg		100.4	49.4 - 151.0
Antimony	88.2	55.80		mg/Kg		63.3	2.2 - 197.3

Method: 6010C - Metals (ICP) (Continued)

Lab Sample ID: LCSSRM 460-395193/2-A ^4
Matrix: Solid
Analysis Batch: 395441

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 395193

Analyte	Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	57.0	52.68		mg/Kg		92.4	75.1 - 124.9
Barium	110	113.4		mg/Kg		103.1	82.4 - 118.2
Beryllium	67.5	69.14		mg/Kg		102.4	82.8 - 117.2
Cadmium	77.8	76.26		mg/Kg		98.0	82.8 - 117.2
Calcium	6450	6342		mg/Kg		98.3	82.2 - 117.7
Chromium	65.0	68.64		mg/Kg		105.6	79.1 - 121.1
Cobalt	58.8	60.66		mg/Kg		103.2	83.8 - 116.3
Copper	56.4	54.98		mg/Kg		97.5	80.5 - 119.7
Iron	14700	15380		mg/Kg		104.7	45.6 - 154.4
Lead	85.6	88.02		mg/Kg		102.8	82.0 - 118.0
Magnesium	2710	2542		mg/Kg		93.8	75.6 - 124.0
Manganese	273	282.2		mg/Kg		103.4	81.0 - 118.7
Nickel	61.3	64.66		mg/Kg		105.5	82.5 - 117.5
Potassium	2420	2300		mg/Kg		95.0	69.4 - 131.0
Selenium	78.9	74.72		mg/Kg		94.7	77.6 - 122.4
Silver	54.2	51.90		mg/Kg		95.8	74.7 - 125.3
Sodium	914	853.0	J	mg/Kg		93.3	71.6 - 128.0
Thallium	178	191.4		mg/Kg		107.6	79.2 - 120.2
Vanadium	56.3	58.52		mg/Kg		103.9	77.1 - 122.9
Zinc	198	201.4		mg/Kg		101.7	82.3 - 117.2

Lab Sample ID: 460-121317-A-12-D MS ^10
Matrix: Solid
Analysis Batch: 395441

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 395193

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Aluminum	11800		204	12900	4	mg/Kg	☼	531	75 - 125
Antimony	4.2	U F1	51.1	25.83	F1	mg/Kg	☼	51	75 - 125
Arsenic	12.7		204	197.5		mg/Kg	☼	90	75 - 125
Barium	31.6	J	204	236.9		mg/Kg	☼	100	75 - 125
Beryllium	0.89	U	5.11	5.74		mg/Kg	☼	113	75 - 125
Cadmium	1.1	U	5.11	4.63		mg/Kg	☼	91	75 - 125
Calcium	2860		2040	4552		mg/Kg	☼	83	75 - 125

Method: 6010C - Metals (ICP) (Continued)

Lab Sample ID: 460-121317-A-12-D MS ^10
Matrix: Solid
Analysis Batch: 395441

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 395193

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chromium	50.7	F1	20.4	48.89	F1	mg/Kg	☼	-9	75 - 125
Cobalt	9.6	J	51.1	58.82		mg/Kg	☼	96	75 - 125
Copper	13.9		25.5	38.90		mg/Kg	☼	98	75 - 125
Iron	51500		102	37880	4	mg/Kg	☼	-13292	75 - 125
Lead	15.4		51.1	63.01		mg/Kg	☼	93	75 - 125
Magnesium	3390	F1	2040	4826	F1	mg/Kg	☼	70	75 - 125
Manganese	214		51.1	240.5	4	mg/Kg	☼	52	75 - 125
Nickel	18.7	J	51.1	68.22		mg/Kg	☼	97	75 - 125
Potassium	2000	J	2040	4076		mg/Kg	☼	102	75 - 125
Selenium	3.6	U	204	188.8		mg/Kg	☼	92	75 - 125
Silver	0.93	U	5.11	4.75	J	mg/Kg	☼	93	75 - 125
Sodium	329	J	2040	2233	J	mg/Kg	☼	93	75 - 125
Thallium	4.7	U	204	208.3		mg/Kg	☼	102	75 - 125
Vanadium	51.1		51.1	101.2		mg/Kg	☼	98	75 - 125
Zinc	64.6	F1	51.1	101.6	F1	mg/Kg	☼	73	75 - 125

Lab Sample ID: 460-121317-A-12-C DU ^10
Matrix: Solid
Analysis Batch: 395441

Client Sample ID: Duplicate
Prep Type: Total/NA
Prep Batch: 395193

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Aluminum	11800		10880		mg/Kg	☼	8	20
Antimony	4.2	U F1	4.1	U	mg/Kg	☼	NC	20
Arsenic	12.7		11.34		mg/Kg	☼	11	20
Barium	31.6	J	32.13	J	mg/Kg	☼	2	20
Beryllium	0.89	U	0.88	U	mg/Kg	☼	NC	20
Cadmium	1.1	U	1.1	U	mg/Kg	☼	NC	20
Calcium	2860		2714		mg/Kg	☼	5	20
Chromium	50.7	F1	27.72	F3	mg/Kg	☼	59	20
Cobalt	9.6	J	8.67	J	mg/Kg	☼	10	20
Copper	13.9		14.56		mg/Kg	☼	4	20
Iron	51500		37970	F3	mg/Kg	☼	30	20
Lead	15.4		12.71		mg/Kg	☼	19	20
Magnesium	3390	F1	2982		mg/Kg	☼	13	20
Manganese	214		189.7		mg/Kg	☼	12	20
Nickel	18.7	J	16.68	J	mg/Kg	☼	11	20
Potassium	2000	J	1982	J	mg/Kg	☼	0.7	20
Selenium	3.6	U	3.6	U	mg/Kg	☼	NC	20
Silver	0.93	U	0.92	U	mg/Kg	☼	NC	20
Sodium	329	J	334.5	J	mg/Kg	☼	2	20
Thallium	4.7	U	4.6	U	mg/Kg	☼	NC	20
Vanadium	51.1		47.56		mg/Kg	☼	7	20
Zinc	64.6	F1	47.42	F3	mg/Kg	☼	31	20

Method: 6020A - Metals (ICP/MS)

Lab Sample ID: MB 460-395862/1-A ^2
Matrix: Water
Analysis Batch: 396064

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 395862

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	18.2	U	40.0	18.2	ug/L		10/08/16 01:40	10/08/16 23:15	2
Antimony	0.62	U	2.0	0.62	ug/L		10/08/16 01:40	10/08/16 23:15	2
Arsenic	0.64	U	2.0	0.64	ug/L		10/08/16 01:40	10/08/16 23:15	2
Barium	1.2	U	4.0	1.2	ug/L		10/08/16 01:40	10/08/16 23:15	2
Beryllium	0.24	U	0.80	0.24	ug/L		10/08/16 01:40	10/08/16 23:15	2
Cadmium	0.71	U	2.0	0.71	ug/L		10/08/16 01:40	10/08/16 23:15	2
Calcium	60.5	U	200	60.5	ug/L		10/08/16 01:40	10/08/16 23:15	2
Chromium	1.3	U	4.0	1.3	ug/L		10/08/16 01:40	10/08/16 23:15	2
Cobalt	1.3	U	4.0	1.3	ug/L		10/08/16 01:40	10/08/16 23:15	2
Copper	1.4	U	4.0	1.4	ug/L		10/08/16 01:40	10/08/16 23:15	2
Iron	42.4	U	120	42.4	ug/L		10/08/16 01:40	10/08/16 23:15	2
Lead	0.38	U	1.2	0.38	ug/L		10/08/16 01:40	10/08/16 23:15	2
Magnesium	63.6	U	200	63.6	ug/L		10/08/16 01:40	10/08/16 23:15	2
Manganese	2.5	U	8.0	2.5	ug/L		10/08/16 01:40	10/08/16 23:15	2
Nickel	1.4	U	4.0	1.4	ug/L		10/08/16 01:40	10/08/16 23:15	2
Potassium	91.4	U	200	91.4	ug/L		10/08/16 01:40	10/08/16 23:15	2
Selenium	0.73	U	10.0	0.73	ug/L		10/08/16 01:40	10/08/16 23:15	2
Silver	1.3	U	2.0	1.3	ug/L		10/08/16 01:40	10/08/16 23:15	2
Sodium	69.0	U	200	69.0	ug/L		10/08/16 01:40	10/08/16 23:15	2
Thallium	0.26	U	0.80	0.26	ug/L		10/08/16 01:40	10/08/16 23:15	2
Vanadium	1.9	U	4.0	1.9	ug/L		10/08/16 01:40	10/08/16 23:15	2
Zinc	7.0	U	16.0	7.0	ug/L		10/08/16 01:40	10/08/16 23:15	2

Lab Sample ID: LCS 460-395862/2-A ^2
Matrix: Water
Analysis Batch: 396064

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 395862

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Aluminum	2500	2461		ug/L		98	80 - 120
Antimony	25.0	24.93		ug/L		100	80 - 120
Arsenic	50.0	42.07		ug/L		84	80 - 120
Barium	50.0	48.91		ug/L		98	80 - 120
Beryllium	25.0	24.29		ug/L		97	80 - 120
Cadmium	25.0	24.98		ug/L		100	80 - 120
Calcium	2500	2536		ug/L		101	80 - 120
Chromium	50.0	49.49		ug/L		99	80 - 120
Cobalt	25.0	24.21		ug/L		97	80 - 120
Copper	50.0	48.54		ug/L		97	80 - 120
Iron	2500	2564		ug/L		103	80 - 120
Lead	25.0	24.72		ug/L		99	80 - 120
Magnesium	2500	2436		ug/L		97	80 - 120
Manganese	250	255.2		ug/L		102	80 - 120
Nickel	50.0	49.36		ug/L		99	80 - 120
Potassium	2500	2439		ug/L		98	80 - 120
Selenium	50.0	42.29		ug/L		85	80 - 120
Silver	25.0	24.60		ug/L		98	80 - 120
Sodium	2500	2431		ug/L		97	80 - 120
Thallium	20.0	20.10		ug/L		101	80 - 120

Method: 6020A - Metals (ICP/MS) (Continued)

Lab Sample ID: LCS 460-395862/2-A ^2
Matrix: Water
Analysis Batch: 396064

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 395862

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Vanadium	50.0	48.65		ug/L		97	80 - 120
Zinc	250	243.9		ug/L		98	80 - 120

Lab Sample ID: 460-121033-E-17-D MS ^2
Matrix: Water
Analysis Batch: 396064

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 395862

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Aluminum	409		2500	2915		ug/L		100	75 - 125
Antimony	0.63	J	25.0	25.91		ug/L		101	75 - 125
Arsenic	0.90	J	50.0	40.81		ug/L		80	75 - 125
Barium	610		50.0	670.9	4	ug/L		122	75 - 125
Beryllium	0.24	U	25.0	23.85		ug/L		95	75 - 125
Cadmium	0.71	U	25.0	24.94		ug/L		100	75 - 125
Calcium	170000		2500	176300	4	ug/L		238	75 - 125
Chromium	2.0	J	50.0	50.84		ug/L		98	75 - 125
Cobalt	1.3	U	25.0	24.17		ug/L		97	75 - 125
Copper	1.7	J	50.0	47.36		ug/L		91	75 - 125
Iron	12500		2500	15230	4	ug/L		108	75 - 125
Lead	27.1		25.0	52.58		ug/L		102	75 - 125
Magnesium	36600		2500	39340	4	ug/L		109	75 - 125
Manganese	1370		250	1624	4	ug/L		104	75 - 125
Nickel	1.4	U	50.0	47.12		ug/L		94	75 - 125
Potassium	26100		2500	29030	4	ug/L		117	75 - 125
Selenium	0.73	U	50.0	39.42		ug/L		79	75 - 125
Silver	1.3	U	25.0	24.14		ug/L		97	75 - 125
Sodium	152000		2500	156500	4	ug/L		195	75 - 125
Thallium	0.26	U	20.0	20.77		ug/L		104	75 - 125
Vanadium	2.4	J	50.0	51.16		ug/L		97	75 - 125
Zinc	70.4		250	306.4		ug/L		94	75 - 125

Lab Sample ID: 460-121033-E-17-C DU ^2
Matrix: Water
Analysis Batch: 396064

Client Sample ID: Duplicate
Prep Type: Total/NA
Prep Batch: 395862

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Aluminum	409		416.4		ug/L		2	20
Antimony	0.63	J	0.634	J	ug/L		0.3	20
Barium	610		615.4		ug/L		0.9	20
Beryllium	0.24	U	0.24	U	ug/L		NC	20
Cadmium	0.71	U	0.71	U	ug/L		NC	20
Calcium	170000		173100		ug/L		2	20
Chromium	2.0	J	2.11	J	ug/L		4	20
Cobalt	1.3	U	1.3	U	ug/L		NC	20
Copper	1.7	J	1.69	J	ug/L		3	20
Iron	12500		12680		ug/L		1	20
Lead	27.1		26.54		ug/L		2	20
Magnesium	36600		36810		ug/L		0.5	20
Manganese	1370		1377		ug/L		0.8	20

Method: 6020A - Metals (ICP/MS) (Continued)

Lab Sample ID: 460-121033-E-17-C DU ^2 — **Client Sample ID: Duplicate**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 396064 — **Prep Batch: 395862**

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Nickel	1.4	U	1.4	U	ug/L		NC	20
Potassium	26100		26290		ug/L		0.7	20
Selenium	0.73	U	0.73	U	ug/L		NC	20
Silver	1.3	U	1.3	U	ug/L		NC	20
Sodium	152000		153300		ug/L		1	20
Thallium	0.26	U	0.26	U	ug/L		NC	20
Vanadium	2.4	J	2.39	J	ug/L		2	20
Zinc	70.4		71.58		ug/L		2	20

Method: 7471B - Mercury (CVAA)

Lab Sample ID: MB 460-395276/1-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 395370 — **Prep Batch: 395276**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.011	U	0.017	0.011	mg/Kg		10/06/16 05:24	10/06/16 10:06	1

Lab Sample ID: LCSSRM 460-395276/2-A ^20 — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 395370 — **Prep Batch: 395276**

Analyte	Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	12.3	11.37		mg/Kg		92.4	64.1 - 135.8

Lab Sample ID: 460-121278-A-6-D MS — **Client Sample ID: Matrix Spike**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 395370 — **Prep Batch: 395276**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.38		0.0911	0.669	4	mg/Kg	☼	320	75 - 125

Lab Sample ID: 460-121278-A-6-C DU — **Client Sample ID: Duplicate**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 395370 — **Prep Batch: 395276**

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Mercury	0.38		0.370		mg/Kg	☼	2	20

Lab Sample ID: MB 460-396126/10-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 396226 — **Prep Batch: 396126**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.011	U	0.017	0.011	mg/Kg		10/10/16 04:01	10/10/16 07:40	1

Method: 7471B - Mercury (CVAA) (Continued)

Lab Sample ID: LCSSRM 460-396126/11-A ^20 — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 396226 — **Prep Batch: 396126**

Analyte	Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	12.3	12.24		mg/Kg		99.5	64.1 - 135.8

Lab Sample ID: 460-120997-C-11-D MS — **Client Sample ID: Matrix Spike**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 396226 — **Prep Batch: 396126**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.024	F1	0.102	0.0651	F1	mg/Kg	☼	40	75 - 125

Lab Sample ID: 460-120997-A-11-C DU — **Client Sample ID: Duplicate**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 396226 — **Prep Batch: 396126**

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Mercury	0.024	F1	0.0311	F5	mg/Kg	☼	25	20

Method: 9012B - Cyanide, Total andor Amenable

Lab Sample ID: MB 460-397040/1-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 397351 — **Prep Batch: 397040**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	0.027	U	0.10	0.027	mg/Kg		10/13/16 11:03	10/14/16 10:56	1

Lab Sample ID: HLCS 460-397040/3-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 397351 — **Prep Batch: 397040**

Analyte	Spike Added	HLCS Result	HLCS Qualifier	Unit	D	%Rec	%Rec. Limits
Cyanide, Total	2.00	2.11		mg/Kg		106	90 - 110

Lab Sample ID: LCSSRM 460-397040/4-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 397351 — **Prep Batch: 397040**

Analyte	Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec. Limits
Cyanide, Total	103	10.90		mg/Kg		10.6	3.5 - 121.4

Lab Sample ID: LLCS 460-397040/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 397351 — **Prep Batch: 397040**

Analyte	Spike Added	LLCS Result	LLCS Qualifier	Unit	D	%Rec	%Rec. Limits
Cyanide, Total	1.00	0.951		mg/Kg		95	90 - 110

Method: 9012B - Cyanide, Total andor Amenable (Continued)

Lab Sample ID: 460-121319-2 MS
Matrix: Solid
Analysis Batch: 397351

Client Sample ID: SB2-19.0-20.0
Prep Type: Total/NA
Prep Batch: 397040

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Cyanide, Total	0.029	U	2.17	2.28		mg/Kg	☼	105	47 - 118		

Lab Sample ID: 460-121319-2 MSD
Matrix: Solid
Analysis Batch: 397351

Client Sample ID: SB2-19.0-20.0
Prep Type: Total/NA
Prep Batch: 397040

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Cyanide, Total	0.029	U	2.17	2.42		mg/Kg	☼	111	47 - 118	6	35

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.
*	LCS or LCSD is outside acceptance limits.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
X	Surrogate is outside control limits

GC/MS Semi VOA

Qualifier	Qualifier Description
F1	MS and/or MSD Recovery is outside acceptance limits.
U	Indicates the analyte was analyzed for but not detected.
*	LCS or LCSD is outside acceptance limits.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
H	Sample was prepped or analyzed beyond the specified holding time
X	Surrogate is outside control limits
E	Result exceeded calibration range.

GC/MS Semi VOA TICs

Qualifier	Qualifier Description
J	Indicates an Estimated Value for TICs
N	This flag indicates the presumptive evidence of a compound.
H	Sample was prepped or analyzed beyond the specified holding time
A	The tentatively identified compound is a suspected aldol-condensation product.

GC Semi VOA

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.
H	Sample was prepped or analyzed beyond the specified holding time
F1	MS and/or MSD Recovery is outside acceptance limits.
p	The %RPD between the primary and confirmation column/detector is >40%. The lower value has been reported.
X	Surrogate is outside control limits
F2	MS/MSD RPD exceeds control limits

Metals

Qualifier	Qualifier Description
F5	Duplicate RPD exceeds limit, and one or both sample results are less than 5 times RL. The data are considered valid because the absolute difference is less than the RL.
F1	MS and/or MSD Recovery is outside acceptance limits.
U	Indicates the analyte was analyzed for but not detected.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.
F3	Duplicate RPD exceeds the control limit

General Chemistry

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
U	Indicates the analyte was analyzed for but not detected.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains no Free Liquid

Glossary (Continued)

Abbreviation	These commonly used abbreviations may or may not be present in this report.
DER	Duplicate error ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative error ratio
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

GC/MS VOA

Prep Batch: 394942

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-121319-1	SB2-2.0-3.0	Total/NA	Solid	5035	
460-121319-2	SB2-19.0-20.0	Total/NA	Solid	5035	
460-121319-3	SB3-3.0-4.0	Total/NA	Solid	5035	
460-121319-4	SB3-15.0-16.0	Total/NA	Solid	5035	
460-121319-5	SB4-2.0-3.0	Total/NA	Solid	5035	
460-121319-6	SB4-6.0-7.0	Total/NA	Solid	5035	
LB3 460-394942/1-A	Method Blank	Total/NA	Solid	5035	

Analysis Batch: 395007

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-121319-1	SB2-2.0-3.0	Total/NA	Solid	8260C	394942
460-121319-2	SB2-19.0-20.0	Total/NA	Solid	8260C	394942
460-121319-3	SB3-3.0-4.0	Total/NA	Solid	8260C	394942
460-121319-5	SB4-2.0-3.0	Total/NA	Solid	8260C	394942
460-121319-6	SB4-6.0-7.0	Total/NA	Solid	8260C	394942
LB3 460-394942/1-A	Method Blank	Total/NA	Solid	8260C	394942
MB 460-395007/7	Method Blank	Total/NA	Solid	8260C	
LCS 460-395007/3	Lab Control Sample	Total/NA	Solid	8260C	
LCSD 460-395007/4	Lab Control Sample Dup	Total/NA	Solid	8260C	

Analysis Batch: 395272

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-121319-4	SB3-15.0-16.0	Total/NA	Solid	8260C	394942
LB3 460-394942/1-A	Method Blank	Total/NA	Solid	8260C	394942
MB 460-395272/6	Method Blank	Total/NA	Solid	8260C	
LCS 460-395272/3	Lab Control Sample	Total/NA	Solid	8260C	
LCSD 460-395272/4	Lab Control Sample Dup	Total/NA	Solid	8260C	

Analysis Batch: 396070

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-121319-7	GW02	Total/NA	Water	8260C	
460-121319-8	GW03	Total/NA	Water	8260C	
MB 460-396070/7	Method Blank	Total/NA	Water	8260C	
LCS 460-396070/3	Lab Control Sample	Total/NA	Water	8260C	
LCSD 460-396070/4	Lab Control Sample Dup	Total/NA	Water	8260C	

Analysis Batch: 396938

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-121319-9	Trip Blank	Total/NA	Water	8260C	
MB 460-396938/8	Method Blank	Total/NA	Water	8260C	
LCS 460-396938/4	Lab Control Sample	Total/NA	Water	8260C	
460-121459-C-1 MS	Matrix Spike	Total/NA	Water	8260C	
460-121459-C-1 MSD	Matrix Spike Duplicate	Total/NA	Water	8260C	

GC/MS Semi VOA

Prep Batch: 395061

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-121319-1	SB2-2.0-3.0	Total/NA	Solid	3546	
460-121319-2	SB2-19.0-20.0	Total/NA	Solid	3546	

GC/MS Semi VOA (Continued)

Prep Batch: 395061 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-121319-3	SB3-3.0-4.0	Total/NA	Solid	3546	
460-121319-4	SB3-15.0-16.0	Total/NA	Solid	3546	
460-121319-5	SB4-2.0-3.0	Total/NA	Solid	3546	
460-121319-6	SB4-6.0-7.0	Total/NA	Solid	3546	
MB 460-395061/1-A	Method Blank	Total/NA	Solid	3546	
LCS 460-395061/2-A	Lab Control Sample	Total/NA	Solid	3546	
LCS 460-395061/3-A	Lab Control Sample	Total/NA	Solid	3546	
460-121305-A-1-A MS	Matrix Spike	Total/NA	Solid	3546	
460-121305-A-1-B MSD	Matrix Spike Duplicate	Total/NA	Solid	3546	

Analysis Batch: 395438

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-121319-1	SB2-2.0-3.0	Total/NA	Solid	8270D	395061
460-121319-2	SB2-19.0-20.0	Total/NA	Solid	8270D	395061
460-121319-3	SB3-3.0-4.0	Total/NA	Solid	8270D	395061
460-121319-4	SB3-15.0-16.0	Total/NA	Solid	8270D	395061
460-121319-5	SB4-2.0-3.0	Total/NA	Solid	8270D	395061
460-121319-6	SB4-6.0-7.0	Total/NA	Solid	8270D	395061
LCS 460-395061/2-A	Lab Control Sample	Total/NA	Solid	8270D	395061
LCS 460-395061/3-A	Lab Control Sample	Total/NA	Solid	8270D	395061
460-121305-A-1-A MS	Matrix Spike	Total/NA	Solid	8270D	395061
460-121305-A-1-B MSD	Matrix Spike Duplicate	Total/NA	Solid	8270D	395061

Analysis Batch: 395602

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 460-395061/1-A	Method Blank	Total/NA	Solid	8270D	395061

Prep Batch: 396950

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-121319-7	GW02	Total/NA	Water	3510C	
460-121319-8	GW03	Total/NA	Water	3510C	
MB 460-396950/1-A	Method Blank	Total/NA	Water	3510C	
LCS 460-396950/2-A	Lab Control Sample	Total/NA	Water	3510C	
LCS 460-396950/4-A	Lab Control Sample	Total/NA	Water	3510C	
LCSD 460-396950/3-A	Lab Control Sample Dup	Total/NA	Water	3510C	
LCSD 460-396950/5-A	Lab Control Sample Dup	Total/NA	Water	3510C	

Analysis Batch: 397149

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 460-396950/1-A	Method Blank	Total/NA	Water	8270D	396950
LCS 460-396950/2-A	Lab Control Sample	Total/NA	Water	8270D	396950
LCS 460-396950/4-A	Lab Control Sample	Total/NA	Water	8270D	396950
LCSD 460-396950/3-A	Lab Control Sample Dup	Total/NA	Water	8270D	396950
LCSD 460-396950/5-A	Lab Control Sample Dup	Total/NA	Water	8270D	396950

Analysis Batch: 398204

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-121319-7	GW02	Total/NA	Water	8270D	396950
460-121319-8	GW03	Total/NA	Water	8270D	396950

GC Semi VOA

Prep Batch: 395263

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-121319-1	SB2-2.0-3.0	Total/NA	Solid	3546	
460-121319-2	SB2-19.0-20.0	Total/NA	Solid	3546	
460-121319-3	SB3-3.0-4.0	Total/NA	Solid	3546	
460-121319-4	SB3-15.0-16.0	Total/NA	Solid	3546	
460-121319-5	SB4-2.0-3.0	Total/NA	Solid	3546	
460-121319-6	SB4-6.0-7.0	Total/NA	Solid	3546	
MB 460-395263/1-A	Method Blank	Total/NA	Solid	3546	
LCS 460-395263/2-A	Lab Control Sample	Total/NA	Solid	3546	
460-121360-A-6-F MS	Matrix Spike	Total/NA	Solid	3546	
460-121360-A-6-G MSD	Matrix Spike Duplicate	Total/NA	Solid	3546	

Prep Batch: 395266

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-121319-1	SB2-2.0-3.0	Total/NA	Solid	3546	
460-121319-2	SB2-19.0-20.0	Total/NA	Solid	3546	
460-121319-3	SB3-3.0-4.0	Total/NA	Solid	3546	
460-121319-4	SB3-15.0-16.0	Total/NA	Solid	3546	
460-121319-5	SB4-2.0-3.0	Total/NA	Solid	3546	
460-121319-6	SB4-6.0-7.0	Total/NA	Solid	3546	
MB 460-395266/1-A	Method Blank	Total/NA	Solid	3546	
LCS 460-395266/2-A	Lab Control Sample	Total/NA	Solid	3546	

Analysis Batch: 395288

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-121319-1	SB2-2.0-3.0	Total/NA	Solid	8081B	395263
460-121319-2	SB2-19.0-20.0	Total/NA	Solid	8081B	395263
460-121319-3	SB3-3.0-4.0	Total/NA	Solid	8081B	395263
460-121319-4	SB3-15.0-16.0	Total/NA	Solid	8081B	395263
460-121319-5	SB4-2.0-3.0	Total/NA	Solid	8081B	395263
460-121319-6	SB4-6.0-7.0	Total/NA	Solid	8081B	395263
MB 460-395263/1-A	Method Blank	Total/NA	Solid	8081B	395263
LCS 460-395263/2-A	Lab Control Sample	Total/NA	Solid	8081B	395263
460-121360-A-6-F MS	Matrix Spike	Total/NA	Solid	8081B	395263
460-121360-A-6-G MSD	Matrix Spike Duplicate	Total/NA	Solid	8081B	395263

Analysis Batch: 395389

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-121319-1	SB2-2.0-3.0	Total/NA	Solid	8082A	395266
460-121319-2	SB2-19.0-20.0	Total/NA	Solid	8082A	395266
460-121319-3	SB3-3.0-4.0	Total/NA	Solid	8082A	395266
460-121319-4	SB3-15.0-16.0	Total/NA	Solid	8082A	395266
460-121319-5	SB4-2.0-3.0	Total/NA	Solid	8082A	395266
460-121319-6	SB4-6.0-7.0	Total/NA	Solid	8082A	395266
MB 460-395266/1-A	Method Blank	Total/NA	Solid	8082A	395266
LCS 460-395266/2-A	Lab Control Sample	Total/NA	Solid	8082A	395266

Prep Batch: 396887

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-121319-7	GW02	Total/NA	Water	3510C	
460-121319-8	GW03	Total/NA	Water	3510C	
MB 460-396887/1-A	Method Blank	Total/NA	Water	3510C	

GC Semi VOA (Continued)

Prep Batch: 396887 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 460-396887/2-A	Lab Control Sample	Total/NA	Water	3510C	
LCSD 460-396887/3-A	Lab Control Sample Dup	Total/NA	Water	3510C	

Analysis Batch: 397167

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-121319-7	GW02	Total/NA	Water	8082A	396887
460-121319-8	GW03	Total/NA	Water	8082A	396887
MB 460-396887/1-A	Method Blank	Total/NA	Water	8082A	396887
LCS 460-396887/2-A	Lab Control Sample	Total/NA	Water	8082A	396887
LCSD 460-396887/3-A	Lab Control Sample Dup	Total/NA	Water	8082A	396887

Metals

Prep Batch: 395100

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-121319-7	GW02	Total/NA	Water	245.1	
460-121319-8	GW03	Total/NA	Water	245.1	
MB 460-395100/1-A	Method Blank	Total/NA	Water	245.1	
LCS 460-395100/2-A	Lab Control Sample	Total/NA	Water	245.1	
460-121336-D-1-C MS	Matrix Spike	Total/NA	Water	245.1	
460-121336-D-1-B DU	Duplicate	Total/NA	Water	245.1	

Analysis Batch: 395184

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-121319-7	GW02	Total/NA	Water	245.1	395100
460-121319-8	GW03	Total/NA	Water	245.1	395100
MB 460-395100/1-A	Method Blank	Total/NA	Water	245.1	395100
LCS 460-395100/2-A	Lab Control Sample	Total/NA	Water	245.1	395100
460-121336-D-1-C MS	Matrix Spike	Total/NA	Water	245.1	395100
460-121336-D-1-B DU	Duplicate	Total/NA	Water	245.1	395100

Prep Batch: 395193

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-121319-1	SB2-2.0-3.0	Total/NA	Solid	3050B	
460-121319-2	SB2-19.0-20.0	Total/NA	Solid	3050B	
460-121319-3	SB3-3.0-4.0	Total/NA	Solid	3050B	
460-121319-4	SB3-15.0-16.0	Total/NA	Solid	3050B	
460-121319-5	SB4-2.0-3.0	Total/NA	Solid	3050B	
460-121319-6	SB4-6.0-7.0	Total/NA	Solid	3050B	
MB 460-395193/1-A ^2	Method Blank	Total/NA	Solid	3050B	
LCSSRM 460-395193/2-A ^4	Lab Control Sample	Total/NA	Solid	3050B	
460-121317-A-12-D MS ^10	Matrix Spike	Total/NA	Solid	3050B	
460-121317-A-12-C DU ^10	Duplicate	Total/NA	Solid	3050B	

Prep Batch: 395276

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-121319-1	SB2-2.0-3.0	Total/NA	Solid	7471B	
460-121319-2	SB2-19.0-20.0	Total/NA	Solid	7471B	
460-121319-3	SB3-3.0-4.0	Total/NA	Solid	7471B	
460-121319-4	SB3-15.0-16.0	Total/NA	Solid	7471B	

Metals (Continued)

Prep Batch: 395276 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 460-395276/1-A	Method Blank	Total/NA	Solid	7471B	
LCSSRM 460-395276/2-A ^2	Lab Control Sample	Total/NA	Solid	7471B	
460-121278-A-6-D MS	Matrix Spike	Total/NA	Solid	7471B	
460-121278-A-6-C DU	Duplicate	Total/NA	Solid	7471B	

Analysis Batch: 395370

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-121319-1	SB2-2.0-3.0	Total/NA	Solid	7471B	395276
460-121319-2	SB2-19.0-20.0	Total/NA	Solid	7471B	395276
460-121319-3	SB3-3.0-4.0	Total/NA	Solid	7471B	395276
460-121319-4	SB3-15.0-16.0	Total/NA	Solid	7471B	395276
MB 460-395276/1-A	Method Blank	Total/NA	Solid	7471B	395276
LCSSRM 460-395276/2-A ^2	Lab Control Sample	Total/NA	Solid	7471B	395276
460-121278-A-6-D MS	Matrix Spike	Total/NA	Solid	7471B	395276
460-121278-A-6-C DU	Duplicate	Total/NA	Solid	7471B	395276

Analysis Batch: 395441

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 460-395193/1-A ^2	Method Blank	Total/NA	Solid	6010C	395193
LCSSRM 460-395193/2-A ^4	Lab Control Sample	Total/NA	Solid	6010C	395193
460-121317-A-12-D MS ^10	Matrix Spike	Total/NA	Solid	6010C	395193
460-121317-A-12-C DU ^10	Duplicate	Total/NA	Solid	6010C	395193

Analysis Batch: 395750

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-121319-1	SB2-2.0-3.0	Total/NA	Solid	6010C	395193
460-121319-2	SB2-19.0-20.0	Total/NA	Solid	6010C	395193
460-121319-3	SB3-3.0-4.0	Total/NA	Solid	6010C	395193
460-121319-4	SB3-15.0-16.0	Total/NA	Solid	6010C	395193
460-121319-5	SB4-2.0-3.0	Total/NA	Solid	6010C	395193
460-121319-6	SB4-6.0-7.0	Total/NA	Solid	6010C	395193

Prep Batch: 395862

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-121319-7	GW02	Total/NA	Water	3010A	
460-121319-8	GW03	Total/NA	Water	3010A	
MB 460-395862/1-A ^2	Method Blank	Total/NA	Water	3010A	
LCS 460-395862/2-A ^2	Lab Control Sample	Total/NA	Water	3010A	
460-121033-E-17-D MS ^2	Matrix Spike	Total/NA	Water	3010A	
460-121033-E-17-C DU ^2	Duplicate	Total/NA	Water	3010A	

Analysis Batch: 396064

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-121319-7	GW02	Total/NA	Water	6020A	395862
460-121319-8	GW03	Total/NA	Water	6020A	395862
460-121319-8	GW03	Total/NA	Water	6020A	395862
MB 460-395862/1-A ^2	Method Blank	Total/NA	Water	6020A	395862
LCS 460-395862/2-A ^2	Lab Control Sample	Total/NA	Water	6020A	395862
460-121033-E-17-D MS ^2	Matrix Spike	Total/NA	Water	6020A	395862
460-121033-E-17-C DU ^2	Duplicate	Total/NA	Water	6020A	395862

Metals (Continued)

Prep Batch: 396126

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-121319-5	SB4-2.0-3.0	Total/NA	Solid	7471B	
460-121319-6	SB4-6.0-7.0	Total/NA	Solid	7471B	
MB 460-396126/10-A	Method Blank	Total/NA	Solid	7471B	
LCSSRM 460-396126/11-A	Lab Control Sample	Total/NA	Solid	7471B	
460-120997-C-11-D MS	Matrix Spike	Total/NA	Solid	7471B	
460-120997-A-11-C DU	Duplicate	Total/NA	Solid	7471B	

Analysis Batch: 396226

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-121319-5	SB4-2.0-3.0	Total/NA	Solid	7471B	396126
460-121319-6	SB4-6.0-7.0	Total/NA	Solid	7471B	396126
MB 460-396126/10-A	Method Blank	Total/NA	Solid	7471B	396126
LCSSRM 460-396126/11-A	Lab Control Sample	Total/NA	Solid	7471B	396126
460-120997-C-11-D MS	Matrix Spike	Total/NA	Solid	7471B	396126
460-120997-A-11-C DU	Duplicate	Total/NA	Solid	7471B	396126

Analysis Batch: 397166

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-121319-7	GW02	Total/NA	Water	6020A	395862

General Chemistry

Analysis Batch: 395080

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-121319-1	SB2-2.0-3.0	Total/NA	Solid	Moisture	
460-121319-2	SB2-19.0-20.0	Total/NA	Solid	Moisture	
460-121319-3	SB3-3.0-4.0	Total/NA	Solid	Moisture	
460-121319-4	SB3-15.0-16.0	Total/NA	Solid	Moisture	
460-121319-5	SB4-2.0-3.0	Total/NA	Solid	Moisture	
460-121319-6	SB4-6.0-7.0	Total/NA	Solid	Moisture	
460-121294-D-4 DU	Duplicate	Total/NA	Solid	Moisture	

Prep Batch: 397040

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-121319-1	SB2-2.0-3.0	Total/NA	Solid	9012B	
460-121319-2	SB2-19.0-20.0	Total/NA	Solid	9012B	
460-121319-3	SB3-3.0-4.0	Total/NA	Solid	9012B	
460-121319-4	SB3-15.0-16.0	Total/NA	Solid	9012B	
460-121319-5	SB4-2.0-3.0	Total/NA	Solid	9012B	
460-121319-6	SB4-6.0-7.0	Total/NA	Solid	9012B	
MB 460-397040/1-A	Method Blank	Total/NA	Solid	9012B	
HLCS 460-397040/3-A	Lab Control Sample	Total/NA	Solid	9012B	
LCSSRM 460-397040/4-A	Lab Control Sample	Total/NA	Solid	9012B	
LLCS 460-397040/2-A	Lab Control Sample	Total/NA	Solid	9012B	
460-121319-2 MS	SB2-19.0-20.0	Total/NA	Solid	9012B	
460-121319-2 MSD	SB2-19.0-20.0	Total/NA	Solid	9012B	

Analysis Batch: 397351

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-121319-1	SB2-2.0-3.0	Total/NA	Solid	9012B	397040

General Chemistry (Continued)

Analysis Batch: 397351 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-121319-2	SB2-19.0-20.0	Total/NA	Solid	9012B	397040
460-121319-3	SB3-3.0-4.0	Total/NA	Solid	9012B	397040
460-121319-4	SB3-15.0-16.0	Total/NA	Solid	9012B	397040
460-121319-5	SB4-2.0-3.0	Total/NA	Solid	9012B	397040
460-121319-6	SB4-6.0-7.0	Total/NA	Solid	9012B	397040
MB 460-397040/1-A	Method Blank	Total/NA	Solid	9012B	397040
HLCS 460-397040/3-A	Lab Control Sample	Total/NA	Solid	9012B	397040
LCSSRM 460-397040/4-A	Lab Control Sample	Total/NA	Solid	9012B	397040
LLCS 460-397040/2-A	Lab Control Sample	Total/NA	Solid	9012B	397040
460-121319-2 MS	SB2-19.0-20.0	Total/NA	Solid	9012B	397040
460-121319-2 MSD	SB2-19.0-20.0	Total/NA	Solid	9012B	397040

Client Sample ID: SB2-2.0-3.0
Date Collected: 10/03/16 10:05
Date Received: 10/03/16 18:55

Lab Sample ID: 460-121319-1
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	395080	10/05/16 11:28	RWC	TAL EDI

Client Sample ID: SB2-2.0-3.0
Date Collected: 10/03/16 10:05
Date Received: 10/03/16 18:55

Lab Sample ID: 460-121319-1
Matrix: Solid
Percent Solids: 92.6

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			394942	10/04/16 21:47	AVM	TAL EDI
Total/NA	Analysis	8260C		1	395007	10/05/16 17:16	SZD	TAL EDI
Total/NA	Prep	3546			395061	10/05/16 10:34	FHW	TAL EDI
Total/NA	Analysis	8270D		1	395438	10/06/16 23:41	MMC	TAL EDI
Total/NA	Prep	3546			395263	10/06/16 03:19	ARA	TAL EDI
Total/NA	Analysis	8081B		1	395288	10/06/16 13:19	SAK	TAL EDI
Total/NA	Prep	3546			395266	10/06/16 03:36	ARA	TAL EDI
Total/NA	Analysis	8082A		1	395389	10/06/16 15:21	SAK	TAL EDI
Total/NA	Prep	3050B			395193	10/05/16 18:27	EAE	TAL EDI
Total/NA	Analysis	6010C		4	395750	10/08/16 03:31	CDC	TAL EDI
Total/NA	Prep	7471B			395276	10/06/16 05:24	TJS	TAL EDI
Total/NA	Analysis	7471B		1	395370	10/06/16 11:06	TJS	TAL EDI
Total/NA	Prep	9012B			397040	10/13/16 11:03	MBE	TAL EDI
Total/NA	Analysis	9012B		1	397351	10/14/16 11:12	MAL	TAL EDI

Client Sample ID: SB2-19.0-20.0
Date Collected: 10/03/16 11:00
Date Received: 10/03/16 18:55

Lab Sample ID: 460-121319-2
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	395080	10/05/16 11:28	RWC	TAL EDI

Client Sample ID: SB2-19.0-20.0
Date Collected: 10/03/16 11:00
Date Received: 10/03/16 18:55

Lab Sample ID: 460-121319-2
Matrix: Solid
Percent Solids: 92.0

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			394942	10/04/16 21:48	AVM	TAL EDI
Total/NA	Analysis	8260C		1	395007	10/05/16 17:41	SZD	TAL EDI
Total/NA	Prep	3546			395061	10/05/16 10:34	FHW	TAL EDI
Total/NA	Analysis	8270D		1	395438	10/06/16 20:49	MMC	TAL EDI
Total/NA	Prep	3546			395263	10/06/16 03:19	ARA	TAL EDI
Total/NA	Analysis	8081B		1	395288	10/06/16 13:32	SAK	TAL EDI
Total/NA	Prep	3546			395266	10/06/16 03:36	ARA	TAL EDI
Total/NA	Analysis	8082A		1	395389	10/06/16 15:36	SAK	TAL EDI
Total/NA	Prep	3050B			395193	10/05/16 18:27	EAE	TAL EDI

Client Sample ID: SB2-19.0-20.0
Date Collected: 10/03/16 11:00
Date Received: 10/03/16 18:55

Lab Sample ID: 460-121319-2
Matrix: Solid
Percent Solids: 92.0

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	6010C		4	395750	10/08/16 03:35	CDC	TAL EDI
Total/NA	Prep	7471B			395276	10/06/16 05:24	TJS	TAL EDI
Total/NA	Analysis	7471B		1	395370	10/06/16 11:08	TJS	TAL EDI
Total/NA	Prep	9012B			397040	10/13/16 11:03	MBE	TAL EDI
Total/NA	Analysis	9012B		1	397351	10/14/16 11:13	MAL	TAL EDI

Client Sample ID: SB3-3.0-4.0
Date Collected: 10/03/16 12:25
Date Received: 10/03/16 18:55

Lab Sample ID: 460-121319-3
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	395080	10/05/16 11:28	RWC	TAL EDI

Client Sample ID: SB3-3.0-4.0
Date Collected: 10/03/16 12:25
Date Received: 10/03/16 18:55

Lab Sample ID: 460-121319-3
Matrix: Solid
Percent Solids: 88.3

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			394942	10/04/16 21:49	AVM	TAL EDI
Total/NA	Analysis	8260C		1	395007	10/05/16 18:05	SZD	TAL EDI
Total/NA	Prep	3546			395061	10/05/16 10:34	FHW	TAL EDI
Total/NA	Analysis	8270D		1	395438	10/06/16 23:16	MMC	TAL EDI
Total/NA	Prep	3546			395263	10/06/16 03:19	ARA	TAL EDI
Total/NA	Analysis	8081B		1	395288	10/06/16 13:45	SAK	TAL EDI
Total/NA	Prep	3546			395266	10/06/16 03:36	ARA	TAL EDI
Total/NA	Analysis	8082A		1	395389	10/06/16 15:51	SAK	TAL EDI
Total/NA	Prep	3050B			395193	10/05/16 18:27	EAE	TAL EDI
Total/NA	Analysis	6010C		4	395750	10/08/16 03:50	CDC	TAL EDI
Total/NA	Prep	7471B			395276	10/06/16 05:24	TJS	TAL EDI
Total/NA	Analysis	7471B		1	395370	10/06/16 11:10	TJS	TAL EDI
Total/NA	Prep	9012B			397040	10/13/16 11:03	MBE	TAL EDI
Total/NA	Analysis	9012B		1	397351	10/14/16 11:19	MAL	TAL EDI

Client Sample ID: SB3-15.0-16.0
Date Collected: 10/03/16 14:00
Date Received: 10/03/16 18:55

Lab Sample ID: 460-121319-4
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	395080	10/05/16 11:28	RWC	TAL EDI

Client Sample ID: SB3-15.0-16.0

Date Collected: 10/03/16 14:00
Date Received: 10/03/16 18:55

Lab Sample ID: 460-121319-4

Matrix: Solid
Percent Solids: 83.0

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			394942	10/04/16 21:50	AVM	TAL EDI
Total/NA	Analysis	8260C		1	395272	10/06/16 11:38	AAT	TAL EDI
Total/NA	Prep	3546			395061	10/05/16 10:34	FHW	TAL EDI
Total/NA	Analysis	8270D		1	395438	10/06/16 21:14	MMC	TAL EDI
Total/NA	Prep	3546			395263	10/06/16 03:19	ARA	TAL EDI
Total/NA	Analysis	8081B		1	395288	10/06/16 13:59	SAK	TAL EDI
Total/NA	Prep	3546			395266	10/06/16 03:36	ARA	TAL EDI
Total/NA	Analysis	8082A		1	395389	10/06/16 16:06	SAK	TAL EDI
Total/NA	Prep	3050B			395193	10/05/16 18:27	EAE	TAL EDI
Total/NA	Analysis	6010C		4	395750	10/08/16 03:54	CDC	TAL EDI
Total/NA	Prep	7471B			395276	10/06/16 05:24	TJS	TAL EDI
Total/NA	Analysis	7471B		1	395370	10/06/16 10:49	TJS	TAL EDI
Total/NA	Prep	9012B			397040	10/13/16 11:06	MBE	TAL EDI
Total/NA	Analysis	9012B		1	397351	10/14/16 11:20	MAL	TAL EDI

Client Sample ID: SB4-2.0-3.0

Date Collected: 10/03/16 16:00
Date Received: 10/03/16 18:55

Lab Sample ID: 460-121319-5

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	395080	10/05/16 11:28	RWC	TAL EDI

Client Sample ID: SB4-2.0-3.0

Date Collected: 10/03/16 16:00
Date Received: 10/03/16 18:55

Lab Sample ID: 460-121319-5

Matrix: Solid
Percent Solids: 70.9

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			394942	10/04/16 21:51	AVM	TAL EDI
Total/NA	Analysis	8260C		1	395007	10/05/16 18:53	SZD	TAL EDI
Total/NA	Prep	3546			395061	10/05/16 10:34	FHW	TAL EDI
Total/NA	Analysis	8270D		1	395438	10/06/16 21:38	MMC	TAL EDI
Total/NA	Prep	3546			395263	10/06/16 03:19	ARA	TAL EDI
Total/NA	Analysis	8081B		1	395288	10/06/16 14:12	SAK	TAL EDI
Total/NA	Prep	3546			395266	10/06/16 03:36	ARA	TAL EDI
Total/NA	Analysis	8082A		1	395389	10/06/16 16:20	SAK	TAL EDI
Total/NA	Prep	3050B			395193	10/05/16 18:27	EAE	TAL EDI
Total/NA	Analysis	6010C		4	395750	10/08/16 03:58	CDC	TAL EDI
Total/NA	Prep	7471B			396126	10/10/16 04:01	TJS	TAL EDI
Total/NA	Analysis	7471B		1	396226	10/10/16 08:13	TJS	TAL EDI
Total/NA	Prep	9012B			397040	10/13/16 11:06	MBE	TAL EDI
Total/NA	Analysis	9012B		1	397351	10/14/16 11:21	MAL	TAL EDI

Client Sample ID: SB4-6.0-7.0
Date Collected: 10/03/16 16:35
Date Received: 10/03/16 18:55

Lab Sample ID: 460-121319-6
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	395080	10/05/16 11:28	RWC	TAL EDI

Client Sample ID: SB4-6.0-7.0
Date Collected: 10/03/16 16:35
Date Received: 10/03/16 18:55

Lab Sample ID: 460-121319-6
Matrix: Solid
Percent Solids: 80.2

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			394942	10/04/16 21:52	AVM	TAL EDI
Total/NA	Analysis	8260C		1	395007	10/05/16 19:17	SZD	TAL EDI
Total/NA	Prep	3546			395061	10/05/16 10:34	FHW	TAL EDI
Total/NA	Analysis	8270D		1	395438	10/06/16 22:03	MMC	TAL EDI
Total/NA	Prep	3546			395263	10/06/16 03:19	ARA	TAL EDI
Total/NA	Analysis	8081B		1	395288	10/06/16 14:25	SAK	TAL EDI
Total/NA	Prep	3546			395266	10/06/16 03:36	ARA	TAL EDI
Total/NA	Analysis	8082A		1	395389	10/06/16 16:35	SAK	TAL EDI
Total/NA	Prep	3050B			395193	10/05/16 18:27	EAE	TAL EDI
Total/NA	Analysis	6010C		4	395750	10/08/16 04:02	CDC	TAL EDI
Total/NA	Prep	7471B			396126	10/10/16 04:01	TJS	TAL EDI
Total/NA	Analysis	7471B		1	396226	10/10/16 08:15	TJS	TAL EDI
Total/NA	Prep	9012B			397040	10/13/16 11:06	MBE	TAL EDI
Total/NA	Analysis	9012B		1	397351	10/14/16 11:22	MAL	TAL EDI

Client Sample ID: GW02
Date Collected: 10/03/16 14:30
Date Received: 10/03/16 18:55

Lab Sample ID: 460-121319-7
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	396070	10/09/16 15:19	VZD	TAL EDI
Total/NA	Prep	3510C			396950	10/13/16 07:23	HAW	TAL EDI
Total/NA	Analysis	8270D		1	398204	10/19/16 08:49	MMC	TAL EDI
Total/NA	Prep	3510C			396887	10/12/16 20:28	RAR	TAL EDI
Total/NA	Analysis	8082A		1	397167	10/14/16 03:02	CDC	TAL EDI
Total/NA	Prep	245.1			395100	10/05/16 12:21	RBS	TAL EDI
Total/NA	Analysis	245.1		1	395184	10/05/16 15:58	RBS	TAL EDI
Total/NA	Prep	3010A			395862	10/08/16 01:40	EAE	TAL EDI
Total/NA	Analysis	6020A		2	396064	10/09/16 00:29	PHP	TAL EDI
Total/NA	Prep	3010A			395862	10/08/16 01:40	EAE	TAL EDI
Total/NA	Analysis	6020A		5	397166	10/12/16 23:02	VAD	TAL EDI

Lab Chronicle

Client: SESI Consulting Engineers
Project/Site: 20 S. West St., Mt. Vernon, NY

TestAmerica Job ID: 460-121319-1

Client Sample ID: GW03

Date Collected: 10/03/16 11:00
Date Received: 10/03/16 18:55

Lab Sample ID: 460-121319-8

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	396070	10/09/16 15:41	VZD	TAL EDI
Total/NA	Prep	3510C			396950	10/13/16 07:23	HAW	TAL EDI
Total/NA	Analysis	8270D		1	398204	10/19/16 09:10	MMC	TAL EDI
Total/NA	Prep	3510C			396887	10/12/16 20:28	RAR	TAL EDI
Total/NA	Analysis	8082A		1	397167	10/14/16 03:16	CDC	TAL EDI
Total/NA	Prep	245.1			395100	10/05/16 12:21	RBS	TAL EDI
Total/NA	Analysis	245.1		1	395184	10/05/16 16:00	RBS	TAL EDI
Total/NA	Prep	3010A			395862	10/08/16 01:40	EAE	TAL EDI
Total/NA	Analysis	6020A		2	396064	10/09/16 00:34	PHP	TAL EDI
Total/NA	Prep	3010A			395862	10/08/16 01:40	EAE	TAL EDI
Total/NA	Analysis	6020A		20	396064	10/09/16 00:39	PHP	TAL EDI

Client Sample ID: Trip Blank

Date Collected: 10/03/16 00:00
Date Received: 10/03/16 18:55

Lab Sample ID: 460-121319-9

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	396938	10/13/16 09:57	CJM	TAL EDI

Laboratory References:

TAL EDI = TestAmerica Edison, 777 New Durham Road, Edison, NJ 08817, TEL (732)549-3900

Certification Summary

Client: SESI Consulting Engineers
Project/Site: 20 S. West St., Mt. Vernon, NY

TestAmerica Job ID: 460-121319-1

Laboratory: TestAmerica Edison

Unless otherwise noted, all analytes for this laboratory were covered under each certification below.

Authority	Program	EPA Region	Certification ID	Expiration Date
New York	NELAP	2	11452	03-31-17

The following analytes are included in this report, but certification is not offered by the governing authority:

Analysis Method	Prep Method	Matrix	Analyte
8082A	3510C	Water	Polychlorinated biphenyls, Total
8082A	3546	Solid	Polychlorinated biphenyls, Total
Moisture		Solid	Percent Moisture
Moisture		Solid	Percent Solids

ANALYTICAL REPORT

Job Number: 200-35064-1

SDG Number: 200-35064-1

Job Description: 20 S West Street

For:
SESI Consulting Engineers
12 A Maple Avenue
Pine Brook, NJ 07058

Attention: Fuad Dahan

Approved for release.
Kathryn A Kelly
Project Manager I
9/8/2016 9:14 AM

Kathryn A Kelly, Project Manager I
30 Community Drive, South Burlington, VT, 05403
kathryn.kelly@testamericainc.com
09/08/2016

The test results in this report relate only to sample(s) as received by the laboratory. These test results were derived under a quality system that adheres to the requirements of NELAC. Pursuant to NELAC, this report may not be produced in full without written approval from the laboratory

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CASE NARRATIVE

Client: SESI Consulting Engineers

Project: 20 S West Street

Report Number: 200-35064-1

With the exceptions noted as flags or footnotes, standard analytical protocols were followed in the analysis of the samples and no problems were encountered or anomalies observed. In addition all laboratory quality control samples were within established control limits, with any exceptions noted below. Each sample was analyzed to achieve the lowest possible reporting limit within the constraints of the method. In some cases, due to interference or analytes present at high concentrations, samples were diluted. For diluted samples, the reporting limits are adjusted relative to the dilution required.

Calculations are performed before rounding to avoid round-off errors in calculated results.

All holding times were met and proper preservation noted for the methods performed on these samples, unless otherwise detailed in the individual sections below.

RECEIPT
The samples were received on 08/31/2016; the samples arrived in good condition.

VOLATILE ORGANIC COMPOUNDS
Samples SS-1, SS-2 and SS-3 were analyzed for Volatile Organic Compounds in accordance with EPA Method TO-15. The samples were analyzed on 09/03/2016.

Sample SS-1[1.5X] required dilution prior to analysis. The reporting limits have been adjusted accordingly.

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

AIR - GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Burlington Job No.: 200-35064-1

SDG No.: 200-35064-1

Instrument ID: CHW.i Analysis Batch Number: 108448

Lab Sample ID: IC 200-108448/4 Client Sample ID:

Date Analyzed: 08/22/16 18:30 Lab File ID: 21457_06.d GC Column: RTX-624 ID: 0.32(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Trichloroethene	14.78	Incomplete Integration	guazzonig	08/25/16 10:47
Tetrachloroethene	18.12	Incomplete Integration	guazzonig	08/25/16 10:47

Lab Sample ID: IC 200-108448/5 Client Sample ID:

Date Analyzed: 08/22/16 19:23 Lab File ID: 21457_07.d GC Column: RTX-624 ID: 0.32(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Cyclohexane	13.01	Incomplete Integration	guazzonig	08/25/16 10:52
Methyl Butyl Ketone (2-Hexanone)	18.40	Incomplete Integration	guazzonig	08/25/16 10:52
Naphthalene	27.62	Incomplete Integration	guazzonig	08/25/16 10:48

Lab Sample ID: IC 200-108448/6 Client Sample ID:

Date Analyzed: 08/22/16 20:16 Lab File ID: 21457_08.d GC Column: RTX-624 ID: 0.32(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Naphthalene	27.62	Incomplete Integration	guazzonig	08/25/16 10:49

AIR - GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Burlington Job No.: 200-35064-1

SDG No.: 200-35064-1

Instrument ID: CHW.i Analysis Batch Number: 108809

Lab Sample ID: MB 200-108809/4 Client Sample ID:

Date Analyzed: 09/02/16 13:22 Lab File ID: 21628_04.d GC Column: RTX-624 ID: 0.32(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,3,5-Trimethylbenzene	22.54	Assign Peak	puangmalee k	09/07/16 08:07

Lab Sample ID: 200-35064-1 Client Sample ID: SS-1

Date Analyzed: 09/03/16 04:36 Lab File ID: 21628_22.d GC Column: RTX-624 ID: 0.32(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Methylene Chloride	10.02	Assign Peak	puangmalee k	09/07/16 09:47

Lab Sample ID: 200-35064-3 Client Sample ID: SS-3

Date Analyzed: 09/03/16 06:23 Lab File ID: 21628_24.d GC Column: RTX-624 ID: 0.32(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Chloromethane	6.01	Assign Peak	puangmalee k	09/07/16 09:57
Cyclohexane	13.02	Assign Peak	puangmalee k	09/07/16 09:57

SAMPLE SUMMARY

Client: SESI Consulting Engineers

Job Number: 200-35064-1
Sdg Number: 200-35064-1

Lab Sample ID	Client Sample ID	Client Matrix	Date/Time Sampled	Date/Time Received
200-35064-1	SS-1	Air	08/30/2016 1124	08/31/2016 1030
200-35064-2	SS-2	Air	08/30/2016 1215	08/31/2016 1030
200-35064-3	SS-3	Air	08/30/2016 1252	08/31/2016 1030

EXECUTIVE SUMMARY - Detections

Client: SESI Consulting Engineers

Job Number: 200-35064-1
Sdg Number: 200-35064-1

Lab Sample ID / Analyte	Client Sample ID	Result	Qualifier	Reporting Limit	Units	Method
200-35064-1	**SS-1**					
Freon 22		2.2		0.75	ppb v/v	TO-15
Freon 22		7.7		2.7	ug/m3	TO-15
n-Butane		12		0.75	ppb v/v	TO-15
n-Butane		29		1.8	ug/m3	TO-15
1,3-Butadiene		0.58		0.30	ppb v/v	TO-15
1,3-Butadiene		1.3		0.66	ug/m3	TO-15
Trichlorofluoromethane		0.32		0.30	ppb v/v	TO-15
Trichlorofluoromethane		1.8		1.7	ug/m3	TO-15
Acetone		40		7.5	ppb v/v	TO-15
Acetone		95		18	ug/m3	TO-15
Carbon disulfide		1.6		0.75	ppb v/v	TO-15
Carbon disulfide		4.9		2.3	ug/m3	TO-15
n-Hexane		3.4		0.30	ppb v/v	TO-15
n-Hexane		12		1.1	ug/m3	TO-15
Methyl Ethyl Ketone		6.0		0.75	ppb v/v	TO-15
Methyl Ethyl Ketone		18		2.2	ug/m3	TO-15
Chloroform		0.77		0.30	ppb v/v	TO-15
Chloroform		3.8		1.5	ug/m3	TO-15
1,1,1-Trichloroethane		0.44		0.30	ppb v/v	TO-15
1,1,1-Trichloroethane		2.4		1.6	ug/m3	TO-15
Benzene		0.42		0.30	ppb v/v	TO-15
Benzene		1.3		0.96	ug/m3	TO-15
n-Heptane		1.7		0.30	ppb v/v	TO-15
n-Heptane		6.9		1.2	ug/m3	TO-15
Toluene		0.54		0.30	ppb v/v	TO-15
Toluene		2.0		1.1	ug/m3	TO-15
Tetrachloroethene		8.0		0.30	ppb v/v	TO-15
Tetrachloroethene		54		2.0	ug/m3	TO-15

EXECUTIVE SUMMARY - Detections

Client: SESI Consulting Engineers

Job Number: 200-35064-1
Sdg Number: 200-35064-1

Lab Sample ID / Analyte	Client Sample ID	Result	Qualifier	Reporting Limit	Units	Method
200-35064-2	**SS-2**					
Freon 22		0.52		0.50	ppb v/v	TO-15
Freon 22		1.8		1.8	ug/m3	TO-15
Trichlorofluoromethane		0.20		0.20	ppb v/v	TO-15
Trichlorofluoromethane		1.1		1.1	ug/m3	TO-15
Acetone		11		5.0	ppb v/v	TO-15
Acetone		27		12	ug/m3	TO-15
Methylene Chloride		0.63		0.50	ppb v/v	TO-15
Methylene Chloride		2.2		1.7	ug/m3	TO-15
Methyl Ethyl Ketone		0.79		0.50	ppb v/v	TO-15
Methyl Ethyl Ketone		2.3		1.5	ug/m3	TO-15
Carbon tetrachloride		0.19		0.040	ppb v/v	TO-15
Carbon tetrachloride		1.2		0.25	ug/m3	TO-15
Trichloroethene		0.11		0.040	ppb v/v	TO-15
Trichloroethene		0.58		0.21	ug/m3	TO-15
Toluene		0.31		0.20	ppb v/v	TO-15
Toluene		1.2		0.75	ug/m3	TO-15
Tetrachloroethene		5.2		0.20	ppb v/v	TO-15
Tetrachloroethene		35		1.4	ug/m3	TO-15

EXECUTIVE SUMMARY - Detections

Client: SESI Consulting Engineers

Job Number: 200-35064-1
Sdg Number: 200-35064-1

Lab Sample ID / Analyte	Client Sample ID	Result	Qualifier	Reporting Limit	Units	Method
200-35064-3	**SS-3**					
Freon 22		0.52		0.50	ppb v/v	TO-15
Freon 22		1.8		1.8	ug/m3	TO-15
Trichlorofluoromethane		0.20		0.20	ppb v/v	TO-15
Trichlorofluoromethane		1.1		1.1	ug/m3	TO-15
Acetone		23		5.0	ppb v/v	TO-15
Acetone		54		12	ug/m3	TO-15
Methylene Chloride		29		0.50	ppb v/v	TO-15
Methylene Chloride		100		1.7	ug/m3	TO-15
Methyl Ethyl Ketone		1.5		0.50	ppb v/v	TO-15
Methyl Ethyl Ketone		4.4		1.5	ug/m3	TO-15
Chloroform		3.4		0.20	ppb v/v	TO-15
Chloroform		17		0.98	ug/m3	TO-15
Carbon tetrachloride		0.40		0.040	ppb v/v	TO-15
Carbon tetrachloride		2.5		0.25	ug/m3	TO-15
Trichloroethene		0.047		0.040	ppb v/v	TO-15
Trichloroethene		0.25		0.21	ug/m3	TO-15
Toluene		1.3		0.20	ppb v/v	TO-15
Toluene		4.8		0.75	ug/m3	TO-15
Tetrachloroethene		3.6		0.20	ppb v/v	TO-15
Tetrachloroethene		24		1.4	ug/m3	TO-15
m,p-Xylene		0.74		0.50	ppb v/v	TO-15
m,p-Xylene		3.2		2.2	ug/m3	TO-15
Xylene, o-		0.33		0.20	ppb v/v	TO-15
Xylene, o-		1.4		0.87	ug/m3	TO-15
Xylene (total)		1.1		0.70	ppb v/v	TO-15
Xylene (total)		4.6		3.0	ug/m3	TO-15
n-Propylbenzene		0.35		0.20	ppb v/v	TO-15
n-Propylbenzene		1.7		0.98	ug/m3	TO-15
4-Ethyltoluene		0.67		0.20	ppb v/v	TO-15
4-Ethyltoluene		3.3		0.98	ug/m3	TO-15
1,3,5-Trimethylbenzene		2.0		0.20	ppb v/v	TO-15
1,3,5-Trimethylbenzene		9.8		0.98	ug/m3	TO-15
1,2,4-Trimethylbenzene		7.1		0.20	ppb v/v	TO-15
1,2,4-Trimethylbenzene		35		0.98	ug/m3	TO-15
sec-Butylbenzene		0.42		0.20	ppb v/v	TO-15
sec-Butylbenzene		2.3		1.1	ug/m3	TO-15
4-Isopropyltoluene		0.83		0.20	ppb v/v	TO-15
4-Isopropyltoluene		4.5		1.1	ug/m3	TO-15
n-Butylbenzene		1.3		0.20	ppb v/v	TO-15
n-Butylbenzene		7.1		1.1	ug/m3	TO-15
Naphthalene		18		0.50	ppb v/v	TO-15
Naphthalene		92		2.6	ug/m3	TO-15

METHOD SUMMARY

Client: SESI Consulting Engineers

Job Number: 200-35064-1
Sdg Number: 200-35064-1

Description	Lab Location	Method	Preparation Method
Matrix: Air			
Volatile Organic Compounds in Ambient Air	TAL BUR	EPA TO-15	
Collection via Summa Canister	TAL BUR		Summa Canister

Lab References:

TAL BUR = TestAmerica Burlington

Method References:

EPA = US Environmental Protection Agency

METHOD / ANALYST SUMMARY

Client: SESI Consulting Engineers

Job Number: 200-35064-1
Sdg Number: 200-35064-1

Method	Analyst	Analyst ID
EPA TO-15	Puangmalee, Kesanee 1	K1P

Client: SESI Consulting Engineers

Job Number: 200-35064-1
Sdg Number: 200-35064-1

Client Sample ID: SS-1

Lab Sample ID: 200-35064-1
Client Matrix: Air

Date Sampled: 08/30/2016 1124
Date Received: 08/31/2016 1030

TO-15 Volatile Organic Compounds in Ambient Air

Analysis Method:	TO-15	Analysis Batch:	200-108809	Instrument ID:	CHW.i
Prep Method:	Summa Canister	Prep Batch:	N/A	Lab File ID:	21628_22.d
Dilution:	1.5			Initial Weight/Volume:	133 mL
Analysis Date:	09/03/2016 0436			Final Weight/Volume:	200 mL
Prep Date:	09/03/2016 0436			Injection Volume:	200 mL

Analyte	Result (ppb v/v)	Qualifier	RL
Dichlorodifluoromethane	0.75	U	0.75
Freon 22	2.2		0.75
1,2-Dichlorotetrafluoroethane	0.30	U	0.30
Chloromethane	0.75	U	0.75
n-Butane	12		0.75
Vinyl chloride	0.060	U	0.060
1,3-Butadiene	0.58		0.30
Bromomethane	0.30	U	0.30
Chloroethane	0.75	U	0.75
Bromoethene(Vinyl Bromide)	0.30	U	0.30
Trichlorofluoromethane	0.32		0.30
Freon TF	0.30	U	0.30
1,1-Dichloroethene	0.30	U	0.30
Acetone	40		7.5
Isopropyl alcohol	7.5	U	7.5
Carbon disulfide	1.6		0.75
3-Chloropropene	0.75	U	0.75
Methylene Chloride	0.75	U	0.75
tert-Butyl alcohol	7.5	U	7.5
Methyl tert-butyl ether	0.30	U	0.30
trans-1,2-Dichloroethene	0.30	U	0.30
n-Hexane	3.4		0.30
1,1-Dichloroethane	0.30	U	0.30
Methyl Ethyl Ketone	6.0		0.75
cis-1,2-Dichloroethene	0.30	U	0.30
1,2-Dichloroethene, Total	0.60	U	0.60
Chloroform	0.77		0.30
Tetrahydrofuran	7.5	U	7.5
1,1,1-Trichloroethane	0.44		0.30
Cyclohexane	0.30	U	0.30
Carbon tetrachloride	0.060	U	0.060
2,2,4-Trimethylpentane	0.30	U	0.30
Benzene	0.42		0.30
1,2-Dichloroethane	0.30	U	0.30
n-Heptane	1.7		0.30
Trichloroethene	0.060	U	0.060
Methyl methacrylate	0.75	U	0.75
1,2-Dichloropropane	0.30	U	0.30
1,4-Dioxane	7.5	U	7.5
Bromodichloromethane	0.30	U	0.30
cis-1,3-Dichloropropene	0.30	U	0.30
methyl isobutyl ketone	0.75	U	0.75
Toluene	0.54		0.30
trans-1,3-Dichloropropene	0.30	U	0.30
1,1,2-Trichloroethane	0.30	U	0.30
Tetrachloroethene	8.0		0.30

Client: SESI Consulting Engineers

Job Number: 200-35064-1
Sdg Number: 200-35064-1

Client Sample ID: SS-1

Lab Sample ID: 200-35064-1
Client Matrix: Air

Date Sampled: 08/30/2016 1124
Date Received: 08/31/2016 1030

TO-15 Volatile Organic Compounds in Ambient Air

Analysis Method:	TO-15	Analysis Batch:	200-108809	Instrument ID:	CHW.i
Prep Method:	Summa Canister	Prep Batch:	N/A	Lab File ID:	21628_22.d
Dilution:	1.5			Initial Weight/Volume:	133 mL
Analysis Date:	09/03/2016 0436			Final Weight/Volume:	200 mL
Prep Date:	09/03/2016 0436			Injection Volume:	200 mL

Analyte	Result (ppb v/v)	Qualifier	RL
Methyl Butyl Ketone (2-Hexanone)	0.75	U	0.75
Dibromochloromethane	0.30	U	0.30
1,2-Dibromoethane	0.30	U	0.30
Chlorobenzene	0.30	U	0.30
Ethylbenzene	0.30	U	0.30
m,p-Xylene	0.75	U	0.75
Xylene, o-	0.30	U	0.30
Xylene (total)	1.1	U	1.1
Styrene	0.30	U	0.30
Bromoform	0.30	U	0.30
Cumene	0.30	U	0.30
1,1,2,2-Tetrachloroethane	0.30	U	0.30
n-Propylbenzene	0.30	U	0.30
4-Ethyltoluene	0.30	U	0.30
1,3,5-Trimethylbenzene	0.30	U	0.30
2-Chlorotoluene	0.30	U	0.30
tert-Butylbenzene	0.30	U	0.30
1,2,4-Trimethylbenzene	0.30	U	0.30
sec-Butylbenzene	0.30	U	0.30
4-Isopropyltoluene	0.30	U	0.30
1,3-Dichlorobenzene	0.30	U	0.30
1,4-Dichlorobenzene	0.30	U	0.30
Benzyl chloride	0.30	U	0.30
n-Butylbenzene	0.30	U	0.30
1,2-Dichlorobenzene	0.30	U	0.30
1,2,4-Trichlorobenzene	0.75	U	0.75
Hexachlorobutadiene	0.30	U	0.30
Naphthalene	0.75	U	0.75

Analyte	Result (ug/m3)	Qualifier	RL
Dichlorodifluoromethane	3.7	U	3.7
Freon 22	7.7		2.7
1,2-Dichlorotetrafluoroethane	2.1	U	2.1
Chloromethane	1.5	U	1.5
n-Butane	29		1.8
Vinyl chloride	0.15	U	0.15
1,3-Butadiene	1.3		0.66
Bromomethane	1.2	U	1.2
Chloroethane	2.0	U	2.0
Bromoethene(Vinyl Bromide)	1.3	U	1.3
Trichlorofluoromethane	1.8		1.7
Freon TF	2.3	U	2.3
1,1-Dichloroethene	1.2	U	1.2
Acetone	95		18
Isopropyl alcohol	18	U	18
Carbon disulfide	4.9		2.3

Client: SESI Consulting Engineers

Job Number: 200-35064-1
Sdg Number: 200-35064-1

Client Sample ID: SS-1

Lab Sample ID: 200-35064-1
Client Matrix: Air

Date Sampled: 08/30/2016 1124
Date Received: 08/31/2016 1030

TO-15 Volatile Organic Compounds in Ambient Air

Analysis Method:	TO-15	Analysis Batch:	200-108809	Instrument ID:	CHW.i
Prep Method:	Summa Canister	Prep Batch:	N/A	Lab File ID:	21628_22.d
Dilution:	1.5			Initial Weight/Volume:	133 mL
Analysis Date:	09/03/2016 0436			Final Weight/Volume:	200 mL
Prep Date:	09/03/2016 0436			Injection Volume:	200 mL

Analyte	Result (ug/m3)	Qualifier	RL
3-Chloropropene	2.3	U	2.3
Methylene Chloride	2.6	U	2.6
tert-Butyl alcohol	23	U	23
Methyl tert-butyl ether	1.1	U	1.1
trans-1,2-Dichloroethene	1.2	U	1.2
n-Hexane	12		1.1
1,1-Dichloroethane	1.2	U	1.2
Methyl Ethyl Ketone	18		2.2
cis-1,2-Dichloroethene	1.2	U	1.2
1,2-Dichloroethene, Total	2.4	U	2.4
Chloroform	3.8		1.5
Tetrahydrofuran	22	U	22
1,1,1-Trichloroethane	2.4		1.6
Cyclohexane	1.0	U	1.0
Carbon tetrachloride	0.38	U	0.38
2,2,4-Trimethylpentane	1.4	U	1.4
Benzene	1.3		0.96
1,2-Dichloroethane	1.2	U	1.2
n-Heptane	6.9		1.2
Trichloroethene	0.32	U	0.32
Methyl methacrylate	3.1	U	3.1
1,2-Dichloropropane	1.4	U	1.4
1,4-Dioxane	27	U	27
Bromodichloromethane	2.0	U	2.0
cis-1,3-Dichloropropene	1.4	U	1.4
methyl isobutyl ketone	3.1	U	3.1
Toluene	2.0		1.1
trans-1,3-Dichloropropene	1.4	U	1.4
1,1,2-Trichloroethane	1.6	U	1.6
Tetrachloroethene	54		2.0
Methyl Butyl Ketone (2-Hexanone)	3.1	U	3.1
Dibromochloromethane	2.6	U	2.6
1,2-Dibromoethane	2.3	U	2.3
Chlorobenzene	1.4	U	1.4
Ethylbenzene	1.3	U	1.3
m,p-Xylene	3.3	U	3.3
Xylene, o-	1.3	U	1.3
Xylene (total)	4.6	U	4.6
Styrene	1.3	U	1.3
Bromoform	3.1	U	3.1
Cumene	1.5	U	1.5
1,1,2,2-Tetrachloroethane	2.1	U	2.1
n-Propylbenzene	1.5	U	1.5
4-Ethyltoluene	1.5	U	1.5
1,3,5-Trimethylbenzene	1.5	U	1.5
2-Chlorotoluene	1.6	U	1.6

Client: SESI Consulting Engineers

Job Number: 200-35064-1
Sdg Number: 200-35064-1

Client Sample ID: SS-1

Lab Sample ID: 200-35064-1
Client Matrix: Air

Date Sampled: 08/30/2016 1124
Date Received: 08/31/2016 1030

TO-15 Volatile Organic Compounds in Ambient Air

Analysis Method:	TO-15	Analysis Batch:	200-108809	Instrument ID:	CHW.i
Prep Method:	Summa Canister	Prep Batch:	N/A	Lab File ID:	21628_22.d
Dilution:	1.5			Initial Weight/Volume:	133 mL
Analysis Date:	09/03/2016 0436			Final Weight/Volume:	200 mL
Prep Date:	09/03/2016 0436			Injection Volume:	200 mL

Analyte	Result (ug/m3)	Qualifier	RL
tert-Butylbenzene	1.6	U	1.6
1,2,4-Trimethylbenzene	1.5	U	1.5
sec-Butylbenzene	1.6	U	1.6
4-Isopropyltoluene	1.6	U	1.6
1,3-Dichlorobenzene	1.8	U	1.8
1,4-Dichlorobenzene	1.8	U	1.8
Benzyl chloride	1.6	U	1.6
n-Butylbenzene	1.6	U	1.6
1,2-Dichlorobenzene	1.8	U	1.8
1,2,4-Trichlorobenzene	5.6	U	5.6
Hexachlorobutadiene	3.2	U	3.2
Naphthalene	3.9	U	3.9

Client: SESI Consulting Engineers

Job Number: 200-35064-1
Sdg Number: 200-35064-1

Client Sample ID: SS-2

Lab Sample ID: 200-35064-2
Client Matrix: Air

Date Sampled: 08/30/2016 1215
Date Received: 08/31/2016 1030

TO-15 Volatile Organic Compounds in Ambient Air

Analysis Method:	TO-15	Analysis Batch:	200-108809	Instrument ID:	CHW.i
Prep Method:	Summa Canister	Prep Batch:	N/A	Lab File ID:	21628_23.d
Dilution:	1.0			Initial Weight/Volume:	200 mL
Analysis Date:	09/03/2016 0530			Final Weight/Volume:	200 mL
Prep Date:	09/03/2016 0530			Injection Volume:	200 mL

Analyte	Result (ppb v/v)	Qualifier	RL
Dichlorodifluoromethane	0.50	U	0.50
Freon 22	0.52		0.50
1,2-Dichlorotetrafluoroethane	0.20	U	0.20
Chloromethane	0.50	U	0.50
n-Butane	0.50	U	0.50
Vinyl chloride	0.040	U	0.040
1,3-Butadiene	0.20	U	0.20
Bromomethane	0.20	U	0.20
Chloroethane	0.50	U	0.50
Bromoethene(Vinyl Bromide)	0.20	U	0.20
Trichlorofluoromethane	0.20		0.20
Freon TF	0.20	U	0.20
1,1-Dichloroethene	0.20	U	0.20
Acetone	11		5.0
Isopropyl alcohol	5.0	U	5.0
Carbon disulfide	0.50	U	0.50
3-Chloropropene	0.50	U	0.50
Methylene Chloride	0.63		0.50
tert-Butyl alcohol	5.0	U	5.0
Methyl tert-butyl ether	0.20	U	0.20
trans-1,2-Dichloroethene	0.20	U	0.20
n-Hexane	0.20	U	0.20
1,1-Dichloroethane	0.20	U	0.20
Methyl Ethyl Ketone	0.79		0.50
cis-1,2-Dichloroethene	0.20	U	0.20
1,2-Dichloroethene, Total	0.40	U	0.40
Chloroform	0.20	U	0.20
Tetrahydrofuran	5.0	U	5.0
1,1,1-Trichloroethane	0.20	U	0.20
Cyclohexane	0.20	U	0.20
Carbon tetrachloride	0.19		0.040
2,2,4-Trimethylpentane	0.20	U	0.20
Benzene	0.20	U	0.20
1,2-Dichloroethane	0.20	U	0.20
n-Heptane	0.20	U	0.20
Trichloroethene	0.11		0.040
Methyl methacrylate	0.50	U	0.50
1,2-Dichloropropane	0.20	U	0.20
1,4-Dioxane	5.0	U	5.0
Bromodichloromethane	0.20	U	0.20
cis-1,3-Dichloropropene	0.20	U	0.20
methyl isobutyl ketone	0.50	U	0.50
Toluene	0.31		0.20
trans-1,3-Dichloropropene	0.20	U	0.20
1,1,2-Trichloroethane	0.20	U	0.20
Tetrachloroethene	5.2		0.20

Client: SESI Consulting Engineers

Job Number: 200-35064-1
Sdg Number: 200-35064-1

Client Sample ID: SS-2

Lab Sample ID: 200-35064-2
Client Matrix: Air

Date Sampled: 08/30/2016 1215
Date Received: 08/31/2016 1030

TO-15 Volatile Organic Compounds in Ambient Air

Analysis Method:	TO-15	Analysis Batch:	200-108809	Instrument ID:	CHW.i
Prep Method:	Summa Canister	Prep Batch:	N/A	Lab File ID:	21628_23.d
Dilution:	1.0			Initial Weight/Volume:	200 mL
Analysis Date:	09/03/2016 0530			Final Weight/Volume:	200 mL
Prep Date:	09/03/2016 0530			Injection Volume:	200 mL

Analyte	Result (ppb v/v)	Qualifier	RL
Methyl Butyl Ketone (2-Hexanone)	0.50	U	0.50
Dibromochloromethane	0.20	U	0.20
1,2-Dibromoethane	0.20	U	0.20
Chlorobenzene	0.20	U	0.20
Ethylbenzene	0.20	U	0.20
m,p-Xylene	0.50	U	0.50
Xylene, o-	0.20	U	0.20
Xylene (total)	0.70	U	0.70
Styrene	0.20	U	0.20
Bromoform	0.20	U	0.20
Cumene	0.20	U	0.20
1,1,2,2-Tetrachloroethane	0.20	U	0.20
n-Propylbenzene	0.20	U	0.20
4-Ethyltoluene	0.20	U	0.20
1,3,5-Trimethylbenzene	0.20	U	0.20
2-Chlorotoluene	0.20	U	0.20
tert-Butylbenzene	0.20	U	0.20
1,2,4-Trimethylbenzene	0.20	U	0.20
sec-Butylbenzene	0.20	U	0.20
4-Isopropyltoluene	0.20	U	0.20
1,3-Dichlorobenzene	0.20	U	0.20
1,4-Dichlorobenzene	0.20	U	0.20
Benzyl chloride	0.20	U	0.20
n-Butylbenzene	0.20	U	0.20
1,2-Dichlorobenzene	0.20	U	0.20
1,2,4-Trichlorobenzene	0.50	U	0.50
Hexachlorobutadiene	0.20	U	0.20
Naphthalene	0.50	U	0.50

Analyte	Result (ug/m3)	Qualifier	RL
Dichlorodifluoromethane	2.5	U	2.5
Freon 22	1.8		1.8
1,2-Dichlorotetrafluoroethane	1.4	U	1.4
Chloromethane	1.0	U	1.0
n-Butane	1.2	U	1.2
Vinyl chloride	0.10	U	0.10
1,3-Butadiene	0.44	U	0.44
Bromomethane	0.78	U	0.78
Chloroethane	1.3	U	1.3
Bromoethene(Vinyl Bromide)	0.87	U	0.87
Trichlorofluoromethane	1.1		1.1
Freon TF	1.5	U	1.5
1,1-Dichloroethene	0.79	U	0.79
Acetone	27		12
Isopropyl alcohol	12	U	12
Carbon disulfide	1.6	U	1.6

Client: SESI Consulting Engineers

Job Number: 200-35064-1
Sdg Number: 200-35064-1

Client Sample ID: SS-2

Lab Sample ID: 200-35064-2
Client Matrix: Air

Date Sampled: 08/30/2016 1215
Date Received: 08/31/2016 1030

TO-15 Volatile Organic Compounds in Ambient Air

Analysis Method:	TO-15	Analysis Batch:	200-108809	Instrument ID:	CHW.i
Prep Method:	Summa Canister	Prep Batch:	N/A	Lab File ID:	21628_23.d
Dilution:	1.0			Initial Weight/Volume:	200 mL
Analysis Date:	09/03/2016 0530			Final Weight/Volume:	200 mL
Prep Date:	09/03/2016 0530			Injection Volume:	200 mL

Analyte	Result (ug/m3)	Qualifier	RL
3-Chloropropene	1.6	U	1.6
Methylene Chloride	2.2		1.7
tert-Butyl alcohol	15	U	15
Methyl tert-butyl ether	0.72	U	0.72
trans-1,2-Dichloroethene	0.79	U	0.79
n-Hexane	0.70	U	0.70
1,1-Dichloroethane	0.81	U	0.81
Methyl Ethyl Ketone	2.3		1.5
cis-1,2-Dichloroethene	0.79	U	0.79
1,2-Dichloroethene, Total	1.6	U	1.6
Chloroform	0.98	U	0.98
Tetrahydrofuran	15	U	15
1,1,1-Trichloroethane	1.1	U	1.1
Cyclohexane	0.69	U	0.69
Carbon tetrachloride	1.2		0.25
2,2,4-Trimethylpentane	0.93	U	0.93
Benzene	0.64	U	0.64
1,2-Dichloroethane	0.81	U	0.81
n-Heptane	0.82	U	0.82
Trichloroethene	0.58		0.21
Methyl methacrylate	2.0	U	2.0
1,2-Dichloropropane	0.92	U	0.92
1,4-Dioxane	18	U	18
Bromodichloromethane	1.3	U	1.3
cis-1,3-Dichloropropene	0.91	U	0.91
methyl isobutyl ketone	2.0	U	2.0
Toluene	1.2		0.75
trans-1,3-Dichloropropene	0.91	U	0.91
1,1,2-Trichloroethane	1.1	U	1.1
Tetrachloroethene	35		1.4
Methyl Butyl Ketone (2-Hexanone)	2.0	U	2.0
Dibromochloromethane	1.7	U	1.7
1,2-Dibromoethane	1.5	U	1.5
Chlorobenzene	0.92	U	0.92
Ethylbenzene	0.87	U	0.87
m,p-Xylene	2.2	U	2.2
Xylene, o-	0.87	U	0.87
Xylene (total)	3.0	U	3.0
Styrene	0.85	U	0.85
Bromoform	2.1	U	2.1
Cumene	0.98	U	0.98
1,1,2,2-Tetrachloroethane	1.4	U	1.4
n-Propylbenzene	0.98	U	0.98
4-Ethyltoluene	0.98	U	0.98
1,3,5-Trimethylbenzene	0.98	U	0.98
2-Chlorotoluene	1.0	U	1.0

Client: SESI Consulting Engineers

Job Number: 200-35064-1
Sdg Number: 200-35064-1

Client Sample ID: SS-2

Lab Sample ID: 200-35064-2
Client Matrix: Air

Date Sampled: 08/30/2016 1215
Date Received: 08/31/2016 1030

TO-15 Volatile Organic Compounds in Ambient Air

Analysis Method:	TO-15	Analysis Batch:	200-108809	Instrument ID:	CHW.i
Prep Method:	Summa Canister	Prep Batch:	N/A	Lab File ID:	21628_23.d
Dilution:	1.0			Initial Weight/Volume:	200 mL
Analysis Date:	09/03/2016 0530			Final Weight/Volume:	200 mL
Prep Date:	09/03/2016 0530			Injection Volume:	200 mL

Analyte	Result (ug/m3)	Qualifier	RL
tert-Butylbenzene	1.1	U	1.1
1,2,4-Trimethylbenzene	0.98	U	0.98
sec-Butylbenzene	1.1	U	1.1
4-Isopropyltoluene	1.1	U	1.1
1,3-Dichlorobenzene	1.2	U	1.2
1,4-Dichlorobenzene	1.2	U	1.2
Benzyl chloride	1.0	U	1.0
n-Butylbenzene	1.1	U	1.1
1,2-Dichlorobenzene	1.2	U	1.2
1,2,4-Trichlorobenzene	3.7	U	3.7
Hexachlorobutadiene	2.1	U	2.1
Naphthalene	2.6	U	2.6

Client: SESI Consulting Engineers

Job Number: 200-35064-1
Sdg Number: 200-35064-1

Client Sample ID: SS-3

Lab Sample ID: 200-35064-3
Client Matrix: Air

Date Sampled: 08/30/2016 1252
Date Received: 08/31/2016 1030

TO-15 Volatile Organic Compounds in Ambient Air

Analysis Method:	TO-15	Analysis Batch:	200-108809	Instrument ID:	CHW.i
Prep Method:	Summa Canister	Prep Batch:	N/A	Lab File ID:	21628_24.d
Dilution:	1.0			Initial Weight/Volume:	200 mL
Analysis Date:	09/03/2016 0623			Final Weight/Volume:	200 mL
Prep Date:	09/03/2016 0623			Injection Volume:	200 mL

Analyte	Result (ppb v/v)	Qualifier	RL
Dichlorodifluoromethane	0.50	U	0.50
Freon 22	0.52		0.50
1,2-Dichlorotetrafluoroethane	0.20	U	0.20
Chloromethane	0.50	U	0.50
n-Butane	0.50	U	0.50
Vinyl chloride	0.040	U	0.040
1,3-Butadiene	0.20	U	0.20
Bromomethane	0.20	U	0.20
Chloroethane	0.50	U	0.50
Bromoethene(Vinyl Bromide)	0.20	U	0.20
Trichlorofluoromethane	0.20		0.20
Freon TF	0.20	U	0.20
1,1-Dichloroethene	0.20	U	0.20
Acetone	23		5.0
Isopropyl alcohol	5.0	U	5.0
Carbon disulfide	0.50	U	0.50
3-Chloropropene	0.50	U	0.50
Methylene Chloride	29		0.50
tert-Butyl alcohol	5.0	U	5.0
Methyl tert-butyl ether	0.20	U	0.20
trans-1,2-Dichloroethene	0.20	U	0.20
n-Hexane	0.20	U	0.20
1,1-Dichloroethane	0.20	U	0.20
Methyl Ethyl Ketone	1.5		0.50
cis-1,2-Dichloroethene	0.20	U	0.20
1,2-Dichloroethene, Total	0.40	U	0.40
Chloroform	3.4		0.20
Tetrahydrofuran	5.0	U	5.0
1,1,1-Trichloroethane	0.20	U	0.20
Cyclohexane	0.20	U	0.20
Carbon tetrachloride	0.40		0.040
2,2,4-Trimethylpentane	0.20	U	0.20
Benzene	0.20	U	0.20
1,2-Dichloroethane	0.20	U	0.20
n-Heptane	0.20	U	0.20
Trichloroethene	0.047		0.040
Methyl methacrylate	0.50	U	0.50
1,2-Dichloropropane	0.20	U	0.20
1,4-Dioxane	5.0	U	5.0
Bromodichloromethane	0.20	U	0.20
cis-1,3-Dichloropropene	0.20	U	0.20
methyl isobutyl ketone	0.50	U	0.50
Toluene	1.3		0.20
trans-1,3-Dichloropropene	0.20	U	0.20
1,1,2-Trichloroethane	0.20	U	0.20
Tetrachloroethene	3.6		0.20

Client: SESI Consulting Engineers

Job Number: 200-35064-1
Sdg Number: 200-35064-1

Client Sample ID: SS-3

Lab Sample ID: 200-35064-3
Client Matrix: Air

Date Sampled: 08/30/2016 1252
Date Received: 08/31/2016 1030

TO-15 Volatile Organic Compounds in Ambient Air

Analysis Method:	TO-15	Analysis Batch:	200-108809	Instrument ID:	CHW.i
Prep Method:	Summa Canister	Prep Batch:	N/A	Lab File ID:	21628_24.d
Dilution:	1.0			Initial Weight/Volume:	200 mL
Analysis Date:	09/03/2016 0623			Final Weight/Volume:	200 mL
Prep Date:	09/03/2016 0623			Injection Volume:	200 mL

Analyte	Result (ppb v/v)	Qualifier	RL
Methyl Butyl Ketone (2-Hexanone)	0.50	U	0.50
Dibromochloromethane	0.20	U	0.20
1,2-Dibromoethane	0.20	U	0.20
Chlorobenzene	0.20	U	0.20
Ethylbenzene	0.20	U	0.20
m,p-Xylene	0.74		0.50
Xylene, o-	0.33		0.20
Xylene (total)	1.1		0.70
Styrene	0.20	U	0.20
Bromoform	0.20	U	0.20
Cumene	0.20	U	0.20
1,1,2,2-Tetrachloroethane	0.20	U	0.20
n-Propylbenzene	0.35		0.20
4-Ethyltoluene	0.67		0.20
1,3,5-Trimethylbenzene	2.0		0.20
2-Chlorotoluene	0.20	U	0.20
tert-Butylbenzene	0.20	U	0.20
1,2,4-Trimethylbenzene	7.1		0.20
sec-Butylbenzene	0.42		0.20
4-Isopropyltoluene	0.83		0.20
1,3-Dichlorobenzene	0.20	U	0.20
1,4-Dichlorobenzene	0.20	U	0.20
Benzyl chloride	0.20	U	0.20
n-Butylbenzene	1.3		0.20
1,2-Dichlorobenzene	0.20	U	0.20
1,2,4-Trichlorobenzene	0.50	U	0.50
Hexachlorobutadiene	0.20	U	0.20
Naphthalene	18		0.50

Analyte	Result (ug/m3)	Qualifier	RL
Dichlorodifluoromethane	2.5	U	2.5
Freon 22	1.8		1.8
1,2-Dichlorotetrafluoroethane	1.4	U	1.4
Chloromethane	1.0	U	1.0
n-Butane	1.2	U	1.2
Vinyl chloride	0.10	U	0.10
1,3-Butadiene	0.44	U	0.44
Bromomethane	0.78	U	0.78
Chloroethane	1.3	U	1.3
Bromoethene(Vinyl Bromide)	0.87	U	0.87
Trichlorofluoromethane	1.1		1.1
Freon TF	1.5	U	1.5
1,1-Dichloroethene	0.79	U	0.79
Acetone	54		12
Isopropyl alcohol	12	U	12
Carbon disulfide	1.6	U	1.6

Client: SESI Consulting Engineers

Job Number: 200-35064-1
Sdg Number: 200-35064-1

Client Sample ID: SS-3

Lab Sample ID: 200-35064-3
Client Matrix: Air

Date Sampled: 08/30/2016 1252
Date Received: 08/31/2016 1030

TO-15 Volatile Organic Compounds in Ambient Air

Analysis Method:	TO-15	Analysis Batch:	200-108809	Instrument ID:	CHW.i
Prep Method:	Summa Canister	Prep Batch:	N/A	Lab File ID:	21628_24.d
Dilution:	1.0			Initial Weight/Volume:	200 mL
Analysis Date:	09/03/2016 0623			Final Weight/Volume:	200 mL
Prep Date:	09/03/2016 0623			Injection Volume:	200 mL

Analyte	Result (ug/m3)	Qualifier	RL
3-Chloropropene	1.6	U	1.6
Methylene Chloride	100		1.7
tert-Butyl alcohol	15	U	15
Methyl tert-butyl ether	0.72	U	0.72
trans-1,2-Dichloroethene	0.79	U	0.79
n-Hexane	0.70	U	0.70
1,1-Dichloroethane	0.81	U	0.81
Methyl Ethyl Ketone	4.4		1.5
cis-1,2-Dichloroethene	0.79	U	0.79
1,2-Dichloroethene, Total	1.6	U	1.6
Chloroform	17		0.98
Tetrahydrofuran	15	U	15
1,1,1-Trichloroethane	1.1	U	1.1
Cyclohexane	0.69	U	0.69
Carbon tetrachloride	2.5		0.25
2,2,4-Trimethylpentane	0.93	U	0.93
Benzene	0.64	U	0.64
1,2-Dichloroethane	0.81	U	0.81
n-Heptane	0.82	U	0.82
Trichloroethene	0.25		0.21
Methyl methacrylate	2.0	U	2.0
1,2-Dichloropropane	0.92	U	0.92
1,4-Dioxane	18	U	18
Bromodichloromethane	1.3	U	1.3
cis-1,3-Dichloropropene	0.91	U	0.91
methyl isobutyl ketone	2.0	U	2.0
Toluene	4.8		0.75
trans-1,3-Dichloropropene	0.91	U	0.91
1,1,2-Trichloroethane	1.1	U	1.1
Tetrachloroethene	24		1.4
Methyl Butyl Ketone (2-Hexanone)	2.0	U	2.0
Dibromochloromethane	1.7	U	1.7
1,2-Dibromoethane	1.5	U	1.5
Chlorobenzene	0.92	U	0.92
Ethylbenzene	0.87	U	0.87
m,p-Xylene	3.2		2.2
Xylene, o-	1.4		0.87
Xylene (total)	4.6		3.0
Styrene	0.85	U	0.85
Bromoform	2.1	U	2.1
Cumene	0.98	U	0.98
1,1,2,2-Tetrachloroethane	1.4	U	1.4
n-Propylbenzene	1.7		0.98
4-Ethyltoluene	3.3		0.98
1,3,5-Trimethylbenzene	9.8		0.98
2-Chlorotoluene	1.0	U	1.0

Client: SESI Consulting Engineers

Job Number: 200-35064-1
Sdg Number: 200-35064-1

Client Sample ID: SS-3

Lab Sample ID: 200-35064-3
Client Matrix: Air

Date Sampled: 08/30/2016 1252
Date Received: 08/31/2016 1030

TO-15 Volatile Organic Compounds in Ambient Air

Analysis Method:	TO-15	Analysis Batch:	200-108809	Instrument ID:	CHW.i
Prep Method:	Summa Canister	Prep Batch:	N/A	Lab File ID:	21628_24.d
Dilution:	1.0			Initial Weight/Volume:	200 mL
Analysis Date:	09/03/2016 0623			Final Weight/Volume:	200 mL
Prep Date:	09/03/2016 0623			Injection Volume:	200 mL

Analyte	Result (ug/m3)	Qualifier	RL
tert-Butylbenzene	1.1	U	1.1
1,2,4-Trimethylbenzene	35		0.98
sec-Butylbenzene	2.3		1.1
4-Isopropyltoluene	4.5		1.1
1,3-Dichlorobenzene	1.2	U	1.2
1,4-Dichlorobenzene	1.2	U	1.2
Benzyl chloride	1.0	U	1.0
n-Butylbenzene	7.1		1.1
1,2-Dichlorobenzene	1.2	U	1.2
1,2,4-Trichlorobenzene	3.7	U	3.7
Hexachlorobutadiene	2.1	U	2.1
Naphthalene	92		2.6

Client: SESI Consulting Engineers

Job Number: 200-35064-1
Sdg Number: 200-35064-1

Method Blank - Batch: 200-108809

Method: TO-15
Preparation: Summa Canister

Lab Sample ID:	MB 200-108809/4	Analysis Batch:	200-108809	Instrument ID:	CHW.i
Client Matrix:	Air	Prep Batch:	N/A	Lab File ID:	21628_04.d
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	200 mL
Analysis Date:	09/02/2016 1322	Units:	ppb v/v	Final Weight/Volume:	200 mL
Prep Date:	09/02/2016 1322			Injection Volume:	200 mL
Leach Date:	N/A				

Analyte	Result	Qual	RL
Dichlorodifluoromethane	0.50	U	0.50
Freon 22	0.50	U	0.50
1,2-Dichlorotetrafluoroethane	0.20	U	0.20
Chloromethane	0.50	U	0.50
n-Butane	0.50	U	0.50
Vinyl chloride	0.040	U	0.040
1,3-Butadiene	0.20	U	0.20
Bromomethane	0.20	U	0.20
Chloroethane	0.50	U	0.50
Bromoethene(Vinyl Bromide)	0.20	U	0.20
Trichlorofluoromethane	0.20	U	0.20
Freon TF	0.20	U	0.20
1,1-Dichloroethene	0.20	U	0.20
Acetone	5.0	U	5.0
Isopropyl alcohol	5.0	U	5.0
Carbon disulfide	0.50	U	0.50
3-Chloropropene	0.50	U	0.50
Methylene Chloride	0.50	U	0.50
tert-Butyl alcohol	5.0	U	5.0
Methyl tert-butyl ether	0.20	U	0.20
trans-1,2-Dichloroethene	0.20	U	0.20
n-Hexane	0.20	U	0.20
1,1-Dichloroethane	0.20	U	0.20
Methyl Ethyl Ketone	0.50	U	0.50
cis-1,2-Dichloroethene	0.20	U	0.20
1,2-Dichloroethene, Total	0.40	U	0.40
Chloroform	0.20	U	0.20
Tetrahydrofuran	5.0	U	5.0
1,1,1-Trichloroethane	0.20	U	0.20
Cyclohexane	0.20	U	0.20
Carbon tetrachloride	0.040	U	0.040
2,2,4-Trimethylpentane	0.20	U	0.20
Benzene	0.20	U	0.20
1,2-Dichloroethane	0.20	U	0.20
n-Heptane	0.20	U	0.20
Trichloroethene	0.040	U	0.040
Methyl methacrylate	0.50	U	0.50
1,2-Dichloropropane	0.20	U	0.20
1,4-Dioxane	5.0	U	5.0
Bromodichloromethane	0.20	U	0.20
cis-1,3-Dichloropropene	0.20	U	0.20
methyl isobutyl ketone	0.50	U	0.50
Toluene	0.20	U	0.20
trans-1,3-Dichloropropene	0.20	U	0.20
1,1,2-Trichloroethane	0.20	U	0.20

Client: SESI Consulting Engineers

Job Number: 200-35064-1
Sdg Number: 200-35064-1

Method Blank - Batch: 200-108809

Method: TO-15
Preparation: Summa Canister

Lab Sample ID:	MB 200-108809/4	Analysis Batch:	200-108809	Instrument ID:	CHW.i
Client Matrix:	Air	Prep Batch:	N/A	Lab File ID:	21628_04.d
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	200 mL
Analysis Date:	09/02/2016 1322	Units:	ppb v/v	Final Weight/Volume:	200 mL
Prep Date:	09/02/2016 1322			Injection Volume:	200 mL
Leach Date:	N/A				

Analyte	Result	Qual	RL
Tetrachloroethene	0.20	U	0.20
Methyl Butyl Ketone (2-Hexanone)	0.50	U	0.50
Dibromochloromethane	0.20	U	0.20
1,2-Dibromoethane	0.20	U	0.20
Chlorobenzene	0.20	U	0.20
Ethylbenzene	0.20	U	0.20
m,p-Xylene	0.50	U	0.50
Xylene, o-	0.20	U	0.20
Xylene (total)	0.70	U	0.70
Styrene	0.20	U	0.20
Bromoform	0.20	U	0.20
Cumene	0.20	U	0.20
1,1,2,2-Tetrachloroethane	0.20	U	0.20
n-Propylbenzene	0.20	U	0.20
4-Ethyltoluene	0.20	U	0.20
1,3,5-Trimethylbenzene	0.20	U	0.20
2-Chlorotoluene	0.20	U	0.20
tert-Butylbenzene	0.20	U	0.20
1,2,4-Trimethylbenzene	0.20	U	0.20
sec-Butylbenzene	0.20	U	0.20
4-Isopropyltoluene	0.20	U	0.20
1,3-Dichlorobenzene	0.20	U	0.20
1,4-Dichlorobenzene	0.20	U	0.20
Benzyl chloride	0.20	U	0.20
n-Butylbenzene	0.20	U	0.20
1,2-Dichlorobenzene	0.20	U	0.20
1,2,4-Trichlorobenzene	0.50	U	0.50
Hexachlorobutadiene	0.20	U	0.20
Naphthalene	0.50	U	0.50

Client: SESI Consulting Engineers

Job Number: 200-35064-1
Sdg Number: 200-35064-1

Method Blank - Batch: 200-108809

Method: TO-15
Preparation: Summa Canister

Lab Sample ID:	MB 200-108809/4	Analysis Batch:	200-108809	Instrument ID:	CHW.i
Client Matrix:	Air	Prep Batch:	N/A	Lab File ID:	21628_04.d
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	200 mL
Analysis Date:	09/02/2016 1322	Units:	ug/m3	Final Weight/Volume:	200 mL
Prep Date:	09/02/2016 1322			Injection Volume:	200 mL
Leach Date:	N/A				

Analyte	Result	Qual	RL
Dichlorodifluoromethane	2.5	U	2.5
Freon 22	1.8	U	1.8
1,2-Dichlorotetrafluoroethane	1.4	U	1.4
Chloromethane	1.0	U	1.0
n-Butane	1.2	U	1.2
Vinyl chloride	0.10	U	0.10
1,3-Butadiene	0.44	U	0.44
Bromomethane	0.78	U	0.78
Chloroethane	1.3	U	1.3
Bromoethene(Vinyl Bromide)	0.87	U	0.87
Trichlorofluoromethane	1.1	U	1.1
Freon TF	1.5	U	1.5
1,1-Dichloroethene	0.79	U	0.79
Acetone	12	U	12
Isopropyl alcohol	12	U	12
Carbon disulfide	1.6	U	1.6
3-Chloropropene	1.6	U	1.6
Methylene Chloride	1.7	U	1.7
tert-Butyl alcohol	15	U	15
Methyl tert-butyl ether	0.72	U	0.72
trans-1,2-Dichloroethene	0.79	U	0.79
n-Hexane	0.70	U	0.70
1,1-Dichloroethane	0.81	U	0.81
Methyl Ethyl Ketone	1.5	U	1.5
cis-1,2-Dichloroethene	0.79	U	0.79
1,2-Dichloroethene, Total	1.6	U	1.6
Chloroform	0.98	U	0.98
Tetrahydrofuran	15	U	15
1,1,1-Trichloroethane	1.1	U	1.1
Cyclohexane	0.69	U	0.69
Carbon tetrachloride	0.25	U	0.25
2,2,4-Trimethylpentane	0.93	U	0.93
Benzene	0.64	U	0.64
1,2-Dichloroethane	0.81	U	0.81
n-Heptane	0.82	U	0.82
Trichloroethene	0.21	U	0.21
Methyl methacrylate	2.0	U	2.0
1,2-Dichloropropane	0.92	U	0.92
1,4-Dioxane	18	U	18
Bromodichloromethane	1.3	U	1.3
cis-1,3-Dichloropropene	0.91	U	0.91
methyl isobutyl ketone	2.0	U	2.0
Toluene	0.75	U	0.75
trans-1,3-Dichloropropene	0.91	U	0.91
1,1,2-Trichloroethane	1.1	U	1.1

Client: SESI Consulting Engineers

Job Number: 200-35064-1
Sdg Number: 200-35064-1

Method Blank - Batch: 200-108809

Method: TO-15
Preparation: Summa Canister

Lab Sample ID:	MB 200-108809/4	Analysis Batch:	200-108809	Instrument ID:	CHW.i
Client Matrix:	Air	Prep Batch:	N/A	Lab File ID:	21628_04.d
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	200 mL
Analysis Date:	09/02/2016 1322	Units:	ug/m3	Final Weight/Volume:	200 mL
Prep Date:	09/02/2016 1322			Injection Volume:	200 mL
Leach Date:	N/A				

Analyte	Result	Qual	RL
Tetrachloroethene	1.4	U	1.4
Methyl Butyl Ketone (2-Hexanone)	2.0	U	2.0
Dibromochloromethane	1.7	U	1.7
1,2-Dibromoethane	1.5	U	1.5
Chlorobenzene	0.92	U	0.92
Ethylbenzene	0.87	U	0.87
m,p-Xylene	2.2	U	2.2
Xylene, o-	0.87	U	0.87
Xylene (total)	3.0	U	3.0
Styrene	0.85	U	0.85
Bromoform	2.1	U	2.1
Cumene	0.98	U	0.98
1,1,2,2-Tetrachloroethane	1.4	U	1.4
n-Propylbenzene	0.98	U	0.98
4-Ethyltoluene	0.98	U	0.98
1,3,5-Trimethylbenzene	0.98	U	0.98
2-Chlorotoluene	1.0	U	1.0
tert-Butylbenzene	1.1	U	1.1
1,2,4-Trimethylbenzene	0.98	U	0.98
sec-Butylbenzene	1.1	U	1.1
4-Isopropyltoluene	1.1	U	1.1
1,3-Dichlorobenzene	1.2	U	1.2
1,4-Dichlorobenzene	1.2	U	1.2
Benzyl chloride	1.0	U	1.0
n-Butylbenzene	1.1	U	1.1
1,2-Dichlorobenzene	1.2	U	1.2
1,2,4-Trichlorobenzene	3.7	U	3.7
Hexachlorobutadiene	2.1	U	2.1
Naphthalene	2.6	U	2.6

Client: SESI Consulting Engineers

Job Number: 200-35064-1
Sdg Number: 200-35064-1

Lab Control Sample - Batch: 200-108809

Method: TO-15
Preparation: Summa Canister

Lab Sample ID:	LCS 200-108809/3	Analysis Batch:	200-108809	Instrument ID:	CHW.i
Client Matrix:	Air	Prep Batch:	N/A	Lab File ID:	21628_03.d
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	200 mL
Analysis Date:	09/02/2016 1230	Units:	ppb v/v	Final Weight/Volume:	200 mL
Prep Date:	09/02/2016 1230			Injection Volume:	200 mL
Leach Date:	N/A				

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Dichlorodifluoromethane	10.0	9.29	93	68 - 128	
Freon 22	10.0	9.20	92	64 - 128	
1,2-Dichlorotetrafluoroethane	10.0	11.0	110	78 - 138	
Chloromethane	10.0	9.68	97	57 - 126	
n-Butane	10.0	9.72	97	56 - 130	
Vinyl chloride	10.0	10.4	104	62 - 125	
1,3-Butadiene	10.0	9.75	97	59 - 125	
Bromomethane	10.0	10.0	100	68 - 128	
Chloroethane	10.0	9.74	97	65 - 125	
Bromoethene(Vinyl Bromide)	10.0	9.79	98	67 - 127	
Trichlorofluoromethane	10.0	9.40	94	67 - 127	
Freon TF	10.0	9.62	96	68 - 128	
1,1-Dichloroethene	10.0	9.69	97	67 - 127	
Acetone	10.0	9.00	90	64 - 136	
Isopropyl alcohol	10.0	7.90	79	55 - 124	
Carbon disulfide	10.0	11.1	111	81 - 141	
3-Chloropropene	10.0	8.42	84	53 - 133	
Methylene Chloride	10.0	9.02	90	62 - 122	
tert-Butyl alcohol	10.0	8.28	83	64 - 124	
Methyl tert-butyl ether	10.0	9.15	92	67 - 127	
trans-1,2-Dichloroethene	10.0	9.82	98	72 - 132	
n-Hexane	10.0	9.68	97	71 - 131	
1,1-Dichloroethane	10.0	9.57	96	66 - 126	
Methyl Ethyl Ketone	10.0	9.38	94	62 - 122	
cis-1,2-Dichloroethene	10.0	9.62	96	67 - 127	
Chloroform	10.0	9.70	97	69 - 129	
Tetrahydrofuran	10.0	9.38	94	61 - 136	
1,1,1-Trichloroethane	10.0	9.94	99	70 - 130	
Cyclohexane	10.0	10.2	102	69 - 129	
Carbon tetrachloride	10.0	10.7	107	62 - 143	
2,2,4-Trimethylpentane	10.0	9.36	94	67 - 127	
Benzene	10.0	9.28	93	67 - 127	
1,2-Dichloroethane	10.0	9.52	95	67 - 132	
n-Heptane	10.0	8.77	88	62 - 130	
Trichloroethene	10.0	10.2	102	68 - 128	
Methyl methacrylate	10.0	9.85	99	70 - 130	
1,2-Dichloropropane	10.0	9.79	98	67 - 127	
1,4-Dioxane	10.0	9.56	96	66 - 132	
Bromodichloromethane	10.0	9.78	98	69 - 129	
cis-1,3-Dichloropropene	10.0	9.61	96	70 - 130	
methyl isobutyl ketone	10.0	8.70	87	62 - 130	
Toluene	10.0	9.87	99	67 - 127	
trans-1,3-Dichloropropene	10.0	9.96	100	69 - 129	
1,1,2-Trichloroethane	10.0	10.1	101	69 - 129	
Tetrachloroethene	10.0	10.6	106	70 - 130	
Methyl Butyl Ketone (2-Hexanone)	10.0	9.53	95	61 - 127	

Client: SESI Consulting Engineers

Job Number: 200-35064-1
Sdg Number: 200-35064-1

Lab Control Sample - Batch: 200-108809

Method: TO-15
Preparation: Summa Canister

Lab Sample ID:	LCS 200-108809/3	Analysis Batch:	200-108809	Instrument ID:	CHW.i
Client Matrix:	Air	Prep Batch:	N/A	Lab File ID:	21628_03.d
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	200 mL
Analysis Date:	09/02/2016 1230	Units:	ppb v/v	Final Weight/Volume:	200 mL
Prep Date:	09/02/2016 1230			Injection Volume:	200 mL
Leach Date:	N/A				

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Dibromochloromethane	10.0	10.2	102	66 - 130	
1,2-Dibromoethane	10.0	10.3	103	70 - 130	
Chlorobenzene	10.0	10.3	103	68 - 128	
Ethylbenzene	10.0	9.85	98	68 - 128	
m,p-Xylene	20.0	20.1	101	68 - 128	
Xylene, o-	10.0	9.80	98	67 - 127	
Styrene	10.0	9.98	100	68 - 128	
Bromoform	10.0	10.3	103	34 - 170	
Cumene	10.0	9.72	97	67 - 127	
1,1,2,2-Tetrachloroethane	10.0	9.90	99	69 - 129	
n-Propylbenzene	10.0	9.86	99	67 - 127	
4-Ethyltoluene	10.0	10.2	102	69 - 129	
1,3,5-Trimethylbenzene	10.0	9.78	98	65 - 125	
2-Chlorotoluene	10.0	9.71	97	67 - 127	
tert-Butylbenzene	10.0	9.35	94	63 - 125	
1,2,4-Trimethylbenzene	10.0	9.53	95	65 - 125	
sec-Butylbenzene	10.0	8.31	83	66 - 126	
4-Isopropyltoluene	10.0	9.61	96	67 - 129	
1,3-Dichlorobenzene	10.0	10.0	100	67 - 127	
1,4-Dichlorobenzene	10.0	9.44	94	66 - 126	
Benzyl chloride	10.0	8.22	82	54 - 135	
n-Butylbenzene	10.0	9.83	98	67 - 127	
1,2-Dichlorobenzene	10.0	9.91	99	67 - 127	
1,2,4-Trichlorobenzene	10.0	10.2	102	59 - 126	
Hexachlorobutadiene	10.0	9.59	96	62 - 130	
Naphthalene	10.0	8.87	89	50 - 121	

DATA REPORTING QUALIFIERS

Client: SESI Consulting Engineers

Job Number: 200-35064-1
Sdg Number: 200-35064-1

Lab Section	Qualifier	Description
Air - GC/MS VOA		
	U	Indicates the analyte was analyzed for but not detected.

Client: SESI Consulting Engineers

Job Number: 200-35064-1
Sdg Number: 200-35064-1

QC Association Summary

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch
Air - GC/MS VOA					
Analysis Batch:200-108809					
LCS 200-108809/3	Lab Control Sample	T	Air	TO-15	
MB 200-108809/4	Method Blank	T	Air	TO-15	
200-35064-1	SS-1	T	Air	TO-15	
200-35064-2	SS-2	T	Air	TO-15	
200-35064-3	SS-3	T	Air	TO-15	

Report Basis
T = Total

Client: SESI Consulting Engineers

Job Number: 200-35064-1
SDG: 200-35064-1

Laboratory Chronicle

Lab ID: 200-35064-1 **Client ID: SS-1**

Sample Date/Time: 08/30/2016 11:24 Received Date/Time: 08/31/2016 10:30

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:Summa Canister	200-35064-A-1		200-108809		09/03/2016 04:36	1.5	TAL BUR	K1P
A:TO-15	200-35064-A-1		200-108809		09/03/2016 04:36	1.5	TAL BUR	K1P

Lab ID: 200-35064-2 **Client ID: SS-2**

Sample Date/Time: 08/30/2016 12:15 Received Date/Time: 08/31/2016 10:30

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:Summa Canister	200-35064-A-2		200-108809		09/03/2016 05:30	1	TAL BUR	K1P
A:TO-15	200-35064-A-2		200-108809		09/03/2016 05:30	1	TAL BUR	K1P

Lab ID: 200-35064-3 **Client ID: SS-3**

Sample Date/Time: 08/30/2016 12:52 Received Date/Time: 08/31/2016 10:30

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:Summa Canister	200-35064-A-3		200-108809		09/03/2016 06:23	1	TAL BUR	K1P
A:TO-15	200-35064-A-3		200-108809		09/03/2016 06:23	1	TAL BUR	K1P

Lab ID: MB **Client ID: N/A**

Sample Date/Time: N/A Received Date/Time: N/A

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:Summa Canister	MB 200-108809/4		200-108809		09/02/2016 13:22	1	TAL BUR	K1P
A:TO-15	MB 200-108809/4		200-108809		09/02/2016 13:22	1	TAL BUR	K1P

Lab ID: LCS **Client ID: N/A**

Sample Date/Time: N/A Received Date/Time: N/A

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:Summa Canister	LCS 200-108809/3		200-108809		09/02/2016 12:30	1	TAL BUR	K1P
A:TO-15	LCS 200-108809/3		200-108809		09/02/2016 12:30	1	TAL BUR	K1P

Lab References:
TAL BUR = TestAmerica Burlington

Lab Name: TestAmerica Burlington Job No.: 200-35064-1

SDG No.: 200-35064-1

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
ATTO15CAL1w_00161	09/27/16	08/08/16	Zero Air, Lot 12	15.463 L	ATTO15CAL6w_00130	155 mL	1,1,1-Trichloroethane	0.20044 ppb v/v
							1,1,2,2-Tetrachloroethane	0.20044 ppb v/v
							1,1,2-Trichloroethane	0.20044 ppb v/v
							1,1-Dichloroethane	0.20044 ppb v/v
							1,1-Dichloroethene	0.20044 ppb v/v
							1,2,3-Trichlorobenzene	0.20044 ppb v/v
							1,2,3-Trichloropropane	0.20044 ppb v/v
							1,2,4-Trichlorobenzene	0.20044 ppb v/v
							1,2,4-Trimethylbenzene	0.20044 ppb v/v
							1,2-Dibromoethane	0.20044 ppb v/v
							1,2-Dichlorobenzene	0.20044 ppb v/v
							1,2-Dichloroethane	0.20044 ppb v/v
							1,2-Dichloropropane	0.20044 ppb v/v
							1,2-Dichlorotetrafluoroethane	0.20044 ppb v/v
							1,3,5-Trimethylbenzene	0.20044 ppb v/v
							1,3-Butadiene	0.20044 ppb v/v
							1,3-Dichlorobenzene	0.20044 ppb v/v
							1,4-Dichlorobenzene	0.20044 ppb v/v
							1,4-Dioxane	0.20044 ppb v/v
							2,2,4-Trimethylpentane	0.20044 ppb v/v
							2-Chlorotoluene	0.20044 ppb v/v
							2-Methylbutane	0.20044 ppb v/v
							3-Chloropropene	0.20044 ppb v/v
							4-Ethyltoluene	0.20044 ppb v/v
							4-Isopropyltoluene	0.20044 ppb v/v

Lab Name: TestAmerica Burlington Job No.: 200-35064-1

SDG No.: 200-35064-1

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Acetone	0.20044 ppb v/v
							Acetonitrile	0.20044 ppb v/v
							Acrolein	0.20044 ppb v/v
							Acrylonitrile	0.20044 ppb v/v
							Alpha Methyl Styrene	0.20044 ppb v/v
							Benzene	0.20044 ppb v/v
							Benzyl chloride	0.20044 ppb v/v
							Bromodichloromethane	0.20044 ppb v/v
							Bromoethene(Vinyl Bromide)	0.20044 ppb v/v
							Bromoform	0.20044 ppb v/v
							Bromomethane	0.20044 ppb v/v
							Carbon disulfide	0.20044 ppb v/v
							Carbon tetrachloride	0.20044 ppb v/v
							Chlorobenzene	0.20044 ppb v/v
							Chloroethane	0.20044 ppb v/v
							Chloroform	0.20044 ppb v/v
							Chloromethane	0.20044 ppb v/v
							cis-1,2-Dichloroethene	0.20044 ppb v/v
							cis-1,3-Dichloropropene	0.20044 ppb v/v
							Cumene	0.20044 ppb v/v
							Cyclohexane	0.20044 ppb v/v
							Dibromochloromethane	0.20044 ppb v/v
							Dibromomethane	0.20044 ppb v/v
							Dichlorodifluoromethane	0.20044 ppb v/v
							Dodecane	0.20044 ppb v/v

Lab Name: TestAmerica Burlington Job No.: 200-35064-1

SDG No.: 200-35064-1

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Ethyl acetate	0.20044 ppb v/v
							Ethyl ether	0.20044 ppb v/v
							Ethylbenzene	0.20044 ppb v/v
							Freon 22	0.20044 ppb v/v
							Freon TF	0.20044 ppb v/v
							Hexachlorobutadiene	0.20044 ppb v/v
							Isopropyl alcohol	0.20044 ppb v/v
							m,p-Xylene	0.400879 ppb v/v
							Methyl Butyl Ketone (2-Hexanone)	0.20044 ppb v/v
							Methyl Ethyl Ketone	0.20044 ppb v/v
							methyl isobutyl ketone	0.20044 ppb v/v
							Methyl methacrylate	0.20044 ppb v/v
							Methyl tert-butyl ether	0.20044 ppb v/v
							Methylene Chloride	0.20044 ppb v/v
							n-Butane	0.20044 ppb v/v
							n-Butanol	0.20044 ppb v/v
							n-Butylbenzene	0.20044 ppb v/v
							n-Decane	0.20044 ppb v/v
							n-Heptane	0.20044 ppb v/v
							n-Hexane	0.20044 ppb v/v
							n-Nonane	0.20044 ppb v/v
							n-Octane	0.20044 ppb v/v
							n-Propylbenzene	0.20044 ppb v/v
							Naphthalene	0.20044 ppb v/v
							Pentane	0.20044 ppb v/v

Lab Name: TestAmerica Burlington Job No.: 200-35064-1

SDG No.: 200-35064-1

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Propene	0.20044 ppb v/v
							sec-Butylbenzene	0.20044 ppb v/v
							Styrene	0.20044 ppb v/v
							tert-Butyl alcohol	0.20044 ppb v/v
							tert-Butylbenzene	0.20044 ppb v/v
							Tetrachloroethene	0.20044 ppb v/v
							Tetrahydrofuran	0.20044 ppb v/v
							Toluene	0.20044 ppb v/v
							trans-1,2-Dichloroethene	0.20044 ppb v/v
							trans-1,3-Dichloropropene	0.20044 ppb v/v
							Trichloroethene	0.20044 ppb v/v
							Trichlorofluoromethane	0.20044 ppb v/v
							Undecane	0.20044 ppb v/v
							Vinyl acetate	0.20044 ppb v/v
							Vinyl chloride	0.20044 ppb v/v
							Xylene, o-	0.20044 ppb v/v
							Ethanol	0.400944 ppb v/v
.ATTO15CAL6w_00130	09/27/16	08/04/16	Zero Air, Lot 13	15.463 L	ATTO15CALSTKi_00084	1546 mL	1,1,1-Trichloroethane	19.9961 ppb v/v
							1,1,2,2-Tetrachloroethane	19.9961 ppb v/v
							1,1,2-Trichloroethane	19.9961 ppb v/v
							1,1-Dichloroethane	19.9961 ppb v/v
							1,1-Dichloroethene	19.9961 ppb v/v
							1,2,3-Trichlorobenzene	19.9961 ppb v/v
							1,2,3-Trichloropropane	19.9961 ppb v/v
							1,2,4-Trichlorobenzene	19.9961 ppb v/v

Lab Name: TestAmerica Burlington Job No.: 200-35064-1

SDG No.: 200-35064-1

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							1,2,4-Trimethylbenzene	19.9961 ppb v/v
							1,2-Dibromoethane	19.9961 ppb v/v
							1,2-Dichlorobenzene	19.9961 ppb v/v
							1,2-Dichloroethane	19.9961 ppb v/v
							1,2-Dichloropropane	19.9961 ppb v/v
							1,2-Dichlorotetrafluoroethane	19.9961 ppb v/v
							1,3,5-Trimethylbenzene	19.9961 ppb v/v
							1,3-Butadiene	19.9961 ppb v/v
							1,3-Dichlorobenzene	19.9961 ppb v/v
							1,4-Dichlorobenzene	19.9961 ppb v/v
							1,4-Dioxane	19.9961 ppb v/v
							2,2,4-Trimethylpentane	19.9961 ppb v/v
							2-Chlorotoluene	19.9961 ppb v/v
							2-Methylbutane	19.9961 ppb v/v
							3-Chloropropene	19.9961 ppb v/v
							4-Ethyltoluene	19.9961 ppb v/v
							4-Isopropyltoluene	19.9961 ppb v/v
							Acetone	19.9961 ppb v/v
							Acetonitrile	19.9961 ppb v/v
							Acrolein	19.9961 ppb v/v
							Acrylonitrile	19.9961 ppb v/v
							Alpha Methyl Styrene	19.9961 ppb v/v
							Benzene	19.9961 ppb v/v
							Benzyl chloride	19.9961 ppb v/v
							Bromodichloromethane	19.9961 ppb v/v

Lab Name: TestAmerica Burlington Job No.: 200-35064-1

SDG No.: 200-35064-1

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Bromoethene(Vinyl Bromide)	19.9961 ppb v/v
							Bromoform	19.9961 ppb v/v
							Bromomethane	19.9961 ppb v/v
							Carbon disulfide	19.9961 ppb v/v
							Carbon tetrachloride	19.9961 ppb v/v
							Chlorobenzene	19.9961 ppb v/v
							Chloroethane	19.9961 ppb v/v
							Chloroform	19.9961 ppb v/v
							Chloromethane	19.9961 ppb v/v
							cis-1,2-Dichloroethene	19.9961 ppb v/v
							cis-1,3-Dichloropropene	19.9961 ppb v/v
							Cumene	19.9961 ppb v/v
							Cyclohexane	19.9961 ppb v/v
							Dibromochloromethane	19.9961 ppb v/v
							Dibromomethane	19.9961 ppb v/v
							Dichlorodifluoromethane	19.9961 ppb v/v
							Dodecane	19.9961 ppb v/v
							Ethyl acetate	19.9961 ppb v/v
							Ethyl ether	19.9961 ppb v/v
							Ethylbenzene	19.9961 ppb v/v
							Freon 22	19.9961 ppb v/v
							Freon TF	19.9961 ppb v/v
							Hexachlorobutadiene	19.9961 ppb v/v
							Isopropyl alcohol	19.9961 ppb v/v
							m,p-Xylene	39.9922 ppb v/v

Lab Name: TestAmerica Burlington Job No.: 200-35064-1

SDG No.: 200-35064-1

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Methyl Butyl Ketone (2-Hexanone)	19.9961 ppb v/v
							Methyl Ethyl Ketone	19.9961 ppb v/v
							methyl isobutyl ketone	19.9961 ppb v/v
							Methyl methacrylate	19.9961 ppb v/v
							Methyl tert-butyl ether	19.9961 ppb v/v
							Methylene Chloride	19.9961 ppb v/v
							n-Butane	19.9961 ppb v/v
							n-Butanol	19.9961 ppb v/v
							n-Butylbenzene	19.9961 ppb v/v
							n-Decane	19.9961 ppb v/v
							n-Heptane	19.9961 ppb v/v
							n-Hexane	19.9961 ppb v/v
							n-Nonane	19.9961 ppb v/v
							n-Octane	19.9961 ppb v/v
							n-Propylbenzene	19.9961 ppb v/v
							Naphthalene	19.9961 ppb v/v
							Pentane	19.9961 ppb v/v
							Propene	19.9961 ppb v/v
							sec-Butylbenzene	19.9961 ppb v/v
							Styrene	19.9961 ppb v/v
							tert-Butyl alcohol	19.9961 ppb v/v
							tert-Butylbenzene	19.9961 ppb v/v
							Tetrachloroethene	19.9961 ppb v/v
							Tetrahydrofuran	19.9961 ppb v/v
							Toluene	19.9961 ppb v/v

Lab Name: TestAmerica Burlington Job No.: 200-35064-1

SDG No.: 200-35064-1

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							trans-1,2-Dichloroethene	19.9961 ppb v/v
							trans-1,3-Dichloropropene	19.9961 ppb v/v
							Trichloroethene	19.9961 ppb v/v
							Trichlorofluoromethane	19.9961 ppb v/v
							Undecane	19.9961 ppb v/v
							Vinyl acetate	19.9961 ppb v/v
							Vinyl chloride	19.9961 ppb v/v
							Xylene, o-	19.9961 ppb v/v
					ATTO15EthCALw_00071	1237 mL	Ethanol	39.9987 ppb v/v
..ATTO15CALSTKi_00084	10/21/16	07/21/16	Zero Air, Lot 13	37.5 L	ATTO15CALs_00025	7500 mL	1,1,1-Trichloroethane	200 ppb v/v
							1,1,2,2-Tetrachloroethane	200 ppb v/v
							1,1,2-Trichloroethane	200 ppb v/v
							1,1-Dichloroethane	200 ppb v/v
							1,1-Dichloroethene	200 ppb v/v
							1,2,3-Trichlorobenzene	200 ppb v/v
							1,2,3-Trichloropropane	200 ppb v/v
							1,2,4-Trichlorobenzene	200 ppb v/v
							1,2,4-Trimethylbenzene	200 ppb v/v
							1,2-Dibromoethane	200 ppb v/v
							1,2-Dichlorobenzene	200 ppb v/v
							1,2-Dichloroethane	200 ppb v/v
							1,2-Dichloropropane	200 ppb v/v
							1,2-Dichlorotetrafluoroethane	200 ppb v/v
							1,3,5-Trimethylbenzene	200 ppb v/v
							1,3-Butadiene	200 ppb v/v
							1,3-Dichlorobenzene	200 ppb v/v
							1,4-Dichlorobenzene	200 ppb v/v
							1,4-Dioxane	200 ppb v/v
							2,2,4-Trimethylpentane	200 ppb v/v
							2-Chlorotoluene	200 ppb v/v
							2-Methylbutane	200 ppb v/v
							3-Chloropropene	200 ppb v/v
							4-Ethyltoluene	200 ppb v/v
							4-Isopropyltoluene	200 ppb v/v
							Acetone	200 ppb v/v
							Acetonitrile	200 ppb v/v
							Acrolein	200 ppb v/v
							Acrylonitrile	200 ppb v/v
							Alpha Methyl Styrene	200 ppb v/v
							Benzene	200 ppb v/v

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SDG No.: 200-35064-1

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Benzyl chloride	200 ppb v/v
							Bromodichloromethane	200 ppb v/v
							Bromoethene(Vinyl Bromide)	200 ppb v/v
							Bromoform	200 ppb v/v
							Bromomethane	200 ppb v/v
							Carbon disulfide	200 ppb v/v
							Carbon tetrachloride	200 ppb v/v
							Chlorobenzene	200 ppb v/v
							Chloroethane	200 ppb v/v
							Chloroform	200 ppb v/v
							Chloromethane	200 ppb v/v
							cis-1,2-Dichloroethene	200 ppb v/v
							cis-1,3-Dichloropropene	200 ppb v/v
							Cumene	200 ppb v/v
							Cyclohexane	200 ppb v/v
							Dibromochloromethane	200 ppb v/v
							Dibromomethane	200 ppb v/v
							Dichlorodifluoromethane	200 ppb v/v
							Dodecane	200 ppb v/v
							Ethyl acetate	200 ppb v/v
							Ethyl ether	200 ppb v/v
							Ethylbenzene	200 ppb v/v
							Freon 22	200 ppb v/v
							Freon TF	200 ppb v/v
							Hexachlorobutadiene	200 ppb v/v
							Isopropyl alcohol	200 ppb v/v
							m,p-Xylene	400 ppb v/v
							Methyl Butyl Ketone (2-Hexanone)	200 ppb v/v
							Methyl Ethyl Ketone	200 ppb v/v
							methyl isobutyl ketone	200 ppb v/v
							Methyl methacrylate	200 ppb v/v
							Methyl tert-butyl ether	200 ppb v/v
							Methylene Chloride	200 ppb v/v
							n-Butane	200 ppb v/v
							n-Butanol	200 ppb v/v
							n-Butylbenzene	200 ppb v/v
							n-Decane	200 ppb v/v
							n-Heptane	200 ppb v/v
							n-Hexane	200 ppb v/v
							n-Nonane	200 ppb v/v
							n-Octane	200 ppb v/v
							n-Propylbenzene	200 ppb v/v
							Naphthalene	200 ppb v/v
							Pentane	200 ppb v/v
							Propene	200 ppb v/v
							sec-Butylbenzene	200 ppb v/v
							Styrene	200 ppb v/v

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SDG No.: 200-35064-1

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							tert-Butyl alcohol	200 ppb v/v
							tert-Butylbenzene	200 ppb v/v
							Tetrachloroethene	200 ppb v/v
							Tetrahydrofuran	200 ppb v/v
							Toluene	200 ppb v/v
							trans-1,2-Dichloroethene	200 ppb v/v
							trans-1,3-Dichloropropene	200 ppb v/v
							Trichloroethene	200 ppb v/v
							Trichlorofluoromethane	200 ppb v/v
							Undecane	200 ppb v/v
							Vinyl acetate	200 ppb v/v
							Vinyl chloride	200 ppb v/v
							Xylene, o-	200 ppb v/v
...ATTO15CALs_00025	12/30/16		Spectra Gases, Lot cc-90855		(Purchased Reagent)		1,1,1-Trichloroethane	1 ppm v/v
							1,1,2,2-Tetrachloroethane	1 ppm v/v
							1,1,2-Trichloroethane	1 ppm v/v
							1,1-Dichloroethane	1 ppm v/v
							1,1-Dichloroethene	1 ppm v/v
							1,2,3-Trichlorobenzene	1 ppm v/v
							1,2,3-Trichloropropane	1 ppm v/v
							1,2,4-Trichlorobenzene	1 ppm v/v
							1,2,4-Trimethylbenzene	1 ppm v/v
							1,2-Dibromoethane	1 ppm v/v
							1,2-Dichlorobenzene	1 ppm v/v
							1,2-Dichloroethane	1 ppm v/v
							1,2-Dichloropropane	1 ppm v/v
							1,2-Dichlorotetrafluoroethane	1 ppm v/v
							1,3,5-Trimethylbenzene	1 ppm v/v
							1,3-Butadiene	1 ppm v/v
							1,3-Dichlorobenzene	1 ppm v/v
							1,4-Dichlorobenzene	1 ppm v/v
							1,4-Dioxane	1 ppm v/v
							2,2,4-Trimethylpentane	1 ppm v/v
							2-Chlorotoluene	1 ppm v/v
							2-Methylbutane	1 ppm v/v
							3-Chloropropene	1 ppm v/v
							4-Ethyltoluene	1 ppm v/v
							4-Isopropyltoluene	1 ppm v/v
							Acetone	1 ppm v/v
							Acetonitrile	1 ppm v/v
							Acrolein	1 ppm v/v
							Acrylonitrile	1 ppm v/v
							Alpha Methyl Styrene	1 ppm v/v
							Benzene	1 ppm v/v
							Benzyl chloride	1 ppm v/v
							Bromodichloromethane	1 ppm v/v
							Bromoethene(Vinyl Bromide)	1 ppm v/v
							Bromoform	1 ppm v/v

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SDG No.: 200-35064-1

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Bromomethane	1 ppm v/v
							Carbon disulfide	1 ppm v/v
							Carbon tetrachloride	1 ppm v/v
							Chlorobenzene	1 ppm v/v
							Chloroethane	1 ppm v/v
							Chloroform	1 ppm v/v
							Chloromethane	1 ppm v/v
							cis-1,2-Dichloroethene	1 ppm v/v
							cis-1,3-Dichloropropene	1 ppm v/v
							Cumene	1 ppm v/v
							Cyclohexane	1 ppm v/v
							Dibromochloromethane	1 ppm v/v
							Dibromomethane	1 ppm v/v
							Dichlorodifluoromethane	1 ppm v/v
							Dodecane	1 ppm v/v
							Ethyl acetate	1 ppm v/v
							Ethyl ether	1 ppm v/v
							Ethylbenzene	1 ppm v/v
							Freon 22	1 ppm v/v
							Freon TF	1 ppm v/v
							Hexachlorobutadiene	1 ppm v/v
							Isopropyl alcohol	1 ppm v/v
							m,p-Xylene	2 ppm v/v
							Methyl Butyl Ketone (2-Hexanone)	1 ppm v/v
							Methyl Ethyl Ketone	1 ppm v/v
							methyl isobutyl ketone	1 ppm v/v
							Methyl methacrylate	1 ppm v/v
							Methyl tert-butyl ether	1 ppm v/v
							Methylene Chloride	1 ppm v/v
							n-Butane	1 ppm v/v
							n-Butanol	1 ppm v/v
							n-Butylbenzene	1 ppm v/v
							n-Decane	1 ppm v/v
							n-Heptane	1 ppm v/v
							n-Hexane	1 ppm v/v
							n-Nonane	1 ppm v/v
							n-Octane	1 ppm v/v
							n-Propylbenzene	1 ppm v/v
							Naphthalene	1 ppm v/v
							Pentane	1 ppm v/v
							Propene	1 ppm v/v
							sec-Butylbenzene	1 ppm v/v
							Styrene	1 ppm v/v
							tert-Butyl alcohol	1 ppm v/v
							tert-Butylbenzene	1 ppm v/v
							Tetrachloroethene	1 ppm v/v
							Tetrahydrofuran	1 ppm v/v

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SDG No.: 200-35064-1

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Toluene	1 ppm v/v
							trans-1,2-Dichloroethene	1 ppm v/v
							trans-1,3-Dichloropropene	1 ppm v/v
							Trichloroethene	1 ppm v/v
							Trichlorofluoromethane	1 ppm v/v
							Undecane	1 ppm v/v
							Vinyl acetate	1 ppm v/v
							Vinyl chloride	1 ppm v/v
							Xylene, o-	1 ppm v/v
..ATTO15EthCALw_00071	09/27/16	06/27/16	Zero Air, Lot 12	37.5 ppb	ATTO15EthCALs_00007	18.75 uL	Ethanol	500 ppb v/v
...ATTO15EthCALs_00007	09/11/17		SIGMA, Lot SHBB5682V		(Purchased Reagent)		Ethanol	1 mL/mL
ATTO15CAL2w_00219	09/27/16	08/08/16	Zero Air, Lot 12	15.463 L	ATTO15CAL6w_00130	387 mL	1,1,1-Trichloroethane	0.500453 ppb v/v
							1,1,2,2-Tetrachloroethane	0.500453 ppb v/v
							1,1,2-Trichloroethane	0.500453 ppb v/v
							1,1-Dichloroethane	0.500453 ppb v/v
							1,1-Dichloroethene	0.500453 ppb v/v
							1,2,3-Trichlorobenzene	0.500453 ppb v/v
							1,2,3-Trichloropropane	0.500453 ppb v/v
							1,2,4-Trichlorobenzene	0.500453 ppb v/v
							1,2,4-Trimethylbenzene	0.500453 ppb v/v
							1,2-Dibromoethane	0.500453 ppb v/v
							1,2-Dichlorobenzene	0.500453 ppb v/v
							1,2-Dichloroethane	0.500453 ppb v/v
							1,2-Dichloropropane	0.500453 ppb v/v
							1,2-Dichlorotetrafluoroethane	0.500453 ppb v/v
							1,3,5-Trimethylbenzene	0.500453 ppb v/v
							1,3-Butadiene	0.500453 ppb v/v
							1,3-Dichlorobenzene	0.500453 ppb v/v
							1,4-Dichlorobenzene	0.500453 ppb v/v
							1,4-Dioxane	0.500453 ppb v/v

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Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							2,2,4-Trimethylpentane	0.500453 ppb v/v
							2-Chlorotoluene	0.500453 ppb v/v
							2-Methylbutane	0.500453 ppb v/v
							3-Chloropropene	0.500453 ppb v/v
							4-Ethyltoluene	0.500453 ppb v/v
							4-Isopropyltoluene	0.500453 ppb v/v
							Acetone	0.500453 ppb v/v
							Acetonitrile	0.500453 ppb v/v
							Acrolein	0.500453 ppb v/v
							Acrylonitrile	0.500453 ppb v/v
							Alpha Methyl Styrene	0.500453 ppb v/v
							Benzene	0.500453 ppb v/v
							Benzyl chloride	0.500453 ppb v/v
							Bromodichloromethane	0.500453 ppb v/v
							Bromoethene(Vinyl Bromide)	0.500453 ppb v/v
							Bromoform	0.500453 ppb v/v
							Bromomethane	0.500453 ppb v/v
							Carbon disulfide	0.500453 ppb v/v
							Carbon tetrachloride	0.500453 ppb v/v
							Chlorobenzene	0.500453 ppb v/v
							Chloroethane	0.500453 ppb v/v
							Chloroform	0.500453 ppb v/v
							Chloromethane	0.500453 ppb v/v
							cis-1,2-Dichloroethene	0.500453 ppb v/v
							cis-1,3-Dichloropropene	0.500453 ppb v/v

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Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Cumene	0.500453 ppb v/v
							Cyclohexane	0.500453 ppb v/v
							Dibromochloromethane	0.500453 ppb v/v
							Dibromomethane	0.500453 ppb v/v
							Dichlorodifluoromethane	0.500453 ppb v/v
							Dodecane	0.500453 ppb v/v
							Ethyl acetate	0.500453 ppb v/v
							Ethyl ether	0.500453 ppb v/v
							Ethylbenzene	0.500453 ppb v/v
							Freon 22	0.500453 ppb v/v
							Freon TF	0.500453 ppb v/v
							Hexachlorobutadiene	0.500453 ppb v/v
							Isopropyl alcohol	0.500453 ppb v/v
							m,p-Xylene	1.00091 ppb v/v
							Methyl Butyl Ketone (2-Hexanone)	0.500453 ppb v/v
							Methyl Ethyl Ketone	0.500453 ppb v/v
							methyl isobutyl ketone	0.500453 ppb v/v
							Methyl methacrylate	0.500453 ppb v/v
							Methyl tert-butyl ether	0.500453 ppb v/v
							Methylene Chloride	0.500453 ppb v/v
							n-Butane	0.500453 ppb v/v
							n-Butanol	0.500453 ppb v/v
							n-Butylbenzene	0.500453 ppb v/v
							n-Decane	0.500453 ppb v/v
							n-Heptane	0.500453 ppb v/v

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Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							n-Hexane	0.500453 ppb v/v
							n-Nonane	0.500453 ppb v/v
							n-Octane	0.500453 ppb v/v
							n-Propylbenzene	0.500453 ppb v/v
							Naphthalene	0.500453 ppb v/v
							Pentane	0.500453 ppb v/v
							Propene	0.500453 ppb v/v
							sec-Butylbenzene	0.500453 ppb v/v
							Styrene	0.500453 ppb v/v
							tert-Butyl alcohol	0.500453 ppb v/v
							tert-Butylbenzene	0.500453 ppb v/v
							Tetrachloroethene	0.500453 ppb v/v
							Tetrahydrofuran	0.500453 ppb v/v
							Toluene	0.500453 ppb v/v
							trans-1,2-Dichloroethene	0.500453 ppb v/v
							trans-1,3-Dichloropropene	0.500453 ppb v/v
							Trichloroethene	0.500453 ppb v/v
							Trichlorofluoromethane	0.500453 ppb v/v
							Undecane	0.500453 ppb v/v
							Vinyl acetate	0.500453 ppb v/v
							Vinyl chloride	0.500453 ppb v/v
							Xylene, o-	0.500453 ppb v/v
							Ethanol	5.01064 ppb v/v
					ATTO15EthCALw_00071	124 mL	Ethanol	5.01064 ppb v/v
.ATTO15CAL6w_00130	09/27/16	08/04/16	Zero Air, Lot 13	15.463 L	ATTO15CALSTKi_00084	1546 mL	1,1,1-Trichloroethane	19.9961 ppb v/v

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Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							1,1,2,2-Tetrachloroethane	19.9961 ppb v/v
							1,1,2-Trichloroethane	19.9961 ppb v/v
							1,1-Dichloroethane	19.9961 ppb v/v
							1,1-Dichloroethene	19.9961 ppb v/v
							1,2,3-Trichlorobenzene	19.9961 ppb v/v
							1,2,3-Trichloropropane	19.9961 ppb v/v
							1,2,4-Trichlorobenzene	19.9961 ppb v/v
							1,2,4-Trimethylbenzene	19.9961 ppb v/v
							1,2-Dibromoethane	19.9961 ppb v/v
							1,2-Dichlorobenzene	19.9961 ppb v/v
							1,2-Dichloroethane	19.9961 ppb v/v
							1,2-Dichloropropane	19.9961 ppb v/v
							1,2-Dichlorotetrafluoroethane	19.9961 ppb v/v
							1,3,5-Trimethylbenzene	19.9961 ppb v/v
							1,3-Butadiene	19.9961 ppb v/v
							1,3-Dichlorobenzene	19.9961 ppb v/v
							1,4-Dichlorobenzene	19.9961 ppb v/v
							1,4-Dioxane	19.9961 ppb v/v
							2,2,4-Trimethylpentane	19.9961 ppb v/v
							2-Chlorotoluene	19.9961 ppb v/v
							2-Methylbutane	19.9961 ppb v/v
							3-Chloropropene	19.9961 ppb v/v
							4-Ethyltoluene	19.9961 ppb v/v
							4-Isopropyltoluene	19.9961 ppb v/v
							Acetone	19.9961 ppb v/v

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Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Acetonitrile	19.9961 ppb v/v
							Acrolein	19.9961 ppb v/v
							Acrylonitrile	19.9961 ppb v/v
							Alpha Methyl Styrene	19.9961 ppb v/v
							Benzene	19.9961 ppb v/v
							Benzyl chloride	19.9961 ppb v/v
							Bromodichloromethane	19.9961 ppb v/v
							Bromoethene(Vinyl Bromide)	19.9961 ppb v/v
							Bromoform	19.9961 ppb v/v
							Bromomethane	19.9961 ppb v/v
							Carbon disulfide	19.9961 ppb v/v
							Carbon tetrachloride	19.9961 ppb v/v
							Chlorobenzene	19.9961 ppb v/v
							Chloroethane	19.9961 ppb v/v
							Chloroform	19.9961 ppb v/v
							Chloromethane	19.9961 ppb v/v
							cis-1,2-Dichloroethene	19.9961 ppb v/v
							cis-1,3-Dichloropropene	19.9961 ppb v/v
							Cumene	19.9961 ppb v/v
							Cyclohexane	19.9961 ppb v/v
							Dibromochloromethane	19.9961 ppb v/v
							Dibromomethane	19.9961 ppb v/v
							Dichlorodifluoromethane	19.9961 ppb v/v
							Dodecane	19.9961 ppb v/v
							Ethyl acetate	19.9961 ppb v/v

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SDG No.: 200-35064-1

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Ethyl ether	19.9961 ppb v/v
							Ethylbenzene	19.9961 ppb v/v
							Freon 22	19.9961 ppb v/v
							Freon TF	19.9961 ppb v/v
							Hexachlorobutadiene	19.9961 ppb v/v
							Isopropyl alcohol	19.9961 ppb v/v
							m,p-Xylene	39.9922 ppb v/v
							Methyl Butyl Ketone (2-Hexanone)	19.9961 ppb v/v
							Methyl Ethyl Ketone	19.9961 ppb v/v
							methyl isobutyl ketone	19.9961 ppb v/v
							Methyl methacrylate	19.9961 ppb v/v
							Methyl tert-butyl ether	19.9961 ppb v/v
							Methylene Chloride	19.9961 ppb v/v
							n-Butane	19.9961 ppb v/v
							n-Butanol	19.9961 ppb v/v
							n-Butylbenzene	19.9961 ppb v/v
							n-Decane	19.9961 ppb v/v
							n-Heptane	19.9961 ppb v/v
							n-Hexane	19.9961 ppb v/v
							n-Nonane	19.9961 ppb v/v
							n-Octane	19.9961 ppb v/v
							n-Propylbenzene	19.9961 ppb v/v
							Naphthalene	19.9961 ppb v/v
							Pentane	19.9961 ppb v/v
							Propene	19.9961 ppb v/v

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Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							sec-Butylbenzene	19.9961 ppb v/v
							Styrene	19.9961 ppb v/v
							tert-Butyl alcohol	19.9961 ppb v/v
							tert-Butylbenzene	19.9961 ppb v/v
							Tetrachloroethene	19.9961 ppb v/v
							Tetrahydrofuran	19.9961 ppb v/v
							Toluene	19.9961 ppb v/v
							trans-1,2-Dichloroethene	19.9961 ppb v/v
							trans-1,3-Dichloropropene	19.9961 ppb v/v
							Trichloroethene	19.9961 ppb v/v
							Trichlorofluoromethane	19.9961 ppb v/v
							Undecane	19.9961 ppb v/v
							Vinyl acetate	19.9961 ppb v/v
							Vinyl chloride	19.9961 ppb v/v
							Xylene, o-	19.9961 ppb v/v
					ATTO15EthCALw_00071	1237 mL	Ethanol	39.9987 ppb v/v
..ATTO15CALSTKi_00084	10/21/16	07/21/16	Zero Air, Lot 13	37.5 L	ATTO15CALs_00025	7500 mL	1,1,1-Trichloroethane	200 ppb v/v
							1,1,2,2-Tetrachloroethane	200 ppb v/v
							1,1,2-Trichloroethane	200 ppb v/v
							1,1-Dichloroethane	200 ppb v/v
							1,1-Dichloroethene	200 ppb v/v
							1,2,3-Trichlorobenzene	200 ppb v/v
							1,2,3-Trichloropropane	200 ppb v/v
							1,2,4-Trichlorobenzene	200 ppb v/v
							1,2,4-Trimethylbenzene	200 ppb v/v
							1,2-Dibromoethane	200 ppb v/v
							1,2-Dichlorobenzene	200 ppb v/v
							1,2-Dichloroethane	200 ppb v/v
							1,2-Dichloropropane	200 ppb v/v
							1,2-Dichlorotetrafluoroethane	200 ppb v/v
							1,3,5-Trimethylbenzene	200 ppb v/v
							1,3-Butadiene	200 ppb v/v
							1,3-Dichlorobenzene	200 ppb v/v
							1,4-Dichlorobenzene	200 ppb v/v

Lab Name: TestAmerica Burlington Job No.: 200-35064-1

SDG No.: 200-35064-1

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							1,4-Dioxane	200 ppb v/v
							2,2,4-Trimethylpentane	200 ppb v/v
							2-Chlorotoluene	200 ppb v/v
							2-Methylbutane	200 ppb v/v
							3-Chloropropene	200 ppb v/v
							4-Ethyltoluene	200 ppb v/v
							4-Isopropyltoluene	200 ppb v/v
							Acetone	200 ppb v/v
							Acetonitrile	200 ppb v/v
							Acrolein	200 ppb v/v
							Acrylonitrile	200 ppb v/v
							Alpha Methyl Styrene	200 ppb v/v
							Benzene	200 ppb v/v
							Benzyl chloride	200 ppb v/v
							Bromodichloromethane	200 ppb v/v
							Bromoethene(Vinyl Bromide)	200 ppb v/v
							Bromoform	200 ppb v/v
							Bromomethane	200 ppb v/v
							Carbon disulfide	200 ppb v/v
							Carbon tetrachloride	200 ppb v/v
							Chlorobenzene	200 ppb v/v
							Chloroethane	200 ppb v/v
							Chloroform	200 ppb v/v
							Chloromethane	200 ppb v/v
							cis-1,2-Dichloroethene	200 ppb v/v
							cis-1,3-Dichloropropene	200 ppb v/v
							Cumene	200 ppb v/v
							Cyclohexane	200 ppb v/v
							Dibromochloromethane	200 ppb v/v
							Dibromomethane	200 ppb v/v
							Dichlorodifluoromethane	200 ppb v/v
							Dodecane	200 ppb v/v
							Ethyl acetate	200 ppb v/v
							Ethyl ether	200 ppb v/v
							Ethylbenzene	200 ppb v/v
							Freon 22	200 ppb v/v
							Freon TF	200 ppb v/v
							Hexachlorobutadiene	200 ppb v/v
							Isopropyl alcohol	200 ppb v/v
							m,p-Xylene	400 ppb v/v
							Methyl Butyl Ketone (2-Hexanone)	200 ppb v/v
							Methyl Ethyl Ketone	200 ppb v/v
							methyl isobutyl ketone	200 ppb v/v
							Methyl methacrylate	200 ppb v/v
							Methyl tert-butyl ether	200 ppb v/v
							Methylene Chloride	200 ppb v/v
							n-Butane	200 ppb v/v

Lab Name: TestAmerica Burlington Job No.: 200-35064-1

SDG No.: 200-35064-1

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							n-Butanol	200 ppb v/v
							n-Butylbenzene	200 ppb v/v
							n-Decane	200 ppb v/v
							n-Heptane	200 ppb v/v
							n-Hexane	200 ppb v/v
							n-Nonane	200 ppb v/v
							n-Octane	200 ppb v/v
							n-Propylbenzene	200 ppb v/v
							Naphthalene	200 ppb v/v
							Pentane	200 ppb v/v
							Propene	200 ppb v/v
							sec-Butylbenzene	200 ppb v/v
							Styrene	200 ppb v/v
							tert-Butyl alcohol	200 ppb v/v
							tert-Butylbenzene	200 ppb v/v
							Tetrachloroethene	200 ppb v/v
							Tetrahydrofuran	200 ppb v/v
							Toluene	200 ppb v/v
							trans-1,2-Dichloroethene	200 ppb v/v
							trans-1,3-Dichloropropene	200 ppb v/v
							Trichloroethene	200 ppb v/v
							Trichlorofluoromethane	200 ppb v/v
							Undecane	200 ppb v/v
							Vinyl acetate	200 ppb v/v
							Vinyl chloride	200 ppb v/v
							Xylene, o-	200 ppb v/v
...ATTO15CALs_00025	12/30/16		Spectra Gases, Lot cc-90855		(Purchased Reagent)		1,1,1-Trichloroethane	1 ppm v/v
							1,1,2,2-Tetrachloroethane	1 ppm v/v
							1,1,2-Trichloroethane	1 ppm v/v
							1,1-Dichloroethane	1 ppm v/v
							1,1-Dichloroethene	1 ppm v/v
							1,2,3-Trichlorobenzene	1 ppm v/v
							1,2,3-Trichloropropane	1 ppm v/v
							1,2,4-Trichlorobenzene	1 ppm v/v
							1,2,4-Trimethylbenzene	1 ppm v/v
							1,2-Dibromoethane	1 ppm v/v
							1,2-Dichlorobenzene	1 ppm v/v
							1,2-Dichloroethane	1 ppm v/v
							1,2-Dichloropropane	1 ppm v/v
							1,2-Dichlorotetrafluoroethane	1 ppm v/v
							1,3,5-Trimethylbenzene	1 ppm v/v
							1,3-Butadiene	1 ppm v/v
							1,3-Dichlorobenzene	1 ppm v/v
							1,4-Dichlorobenzene	1 ppm v/v
							1,4-Dioxane	1 ppm v/v
							2,2,4-Trimethylpentane	1 ppm v/v
							2-Chlorotoluene	1 ppm v/v
							2-Methylbutane	1 ppm v/v

Lab Name: TestAmerica Burlington Job No.: 200-35064-1

SDG No.: 200-35064-1

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							3-Chloropropene	1 ppm v/v
							4-Ethyltoluene	1 ppm v/v
							4-Isopropyltoluene	1 ppm v/v
							Acetone	1 ppm v/v
							Acetonitrile	1 ppm v/v
							Acrolein	1 ppm v/v
							Acrylonitrile	1 ppm v/v
							Alpha Methyl Styrene	1 ppm v/v
							Benzene	1 ppm v/v
							Benzyl chloride	1 ppm v/v
							Bromodichloromethane	1 ppm v/v
							Bromoethene(Vinyl Bromide)	1 ppm v/v
							Bromoform	1 ppm v/v
							Bromomethane	1 ppm v/v
							Carbon disulfide	1 ppm v/v
							Carbon tetrachloride	1 ppm v/v
							Chlorobenzene	1 ppm v/v
							Chloroethane	1 ppm v/v
							Chloroform	1 ppm v/v
							Chloromethane	1 ppm v/v
							cis-1,2-Dichloroethene	1 ppm v/v
							cis-1,3-Dichloropropene	1 ppm v/v
							Cumene	1 ppm v/v
							Cyclohexane	1 ppm v/v
							Dibromochloromethane	1 ppm v/v
							Dibromomethane	1 ppm v/v
							Dichlorodifluoromethane	1 ppm v/v
							Dodecane	1 ppm v/v
							Ethyl acetate	1 ppm v/v
							Ethyl ether	1 ppm v/v
							Ethylbenzene	1 ppm v/v
							Freon 22	1 ppm v/v
							Freon TF	1 ppm v/v
							Hexachlorobutadiene	1 ppm v/v
							Isopropyl alcohol	1 ppm v/v
							m,p-Xylene	2 ppm v/v
							Methyl Butyl Ketone (2-Hexanone)	1 ppm v/v
							Methyl Ethyl Ketone	1 ppm v/v
							methyl isobutyl ketone	1 ppm v/v
							Methyl methacrylate	1 ppm v/v
							Methyl tert-butyl ether	1 ppm v/v
							Methylene Chloride	1 ppm v/v
							n-Butane	1 ppm v/v
							n-Butanol	1 ppm v/v
							n-Butylbenzene	1 ppm v/v
							n-Decane	1 ppm v/v
							n-Heptane	1 ppm v/v

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SDG No.: 200-35064-1

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							n-Hexane	1 ppm v/v
							n-Nonane	1 ppm v/v
							n-Octane	1 ppm v/v
							n-Propylbenzene	1 ppm v/v
							Naphthalene	1 ppm v/v
							Pentane	1 ppm v/v
							Propene	1 ppm v/v
							sec-Butylbenzene	1 ppm v/v
							Styrene	1 ppm v/v
							tert-Butyl alcohol	1 ppm v/v
							tert-Butylbenzene	1 ppm v/v
							Tetrachloroethene	1 ppm v/v
							Tetrahydrofuran	1 ppm v/v
							Toluene	1 ppm v/v
							trans-1,2-Dichloroethene	1 ppm v/v
							trans-1,3-Dichloropropene	1 ppm v/v
							Trichloroethene	1 ppm v/v
							Trichlorofluoromethane	1 ppm v/v
							Undecane	1 ppm v/v
							Vinyl acetate	1 ppm v/v
							Vinyl chloride	1 ppm v/v
							Xylene, o-	1 ppm v/v
..ATTO15EthCALw_00071	09/27/16	06/27/16	Zero Air, Lot 12	37.5 ppb	ATTO15EthCALs_00007	18.75 uL	Ethanol	500 ppb v/v
...ATTO15EthCALs_00007	09/11/17		SIGMA, Lot SHBB5682V		(Purchased Reagent)		Ethanol	1 mL/mL
.ATTO15EthCALw_00071	09/27/16	06/27/16	Zero Air, Lot 12	37.5 ppb	ATTO15EthCALs_00007	18.75 uL	Ethanol	500 ppb v/v
..ATTO15EthCALs_00007	09/11/17		SIGMA, Lot SHBB5682V		(Purchased Reagent)		Ethanol	1 mL/mL
ATTO15CAL3w_00170	09/27/16	08/04/16	Zero Air, Lot 12	15.463 L	ATTO15CALSTKi_00084	386 mL	1,1,1-Trichloroethane	4.99256 ppb v/v
							1,1,2,2-Tetrachloroethane	4.99256 ppb v/v
							1,1,2-Trichloroethane	4.99256 ppb v/v
							1,1-Dichloroethane	4.99256 ppb v/v
							1,1-Dichloroethene	4.99256 ppb v/v
							1,2,3-Trichlorobenzene	4.99256 ppb v/v
							1,2,3-Trichloropropane	4.99256 ppb v/v
							1,2,4-Trichlorobenzene	4.99256 ppb v/v
							1,2,4-Trimethylbenzene	4.99256 ppb v/v
							1,2-Dibromoethane	4.99256 ppb v/v
							1,2-Dichlorobenzene	4.99256 ppb v/v

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SDG No.: 200-35064-1

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							1,2-Dichloroethane	4.99256 ppb v/v
							1,2-Dichloropropane	4.99256 ppb v/v
							1,2-Dichlorotetrafluoroethane	4.99256 ppb v/v
							1,3,5-Trimethylbenzene	4.99256 ppb v/v
							1,3-Butadiene	4.99256 ppb v/v
							1,3-Dichlorobenzene	4.99256 ppb v/v
							1,4-Dichlorobenzene	4.99256 ppb v/v
							1,4-Dioxane	4.99256 ppb v/v
							2,2,4-Trimethylpentane	4.99256 ppb v/v
							2-Chlorotoluene	4.99256 ppb v/v
							2-Methylbutane	4.99256 ppb v/v
							3-Chloropropene	4.99256 ppb v/v
							4-Ethyltoluene	4.99256 ppb v/v
							4-Isopropyltoluene	4.99256 ppb v/v
							Acetone	4.99256 ppb v/v
							Acetonitrile	4.99256 ppb v/v
							Acrolein	4.99256 ppb v/v
							Acrylonitrile	4.99256 ppb v/v
							Alpha Methyl Styrene	4.99256 ppb v/v
							Benzene	4.99256 ppb v/v
							Benzyl chloride	4.99256 ppb v/v
							Bromodichloromethane	4.99256 ppb v/v
							Bromoethene(Vinyl Bromide)	4.99256 ppb v/v
							Bromoform	4.99256 ppb v/v
							Bromomethane	4.99256 ppb v/v

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SDG No.: 200-35064-1

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Carbon disulfide	4.99256 ppb v/v
							Carbon tetrachloride	4.99256 ppb v/v
							Chlorobenzene	4.99256 ppb v/v
							Chloroethane	4.99256 ppb v/v
							Chloroform	4.99256 ppb v/v
							Chloromethane	4.99256 ppb v/v
							cis-1,2-Dichloroethene	4.99256 ppb v/v
							cis-1,3-Dichloropropene	4.99256 ppb v/v
							Cumene	4.99256 ppb v/v
							Cyclohexane	4.99256 ppb v/v
							Dibromochloromethane	4.99256 ppb v/v
							Dibromomethane	4.99256 ppb v/v
							Dichlorodifluoromethane	4.99256 ppb v/v
							Dodecane	4.99256 ppb v/v
							Ethyl acetate	4.99256 ppb v/v
							Ethyl ether	4.99256 ppb v/v
							Ethylbenzene	4.99256 ppb v/v
							Freon 22	4.99256 ppb v/v
							Freon TF	4.99256 ppb v/v
							Hexachlorobutadiene	4.99256 ppb v/v
							Isopropyl alcohol	4.99256 ppb v/v
							m,p-Xylene	9.98513 ppb v/v
							Methyl Butyl Ketone (2-Hexanone)	4.99256 ppb v/v
							Methyl Ethyl Ketone	4.99256 ppb v/v
							methyl isobutyl ketone	4.99256 ppb v/v

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SDG No.: 200-35064-1

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Methyl methacrylate	4.99256 ppb v/v
							Methyl tert-butyl ether	4.99256 ppb v/v
							Methylene Chloride	4.99256 ppb v/v
							n-Butane	4.99256 ppb v/v
							n-Butanol	4.99256 ppb v/v
							n-Butylbenzene	4.99256 ppb v/v
							n-Decane	4.99256 ppb v/v
							n-Heptane	4.99256 ppb v/v
							n-Hexane	4.99256 ppb v/v
							n-Nonane	4.99256 ppb v/v
							n-Octane	4.99256 ppb v/v
							n-Propylbenzene	4.99256 ppb v/v
							Naphthalene	4.99256 ppb v/v
							Pentane	4.99256 ppb v/v
							Propene	4.99256 ppb v/v
							sec-Butylbenzene	4.99256 ppb v/v
							Styrene	4.99256 ppb v/v
							tert-Butyl alcohol	4.99256 ppb v/v
							tert-Butylbenzene	4.99256 ppb v/v
							Tetrachloroethene	4.99256 ppb v/v
							Tetrahydrofuran	4.99256 ppb v/v
							Toluene	4.99256 ppb v/v
							trans-1,2-Dichloroethene	4.99256 ppb v/v
							trans-1,3-Dichloropropene	4.99256 ppb v/v
							Trichloroethene	4.99256 ppb v/v

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Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Trichlorofluoromethane	4.99256 ppb v/v
							Undecane	4.99256 ppb v/v
							Vinyl acetate	4.99256 ppb v/v
							Vinyl chloride	4.99256 ppb v/v
							Xylene, o-	4.99256 ppb v/v
					ATTO15EthCALw_00071	309 mL	Ethanol	9.99159 ppb v/v
.ATTO15CALSTKi_00084	10/21/16	07/21/16	Zero Air, Lot 13	37.5 L	ATTO15CALs_00025	7500 mL	1,1,1-Trichloroethane	200 ppb v/v
							1,1,2,2-Tetrachloroethane	200 ppb v/v
							1,1,2-Trichloroethane	200 ppb v/v
							1,1-Dichloroethane	200 ppb v/v
							1,1-Dichloroethene	200 ppb v/v
							1,2,3-Trichlorobenzene	200 ppb v/v
							1,2,3-Trichloropropane	200 ppb v/v
							1,2,4-Trichlorobenzene	200 ppb v/v
							1,2,4-Trimethylbenzene	200 ppb v/v
							1,2-Dibromoethane	200 ppb v/v
							1,2-Dichlorobenzene	200 ppb v/v
							1,2-Dichloroethane	200 ppb v/v
							1,2-Dichloropropane	200 ppb v/v
							1,2-Dichlorotetrafluoroethane	200 ppb v/v
							1,3,5-Trimethylbenzene	200 ppb v/v
							1,3-Butadiene	200 ppb v/v
							1,3-Dichlorobenzene	200 ppb v/v
							1,4-Dichlorobenzene	200 ppb v/v
							1,4-Dioxane	200 ppb v/v
							2,2,4-Trimethylpentane	200 ppb v/v
							2-Chlorotoluene	200 ppb v/v
							2-Methylbutane	200 ppb v/v
							3-Chloropropene	200 ppb v/v
							4-Ethyltoluene	200 ppb v/v
							4-Isopropyltoluene	200 ppb v/v
							Acetone	200 ppb v/v
							Acetonitrile	200 ppb v/v
							Acrolein	200 ppb v/v
							Acrylonitrile	200 ppb v/v
							Alpha Methyl Styrene	200 ppb v/v
							Benzene	200 ppb v/v
							Benzyl chloride	200 ppb v/v
							Bromodichloromethane	200 ppb v/v
							Bromoethene(Vinyl Bromide)	200 ppb v/v
							Bromoform	200 ppb v/v
							Bromomethane	200 ppb v/v
							Carbon disulfide	200 ppb v/v

Lab Name: TestAmerica Burlington Job No.: 200-35064-1

SDG No.: 200-35064-1

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Carbon tetrachloride	200 ppb v/v
							Chlorobenzene	200 ppb v/v
							Chloroethane	200 ppb v/v
							Chloroform	200 ppb v/v
							Chloromethane	200 ppb v/v
							cis-1,2-Dichloroethene	200 ppb v/v
							cis-1,3-Dichloropropene	200 ppb v/v
							Cumene	200 ppb v/v
							Cyclohexane	200 ppb v/v
							Dibromochloromethane	200 ppb v/v
							Dibromomethane	200 ppb v/v
							Dichlorodifluoromethane	200 ppb v/v
							Dodecane	200 ppb v/v
							Ethyl acetate	200 ppb v/v
							Ethyl ether	200 ppb v/v
							Ethylbenzene	200 ppb v/v
							Freon 22	200 ppb v/v
							Freon TF	200 ppb v/v
							Hexachlorobutadiene	200 ppb v/v
							Isopropyl alcohol	200 ppb v/v
							m,p-Xylene	400 ppb v/v
							Methyl Butyl Ketone (2-Hexanone)	200 ppb v/v
							Methyl Ethyl Ketone	200 ppb v/v
							methyl isobutyl ketone	200 ppb v/v
							Methyl methacrylate	200 ppb v/v
							Methyl tert-butyl ether	200 ppb v/v
							Methylene Chloride	200 ppb v/v
							n-Butane	200 ppb v/v
							n-Butanol	200 ppb v/v
							n-Butylbenzene	200 ppb v/v
							n-Decane	200 ppb v/v
							n-Heptane	200 ppb v/v
							n-Hexane	200 ppb v/v
							n-Nonane	200 ppb v/v
							n-Octane	200 ppb v/v
							n-Propylbenzene	200 ppb v/v
							Naphthalene	200 ppb v/v
							Pentane	200 ppb v/v
							Propene	200 ppb v/v
							sec-Butylbenzene	200 ppb v/v
							Styrene	200 ppb v/v
							tert-Butyl alcohol	200 ppb v/v
							tert-Butylbenzene	200 ppb v/v
							Tetrachloroethene	200 ppb v/v
							Tetrahydrofuran	200 ppb v/v
							Toluene	200 ppb v/v
							trans-1,2-Dichloroethene	200 ppb v/v

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SDG No.: 200-35064-1

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							trans-1,3-Dichloropropene	200 ppb v/v
							Trichloroethene	200 ppb v/v
							Trichlorofluoromethane	200 ppb v/v
							Undecane	200 ppb v/v
							Vinyl acetate	200 ppb v/v
							Vinyl chloride	200 ppb v/v
							Xylene, o-	200 ppb v/v
..ATTO15CALs_00025	12/30/16	Spectra Gases, Lot cc-90855			(Purchased Reagent)		1,1,1-Trichloroethane	1 ppm v/v
							1,1,2,2-Tetrachloroethane	1 ppm v/v
							1,1,2-Trichloroethane	1 ppm v/v
							1,1-Dichloroethane	1 ppm v/v
							1,1-Dichloroethene	1 ppm v/v
							1,2,3-Trichlorobenzene	1 ppm v/v
							1,2,3-Trichloropropane	1 ppm v/v
							1,2,4-Trichlorobenzene	1 ppm v/v
							1,2,4-Trimethylbenzene	1 ppm v/v
							1,2-Dibromoethane	1 ppm v/v
							1,2-Dichlorobenzene	1 ppm v/v
							1,2-Dichloroethane	1 ppm v/v
							1,2-Dichloropropane	1 ppm v/v
							1,2-Dichlorotetrafluoroethane	1 ppm v/v
							1,3,5-Trimethylbenzene	1 ppm v/v
							1,3-Butadiene	1 ppm v/v
							1,3-Dichlorobenzene	1 ppm v/v
							1,4-Dichlorobenzene	1 ppm v/v
							1,4-Dioxane	1 ppm v/v
							2,2,4-Trimethylpentane	1 ppm v/v
							2-Chlorotoluene	1 ppm v/v
							2-Methylbutane	1 ppm v/v
							3-Chloropropene	1 ppm v/v
							4-Ethyltoluene	1 ppm v/v
							4-Isopropyltoluene	1 ppm v/v
							Acetone	1 ppm v/v
							Acetonitrile	1 ppm v/v
							Acrolein	1 ppm v/v
							Acrylonitrile	1 ppm v/v
							Alpha Methyl Styrene	1 ppm v/v
							Benzene	1 ppm v/v
							Benzyl chloride	1 ppm v/v
							Bromodichloromethane	1 ppm v/v
							Bromoethene(Vinyl Bromide)	1 ppm v/v
							Bromoform	1 ppm v/v
							Bromomethane	1 ppm v/v
							Carbon disulfide	1 ppm v/v
							Carbon tetrachloride	1 ppm v/v
							Chlorobenzene	1 ppm v/v
							Chloroethane	1 ppm v/v
							Chloroform	1 ppm v/v

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SDG No.: 200-35064-1

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Chloromethane	1 ppm v/v
							cis-1,2-Dichloroethene	1 ppm v/v
							cis-1,3-Dichloropropene	1 ppm v/v
							Cumene	1 ppm v/v
							Cyclohexane	1 ppm v/v
							Dibromochloromethane	1 ppm v/v
							Dibromomethane	1 ppm v/v
							Dichlorodifluoromethane	1 ppm v/v
							Dodecane	1 ppm v/v
							Ethyl acetate	1 ppm v/v
							Ethyl ether	1 ppm v/v
							Ethylbenzene	1 ppm v/v
							Freon 22	1 ppm v/v
							Freon TF	1 ppm v/v
							Hexachlorobutadiene	1 ppm v/v
							Isopropyl alcohol	1 ppm v/v
							m,p-Xylene	2 ppm v/v
							Methyl Butyl Ketone (2-Hexanone)	1 ppm v/v
							Methyl Ethyl Ketone	1 ppm v/v
							methyl isobutyl ketone	1 ppm v/v
							Methyl methacrylate	1 ppm v/v
							Methyl tert-butyl ether	1 ppm v/v
							Methylene Chloride	1 ppm v/v
							n-Butane	1 ppm v/v
							n-Butanol	1 ppm v/v
							n-Butylbenzene	1 ppm v/v
							n-Decane	1 ppm v/v
							n-Heptane	1 ppm v/v
							n-Hexane	1 ppm v/v
							n-Nonane	1 ppm v/v
							n-Octane	1 ppm v/v
							n-Propylbenzene	1 ppm v/v
							Naphthalene	1 ppm v/v
							Pentane	1 ppm v/v
							Propene	1 ppm v/v
							sec-Butylbenzene	1 ppm v/v
							Styrene	1 ppm v/v
							tert-Butyl alcohol	1 ppm v/v
							tert-Butylbenzene	1 ppm v/v
							Tetrachloroethene	1 ppm v/v
							Tetrahydrofuran	1 ppm v/v
							Toluene	1 ppm v/v
							trans-1,2-Dichloroethene	1 ppm v/v
							trans-1,3-Dichloropropene	1 ppm v/v
							Trichloroethene	1 ppm v/v
							Trichlorofluoromethane	1 ppm v/v
							Undecane	1 ppm v/v

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SDG No.: 200-35064-1

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Vinyl acetate	1 ppm v/v
							Vinyl chloride	1 ppm v/v
							Xylene, o-	1 ppm v/v
.ATTO15EthCALw_00071	09/27/16	06/27/16	Zero Air, Lot 12	37.5 ppb	ATTO15EthCALs_00007	18.75 uL	Ethanol	500 ppb v/v
..ATTO15EthCALs_00007	09/11/17		SIGMA, Lot SHBB5682V		(Purchased Reagent)		Ethanol	1 mL/mL
ATTO15CAL4w_00558	09/13/16	07/18/16	Zero Air, Lot 12	15.463 L	ATTO15CALSTKi_00083	773 mL	1,1,1-Trichloroethane	9.99806 ppb v/v
							1,1,2,2-Tetrachloroethane	9.99806 ppb v/v
							1,1,2-Trichloroethane	9.99806 ppb v/v
							1,1-Dichloroethane	9.99806 ppb v/v
							1,1-Dichloroethene	9.99806 ppb v/v
							1,2,3-Trichlorobenzene	9.99806 ppb v/v
							1,2,3-Trichloropropane	9.99806 ppb v/v
							1,2,4-Trichlorobenzene	9.99806 ppb v/v
							1,2,4-Trimethylbenzene	9.99806 ppb v/v
							1,2-Dibromoethane	9.99806 ppb v/v
							1,2-Dichlorobenzene	9.99806 ppb v/v
							1,2-Dichloroethane	9.99806 ppb v/v
							1,2-Dichloropropane	9.99806 ppb v/v
							1,2-Dichlorotetrafluoroethane	9.99806 ppb v/v
							1,3,5-Trimethylbenzene	9.99806 ppb v/v
							1,3-Butadiene	9.99806 ppb v/v
							1,3-Dichlorobenzene	9.99806 ppb v/v
							1,4-Dichlorobenzene	9.99806 ppb v/v
							1,4-Dioxane	9.99806 ppb v/v
							2,2,4-Trimethylpentane	9.99806 ppb v/v
							2-Chlorotoluene	9.99806 ppb v/v
							2-Methylbutane	9.99806 ppb v/v

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SDG No.: 200-35064-1

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							3-Chloropropene	9.99806 ppb v/v
							4-Ethyltoluene	9.99806 ppb v/v
							4-Isopropyltoluene	9.99806 ppb v/v
							Acetone	9.99806 ppb v/v
							Acetonitrile	9.99806 ppb v/v
							Acrolein	9.99806 ppb v/v
							Acrylonitrile	9.99806 ppb v/v
							Alpha Methyl Styrene	9.99806 ppb v/v
							Benzene	9.99806 ppb v/v
							Benzyl chloride	9.99806 ppb v/v
							Bromodichloromethane	9.99806 ppb v/v
							Bromoethene(Vinyl Bromide)	9.99806 ppb v/v
							Bromoform	9.99806 ppb v/v
							Bromomethane	9.99806 ppb v/v
							Carbon disulfide	9.99806 ppb v/v
							Carbon tetrachloride	9.99806 ppb v/v
							Chlorobenzene	9.99806 ppb v/v
							Chloroethane	9.99806 ppb v/v
							Chloroform	9.99806 ppb v/v
							Chloromethane	9.99806 ppb v/v
							cis-1,2-Dichloroethene	9.99806 ppb v/v
							cis-1,3-Dichloropropene	9.99806 ppb v/v
							Cumene	9.99806 ppb v/v
							Cyclohexane	9.99806 ppb v/v
							Dibromochloromethane	9.99806 ppb v/v

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SDG No.: 200-35064-1

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Dibromomethane	9.99806 ppb v/v
							Dichlorodifluoromethane	9.99806 ppb v/v
							Dodecane	9.99806 ppb v/v
							Ethyl acetate	9.99806 ppb v/v
							Ethyl ether	9.99806 ppb v/v
							Ethylbenzene	9.99806 ppb v/v
							Freon 22	9.99806 ppb v/v
							Freon TF	9.99806 ppb v/v
							Hexachlorobutadiene	9.99806 ppb v/v
							Isopropyl alcohol	9.99806 ppb v/v
							m,p-Xylene	19.9961 ppb v/v
							Methyl Butyl Ketone (2-Hexanone)	9.99806 ppb v/v
							Methyl Ethyl Ketone	9.99806 ppb v/v
							methyl isobutyl ketone	9.99806 ppb v/v
							Methyl methacrylate	9.99806 ppb v/v
							Methyl tert-butyl ether	9.99806 ppb v/v
							Methylene Chloride	9.99806 ppb v/v
							n-Butane	9.99806 ppb v/v
							n-Butanol	9.99806 ppb v/v
							n-Butylbenzene	9.99806 ppb v/v
							n-Decane	9.99806 ppb v/v
							n-Heptane	9.99806 ppb v/v
							n-Hexane	9.99806 ppb v/v
							n-Nonane	9.99806 ppb v/v
							n-Octane	9.99806 ppb v/v

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SDG No.: 200-35064-1

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							n-Propylbenzene	9.99806 ppb v/v
							Naphthalene	9.99806 ppb v/v
							Pentane	9.99806 ppb v/v
							Propene	9.99806 ppb v/v
							sec-Butylbenzene	9.99806 ppb v/v
							Styrene	9.99806 ppb v/v
							tert-Butyl alcohol	9.99806 ppb v/v
							tert-Butylbenzene	9.99806 ppb v/v
							Tetrachloroethene	9.99806 ppb v/v
							Tetrahydrofuran	9.99806 ppb v/v
							Toluene	9.99806 ppb v/v
							trans-1,2-Dichloroethene	9.99806 ppb v/v
							trans-1,3-Dichloropropene	9.99806 ppb v/v
							Trichloroethene	9.99806 ppb v/v
							Trichlorofluoromethane	9.99806 ppb v/v
							Undecane	9.99806 ppb v/v
							Vinyl acetate	9.99806 ppb v/v
							Vinyl chloride	9.99806 ppb v/v
							Xylene, o-	9.99806 ppb v/v
					ATTO15EthCALw_00070	464 mL	Ethanol	15.0036 ppb v/v
.ATTO15CALSTKi_00083	09/13/16	06/13/16	Zero Air, Lot 13	37.5 L	ATTO15CALs_00025	7500 mL	1,1,1-Trichloroethane	200 ppb v/v
							1,1,2,2-Tetrachloroethane	200 ppb v/v
							1,1,2-Trichloroethane	200 ppb v/v
							1,1-Dichloroethane	200 ppb v/v
							1,1-Dichloroethene	200 ppb v/v
							1,2,3-Trichlorobenzene	200 ppb v/v
							1,2,3-Trichloropropane	200 ppb v/v
							1,2,4-Trichlorobenzene	200 ppb v/v
							1,2,4-Trimethylbenzene	200 ppb v/v
							1,2-Dibromoethane	200 ppb v/v

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SDG No.: 200-35064-1

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							1,2-Dichlorobenzene	200 ppb v/v
							1,2-Dichloroethane	200 ppb v/v
							1,2-Dichloropropane	200 ppb v/v
							1,2-Dichlorotetrafluoroethane	200 ppb v/v
							1,3,5-Trimethylbenzene	200 ppb v/v
							1,3-Butadiene	200 ppb v/v
							1,3-Dichlorobenzene	200 ppb v/v
							1,4-Dichlorobenzene	200 ppb v/v
							1,4-Dioxane	200 ppb v/v
							2,2,4-Trimethylpentane	200 ppb v/v
							2-Chlorotoluene	200 ppb v/v
							2-Methylbutane	200 ppb v/v
							3-Chloropropene	200 ppb v/v
							4-Ethyltoluene	200 ppb v/v
							4-Isopropyltoluene	200 ppb v/v
							Acetone	200 ppb v/v
							Acetonitrile	200 ppb v/v
							Acrolein	200 ppb v/v
							Acrylonitrile	200 ppb v/v
							Alpha Methyl Styrene	200 ppb v/v
							Benzene	200 ppb v/v
							Benzyl chloride	200 ppb v/v
							Bromodichloromethane	200 ppb v/v
							Bromoethene(Vinyl Bromide)	200 ppb v/v
							Bromoform	200 ppb v/v
							Bromomethane	200 ppb v/v
							Carbon disulfide	200 ppb v/v
							Carbon tetrachloride	200 ppb v/v
							Chlorobenzene	200 ppb v/v
							Chloroethane	200 ppb v/v
							Chloroform	200 ppb v/v
							Chloromethane	200 ppb v/v
							cis-1,2-Dichloroethene	200 ppb v/v
							cis-1,3-Dichloropropene	200 ppb v/v
							Cumene	200 ppb v/v
							Cyclohexane	200 ppb v/v
							Dibromochloromethane	200 ppb v/v
							Dibromomethane	200 ppb v/v
							Dichlorodifluoromethane	200 ppb v/v
							Dodecane	200 ppb v/v
							Ethyl acetate	200 ppb v/v
							Ethyl ether	200 ppb v/v
							Ethylbenzene	200 ppb v/v
							Freon 22	200 ppb v/v
							Freon TF	200 ppb v/v
							Hexachlorobutadiene	200 ppb v/v
							Isopropyl alcohol	200 ppb v/v
							m,p-Xylene	400 ppb v/v

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Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Methyl Butyl Ketone (2-Hexanone)	200 ppb v/v
							Methyl Ethyl Ketone	200 ppb v/v
							methyl isobutyl ketone	200 ppb v/v
							Methyl methacrylate	200 ppb v/v
							Methyl tert-butyl ether	200 ppb v/v
							Methylene Chloride	200 ppb v/v
							n-Butane	200 ppb v/v
							n-Butanol	200 ppb v/v
							n-Butylbenzene	200 ppb v/v
							n-Decane	200 ppb v/v
							n-Heptane	200 ppb v/v
							n-Hexane	200 ppb v/v
							n-Nonane	200 ppb v/v
							n-Octane	200 ppb v/v
							n-Propylbenzene	200 ppb v/v
							Naphthalene	200 ppb v/v
							Pentane	200 ppb v/v
							Propene	200 ppb v/v
							sec-Butylbenzene	200 ppb v/v
							Styrene	200 ppb v/v
							tert-Butyl alcohol	200 ppb v/v
							tert-Butylbenzene	200 ppb v/v
							Tetrachloroethene	200 ppb v/v
							Tetrahydrofuran	200 ppb v/v
							Toluene	200 ppb v/v
							trans-1,2-Dichloroethene	200 ppb v/v
							trans-1,3-Dichloropropene	200 ppb v/v
							Trichloroethene	200 ppb v/v
							Trichlorofluoromethane	200 ppb v/v
							Undecane	200 ppb v/v
							Vinyl acetate	200 ppb v/v
							Vinyl chloride	200 ppb v/v
							Xylene, o-	200 ppb v/v
..ATTO15CALs_00025	12/30/16	Spectra Gases, Lot cc-90855			(Purchased Reagent)		1,1,1-Trichloroethane	1 ppm v/v
							1,1,2,2-Tetrachloroethane	1 ppm v/v
							1,1,2-Trichloroethane	1 ppm v/v
							1,1-Dichloroethane	1 ppm v/v
							1,1-Dichloroethene	1 ppm v/v
							1,2,3-Trichlorobenzene	1 ppm v/v
							1,2,3-Trichloropropane	1 ppm v/v
							1,2,4-Trichlorobenzene	1 ppm v/v
							1,2,4-Trimethylbenzene	1 ppm v/v
							1,2-Dibromoethane	1 ppm v/v
							1,2-Dichlorobenzene	1 ppm v/v
							1,2-Dichloroethane	1 ppm v/v
							1,2-Dichloropropane	1 ppm v/v
							1,2-Dichlorotetrafluoroethane	1 ppm v/v

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Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							1,3,5-Trimethylbenzene	1 ppm v/v
							1,3-Butadiene	1 ppm v/v
							1,3-Dichlorobenzene	1 ppm v/v
							1,4-Dichlorobenzene	1 ppm v/v
							1,4-Dioxane	1 ppm v/v
							2,2,4-Trimethylpentane	1 ppm v/v
							2-Chlorotoluene	1 ppm v/v
							2-Methylbutane	1 ppm v/v
							3-Chloropropene	1 ppm v/v
							4-Ethyltoluene	1 ppm v/v
							4-Isopropyltoluene	1 ppm v/v
							Acetone	1 ppm v/v
							Acetonitrile	1 ppm v/v
							Acrolein	1 ppm v/v
							Acrylonitrile	1 ppm v/v
							Alpha Methyl Styrene	1 ppm v/v
							Benzene	1 ppm v/v
							Benzyl chloride	1 ppm v/v
							Bromodichloromethane	1 ppm v/v
							Bromoethene(Vinyl Bromide)	1 ppm v/v
							Bromoform	1 ppm v/v
							Bromomethane	1 ppm v/v
							Carbon disulfide	1 ppm v/v
							Carbon tetrachloride	1 ppm v/v
							Chlorobenzene	1 ppm v/v
							Chloroethane	1 ppm v/v
							Chloroform	1 ppm v/v
							Chloromethane	1 ppm v/v
							cis-1,2-Dichloroethene	1 ppm v/v
							cis-1,3-Dichloropropene	1 ppm v/v
							Cumene	1 ppm v/v
							Cyclohexane	1 ppm v/v
							Dibromochloromethane	1 ppm v/v
							Dibromomethane	1 ppm v/v
							Dichlorodifluoromethane	1 ppm v/v
							Dodecane	1 ppm v/v
							Ethyl acetate	1 ppm v/v
							Ethyl ether	1 ppm v/v
							Ethylbenzene	1 ppm v/v
							Freon 22	1 ppm v/v
							Freon TF	1 ppm v/v
							Hexachlorobutadiene	1 ppm v/v
							Isopropyl alcohol	1 ppm v/v
							m,p-Xylene	2 ppm v/v
							Methyl Butyl Ketone (2-Hexanone)	1 ppm v/v
							Methyl Ethyl Ketone	1 ppm v/v
							methyl isobutyl ketone	1 ppm v/v

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Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Methyl methacrylate	1 ppm v/v
							Methyl tert-butyl ether	1 ppm v/v
							Methylene Chloride	1 ppm v/v
							n-Butane	1 ppm v/v
							n-Butanol	1 ppm v/v
							n-Butylbenzene	1 ppm v/v
							n-Decane	1 ppm v/v
							n-Heptane	1 ppm v/v
							n-Hexane	1 ppm v/v
							n-Nonane	1 ppm v/v
							n-Octane	1 ppm v/v
							n-Propylbenzene	1 ppm v/v
							Naphthalene	1 ppm v/v
							Pentane	1 ppm v/v
							Propene	1 ppm v/v
							sec-Butylbenzene	1 ppm v/v
							Styrene	1 ppm v/v
							tert-Butyl alcohol	1 ppm v/v
							tert-Butylbenzene	1 ppm v/v
							Tetrachloroethene	1 ppm v/v
							Tetrahydrofuran	1 ppm v/v
							Toluene	1 ppm v/v
							trans-1,2-Dichloroethene	1 ppm v/v
							trans-1,3-Dichloropropene	1 ppm v/v
							Trichloroethene	1 ppm v/v
							Trichlorofluoromethane	1 ppm v/v
							Undecane	1 ppm v/v
							Vinyl acetate	1 ppm v/v
							Vinyl chloride	1 ppm v/v
							Xylene, o-	1 ppm v/v
.ATTO15EthCALw_00070	09/27/16	06/27/16	Zero Air, Lot 12	37.5 ppb	ATTO15EthCALs_00007	18.75 uL	Ethanol	500 ppb v/v
..ATTO15EthCALs_00007	09/11/17	SIGMA, Lot SHBB5682V			(Purchased Reagent)		Ethanol	1 mL/mL
ATTO15CAL4w_00558	09/13/16	07/18/16	Zero Air, Lot 12	15.463 L	ATTO15CALSTKi_00083	773 mL	1,2-Dichloroethene, Total	19.9961 ppb v/v
							Xylene (total)	29.9942 ppb v/v
.ATTO15CALSTKi_00083	09/13/16	06/13/16	Zero Air, Lot 13	37.5 L	ATTO15CALs_00025	7500 mL	1,2-Dichloroethene, Total	400 ppb v/v
							Xylene (total)	600 ppb v/v
..ATTO15CALs_00025	12/30/16	Spectra Gases, Lot cc-90855			(Purchased Reagent)		1,2-Dichloroethene, Total	2 ppm v/v
							Xylene (total)	3 ppm v/v
ATTO15CAL5w_00063	09/27/16	08/04/16	Zero Air, Lot 12	15.463 L	ATTO15CALSTKi_00084	1160 mL	1,1,1-Trichloroethane	15.0036 ppb v/v
							1,1,2,2-Tetrachloroethane	15.0036 ppb v/v
							1,1,2-Trichloroethane	15.0036 ppb v/v
							1,1-Dichloroethane	15.0036 ppb v/v

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Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							1,1-Dichloroethene	15.0036 ppb v/v
							1,2,3-Trichlorobenzene	15.0036 ppb v/v
							1,2,3-Trichloropropane	15.0036 ppb v/v
							1,2,4-Trichlorobenzene	15.0036 ppb v/v
							1,2,4-Trimethylbenzene	15.0036 ppb v/v
							1,2-Dibromoethane	15.0036 ppb v/v
							1,2-Dichlorobenzene	15.0036 ppb v/v
							1,2-Dichloroethane	15.0036 ppb v/v
							1,2-Dichloropropane	15.0036 ppb v/v
							1,2-Dichlorotetrafluoroethane	15.0036 ppb v/v
							1,3,5-Trimethylbenzene	15.0036 ppb v/v
							1,3-Butadiene	15.0036 ppb v/v
							1,3-Dichlorobenzene	15.0036 ppb v/v
							1,4-Dichlorobenzene	15.0036 ppb v/v
							1,4-Dioxane	15.0036 ppb v/v
							2,2,4-Trimethylpentane	15.0036 ppb v/v
							2-Chlorotoluene	15.0036 ppb v/v
							2-Methylbutane	15.0036 ppb v/v
							3-Chloropropene	15.0036 ppb v/v
							4-Ethyltoluene	15.0036 ppb v/v
							4-Isopropyltoluene	15.0036 ppb v/v
							Acetone	15.0036 ppb v/v
							Acetonitrile	15.0036 ppb v/v
							Acrolein	15.0036 ppb v/v
							Acrylonitrile	15.0036 ppb v/v

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Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Alpha Methyl Styrene	15.0036 ppb v/v
							Benzene	15.0036 ppb v/v
							Benzyl chloride	15.0036 ppb v/v
							Bromodichloromethane	15.0036 ppb v/v
							Bromoethene(Vinyl Bromide)	15.0036 ppb v/v
							Bromoform	15.0036 ppb v/v
							Bromomethane	15.0036 ppb v/v
							Carbon disulfide	15.0036 ppb v/v
							Carbon tetrachloride	15.0036 ppb v/v
							Chlorobenzene	15.0036 ppb v/v
							Chloroethane	15.0036 ppb v/v
							Chloroform	15.0036 ppb v/v
							Chloromethane	15.0036 ppb v/v
							cis-1,2-Dichloroethene	15.0036 ppb v/v
							cis-1,3-Dichloropropene	15.0036 ppb v/v
							Cumene	15.0036 ppb v/v
							Cyclohexane	15.0036 ppb v/v
							Dibromochloromethane	15.0036 ppb v/v
							Dibromomethane	15.0036 ppb v/v
							Dichlorodifluoromethane	15.0036 ppb v/v
							Dodecane	15.0036 ppb v/v
							Ethyl acetate	15.0036 ppb v/v
							Ethyl ether	15.0036 ppb v/v
							Ethylbenzene	15.0036 ppb v/v
							Freon 22	15.0036 ppb v/v

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SDG No.: 200-35064-1

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Freon TF	15.0036 ppb v/v
							Hexachlorobutadiene	15.0036 ppb v/v
							Isopropyl alcohol	15.0036 ppb v/v
							m,p-Xylene	30.0071 ppb v/v
							Methyl Butyl Ketone (2-Hexanone)	15.0036 ppb v/v
							Methyl Ethyl Ketone	15.0036 ppb v/v
							methyl isobutyl ketone	15.0036 ppb v/v
							Methyl methacrylate	15.0036 ppb v/v
							Methyl tert-butyl ether	15.0036 ppb v/v
							Methylene Chloride	15.0036 ppb v/v
							n-Butane	15.0036 ppb v/v
							n-Butanol	15.0036 ppb v/v
							n-Butylbenzene	15.0036 ppb v/v
							n-Decane	15.0036 ppb v/v
							n-Heptane	15.0036 ppb v/v
							n-Hexane	15.0036 ppb v/v
							n-Nonane	15.0036 ppb v/v
							n-Octane	15.0036 ppb v/v
							n-Propylbenzene	15.0036 ppb v/v
							Naphthalene	15.0036 ppb v/v
							Pentane	15.0036 ppb v/v
							Propene	15.0036 ppb v/v
							sec-Butylbenzene	15.0036 ppb v/v
							Styrene	15.0036 ppb v/v
							tert-Butyl alcohol	15.0036 ppb v/v

Lab Name: TestAmerica Burlington Job No.: 200-35064-1

SDG No.: 200-35064-1

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							tert-Butylbenzene	15.0036 ppb v/v
							Tetrachloroethene	15.0036 ppb v/v
							Tetrahydrofuran	15.0036 ppb v/v
							Toluene	15.0036 ppb v/v
							trans-1,2-Dichloroethene	15.0036 ppb v/v
							trans-1,3-Dichloropropene	15.0036 ppb v/v
							Trichloroethene	15.0036 ppb v/v
							Trichlorofluoromethane	15.0036 ppb v/v
							Undecane	15.0036 ppb v/v
							Vinyl acetate	15.0036 ppb v/v
							Vinyl chloride	15.0036 ppb v/v
							Xylene, o-	15.0036 ppb v/v
					ATTO15EthCALw_00071	620 mL	Ethanol	20.0479 ppb v/v
.ATTO15CALSTKi_00084	10/21/16	07/21/16	Zero Air, Lot 13	37.5 L	ATTO15CALs_00025	7500 mL	1,1,1-Trichloroethane	200 ppb v/v
							1,1,2,2-Tetrachloroethane	200 ppb v/v
							1,1,2-Trichloroethane	200 ppb v/v
							1,1-Dichloroethane	200 ppb v/v
							1,1-Dichloroethene	200 ppb v/v
							1,2,3-Trichlorobenzene	200 ppb v/v
							1,2,3-Trichloropropane	200 ppb v/v
							1,2,4-Trichlorobenzene	200 ppb v/v
							1,2,4-Trimethylbenzene	200 ppb v/v
							1,2-Dibromoethane	200 ppb v/v
							1,2-Dichlorobenzene	200 ppb v/v
							1,2-Dichloroethane	200 ppb v/v
							1,2-Dichloropropane	200 ppb v/v
							1,2-Dichlorotetrafluoroethane	200 ppb v/v
							1,3,5-Trimethylbenzene	200 ppb v/v
							1,3-Butadiene	200 ppb v/v
							1,3-Dichlorobenzene	200 ppb v/v
							1,4-Dichlorobenzene	200 ppb v/v
							1,4-Dioxane	200 ppb v/v
							2,2,4-Trimethylpentane	200 ppb v/v
							2-Chlorotoluene	200 ppb v/v
							2-Methylbutane	200 ppb v/v
							3-Chloropropene	200 ppb v/v

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SDG No.: 200-35064-1

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							4-Ethyltoluene	200 ppb v/v
							4-Isopropyltoluene	200 ppb v/v
							Acetone	200 ppb v/v
							Acetonitrile	200 ppb v/v
							Acrolein	200 ppb v/v
							Acrylonitrile	200 ppb v/v
							Alpha Methyl Styrene	200 ppb v/v
							Benzene	200 ppb v/v
							Benzyl chloride	200 ppb v/v
							Bromodichloromethane	200 ppb v/v
							Bromoethene(Vinyl Bromide)	200 ppb v/v
							Bromoform	200 ppb v/v
							Bromomethane	200 ppb v/v
							Carbon disulfide	200 ppb v/v
							Carbon tetrachloride	200 ppb v/v
							Chlorobenzene	200 ppb v/v
							Chloroethane	200 ppb v/v
							Chloroform	200 ppb v/v
							Chloromethane	200 ppb v/v
							cis-1,2-Dichloroethene	200 ppb v/v
							cis-1,3-Dichloropropene	200 ppb v/v
							Cumene	200 ppb v/v
							Cyclohexane	200 ppb v/v
							Dibromochloromethane	200 ppb v/v
							Dibromomethane	200 ppb v/v
							Dichlorodifluoromethane	200 ppb v/v
							Dodecane	200 ppb v/v
							Ethyl acetate	200 ppb v/v
							Ethyl ether	200 ppb v/v
							Ethylbenzene	200 ppb v/v
							Freon 22	200 ppb v/v
							Freon TF	200 ppb v/v
							Hexachlorobutadiene	200 ppb v/v
							Isopropyl alcohol	200 ppb v/v
							m,p-Xylene	400 ppb v/v
							Methyl Butyl Ketone (2-Hexanone)	200 ppb v/v
							Methyl Ethyl Ketone	200 ppb v/v
							methyl isobutyl ketone	200 ppb v/v
							Methyl methacrylate	200 ppb v/v
							Methyl tert-butyl ether	200 ppb v/v
							Methylene Chloride	200 ppb v/v
							n-Butane	200 ppb v/v
							n-Butanol	200 ppb v/v
							n-Butylbenzene	200 ppb v/v
							n-Decane	200 ppb v/v
							n-Heptane	200 ppb v/v
							n-Hexane	200 ppb v/v

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SDG No.: 200-35064-1

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							n-Nonane	200 ppb v/v
							n-Octane	200 ppb v/v
							n-Propylbenzene	200 ppb v/v
							Naphthalene	200 ppb v/v
							Pentane	200 ppb v/v
							Propene	200 ppb v/v
							sec-Butylbenzene	200 ppb v/v
							Styrene	200 ppb v/v
							tert-Butyl alcohol	200 ppb v/v
							tert-Butylbenzene	200 ppb v/v
							Tetrachloroethene	200 ppb v/v
							Tetrahydrofuran	200 ppb v/v
							Toluene	200 ppb v/v
							trans-1,2-Dichloroethene	200 ppb v/v
							trans-1,3-Dichloropropene	200 ppb v/v
							Trichloroethene	200 ppb v/v
							Trichlorofluoromethane	200 ppb v/v
							Undecane	200 ppb v/v
							Vinyl acetate	200 ppb v/v
							Vinyl chloride	200 ppb v/v
							Xylene, o-	200 ppb v/v
..ATTO15CALs_00025	12/30/16	Spectra Gases, Lot cc-90855			(Purchased Reagent)		1,1,1-Trichloroethane	1 ppm v/v
							1,1,2,2-Tetrachloroethane	1 ppm v/v
							1,1,2-Trichloroethane	1 ppm v/v
							1,1-Dichloroethane	1 ppm v/v
							1,1-Dichloroethene	1 ppm v/v
							1,2,3-Trichlorobenzene	1 ppm v/v
							1,2,3-Trichloropropane	1 ppm v/v
							1,2,4-Trichlorobenzene	1 ppm v/v
							1,2,4-Trimethylbenzene	1 ppm v/v
							1,2-Dibromoethane	1 ppm v/v
							1,2-Dichlorobenzene	1 ppm v/v
							1,2-Dichloroethane	1 ppm v/v
							1,2-Dichloropropane	1 ppm v/v
							1,2-Dichlorotetrafluoroethane	1 ppm v/v
							1,3,5-Trimethylbenzene	1 ppm v/v
							1,3-Butadiene	1 ppm v/v
							1,3-Dichlorobenzene	1 ppm v/v
							1,4-Dichlorobenzene	1 ppm v/v
							1,4-Dioxane	1 ppm v/v
							2,2,4-Trimethylpentane	1 ppm v/v
							2-Chlorotoluene	1 ppm v/v
							2-Methylbutane	1 ppm v/v
							3-Chloropropene	1 ppm v/v
							4-Ethyltoluene	1 ppm v/v
							4-Isopropyltoluene	1 ppm v/v
							Acetone	1 ppm v/v
							Acetonitrile	1 ppm v/v

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SDG No.: 200-35064-1

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Acrolein	1 ppm v/v
							Acrylonitrile	1 ppm v/v
							Alpha Methyl Styrene	1 ppm v/v
							Benzene	1 ppm v/v
							Benzyl chloride	1 ppm v/v
							Bromodichloromethane	1 ppm v/v
							Bromoethene(Vinyl Bromide)	1 ppm v/v
							Bromoform	1 ppm v/v
							Bromomethane	1 ppm v/v
							Carbon disulfide	1 ppm v/v
							Carbon tetrachloride	1 ppm v/v
							Chlorobenzene	1 ppm v/v
							Chloroethane	1 ppm v/v
							Chloroform	1 ppm v/v
							Chloromethane	1 ppm v/v
							cis-1,2-Dichloroethene	1 ppm v/v
							cis-1,3-Dichloropropene	1 ppm v/v
							Cumene	1 ppm v/v
							Cyclohexane	1 ppm v/v
							Dibromochloromethane	1 ppm v/v
							Dibromomethane	1 ppm v/v
							Dichlorodifluoromethane	1 ppm v/v
							Dodecane	1 ppm v/v
							Ethyl acetate	1 ppm v/v
							Ethyl ether	1 ppm v/v
							Ethylbenzene	1 ppm v/v
							Freon 22	1 ppm v/v
							Freon TF	1 ppm v/v
							Hexachlorobutadiene	1 ppm v/v
							Isopropyl alcohol	1 ppm v/v
							m,p-Xylene	2 ppm v/v
							Methyl Butyl Ketone (2-Hexanone)	1 ppm v/v
							Methyl Ethyl Ketone	1 ppm v/v
							methyl isobutyl ketone	1 ppm v/v
							Methyl methacrylate	1 ppm v/v
							Methyl tert-butyl ether	1 ppm v/v
							Methylene Chloride	1 ppm v/v
							n-Butane	1 ppm v/v
							n-Butanol	1 ppm v/v
							n-Butylbenzene	1 ppm v/v
							n-Decane	1 ppm v/v
							n-Heptane	1 ppm v/v
							n-Hexane	1 ppm v/v
							n-Nonane	1 ppm v/v
							n-Octane	1 ppm v/v
							n-Propylbenzene	1 ppm v/v
							Naphthalene	1 ppm v/v

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Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Pentane	1 ppm v/v
							Propene	1 ppm v/v
							sec-Butylbenzene	1 ppm v/v
							Styrene	1 ppm v/v
							tert-Butyl alcohol	1 ppm v/v
							tert-Butylbenzene	1 ppm v/v
							Tetrachloroethene	1 ppm v/v
							Tetrahydrofuran	1 ppm v/v
							Toluene	1 ppm v/v
							trans-1,2-Dichloroethene	1 ppm v/v
							trans-1,3-Dichloropropene	1 ppm v/v
							Trichloroethene	1 ppm v/v
							Trichlorofluoromethane	1 ppm v/v
							Undecane	1 ppm v/v
							Vinyl acetate	1 ppm v/v
							Vinyl chloride	1 ppm v/v
							Xylene, o-	1 ppm v/v
.ATTO15EthCALw_00071	09/27/16	06/27/16	Zero Air, Lot 12	37.5 ppb	ATTO15EthCALs_00007	18.75 uL	Ethanol	500 ppb v/v
..ATTO15EthCALs_00007	09/11/17		SIGMA, Lot SHBB5682V		(Purchased Reagent)		Ethanol	1 mL/mL
ATTO15CAL6w_00130	09/27/16	08/04/16	Zero Air, Lot 13	15.463 L	ATTO15CALSTKi_00084	1546 mL	1,1,1-Trichloroethane	19.9961 ppb v/v
							1,1,2,2-Tetrachloroethane	19.9961 ppb v/v
							1,1,2-Trichloroethane	19.9961 ppb v/v
							1,1-Dichloroethane	19.9961 ppb v/v
							1,1-Dichloroethene	19.9961 ppb v/v
							1,2,3-Trichlorobenzene	19.9961 ppb v/v
							1,2,3-Trichloropropane	19.9961 ppb v/v
							1,2,4-Trichlorobenzene	19.9961 ppb v/v
							1,2,4-Trimethylbenzene	19.9961 ppb v/v
							1,2-Dibromoethane	19.9961 ppb v/v
							1,2-Dichlorobenzene	19.9961 ppb v/v
							1,2-Dichloroethane	19.9961 ppb v/v
							1,2-Dichloropropane	19.9961 ppb v/v
							1,2-Dichlorotetrafluoroethane	19.9961 ppb v/v
							1,3,5-Trimethylbenzene	19.9961 ppb v/v

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Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							1,3-Butadiene	19.9961 ppb v/v
							1,3-Dichlorobenzene	19.9961 ppb v/v
							1,4-Dichlorobenzene	19.9961 ppb v/v
							1,4-Dioxane	19.9961 ppb v/v
							2,2,4-Trimethylpentane	19.9961 ppb v/v
							2-Chlorotoluene	19.9961 ppb v/v
							2-Methylbutane	19.9961 ppb v/v
							3-Chloropropene	19.9961 ppb v/v
							4-Ethyltoluene	19.9961 ppb v/v
							4-Isopropyltoluene	19.9961 ppb v/v
							Acetone	19.9961 ppb v/v
							Acetonitrile	19.9961 ppb v/v
							Acrolein	19.9961 ppb v/v
							Acrylonitrile	19.9961 ppb v/v
							Alpha Methyl Styrene	19.9961 ppb v/v
							Benzene	19.9961 ppb v/v
							Benzyl chloride	19.9961 ppb v/v
							Bromodichloromethane	19.9961 ppb v/v
							Bromoethene(Vinyl Bromide)	19.9961 ppb v/v
							Bromoform	19.9961 ppb v/v
							Bromomethane	19.9961 ppb v/v
							Carbon disulfide	19.9961 ppb v/v
							Carbon tetrachloride	19.9961 ppb v/v
							Chlorobenzene	19.9961 ppb v/v
							Chloroethane	19.9961 ppb v/v

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SDG No.: 200-35064-1

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Chloroform	19.9961 ppb v/v
							Chloromethane	19.9961 ppb v/v
							cis-1,2-Dichloroethene	19.9961 ppb v/v
							cis-1,3-Dichloropropene	19.9961 ppb v/v
							Cumene	19.9961 ppb v/v
							Cyclohexane	19.9961 ppb v/v
							Dibromochloromethane	19.9961 ppb v/v
							Dibromomethane	19.9961 ppb v/v
							Dichlorodifluoromethane	19.9961 ppb v/v
							Dodecane	19.9961 ppb v/v
							Ethyl acetate	19.9961 ppb v/v
							Ethyl ether	19.9961 ppb v/v
							Ethylbenzene	19.9961 ppb v/v
							Freon 22	19.9961 ppb v/v
							Freon TF	19.9961 ppb v/v
							Hexachlorobutadiene	19.9961 ppb v/v
							Isopropyl alcohol	19.9961 ppb v/v
							m,p-Xylene	39.9922 ppb v/v
							Methyl Butyl Ketone (2-Hexanone)	19.9961 ppb v/v
							Methyl Ethyl Ketone	19.9961 ppb v/v
							methyl isobutyl ketone	19.9961 ppb v/v
							Methyl methacrylate	19.9961 ppb v/v
							Methyl tert-butyl ether	19.9961 ppb v/v
							Methylene Chloride	19.9961 ppb v/v
							n-Butane	19.9961 ppb v/v

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SDG No.: 200-35064-1

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							n-Butanol	19.9961 ppb v/v
							n-Butylbenzene	19.9961 ppb v/v
							n-Decane	19.9961 ppb v/v
							n-Heptane	19.9961 ppb v/v
							n-Hexane	19.9961 ppb v/v
							n-Nonane	19.9961 ppb v/v
							n-Octane	19.9961 ppb v/v
							n-Propylbenzene	19.9961 ppb v/v
							Naphthalene	19.9961 ppb v/v
							Pentane	19.9961 ppb v/v
							Propene	19.9961 ppb v/v
							sec-Butylbenzene	19.9961 ppb v/v
							Styrene	19.9961 ppb v/v
							tert-Butyl alcohol	19.9961 ppb v/v
							tert-Butylbenzene	19.9961 ppb v/v
							Tetrachloroethene	19.9961 ppb v/v
							Tetrahydrofuran	19.9961 ppb v/v
							Toluene	19.9961 ppb v/v
							trans-1,2-Dichloroethene	19.9961 ppb v/v
							trans-1,3-Dichloropropene	19.9961 ppb v/v
							Trichloroethene	19.9961 ppb v/v
							Trichlorofluoromethane	19.9961 ppb v/v
							Undecane	19.9961 ppb v/v
							Vinyl acetate	19.9961 ppb v/v
							Vinyl chloride	19.9961 ppb v/v

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SDG No.: 200-35064-1

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Xylene, o-	19.9961 ppb v/v
					ATTO15EthCALw_00071	1237 mL	Ethanol	39.9987 ppb v/v
.ATTO15CALSTKi_00084	10/21/16	07/21/16	Zero Air, Lot 13	37.5 L	ATTO15CALs_00025	7500 mL	1,1,1-Trichloroethane	200 ppb v/v
							1,1,2,2-Tetrachloroethane	200 ppb v/v
							1,1,2-Trichloroethane	200 ppb v/v
							1,1-Dichloroethane	200 ppb v/v
							1,1-Dichloroethene	200 ppb v/v
							1,2,3-Trichlorobenzene	200 ppb v/v
							1,2,3-Trichloropropane	200 ppb v/v
							1,2,4-Trichlorobenzene	200 ppb v/v
							1,2,4-Trimethylbenzene	200 ppb v/v
							1,2-Dibromoethane	200 ppb v/v
							1,2-Dichlorobenzene	200 ppb v/v
							1,2-Dichloroethane	200 ppb v/v
							1,2-Dichloropropane	200 ppb v/v
							1,2-Dichlorotetrafluoroethane	200 ppb v/v
							1,3,5-Trimethylbenzene	200 ppb v/v
							1,3-Butadiene	200 ppb v/v
							1,3-Dichlorobenzene	200 ppb v/v
							1,4-Dichlorobenzene	200 ppb v/v
							1,4-Dioxane	200 ppb v/v
							2,2,4-Trimethylpentane	200 ppb v/v
							2-Chlorotoluene	200 ppb v/v
							2-Methylbutane	200 ppb v/v
							3-Chloropropene	200 ppb v/v
							4-Ethyltoluene	200 ppb v/v
							4-Isopropyltoluene	200 ppb v/v
							Acetone	200 ppb v/v
							Acetonitrile	200 ppb v/v
							Acrolein	200 ppb v/v
							Acrylonitrile	200 ppb v/v
							Alpha Methyl Styrene	200 ppb v/v
							Benzene	200 ppb v/v
							Benzyl chloride	200 ppb v/v
							Bromodichloromethane	200 ppb v/v
							Bromoethene(Vinyl Bromide)	200 ppb v/v
							Bromoform	200 ppb v/v
							Bromomethane	200 ppb v/v
							Carbon disulfide	200 ppb v/v
							Carbon tetrachloride	200 ppb v/v
							Chlorobenzene	200 ppb v/v
							Chloroethane	200 ppb v/v
							Chloroform	200 ppb v/v
							Chloromethane	200 ppb v/v
							cis-1,2-Dichloroethene	200 ppb v/v
							cis-1,3-Dichloropropene	200 ppb v/v

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Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Cumene	200 ppb v/v
							Cyclohexane	200 ppb v/v
							Dibromochloromethane	200 ppb v/v
							Dibromomethane	200 ppb v/v
							Dichlorodifluoromethane	200 ppb v/v
							Dodecane	200 ppb v/v
							Ethyl acetate	200 ppb v/v
							Ethyl ether	200 ppb v/v
							Ethylbenzene	200 ppb v/v
							Freon 22	200 ppb v/v
							Freon TF	200 ppb v/v
							Hexachlorobutadiene	200 ppb v/v
							Isopropyl alcohol	200 ppb v/v
							m,p-Xylene	400 ppb v/v
							Methyl Butyl Ketone (2-Hexanone)	200 ppb v/v
							Methyl Ethyl Ketone	200 ppb v/v
							methyl isobutyl ketone	200 ppb v/v
							Methyl methacrylate	200 ppb v/v
							Methyl tert-butyl ether	200 ppb v/v
							Methylene Chloride	200 ppb v/v
							n-Butane	200 ppb v/v
							n-Butanol	200 ppb v/v
							n-Butylbenzene	200 ppb v/v
							n-Decane	200 ppb v/v
							n-Heptane	200 ppb v/v
							n-Hexane	200 ppb v/v
							n-Nonane	200 ppb v/v
							n-Octane	200 ppb v/v
							n-Propylbenzene	200 ppb v/v
							Naphthalene	200 ppb v/v
							Pentane	200 ppb v/v
							Propene	200 ppb v/v
							sec-Butylbenzene	200 ppb v/v
							Styrene	200 ppb v/v
							tert-Butyl alcohol	200 ppb v/v
							tert-Butylbenzene	200 ppb v/v
							Tetrachloroethene	200 ppb v/v
							Tetrahydrofuran	200 ppb v/v
							Toluene	200 ppb v/v
							trans-1,2-Dichloroethene	200 ppb v/v
							trans-1,3-Dichloropropene	200 ppb v/v
							Trichloroethene	200 ppb v/v
							Trichlorofluoromethane	200 ppb v/v
							Undecane	200 ppb v/v
							Vinyl acetate	200 ppb v/v
							Vinyl chloride	200 ppb v/v
							Xylene, o-	200 ppb v/v

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Burlington Job No.: 200-35064-1

SDG No.: 200-35064-1

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
..ATTO15CALs_00025	12/30/16		Spectra Gases, Lot cc-90855		(Purchased Reagent)		1,1,1-Trichloroethane	1 ppm v/v
							1,1,2,2-Tetrachloroethane	1 ppm v/v
							1,1,2-Trichloroethane	1 ppm v/v
							1,1-Dichloroethane	1 ppm v/v
							1,1-Dichloroethene	1 ppm v/v
							1,2,3-Trichlorobenzene	1 ppm v/v
							1,2,3-Trichloropropane	1 ppm v/v
							1,2,4-Trichlorobenzene	1 ppm v/v
							1,2,4-Trimethylbenzene	1 ppm v/v
							1,2-Dibromoethane	1 ppm v/v
							1,2-Dichlorobenzene	1 ppm v/v
							1,2-Dichloroethane	1 ppm v/v
							1,2-Dichloropropane	1 ppm v/v
							1,2-Dichlorotetrafluoroethane	1 ppm v/v
							1,3,5-Trimethylbenzene	1 ppm v/v
							1,3-Butadiene	1 ppm v/v
							1,3-Dichlorobenzene	1 ppm v/v
							1,4-Dichlorobenzene	1 ppm v/v
							1,4-Dioxane	1 ppm v/v
							2,2,4-Trimethylpentane	1 ppm v/v
							2-Chlorotoluene	1 ppm v/v
							2-Methylbutane	1 ppm v/v
							3-Chloropropene	1 ppm v/v
							4-Ethyltoluene	1 ppm v/v
							4-Isopropyltoluene	1 ppm v/v
							Acetone	1 ppm v/v
							Acetonitrile	1 ppm v/v
							Acrolein	1 ppm v/v
							Acrylonitrile	1 ppm v/v
							Alpha Methyl Styrene	1 ppm v/v
							Benzene	1 ppm v/v
							Benzyl chloride	1 ppm v/v
							Bromodichloromethane	1 ppm v/v
							Bromoethene(Vinyl Bromide)	1 ppm v/v
							Bromoform	1 ppm v/v
							Bromomethane	1 ppm v/v
							Carbon disulfide	1 ppm v/v
							Carbon tetrachloride	1 ppm v/v
							Chlorobenzene	1 ppm v/v
							Chloroethane	1 ppm v/v
							Chloroform	1 ppm v/v
							Chloromethane	1 ppm v/v
							cis-1,2-Dichloroethene	1 ppm v/v
							cis-1,3-Dichloropropene	1 ppm v/v
							Cumene	1 ppm v/v
							Cyclohexane	1 ppm v/v
							Dibromochloromethane	1 ppm v/v
							Dibromomethane	1 ppm v/v

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Burlington Job No.: 200-35064-1

SDG No.: 200-35064-1

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Dichlorodifluoromethane	1 ppm v/v
							Dodecane	1 ppm v/v
							Ethyl acetate	1 ppm v/v
							Ethyl ether	1 ppm v/v
							Ethylbenzene	1 ppm v/v
							Freon 22	1 ppm v/v
							Freon TF	1 ppm v/v
							Hexachlorobutadiene	1 ppm v/v
							Isopropyl alcohol	1 ppm v/v
							m,p-Xylene	2 ppm v/v
							Methyl Butyl Ketone (2-Hexanone)	1 ppm v/v
							Methyl Ethyl Ketone	1 ppm v/v
							methyl isobutyl ketone	1 ppm v/v
							Methyl methacrylate	1 ppm v/v
							Methyl tert-butyl ether	1 ppm v/v
							Methylene Chloride	1 ppm v/v
							n-Butane	1 ppm v/v
							n-Butanol	1 ppm v/v
							n-Butylbenzene	1 ppm v/v
							n-Decane	1 ppm v/v
							n-Heptane	1 ppm v/v
							n-Hexane	1 ppm v/v
							n-Nonane	1 ppm v/v
							n-Octane	1 ppm v/v
							n-Propylbenzene	1 ppm v/v
							Naphthalene	1 ppm v/v
							Pentane	1 ppm v/v
							Propene	1 ppm v/v
							sec-Butylbenzene	1 ppm v/v
							Styrene	1 ppm v/v
							tert-Butyl alcohol	1 ppm v/v
							tert-Butylbenzene	1 ppm v/v
							Tetrachloroethene	1 ppm v/v
							Tetrahydrofuran	1 ppm v/v
							Toluene	1 ppm v/v
							trans-1,2-Dichloroethene	1 ppm v/v
							trans-1,3-Dichloropropene	1 ppm v/v
							Trichloroethene	1 ppm v/v
							Trichlorofluoromethane	1 ppm v/v
							Undecane	1 ppm v/v
							Vinyl acetate	1 ppm v/v
							Vinyl chloride	1 ppm v/v
							Xylene, o-	1 ppm v/v
.ATTO15EthCALw_00071	09/27/16	06/27/16	Zero Air, Lot 12	37.5 ppb	ATTO15EthCALs_00007	18.75 uL	Ethanol	500 ppb v/v
..ATTO15EthCALs_00007	09/11/17	SIGMA, Lot SHBB5682V			(Purchased Reagent)		Ethanol	1 mL/mL
ATTO15CAL7w_00064	09/27/16	08/04/16	Zero Air, Lot 12	15.463 L	ATTO15CALSTKi_00084	3092 mL	1,1,1-Trichloroethane	39.9922 ppb v/v

Lab Name: TestAmerica Burlington Job No.: 200-35064-1

SDG No.: 200-35064-1

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							1,1,2,2-Tetrachloroethane	39.9922 ppb v/v
							1,1,2-Trichloroethane	39.9922 ppb v/v
							1,1-Dichloroethane	39.9922 ppb v/v
							1,1-Dichloroethene	39.9922 ppb v/v
							1,2,3-Trichlorobenzene	39.9922 ppb v/v
							1,2,3-Trichloropropane	39.9922 ppb v/v
							1,2,4-Trichlorobenzene	39.9922 ppb v/v
							1,2,4-Trimethylbenzene	39.9922 ppb v/v
							1,2-Dibromoethane	39.9922 ppb v/v
							1,2-Dichlorobenzene	39.9922 ppb v/v
							1,2-Dichloroethane	39.9922 ppb v/v
							1,2-Dichloropropane	39.9922 ppb v/v
							1,2-Dichlorotetrafluoroethane	39.9922 ppb v/v
							1,3,5-Trimethylbenzene	39.9922 ppb v/v
							1,3-Butadiene	39.9922 ppb v/v
							1,3-Dichlorobenzene	39.9922 ppb v/v
							1,4-Dichlorobenzene	39.9922 ppb v/v
							1,4-Dioxane	39.9922 ppb v/v
							2,2,4-Trimethylpentane	39.9922 ppb v/v
							2-Chlorotoluene	39.9922 ppb v/v
							2-Methylbutane	39.9922 ppb v/v
							3-Chloropropene	39.9922 ppb v/v
							4-Ethyltoluene	39.9922 ppb v/v
							4-Isopropyltoluene	39.9922 ppb v/v
							Acetone	39.9922 ppb v/v

Lab Name: TestAmerica Burlington Job No.: 200-35064-1

SDG No.: 200-35064-1

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Acetonitrile	39.9922 ppb v/v
							Acrolein	39.9922 ppb v/v
							Acrylonitrile	39.9922 ppb v/v
							Alpha Methyl Styrene	39.9922 ppb v/v
							Benzene	39.9922 ppb v/v
							Benzyl chloride	39.9922 ppb v/v
							Bromodichloromethane	39.9922 ppb v/v
							Bromoethene(Vinyl Bromide)	39.9922 ppb v/v
							Bromoform	39.9922 ppb v/v
							Bromomethane	39.9922 ppb v/v
							Carbon disulfide	39.9922 ppb v/v
							Carbon tetrachloride	39.9922 ppb v/v
							Chlorobenzene	39.9922 ppb v/v
							Chloroethane	39.9922 ppb v/v
							Chloroform	39.9922 ppb v/v
							Chloromethane	39.9922 ppb v/v
							cis-1,2-Dichloroethene	39.9922 ppb v/v
							cis-1,3-Dichloropropene	39.9922 ppb v/v
							Cumene	39.9922 ppb v/v
							Cyclohexane	39.9922 ppb v/v
							Dibromochloromethane	39.9922 ppb v/v
							Dibromomethane	39.9922 ppb v/v
							Dichlorodifluoromethane	39.9922 ppb v/v
							Dodecane	39.9922 ppb v/v
							Ethyl acetate	39.9922 ppb v/v

Lab Name: TestAmerica Burlington Job No.: 200-35064-1

SDG No.: 200-35064-1

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Ethyl ether	39.9922 ppb v/v
							Ethylbenzene	39.9922 ppb v/v
							Freon 22	39.9922 ppb v/v
							Freon TF	39.9922 ppb v/v
							Hexachlorobutadiene	39.9922 ppb v/v
							Isopropyl alcohol	39.9922 ppb v/v
							m,p-Xylene	79.9845 ppb v/v
							Methyl Butyl Ketone (2-Hexanone)	39.9922 ppb v/v
							Methyl Ethyl Ketone	39.9922 ppb v/v
							methyl isobutyl ketone	39.9922 ppb v/v
							Methyl methacrylate	39.9922 ppb v/v
							Methyl tert-butyl ether	39.9922 ppb v/v
							Methylene Chloride	39.9922 ppb v/v
							n-Butane	39.9922 ppb v/v
							n-Butanol	39.9922 ppb v/v
							n-Butylbenzene	39.9922 ppb v/v
							n-Decane	39.9922 ppb v/v
							n-Heptane	39.9922 ppb v/v
							n-Hexane	39.9922 ppb v/v
							n-Nonane	39.9922 ppb v/v
							n-Octane	39.9922 ppb v/v
							n-Propylbenzene	39.9922 ppb v/v
							Naphthalene	39.9922 ppb v/v
							Pentane	39.9922 ppb v/v
							Propene	39.9922 ppb v/v

Lab Name: TestAmerica Burlington Job No.: 200-35064-1

SDG No.: 200-35064-1

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							sec-Butylbenzene	39.9922 ppb v/v
							Styrene	39.9922 ppb v/v
							tert-Butyl alcohol	39.9922 ppb v/v
							tert-Butylbenzene	39.9922 ppb v/v
							Tetrachloroethene	39.9922 ppb v/v
							Tetrahydrofuran	39.9922 ppb v/v
							Toluene	39.9922 ppb v/v
							trans-1,2-Dichloroethene	39.9922 ppb v/v
							trans-1,3-Dichloropropene	39.9922 ppb v/v
							Trichloroethene	39.9922 ppb v/v
							Trichlorofluoromethane	39.9922 ppb v/v
							Undecane	39.9922 ppb v/v
							Vinyl acetate	39.9922 ppb v/v
							Vinyl chloride	39.9922 ppb v/v
							Xylene, o-	39.9922 ppb v/v
					ATTO15EthCALw_00071	3092 mL	Ethanol	99.9806 ppb v/v
.ATTO15CALSTKi_00084	10/21/16	07/21/16	Zero Air, Lot 13	37.5 L	ATTO15CALs_00025	7500 mL	1,1,1-Trichloroethane	200 ppb v/v
							1,1,2,2-Tetrachloroethane	200 ppb v/v
							1,1,2-Trichloroethane	200 ppb v/v
							1,1-Dichloroethane	200 ppb v/v
							1,1-Dichloroethene	200 ppb v/v
							1,2,3-Trichlorobenzene	200 ppb v/v
							1,2,3-Trichloropropane	200 ppb v/v
							1,2,4-Trichlorobenzene	200 ppb v/v
							1,2,4-Trimethylbenzene	200 ppb v/v
							1,2-Dibromoethane	200 ppb v/v
							1,2-Dichlorobenzene	200 ppb v/v
							1,2-Dichloroethane	200 ppb v/v
							1,2-Dichloropropane	200 ppb v/v
							1,2-Dichlorotetrafluoroethane	200 ppb v/v
							1,3,5-Trimethylbenzene	200 ppb v/v
							1,3-Butadiene	200 ppb v/v
							1,3-Dichlorobenzene	200 ppb v/v
							1,4-Dichlorobenzene	200 ppb v/v

Lab Name: TestAmerica Burlington Job No.: 200-35064-1

SDG No.: 200-35064-1

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							1,4-Dioxane	200 ppb v/v
							2,2,4-Trimethylpentane	200 ppb v/v
							2-Chlorotoluene	200 ppb v/v
							2-Methylbutane	200 ppb v/v
							3-Chloropropene	200 ppb v/v
							4-Ethyltoluene	200 ppb v/v
							4-Isopropyltoluene	200 ppb v/v
							Acetone	200 ppb v/v
							Acetonitrile	200 ppb v/v
							Acrolein	200 ppb v/v
							Acrylonitrile	200 ppb v/v
							Alpha Methyl Styrene	200 ppb v/v
							Benzene	200 ppb v/v
							Benzyl chloride	200 ppb v/v
							Bromodichloromethane	200 ppb v/v
							Bromoethene(Vinyl Bromide)	200 ppb v/v
							Bromoform	200 ppb v/v
							Bromomethane	200 ppb v/v
							Carbon disulfide	200 ppb v/v
							Carbon tetrachloride	200 ppb v/v
							Chlorobenzene	200 ppb v/v
							Chloroethane	200 ppb v/v
							Chloroform	200 ppb v/v
							Chloromethane	200 ppb v/v
							cis-1,2-Dichloroethene	200 ppb v/v
							cis-1,3-Dichloropropene	200 ppb v/v
							Cumene	200 ppb v/v
							Cyclohexane	200 ppb v/v
							Dibromochloromethane	200 ppb v/v
							Dibromomethane	200 ppb v/v
							Dichlorodifluoromethane	200 ppb v/v
							Dodecane	200 ppb v/v
							Ethyl acetate	200 ppb v/v
							Ethyl ether	200 ppb v/v
							Ethylbenzene	200 ppb v/v
							Freon 22	200 ppb v/v
							Freon TF	200 ppb v/v
							Hexachlorobutadiene	200 ppb v/v
							Isopropyl alcohol	200 ppb v/v
							m,p-Xylene	400 ppb v/v
							Methyl Butyl Ketone (2-Hexanone)	200 ppb v/v
							Methyl Ethyl Ketone	200 ppb v/v
							methyl isobutyl ketone	200 ppb v/v
							Methyl methacrylate	200 ppb v/v
							Methyl tert-butyl ether	200 ppb v/v
							Methylene Chloride	200 ppb v/v
							n-Butane	200 ppb v/v

Lab Name: TestAmerica Burlington Job No.: 200-35064-1

SDG No.: 200-35064-1

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							n-Butanol	200 ppb v/v
							n-Butylbenzene	200 ppb v/v
							n-Decane	200 ppb v/v
							n-Heptane	200 ppb v/v
							n-Hexane	200 ppb v/v
							n-Nonane	200 ppb v/v
							n-Octane	200 ppb v/v
							n-Propylbenzene	200 ppb v/v
							Naphthalene	200 ppb v/v
							Pentane	200 ppb v/v
							Propene	200 ppb v/v
							sec-Butylbenzene	200 ppb v/v
							Styrene	200 ppb v/v
							tert-Butyl alcohol	200 ppb v/v
							tert-Butylbenzene	200 ppb v/v
							Tetrachloroethene	200 ppb v/v
							Tetrahydrofuran	200 ppb v/v
							Toluene	200 ppb v/v
							trans-1,2-Dichloroethene	200 ppb v/v
							trans-1,3-Dichloropropene	200 ppb v/v
							Trichloroethene	200 ppb v/v
							Trichlorofluoromethane	200 ppb v/v
							Undecane	200 ppb v/v
							Vinyl acetate	200 ppb v/v
							Vinyl chloride	200 ppb v/v
							Xylene, o-	200 ppb v/v
..ATTO15CALs_00025	12/30/16		Spectra Gases, Lot cc-90855		(Purchased Reagent)		1,1,1-Trichloroethane	1 ppm v/v
							1,1,2,2-Tetrachloroethane	1 ppm v/v
							1,1,2-Trichloroethane	1 ppm v/v
							1,1-Dichloroethane	1 ppm v/v
							1,1-Dichloroethene	1 ppm v/v
							1,2,3-Trichlorobenzene	1 ppm v/v
							1,2,3-Trichloropropane	1 ppm v/v
							1,2,4-Trichlorobenzene	1 ppm v/v
							1,2,4-Trimethylbenzene	1 ppm v/v
							1,2-Dibromoethane	1 ppm v/v
							1,2-Dichlorobenzene	1 ppm v/v
							1,2-Dichloroethane	1 ppm v/v
							1,2-Dichloropropane	1 ppm v/v
							1,2-Dichlorotetrafluoroethane	1 ppm v/v
							1,3,5-Trimethylbenzene	1 ppm v/v
							1,3-Butadiene	1 ppm v/v
							1,3-Dichlorobenzene	1 ppm v/v
							1,4-Dichlorobenzene	1 ppm v/v
							1,4-Dioxane	1 ppm v/v
							2,2,4-Trimethylpentane	1 ppm v/v
							2-Chlorotoluene	1 ppm v/v
							2-Methylbutane	1 ppm v/v

Lab Name: TestAmerica Burlington Job No.: 200-35064-1

SDG No.: 200-35064-1

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							3-Chloropropene	1 ppm v/v
							4-Ethyltoluene	1 ppm v/v
							4-Isopropyltoluene	1 ppm v/v
							Acetone	1 ppm v/v
							Acetonitrile	1 ppm v/v
							Acrolein	1 ppm v/v
							Acrylonitrile	1 ppm v/v
							Alpha Methyl Styrene	1 ppm v/v
							Benzene	1 ppm v/v
							Benzyl chloride	1 ppm v/v
							Bromodichloromethane	1 ppm v/v
							Bromoethene(Vinyl Bromide)	1 ppm v/v
							Bromoform	1 ppm v/v
							Bromomethane	1 ppm v/v
							Carbon disulfide	1 ppm v/v
							Carbon tetrachloride	1 ppm v/v
							Chlorobenzene	1 ppm v/v
							Chloroethane	1 ppm v/v
							Chloroform	1 ppm v/v
							Chloromethane	1 ppm v/v
							cis-1,2-Dichloroethene	1 ppm v/v
							cis-1,3-Dichloropropene	1 ppm v/v
							Cumene	1 ppm v/v
							Cyclohexane	1 ppm v/v
							Dibromochloromethane	1 ppm v/v
							Dibromomethane	1 ppm v/v
							Dichlorodifluoromethane	1 ppm v/v
							Dodecane	1 ppm v/v
							Ethyl acetate	1 ppm v/v
							Ethyl ether	1 ppm v/v
							Ethylbenzene	1 ppm v/v
							Freon 22	1 ppm v/v
							Freon TF	1 ppm v/v
							Hexachlorobutadiene	1 ppm v/v
							Isopropyl alcohol	1 ppm v/v
							m,p-Xylene	2 ppm v/v
							Methyl Butyl Ketone (2-Hexanone)	1 ppm v/v
							Methyl Ethyl Ketone	1 ppm v/v
							methyl isobutyl ketone	1 ppm v/v
							Methyl methacrylate	1 ppm v/v
							Methyl tert-butyl ether	1 ppm v/v
							Methylene Chloride	1 ppm v/v
							n-Butane	1 ppm v/v
							n-Butanol	1 ppm v/v
							n-Butylbenzene	1 ppm v/v
							n-Decane	1 ppm v/v
							n-Heptane	1 ppm v/v

Lab Name: TestAmerica Burlington Job No.: 200-35064-1

SDG No.: 200-35064-1

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							n-Hexane	1 ppm v/v
							n-Nonane	1 ppm v/v
							n-Octane	1 ppm v/v
							n-Propylbenzene	1 ppm v/v
							Naphthalene	1 ppm v/v
							Pentane	1 ppm v/v
							Propene	1 ppm v/v
							sec-Butylbenzene	1 ppm v/v
							Styrene	1 ppm v/v
							tert-Butyl alcohol	1 ppm v/v
							tert-Butylbenzene	1 ppm v/v
							Tetrachloroethene	1 ppm v/v
							Tetrahydrofuran	1 ppm v/v
							Toluene	1 ppm v/v
							trans-1,2-Dichloroethene	1 ppm v/v
							trans-1,3-Dichloropropene	1 ppm v/v
							Trichloroethene	1 ppm v/v
							Trichlorofluoromethane	1 ppm v/v
							Undecane	1 ppm v/v
							Vinyl acetate	1 ppm v/v
							Vinyl chloride	1 ppm v/v
							Xylene, o-	1 ppm v/v
.ATTO15EthCALw_00071	09/27/16	06/27/16	Zero Air, Lot 12	37.5 ppb	ATTO15EthCALs_00007	18.75 uL	Ethanol	500 ppb v/v
..ATTO15EthCALs_00007	09/11/17	SIGMA, Lot SHBB5682V			(Purchased Reagent)		Ethanol	1 mL/mL
ATTO15LCSW_00629	09/27/16	08/05/16	Zero Air, Lot 13	15.463 L	ATTO15LCSSTKi_00074	773 mL	1,1,1-Trichloroethane	9.99806 ppb v/v
							1,1,2,2-Tetrachloroethane	9.99806 ppb v/v
							1,1,2-Trichloroethane	9.99806 ppb v/v
							1,1-Dichloroethane	9.99806 ppb v/v
							1,1-Dichloroethene	9.99806 ppb v/v
							1,2,4-Trichlorobenzene	9.99806 ppb v/v
							1,2,4-Trimethylbenzene	9.99806 ppb v/v
							1,2-Dibromoethane	9.99806 ppb v/v
							1,2-Dichlorobenzene	9.99806 ppb v/v
							1,2-Dichloroethane	9.99806 ppb v/v
							1,2-Dichloroethene, Total	19.9961 ppb v/v
							1,2-Dichloropropane	9.99806 ppb v/v

Lab Name: TestAmerica Burlington Job No.: 200-35064-1

SDG No.: 200-35064-1

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							1,2-Dichlorotetrafluoroethane	9.99806 ppb v/v
							1,3,5-Trimethylbenzene	9.99806 ppb v/v
							1,3-Butadiene	9.99806 ppb v/v
							1,3-Dichlorobenzene	9.99806 ppb v/v
							1,4-Dichlorobenzene	9.99806 ppb v/v
							1,4-Dioxane	9.99806 ppb v/v
							2,2,4-Trimethylpentane	9.99806 ppb v/v
							2-Chlorotoluene	9.99806 ppb v/v
							3-Chloropropene	9.99806 ppb v/v
							4-Ethyltoluene	9.99806 ppb v/v
							4-Isopropyltoluene	9.99806 ppb v/v
							Acetone	9.99806 ppb v/v
							Benzene	9.99806 ppb v/v
							Benzyl chloride	9.99806 ppb v/v
							Bromodichloromethane	9.99806 ppb v/v
							Bromoethene(Vinyl Bromide)	9.99806 ppb v/v
							Bromoform	9.99806 ppb v/v
							Bromomethane	9.99806 ppb v/v
							Carbon disulfide	9.99806 ppb v/v
							Carbon tetrachloride	9.99806 ppb v/v
							Chlorobenzene	9.99806 ppb v/v
							Chloroethane	9.99806 ppb v/v
							Chloroform	9.99806 ppb v/v
							Chloromethane	9.99806 ppb v/v
							cis-1,2-Dichloroethene	9.99806 ppb v/v

Lab Name: TestAmerica Burlington Job No.: 200-35064-1

SDG No.: 200-35064-1

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							cis-1,3-Dichloropropene	9.99806 ppb v/v
							Cumene	9.99806 ppb v/v
							Cyclohexane	9.99806 ppb v/v
							Dibromochloromethane	9.99806 ppb v/v
							Dichlorodifluoromethane	9.99806 ppb v/v
							Ethylbenzene	9.99806 ppb v/v
							Freon 22	9.99806 ppb v/v
							Freon TF	9.99806 ppb v/v
							Hexachlorobutadiene	9.99806 ppb v/v
							Isopropyl alcohol	9.99806 ppb v/v
							m,p-Xylene	19.9961 ppb v/v
							Methyl Butyl Ketone (2-Hexanone)	9.99806 ppb v/v
							Methyl Ethyl Ketone	9.99806 ppb v/v
							methyl isobutyl ketone	9.99806 ppb v/v
							Methyl methacrylate	9.99806 ppb v/v
							Methyl tert-butyl ether	9.99806 ppb v/v
							Methylene Chloride	9.99806 ppb v/v
							n-Butane	9.99806 ppb v/v
							n-Butylbenzene	9.99806 ppb v/v
							n-Heptane	9.99806 ppb v/v
							n-Hexane	9.99806 ppb v/v
							n-Propylbenzene	9.99806 ppb v/v
							Naphthalene	9.99806 ppb v/v
							sec-Butylbenzene	9.99806 ppb v/v
							Styrene	9.99806 ppb v/v

Lab Name: TestAmerica Burlington Job No.: 200-35064-1

SDG No.: 200-35064-1

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							tert-Butyl alcohol	9.99806 ppb v/v
							tert-Butylbenzene	9.99806 ppb v/v
							Tetrachloroethene	9.99806 ppb v/v
							Tetrahydrofuran	9.99806 ppb v/v
							Toluene	9.99806 ppb v/v
							trans-1,2-Dichloroethene	9.99806 ppb v/v
							trans-1,3-Dichloropropene	9.99806 ppb v/v
							Trichloroethene	9.99806 ppb v/v
							Trichlorofluoromethane	9.99806 ppb v/v
							Vinyl chloride	9.99806 ppb v/v
							Xylene (total)	29.9942 ppb v/v
							Xylene, o-	9.99806 ppb v/v
.ATTO15LCSSTKi_00074	10/21/16	07/21/16	Zero Air, Lot 12	37.5 L	ATTO15LCSs_00019	7500 mL	1,1,1-Trichloroethane	200 ppb v/v
							1,1,2,2-Tetrachloroethane	200 ppb v/v
							1,1,2-Trichloroethane	200 ppb v/v
							1,1-Dichloroethane	200 ppb v/v
							1,1-Dichloroethene	200 ppb v/v
							1,2,4-Trichlorobenzene	200 ppb v/v
							1,2,4-Trimethylbenzene	200 ppb v/v
							1,2-Dibromoethane	200 ppb v/v
							1,2-Dichlorobenzene	200 ppb v/v
							1,2-Dichloroethane	200 ppb v/v
							1,2-Dichloroethene, Total	400 ppb v/v
							1,2-Dichloropropane	200 ppb v/v
							1,2-Dichlorotetrafluoroethane	200 ppb v/v
							1,3,5-Trimethylbenzene	200 ppb v/v
							1,3-Butadiene	200 ppb v/v
							1,3-Dichlorobenzene	200 ppb v/v
							1,4-Dichlorobenzene	200 ppb v/v
							1,4-Dioxane	200 ppb v/v
							2,2,4-Trimethylpentane	200 ppb v/v
							2-Chlorotoluene	200 ppb v/v
							3-Chloropropene	200 ppb v/v
							4-Ethyltoluene	200 ppb v/v
							4-Isopropyltoluene	200 ppb v/v
							Acetone	200 ppb v/v
							Benzene	200 ppb v/v

Lab Name: TestAmerica Burlington Job No.: 200-35064-1

SDG No.: 200-35064-1

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Benzyl chloride	200 ppb v/v
							Bromodichloromethane	200 ppb v/v
							Bromoethene(Vinyl Bromide)	200 ppb v/v
							Bromoform	200 ppb v/v
							Bromomethane	200 ppb v/v
							Carbon disulfide	200 ppb v/v
							Carbon tetrachloride	200 ppb v/v
							Chlorobenzene	200 ppb v/v
							Chloroethane	200 ppb v/v
							Chloroform	200 ppb v/v
							Chloromethane	200 ppb v/v
							cis-1,2-Dichloroethene	200 ppb v/v
							cis-1,3-Dichloropropene	200 ppb v/v
							Cumene	200 ppb v/v
							Cyclohexane	200 ppb v/v
							Dibromochloromethane	200 ppb v/v
							Dichlorodifluoromethane	200 ppb v/v
							Ethylbenzene	200 ppb v/v
							Freon 22	200 ppb v/v
							Freon TF	200 ppb v/v
							Hexachlorobutadiene	200 ppb v/v
							Isopropyl alcohol	200 ppb v/v
							m,p-Xylene	400 ppb v/v
							Methyl Butyl Ketone (2-Hexanone)	200 ppb v/v
							Methyl Ethyl Ketone	200 ppb v/v
							methyl isobutyl ketone	200 ppb v/v
							Methyl methacrylate	200 ppb v/v
							Methyl tert-butyl ether	200 ppb v/v
							Methylene Chloride	200 ppb v/v
							n-Butane	200 ppb v/v
							n-Butylbenzene	200 ppb v/v
							n-Heptane	200 ppb v/v
							n-Hexane	200 ppb v/v
							n-Propylbenzene	200 ppb v/v
							Naphthalene	200 ppb v/v
							sec-Butylbenzene	200 ppb v/v
							Styrene	200 ppb v/v
							tert-Butyl alcohol	200 ppb v/v
							tert-Butylbenzene	200 ppb v/v
							Tetrachloroethene	200 ppb v/v
							Tetrahydrofuran	200 ppb v/v
							Toluene	200 ppb v/v
							trans-1,2-Dichloroethene	200 ppb v/v
							trans-1,3-Dichloropropene	200 ppb v/v
							Trichloroethene	200 ppb v/v
							Trichlorofluoromethane	200 ppb v/v
							Vinyl chloride	200 ppb v/v

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Burlington Job No.: 200-35064-1

SDG No.: 200-35064-1

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Xylene (total)	600 ppb v/v
							Xylene, o-	200 ppb v/v
..ATTO15LCSs_00019	12/30/16	Spectra Gases, Lot CC-250179			(Purchased Reagent)		1,1,1-Trichloroethane	1 ppm v/v
							1,1,2,2-Tetrachloroethane	1 ppm v/v
							1,1,2-Trichloroethane	1 ppm v/v
							1,1-Dichloroethane	1 ppm v/v
							1,1-Dichloroethene	1 ppm v/v
							1,2,4-Trichlorobenzene	1 ppm v/v
							1,2,4-Trimethylbenzene	1 ppm v/v
							1,2-Dibromoethane	1 ppm v/v
							1,2-Dichlorobenzene	1 ppm v/v
							1,2-Dichloroethane	1 ppm v/v
							1,2-Dichloroethene, Total	2 ppm v/v
							1,2-Dichloropropane	1 ppm v/v
							1,2-Dichlorotetrafluoroethane	1 ppm v/v
							1,3,5-Trimethylbenzene	1 ppm v/v
							1,3-Butadiene	1 ppm v/v
							1,3-Dichlorobenzene	1 ppm v/v
							1,4-Dichlorobenzene	1 ppm v/v
							1,4-Dioxane	1 ppm v/v
							2,2,4-Trimethylpentane	1 ppm v/v
							2-Chlorotoluene	1 ppm v/v
							3-Chloropropene	1 ppm v/v
							4-Ethyltoluene	1 ppm v/v
							4-Isopropyltoluene	1 ppm v/v
							Acetone	1 ppm v/v
							Benzene	1 ppm v/v
							Benzyl chloride	1 ppm v/v
							Bromodichloromethane	1 ppm v/v
							Bromoethene(Vinyl Bromide)	1 ppm v/v
							Bromoform	1 ppm v/v
							Bromomethane	1 ppm v/v
							Carbon disulfide	1 ppm v/v
							Carbon tetrachloride	1 ppm v/v
							Chlorobenzene	1 ppm v/v
							Chloroethane	1 ppm v/v
							Chloroform	1 ppm v/v
							Chloromethane	1 ppm v/v
							cis-1,2-Dichloroethene	1 ppm v/v
							cis-1,3-Dichloropropene	1 ppm v/v
							Cumene	1 ppm v/v
							Cyclohexane	1 ppm v/v
							Dibromochloromethane	1 ppm v/v
							Dichlorodifluoromethane	1 ppm v/v
							Ethylbenzene	1 ppm v/v
							Freon 22	1 ppm v/v
							Freon TF	1 ppm v/v
							Hexachlorobutadiene	1 ppm v/v

Lab Name: TestAmerica Burlington Job No.: 200-35064-1

SDG No.: 200-35064-1

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Isopropyl alcohol	1 ppm v/v
							m,p-Xylene	2 ppm v/v
							Methyl Butyl Ketone (2-Hexanone)	1 ppm v/v
							Methyl Ethyl Ketone	1 ppm v/v
							methyl isobutyl ketone	1 ppm v/v
							Methyl methacrylate	1 ppm v/v
							Methyl tert-butyl ether	1 ppm v/v
							Methylene Chloride	1 ppm v/v
							n-Butane	1 ppm v/v
							n-Butylbenzene	1 ppm v/v
							n-Heptane	1 ppm v/v
							n-Hexane	1 ppm v/v
							n-Propylbenzene	1 ppm v/v
							Naphthalene	1 ppm v/v
							sec-Butylbenzene	1 ppm v/v
							Styrene	1 ppm v/v
							tert-Butyl alcohol	1 ppm v/v
							tert-Butylbenzene	1 ppm v/v
							Tetrachloroethene	1 ppm v/v
							Tetrahydrofuran	1 ppm v/v
							Toluene	1 ppm v/v
							trans-1,2-Dichloroethene	1 ppm v/v
							trans-1,3-Dichloropropene	1 ppm v/v
							Trichloroethene	1 ppm v/v
							Trichlorofluoromethane	1 ppm v/v
							Vinyl chloride	1 ppm v/v
							Xylene (total)	3 ppm v/v
							Xylene, o-	1 ppm v/v
ATTO15WISs_00004	11/23/20	Spectra Gases, Lot CC-172855			(Purchased Reagent)		1,4-Difluorobenzene	100 ppb v/v
							Chlorobenzene-d5	100 ppb v/v
							Chlorobromomethane	100 ppb v/v

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Outside USA: eurtechserv@sial.com

9/15/11

Certificate of Analysis

Product Name:
Ethanol – 200 proof, anhydrous, ≥99.5%

CH_3CH_2OH

Product Number:	**459836**
Lot Number:	**SHBB5682V**
Brand:	SIAL
CAS Number:	64-17-5
MDL Number:	MFCD00003568
Formula:	C2H6O
Formula Weight:	46.07 g/mol
Quality Release Date:	15 SEP 2011

389837
ID: ATTO15EthCALs_00007
Exp 09/01/17 Prod Prd Open 09/01/12
TO15 Ethanol Cal source 9

Test	Specification	Result
Appearance (Color)	Colorless	Colorless
Appearance (Form)	Liquid	Liquid
Infrared spectrum	Conforms to Structure	Conforms
Purity (GC)	≥ 99.5 %	> 99.9 %
Water (by Karl Fischer)	≤ 0.005 %	0.003 %
Residue on Evaporation	≤ 0.0005 %	0.0003 %
Starting Material Clearance TRACEABLE TO ACS PRODUCT LISTING	Confirmed	Conforms

Jennifer Baughman, Manager
Quality Control
Sheboygan Falls, WI US

Sigma-Aldrich warrants, that at the time of the quality release or subsequent retest date this product conformed to the information contained in this publication. The current Specification sheet may be available at Sigma-Aldrich.com. For further inquiries, please contact Technical Service. Purchaser must determine the suitability of the product for its particular use. See reverse side of invoice or packing slip for additional terms and conditions of sale.

Certification Summary

Client: SESI Consulting Engineers
Project/Site: 20 S West Street

TestAmerica Job ID: 200-35064-1
SDG: 200-35064-1

Laboratory	Authority	Program	EPA Region	Certification ID
TestAmerica Burlington	Connecticut	State Program	1	PH-0751
TestAmerica Burlington	DE Haz. Subst. Cleanup Act (HSC	State Program	3	NA
TestAmerica Burlington	Florida	NELAP	4	E87467
TestAmerica Burlington	L-A-B	DoD ELAP		L2336
TestAmerica Burlington	Maine	State Program	1	VT00008
TestAmerica Burlington	Minnesota	NELAP	5	050-999-436
TestAmerica Burlington	New Hampshire	NELAP	1	2006
TestAmerica Burlington	New Jersey	NELAP	2	VT972
TestAmerica Burlington	New York	NELAP	2	10391
TestAmerica Burlington	Pennsylvania	NELAP	3	68-00489
TestAmerica Burlington	Rhode Island	State Program	1	LAO00298
TestAmerica Burlington	US Fish & Wildlife	Federal		LE-058448-0
TestAmerica Burlington	USDA	Federal		P330-11-00093
TestAmerica Burlington	Vermont	State Program	1	VT-4000
TestAmerica Burlington	Virginia	NELAP	3	460209

Accreditation may not be offered or required for all methods and analytes reported in this package. Please contact your project manager for the laboratory's current list of certified methods and analytes.

Method TO15

Volatile Organic Compounds (GC/MS) by Method TO15

FORM III
AIR - GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Burlington Job No.: 200-35064-1

SDG No.: 200-35064-1

Matrix: Air Level: Low Lab File ID: 21628_03.d

Lab ID: LCS 200-108809/3 Client ID:

COMPOUND	SPIKE ADDED (ppb v/v)	LCS CONCENTRATION (ppb v/v)	LCS % REC	QC LIMITS REC	#
Dichlorodifluoromethane	10.0	9.29	93	68-128	
Freon 22	10.0	9.20	92	64-128	
1,2-Dichlorotetrafluoroethane	10.0	11.0	110	78-138	
Chloromethane	10.0	9.68	97	57-126	
n-Butane	10.0	9.72	97	56-130	
Vinyl chloride	10.0	10.4	104	62-125	
1,3-Butadiene	10.0	9.75	97	59-125	
Bromomethane	10.0	10.0	100	68-128	
Chloroethane	10.0	9.74	97	65-125	
Bromoethene(Vinyl Bromide)	10.0	9.79	98	67-127	
Trichlorofluoromethane	10.0	9.40	94	67-127	
Freon TF	10.0	9.62	96	68-128	
1,1-Dichloroethene	10.0	9.69	97	67-127	
Acetone	10.0	9.00	90	64-136	
Isopropyl alcohol	10.0	7.90	79	55-124	
Carbon disulfide	10.0	11.1	111	81-141	
3-Chloropropene	10.0	8.42	84	53-133	
Methylene Chloride	10.0	9.02	90	62-122	
tert-Butyl alcohol	10.0	8.28	83	64-124	
Methyl tert-butyl ether	10.0	9.15	92	67-127	
trans-1,2-Dichloroethene	10.0	9.82	98	72-132	
n-Hexane	10.0	9.68	97	71-131	
1,1-Dichloroethane	10.0	9.57	96	66-126	
Methyl Ethyl Ketone	10.0	9.38	94	62-122	
cis-1,2-Dichloroethene	10.0	9.62	96	67-127	
Chloroform	10.0	9.70	97	69-129	
Tetrahydrofuran	10.0	9.38	94	61-136	
1,1,1-Trichloroethane	10.0	9.94	99	70-130	
Cyclohexane	10.0	10.2	102	69-129	
Carbon tetrachloride	10.0	10.7	107	62-143	
2,2,4-Trimethylpentane	10.0	9.36	94	67-127	
Benzene	10.0	9.28	93	67-127	
1,2-Dichloroethane	10.0	9.52	95	67-132	
n-Heptane	10.0	8.77	88	62-130	
Trichloroethene	10.0	10.2	102	68-128	
Methyl methacrylate	10.0	9.85	99	70-130	
1,2-Dichloropropane	10.0	9.79	98	67-127	
1,4-Dioxane	10.0	9.56	96	66-132	
Bromodichloromethane	10.0	9.78	98	69-129	
cis-1,3-Dichloropropene	10.0	9.61	96	70-130	
methyl isobutyl ketone	10.0	8.70	87	62-130	
Toluene	10.0	9.87	99	67-127	

Column to be used to flag recovery and RPD values

FORM III TO-15

FORM III
AIR - GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Burlington Job No.: 200-35064-1

SDG No.: 200-35064-1

Matrix: Air Level: Low Lab File ID: 21628_03.d

Lab ID: LCS 200-108809/3 Client ID:

COMPOUND	SPIKE ADDED (ppb v/v)	LCS CONCENTRATION (ppb v/v)	LCS % REC	QC LIMITS REC	#
trans-1,3-Dichloropropene	10.0	9.96	100	69-129	
1,1,2-Trichloroethane	10.0	10.1	101	69-129	
Tetrachloroethene	10.0	10.6	106	70-130	
Methyl Butyl Ketone (2-Hexanone)	10.0	9.53	95	61-127	
Dibromochloromethane	10.0	10.2	102	66-130	
1,2-Dibromoethane	10.0	10.3	103	70-130	
Chlorobenzene	10.0	10.3	103	68-128	
Ethylbenzene	10.0	9.85	98	68-128	
m,p-Xylene	20.0	20.1	101	68-128	
Xylene, o-	10.0	9.80	98	67-127	
Styrene	10.0	9.98	100	68-128	
Bromoform	10.0	10.3	103	34-170	
Cumene	10.0	9.72	97	67-127	
1,1,2,2-Tetrachloroethane	10.0	9.90	99	69-129	
n-Propylbenzene	10.0	9.86	99	67-127	
4-Ethyltoluene	10.0	10.2	102	69-129	
1,3,5-Trimethylbenzene	10.0	9.78	98	65-125	
2-Chlorotoluene	10.0	9.71	97	67-127	
tert-Butylbenzene	10.0	9.35	94	63-125	
1,2,4-Trimethylbenzene	10.0	9.53	95	65-125	
sec-Butylbenzene	10.0	8.31	83	66-126	
4-Isopropyltoluene	10.0	9.61	96	67-129	
1,3-Dichlorobenzene	10.0	10.0	100	67-127	
1,4-Dichlorobenzene	10.0	9.44	94	66-126	
Benzyl chloride	10.0	8.22	82	54-135	
n-Butylbenzene	10.0	9.83	98	67-127	
1,2-Dichlorobenzene	10.0	9.91	99	67-127	
1,2,4-Trichlorobenzene	10.0	10.2	102	59-126	
Hexachlorobutadiene	10.0	9.59	96	62-130	
Naphthalene	10.0	8.87	89	50-121	

Column to be used to flag recovery and RPD values

FORM III TO-15

FORM IV
AIR - GC/MS VOA METHOD BLANK SUMMARY

Lab Name: TestAmerica Burlington Job No.: 200-35064-1

SDG No.: 200-35064-1

Lab File ID: 21628_04.d Lab Sample ID: MB 200-108809/4

Matrix: Air Heated Purge:(Y/N) N

Instrument ID: CHW.i Date Analyzed: 09/02/2016 13:22

GC Column: RTX-624 ID: 0.32(mm)

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	LCS 200-108809/3	21628_03.d	09/02/2016 12:30
SS-1	200-35064-1	21628_22.d	09/03/2016 04:36
SS-2	200-35064-2	21628_23.d	09/03/2016 05:30
SS-3	200-35064-3	21628_24.d	09/03/2016 06:23

FORM V
AIR - GC/MS VOA INSTRUMENT PERFORMANCE CHECK

Lab Name: TestAmerica Burlington Job No.: 200-35064-1

SDG No.: 200-35064-1

Lab File ID: 21457_1b.d BFB Injection Date: 08/22/2016

Instrument ID: CHW.i BFB Injection Time: 15:49

Analysis Batch No.: 108448

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	8.0 - 40.0% of mass 95	12.6	
75	30.0 - 66.0% of mass 95	40.7	
95	Base peak, 100% relative abundance	100.0	
96	5.0 - 9.0% of mass 95	6.8	
173	Less than 2.0% of mass 174	0.6	(0.6) 1
174	50.0 - 120.0% of mass 95	109.3	
175	4.0 - 9.0 % of mass 174	7.7	(7.1) 1
176	93.0 - 101.0% of mass 174	107.0	(97.9) 1
177	5.0 - 9.0% of mass 176	7.0	(6.5) 2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	IC 200-108448/4	21457_06.d	08/22/2016	18:30
	IC 200-108448/5	21457_07.d	08/22/2016	19:23
	IC 200-108448/6	21457_08.d	08/22/2016	20:16
	IC 200-108448/7	21457_09.d	08/22/2016	21:08
	ICIS 200-108448/8	21457_10.d	08/22/2016	22:01
	IC 200-108448/9	21457_11.d	08/22/2016	22:53
	IC 200-108448/10	21457_12.d	08/22/2016	23:46
	IC 200-108448/11	21457_13.d	08/23/2016	00:38
	ICV 200-108448/15	21457_17.d	08/23/2016	04:08

FORM V
AIR - GC/MS VOA INSTRUMENT PERFORMANCE CHECK

Lab Name: TestAmerica Burlington Job No.: 200-35064-1

SDG No.: 200-35064-1

Lab File ID: 21628_01.d BFB Injection Date: 09/02/2016

Instrument ID: CHW.i BFB Injection Time: 10:39

Analysis Batch No.: 108809

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	8.0 - 40.0% of mass 95	11.6	
75	30.0 - 66.0% of mass 95	38.6	
95	Base peak, 100% relative abundance	100.0	
96	5.0 - 9.0% of mass 95	6.7	
173	Less than 2.0% of mass 174	0.6	(0.5) 1
174	50.0 - 120.0% of mass 95	113.6	
175	4.0 - 9.0 % of mass 174	8.1	(7.2) 1
176	93.0 - 101.0% of mass 174	110.9	(97.6) 1
177	5.0 - 9.0% of mass 176	7.6	(6.8) 2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	CCVIS 200-108809/2	21628_02.d	09/02/2016	11:37
	LCS 200-108809/3	21628_03.d	09/02/2016	12:30
	MB 200-108809/4	21628_04.d	09/02/2016	13:22
SS-1	200-35064-1	21628_22.d	09/03/2016	04:36
SS-2	200-35064-2	21628_23.d	09/03/2016	05:30
SS-3	200-35064-3	21628_24.d	09/03/2016	06:23

FORM VIII
AIR - GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Burlington Job No.: 200-35064-1

SDG No.: 200-35064-1

Sample No.: ICIS 200-108448/8 Date Analyzed: 08/22/2016 22:01

Instrument ID: CHW.i GC Column: RTX-624 ID: 0.32(mm)

Lab File ID (Standard): 21457_10.d Heated Purge: (Y/N) N

Calibration ID: 35583

		BCM		DFBZ		CBNZd5	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
INITIAL CALIBRATION MID-POINT		235284	12.65	1137773	14.37	1032359	19.86
UPPER LIMIT		329398	12.98	1592882	14.70	1445303	20.19
LOWER LIMIT		141170	12.32	682664	14.04	619415	19.53
LAB SAMPLE ID	CLIENT SAMPLE ID						
ICV 200-108448/15		260349	12.65	1266445	14.37	1147513	19.86

BCM = Bromochloromethane
DFBZ = 1,4-Difluorobenzene
CBNZd5 = Chlorobenzene-d5

Area Limit = 60%-140% of internal standard area
RT Limit = ± 0.33 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII TO-15

FORM VIII
AIR - GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Burlington Job No.: 200-35064-1

SDG No.: 200-35064-1

Sample No.: CCVIS 200-108809/2 Date Analyzed: 09/02/2016 11:37

Instrument ID: CHW.i GC Column: RTX-624 ID: 0.32(mm)

Lab File ID (Standard): 21628_02.d Heated Purge: (Y/N) N

Calibration ID: 35583

		BCM		DFBZ		CBNZd5	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		308291	12.65	1533827	14.37	1279857	19.86
UPPER LIMIT		431607	12.98	2147358	14.70	1791800	20.19
LOWER LIMIT		184975	12.32	920296	14.04	767914	19.53
LAB SAMPLE ID	CLIENT SAMPLE ID						
LCS 200-108809/3		316040	12.65	1482649	14.37	1359209	19.86
MB 200-108809/4		319421	12.65	1444794	14.36	1372696	19.86
200-35064-1	SS-1	247647	12.65	1152637	14.37	1112046	19.85
200-35064-2	SS-2	262368	12.65	1414642	14.37	1274016	19.86
200-35064-3	SS-3	304964	12.65	1416483	14.37	1238023	19.85

BCM = Bromochloromethane
DFBZ = 1,4-Difluorobenzene
CBNZd5 = Chlorobenzene-d5

Area Limit = 60%-140% of internal standard area
RT Limit = ± 0.33 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII TO-15

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington Job No.: 200-35064-1

SDG No.: 200-35064-1

Client Sample ID: SS-1 Lab Sample ID: 200-35064-1

Matrix: Air Lab File ID: 21628_22.d

Analysis Method: TO-15 Date Collected: 08/30/2016 11:24

Sample wt/vol: 133(mL) Date Analyzed: 09/03/2016 04:36

Soil Aliquot Vol: Dilution Factor: 1.5

Soil Extract Vol.: GC Column: RTX-624 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 108809 Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	
75-71-8	Dichlorodifluoromethane	120.91	0.75	U	0.75	
75-45-6	Freon 22	86.47	2.2		0.75	
76-14-2	1,2-Dichlorotetrafluoroethane	170.92	0.30	U	0.30	
74-87-3	Chloromethane	50.49	0.75	U	0.75	
106-97-8	n-Butane	58.12	12		0.75	
75-01-4	Vinyl chloride	62.50	0.060	U	0.060	
106-99-0	1,3-Butadiene	54.09	0.58		0.30	
74-83-9	Bromomethane	94.94	0.30	U	0.30	
75-00-3	Chloroethane	64.52	0.75	U	0.75	
593-60-2	Bromoethene(Vinyl Bromide)	106.96	0.30	U	0.30	
75-69-4	Trichlorofluoromethane	137.37	0.32		0.30	
76-13-1	Freon TF	187.38	0.30	U	0.30	
75-35-4	1,1-Dichloroethene	96.94	0.30	U	0.30	
67-64-1	Acetone	58.08	40		7.5	
67-63-0	Isopropyl alcohol	60.10	7.5	U	7.5	
75-15-0	Carbon disulfide	76.14	1.6		0.75	
107-05-1	3-Chloropropene	76.53	0.75	U	0.75	
75-09-2	Methylene Chloride	84.93	0.75	U	0.75	
75-65-0	tert-Butyl alcohol	74.12	7.5	U	7.5	
1634-04-4	Methyl tert-butyl ether	88.15	0.30	U	0.30	
156-60-5	trans-1,2-Dichloroethene	96.94	0.30	U	0.30	
110-54-3	n-Hexane	86.17	3.4		0.30	
75-34-3	1,1-Dichloroethane	98.96	0.30	U	0.30	
78-93-3	Methyl Ethyl Ketone	72.11	6.0		0.75	
156-59-2	cis-1,2-Dichloroethene	96.94	0.30	U	0.30	
540-59-0	1,2-Dichloroethene, Total	96.94	0.60	U	0.60	
67-66-3	Chloroform	119.38	0.77		0.30	
109-99-9	Tetrahydrofuran	72.11	7.5	U	7.5	
71-55-6	1,1,1-Trichloroethane	133.41	0.44		0.30	
110-82-7	Cyclohexane	84.16	0.30	U	0.30	
56-23-5	Carbon tetrachloride	153.81	0.060	U	0.060	
540-84-1	2,2,4-Trimethylpentane	114.23	0.30	U	0.30	
71-43-2	Benzene	78.11	0.42		0.30	
107-06-2	1,2-Dichloroethane	98.96	0.30	U	0.30	

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington | Job No.: 200-35064-1

SDG No.: 200-35064-1

Client Sample ID: SS-1 | Lab Sample ID: 200-35064-1

Matrix: Air | Lab File ID: 21628_22.d

Analysis Method: TO-15 | Date Collected: 08/30/2016 11:24

Sample wt/vol: 133(mL) | Date Analyzed: 09/03/2016 04:36

Soil Aliquot Vol: | Dilution Factor: 1.5

Soil Extract Vol.: | GC Column: RTX-624 ID: 0.32(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 108809 | Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	
142-82-5	n-Heptane	100.21	1.7		0.30	
79-01-6	Trichloroethene	131.39	0.060	U	0.060	
80-62-6	Methyl methacrylate	100.12	0.75	U	0.75	
78-87-5	1,2-Dichloropropane	112.99	0.30	U	0.30	
123-91-1	1,4-Dioxane	88.11	7.5	U	7.5	
75-27-4	Bromodichloromethane	163.83	0.30	U	0.30	
10061-01-5	cis-1,3-Dichloropropene	110.97	0.30	U	0.30	
108-10-1	methyl isobutyl ketone	100.16	0.75	U	0.75	
108-88-3	Toluene	92.14	0.54		0.30	
10061-02-6	trans-1,3-Dichloropropene	110.97	0.30	U	0.30	
79-00-5	1,1,2-Trichloroethane	133.41	0.30	U	0.30	
127-18-4	Tetrachloroethene	165.83	8.0		0.30	
591-78-6	Methyl Butyl Ketone (2-Hexanone)	100.20	0.75	U	0.75	
124-48-1	Dibromochloromethane	208.29	0.30	U	0.30	
106-93-4	1,2-Dibromoethane	187.87	0.30	U	0.30	
108-90-7	Chlorobenzene	112.56	0.30	U	0.30	
100-41-4	Ethylbenzene	106.17	0.30	U	0.30	
179601-23-1	m,p-Xylene	106.17	0.75	U	0.75	
95-47-6	Xylene, o-	106.17	0.30	U	0.30	
1330-20-7	Xylene (total)	106.17	1.1	U	1.1	
100-42-5	Styrene	104.15	0.30	U	0.30	
75-25-2	Bromoform	252.75	0.30	U	0.30	
98-82-8	Cumene	120.19	0.30	U	0.30	
79-34-5	1,1,2,2-Tetrachloroethane	167.85	0.30	U	0.30	
103-65-1	n-Propylbenzene	120.19	0.30	U	0.30	
622-96-8	4-Ethyltoluene	120.20	0.30	U	0.30	
108-67-8	1,3,5-Trimethylbenzene	120.20	0.30	U	0.30	
95-49-8	2-Chlorotoluene	126.59	0.30	U	0.30	
98-06-6	tert-Butylbenzene	134.22	0.30	U	0.30	
95-63-6	1,2,4-Trimethylbenzene	120.20	0.30	U	0.30	
135-98-8	sec-Butylbenzene	134.22	0.30	U	0.30	
99-87-6	4-Isopropyltoluene	134.22	0.30	U	0.30	
541-73-1	1,3-Dichlorobenzene	147.00	0.30	U	0.30	
106-46-7	1,4-Dichlorobenzene	147.00	0.30	U	0.30	

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington Job No.: 200-35064-1

SDG No.: 200-35064-1

Client Sample ID: SS-1 Lab Sample ID: 200-35064-1

Matrix: Air Lab File ID: 21628_22.d

Analysis Method: TO-15 Date Collected: 08/30/2016 11:24

Sample wt/vol: 133(mL) Date Analyzed: 09/03/2016 04:36

Soil Aliquot Vol: Dilution Factor: 1.5

Soil Extract Vol.: GC Column: RTX-624 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 108809 Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	
100-44-7	Benzyl chloride	126.58	0.30	U	0.30	
104-51-8	n-Butylbenzene	134.22	0.30	U	0.30	
95-50-1	1,2-Dichlorobenzene	147.00	0.30	U	0.30	
120-82-1	1,2,4-Trichlorobenzene	181.45	0.75	U	0.75	
87-68-3	Hexachlorobutadiene	260.76	0.30	U	0.30	
91-20-3	Naphthalene	128.17	0.75	U	0.75	

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington | Job No.: 200-35064-1

SDG No.: 200-35064-1

Client Sample ID: SS-1 | Lab Sample ID: 200-35064-1

Matrix: Air | Lab File ID: 21628_22.d

Analysis Method: TO-15 | Date Collected: 08/30/2016 11:24

Sample wt/vol: 133(mL) | Date Analyzed: 09/03/2016 04:36

Soil Aliquot Vol: | Dilution Factor: 1.5

Soil Extract Vol.: | GC Column: RTX-624 ID: 0.32(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 108809 | Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	
75-71-8	Dichlorodifluoromethane	120.91	3.7	U	3.7	
75-45-6	Freon 22	86.47	7.7		2.7	
76-14-2	1,2-Dichlorotetrafluoroethane	170.92	2.1	U	2.1	
74-87-3	Chloromethane	50.49	1.5	U	1.5	
106-97-8	n-Butane	58.12	29		1.8	
75-01-4	Vinyl chloride	62.50	0.15	U	0.15	
106-99-0	1,3-Butadiene	54.09	1.3		0.66	
74-83-9	Bromomethane	94.94	1.2	U	1.2	
75-00-3	Chloroethane	64.52	2.0	U	2.0	
593-60-2	Bromoethene(Vinyl Bromide)	106.96	1.3	U	1.3	
75-69-4	Trichlorofluoromethane	137.37	1.8		1.7	
76-13-1	Freon TF	187.38	2.3	U	2.3	
75-35-4	1,1-Dichloroethene	96.94	1.2	U	1.2	
67-64-1	Acetone	58.08	95		18	
67-63-0	Isopropyl alcohol	60.10	18	U	18	
75-15-0	Carbon disulfide	76.14	4.9		2.3	
107-05-1	3-Chloropropene	76.53	2.3	U	2.3	
75-09-2	Methylene Chloride	84.93	2.6	U	2.6	
75-65-0	tert-Butyl alcohol	74.12	23	U	23	
1634-04-4	Methyl tert-butyl ether	88.15	1.1	U	1.1	
156-60-5	trans-1,2-Dichloroethene	96.94	1.2	U	1.2	
110-54-3	n-Hexane	86.17	12		1.1	
75-34-3	1,1-Dichloroethane	98.96	1.2	U	1.2	
78-93-3	Methyl Ethyl Ketone	72.11	18		2.2	
156-59-2	cis-1,2-Dichloroethene	96.94	1.2	U	1.2	
540-59-0	1,2-Dichloroethene, Total	96.94	2.4	U	2.4	
67-66-3	Chloroform	119.38	3.8		1.5	
109-99-9	Tetrahydrofuran	72.11	22	U	22	
71-55-6	1,1,1-Trichloroethane	133.41	2.4		1.6	
110-82-7	Cyclohexane	84.16	1.0	U	1.0	
56-23-5	Carbon tetrachloride	153.81	0.38	U	0.38	
540-84-1	2,2,4-Trimethylpentane	114.23	1.4	U	1.4	
71-43-2	Benzene	78.11	1.3		0.96	
107-06-2	1,2-Dichloroethane	98.96	1.2	U	1.2	

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington | Job No.: 200-35064-1

SDG No.: 200-35064-1

Client Sample ID: SS-1 | Lab Sample ID: 200-35064-1

Matrix: Air | Lab File ID: 21628_22.d

Analysis Method: TO-15 | Date Collected: 08/30/2016 11:24

Sample wt/vol: 133(mL) | Date Analyzed: 09/03/2016 04:36

Soil Aliquot Vol: | Dilution Factor: 1.5

Soil Extract Vol.: | GC Column: RTX-624 ID: 0.32(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 108809 | Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	
142-82-5	n-Heptane	100.21	6.9		1.2	
79-01-6	Trichloroethene	131.39	0.32	U	0.32	
80-62-6	Methyl methacrylate	100.12	3.1	U	3.1	
78-87-5	1,2-Dichloropropane	112.99	1.4	U	1.4	
123-91-1	1,4-Dioxane	88.11	27	U	27	
75-27-4	Bromodichloromethane	163.83	2.0	U	2.0	
10061-01-5	cis-1,3-Dichloropropene	110.97	1.4	U	1.4	
108-10-1	methyl isobutyl ketone	100.16	3.1	U	3.1	
108-88-3	Toluene	92.14	2.0		1.1	
10061-02-6	trans-1,3-Dichloropropene	110.97	1.4	U	1.4	
79-00-5	1,1,2-Trichloroethane	133.41	1.6	U	1.6	
127-18-4	Tetrachloroethene	165.83	54		2.0	
591-78-6	Methyl Butyl Ketone (2-Hexanone)	100.20	3.1	U	3.1	
124-48-1	Dibromochloromethane	208.29	2.6	U	2.6	
106-93-4	1,2-Dibromoethane	187.87	2.3	U	2.3	
108-90-7	Chlorobenzene	112.56	1.4	U	1.4	
100-41-4	Ethylbenzene	106.17	1.3	U	1.3	
179601-23-1	m,p-Xylene	106.17	3.3	U	3.3	
95-47-6	Xylene, o-	106.17	1.3	U	1.3	
1330-20-7	Xylene (total)	106.17	4.6	U	4.6	
100-42-5	Styrene	104.15	1.3	U	1.3	
75-25-2	Bromoform	252.75	3.1	U	3.1	
98-82-8	Cumene	120.19	1.5	U	1.5	
79-34-5	1,1,2,2-Tetrachloroethane	167.85	2.1	U	2.1	
103-65-1	n-Propylbenzene	120.19	1.5	U	1.5	
622-96-8	4-Ethyltoluene	120.20	1.5	U	1.5	
108-67-8	1,3,5-Trimethylbenzene	120.20	1.5	U	1.5	
95-49-8	2-Chlorotoluene	126.59	1.6	U	1.6	
98-06-6	tert-Butylbenzene	134.22	1.6	U	1.6	
95-63-6	1,2,4-Trimethylbenzene	120.20	1.5	U	1.5	
135-98-8	sec-Butylbenzene	134.22	1.6	U	1.6	
99-87-6	4-Isopropyltoluene	134.22	1.6	U	1.6	
541-73-1	1,3-Dichlorobenzene	147.00	1.8	U	1.8	
106-46-7	1,4-Dichlorobenzene	147.00	1.8	U	1.8	

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington Job No.: 200-35064-1

SDG No.: 200-35064-1

Client Sample ID: SS-1 Lab Sample ID: 200-35064-1

Matrix: Air Lab File ID: 21628_22.d

Analysis Method: TO-15 Date Collected: 08/30/2016 11:24

Sample wt/vol: 133(mL) Date Analyzed: 09/03/2016 04:36

Soil Aliquot Vol: Dilution Factor: 1.5

Soil Extract Vol.: GC Column: RTX-624 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 108809 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	
100-44-7	Benzyl chloride	126.58	1.6	U	1.6	
104-51-8	n-Butylbenzene	134.22	1.6	U	1.6	
95-50-1	1,2-Dichlorobenzene	147.00	1.8	U	1.8	
120-82-1	1,2,4-Trichlorobenzene	181.45	5.6	U	5.6	
87-68-3	Hexachlorobutadiene	260.76	3.2	U	3.2	
91-20-3	Naphthalene	128.17	3.9	U	3.9	

TestAmerica Burlington
Target Compound Quantitation Report

Data File: \\ChromNA\Burlington\ChromData\CHW.i\20160902-21628.b\21628_22.d
Lims ID: 200-35064-A-1
Client ID: SS-1
Sample Type: Client
Inject. Date: 03-Sep-2016 04:36:30 ALS Bottle#: 18 Worklist Smp#: 22
Purge Vol: 200.000 mL Dil. Factor: 1.5000
Sample Info: 200-0021628-022
Misc. Info.: 34064-01
Operator ID: pad Instrument ID: CHW.i

Method: \\ChromNA\Burlington\ChromData\CHW.i\20160902-21628.b\TO15_MasterMethod_(v1).m
Limit Group: AI_TO15_ICAL
Last Update: 07-Sep-2016 08:42:26 Calib Date: 23-Aug-2016 00:38:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Burlington\ChromData\CHW.i\20160822-21457.b\21457_13.d

Column 1 : RTX-624 (0.32 mm) Det: MS SCAN
Process Host: XAWRK010

First Level Reviewer: puangmaleek Date: 07-Sep-2016 09:47:54

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
2 Dichlorodifluoromethane	85	5.383	5.383	0.000	98	28211	0.3734	
3 Chlorodifluoromethane	51	5.468	5.463	0.005	97	50172	1.45	
4 1,2-Dichloro-1,1,2,2-tetra	85		5.789				ND	
5 Chloromethane	50	5.993	5.987	0.006	97	6781	0.3522	
6 Butane	43	6.255	6.260	-0.005	98	282226	8.27	
7 Vinyl chloride	62		6.314				ND	
8 Butadiene	54	6.410	6.415	-0.005	85	7340	0.3849	
10 Bromomethane	94		7.212				ND	
11 Chloroethane	64		7.464				ND	
13 Vinyl bromide	106		7.876				ND	
14 Trichlorofluoromethane	101	7.967	7.967	0.000	96	16149	0.2118	
20 1,1,2-Trichloro-1,2,2-trif	101	8.972	8.978	-0.006	54	3103	0.0500	
21 1,1-Dichloroethene	96		9.042				ND	
22 Acetone	43	9.234	9.240	-0.006	94	848729	26.6	
23 Carbon disulfide	76	9.438	9.438	0.000	98	78909	1.06	
24 Isopropyl alcohol	45	9.438	9.438	0.000	80	58421	1.81	
25 3-Chloro-1-propene	41		9.743				ND	
27 Methylene Chloride	49	10.016	10.005	0.011	76	8512	0.3361	M
28 2-Methyl-2-propanol	59	10.133	10.128	0.005	91	26194	0.5362	
S 30 1,2-Dichloroethene, Total	61		10.200				ND	
29 Methyl tert-butyl ether	73		10.347				ND	
31 trans-1,2-Dichloroethene	61		10.401				ND	
33 Hexane	57	10.732	10.738	-0.006	85	95667	2.26	
34 1,1-Dichloroethane	63		11.214				ND	
37 cis-1,2-Dichloroethene	96		12.220				ND	
38 2-Butanone (MEK)	72	12.241	12.241	0.000	95	60895	3.97	
41 Tetrahydrofuran	42		12.648				ND	
* 40 Chlorobromomethane	128	12.648	12.653	-0.005	75	247647	10.0	
42 Chloroform	83	12.739	12.744	-0.006	94	30030	0.5165	
43 Cyclohexane	84		13.011				ND	
44 1,1,1-Trichloroethane	97	13.022	13.028	-0.006	94	17317	0.2960	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
45 Carbon tetrachloride	117	13.252	13.252	0.000	80	2020	0.0343	
46 Isooctane	57	13.611	13.605	0.005	78	4190	0.0311	
47 Benzene	78	13.664	13.670	-0.006	91	26147	0.2785	
48 1,2-Dichloroethane	62		13.819				ND	
49 n-Heptane	43	13.921	13.921	0.000	79	49770	1.12	
* 50 1,4-Difluorobenzene	114	14.365	14.365	0.000	91	1152637	10.0	
53 Trichloroethene	95		14.793				ND	
54 1,2-Dichloropropane	63		15.296				ND	
55 Methyl methacrylate	69		15.371				ND	
56 1,4-Dioxane	88	15.462	15.456	0.006	84	47010	2.95	
58 Dichlorobromomethane	83		15.751				ND	
60 cis-1,3-Dichloropropene	75		16.580				ND	
61 4-Methyl-2-pentanone (MIBK	43	16.815	16.815	0.000	89	7006	0.1275	
65 Toluene	92	17.125	17.131	-0.006	93	27660	0.3594	
66 trans-1,3-Dichloropropene	75		17.650				ND	
67 1,1,2-Trichloroethane	83		18.008				ND	
68 Tetrachloroethene	166	18.126	18.126	0.000	91	404930	5.32	
69 2-Hexanone	43	18.404	18.399	0.005	94	14661	0.2835	
71 Chlorodibromomethane	129		18.736				ND	
72 Ethylene Dibromide	107		19.019				ND	
* 74 Chlorobenzene-d5	117	19.854	19.859	-0.005	80	1112046	10.0	
75 Chlorobenzene	112		19.918				ND	
76 Ethylbenzene	91	20.046	20.041	0.005	97	11179	0.0688	
S 73 Xylenes, Total	106				0		0.1811	
78 m-Xylene & p-Xylene	106	20.271	20.276	-0.005	0	8503	0.1250	
79 o-Xylene	106	21.014	21.020	-0.006	95	3838	0.0561	
80 Styrene	104	21.057	21.063	-0.006	38	2953	0.0285	
81 Bromoform	173		21.443				ND	
82 Isopropylbenzene	105	21.608	21.608	0.000	75	2703	0.0141	
84 1,1,2,2-Tetrachloroethane	83		22.192				ND	
85 N-Propylbenzene	91	22.266	22.266	0.000	99	7453	0.0342	
88 4-Ethyltoluene	105	22.432	22.443	-0.011	96	4736	0.0250	
89 2-Chlorotoluene	91		22.464				ND	
90 1,3,5-Trimethylbenzene	105	22.534	22.539	-0.005	93	3668	0.0231	
92 tert-Butylbenzene	119		23.010				ND	
93 1,2,4-Trimethylbenzene	105	23.096	23.096	0.000	95	9384	0.0595	
94 sec-Butylbenzene	105	23.326	23.326	0.000	96	3942	0.0170	
95 4-Isopropyltoluene	119	23.524	23.524	0.000	96	6339	0.0315	
96 1,3-Dichlorobenzene	146		23.577				ND	
97 1,4-Dichlorobenzene	146		23.716				ND	
98 Benzyl chloride	91		23.925				ND	
100 n-Butylbenzene	91	24.133	24.134	-0.001	43	4278	0.0273	
101 1,2-Dichlorobenzene	146		24.294				ND	
103 1,2,4-Trichlorobenzene	180	27.044	27.044	0.000	39	2449	0.0365	
104 Hexachlorobutadiene	225	27.236	27.242	-0.006	88	2850	0.0354	
105 Naphthalene	128	27.611	27.600	0.011	94	15560	0.1303	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

ATTO15WISs_00004 Amount Added: 20.00 Units: mL Run Reagent

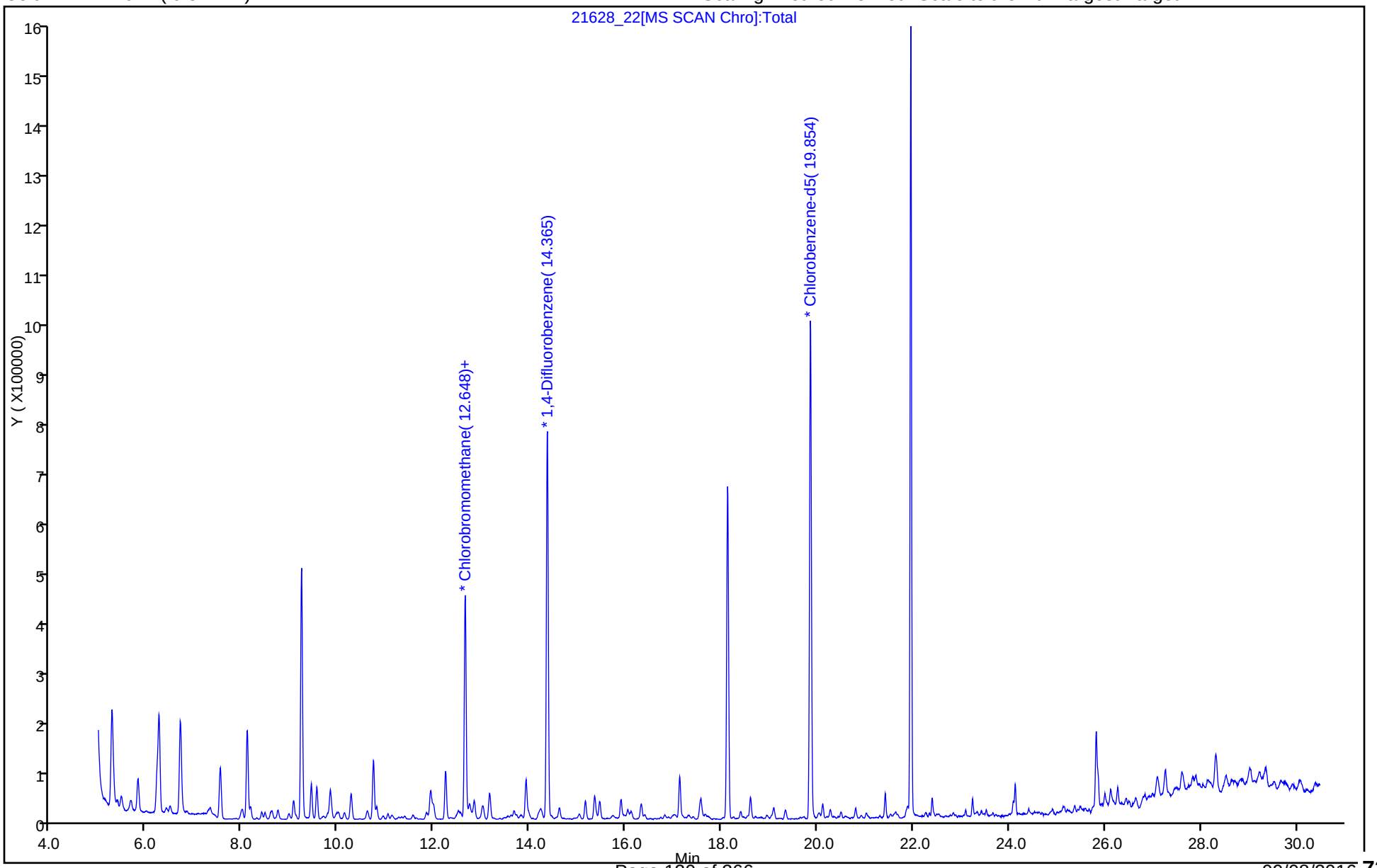
Report Date: 07-Sep-2016 08:42:31 Chrom Revision: 2.2 02-Sep-2016 12:39:46

TestAmerica Burlington

Data File: \\ChromNA\Burlington\ChromData\CHW.i\20160902-21628.b\21628_22.d

Injection Date:	03-Sep-2016 04:36:30	Instrument ID:	CHW.i	Operator ID:	pad
Lims ID:	200-35064-A-1	Lab Sample ID:	200-35064-1	Worklist Smp#:	22
Client ID:	SS-1				
Purge Vol:	200.000 mL	Dil. Factor:	1.5000	ALS Bottle#:	18
Method:	TO15_MasterMethod_(v1)	Limit Group:	AI_TO15_ICAL		

Column: RTX-624 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



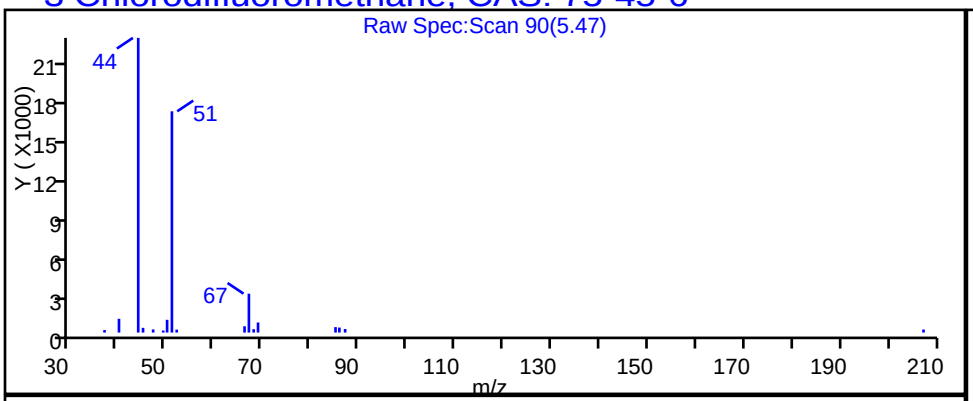
Report Date: 07-Sep-2016 08:42:31 Chrom Revision: 2.2 02-Sep-2016 12:39:46

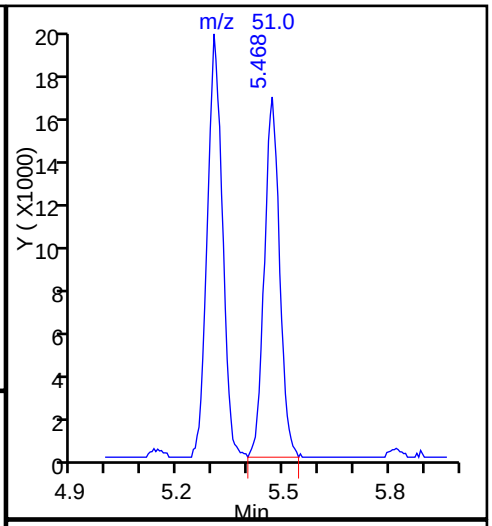
TestAmerica Burlington

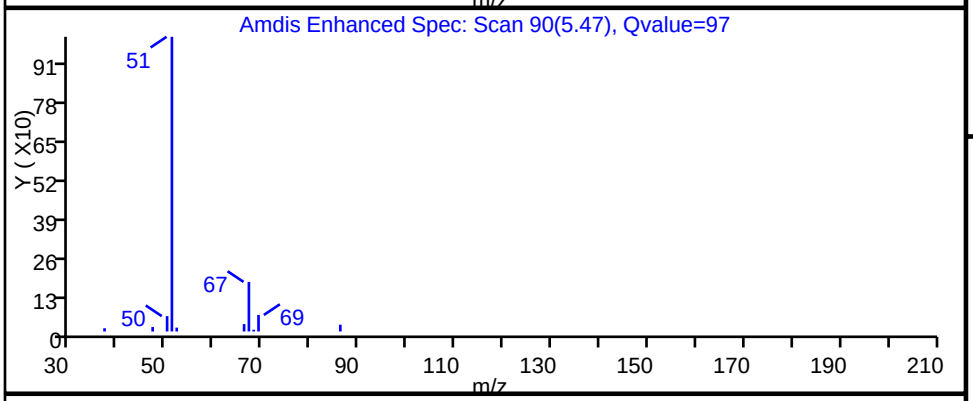
Data File: \\ChromNA\Burlington\ChromData\CHW.i\20160902-21628.b\21628_22.d

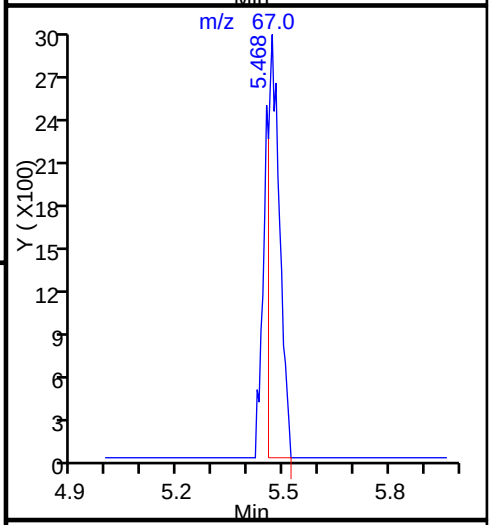
Injection Date:	03-Sep-2016 04:36:30	Instrument ID:	CHW.i		
Lims ID:	200-35064-A-1	Lab Sample ID:	200-35064-1		
Client ID:	SS-1				
Operator ID:	pad	ALS Bottle#:	18	Worklist Smp#:	22
Purge Vol:	200.000 mL	Dil. Factor:	1.5000		
Method:	TO15_MasterMethod_(v1)	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

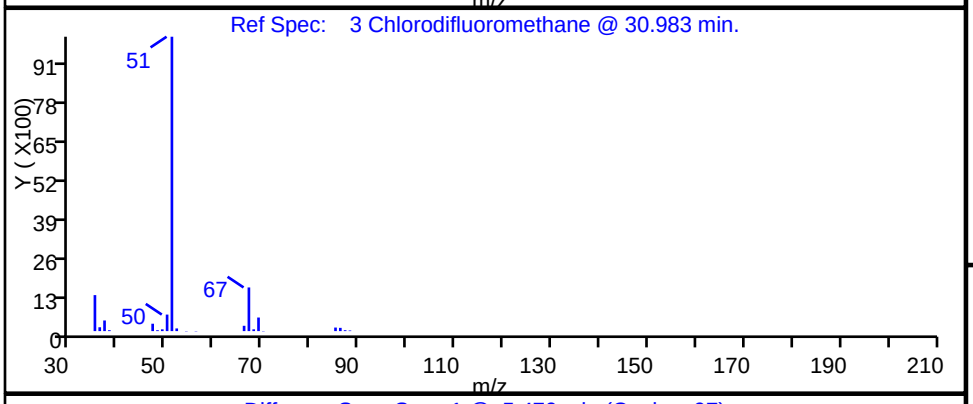
3 Chlorodifluoromethane, CAS: 75-45-6

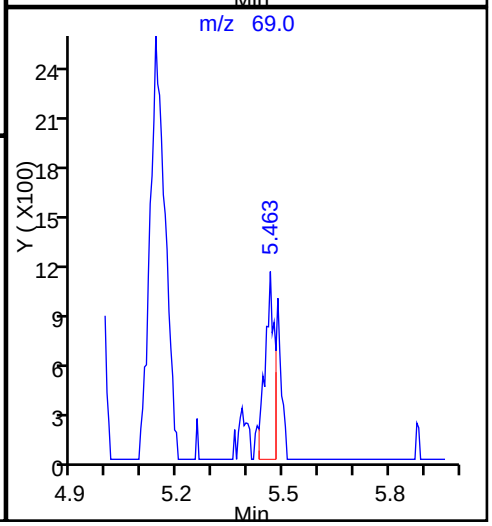


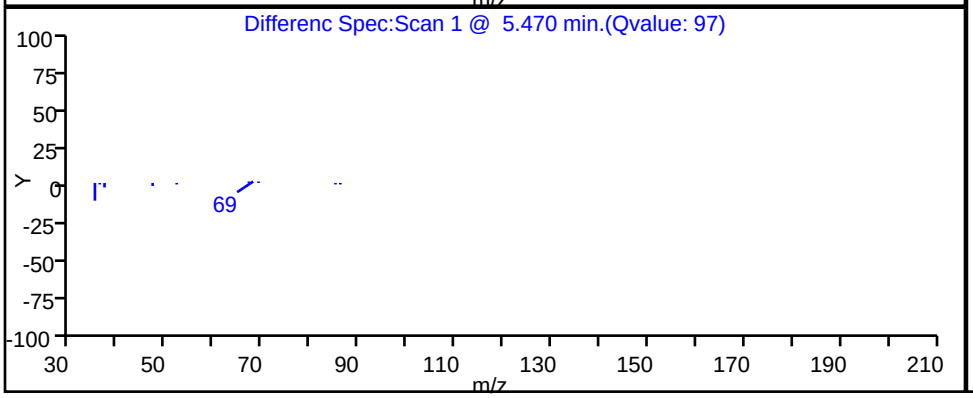








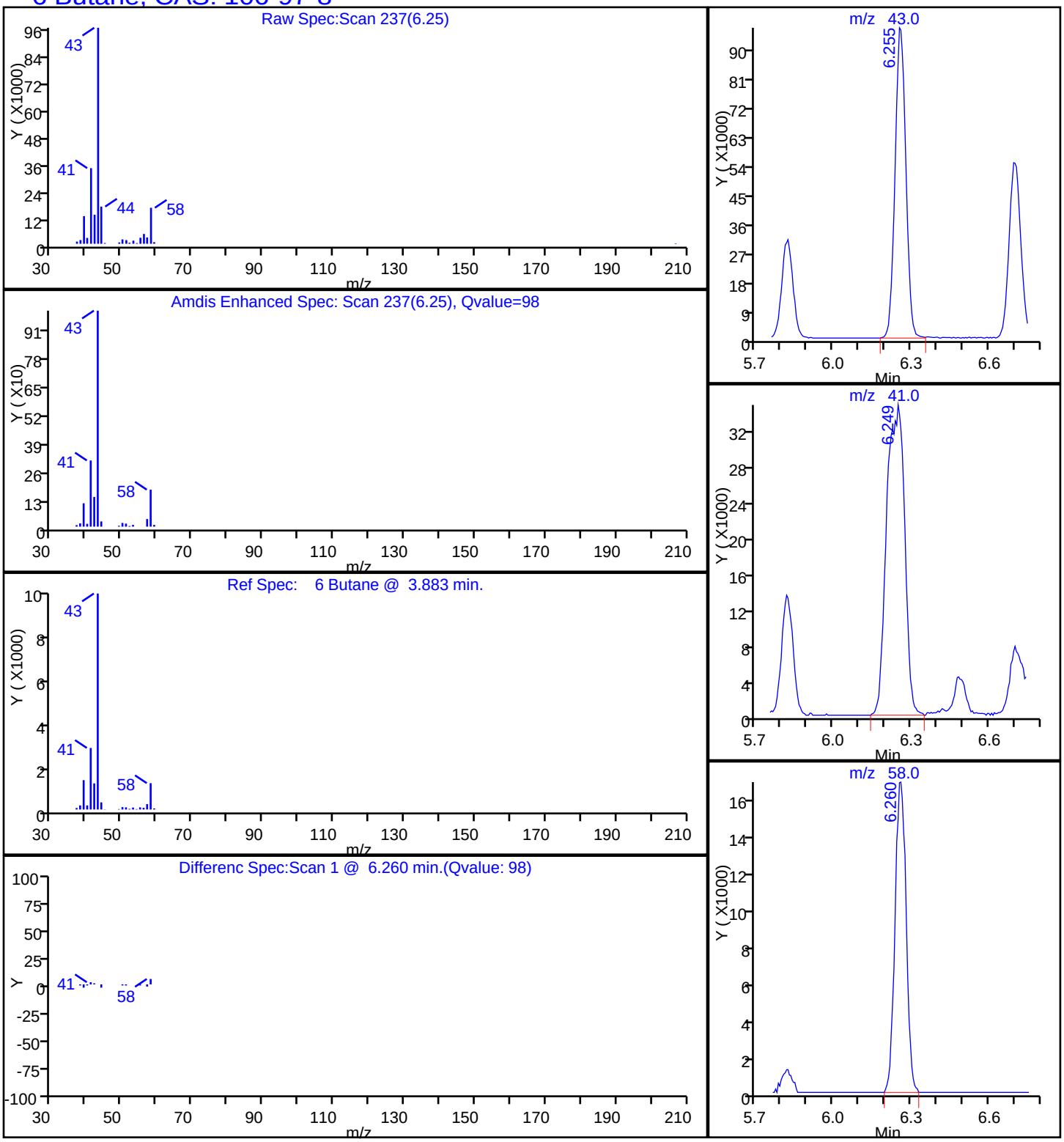




TestAmerica Burlington

Data File:	\\ChromNA\Burlington\ChromData\CHW.i\20160902-21628.b\21628_22.d				
Injection Date:	03-Sep-2016 04:36:30	Instrument ID:	CHW.i		
Lims ID:	200-35064-A-1	Lab Sample ID:	200-35064-1		
Client ID:	SS-1				
Operator ID:	pad	ALS Bottle#:	18	Worklist Smp#:	22
Purge Vol:	200.000 mL	Dil. Factor:	1.5000		
Method:	TO15_MasterMethod_(v1)	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

6 Butane, CAS: 106-97-8



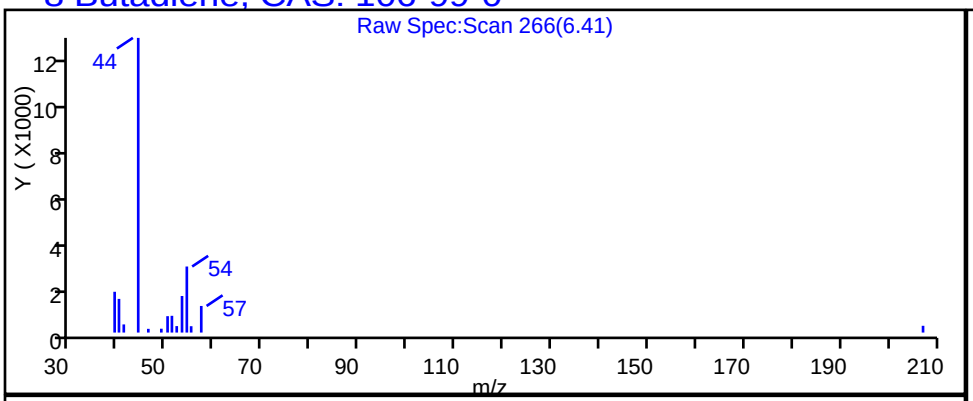
Report Date: 07-Sep-2016 08:42:31 Chrom Revision: 2.2 02-Sep-2016 12:39:46

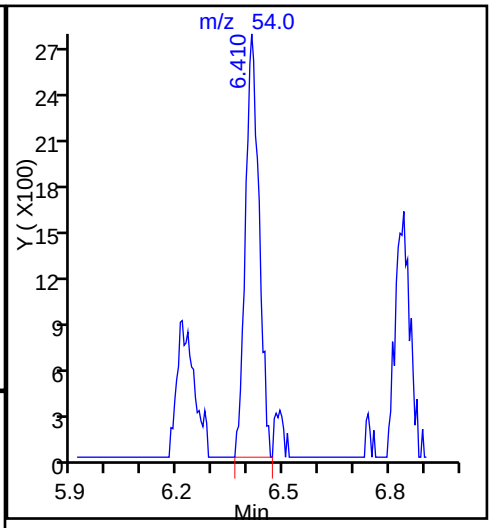
TestAmerica Burlington

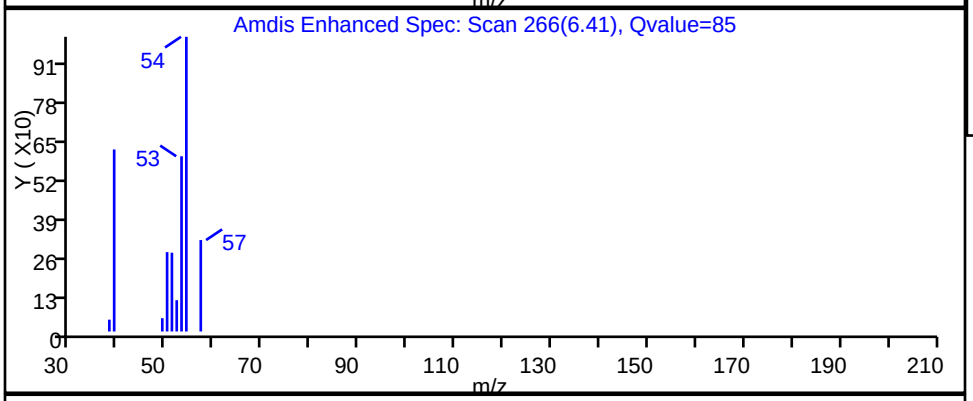
Data File: \\ChromNA\Burlington\ChromData\CHW.i\20160902-21628.b\21628_22.d

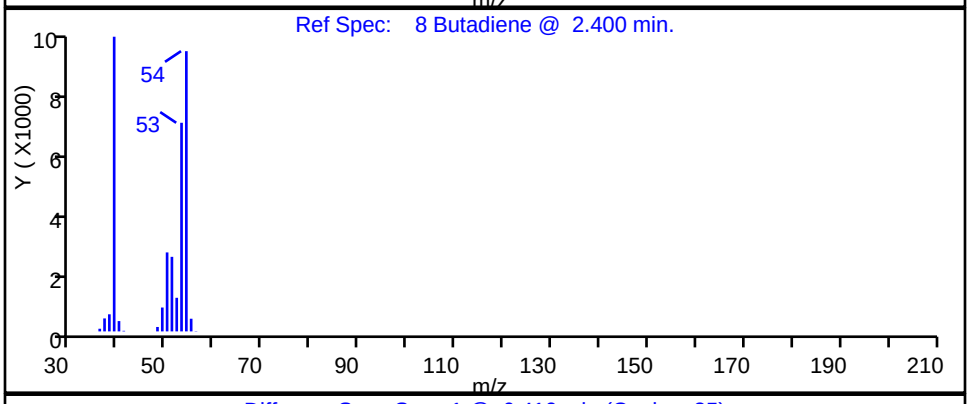
Injection Date:	03-Sep-2016 04:36:30	Instrument ID:	CHW.i		
Lims ID:	200-35064-A-1	Lab Sample ID:	200-35064-1		
Client ID:	SS-1				
Operator ID:	pad	ALS Bottle#:	18	Worklist Smp#:	22
Purge Vol:	200.000 mL	Dil. Factor:	1.5000		
Method:	TO15_MasterMethod_(v1)	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

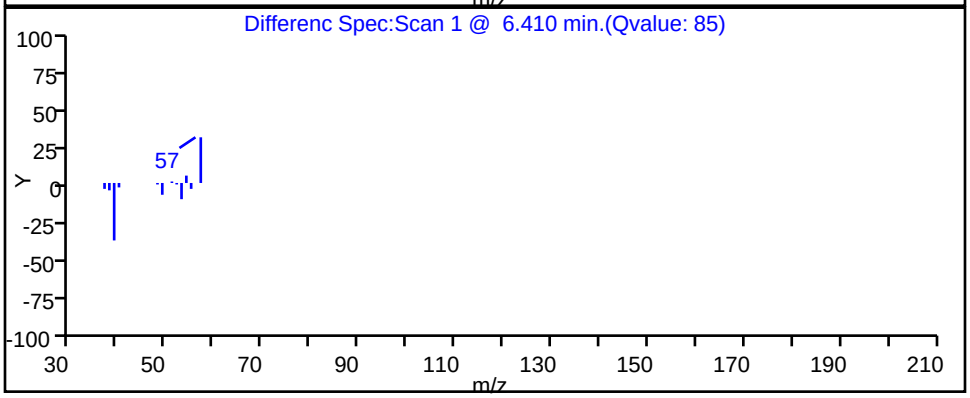
8 Butadiene, CAS: 106-99-0











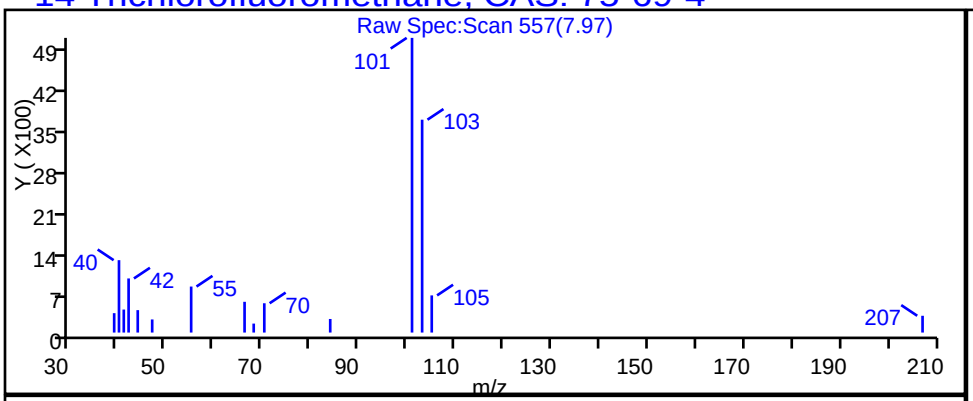
Report Date: 07-Sep-2016 08:42:31 Chrom Revision: 2.2 02-Sep-2016 12:39:46

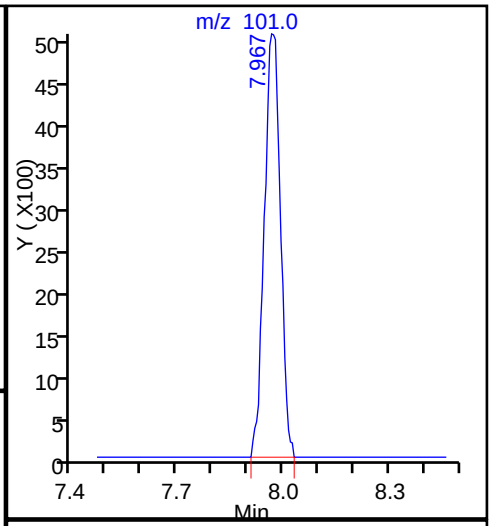
TestAmerica Burlington

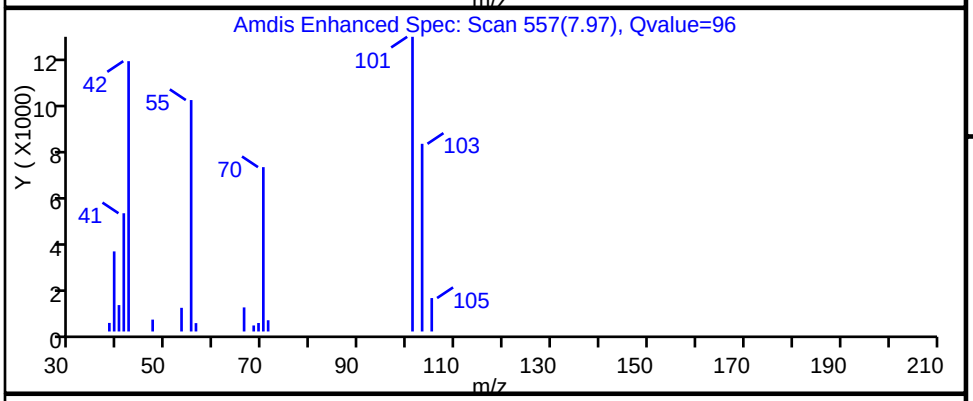
Data File: \\ChromNA\Burlington\ChromData\CHW.i\20160902-21628.b\21628_22.d

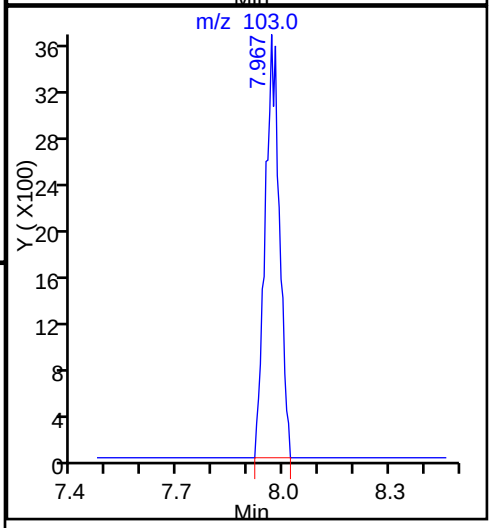
Injection Date:	03-Sep-2016 04:36:30	Instrument ID:	CHW.i		
Lims ID:	200-35064-A-1	Lab Sample ID:	200-35064-1		
Client ID:	SS-1				
Operator ID:	pad	ALS Bottle#:	18	Worklist Smp#:	22
Purge Vol:	200.000 mL	Dil. Factor:	1.5000		
Method:	TO15_MasterMethod_(v1)	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

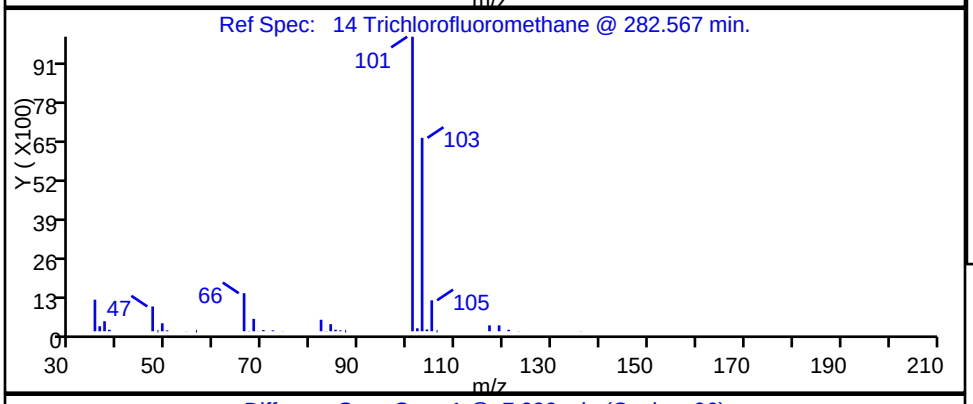
14 Trichlorofluoromethane, CAS: 75-69-4

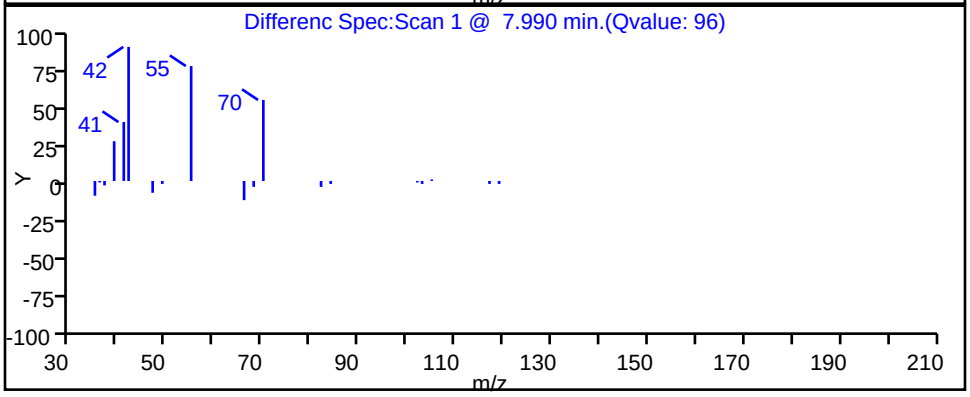












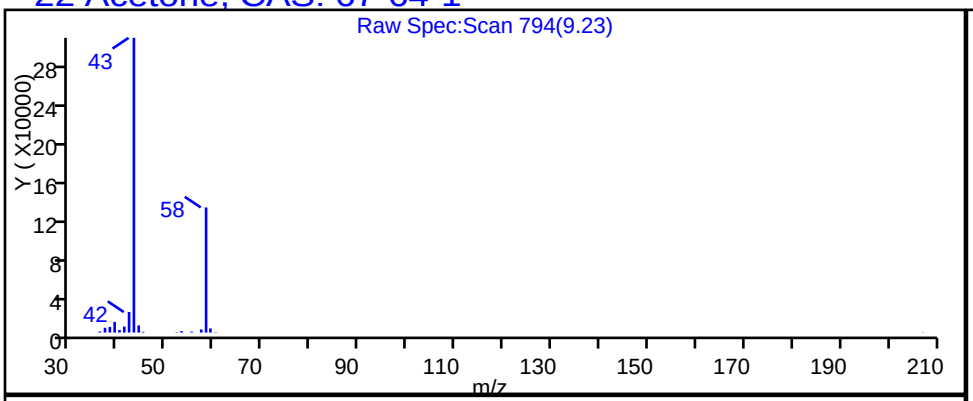
Report Date: 07-Sep-2016 08:42:31 Chrom Revision: 2.2 02-Sep-2016 12:39:46

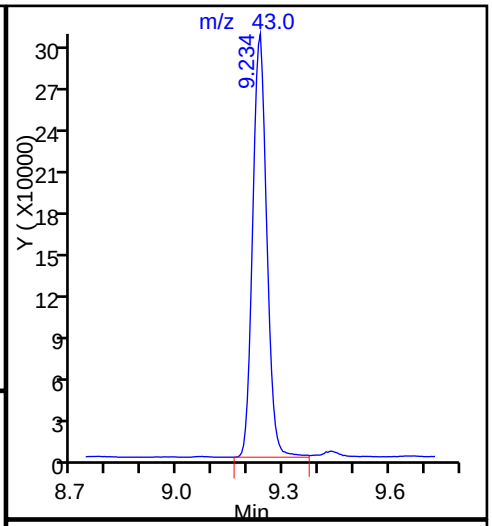
TestAmerica Burlington

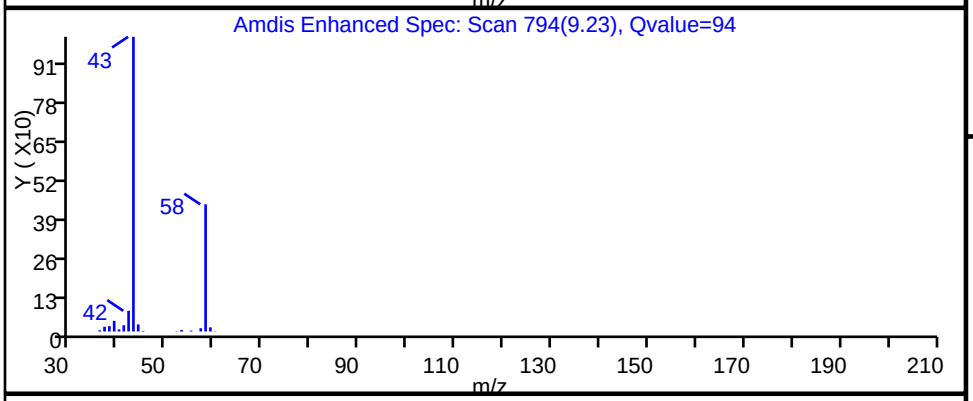
Data File: \\ChromNA\Burlington\ChromData\CHW.i\20160902-21628.b\21628_22.d

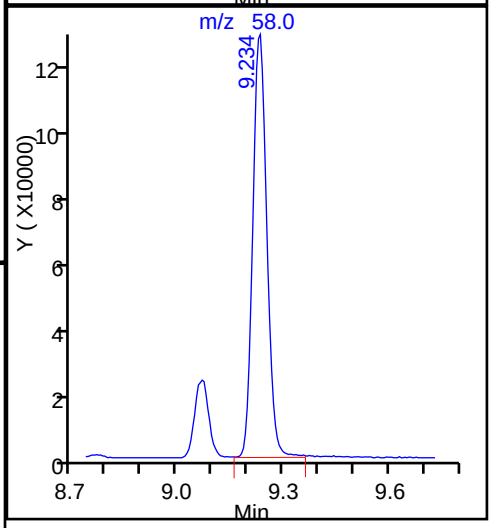
Injection Date:	03-Sep-2016 04:36:30	Instrument ID:	CHW.i		
Lims ID:	200-35064-A-1	Lab Sample ID:	200-35064-1		
Client ID:	SS-1				
Operator ID:	pad	ALS Bottle#:	18	Worklist Smp#:	22
Purge Vol:	200.000 mL	Dil. Factor:	1.5000		
Method:	TO15_MasterMethod_(v1)	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

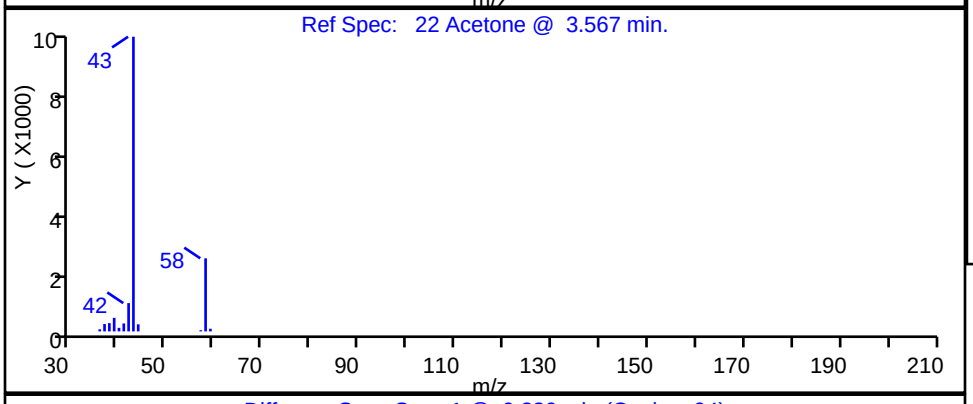
22 Acetone, CAS: 67-64-1

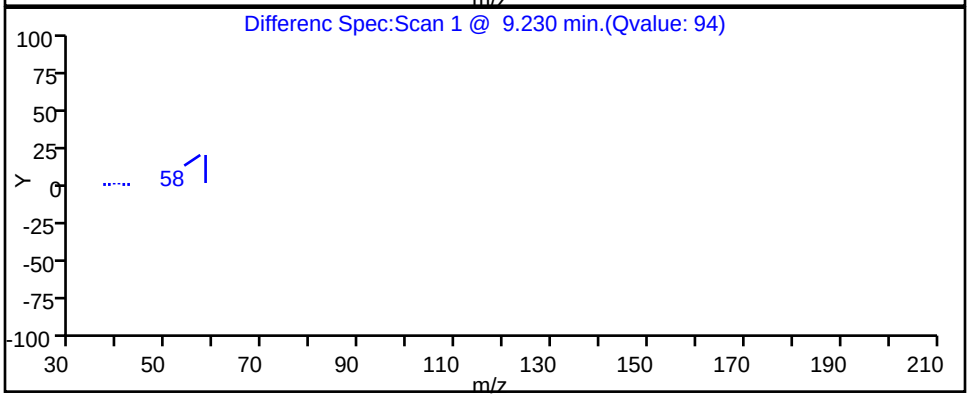










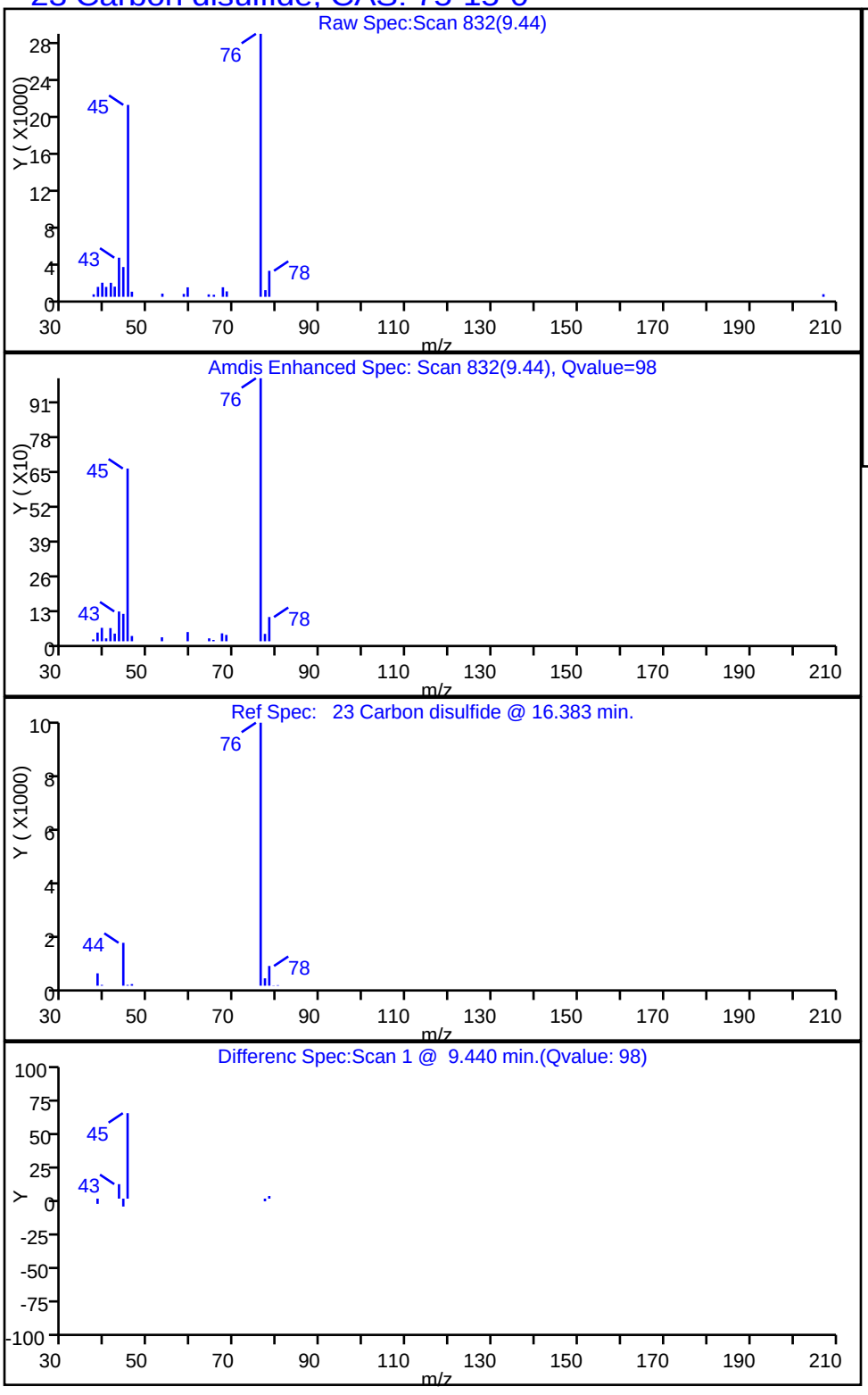


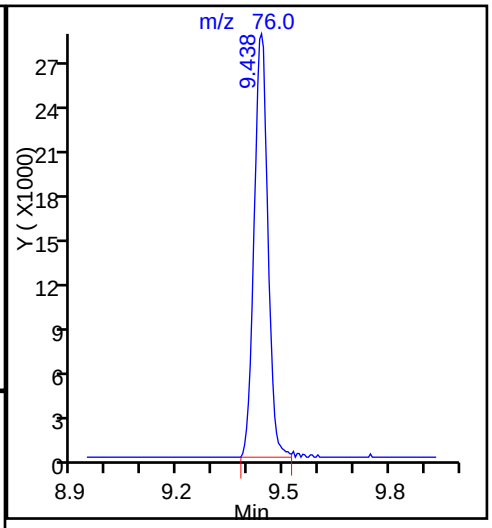
Report Date: 07-Sep-2016 08:42:32 Chrom Revision: 2.2 02-Sep-2016 12:39:46

TestAmerica Burlington

Data File:	\\ChromNA\Burlington\ChromData\CHW.i\20160902-21628.b\21628_22.d				
Injection Date:	03-Sep-2016 04:36:30	Instrument ID:	CHW.i		
Lims ID:	200-35064-A-1	Lab Sample ID:	200-35064-1		
Client ID:	SS-1				
Operator ID:	pad	ALS Bottle#:	18	Worklist Smp#:	22
Purge Vol:	200.000 mL	Dil. Factor:	1.5000		
Method:	TO15_MasterMethod_(v1)	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

23 Carbon disulfide, CAS: 75-15-0





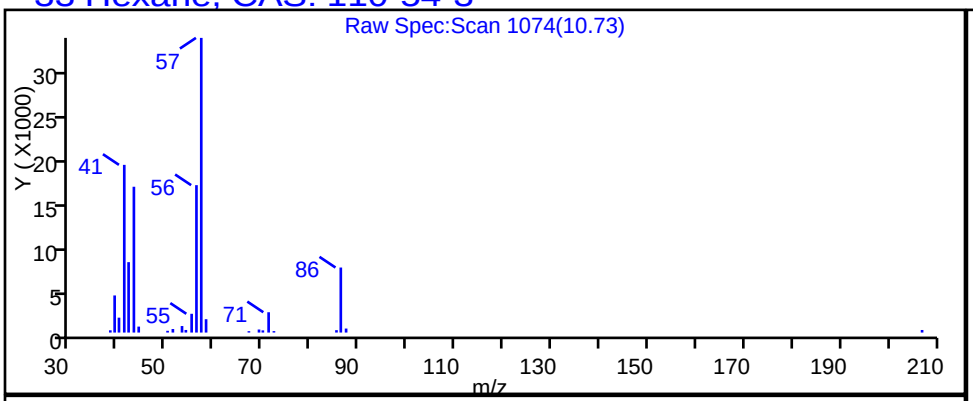
Report Date: 07-Sep-2016 08:42:32 Chrom Revision: 2.2 02-Sep-2016 12:39:46

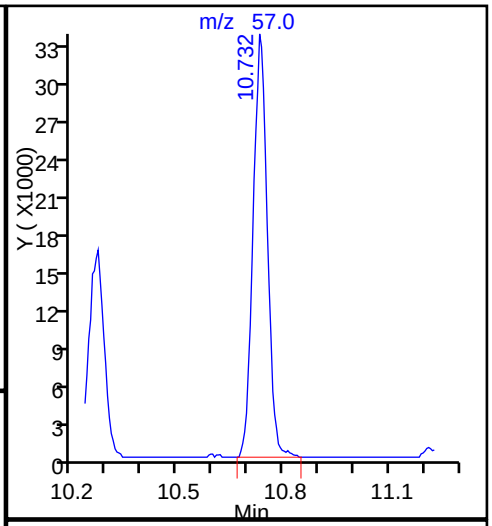
TestAmerica Burlington

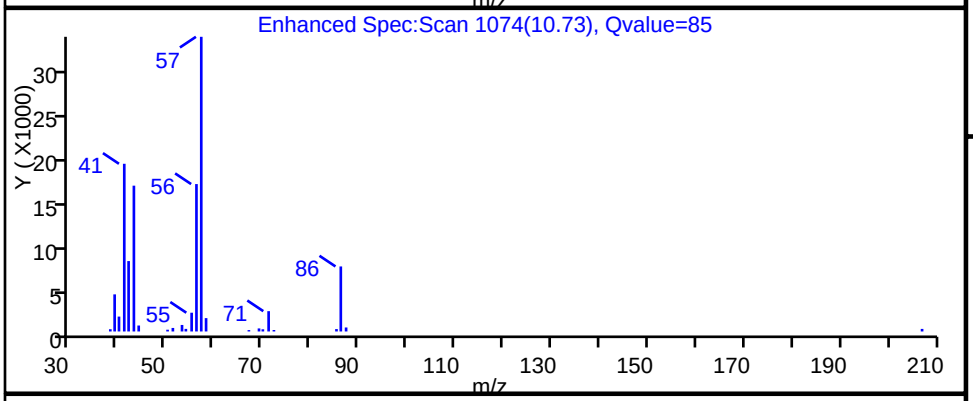
Data File: \\ChromNA\Burlington\ChromData\CHW.i\20160902-21628.b\21628_22.d

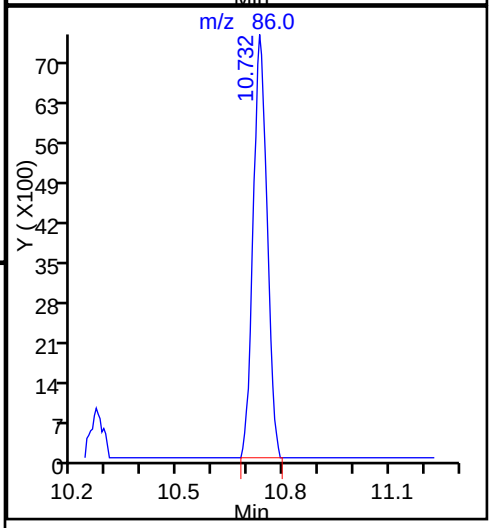
Injection Date:	03-Sep-2016 04:36:30	Instrument ID:	CHW.i		
Lims ID:	200-35064-A-1	Lab Sample ID:	200-35064-1		
Client ID:	SS-1				
Operator ID:	pad	ALS Bottle#:	18	Worklist Smp#:	22
Purge Vol:	200.000 mL	Dil. Factor:	1.5000		
Method:	TO15_MasterMethod_(v1)	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

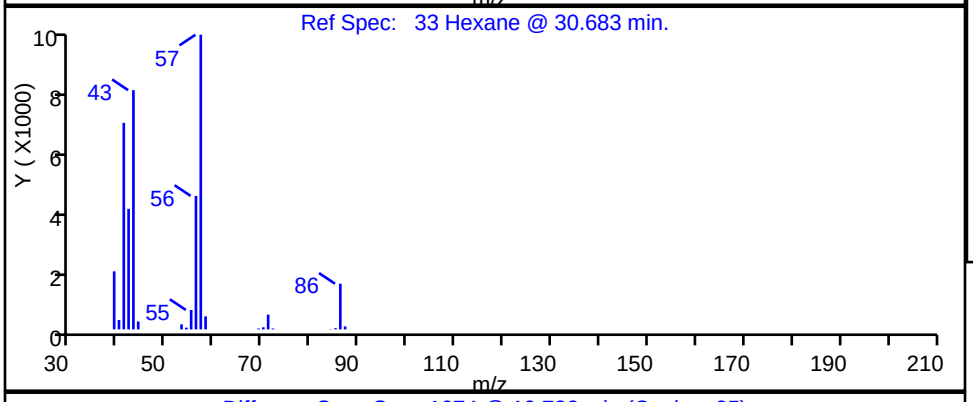
33 Hexane, CAS: 110-54-3

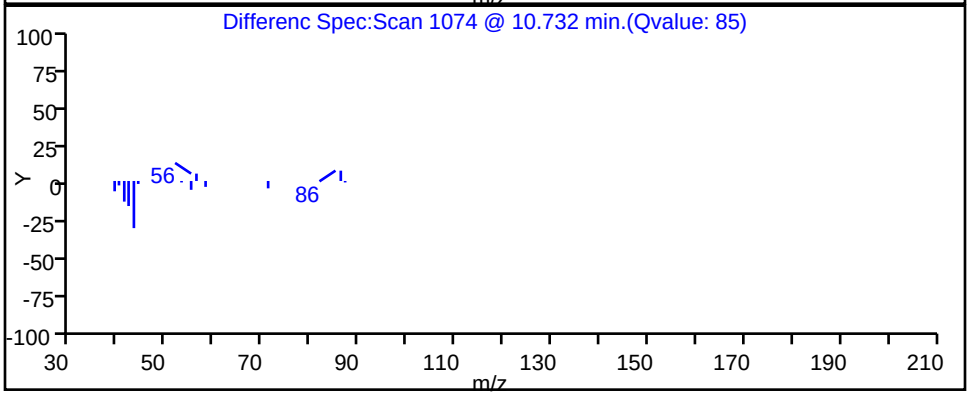












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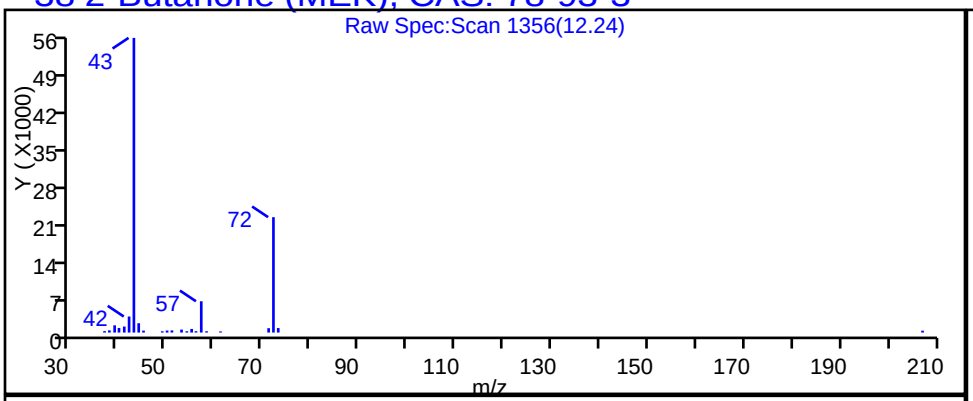
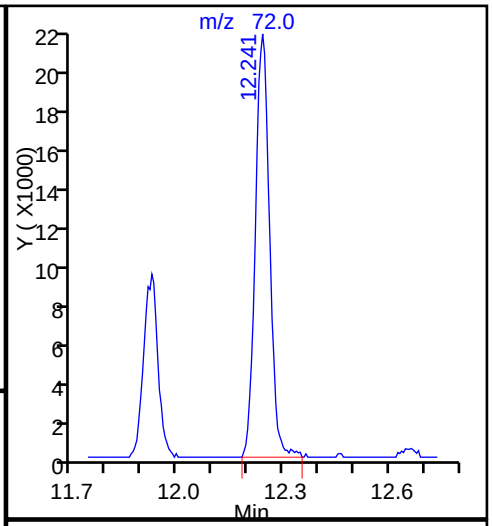
TestAmerica Burlington

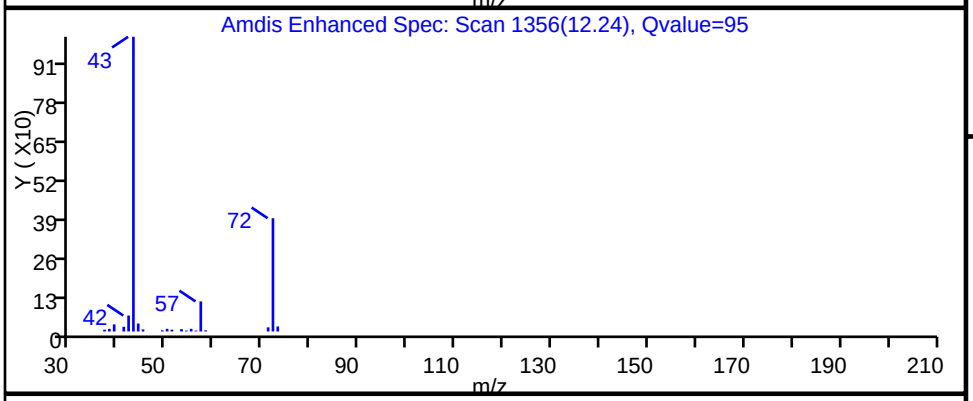
Data File: \\ChromNA\Burlington\ChromData\CHW.i\20160902-21628.b\21628_22.d

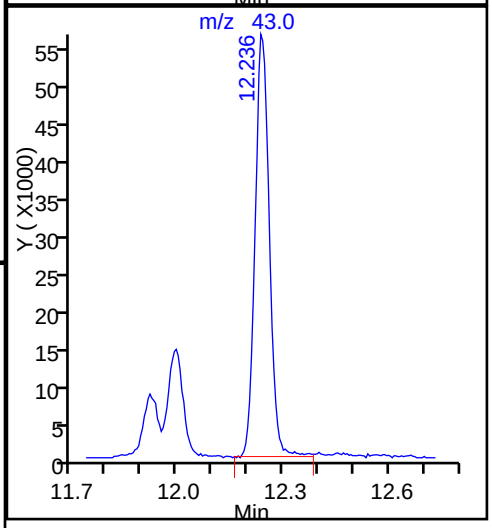
Injection Date:	03-Sep-2016 04:36:30	Instrument ID:	CHW.i		
Lims ID:	200-35064-A-1	Lab Sample ID:	200-35064-1		
Client ID:	SS-1				
Operator ID:	pad	ALS Bottle#:	18	Worklist Smp#:	22
Purge Vol:	200.000 mL	Dil. Factor:	1.5000		
Method:	TO15_MasterMethod_(v1)	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

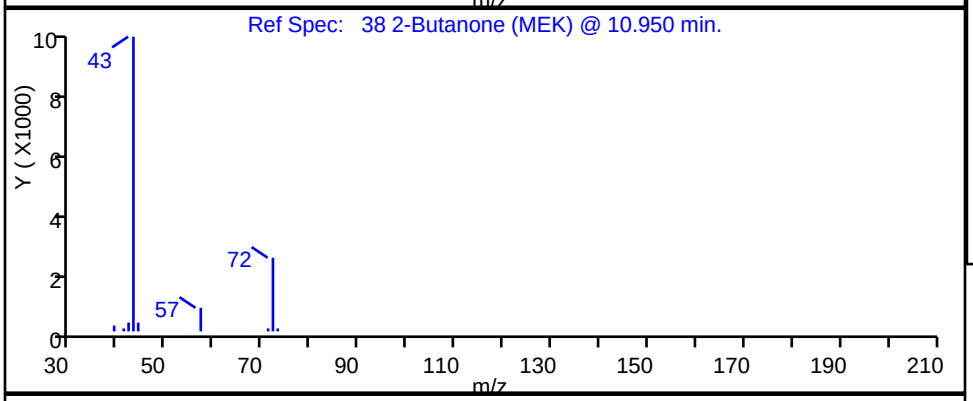
38 2-Butanone (MEK), CAS: 78-93-3

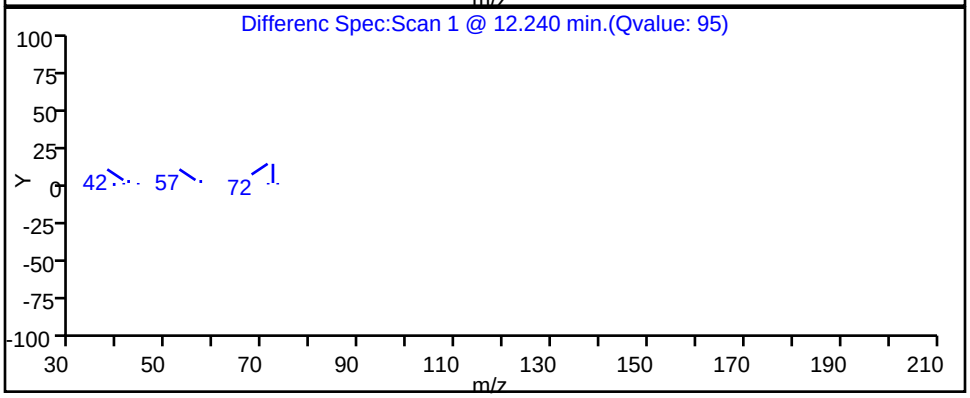












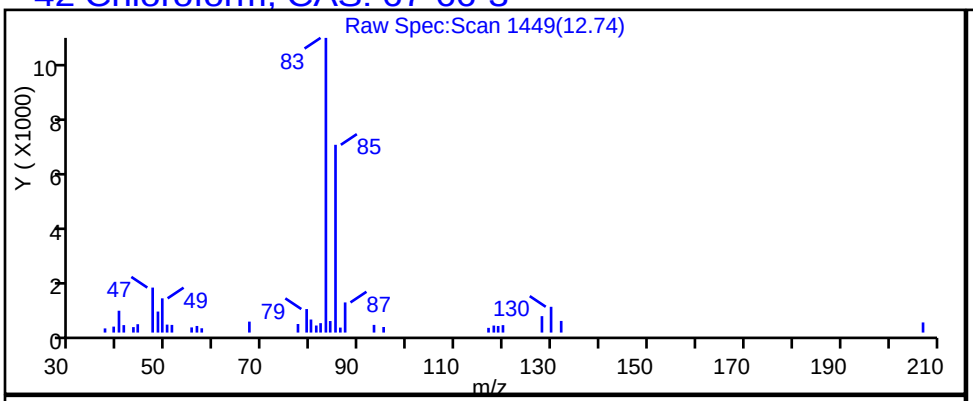
Report Date: 07-Sep-2016 08:42:32 Chrom Revision: 2.2 02-Sep-2016 12:39:46

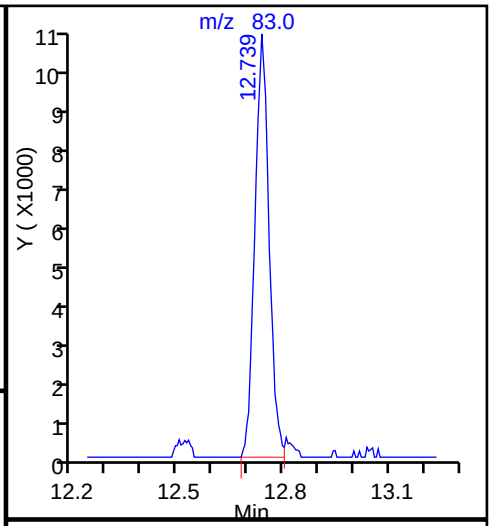
TestAmerica Burlington

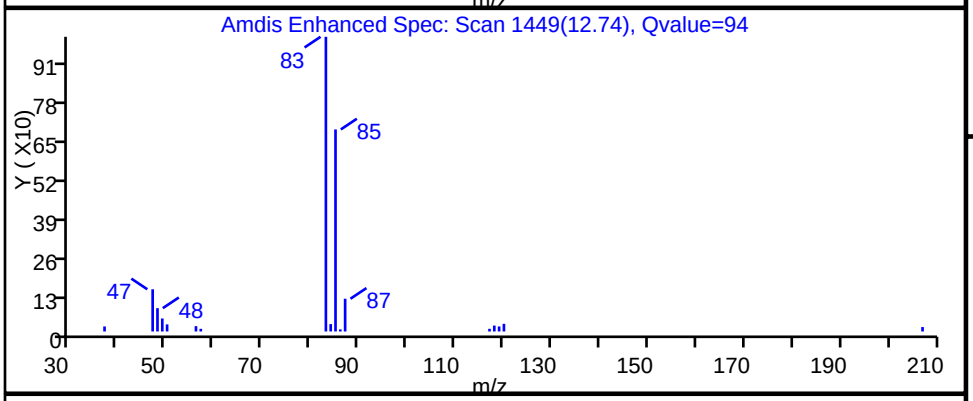
Data File: \\ChromNA\Burlington\ChromData\CHW.i\20160902-21628.b\21628_22.d

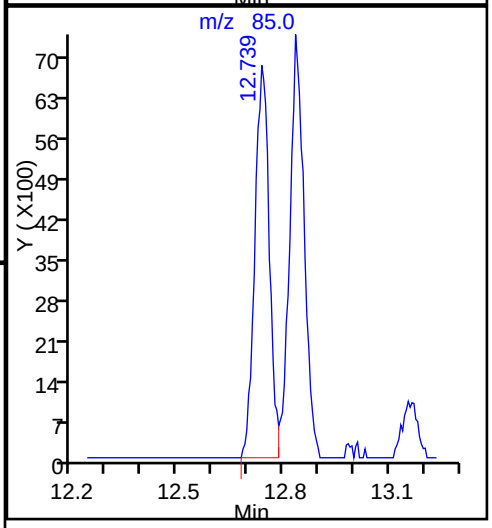
Injection Date:	03-Sep-2016 04:36:30	Instrument ID:	CHW.i		
Lims ID:	200-35064-A-1	Lab Sample ID:	200-35064-1		
Client ID:	SS-1				
Operator ID:	pad	ALS Bottle#:	18	Worklist Smp#:	22
Purge Vol:	200.000 mL	Dil. Factor:	1.5000		
Method:	TO15_MasterMethod_(v1)	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

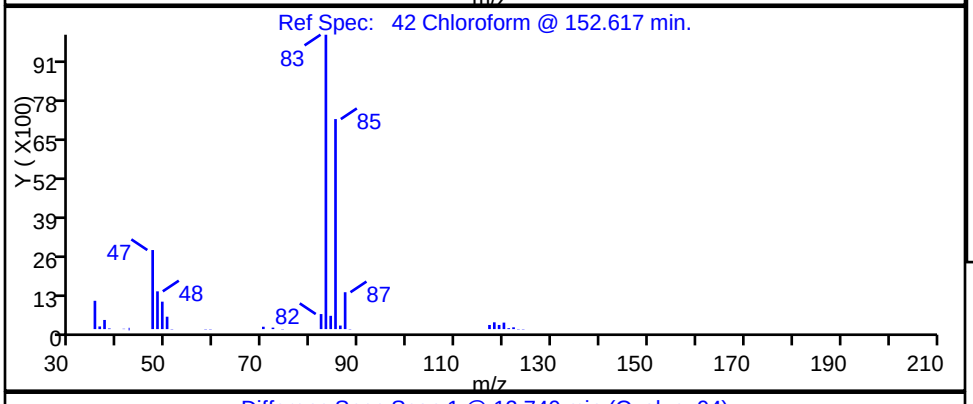
42 Chloroform, CAS: 67-66-3

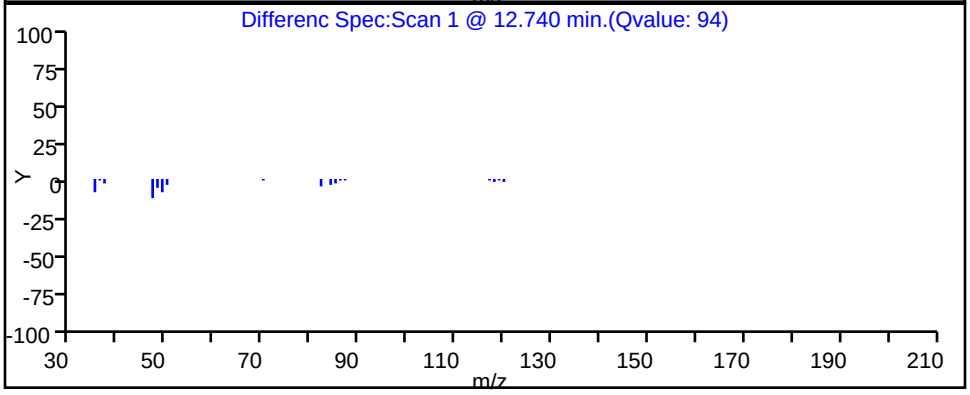












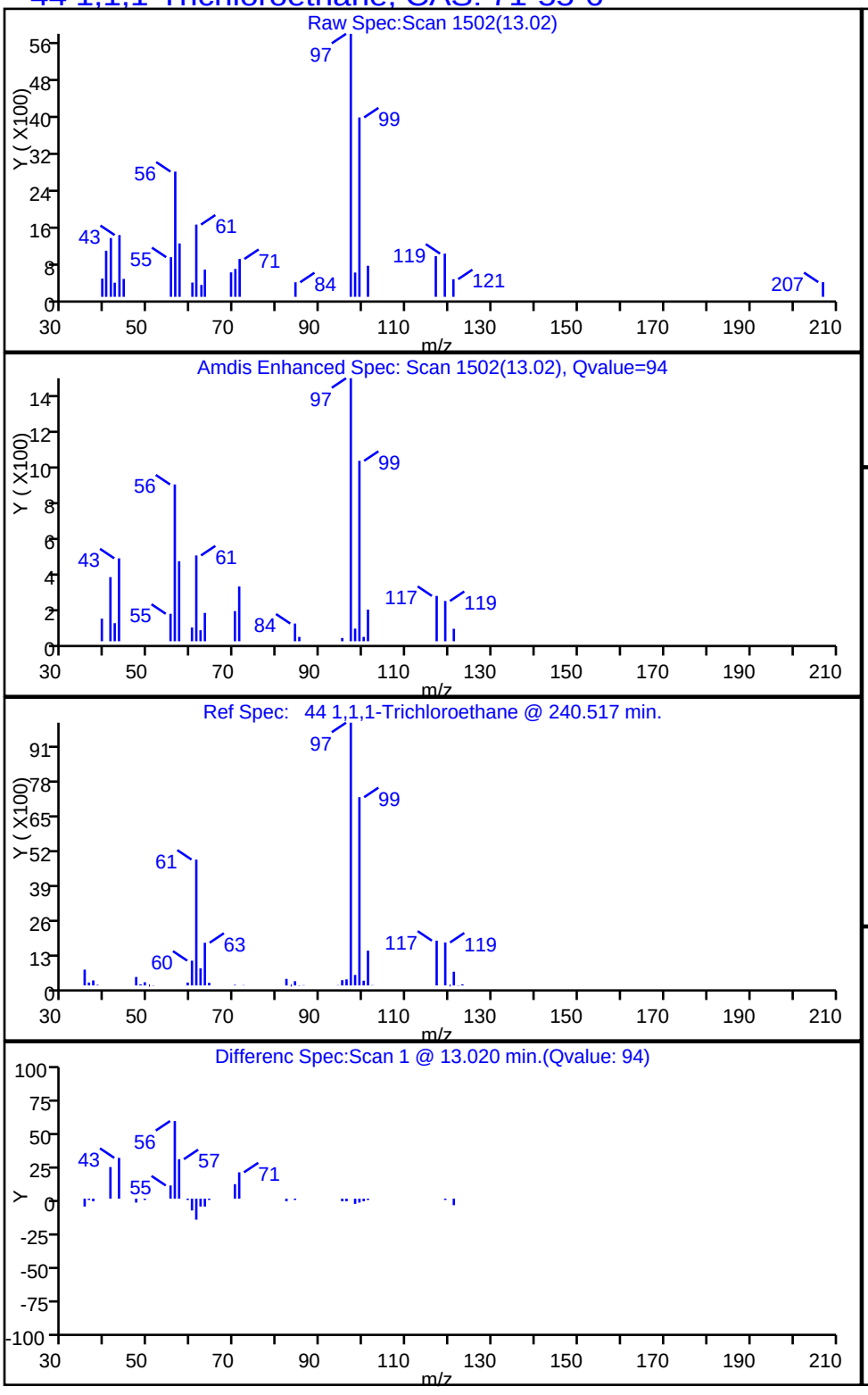
Report Date: 07-Sep-2016 08:42:32 Chrom Revision: 2.2 02-Sep-2016 12:39:46

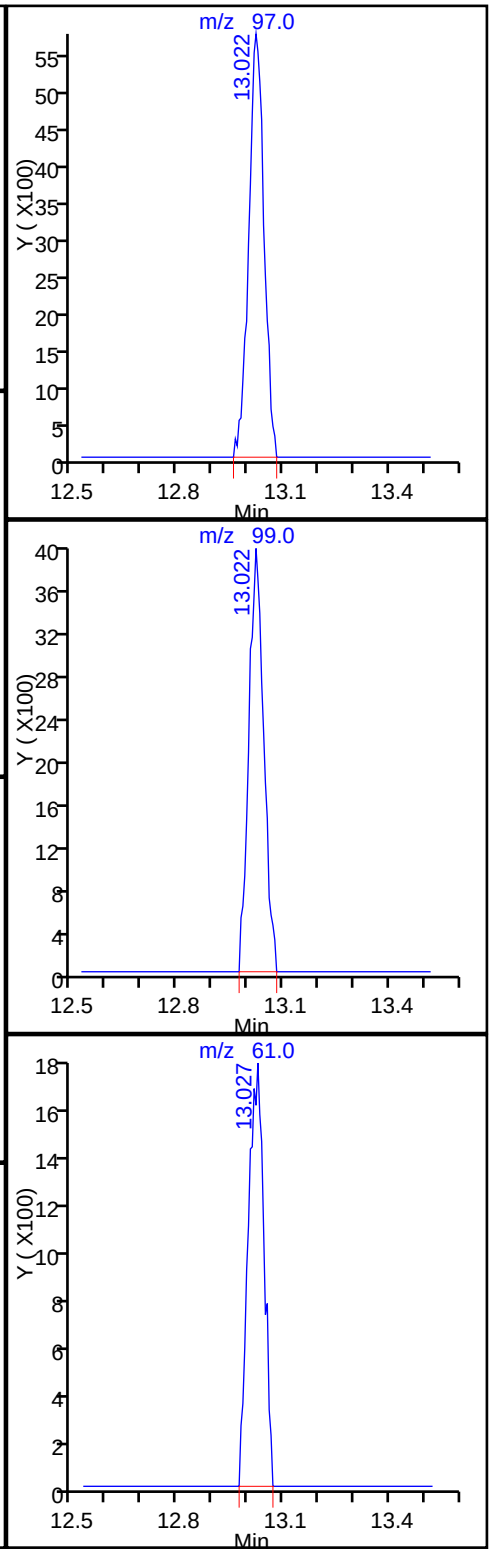
TestAmerica Burlington

Data File: \\ChromNA\Burlington\ChromData\CHW.i\20160902-21628.b\21628_22.d

Injection Date:	03-Sep-2016 04:36:30	Instrument ID:	CHW.i		
Lims ID:	200-35064-A-1	Lab Sample ID:	200-35064-1		
Client ID:	SS-1				
Operator ID:	pad	ALS Bottle#:	18	Worklist Smp#:	22
Purge Vol:	200.000 mL	Dil. Factor:	1.5000		
Method:	TO15_MasterMethod_(v1)	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

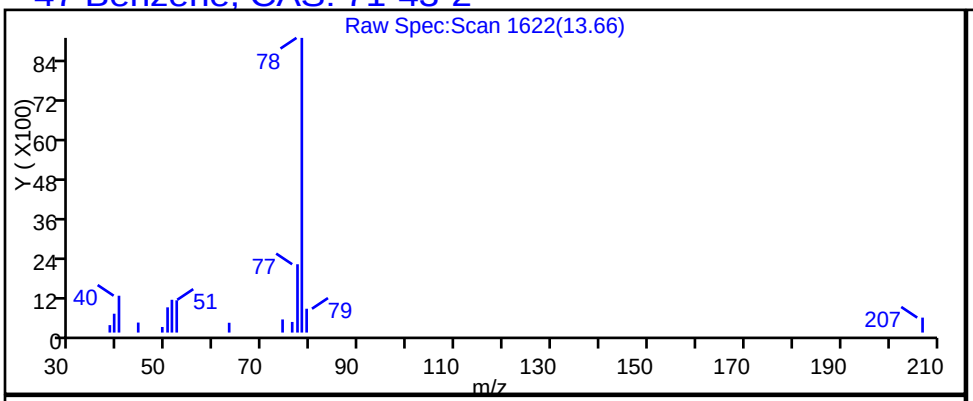
44 1,1,1-Trichloroethane, CAS: 71-55-6

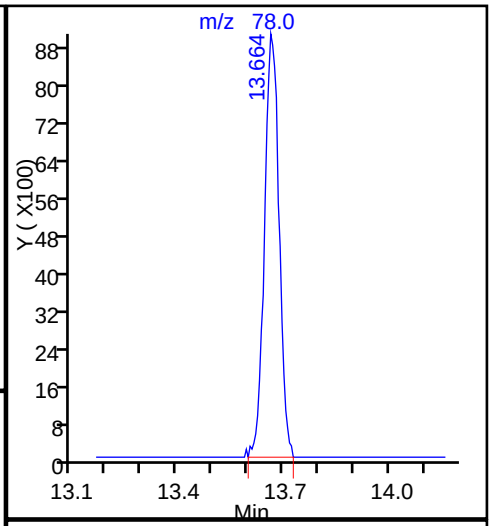


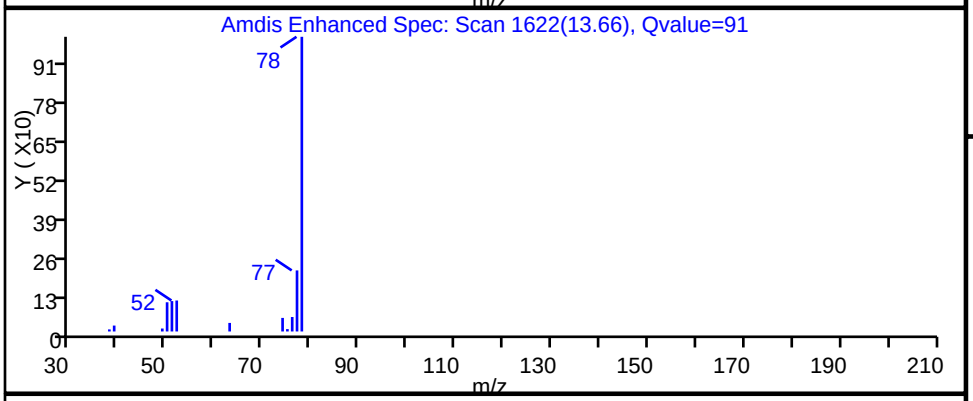


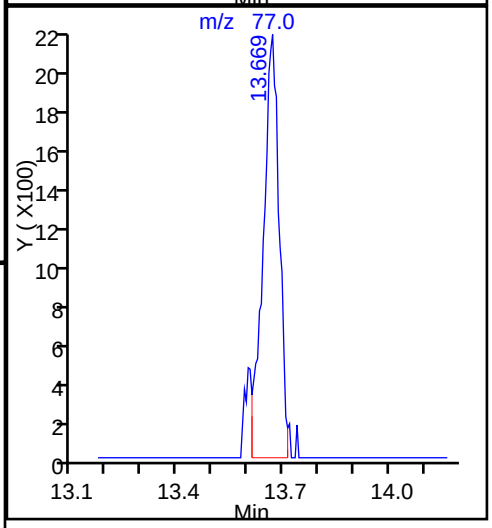
Data File: \\ChromNA\Burlington\ChromData\CHW.i\20160902-21628.b\21628_22.d
Injection Date: 03-Sep-2016 04:36:30 Instrument ID: CHW.i
Lims ID: 200-35064-A-1 Lab Sample ID: 200-35064-1
Client ID: SS-1
Operator ID: pad ALS Bottle#: 18 Worklist Smp#: 22
Purge Vol: 200.000 mL Dil. Factor: 1.5000
Method: TO15_MasterMethod_(v1) Limit Group: AI_TO15_ICAL
Column: RTX-624 (0.32 mm) Detector MS SCAN

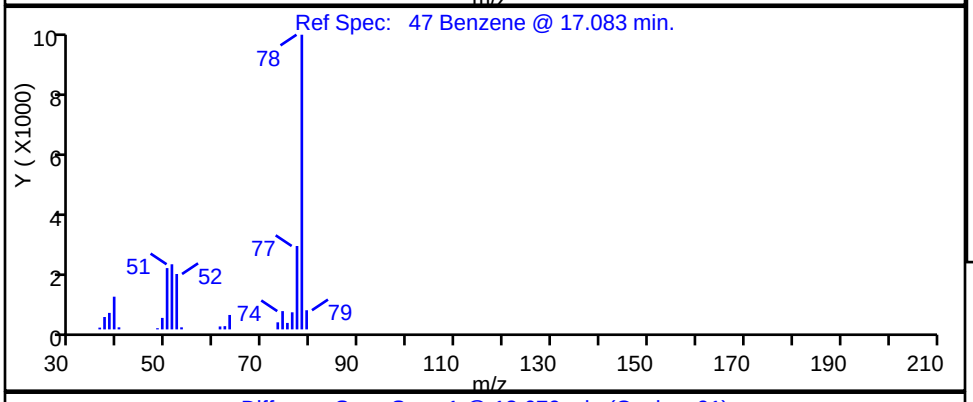
47 Benzene, CAS: 71-43-2

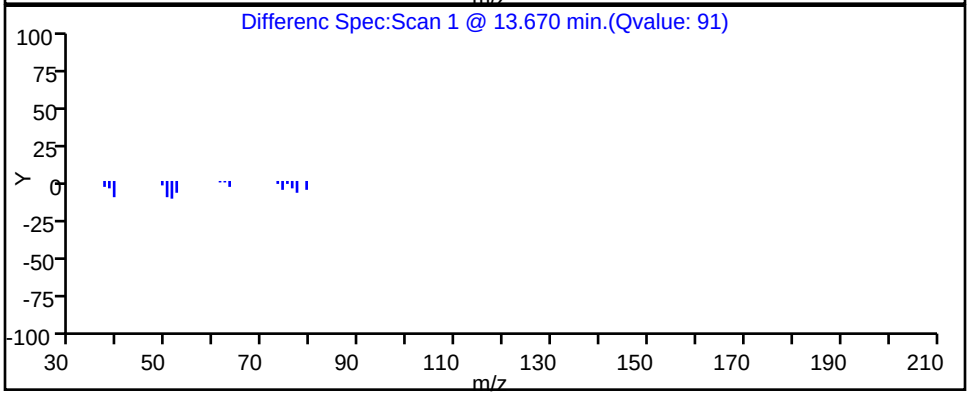












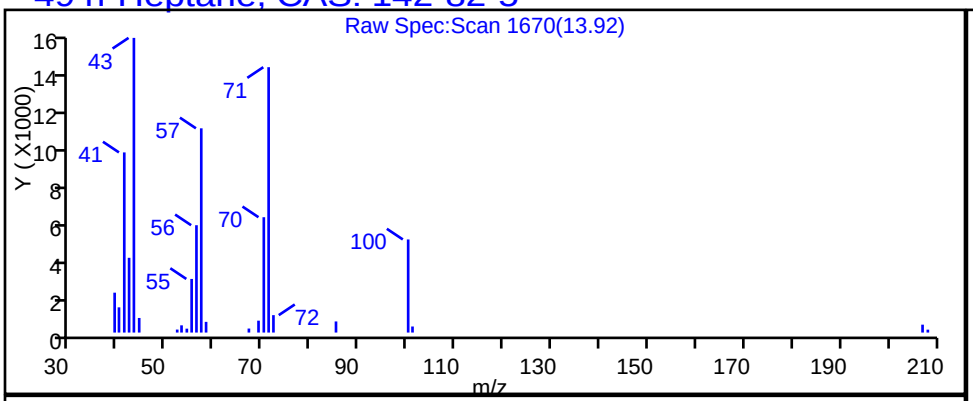
Report Date: 07-Sep-2016 08:42:32 Chrom Revision: 2.2 02-Sep-2016 12:39:46

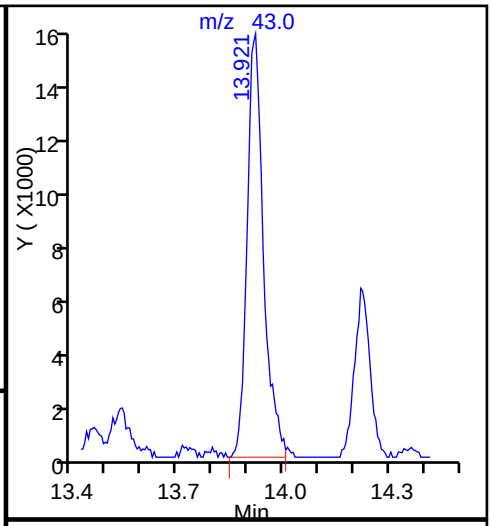
TestAmerica Burlington

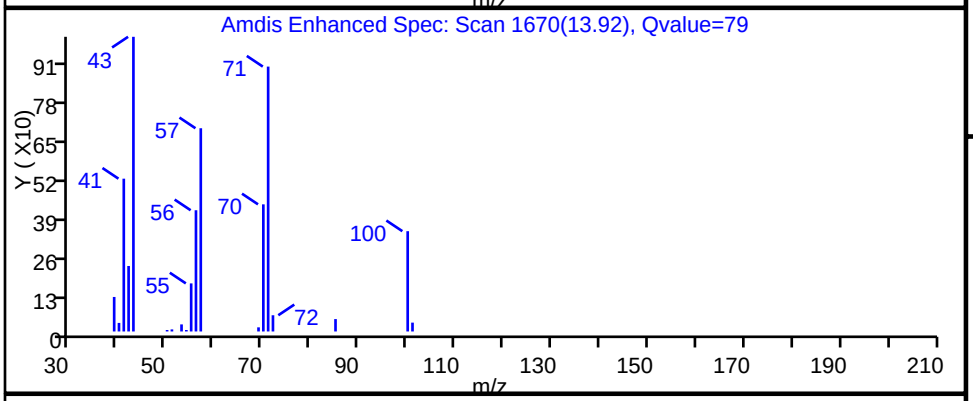
Data File: \\ChromNA\Burlington\ChromData\CHW.i\20160902-21628.b\21628_22.d

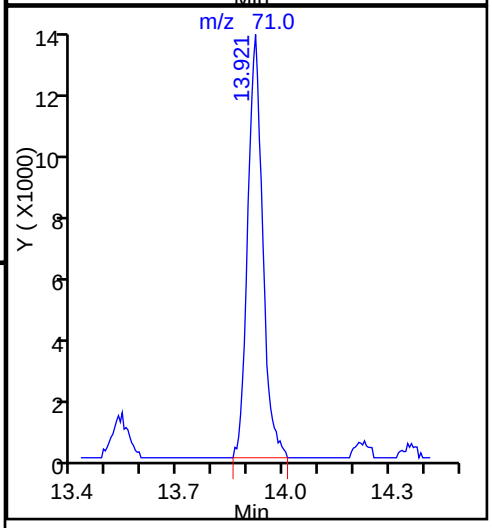
Injection Date:	03-Sep-2016 04:36:30	Instrument ID:	CHW.i		
Lims ID:	200-35064-A-1	Lab Sample ID:	200-35064-1		
Client ID:	SS-1				
Operator ID:	pad	ALS Bottle#:	18	Worklist Smp#:	22
Purge Vol:	200.000 mL	Dil. Factor:	1.5000		
Method:	TO15_MasterMethod_(v1)	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

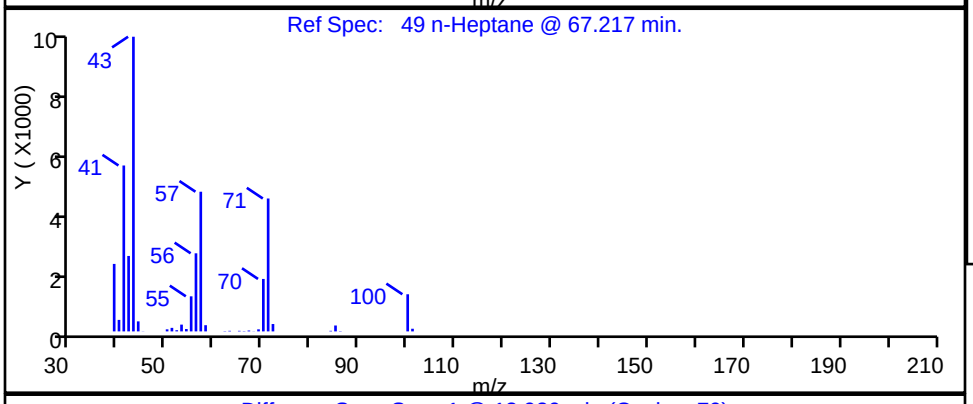
49 n-Heptane, CAS: 142-82-5

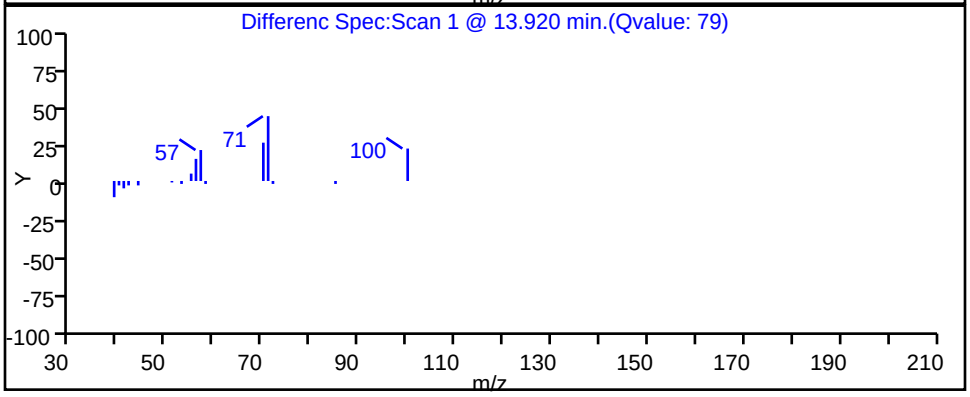












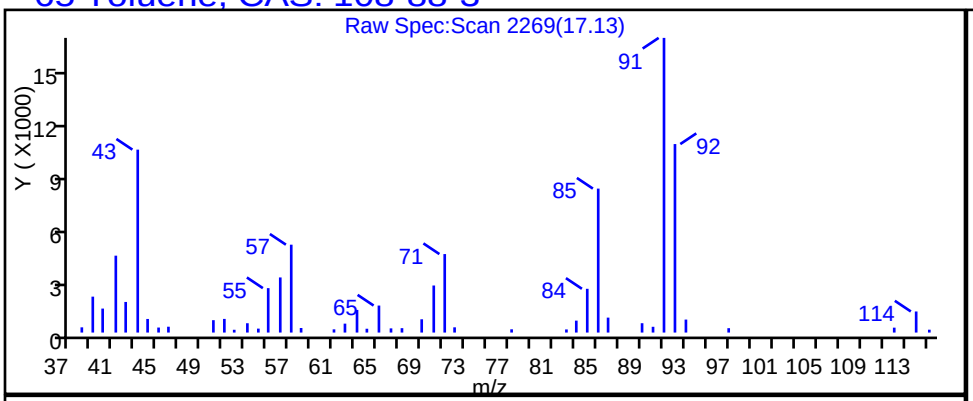
Report Date: 07-Sep-2016 08:42:32 Chrom Revision: 2.2 02-Sep-2016 12:39:46

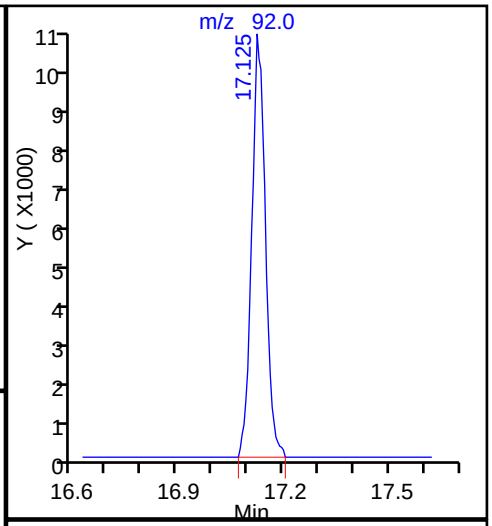
TestAmerica Burlington

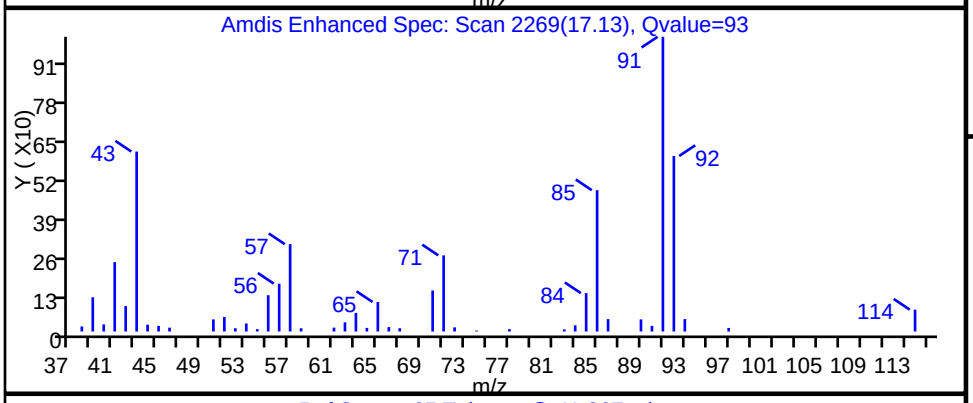
Data File: \\ChromNA\Burlington\ChromData\CHW.i\20160902-21628.b\21628_22.d

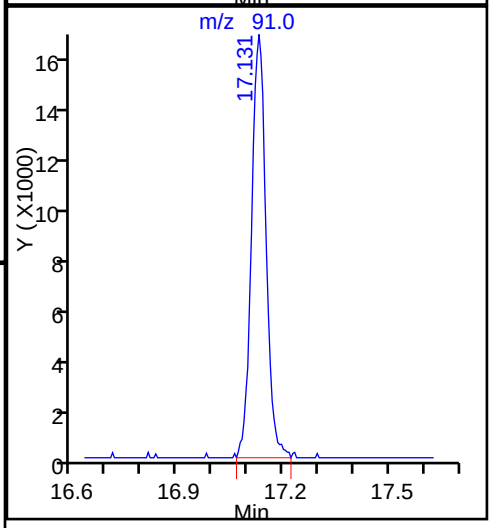
Injection Date:	03-Sep-2016 04:36:30	Instrument ID:	CHW.i		
Lims ID:	200-35064-A-1	Lab Sample ID:	200-35064-1		
Client ID:	SS-1				
Operator ID:	pad	ALS Bottle#:	18	Worklist Smp#:	22
Purge Vol:	200.000 mL	Dil. Factor:	1.5000		
Method:	TO15_MasterMethod_(v1)	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

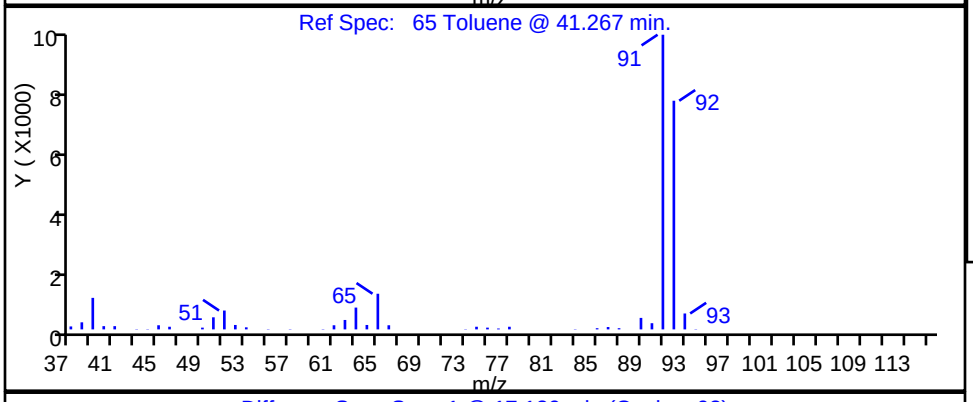
65 Toluene, CAS: 108-88-3

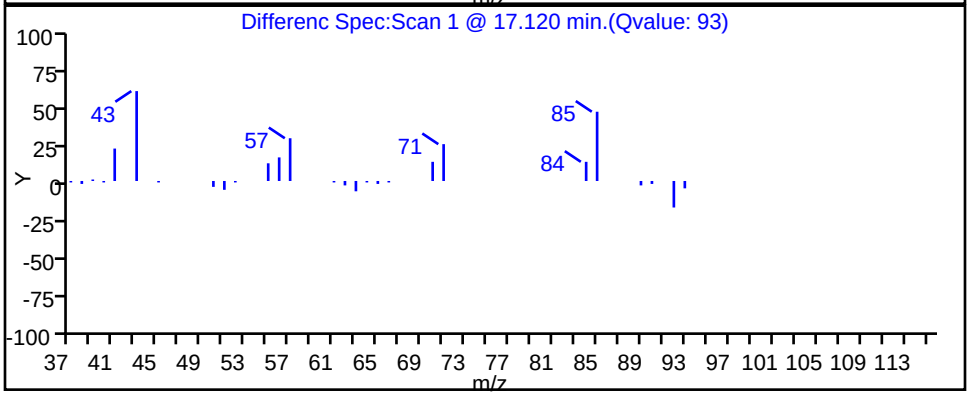












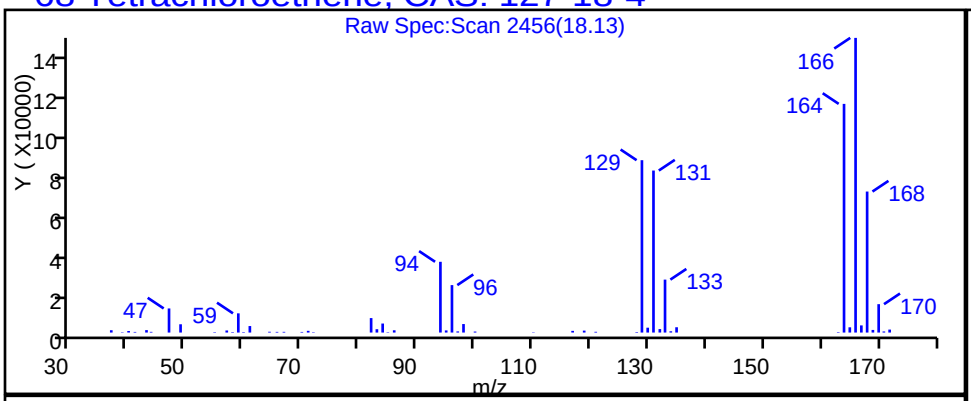
Report Date: 07-Sep-2016 08:42:32 Chrom Revision: 2.2 02-Sep-2016 12:39:46

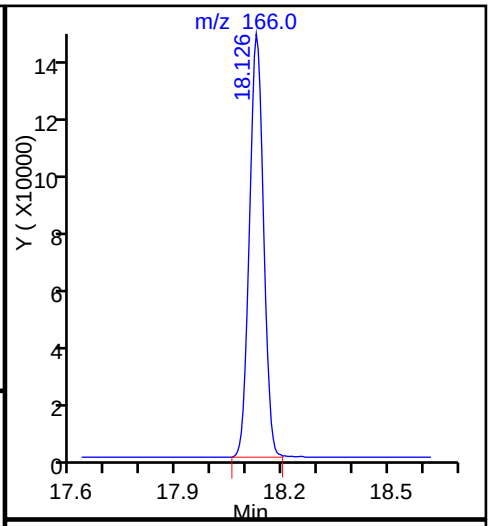
TestAmerica Burlington

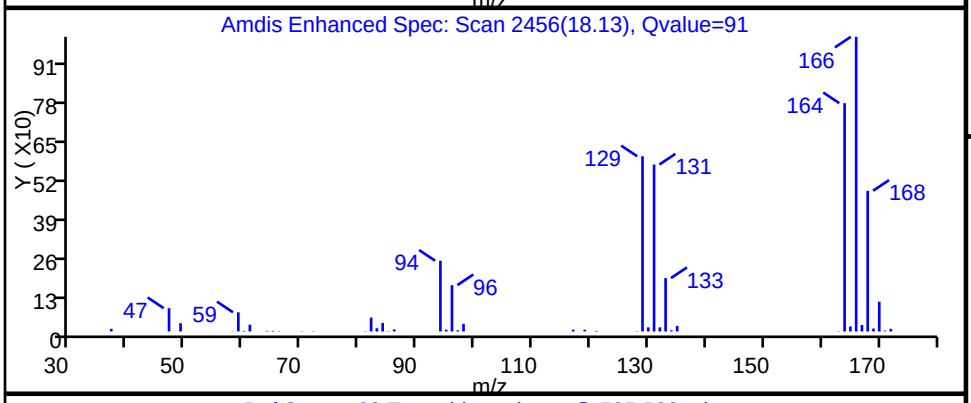
Data File: \\ChromNA\Burlington\ChromData\CHW.i\20160902-21628.b\21628_22.d

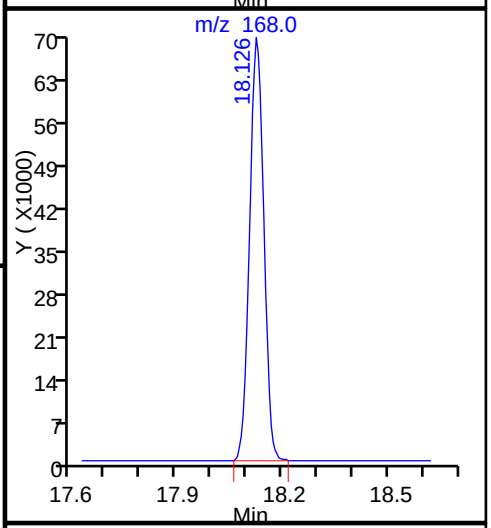
Injection Date:	03-Sep-2016 04:36:30	Instrument ID:	CHW.i		
Lims ID:	200-35064-A-1	Lab Sample ID:	200-35064-1		
Client ID:	SS-1				
Operator ID:	pad	ALS Bottle#:	18	Worklist Smp#:	22
Purge Vol:	200.000 mL	Dil. Factor:	1.5000		
Method:	TO15_MasterMethod_(v1)	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

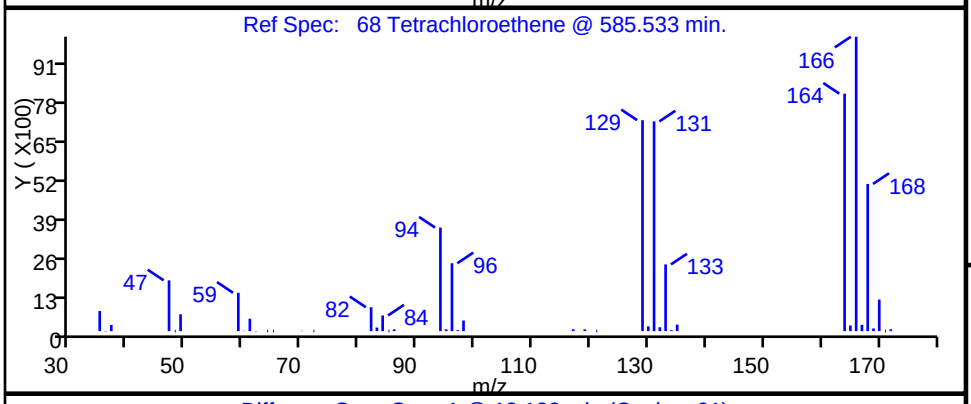
68 Tetrachloroethene, CAS: 127-18-4

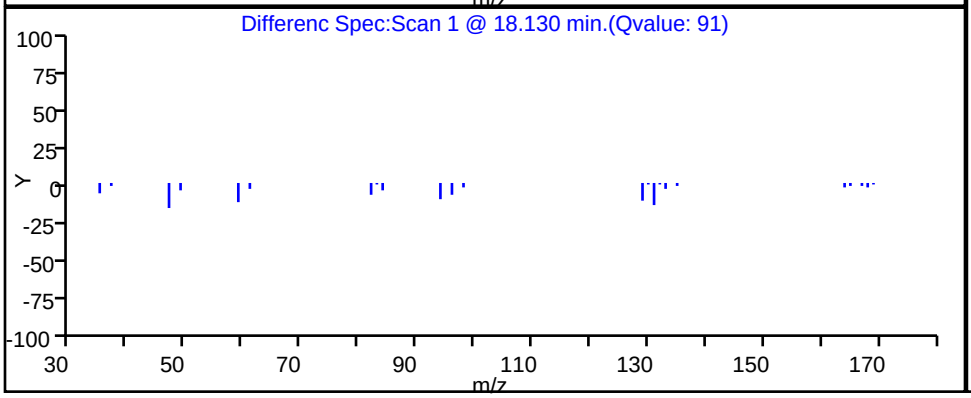


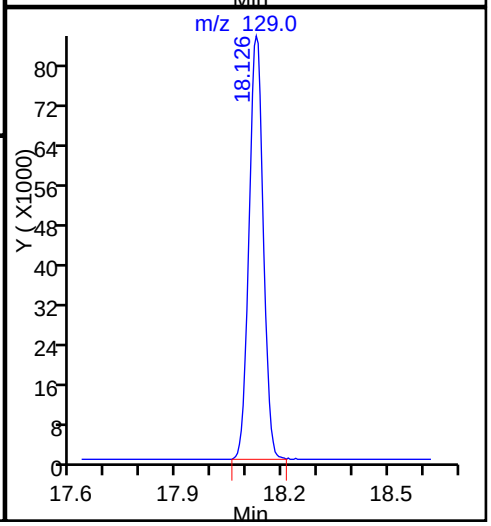












Manual Integration/User Assign Peak Report

TestAmerica Burlington

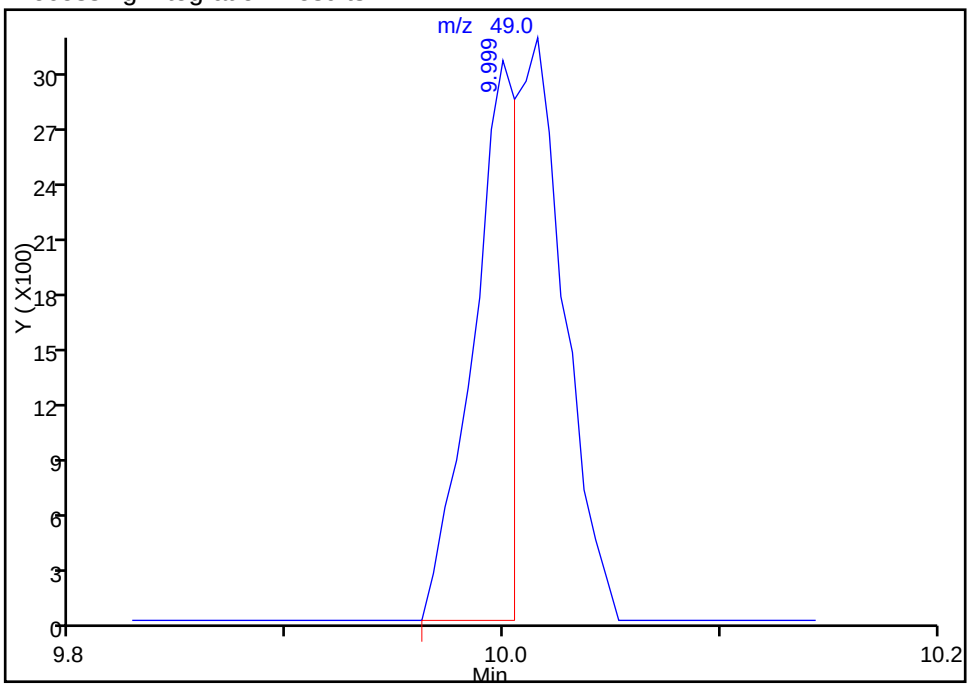
Data File:	\\ChromNA\Burlington\ChromData\CHW.i\20160902-21628.b\21628_22.d				
Injection Date:	03-Sep-2016 04:36:30	Instrument ID:	CHW.i		
Lims ID:	200-35064-A-1	Lab Sample ID:	200-35064-1		
Client ID:	SS-1				
Operator ID:	pad	ALS Bottle#:	18	Worklist Smp#:	22
Purge Vol:	200.000 mL	Dil. Factor:	1.5000		
Method:	TO15_MasterMethod_(v1)	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

27 Methylene Chloride, CAS: 75-09-2

Signal: 1

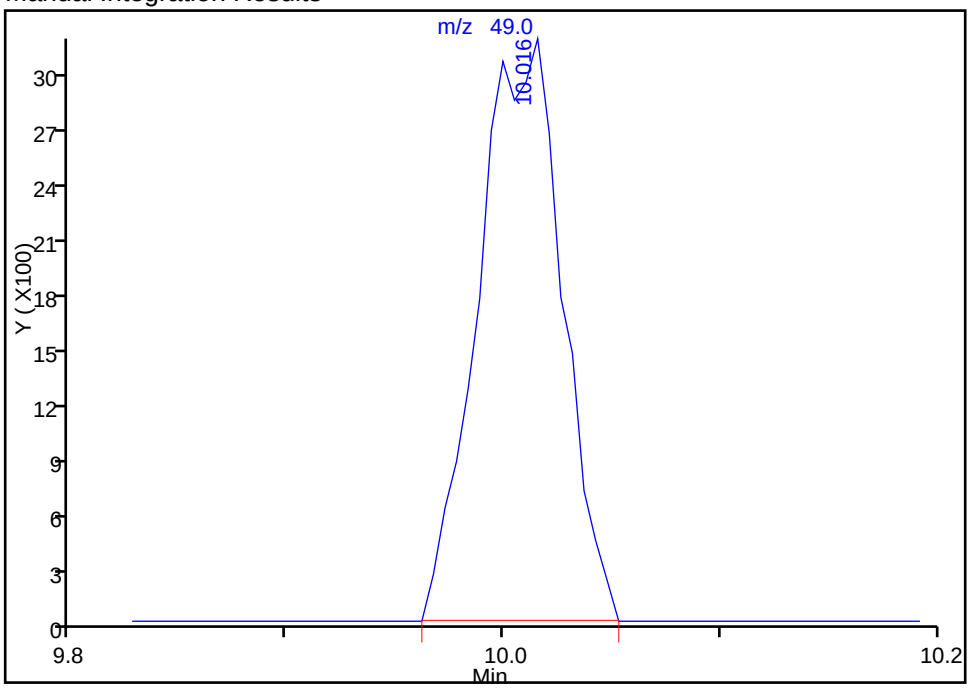
Processing Integration Results

RT: 10.00
Area: 4265
Amount: 0.168403
Amount Units: ppb v/v



Manual Integration Results

RT: 10.02
Area: 8512
Amount: 0.336095
Amount Units: ppb v/v



Reviewer: puangmaleek, 07-Sep-2016 09:47:54

Audit Action: Manually Integrated Audit Reason: Assign Peak

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington | Job No.: 200-35064-1

SDG No.: 200-35064-1

Client Sample ID: SS-2 | Lab Sample ID: 200-35064-2

Matrix: Air | Lab File ID: 21628_23.d

Analysis Method: TO-15 | Date Collected: 08/30/2016 12:15

Sample wt/vol: 200(mL) | Date Analyzed: 09/03/2016 05:30

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: RTX-624 ID: 0.32(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 108809 | Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	
75-71-8	Dichlorodifluoromethane	120.91	0.50	U	0.50	
75-45-6	Freon 22	86.47	0.52		0.50	
76-14-2	1,2-Dichlorotetrafluoroethane	170.92	0.20	U	0.20	
74-87-3	Chloromethane	50.49	0.50	U	0.50	
106-97-8	n-Butane	58.12	0.50	U	0.50	
75-01-4	Vinyl chloride	62.50	0.040	U	0.040	
106-99-0	1,3-Butadiene	54.09	0.20	U	0.20	
74-83-9	Bromomethane	94.94	0.20	U	0.20	
75-00-3	Chloroethane	64.52	0.50	U	0.50	
593-60-2	Bromoethene(Vinyl Bromide)	106.96	0.20	U	0.20	
75-69-4	Trichlorofluoromethane	137.37	0.20		0.20	
76-13-1	Freon TF	187.38	0.20	U	0.20	
75-35-4	1,1-Dichloroethene	96.94	0.20	U	0.20	
67-64-1	Acetone	58.08	11		5.0	
67-63-0	Isopropyl alcohol	60.10	5.0	U	5.0	
75-15-0	Carbon disulfide	76.14	0.50	U	0.50	
107-05-1	3-Chloropropene	76.53	0.50	U	0.50	
75-09-2	Methylene Chloride	84.93	0.63		0.50	
75-65-0	tert-Butyl alcohol	74.12	5.0	U	5.0	
1634-04-4	Methyl tert-butyl ether	88.15	0.20	U	0.20	
156-60-5	trans-1,2-Dichloroethene	96.94	0.20	U	0.20	
110-54-3	n-Hexane	86.17	0.20	U	0.20	
75-34-3	1,1-Dichloroethane	98.96	0.20	U	0.20	
78-93-3	Methyl Ethyl Ketone	72.11	0.79		0.50	
156-59-2	cis-1,2-Dichloroethene	96.94	0.20	U	0.20	
540-59-0	1,2-Dichloroethene, Total	96.94	0.40	U	0.40	
67-66-3	Chloroform	119.38	0.20	U	0.20	
109-99-9	Tetrahydrofuran	72.11	5.0	U	5.0	
71-55-6	1,1,1-Trichloroethane	133.41	0.20	U	0.20	
110-82-7	Cyclohexane	84.16	0.20	U	0.20	
56-23-5	Carbon tetrachloride	153.81	0.19		0.040	
540-84-1	2,2,4-Trimethylpentane	114.23	0.20	U	0.20	
71-43-2	Benzene	78.11	0.20	U	0.20	
107-06-2	1,2-Dichloroethane	98.96	0.20	U	0.20	

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington Job No.: 200-35064-1

SDG No.: 200-35064-1

Client Sample ID: SS-2 Lab Sample ID: 200-35064-2

Matrix: Air Lab File ID: 21628_23.d

Analysis Method: TO-15 Date Collected: 08/30/2016 12:15

Sample wt/vol: 200(mL) Date Analyzed: 09/03/2016 05:30

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-624 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 108809 Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	
142-82-5	n-Heptane	100.21	0.20	U	0.20	
79-01-6	Trichloroethene	131.39	0.11		0.040	
80-62-6	Methyl methacrylate	100.12	0.50	U	0.50	
78-87-5	1,2-Dichloropropane	112.99	0.20	U	0.20	
123-91-1	1,4-Dioxane	88.11	5.0	U	5.0	
75-27-4	Bromodichloromethane	163.83	0.20	U	0.20	
10061-01-5	cis-1,3-Dichloropropene	110.97	0.20	U	0.20	
108-10-1	methyl isobutyl ketone	100.16	0.50	U	0.50	
108-88-3	Toluene	92.14	0.31		0.20	
10061-02-6	trans-1,3-Dichloropropene	110.97	0.20	U	0.20	
79-00-5	1,1,2-Trichloroethane	133.41	0.20	U	0.20	
127-18-4	Tetrachloroethene	165.83	5.2		0.20	
591-78-6	Methyl Butyl Ketone (2-Hexanone)	100.20	0.50	U	0.50	
124-48-1	Dibromochloromethane	208.29	0.20	U	0.20	
106-93-4	1,2-Dibromoethane	187.87	0.20	U	0.20	
108-90-7	Chlorobenzene	112.56	0.20	U	0.20	
100-41-4	Ethylbenzene	106.17	0.20	U	0.20	
179601-23-1	m,p-Xylene	106.17	0.50	U	0.50	
95-47-6	Xylene, o-	106.17	0.20	U	0.20	
1330-20-7	Xylene (total)	106.17	0.70	U	0.70	
100-42-5	Styrene	104.15	0.20	U	0.20	
75-25-2	Bromoform	252.75	0.20	U	0.20	
98-82-8	Cumene	120.19	0.20	U	0.20	
79-34-5	1,1,2,2-Tetrachloroethane	167.85	0.20	U	0.20	
103-65-1	n-Propylbenzene	120.19	0.20	U	0.20	
622-96-8	4-Ethyltoluene	120.20	0.20	U	0.20	
108-67-8	1,3,5-Trimethylbenzene	120.20	0.20	U	0.20	
95-49-8	2-Chlorotoluene	126.59	0.20	U	0.20	
98-06-6	tert-Butylbenzene	134.22	0.20	U	0.20	
95-63-6	1,2,4-Trimethylbenzene	120.20	0.20	U	0.20	
135-98-8	sec-Butylbenzene	134.22	0.20	U	0.20	
99-87-6	4-Isopropyltoluene	134.22	0.20	U	0.20	
541-73-1	1,3-Dichlorobenzene	147.00	0.20	U	0.20	
106-46-7	1,4-Dichlorobenzene	147.00	0.20	U	0.20	

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington Job No.: 200-35064-1

SDG No.: 200-35064-1

Client Sample ID: SS-2 Lab Sample ID: 200-35064-2

Matrix: Air Lab File ID: 21628_23.d

Analysis Method: TO-15 Date Collected: 08/30/2016 12:15

Sample wt/vol: 200(mL) Date Analyzed: 09/03/2016 05:30

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-624 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 108809 Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	
100-44-7	Benzyl chloride	126.58	0.20	U	0.20	
104-51-8	n-Butylbenzene	134.22	0.20	U	0.20	
95-50-1	1,2-Dichlorobenzene	147.00	0.20	U	0.20	
120-82-1	1,2,4-Trichlorobenzene	181.45	0.50	U	0.50	
87-68-3	Hexachlorobutadiene	260.76	0.20	U	0.20	
91-20-3	Naphthalene	128.17	0.50	U	0.50	

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington | Job No.: 200-35064-1

SDG No.: 200-35064-1

Client Sample ID: SS-2 | Lab Sample ID: 200-35064-2

Matrix: Air | Lab File ID: 21628_23.d

Analysis Method: TO-15 | Date Collected: 08/30/2016 12:15

Sample wt/vol: 200(mL) | Date Analyzed: 09/03/2016 05:30

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: RTX-624 ID: 0.32(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 108809 | Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	
75-71-8	Dichlorodifluoromethane	120.91	2.5	U	2.5	
75-45-6	Freon 22	86.47	1.8		1.8	
76-14-2	1,2-Dichlorotetrafluoroethane	170.92	1.4	U	1.4	
74-87-3	Chloromethane	50.49	1.0	U	1.0	
106-97-8	n-Butane	58.12	1.2	U	1.2	
75-01-4	Vinyl chloride	62.50	0.10	U	0.10	
106-99-0	1,3-Butadiene	54.09	0.44	U	0.44	
74-83-9	Bromomethane	94.94	0.78	U	0.78	
75-00-3	Chloroethane	64.52	1.3	U	1.3	
593-60-2	Bromoethene(Vinyl Bromide)	106.96	0.87	U	0.87	
75-69-4	Trichlorofluoromethane	137.37	1.1		1.1	
76-13-1	Freon TF	187.38	1.5	U	1.5	
75-35-4	1,1-Dichloroethene	96.94	0.79	U	0.79	
67-64-1	Acetone	58.08	27		12	
67-63-0	Isopropyl alcohol	60.10	12	U	12	
75-15-0	Carbon disulfide	76.14	1.6	U	1.6	
107-05-1	3-Chloropropene	76.53	1.6	U	1.6	
75-09-2	Methylene Chloride	84.93	2.2		1.7	
75-65-0	tert-Butyl alcohol	74.12	15	U	15	
1634-04-4	Methyl tert-butyl ether	88.15	0.72	U	0.72	
156-60-5	trans-1,2-Dichloroethene	96.94	0.79	U	0.79	
110-54-3	n-Hexane	86.17	0.70	U	0.70	
75-34-3	1,1-Dichloroethane	98.96	0.81	U	0.81	
78-93-3	Methyl Ethyl Ketone	72.11	2.3		1.5	
156-59-2	cis-1,2-Dichloroethene	96.94	0.79	U	0.79	
540-59-0	1,2-Dichloroethene, Total	96.94	1.6	U	1.6	
67-66-3	Chloroform	119.38	0.98	U	0.98	
109-99-9	Tetrahydrofuran	72.11	15	U	15	
71-55-6	1,1,1-Trichloroethane	133.41	1.1	U	1.1	
110-82-7	Cyclohexane	84.16	0.69	U	0.69	
56-23-5	Carbon tetrachloride	153.81	1.2		0.25	
540-84-1	2,2,4-Trimethylpentane	114.23	0.93	U	0.93	
71-43-2	Benzene	78.11	0.64	U	0.64	
107-06-2	1,2-Dichloroethane	98.96	0.81	U	0.81	

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington | Job No.: 200-35064-1

SDG No.: 200-35064-1

Client Sample ID: SS-2 | Lab Sample ID: 200-35064-2

Matrix: Air | Lab File ID: 21628_23.d

Analysis Method: TO-15 | Date Collected: 08/30/2016 12:15

Sample wt/vol: 200(mL) | Date Analyzed: 09/03/2016 05:30

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: RTX-624 ID: 0.32(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 108809 | Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	
142-82-5	n-Heptane	100.21	0.82	U	0.82	
79-01-6	Trichloroethene	131.39	0.58		0.21	
80-62-6	Methyl methacrylate	100.12	2.0	U	2.0	
78-87-5	1,2-Dichloropropane	112.99	0.92	U	0.92	
123-91-1	1,4-Dioxane	88.11	18	U	18	
75-27-4	Bromodichloromethane	163.83	1.3	U	1.3	
10061-01-5	cis-1,3-Dichloropropene	110.97	0.91	U	0.91	
108-10-1	methyl isobutyl ketone	100.16	2.0	U	2.0	
108-88-3	Toluene	92.14	1.2		0.75	
10061-02-6	trans-1,3-Dichloropropene	110.97	0.91	U	0.91	
79-00-5	1,1,2-Trichloroethane	133.41	1.1	U	1.1	
127-18-4	Tetrachloroethene	165.83	35		1.4	
591-78-6	Methyl Butyl Ketone (2-Hexanone)	100.20	2.0	U	2.0	
124-48-1	Dibromochloromethane	208.29	1.7	U	1.7	
106-93-4	1,2-Dibromoethane	187.87	1.5	U	1.5	
108-90-7	Chlorobenzene	112.56	0.92	U	0.92	
100-41-4	Ethylbenzene	106.17	0.87	U	0.87	
179601-23-1	m,p-Xylene	106.17	2.2	U	2.2	
95-47-6	Xylene, o-	106.17	0.87	U	0.87	
1330-20-7	Xylene (total)	106.17	3.0	U	3.0	
100-42-5	Styrene	104.15	0.85	U	0.85	
75-25-2	Bromoform	252.75	2.1	U	2.1	
98-82-8	Cumene	120.19	0.98	U	0.98	
79-34-5	1,1,2,2-Tetrachloroethane	167.85	1.4	U	1.4	
103-65-1	n-Propylbenzene	120.19	0.98	U	0.98	
622-96-8	4-Ethyltoluene	120.20	0.98	U	0.98	
108-67-8	1,3,5-Trimethylbenzene	120.20	0.98	U	0.98	
95-49-8	2-Chlorotoluene	126.59	1.0	U	1.0	
98-06-6	tert-Butylbenzene	134.22	1.1	U	1.1	
95-63-6	1,2,4-Trimethylbenzene	120.20	0.98	U	0.98	
135-98-8	sec-Butylbenzene	134.22	1.1	U	1.1	
99-87-6	4-Isopropyltoluene	134.22	1.1	U	1.1	
541-73-1	1,3-Dichlorobenzene	147.00	1.2	U	1.2	
106-46-7	1,4-Dichlorobenzene	147.00	1.2	U	1.2	

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington Job No.: 200-35064-1

SDG No.: 200-35064-1

Client Sample ID: SS-2 Lab Sample ID: 200-35064-2

Matrix: Air Lab File ID: 21628_23.d

Analysis Method: TO-15 Date Collected: 08/30/2016 12:15

Sample wt/vol: 200(mL) Date Analyzed: 09/03/2016 05:30

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-624 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 108809 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	
100-44-7	Benzyl chloride	126.58	1.0	U	1.0	
104-51-8	n-Butylbenzene	134.22	1.1	U	1.1	
95-50-1	1,2-Dichlorobenzene	147.00	1.2	U	1.2	
120-82-1	1,2,4-Trichlorobenzene	181.45	3.7	U	3.7	
87-68-3	Hexachlorobutadiene	260.76	2.1	U	2.1	
91-20-3	Naphthalene	128.17	2.6	U	2.6	

TestAmerica Burlington
Target Compound Quantitation Report

Data File: \\ChromNA\Burlington\ChromData\CHW.i\20160902-21628.b\21628_23.d
Lims ID: 200-35064-A-2
Client ID: SS-2
Sample Type: Client
Inject. Date: 03-Sep-2016 05:30:30 ALS Bottle#: 19 Worklist Smp#: 23
Purge Vol: 200.000 mL Dil. Factor: 1.0000
Sample Info: 200-0021628-023
Misc. Info.: 34064-02
Operator ID: pad Instrument ID: CHW.i

Method: \\ChromNA\Burlington\ChromData\CHW.i\20160902-21628.b\TO15_MasterMethod_(v1).m
Limit Group: AI_TO15_ICAL
Last Update: 07-Sep-2016 08:42:26 Calib Date: 23-Aug-2016 00:38:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Burlington\ChromData\CHW.i\20160822-21457.b\21457_13.d

Column 1 : RTX-624 (0.32 mm) Det: MS SCAN
Process Host: XAWRK010

First Level Reviewer: puangmaleek Date: 07-Sep-2016 09:52:27

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
2 Dichlorodifluoromethane	85	5.388	5.383	0.005	99	39067	0.4881	
3 Chlorodifluoromethane	51	5.468	5.463	0.005	97	19105	0.5200	
4 1,2-Dichloro-1,1,2,2-tetra	85		5.789				ND	
5 Chloromethane	50	5.987	5.987	0.000	13	1800	0.0882	
6 Butane	43	6.260	6.260	0.000	78	5866	0.1623	
7 Vinyl chloride	62		6.314				ND	
8 Butadiene	54		6.415				ND	
10 Bromomethane	94		7.212				ND	
11 Chloroethane	64		7.464				ND	
13 Vinyl bromide	106		7.876				ND	
14 Trichlorofluoromethane	101	7.967	7.967	0.000	96	15873	0.1965	
20 1,1,2-Trichloro-1,2,2-trif	101	8.967	8.978	-0.011	88	4362	0.0663	
21 1,1-Dichloroethene	96		9.042				ND	
22 Acetone	43	9.235	9.240	-0.005	94	382362	11.3	
23 Carbon disulfide	76	9.438	9.438	0.000	55	24580	0.3102	
24 Isopropyl alcohol	45	9.443	9.438	0.005	99	59925	1.75	
25 3-Chloro-1-propene	41		9.743				ND	
27 Methylene Chloride	49	10.005	10.005	0.000	80	16782	0.6255	
28 2-Methyl-2-propanol	59	10.144	10.128	0.016	90	5826	0.1126	
S 30 1,2-Dichloroethene, Total	61		10.200				ND	
29 Methyl tert-butyl ether	73		10.347				ND	
31 trans-1,2-Dichloroethene	61		10.401				ND	
33 Hexane	57		10.738				ND	
34 1,1-Dichloroethane	63		11.214				ND	
37 cis-1,2-Dichloroethene	96		12.220				ND	
38 2-Butanone (MEK)	72	12.246	12.241	0.005	95	12845	0.7914	
41 Tetrahydrofuran	42		12.648				ND	
* 40 Chlorobromomethane	128	12.653	12.653	0.000	71	262368	10.0	
42 Chloroform	83	12.739	12.744	-0.005	92	6189	0.1005	
43 Cyclohexane	84		13.011				ND	
44 1,1,1-Trichloroethane	97	13.022	13.028	-0.006	92	3950	0.0550	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
45 Carbon tetrachloride	117	13.252	13.252	0.000	93	13431	0.1860	
46 Isooctane	57	13.595	13.605	-0.010	86	4356	0.0264	
47 Benzene	78	13.669	13.670	-0.001	93	7887	0.0685	
48 1,2-Dichloroethane	62		13.819				ND	
49 n-Heptane	43		13.921				ND	
* 50 1,4-Difluorobenzene	114	14.365	14.365	0.000	91	1414642	10.0	
53 Trichloroethene	95	14.793	14.793	0.000	91	5557	0.1086	
54 1,2-Dichloropropane	63		15.296				ND	
55 Methyl methacrylate	69		15.371				ND	
56 1,4-Dioxane	88		15.456				ND	
58 Dichlorobromomethane	83		15.751				ND	
60 cis-1,3-Dichloropropene	75		16.580				ND	
61 4-Methyl-2-pentanone (MIBK	43		16.815				ND	
65 Toluene	92	17.136	17.131	0.005	93	27239	0.3089	
66 trans-1,3-Dichloropropene	75		17.650				ND	
67 1,1,2-Trichloroethane	83		18.008				ND	
68 Tetrachloroethene	166	18.126	18.126	0.000	93	455521	5.23	
69 2-Hexanone	43		18.399				ND	
71 Chlorodibromomethane	129		18.736				ND	
72 Ethylene Dibromide	107		19.019				ND	
* 74 Chlorobenzene-d5	117	19.859	19.859	0.000	81	1274016	10.0	
75 Chlorobenzene	112		19.918				ND	
76 Ethylbenzene	91	20.046	20.041	0.005	94	5398	0.0290	
S 73 Xylenes, Total	106				0		0.1959	
78 m-Xylene & p-Xylene	106	20.276	20.276	0.000	0	11775	0.1511	
79 o-Xylene	106	21.025	21.020	0.005	97	3511	0.0448	
80 Styrene	104	21.063	21.063	0.000	80	1021	0.008615	
81 Bromoform	173		21.443				ND	
82 Isopropylbenzene	105		21.608				ND	
84 1,1,2,2-Tetrachloroethane	83		22.192				ND	
85 N-Propylbenzene	91		22.266				ND	
88 4-Ethyltoluene	105	22.438	22.443	-0.005	94	2839	0.0131	
89 2-Chlorotoluene	91		22.464				ND	
90 1,3,5-Trimethylbenzene	105	22.534	22.539	-0.005	88	2673	0.0147	
92 tert-Butylbenzene	119		23.010				ND	
93 1,2,4-Trimethylbenzene	105	23.096	23.096	0.000	94	8577	0.0475	
94 sec-Butylbenzene	105		23.326				ND	
95 4-Isopropyltoluene	119		23.524				ND	
96 1,3-Dichlorobenzene	146		23.577				ND	
97 1,4-Dichlorobenzene	146	23.711	23.716	-0.005	95	7804	0.0616	
98 Benzyl chloride	91		23.925				ND	
100 n-Butylbenzene	91		24.134				ND	
101 1,2-Dichlorobenzene	146		24.294				ND	
103 1,2,4-Trichlorobenzene	180		27.044				ND	
104 Hexachlorobutadiene	225		27.242				ND	
105 Naphthalene	128	27.611	27.600	0.011	99	33055	0.2417	

Reagents:

ATTO15WISs_00004 Amount Added: 20.00 Units: mL Run Reagent

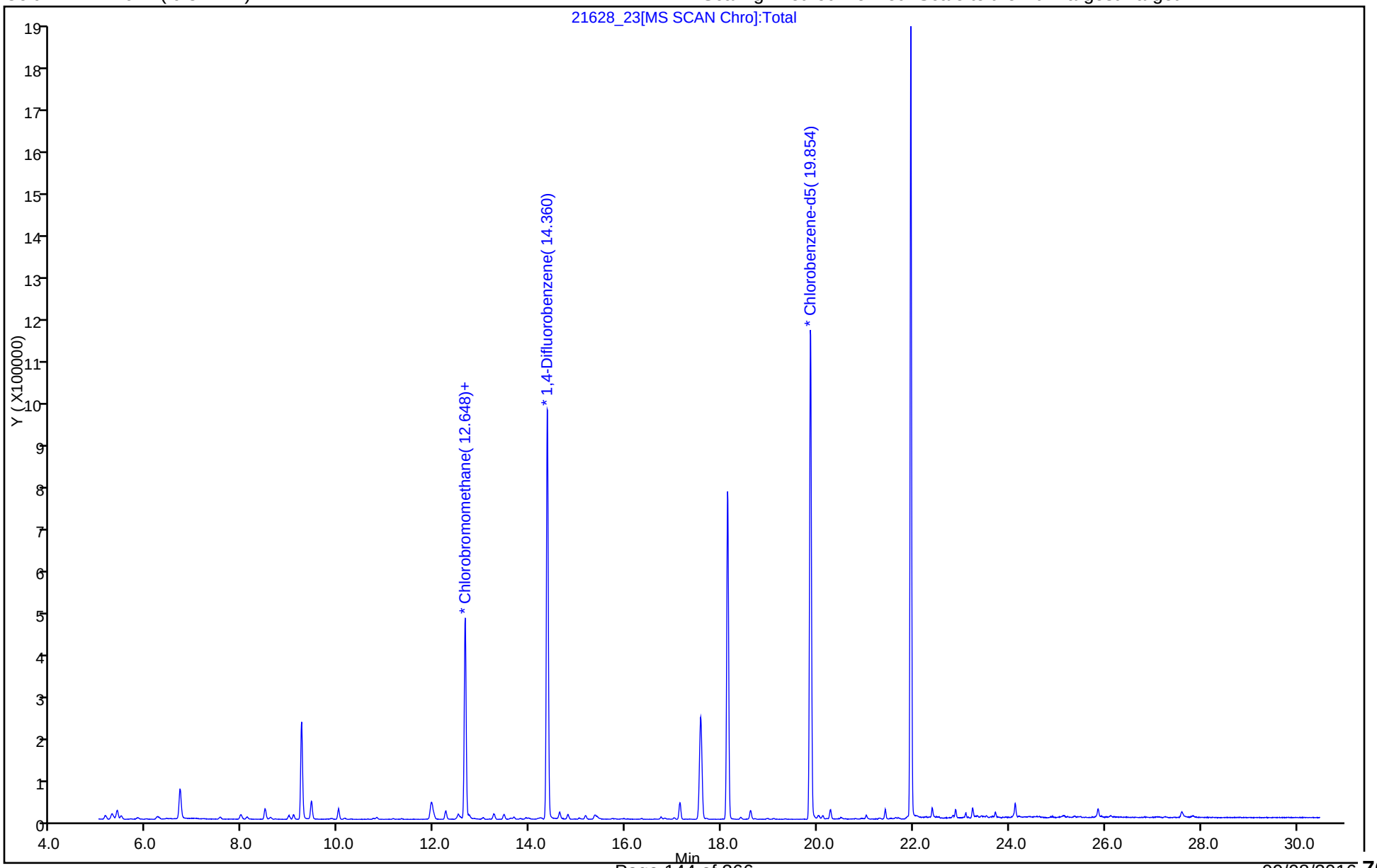
Report Date: 07-Sep-2016 08:42:35 Chrom Revision: 2.2 02-Sep-2016 12:39:46

TestAmerica Burlington

Data File: \\ChromNA\Burlington\ChromData\CHW.i\20160902-21628.b\21628_23.d

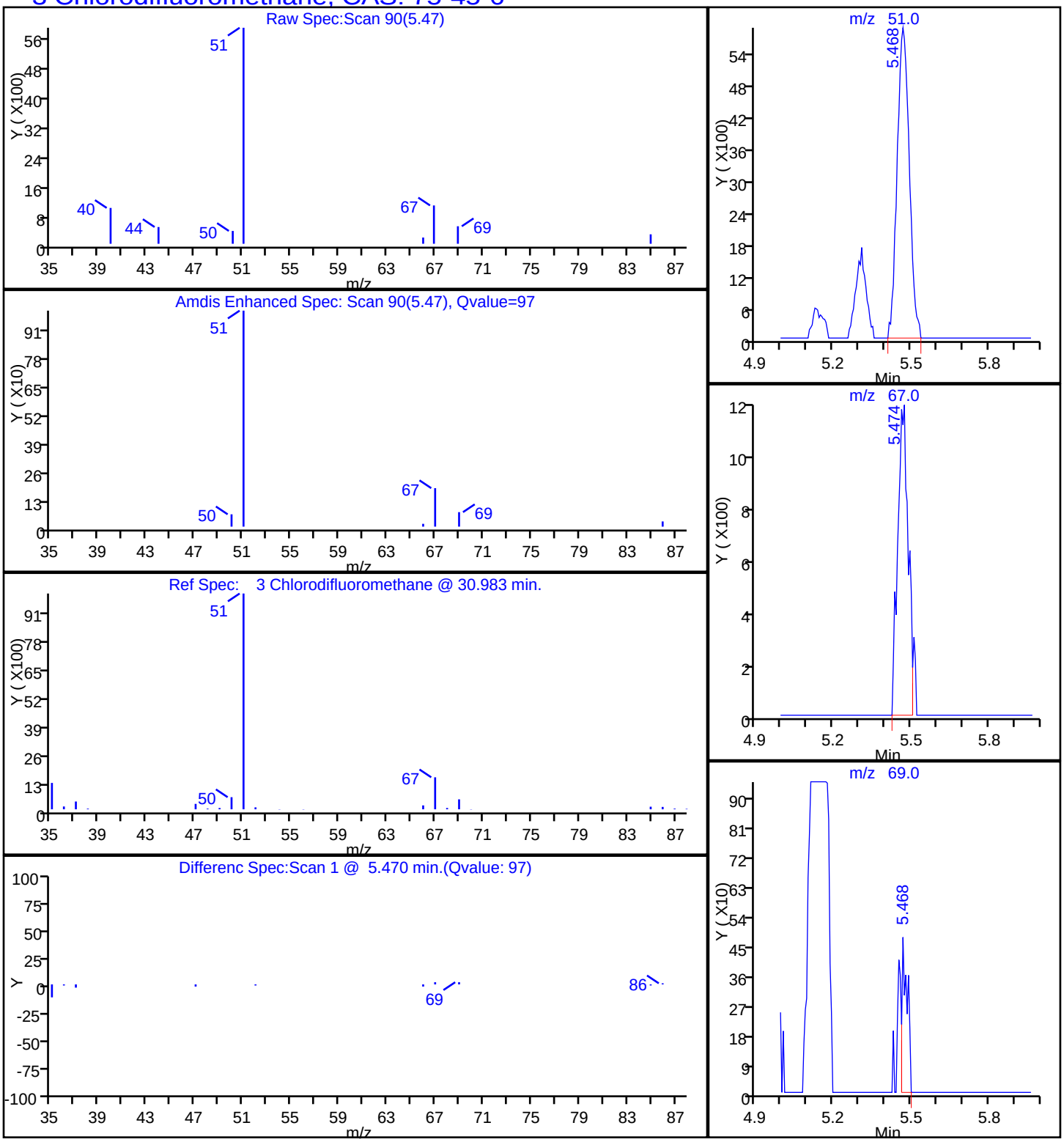
Injection Date:	03-Sep-2016 05:30:30	Instrument ID:	CHW.i	Operator ID:	pad
Lims ID:	200-35064-A-2	Lab Sample ID:	200-35064-2	Worklist Smp#:	23
Client ID:	SS-2				
Purge Vol:	200.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	19
Method:	TO15_MasterMethod_(v1)	Limit Group:	AI_TO15_ICAL		

Column: RTX-624 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Data File: \\ChromNA\Burlington\ChromData\CHW.i\20160902-21628.b\21628_23.d
Injection Date: 03-Sep-2016 05:30:30 Instrument ID: CHW.i
Lims ID: 200-35064-A-2 Lab Sample ID: 200-35064-2
Client ID: SS-2
Operator ID: pad ALS Bottle#: 19 Worklist Smp#: 23
Purge Vol: 200.000 mL Dil. Factor: 1.0000
Method: TO15_MasterMethod_(v1) Limit Group: AI_TO15_ICAL
Column: RTX-624 (0.32 mm) Detector MS SCAN

3 Chlorodifluoromethane, CAS: 75-45-6



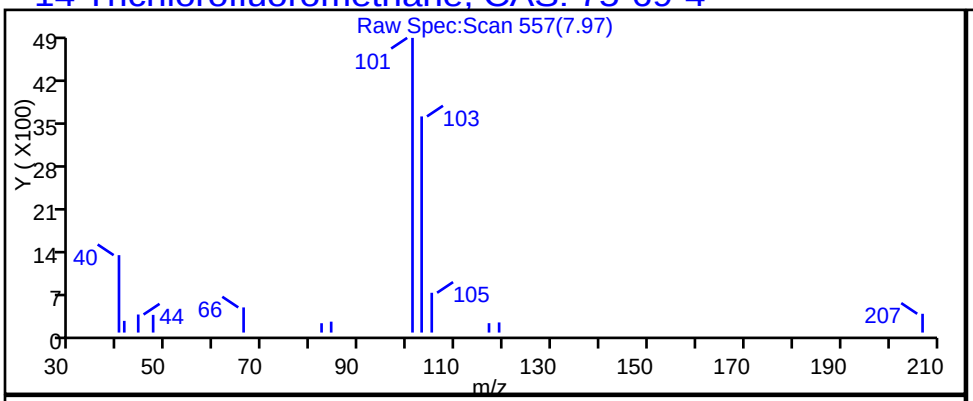
Report Date: 07-Sep-2016 08:42:35 Chrom Revision: 2.2 02-Sep-2016 12:39:46

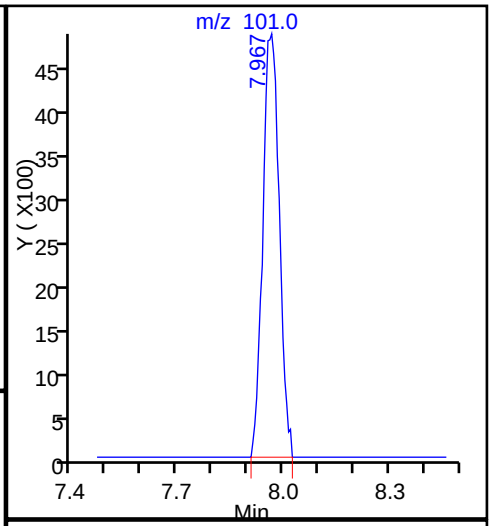
TestAmerica Burlington

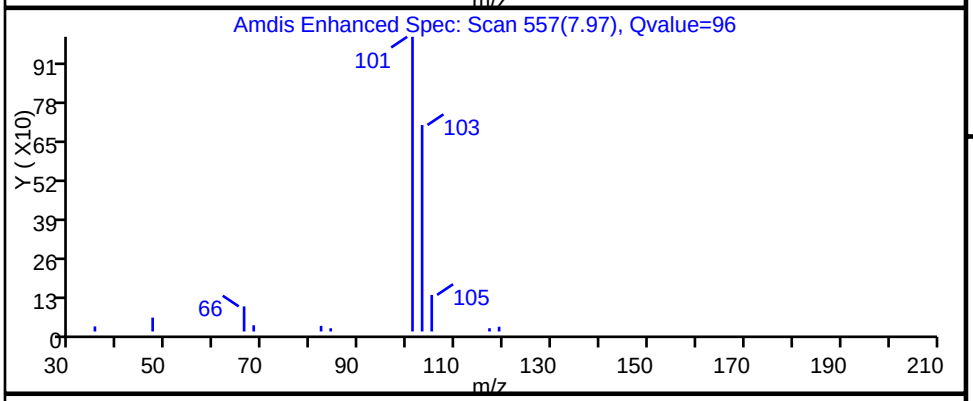
Data File: \\ChromNA\Burlington\ChromData\CHW.i\20160902-21628.b\21628_23.d

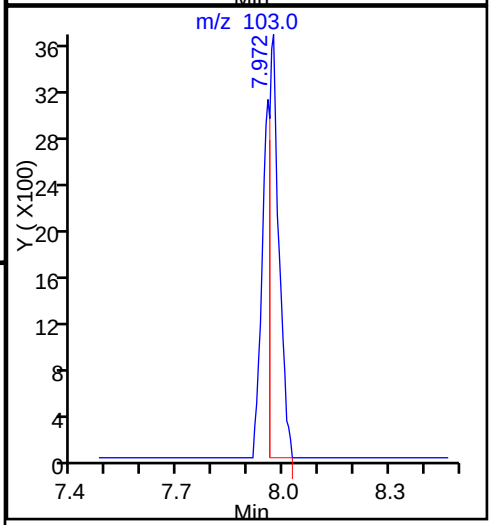
Injection Date:	03-Sep-2016 05:30:30	Instrument ID:	CHW.i		
Lims ID:	200-35064-A-2	Lab Sample ID:	200-35064-2		
Client ID:	SS-2				
Operator ID:	pad	ALS Bottle#:	19	Worklist Smp#:	23
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_MasterMethod_(v1)	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

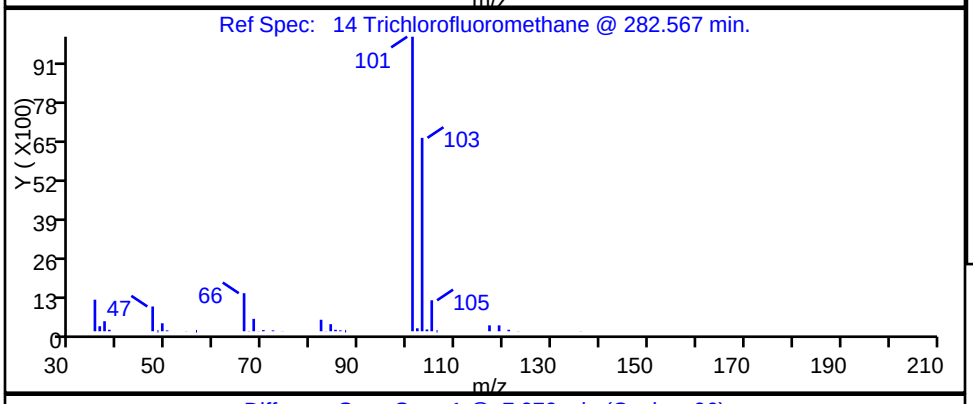
14 Trichlorofluoromethane, CAS: 75-69-4

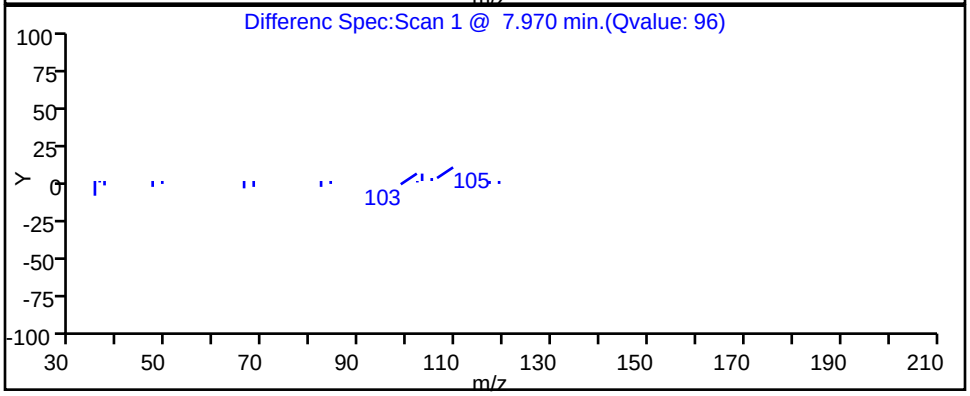












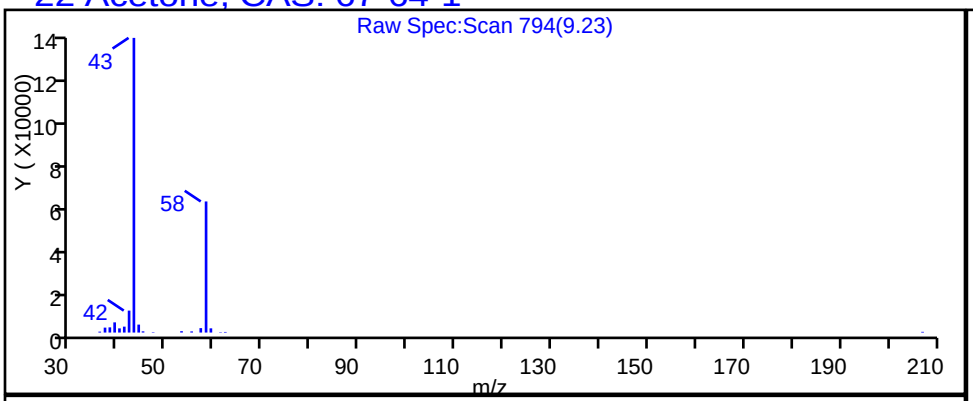
Report Date: 07-Sep-2016 08:42:35 Chrom Revision: 2.2 02-Sep-2016 12:39:46

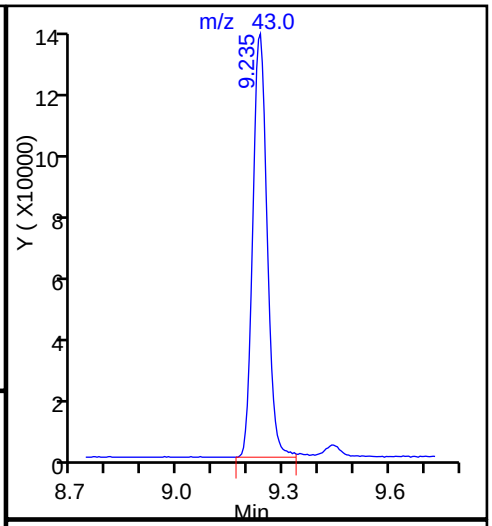
TestAmerica Burlington

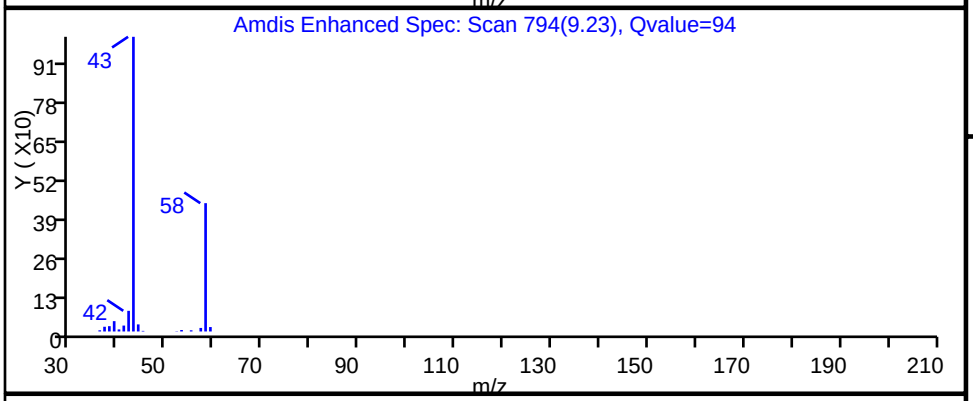
Data File: \\ChromNA\Burlington\ChromData\CHW.i\20160902-21628.b\21628_23.d

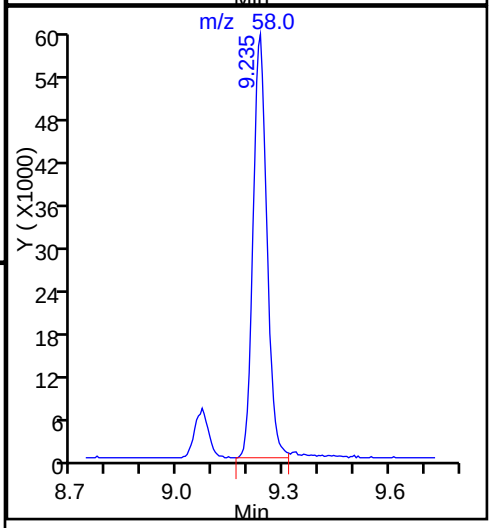
Injection Date:	03-Sep-2016 05:30:30	Instrument ID:	CHW.i		
Lims ID:	200-35064-A-2	Lab Sample ID:	200-35064-2		
Client ID:	SS-2				
Operator ID:	pad	ALS Bottle#:	19	Worklist Smp#:	23
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_MasterMethod_(v1)	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

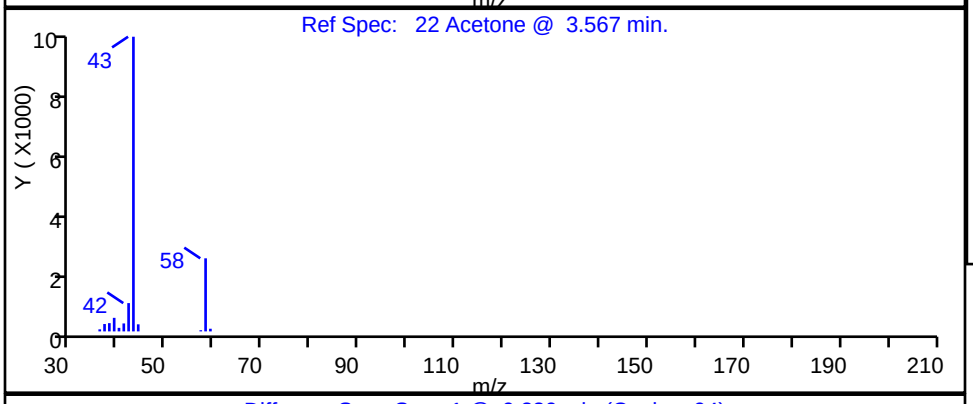
22 Acetone, CAS: 67-64-1

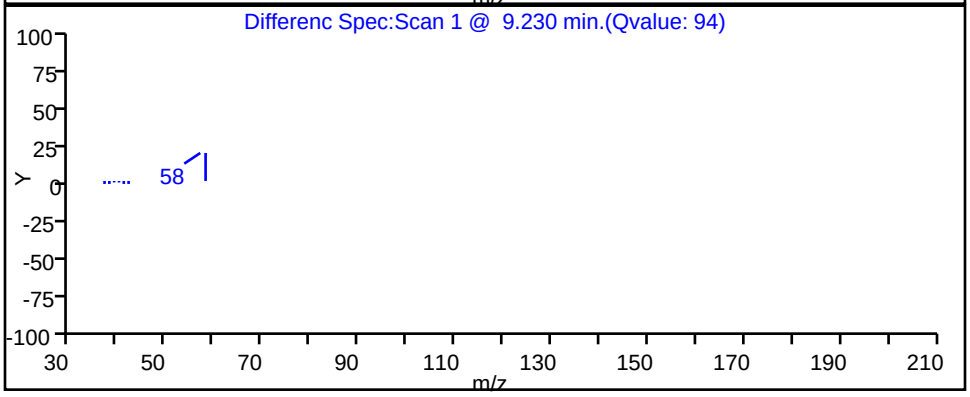






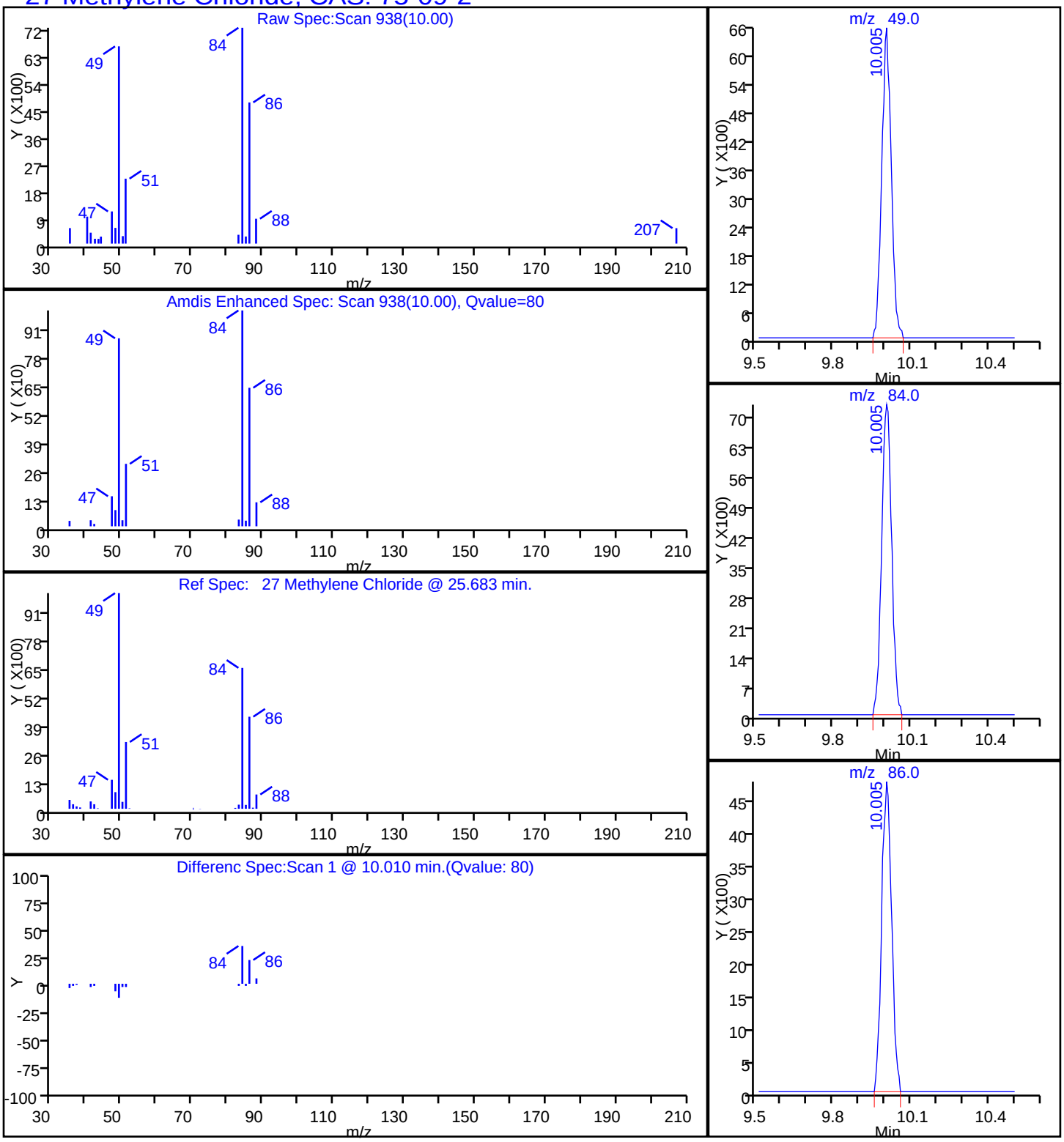






Data File: \\ChromNA\Burlington\ChromData\CHW.i\20160902-21628.b\21628_23.d
Injection Date: 03-Sep-2016 05:30:30 Instrument ID: CHW.i
Lims ID: 200-35064-A-2 Lab Sample ID: 200-35064-2
Client ID: SS-2
Operator ID: pad ALS Bottle#: 19 Worklist Smp#: 23
Purge Vol: 200.000 mL Dil. Factor: 1.0000
Method: TO15_MasterMethod_(v1) Limit Group: AI_TO15_ICAL
Column: RTX-624 (0.32 mm) Detector MS SCAN

27 Methylene Chloride, CAS: 75-09-2



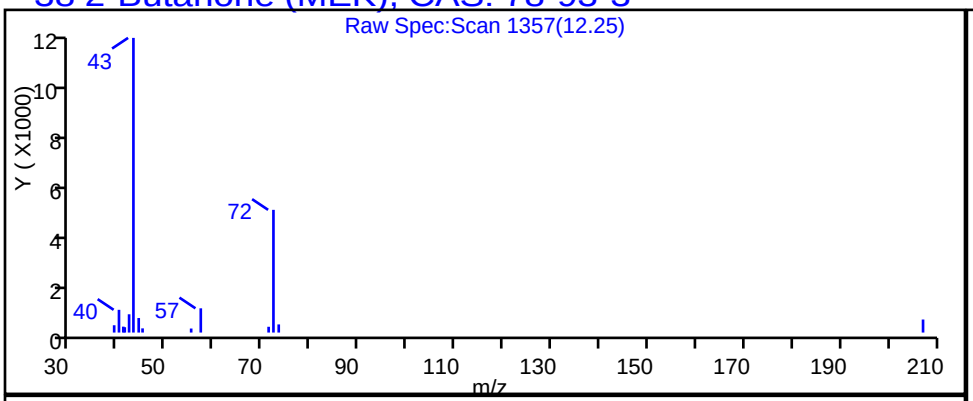
Report Date: 07-Sep-2016 08:42:35 Chrom Revision: 2.2 02-Sep-2016 12:39:46

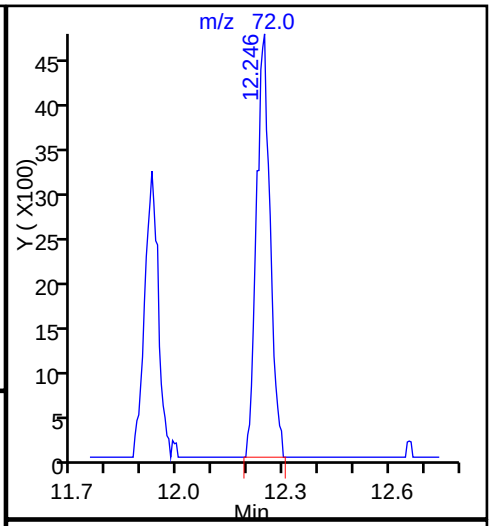
TestAmerica Burlington

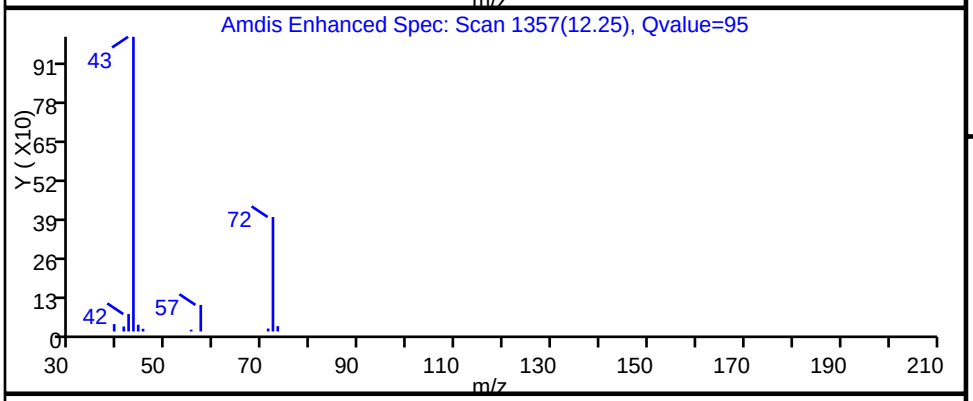
Data File: \\ChromNA\Burlington\ChromData\CHW.i\20160902-21628.b\21628_23.d

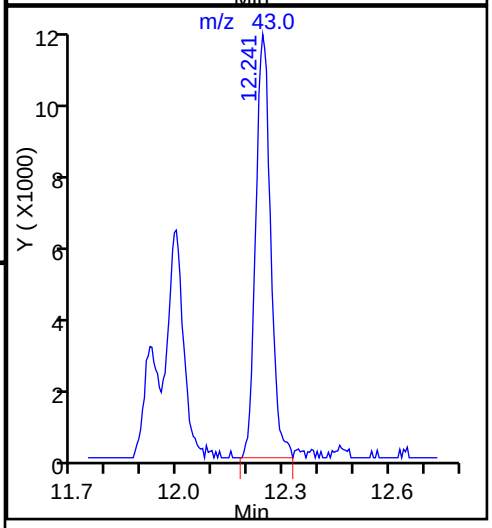
Injection Date:	03-Sep-2016 05:30:30	Instrument ID:	CHW.i		
Lims ID:	200-35064-A-2	Lab Sample ID:	200-35064-2		
Client ID:	SS-2				
Operator ID:	pad	ALS Bottle#:	19	Worklist Smp#:	23
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_MasterMethod_(v1)	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

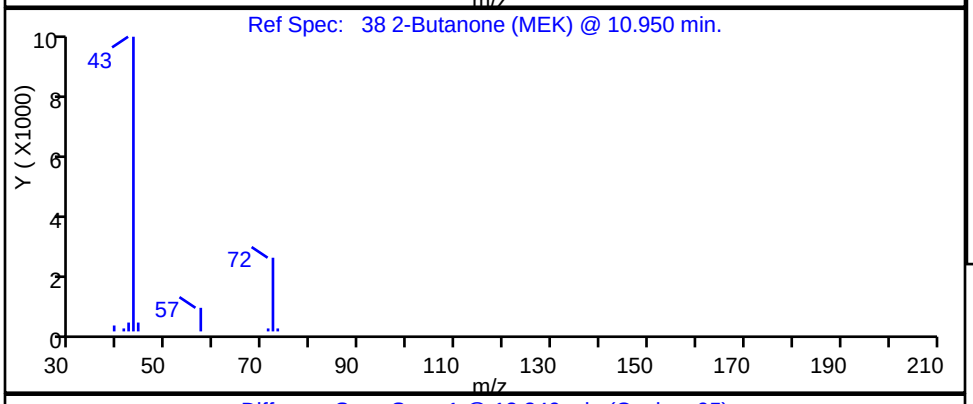
38 2-Butanone (MEK), CAS: 78-93-3

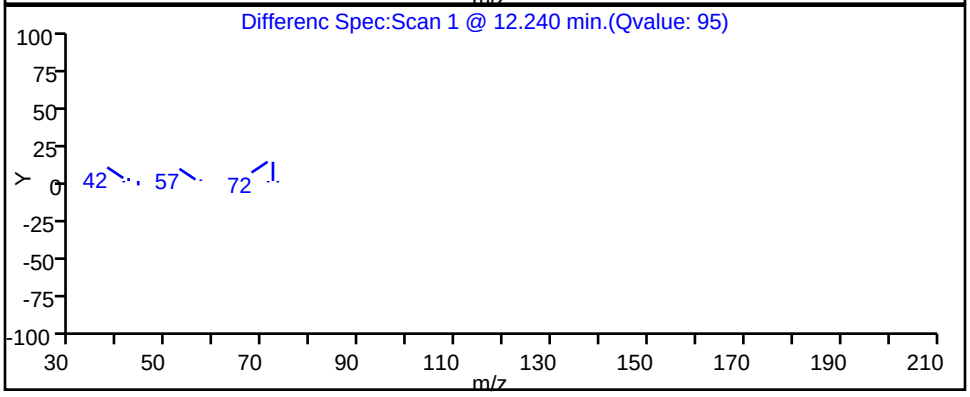












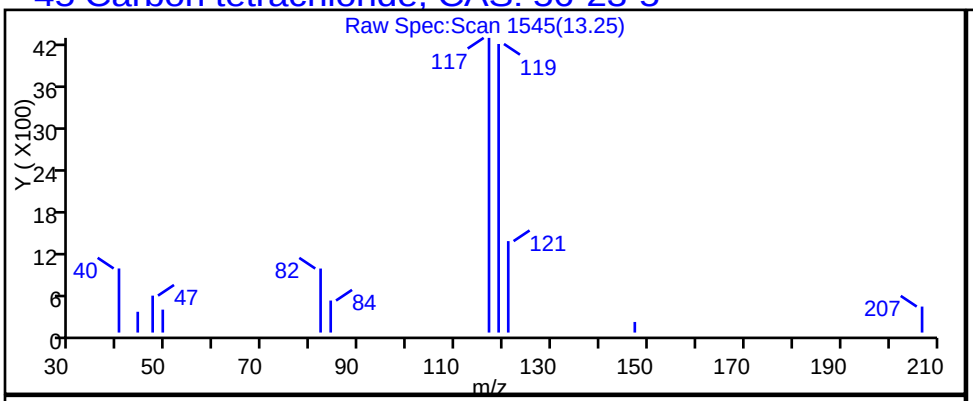
Report Date: 07-Sep-2016 08:42:35 Chrom Revision: 2.2 02-Sep-2016 12:39:46

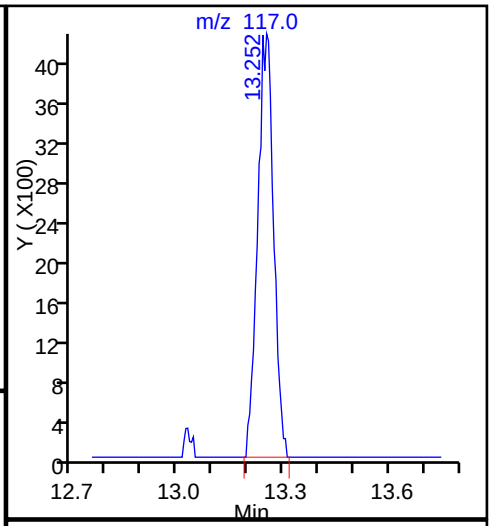
TestAmerica Burlington

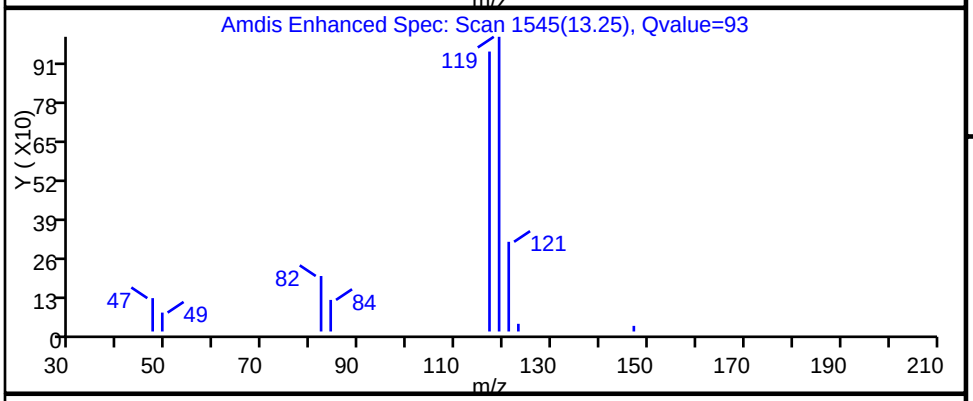
Data File: \\ChromNA\Burlington\ChromData\CHW.i\20160902-21628.b\21628_23.d

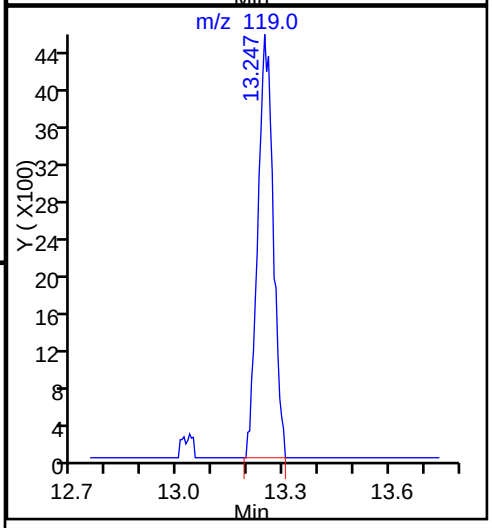
Injection Date:	03-Sep-2016 05:30:30	Instrument ID:	CHW.i		
Lims ID:	200-35064-A-2	Lab Sample ID:	200-35064-2		
Client ID:	SS-2				
Operator ID:	pad	ALS Bottle#:	19	Worklist Smp#:	23
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_MasterMethod_(v1)	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

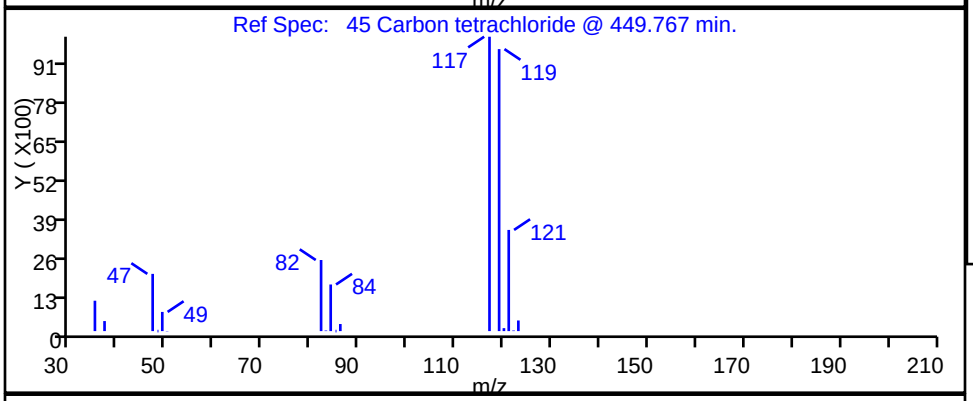
45 Carbon tetrachloride, CAS: 56-23-5

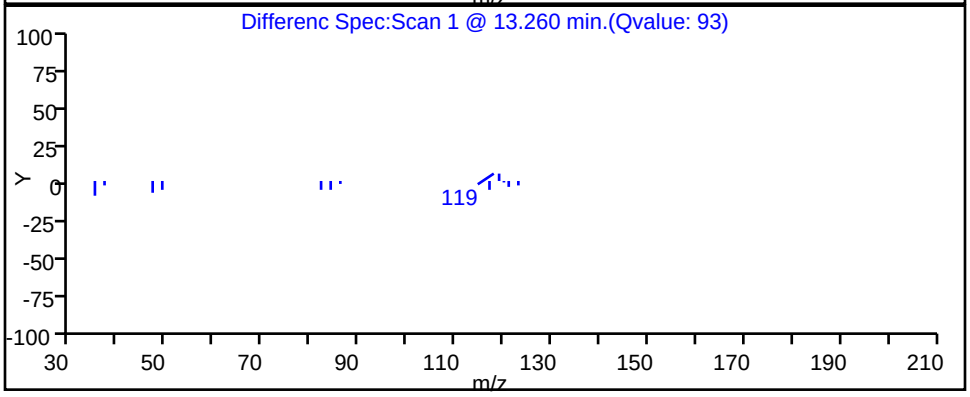












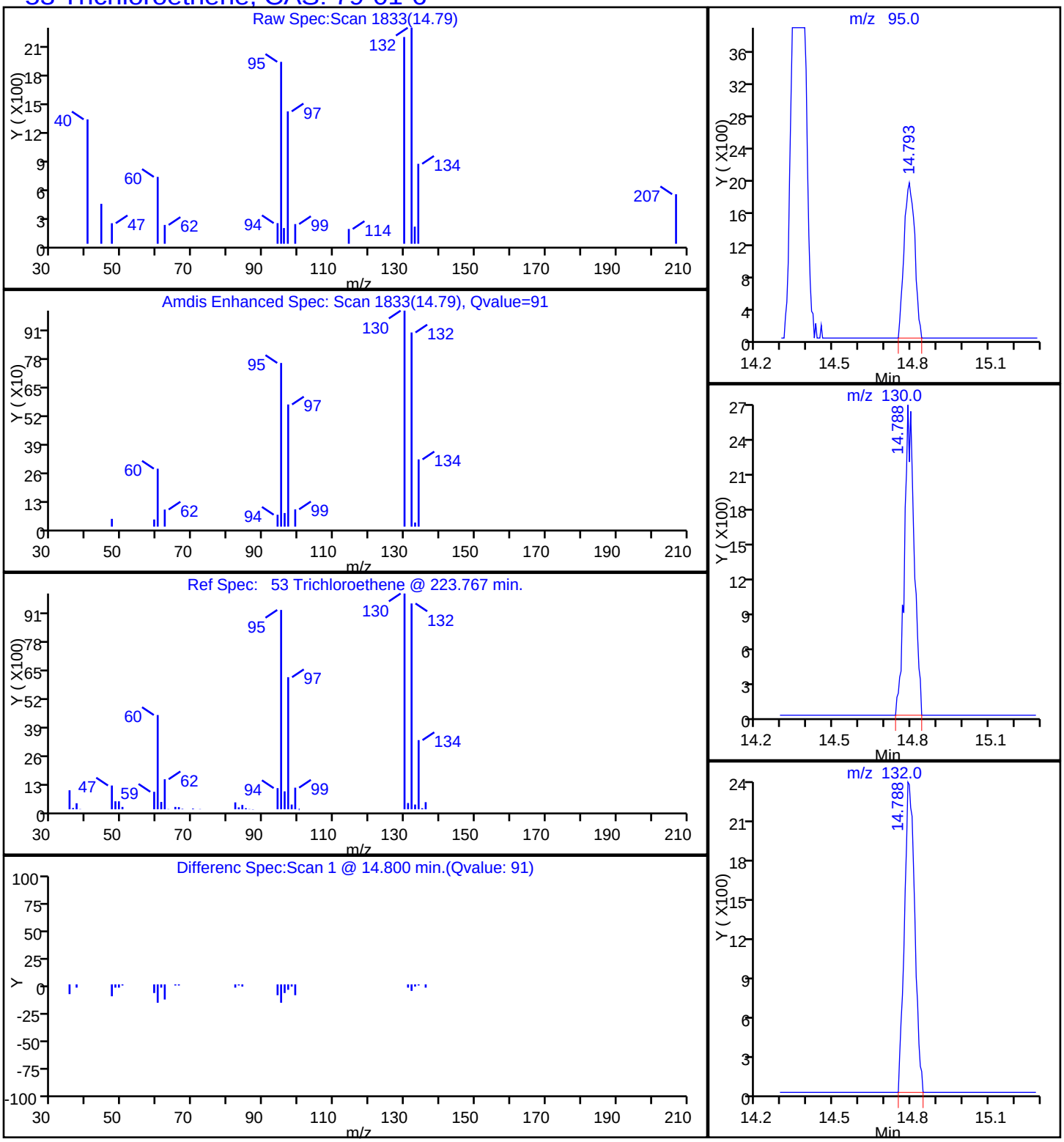
Report Date: 07-Sep-2016 08:42:35 Chrom Revision: 2.2 02-Sep-2016 12:39:46

TestAmerica Burlington

Data File: \\ChromNA\Burlington\ChromData\CHW.i\20160902-21628.b\21628_23.d

Injection Date:	03-Sep-2016 05:30:30	Instrument ID:	CHW.i		
Lims ID:	200-35064-A-2	Lab Sample ID:	200-35064-2		
Client ID:	SS-2				
Operator ID:	pad	ALS Bottle#:	19	Worklist Smp#:	23
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_MasterMethod_(v1)	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

53 Trichloroethene, CAS: 79-01-6

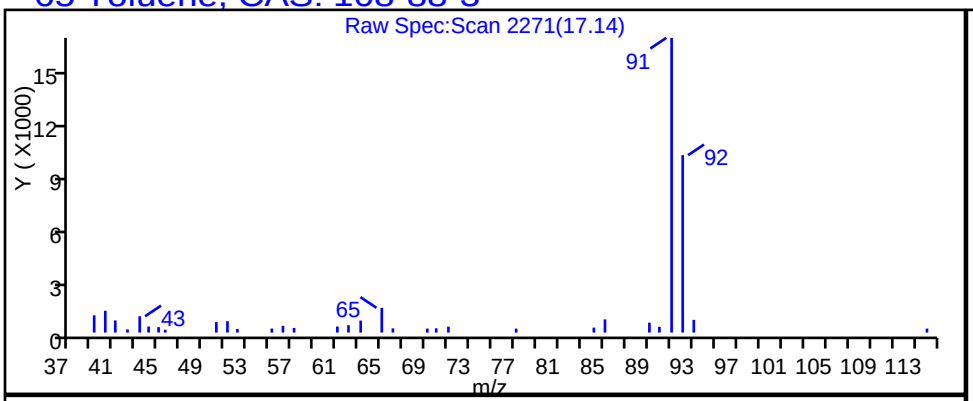


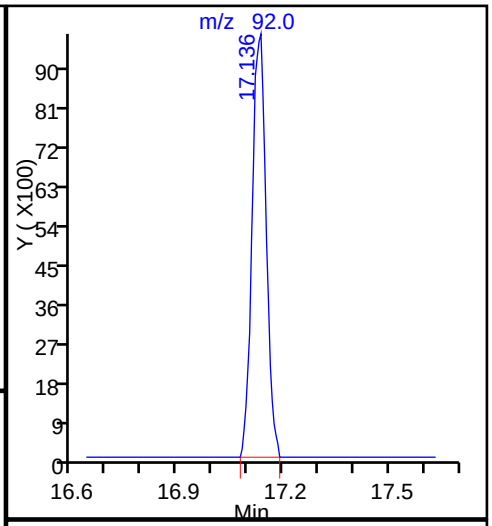
Report Date: 07-Sep-2016 08:42:36 Chrom Revision: 2.2 02-Sep-2016 12:39:46

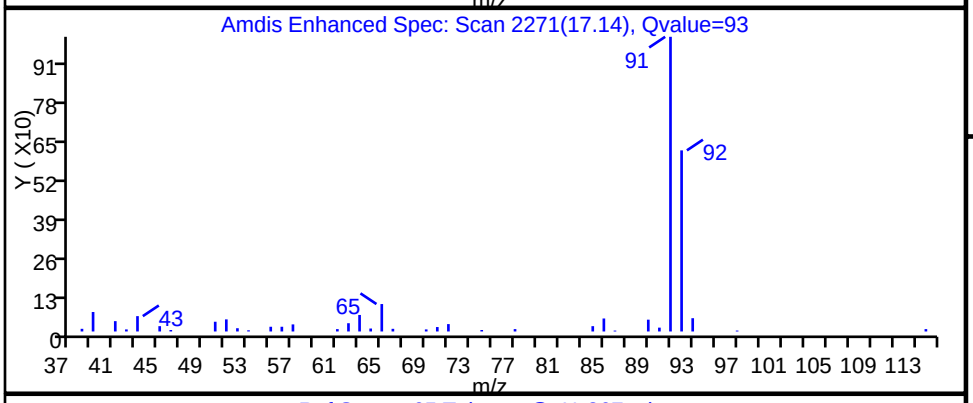
TestAmerica Burlington

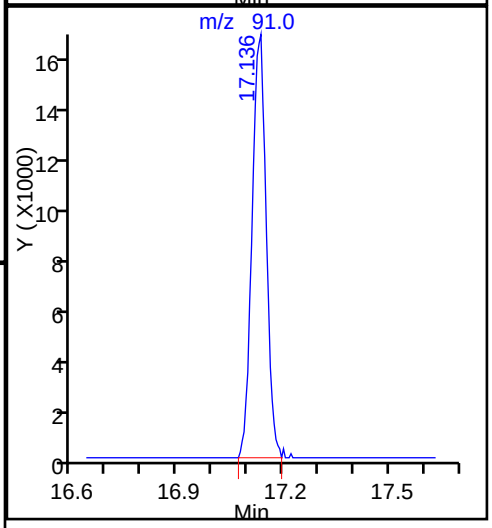
Data File:	\\ChromNA\Burlington\ChromData\CHW.i\20160902-21628.b\21628_23.d				
Injection Date:	03-Sep-2016 05:30:30	Instrument ID:	CHW.i		
Lims ID:	200-35064-A-2	Lab Sample ID:	200-35064-2		
Client ID:	SS-2				
Operator ID:	pad	ALS Bottle#:	19	Worklist Smp#:	23
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_MasterMethod_(v1)	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

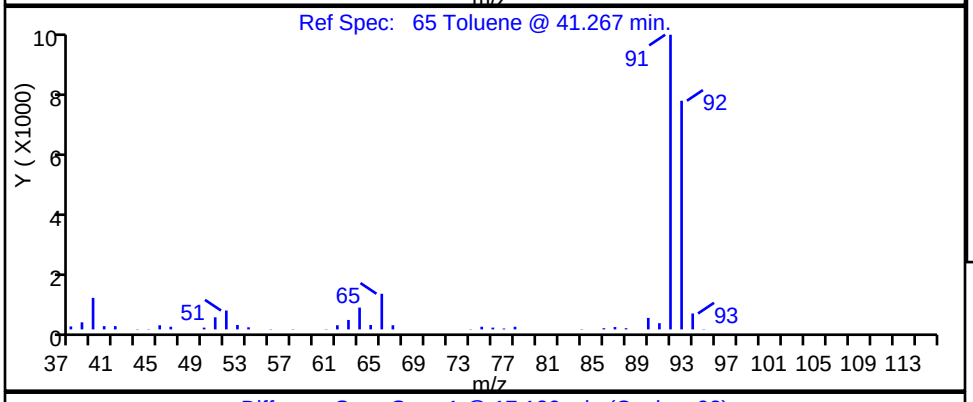
65 Toluene, CAS: 108-88-3

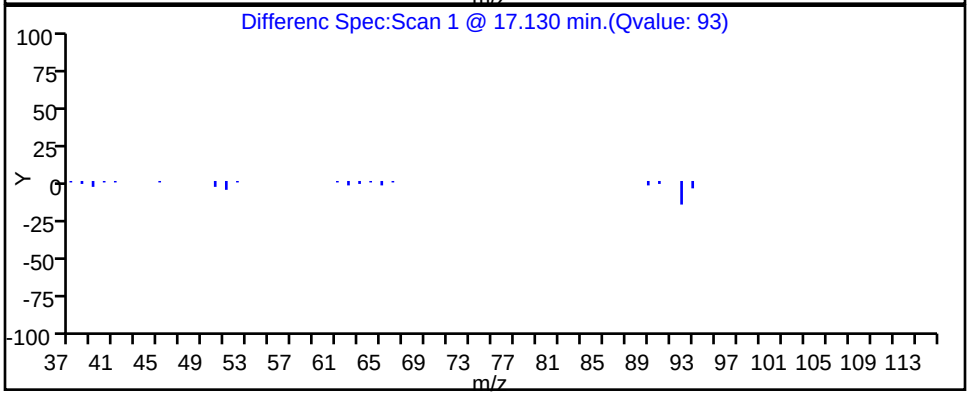












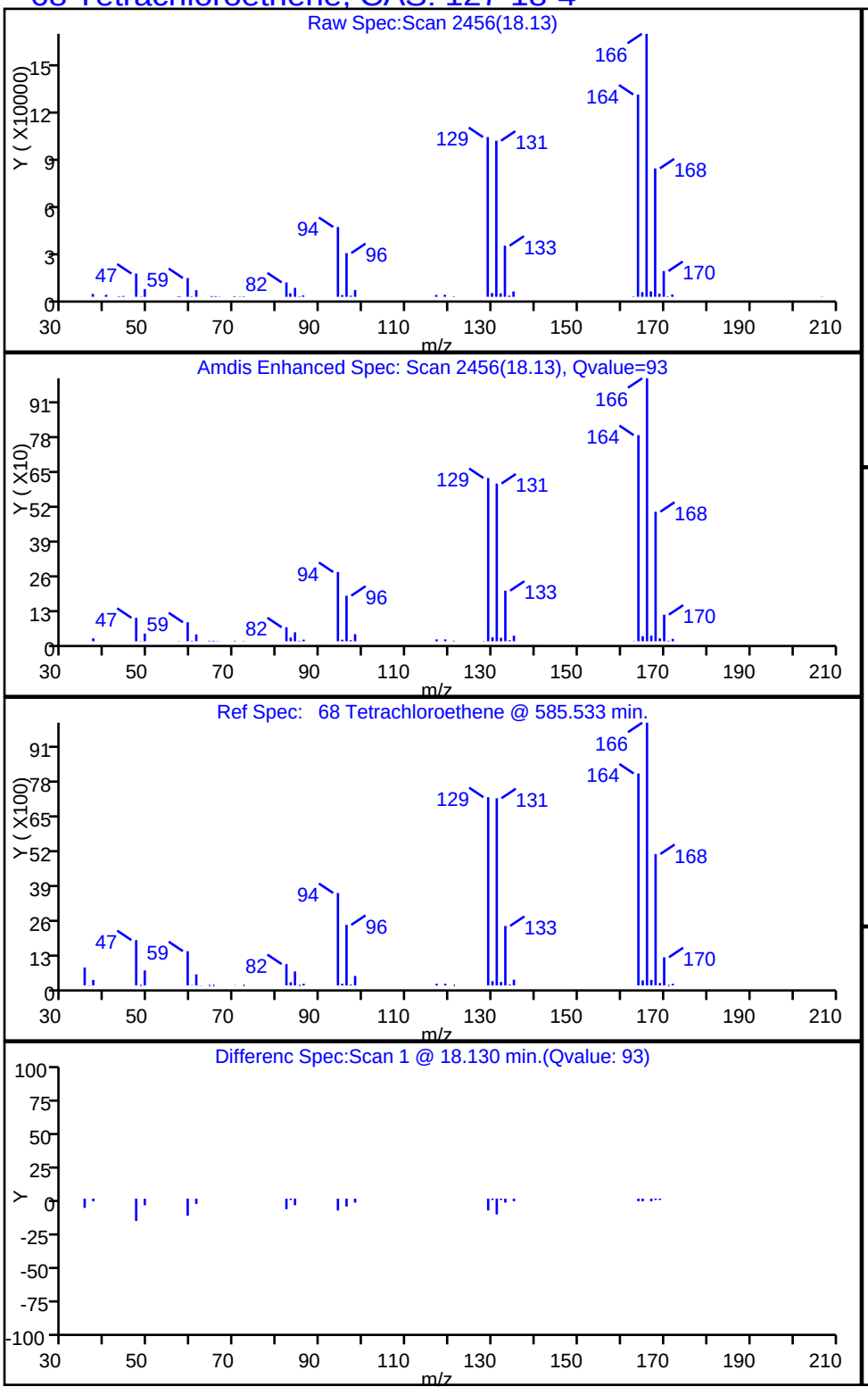
Report Date: 07-Sep-2016 08:42:36 Chrom Revision: 2.2 02-Sep-2016 12:39:46

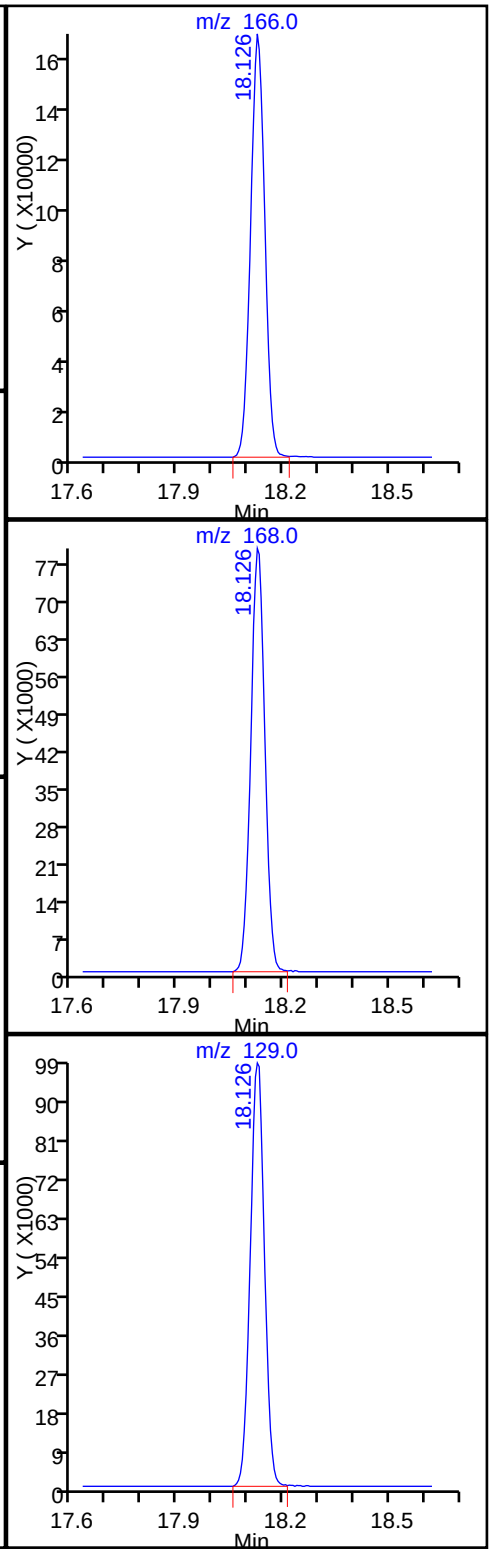
TestAmerica Burlington

Data File: \\ChromNA\Burlington\ChromData\CHW.i\20160902-21628.b\21628_23.d

Injection Date:	03-Sep-2016 05:30:30	Instrument ID:	CHW.i		
Lims ID:	200-35064-A-2	Lab Sample ID:	200-35064-2		
Client ID:	SS-2				
Operator ID:	pad	ALS Bottle#:	19	Worklist Smp#:	23
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_MasterMethod_(v1)	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

68 Tetrachloroethene, CAS: 127-18-4





FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington | Job No.: 200-35064-1

SDG No.: 200-35064-1

Client Sample ID: SS-3 | Lab Sample ID: 200-35064-3

Matrix: Air | Lab File ID: 21628_24.d

Analysis Method: TO-15 | Date Collected: 08/30/2016 12:52

Sample wt/vol: 200(mL) | Date Analyzed: 09/03/2016 06:23

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: RTX-624 ID: 0.32(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 108809 | Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	
75-71-8	Dichlorodifluoromethane	120.91	0.50	U	0.50	
75-45-6	Freon 22	86.47	0.52		0.50	
76-14-2	1,2-Dichlorotetrafluoroethane	170.92	0.20	U	0.20	
74-87-3	Chloromethane	50.49	0.50	U	0.50	
106-97-8	n-Butane	58.12	0.50	U	0.50	
75-01-4	Vinyl chloride	62.50	0.040	U	0.040	
106-99-0	1,3-Butadiene	54.09	0.20	U	0.20	
74-83-9	Bromomethane	94.94	0.20	U	0.20	
75-00-3	Chloroethane	64.52	0.50	U	0.50	
593-60-2	Bromoethene(Vinyl Bromide)	106.96	0.20	U	0.20	
75-69-4	Trichlorofluoromethane	137.37	0.20		0.20	
76-13-1	Freon TF	187.38	0.20	U	0.20	
75-35-4	1,1-Dichloroethene	96.94	0.20	U	0.20	
67-64-1	Acetone	58.08	23		5.0	
67-63-0	Isopropyl alcohol	60.10	5.0	U	5.0	
75-15-0	Carbon disulfide	76.14	0.50	U	0.50	
107-05-1	3-Chloropropene	76.53	0.50	U	0.50	
75-09-2	Methylene Chloride	84.93	29		0.50	
75-65-0	tert-Butyl alcohol	74.12	5.0	U	5.0	
1634-04-4	Methyl tert-butyl ether	88.15	0.20	U	0.20	
156-60-5	trans-1,2-Dichloroethene	96.94	0.20	U	0.20	
110-54-3	n-Hexane	86.17	0.20	U	0.20	
75-34-3	1,1-Dichloroethane	98.96	0.20	U	0.20	
78-93-3	Methyl Ethyl Ketone	72.11	1.5		0.50	
156-59-2	cis-1,2-Dichloroethene	96.94	0.20	U	0.20	
540-59-0	1,2-Dichloroethene, Total	96.94	0.40	U	0.40	
67-66-3	Chloroform	119.38	3.4		0.20	
109-99-9	Tetrahydrofuran	72.11	5.0	U	5.0	
71-55-6	1,1,1-Trichloroethane	133.41	0.20	U	0.20	
110-82-7	Cyclohexane	84.16	0.20	U	0.20	
56-23-5	Carbon tetrachloride	153.81	0.40		0.040	
540-84-1	2,2,4-Trimethylpentane	114.23	0.20	U	0.20	
71-43-2	Benzene	78.11	0.20	U	0.20	
107-06-2	1,2-Dichloroethane	98.96	0.20	U	0.20	

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington Job No.: 200-35064-1

SDG No.: 200-35064-1

Client Sample ID: SS-3 Lab Sample ID: 200-35064-3

Matrix: Air Lab File ID: 21628_24.d

Analysis Method: TO-15 Date Collected: 08/30/2016 12:52

Sample wt/vol: 200(mL) Date Analyzed: 09/03/2016 06:23

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-624 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 108809 Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	
142-82-5	n-Heptane	100.21	0.20	U	0.20	
79-01-6	Trichloroethene	131.39	0.047		0.040	
80-62-6	Methyl methacrylate	100.12	0.50	U	0.50	
78-87-5	1,2-Dichloropropane	112.99	0.20	U	0.20	
123-91-1	1,4-Dioxane	88.11	5.0	U	5.0	
75-27-4	Bromodichloromethane	163.83	0.20	U	0.20	
10061-01-5	cis-1,3-Dichloropropene	110.97	0.20	U	0.20	
108-10-1	methyl isobutyl ketone	100.16	0.50	U	0.50	
108-88-3	Toluene	92.14	1.3		0.20	
10061-02-6	trans-1,3-Dichloropropene	110.97	0.20	U	0.20	
79-00-5	1,1,2-Trichloroethane	133.41	0.20	U	0.20	
127-18-4	Tetrachloroethene	165.83	3.6		0.20	
591-78-6	Methyl Butyl Ketone (2-Hexanone)	100.20	0.50	U	0.50	
124-48-1	Dibromochloromethane	208.29	0.20	U	0.20	
106-93-4	1,2-Dibromoethane	187.87	0.20	U	0.20	
108-90-7	Chlorobenzene	112.56	0.20	U	0.20	
100-41-4	Ethylbenzene	106.17	0.20	U	0.20	
179601-23-1	m,p-Xylene	106.17	0.74		0.50	
95-47-6	Xylene, o-	106.17	0.33		0.20	
1330-20-7	Xylene (total)	106.17	1.1		0.70	
100-42-5	Styrene	104.15	0.20	U	0.20	
75-25-2	Bromoform	252.75	0.20	U	0.20	
98-82-8	Cumene	120.19	0.20	U	0.20	
79-34-5	1,1,2,2-Tetrachloroethane	167.85	0.20	U	0.20	
103-65-1	n-Propylbenzene	120.19	0.35		0.20	
622-96-8	4-Ethyltoluene	120.20	0.67		0.20	
108-67-8	1,3,5-Trimethylbenzene	120.20	2.0		0.20	
95-49-8	2-Chlorotoluene	126.59	0.20	U	0.20	
98-06-6	tert-Butylbenzene	134.22	0.20	U	0.20	
95-63-6	1,2,4-Trimethylbenzene	120.20	7.1		0.20	
135-98-8	sec-Butylbenzene	134.22	0.42		0.20	
99-87-6	4-Isopropyltoluene	134.22	0.83		0.20	
541-73-1	1,3-Dichlorobenzene	147.00	0.20	U	0.20	
106-46-7	1,4-Dichlorobenzene	147.00	0.20	U	0.20	

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington Job No.: 200-35064-1

SDG No.: 200-35064-1

Client Sample ID: SS-3 Lab Sample ID: 200-35064-3

Matrix: Air Lab File ID: 21628_24.d

Analysis Method: TO-15 Date Collected: 08/30/2016 12:52

Sample wt/vol: 200(mL) Date Analyzed: 09/03/2016 06:23

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-624 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 108809 Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	
100-44-7	Benzyl chloride	126.58	0.20	U	0.20	
104-51-8	n-Butylbenzene	134.22	1.3		0.20	
95-50-1	1,2-Dichlorobenzene	147.00	0.20	U	0.20	
120-82-1	1,2,4-Trichlorobenzene	181.45	0.50	U	0.50	
87-68-3	Hexachlorobutadiene	260.76	0.20	U	0.20	
91-20-3	Naphthalene	128.17	18		0.50	

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington | Job No.: 200-35064-1

SDG No.: 200-35064-1

Client Sample ID: SS-3 | Lab Sample ID: 200-35064-3

Matrix: Air | Lab File ID: 21628_24.d

Analysis Method: TO-15 | Date Collected: 08/30/2016 12:52

Sample wt/vol: 200(mL) | Date Analyzed: 09/03/2016 06:23

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: RTX-624 ID: 0.32(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 108809 | Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	
75-71-8	Dichlorodifluoromethane	120.91	2.5	U	2.5	
75-45-6	Freon 22	86.47	1.8		1.8	
76-14-2	1,2-Dichlorotetrafluoroethane	170.92	1.4	U	1.4	
74-87-3	Chloromethane	50.49	1.0	U	1.0	
106-97-8	n-Butane	58.12	1.2	U	1.2	
75-01-4	Vinyl chloride	62.50	0.10	U	0.10	
106-99-0	1,3-Butadiene	54.09	0.44	U	0.44	
74-83-9	Bromomethane	94.94	0.78	U	0.78	
75-00-3	Chloroethane	64.52	1.3	U	1.3	
593-60-2	Bromoethene(Vinyl Bromide)	106.96	0.87	U	0.87	
75-69-4	Trichlorofluoromethane	137.37	1.1		1.1	
76-13-1	Freon TF	187.38	1.5	U	1.5	
75-35-4	1,1-Dichloroethene	96.94	0.79	U	0.79	
67-64-1	Acetone	58.08	54		12	
67-63-0	Isopropyl alcohol	60.10	12	U	12	
75-15-0	Carbon disulfide	76.14	1.6	U	1.6	
107-05-1	3-Chloropropene	76.53	1.6	U	1.6	
75-09-2	Methylene Chloride	84.93	100		1.7	
75-65-0	tert-Butyl alcohol	74.12	15	U	15	
1634-04-4	Methyl tert-butyl ether	88.15	0.72	U	0.72	
156-60-5	trans-1,2-Dichloroethene	96.94	0.79	U	0.79	
110-54-3	n-Hexane	86.17	0.70	U	0.70	
75-34-3	1,1-Dichloroethane	98.96	0.81	U	0.81	
78-93-3	Methyl Ethyl Ketone	72.11	4.4		1.5	
156-59-2	cis-1,2-Dichloroethene	96.94	0.79	U	0.79	
540-59-0	1,2-Dichloroethene, Total	96.94	1.6	U	1.6	
67-66-3	Chloroform	119.38	17		0.98	
109-99-9	Tetrahydrofuran	72.11	15	U	15	
71-55-6	1,1,1-Trichloroethane	133.41	1.1	U	1.1	
110-82-7	Cyclohexane	84.16	0.69	U	0.69	
56-23-5	Carbon tetrachloride	153.81	2.5		0.25	
540-84-1	2,2,4-Trimethylpentane	114.23	0.93	U	0.93	
71-43-2	Benzene	78.11	0.64	U	0.64	
107-06-2	1,2-Dichloroethane	98.96	0.81	U	0.81	

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington | Job No.: 200-35064-1

SDG No.: 200-35064-1

Client Sample ID: SS-3 | Lab Sample ID: 200-35064-3

Matrix: Air | Lab File ID: 21628_24.d

Analysis Method: TO-15 | Date Collected: 08/30/2016 12:52

Sample wt/vol: 200(mL) | Date Analyzed: 09/03/2016 06:23

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: RTX-624 ID: 0.32(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 108809 | Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	
142-82-5	n-Heptane	100.21	0.82	U	0.82	
79-01-6	Trichloroethene	131.39	0.25		0.21	
80-62-6	Methyl methacrylate	100.12	2.0	U	2.0	
78-87-5	1,2-Dichloropropane	112.99	0.92	U	0.92	
123-91-1	1,4-Dioxane	88.11	18	U	18	
75-27-4	Bromodichloromethane	163.83	1.3	U	1.3	
10061-01-5	cis-1,3-Dichloropropene	110.97	0.91	U	0.91	
108-10-1	methyl isobutyl ketone	100.16	2.0	U	2.0	
108-88-3	Toluene	92.14	4.8		0.75	
10061-02-6	trans-1,3-Dichloropropene	110.97	0.91	U	0.91	
79-00-5	1,1,2-Trichloroethane	133.41	1.1	U	1.1	
127-18-4	Tetrachloroethene	165.83	24		1.4	
591-78-6	Methyl Butyl Ketone (2-Hexanone)	100.20	2.0	U	2.0	
124-48-1	Dibromochloromethane	208.29	1.7	U	1.7	
106-93-4	1,2-Dibromoethane	187.87	1.5	U	1.5	
108-90-7	Chlorobenzene	112.56	0.92	U	0.92	
100-41-4	Ethylbenzene	106.17	0.87	U	0.87	
179601-23-1	m,p-Xylene	106.17	3.2		2.2	
95-47-6	Xylene, o-	106.17	1.4		0.87	
1330-20-7	Xylene (total)	106.17	4.6		3.0	
100-42-5	Styrene	104.15	0.85	U	0.85	
75-25-2	Bromoform	252.75	2.1	U	2.1	
98-82-8	Cumene	120.19	0.98	U	0.98	
79-34-5	1,1,2,2-Tetrachloroethane	167.85	1.4	U	1.4	
103-65-1	n-Propylbenzene	120.19	1.7		0.98	
622-96-8	4-Ethyltoluene	120.20	3.3		0.98	
108-67-8	1,3,5-Trimethylbenzene	120.20	9.8		0.98	
95-49-8	2-Chlorotoluene	126.59	1.0	U	1.0	
98-06-6	tert-Butylbenzene	134.22	1.1	U	1.1	
95-63-6	1,2,4-Trimethylbenzene	120.20	35		0.98	
135-98-8	sec-Butylbenzene	134.22	2.3		1.1	
99-87-6	4-Isopropyltoluene	134.22	4.5		1.1	
541-73-1	1,3-Dichlorobenzene	147.00	1.2	U	1.2	
106-46-7	1,4-Dichlorobenzene	147.00	1.2	U	1.2	

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington Job No.: 200-35064-1

SDG No.: 200-35064-1

Client Sample ID: SS-3 Lab Sample ID: 200-35064-3

Matrix: Air Lab File ID: 21628_24.d

Analysis Method: TO-15 Date Collected: 08/30/2016 12:52

Sample wt/vol: 200(mL) Date Analyzed: 09/03/2016 06:23

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-624 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 108809 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	
100-44-7	Benzyl chloride	126.58	1.0	U	1.0	
104-51-8	n-Butylbenzene	134.22	7.1		1.1	
95-50-1	1,2-Dichlorobenzene	147.00	1.2	U	1.2	
120-82-1	1,2,4-Trichlorobenzene	181.45	3.7	U	3.7	
87-68-3	Hexachlorobutadiene	260.76	2.1	U	2.1	
91-20-3	Naphthalene	128.17	92		2.6	

TestAmerica Burlington
Target Compound Quantitation Report

Data File: \\ChromNA\Burlington\ChromData\CHW.i\20160902-21628.b\21628_24.d
Lims ID: 200-35064-A-3
Client ID: SS-3
Sample Type: Client
Inject. Date: 03-Sep-2016 06:23:30 ALS Bottle#: 20 Worklist Smp#: 24
Purge Vol: 200.000 mL Dil. Factor: 1.0000
Sample Info: 200-0021628-024
Misc. Info.: 34064-03
Operator ID: pad Instrument ID: CHW.i

Method: \\ChromNA\Burlington\ChromData\CHW.i\20160902-21628.b\TO15_MasterMethod_(v1).m
Limit Group: AI_TO15_ICAL
Last Update: 07-Sep-2016 08:42:26 Calib Date: 23-Aug-2016 00:38:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Burlington\ChromData\CHW.i\20160822-21457.b\21457_13.d

Column 1 : RTX-624 (0.32 mm) Det: MS SCAN
Process Host: XAWRK010

First Level Reviewer: puangmaleek Date: 07-Sep-2016 09:57:45

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
2 Dichlorodifluoromethane	85	5.383	5.383	0.000	99	39402	0.4235	
3 Chlorodifluoromethane	51	5.474	5.463	0.011	96	22163	0.5190	
4 1,2-Dichloro-1,1,2,2-tetra	85		5.789				ND	
5 Chloromethane	50	6.009	5.987	0.022	88	2984	0.1259	M
6 Butane	43	6.260	6.260	0.000	90	12251	0.2916	
7 Vinyl chloride	62		6.314				ND	
8 Butadiene	54	6.410	6.415	-0.005	57	1426	0.0607	
10 Bromomethane	94		7.212				ND	
11 Chloroethane	64	7.464	7.464	0.000	87	1600	0.0892	
13 Vinyl bromide	106		7.876				ND	
14 Trichlorofluoromethane	101	7.967	7.967	0.000	98	18990	0.2022	
20 1,1,2-Trichloro-1,2,2-trif	101	8.972	8.978	-0.006	86	5025	0.0657	
21 1,1-Dichloroethene	96		9.042				ND	
22 Acetone	43	9.234	9.240	-0.006	94	896395	22.8	
23 Carbon disulfide	76	9.432	9.438	-0.006	32	11293	0.1226	
24 Isopropyl alcohol	45	9.438	9.438	0.000	100	88295	2.22	
25 3-Chloro-1-propene	41		9.743				ND	
27 Methylene Chloride	49	10.005	10.005	0.000	80	911974	29.2	
28 2-Methyl-2-propanol	59	10.133	10.128	0.005	93	10211	0.1697	
S 30 1,2-Dichloroethene, Total	61		10.200				ND	
29 Methyl tert-butyl ether	73		10.347				ND	
31 trans-1,2-Dichloroethene	61		10.401				ND	
33 Hexane	57	10.738	10.738	0.000	77	4260	0.0818	
34 1,1-Dichloroethane	63		11.214				ND	
37 cis-1,2-Dichloroethene	96		12.220				ND	
38 2-Butanone (MEK)	72	12.236	12.241	-0.005	96	27958	1.48	
41 Tetrahydrofuran	42		12.648				ND	
* 40 Chlorobromomethane	128	12.648	12.653	-0.005	74	304964	10.0	
42 Chloroform	83	12.739	12.744	-0.005	93	245987	3.44	
43 Cyclohexane	84	13.017	13.011	0.006	76	1035	0.0199	M
44 1,1,1-Trichloroethane	97		13.028				ND	

	Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
	45 Carbon tetrachloride	117	13.247	13.252	-0.005	96	29226	0.4042	
	46 Isooctane	57	13.589	13.605	-0.016	96	10755	0.0650	
	47 Benzene	78	13.669	13.670	-0.001	93	8203	0.0711	
	48 1,2-Dichloroethane	62		13.819				ND	
	49 n-Heptane	43	13.915	13.921	-0.006	77	4097	0.0752	
*	50 1,4-Difluorobenzene	114	14.365	14.365	0.000	91	1416483	10.0	
	53 Trichloroethene	95	14.793	14.793	0.000	90	2422	0.0473	
	54 1,2-Dichloropropane	63		15.296				ND	
	55 Methyl methacrylate	69		15.371				ND	
	56 1,4-Dioxane	88		15.456				ND	
	58 Dichlorobromomethane	83		15.751				ND	
	60 cis-1,3-Dichloropropene	75		16.580				ND	
	61 4-Methyl-2-pentanone (MIBK	43	16.815	16.815	0.000	93	12145	0.1798	
	65 Toluene	92	17.131	17.131	0.000	93	109274	1.28	
	66 trans-1,3-Dichloropropene	75		17.650				ND	
	67 1,1,2-Trichloroethane	83		18.008				ND	
	68 Tetrachloroethene	166	18.126	18.126	0.000	93	304033	3.59	
	69 2-Hexanone	43		18.399				ND	
	71 Chlorodibromomethane	129		18.736				ND	
	72 Ethylene Dibromide	107		19.019				ND	
*	74 Chlorobenzene-d5	117	19.854	19.859	-0.005	81	1238023	10.0	
	75 Chlorobenzene	112		19.918				ND	
	76 Ethylbenzene	91	20.046	20.041	0.005	95	23268	0.1287	
S	73 Xylenes, Total	106				0		1.07	
	78 m-Xylene & p-Xylene	106	20.271	20.276	-0.005	0	55783	0.7368	
	79 o-Xylene	106	21.015	21.020	-0.005	98	25011	0.3283	
	80 Styrene	104		21.063				ND	
	81 Bromoform	173		21.443				ND	
	82 Isopropylbenzene	105		21.608				ND	
	84 1,1,2,2-Tetrachloroethane	83		22.192				ND	
	85 N-Propylbenzene	91	22.266	22.266	0.000	99	84002	0.3467	
	88 4-Ethyltoluene	105	22.438	22.443	-0.005	98	141744	0.6733	
	89 2-Chlorotoluene	91		22.464				ND	
	90 1,3,5-Trimethylbenzene	105	22.539	22.539	0.000	95	352778	1.99	
	92 tert-Butylbenzene	119		23.010				ND	
	93 1,2,4-Trimethylbenzene	105	23.096	23.096	0.000	95	1245539	7.09	
	94 sec-Butylbenzene	105	23.326	23.326	0.000	98	108262	0.4202	
	95 4-Isopropyltoluene	119	23.524	23.524	0.000	98	184912	0.8263	
	96 1,3-Dichlorobenzene	146		23.577				ND	
	97 1,4-Dichlorobenzene	146		23.716				ND	
	98 Benzyl chloride	91		23.925				ND	
	100 n-Butylbenzene	91	24.128	24.134	-0.006	52	225965	1.30	
	101 1,2-Dichlorobenzene	146		24.294				ND	
	103 1,2,4-Trichlorobenzene	180		27.044				ND	
	104 Hexachlorobutadiene	225		27.242				ND	
	105 Naphthalene	128	27.600	27.600	0.000	99	2339719	17.6	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

ATTO15WISs_00004 Amount Added: 20.00 Units: mL Run Reagent

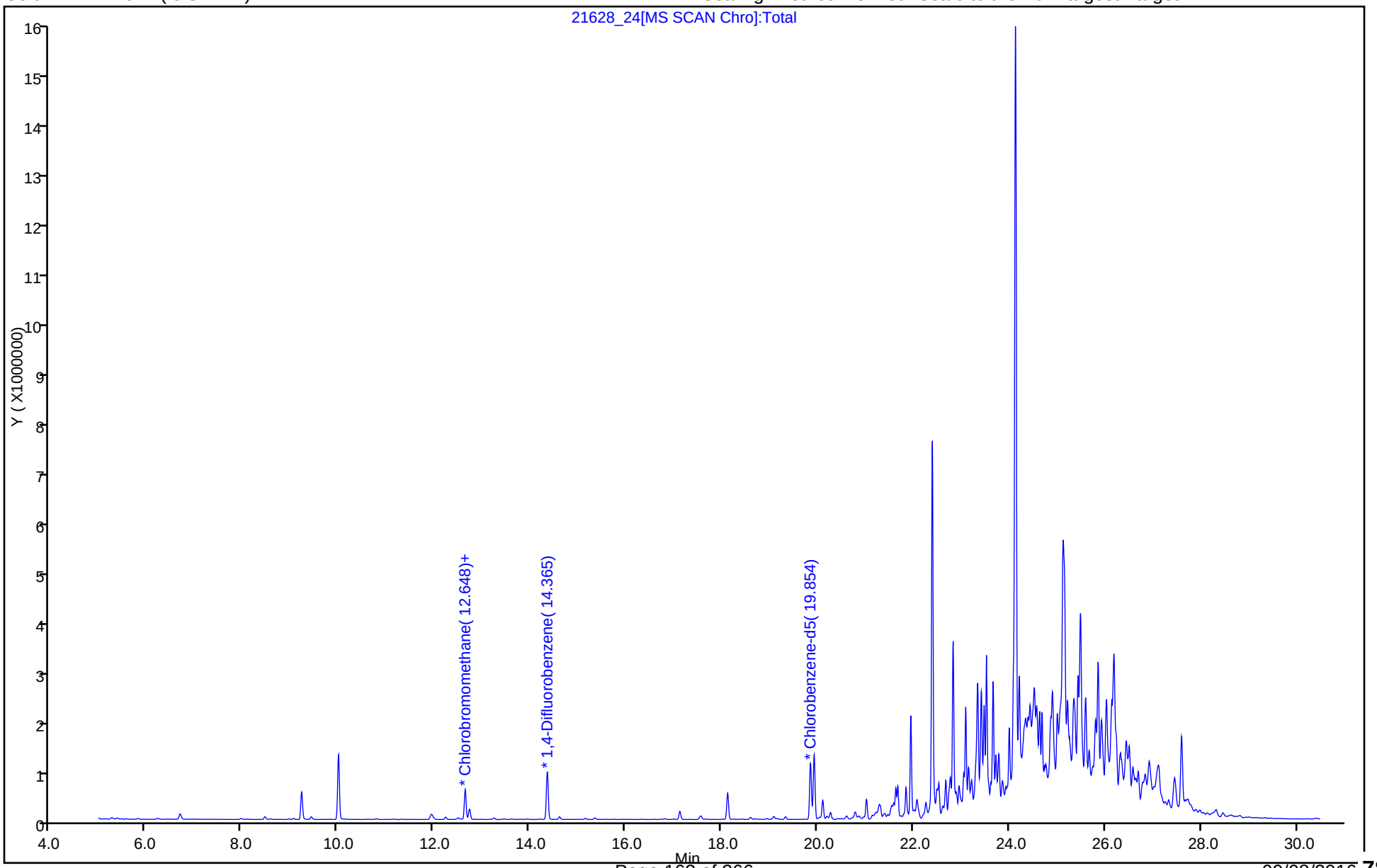
Report Date: 07-Sep-2016 08:42:38 Chrom Revision: 2.2 02-Sep-2016 12:39:46

TestAmerica Burlington

Data File: \\ChromNA\Burlington\ChromData\CHW.i\20160902-21628.b\21628_24.d

Injection Date:	03-Sep-2016 06:23:30	Instrument ID:	CHW.i	Operator ID:	pad
Lims ID:	200-35064-A-3	Lab Sample ID:	200-35064-3	Worklist Smp#:	24
Client ID:	SS-3				
Purge Vol:	200.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	20
Method:	TO15_MasterMethod_(v1)	Limit Group:	AI_TO15_ICAL		

Column: RTX-624 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



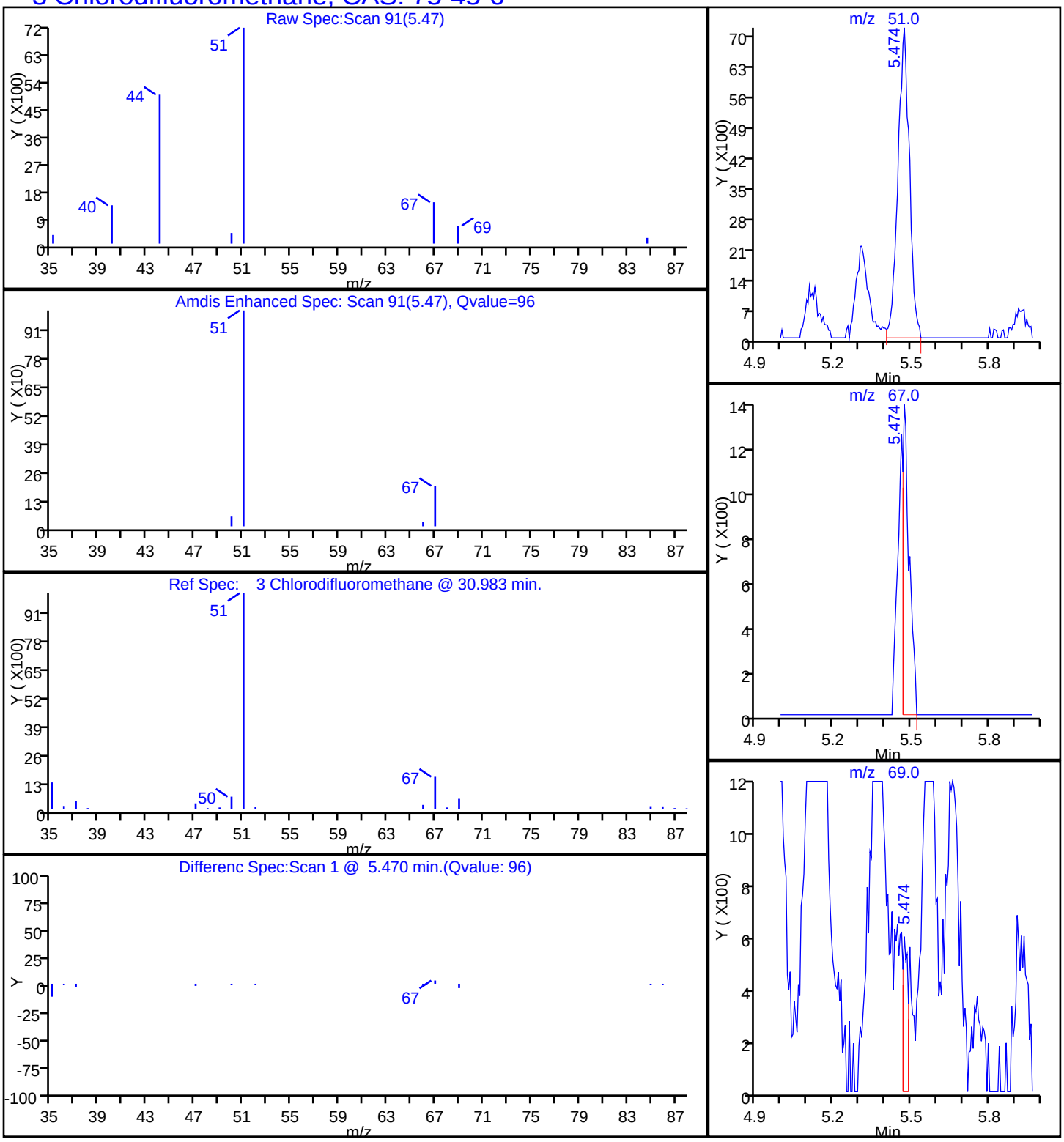
Report Date: 07-Sep-2016 08:42:38 Chrom Revision: 2.2 02-Sep-2016 12:39:46

TestAmerica Burlington

Data File: \\ChromNA\Burlington\ChromData\CHW.i\20160902-21628.b\21628_24.d

Injection Date:	03-Sep-2016 06:23:30	Instrument ID:	CHW.i		
Lims ID:	200-35064-A-3	Lab Sample ID:	200-35064-3		
Client ID:	SS-3				
Operator ID:	pad	ALS Bottle#:	20	Worklist Smp#:	24
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_MasterMethod_(v1)	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

3 Chlorodifluoromethane, CAS: 75-45-6



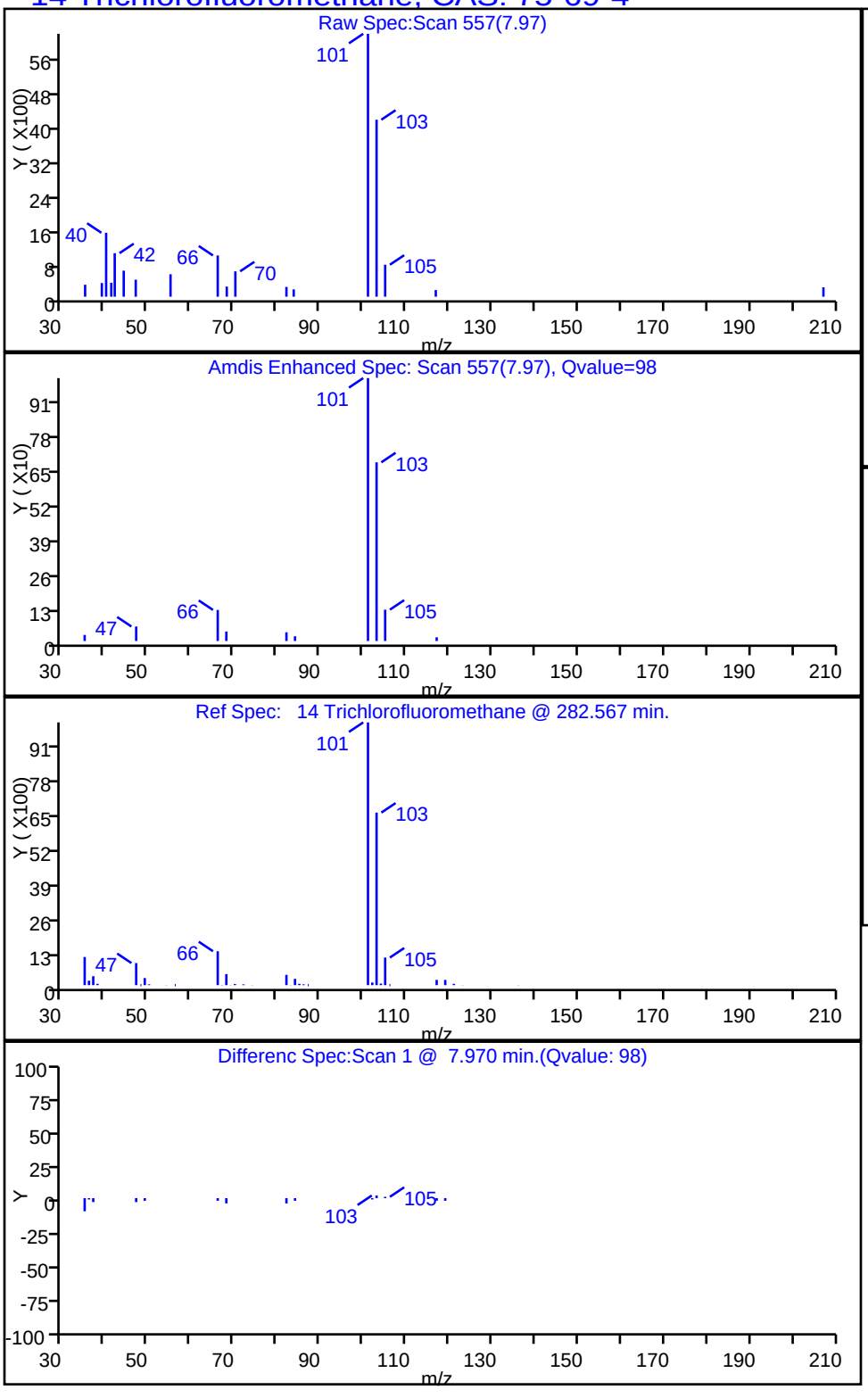
Report Date: 07-Sep-2016 08:42:38 Chrom Revision: 2.2 02-Sep-2016 12:39:46

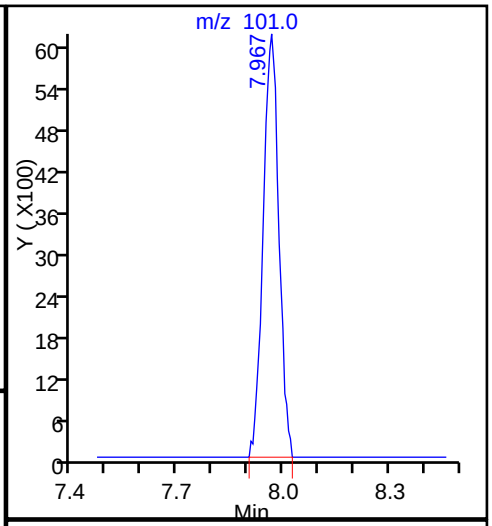
TestAmerica Burlington

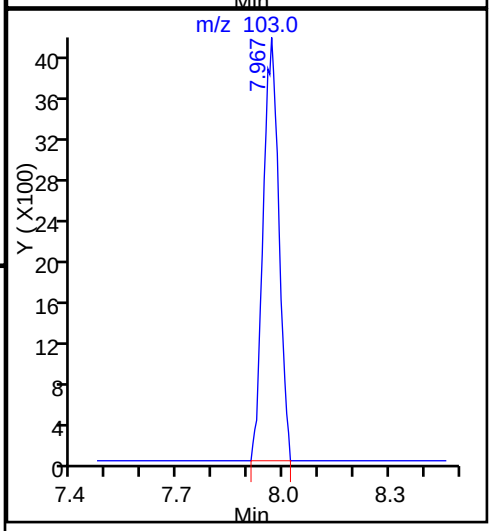
Data File: \\ChromNA\Burlington\ChromData\CHW.i\20160902-21628.b\21628_24.d

Injection Date:	03-Sep-2016 06:23:30	Instrument ID:	CHW.i		
Lims ID:	200-35064-A-3	Lab Sample ID:	200-35064-3		
Client ID:	SS-3				
Operator ID:	pad	ALS Bottle#:	20	Worklist Smp#:	24
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_MasterMethod_(v1)	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

14 Trichlorofluoromethane, CAS: 75-69-4



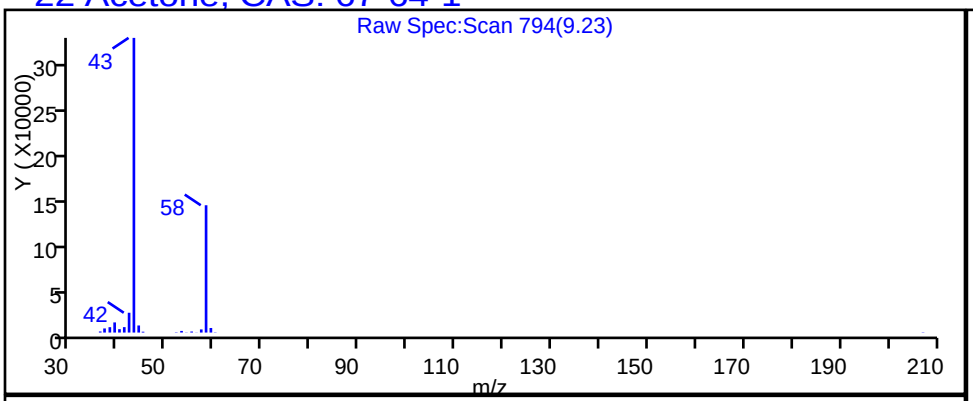


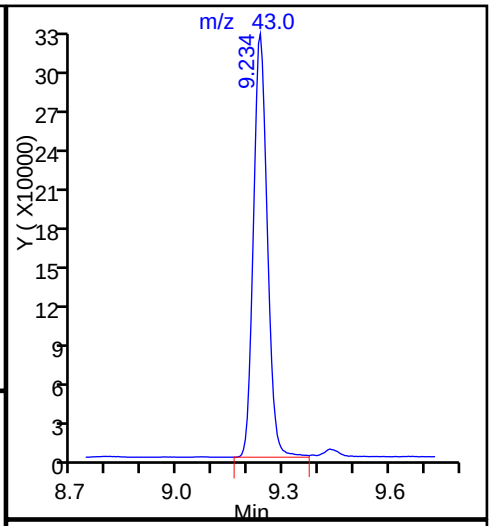


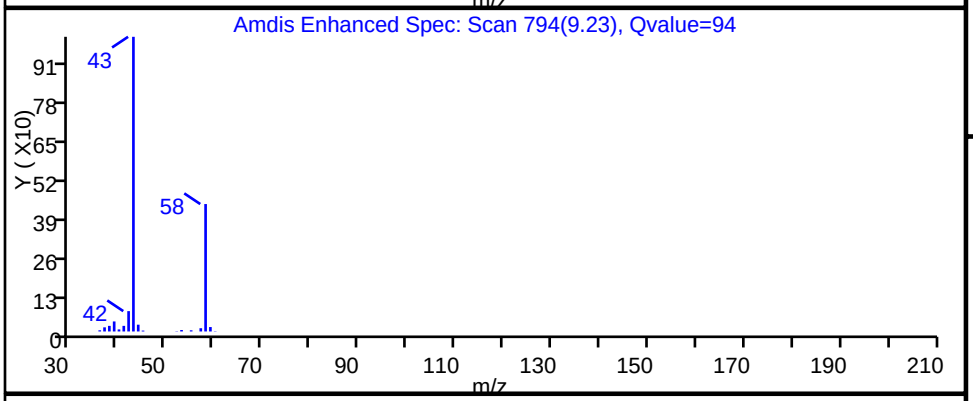
TestAmerica Burlington

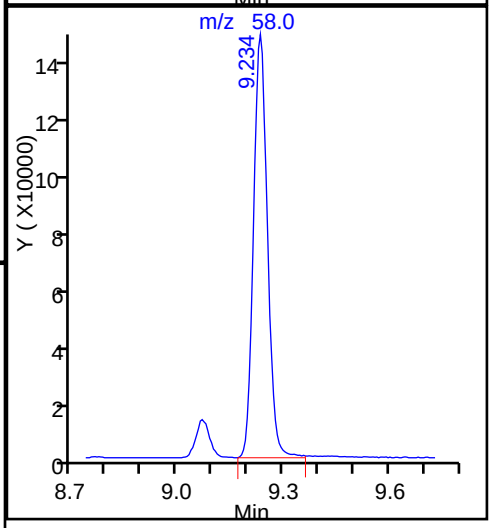
Data File:	\\ChromNA\Burlington\ChromData\CHW.i\20160902-21628.b\21628_24.d				
Injection Date:	03-Sep-2016 06:23:30	Instrument ID:	CHW.i		
Lims ID:	200-35064-A-3	Lab Sample ID:	200-35064-3		
Client ID:	SS-3				
Operator ID:	pad	ALS Bottle#:	20	Worklist Smp#:	24
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_MasterMethod_(v1)	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

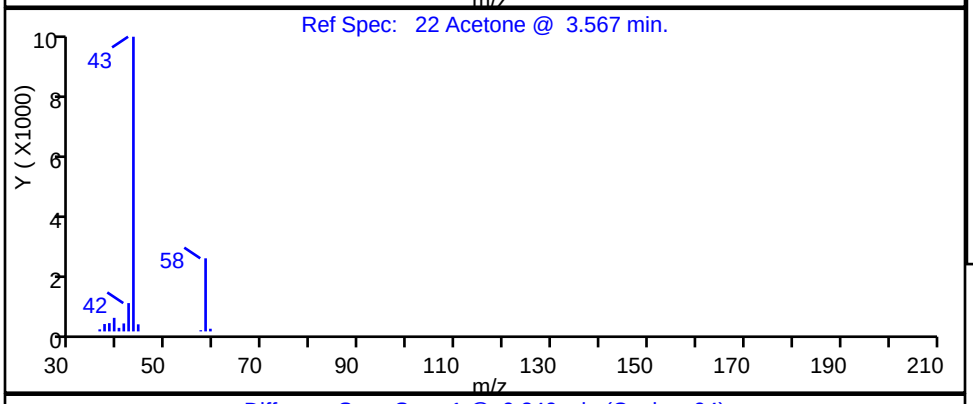
22 Acetone, CAS: 67-64-1

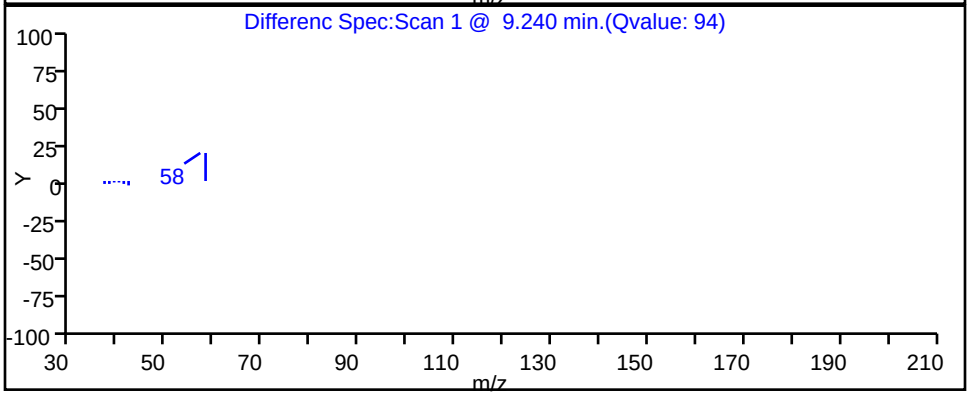












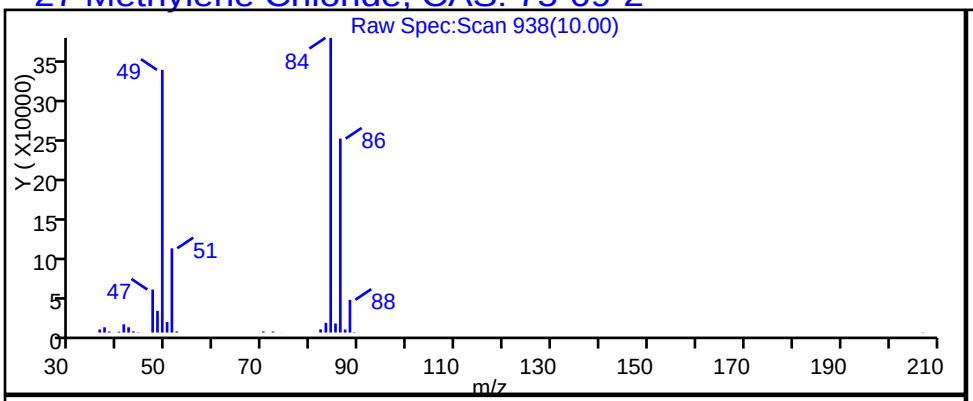
Report Date: 07-Sep-2016 08:42:38 Chrom Revision: 2.2 02-Sep-2016 12:39:46

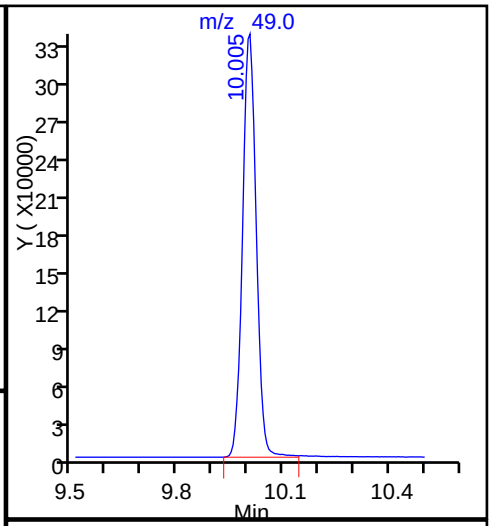
TestAmerica Burlington

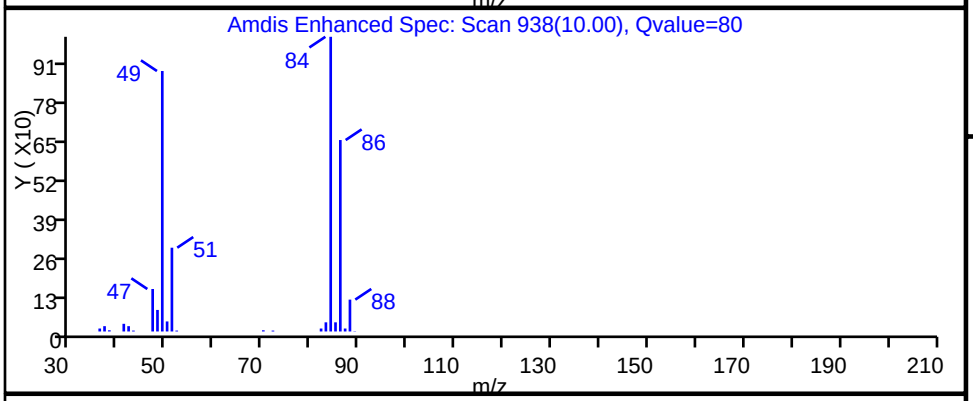
Data File: \\ChromNA\Burlington\ChromData\CHW.i\20160902-21628.b\21628_24.d

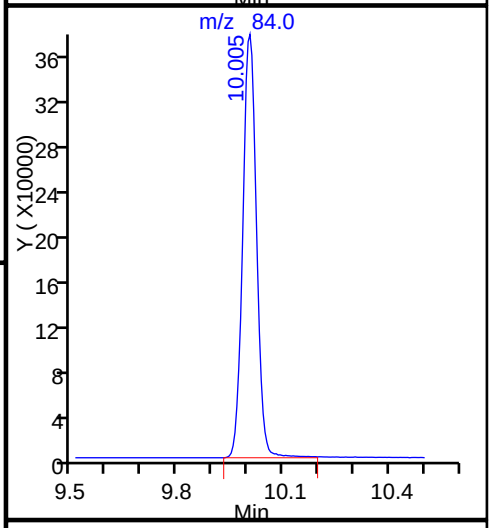
Injection Date:	03-Sep-2016 06:23:30	Instrument ID:	CHW.i		
Lims ID:	200-35064-A-3	Lab Sample ID:	200-35064-3		
Client ID:	SS-3				
Operator ID:	pad	ALS Bottle#:	20	Worklist Smp#:	24
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_MasterMethod_(v1)	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

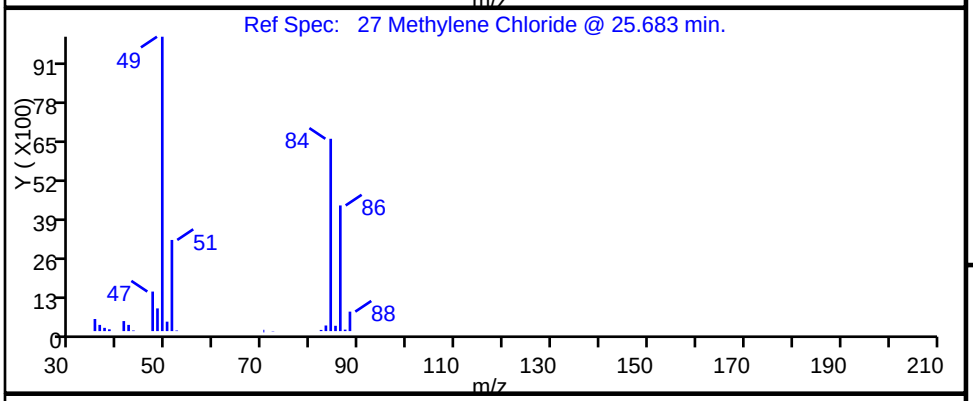
27 Methylene Chloride, CAS: 75-09-2

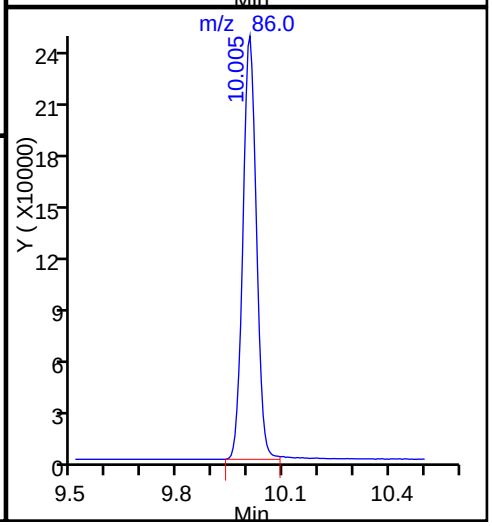


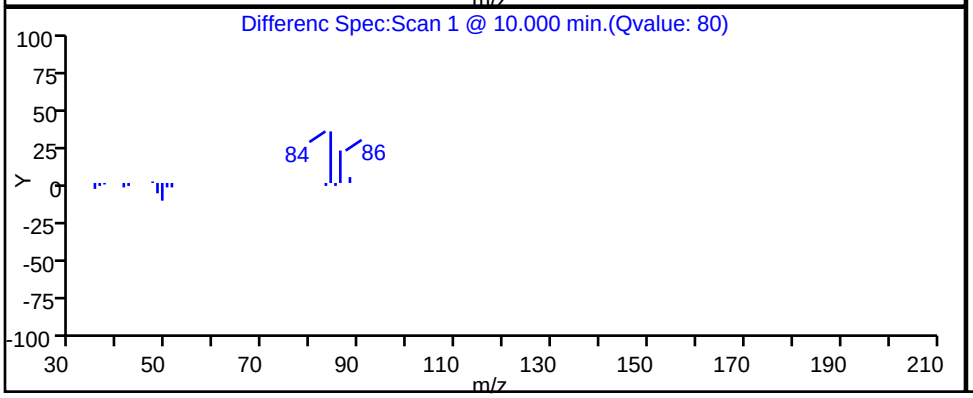












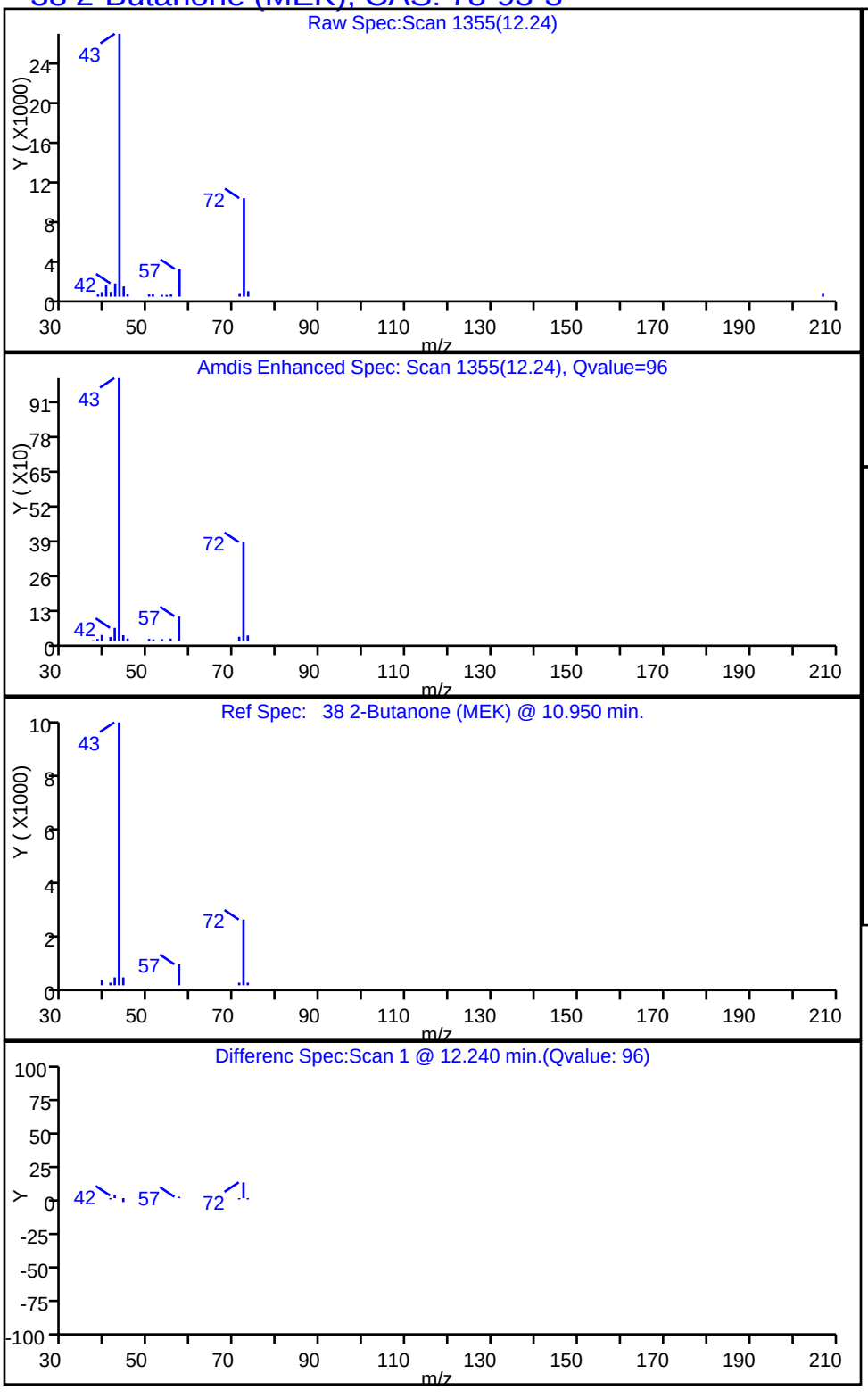
Report Date: 07-Sep-2016 08:42:39 Chrom Revision: 2.2 02-Sep-2016 12:39:46

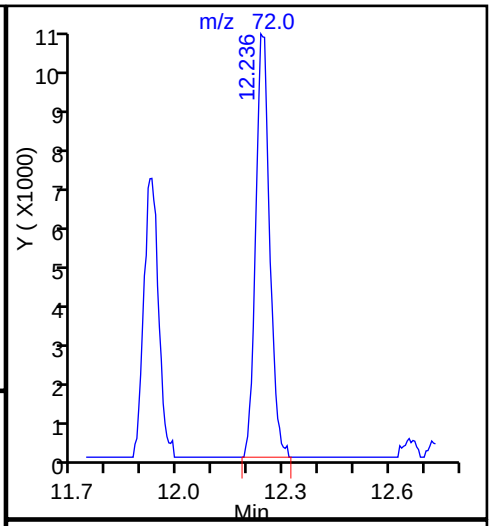
TestAmerica Burlington

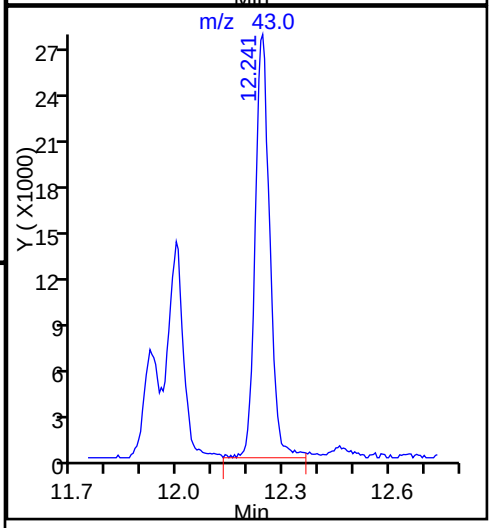
Data File: \\ChromNA\Burlington\ChromData\CHW.i\20160902-21628.b\21628_24.d

Injection Date:	03-Sep-2016 06:23:30	Instrument ID:	CHW.i		
Lims ID:	200-35064-A-3	Lab Sample ID:	200-35064-3		
Client ID:	SS-3				
Operator ID:	pad	ALS Bottle#:	20	Worklist Smp#:	24
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_MasterMethod_(v1)	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

38 2-Butanone (MEK), CAS: 78-93-3





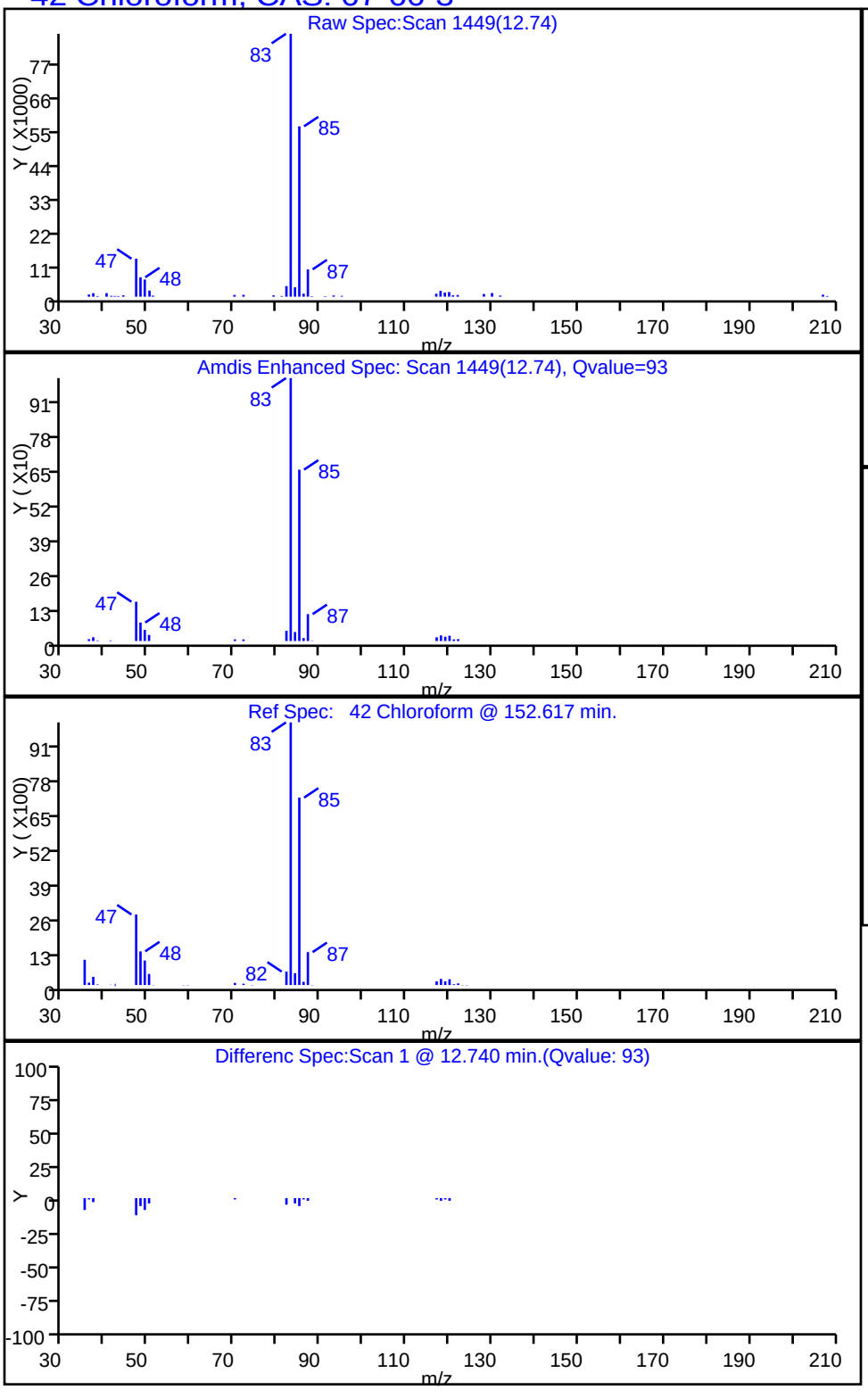


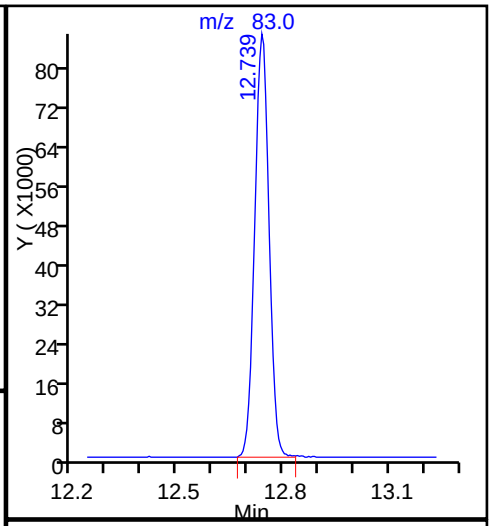
Report Date: 07-Sep-2016 08:42:39 Chrom Revision: 2.2 02-Sep-2016 12:39:46

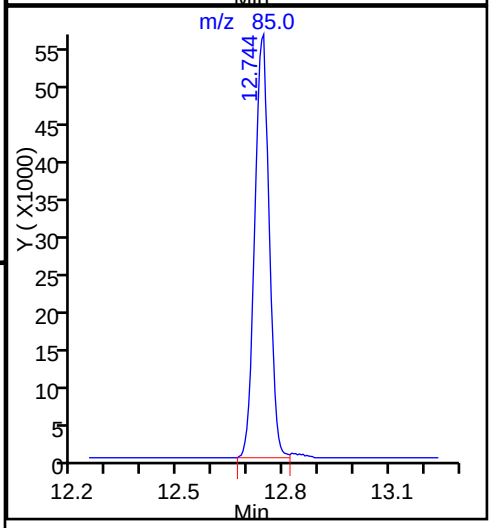
TestAmerica Burlington

Data File:	\\ChromNA\Burlington\ChromData\CHW.i\20160902-21628.b\21628_24.d				
Injection Date:	03-Sep-2016 06:23:30	Instrument ID:	CHW.i		
Lims ID:	200-35064-A-3	Lab Sample ID:	200-35064-3		
Client ID:	SS-3				
Operator ID:	pad	ALS Bottle#:	20	Worklist Smp#:	24
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_MasterMethod_(v1)	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

42 Chloroform, CAS: 67-66-3







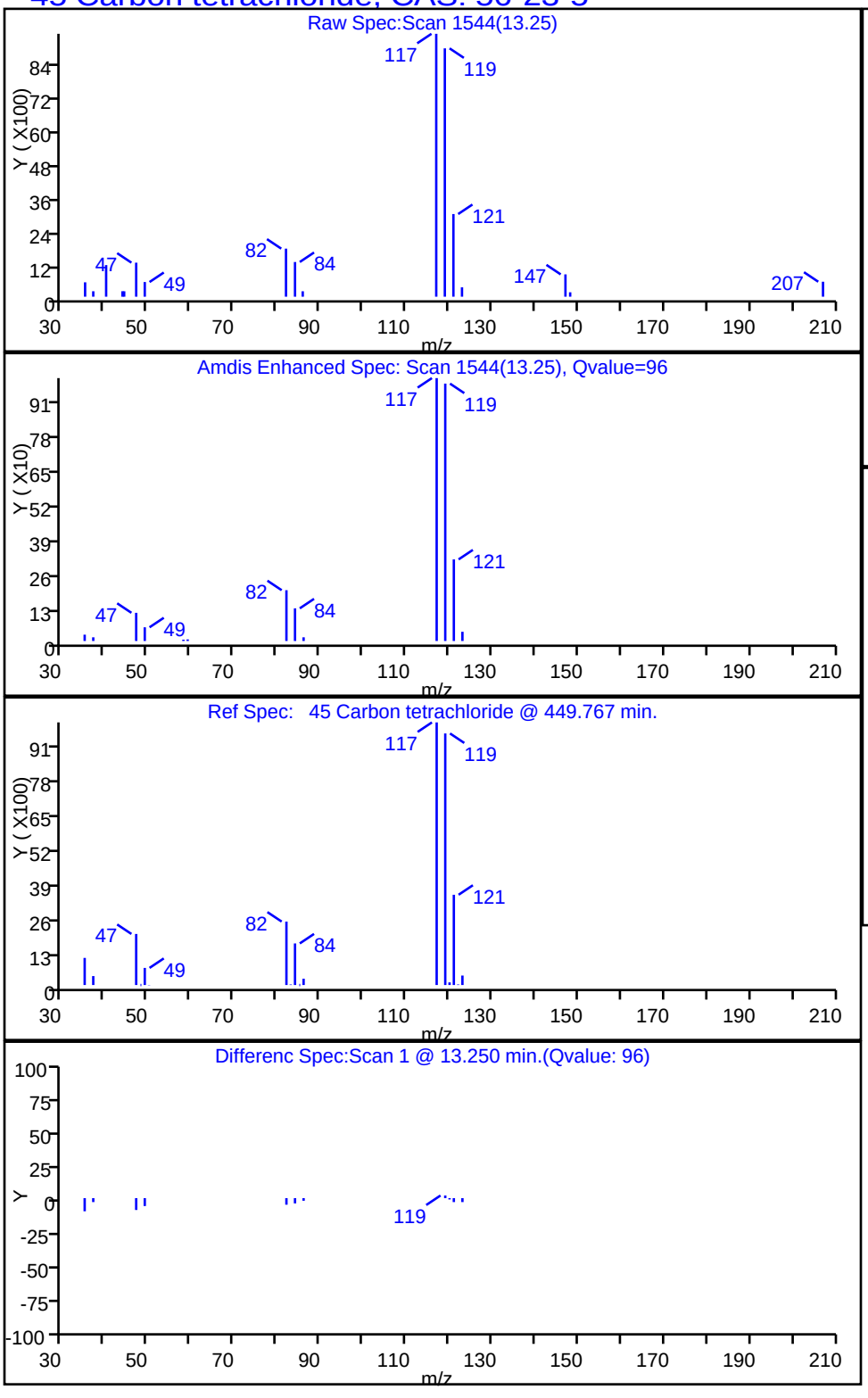
Report Date: 07-Sep-2016 08:42:39 Chrom Revision: 2.2 02-Sep-2016 12:39:46

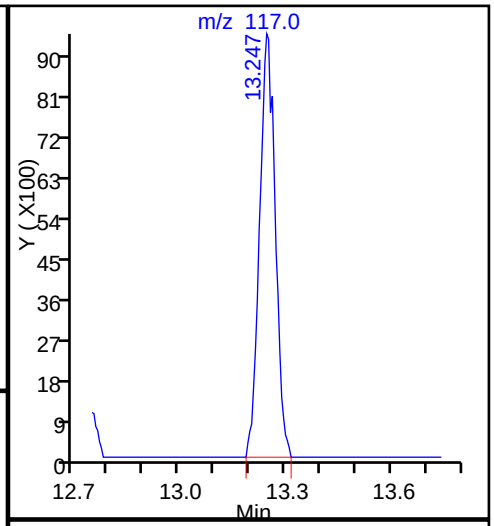
TestAmerica Burlington

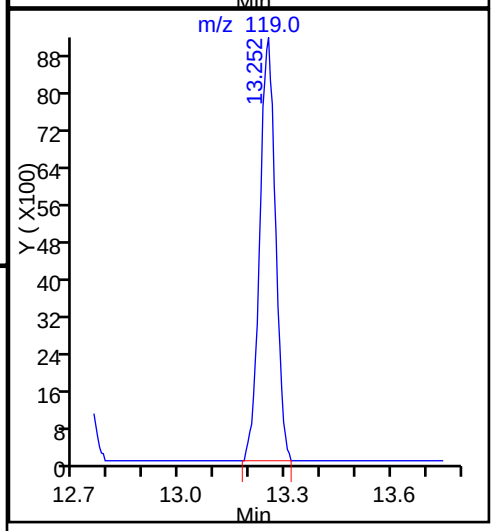
Data File: \\ChromNA\Burlington\ChromData\CHW.i\20160902-21628.b\21628_24.d

Injection Date:	03-Sep-2016 06:23:30	Instrument ID:	CHW.i		
Lims ID:	200-35064-A-3	Lab Sample ID:	200-35064-3		
Client ID:	SS-3				
Operator ID:	pad	ALS Bottle#:	20	Worklist Smp#:	24
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_MasterMethod_(v1)	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

45 Carbon tetrachloride, CAS: 56-23-5





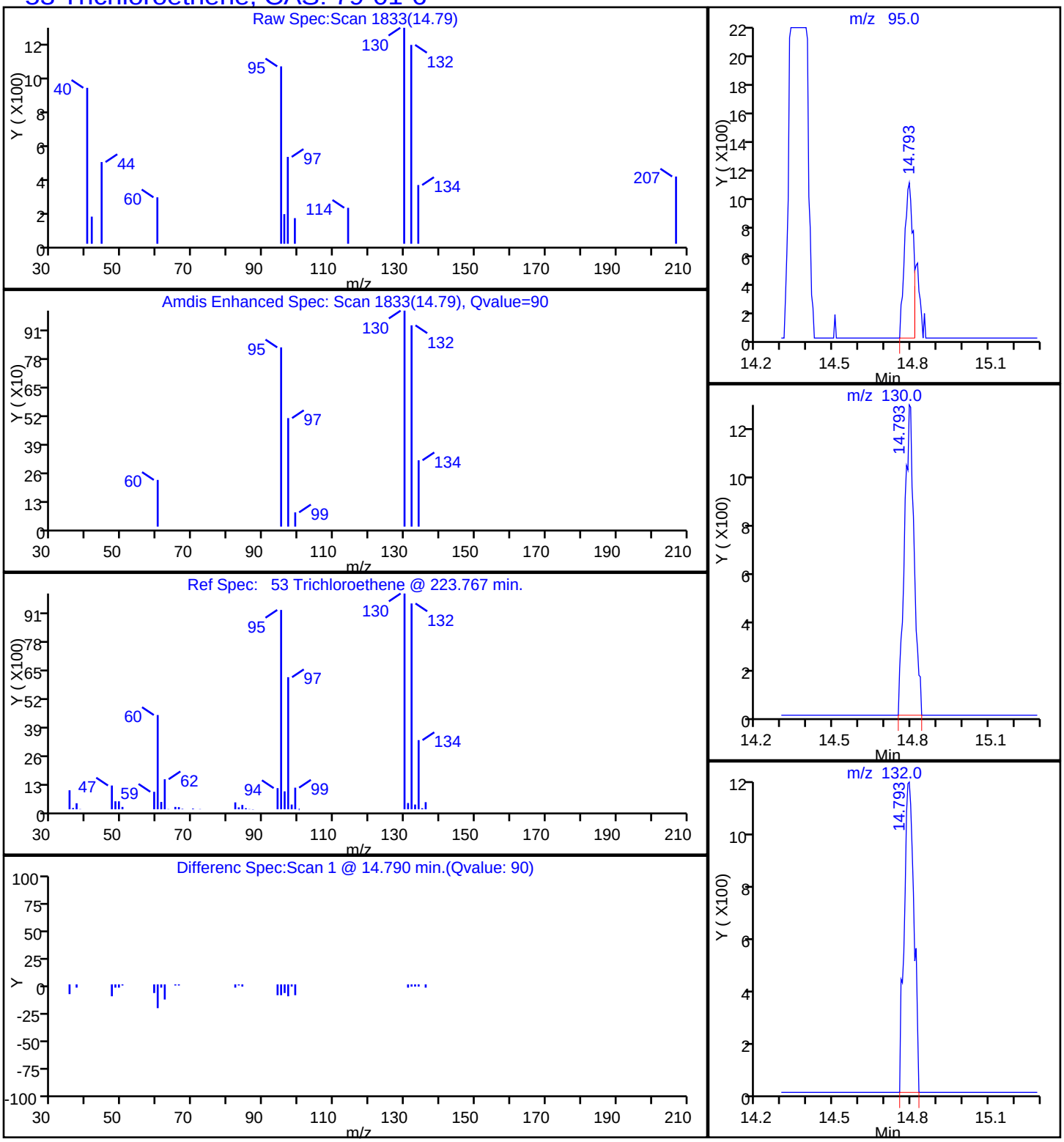


Report Date: 07-Sep-2016 08:42:39 Chrom Revision: 2.2 02-Sep-2016 12:39:46

TestAmerica Burlington

Data File:	\\ChromNA\Burlington\ChromData\CHW.i\20160902-21628.b\21628_24.d				
Injection Date:	03-Sep-2016 06:23:30	Instrument ID:	CHW.i		
Lims ID:	200-35064-A-3	Lab Sample ID:	200-35064-3		
Client ID:	SS-3				
Operator ID:	pad	ALS Bottle#:	20	Worklist Smp#:	24
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_MasterMethod_(v1)	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

53 Trichloroethene, CAS: 79-01-6



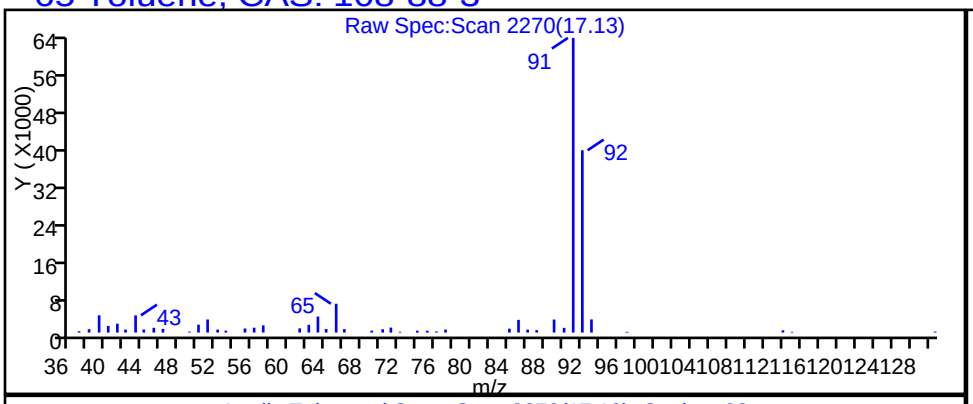
Report Date: 07-Sep-2016 08:42:39 Chrom Revision: 2.2 02-Sep-2016 12:39:46

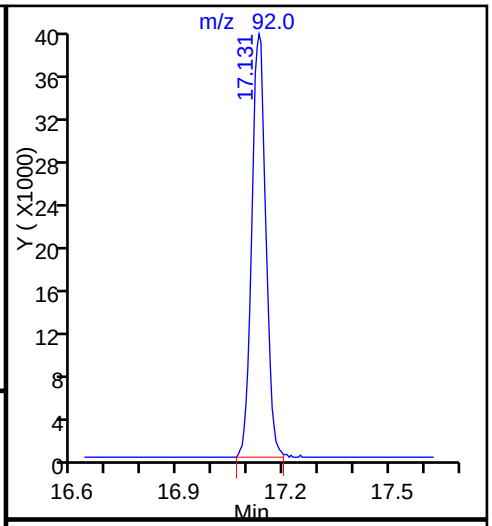
TestAmerica Burlington

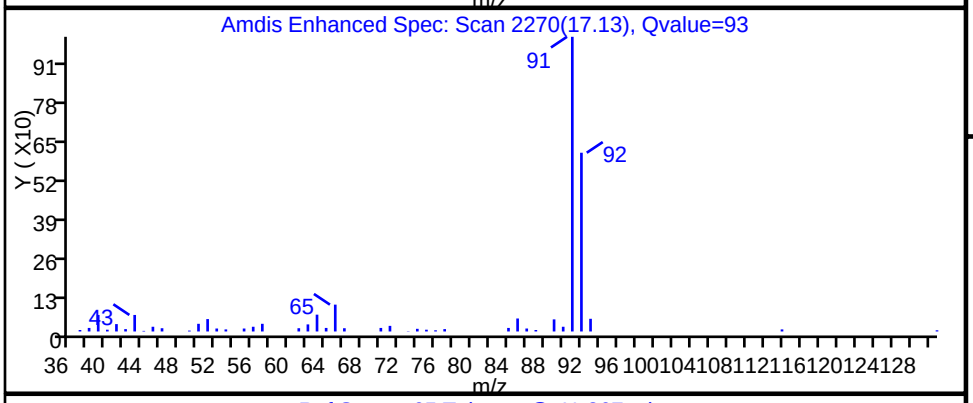
Data File: \\ChromNA\Burlington\ChromData\CHW.i\20160902-21628.b\21628_24.d

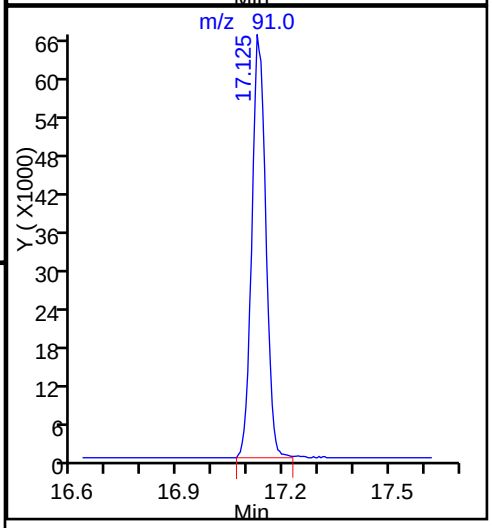
Injection Date:	03-Sep-2016 06:23:30	Instrument ID:	CHW.i		
Lims ID:	200-35064-A-3	Lab Sample ID:	200-35064-3		
Client ID:	SS-3				
Operator ID:	pad	ALS Bottle#:	20	Worklist Smp#:	24
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_MasterMethod_(v1)	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

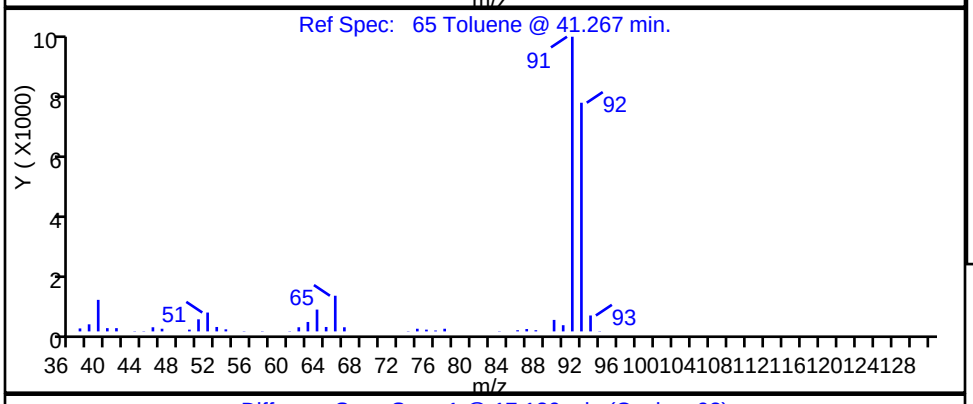
65 Toluene, CAS: 108-88-3

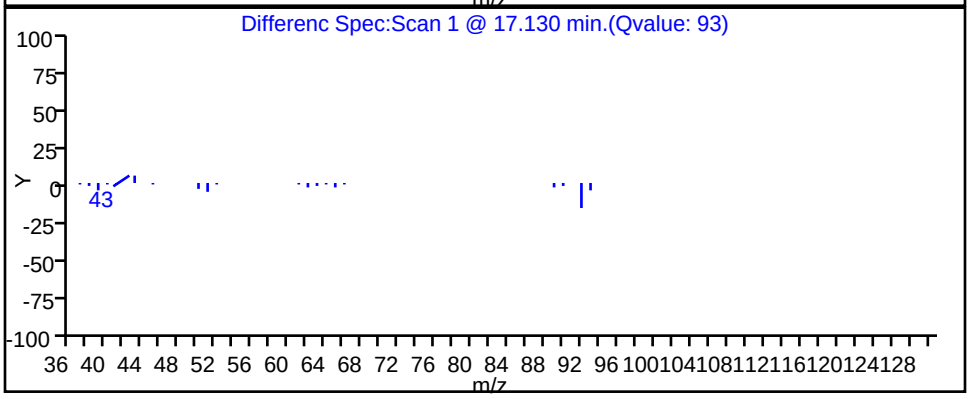






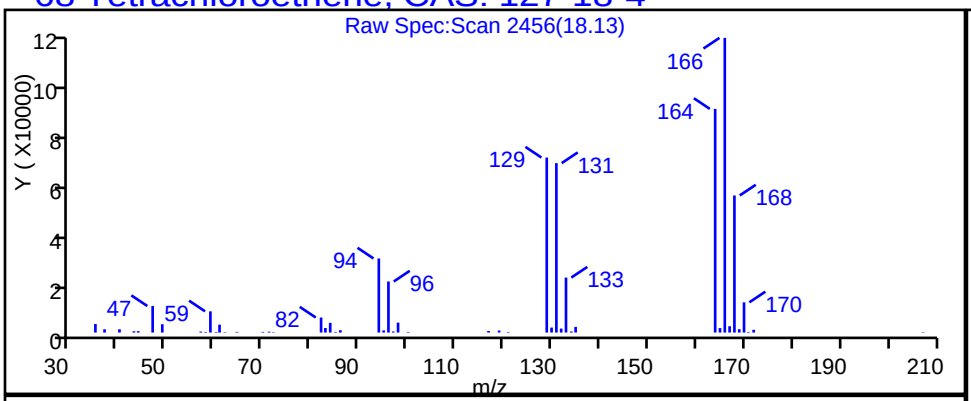


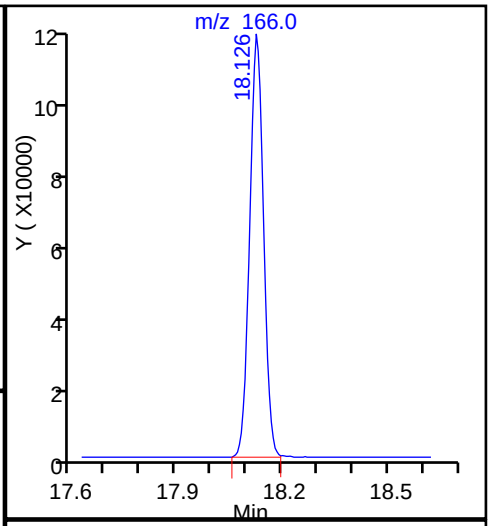


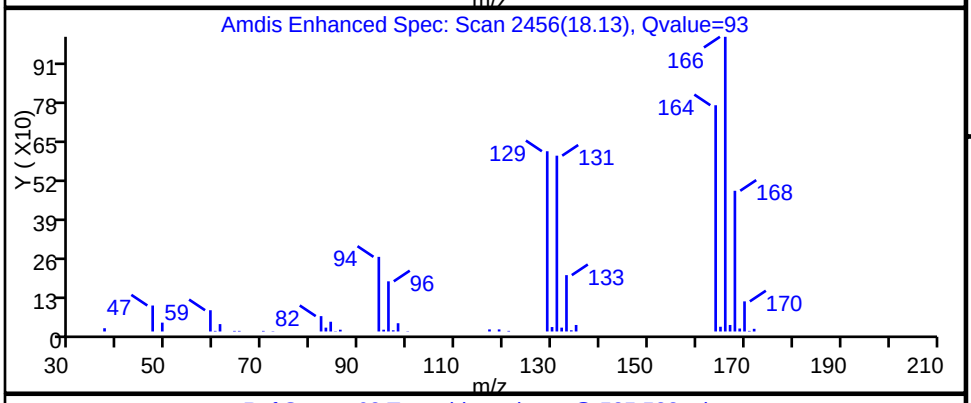


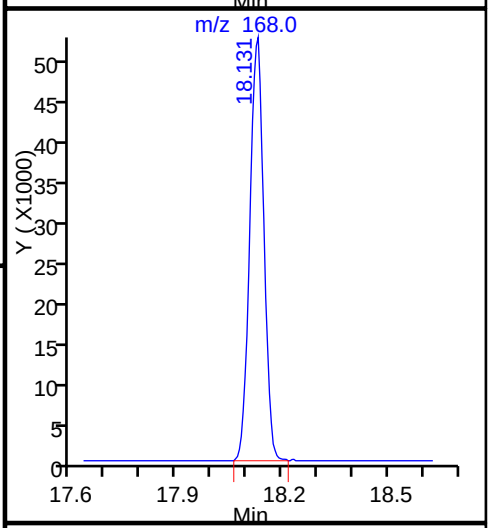
Data File: \\ChromNA\Burlington\ChromData\CHW.i\20160902-21628.b\21628_24.d
Injection Date: 03-Sep-2016 06:23:30 Instrument ID: CHW.i
Lims ID: 200-35064-A-3 Lab Sample ID: 200-35064-3
Client ID: SS-3
Operator ID: pad ALS Bottle#: 20 Worklist Smp#: 24
Purge Vol: 200.000 mL Dil. Factor: 1.0000
Method: TO15_MasterMethod_(v1) Limit Group: AI_TO15_ICAL
Column: RTX-624 (0.32 mm) Detector MS SCAN

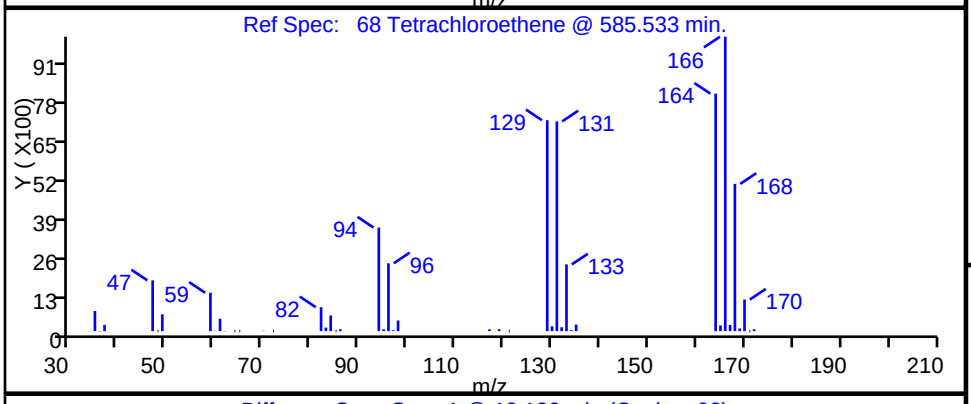
68 Tetrachloroethene, CAS: 127-18-4

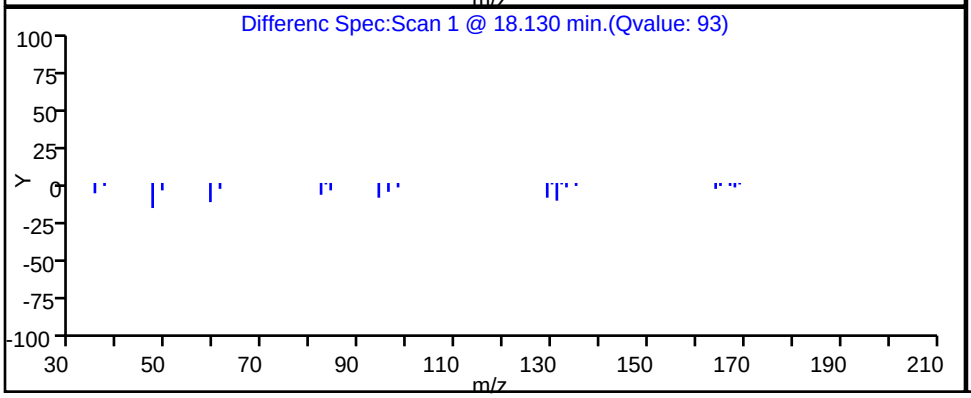


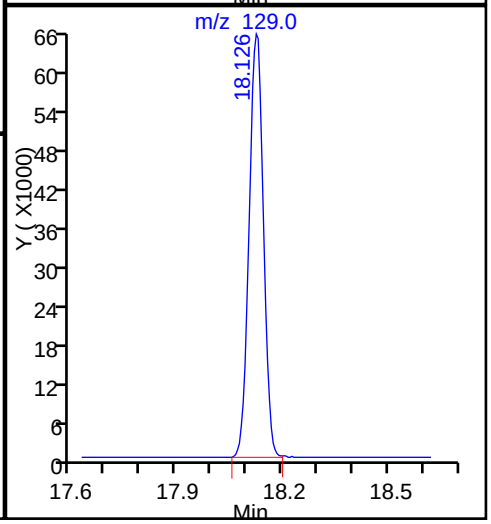










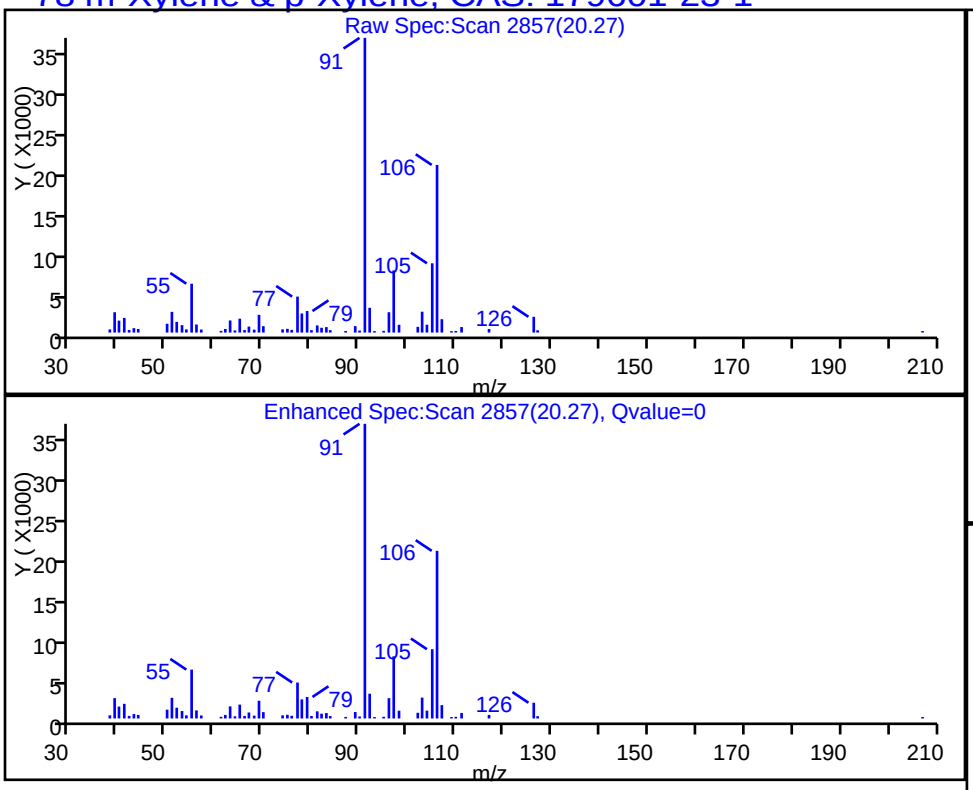


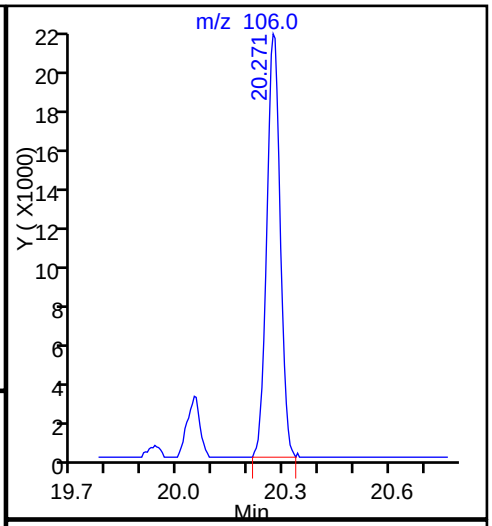
Report Date: 07-Sep-2016 08:42:39 Chrom Revision: 2.2 02-Sep-2016 12:39:46

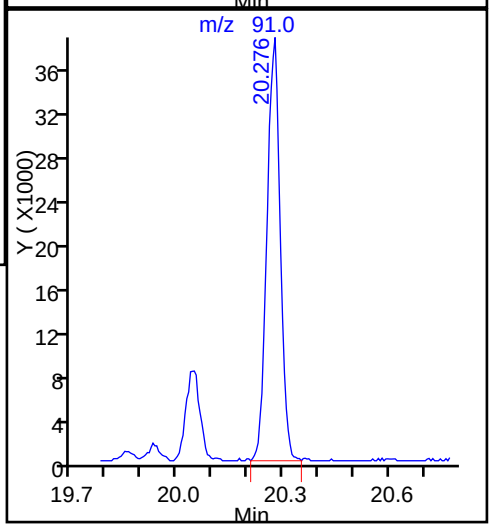
TestAmerica Burlington

Data File:	\\ChromNA\Burlington\ChromData\CHW.i\20160902-21628.b\21628_24.d				
Injection Date:	03-Sep-2016 06:23:30	Instrument ID:	CHW.i		
Lims ID:	200-35064-A-3	Lab Sample ID:	200-35064-3		
Client ID:	SS-3				
Operator ID:	pad	ALS Bottle#:	20	Worklist Smp#:	24
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_MasterMethod_(v1)	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

78 m-Xylene & p-Xylene, CAS: 179601-23-1







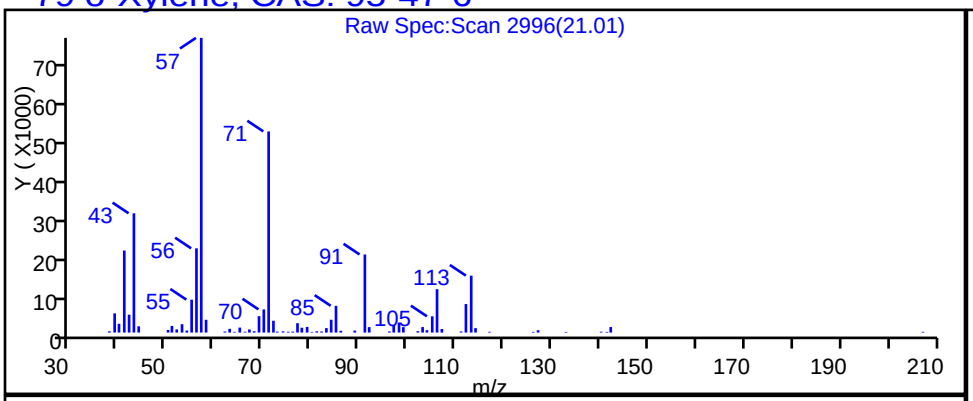
Report Date: 07-Sep-2016 08:42:39 Chrom Revision: 2.2 02-Sep-2016 12:39:46

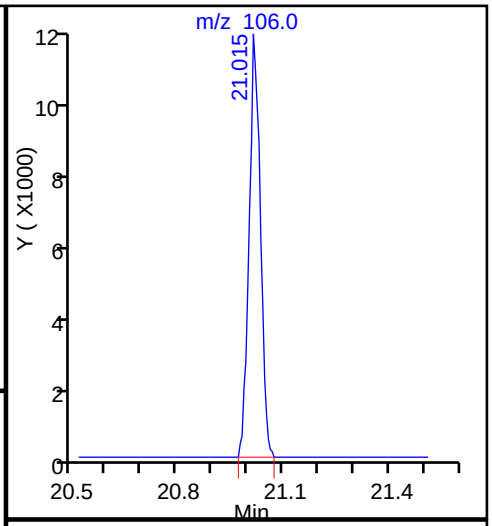
TestAmerica Burlington

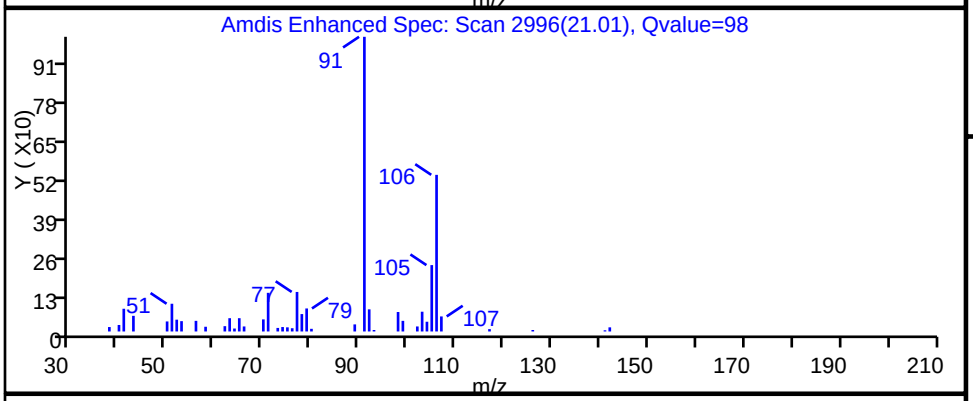
Data File: \\ChromNA\Burlington\ChromData\CHW.i\20160902-21628.b\21628_24.d

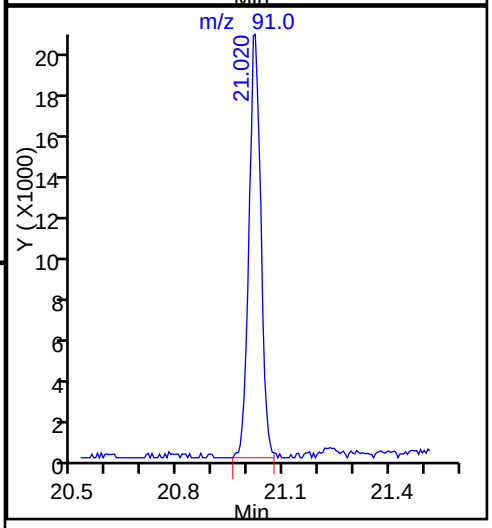
Injection Date:	03-Sep-2016 06:23:30	Instrument ID:	CHW.i		
Lims ID:	200-35064-A-3	Lab Sample ID:	200-35064-3		
Client ID:	SS-3				
Operator ID:	pad	ALS Bottle#:	20	Worklist Smp#:	24
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_MasterMethod_(v1)	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

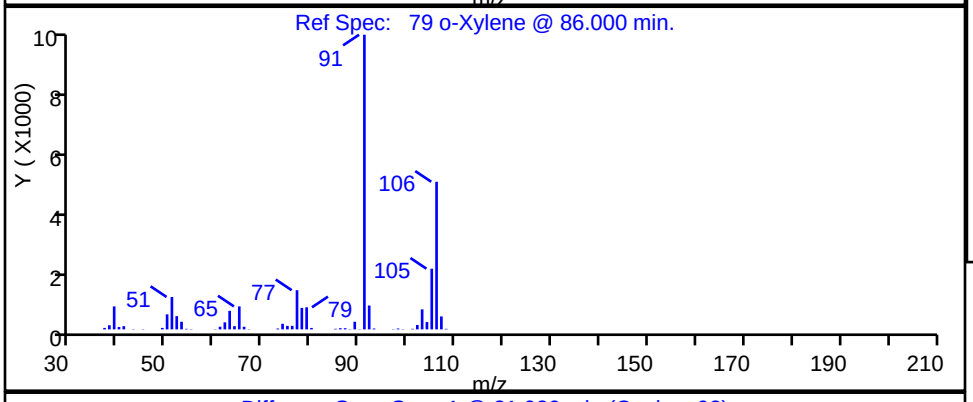
79 o-Xylene, CAS: 95-47-6

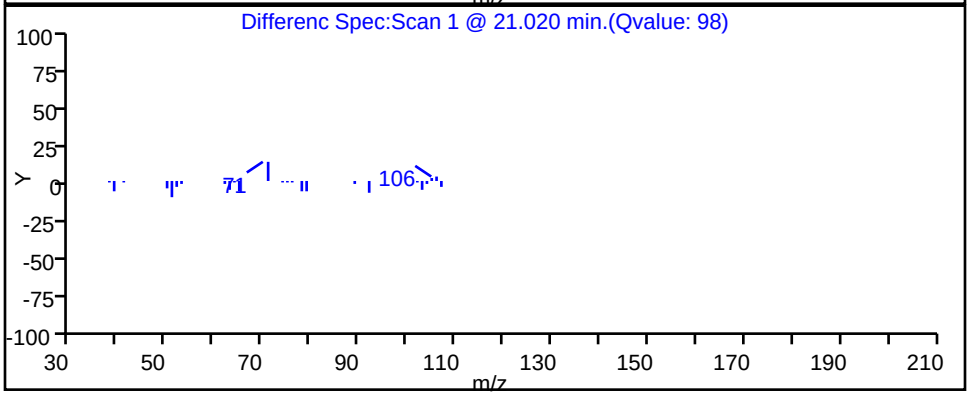






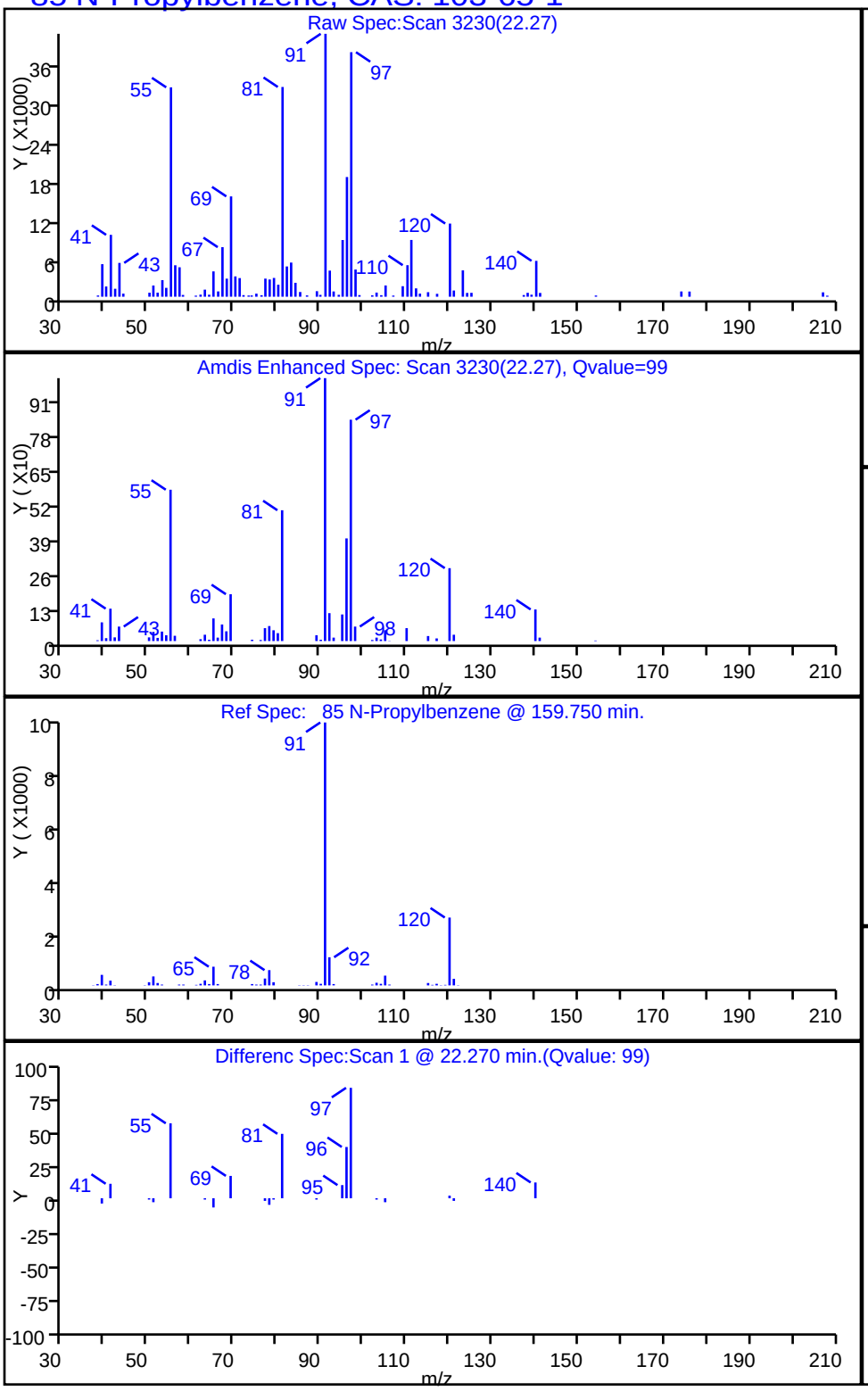


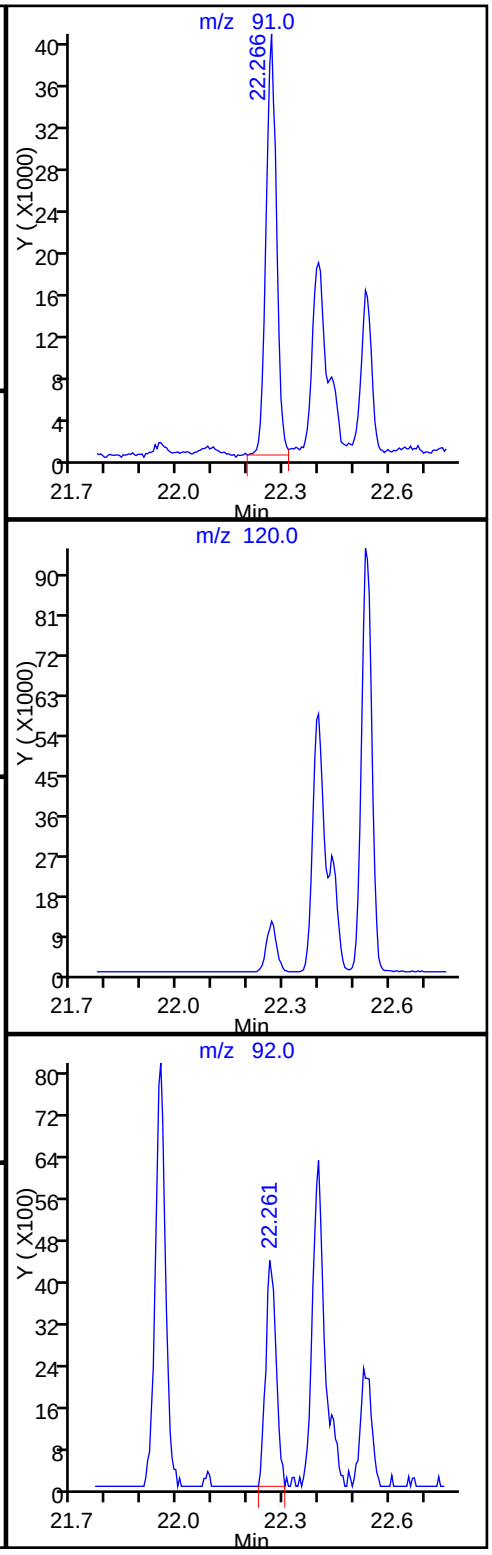




Data File: \\ChromNA\Burlington\ChromData\CHW.i\20160902-21628.b\21628_24.d
Injection Date: 03-Sep-2016 06:23:30 Instrument ID: CHW.i
Lims ID: 200-35064-A-3 Lab Sample ID: 200-35064-3
Client ID: SS-3
Operator ID: pad ALS Bottle#: 20 Worklist Smp#: 24
Purge Vol: 200.000 mL Dil. Factor: 1.0000
Method: TO15_MasterMethod_(v1) Limit Group: AI_TO15_ICAL
Column: RTX-624 (0.32 mm) Detector MS SCAN

85 N-Propylbenzene, CAS: 103-65-1





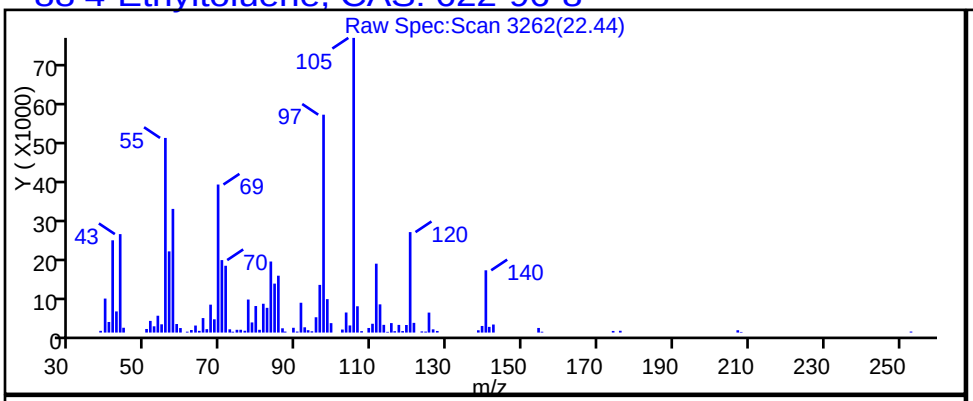
Report Date: 07-Sep-2016 08:42:39 Chrom Revision: 2.2 02-Sep-2016 12:39:46

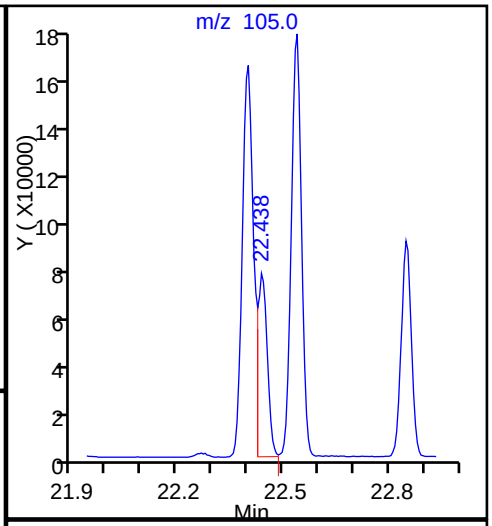
TestAmerica Burlington

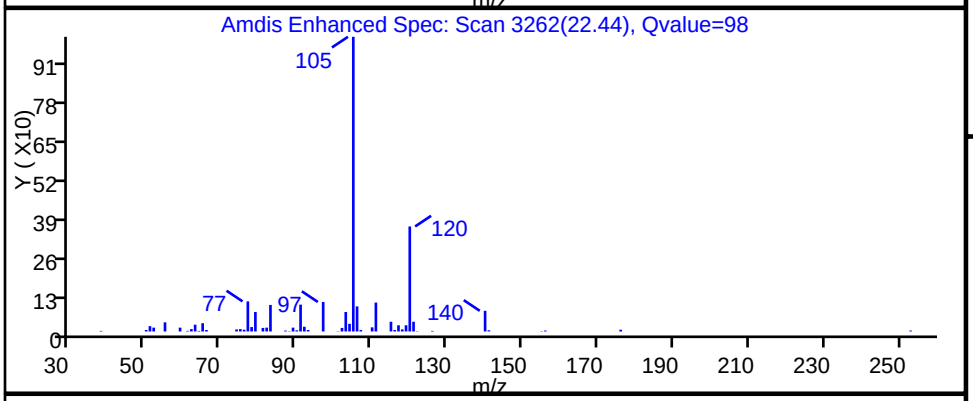
Data File: \\ChromNA\Burlington\ChromData\CHW.i\20160902-21628.b\21628_24.d

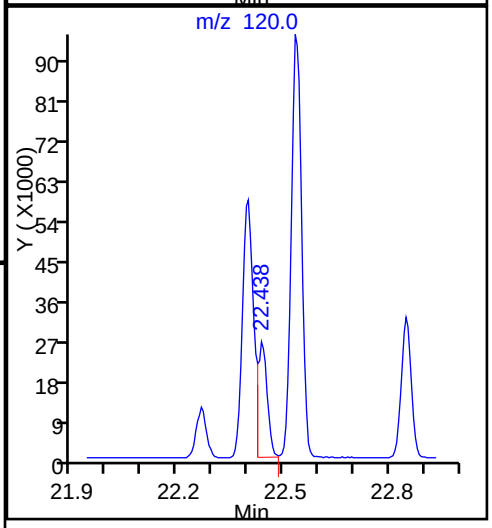
Injection Date:	03-Sep-2016 06:23:30	Instrument ID:	CHW.i		
Lims ID:	200-35064-A-3	Lab Sample ID:	200-35064-3		
Client ID:	SS-3				
Operator ID:	pad	ALS Bottle#:	20	Worklist Smp#:	24
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_MasterMethod_(v1)	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

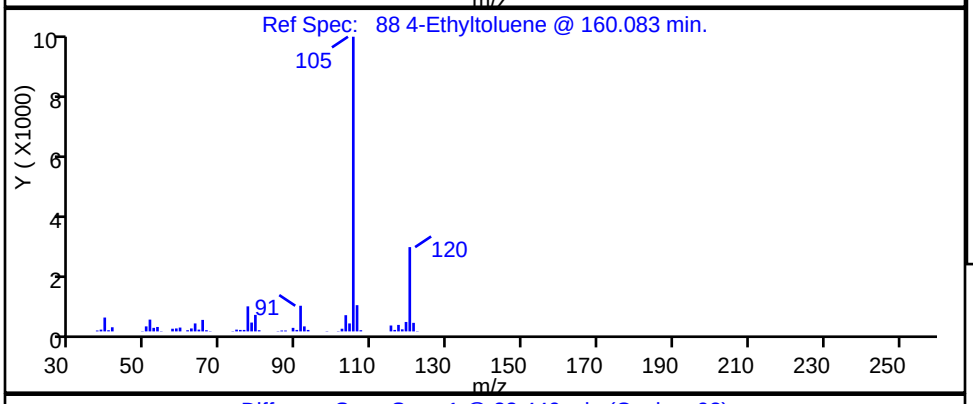
88 4-Ethyltoluene, CAS: 622-96-8

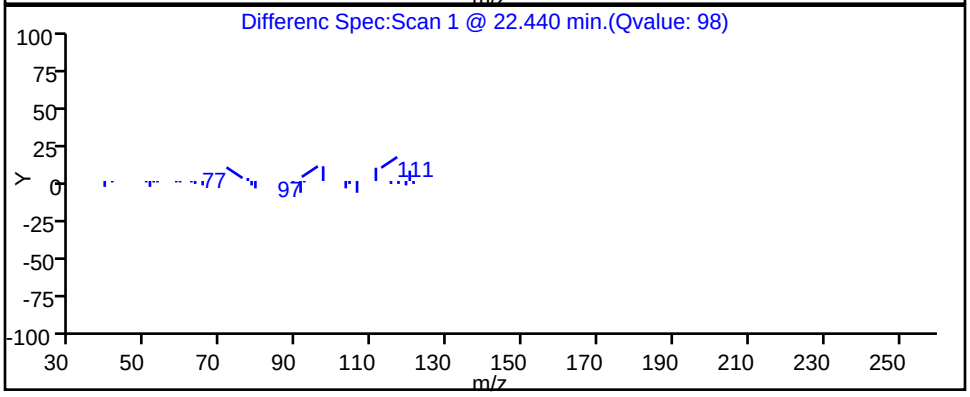












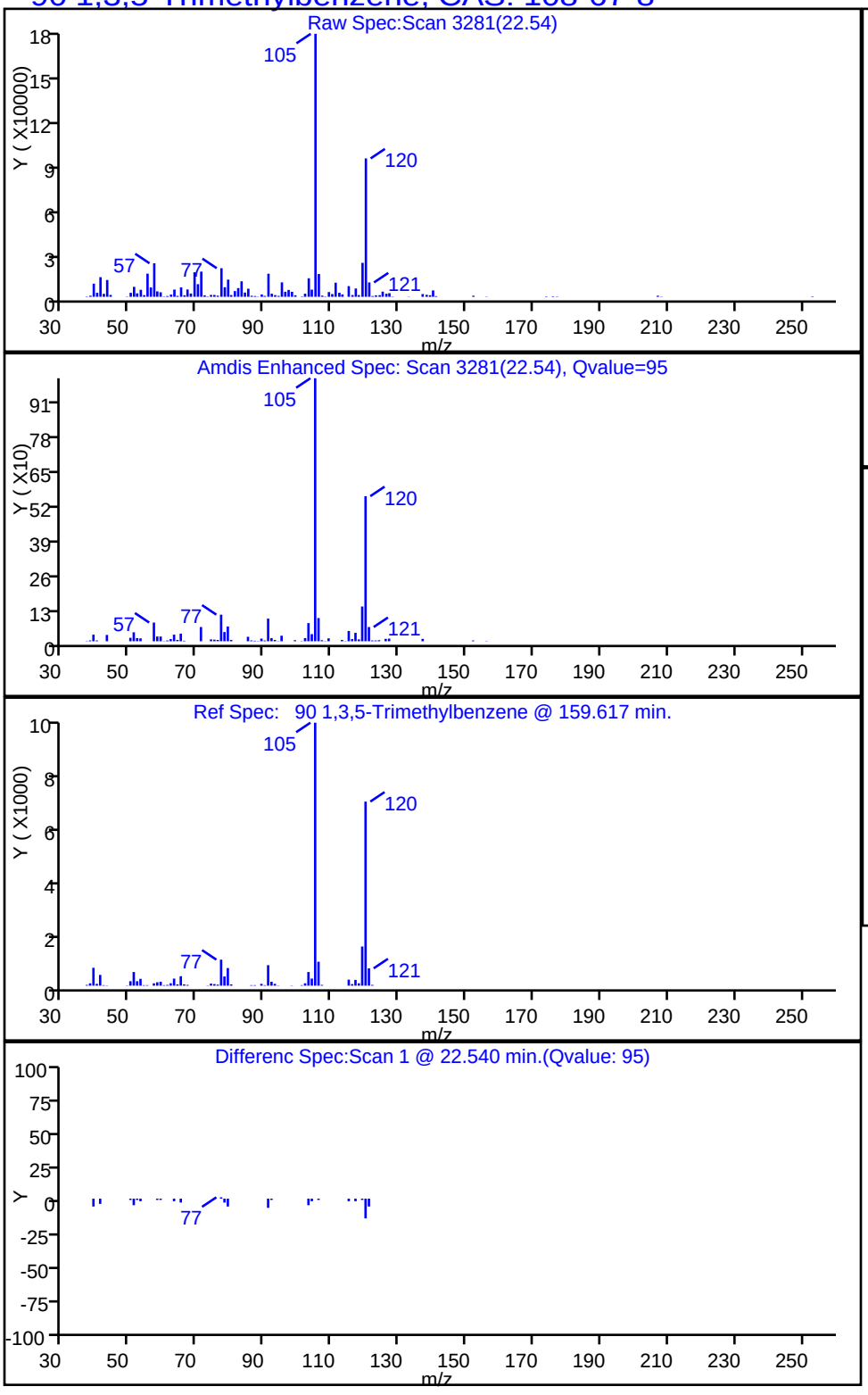
Report Date: 07-Sep-2016 08:42:39 Chrom Revision: 2.2 02-Sep-2016 12:39:46

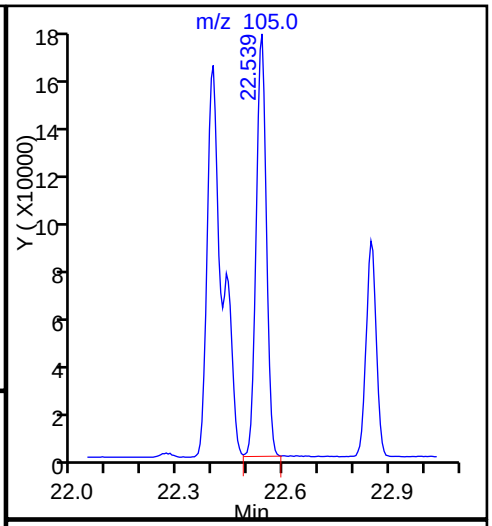
TestAmerica Burlington

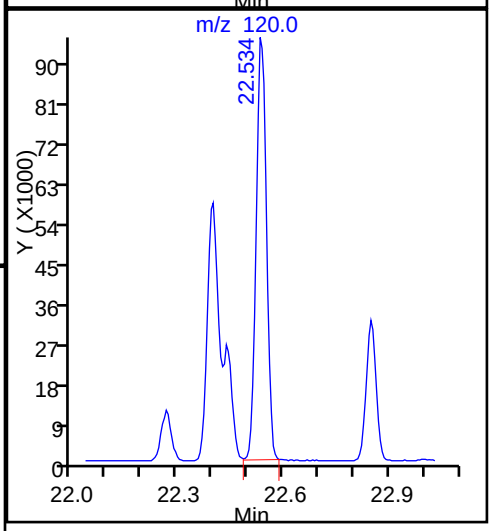
Data File: \\ChromNA\Burlington\ChromData\CHW.i\20160902-21628.b\21628_24.d

Injection Date:	03-Sep-2016 06:23:30	Instrument ID:	CHW.i		
Lims ID:	200-35064-A-3	Lab Sample ID:	200-35064-3		
Client ID:	SS-3				
Operator ID:	pad	ALS Bottle#:	20	Worklist Smp#:	24
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_MasterMethod_(v1)	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

90 1,3,5-Trimethylbenzene, CAS: 108-67-8





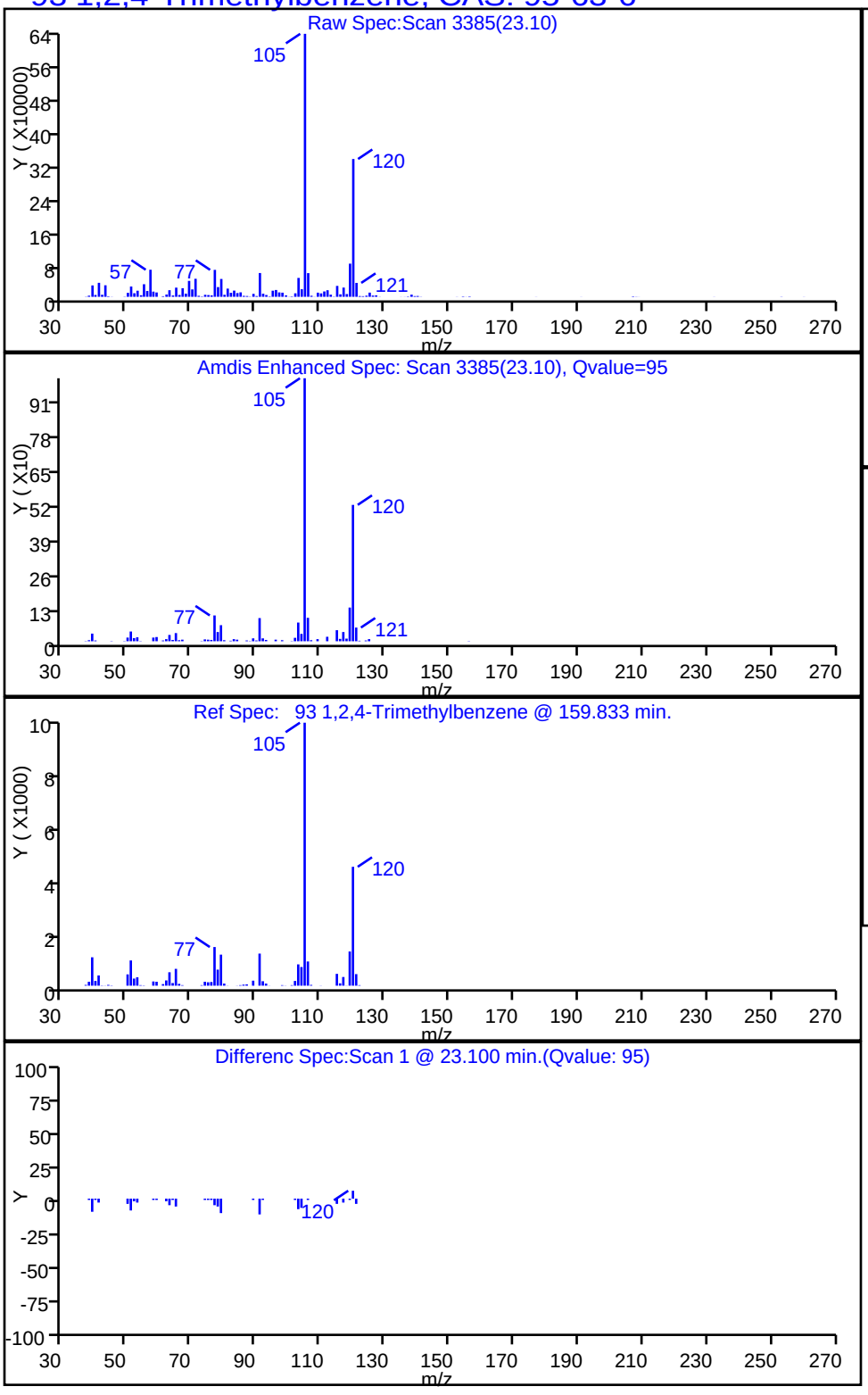


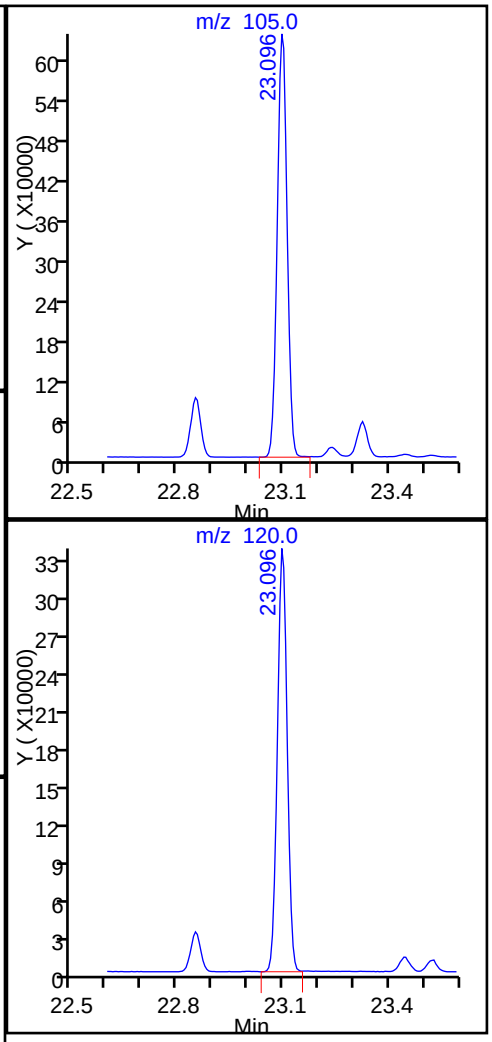
Report Date: 07-Sep-2016 08:42:39 Chrom Revision: 2.2 02-Sep-2016 12:39:46

TestAmerica Burlington

Data File:	\\ChromNA\Burlington\ChromData\CHW.i\20160902-21628.b\21628_24.d				
Injection Date:	03-Sep-2016 06:23:30	Instrument ID:	CHW.i		
Lims ID:	200-35064-A-3	Lab Sample ID:	200-35064-3		
Client ID:	SS-3				
Operator ID:	pad	ALS Bottle#:	20	Worklist Smp#:	24
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_MasterMethod_(v1)	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

93 1,2,4-Trimethylbenzene, CAS: 95-63-6

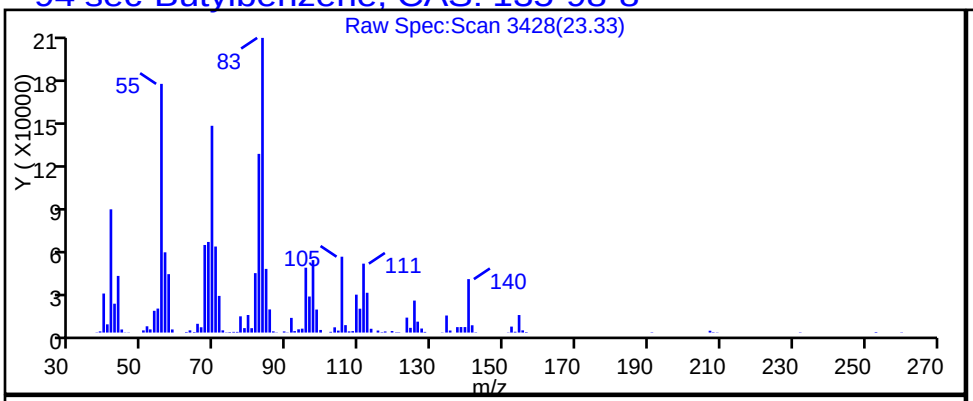


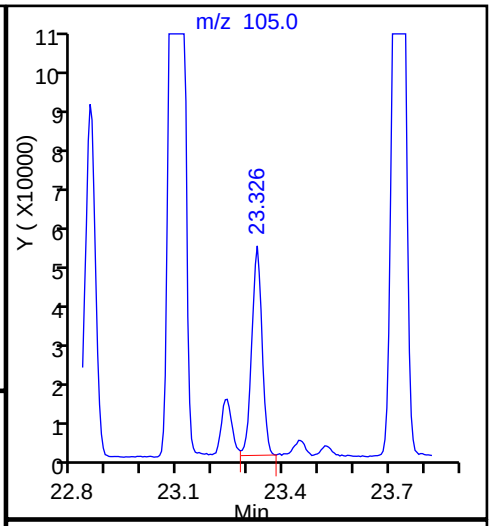


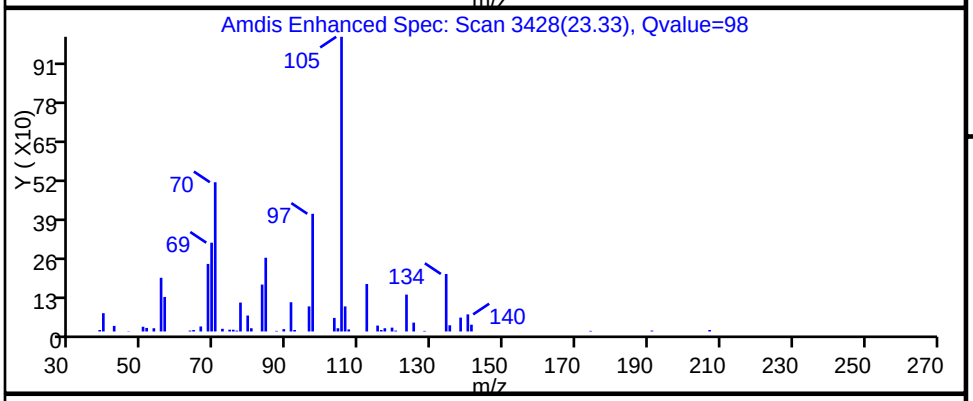
TestAmerica Burlington

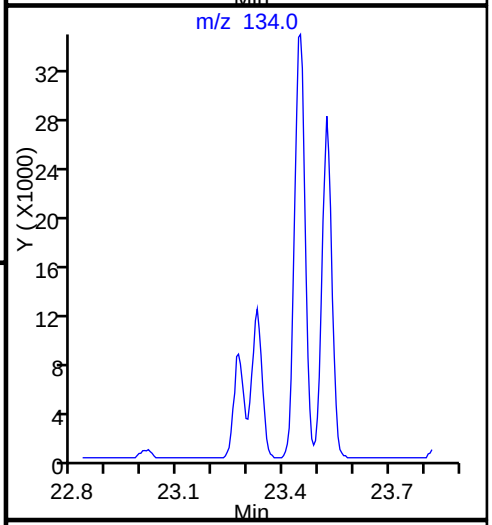
Data File:	\\ChromNA\Burlington\ChromData\CHW.i\20160902-21628.b\21628_24.d				
Injection Date:	03-Sep-2016 06:23:30	Instrument ID:	CHW.i		
Lims ID:	200-35064-A-3	Lab Sample ID:	200-35064-3		
Client ID:	SS-3				
Operator ID:	pad	ALS Bottle#:	20	Worklist Smp#:	24
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_MasterMethod_(v1)	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

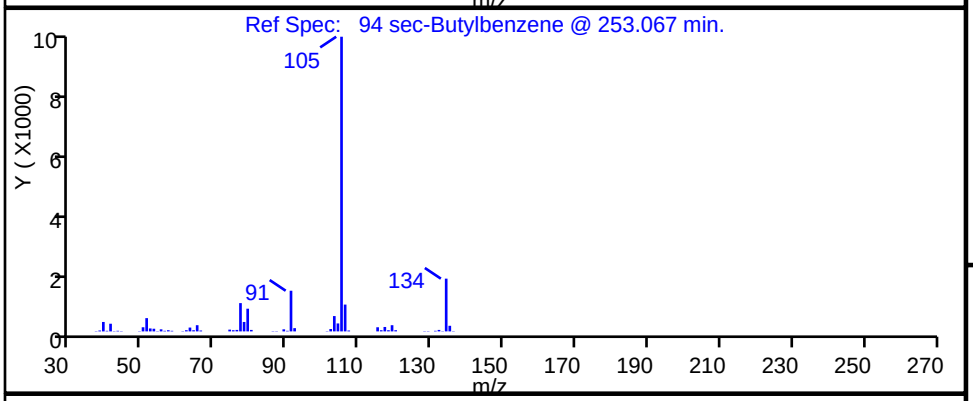
94 sec-Butylbenzene, CAS: 135-98-8

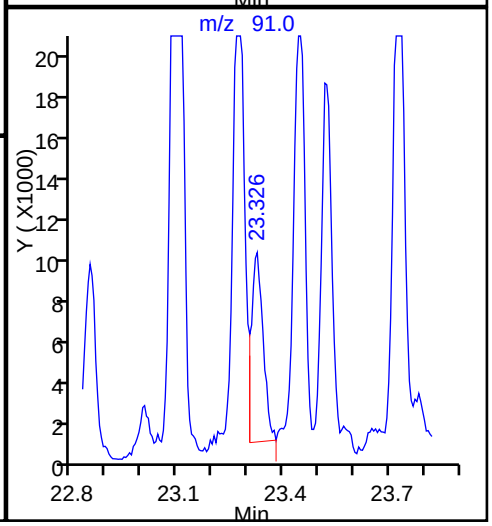


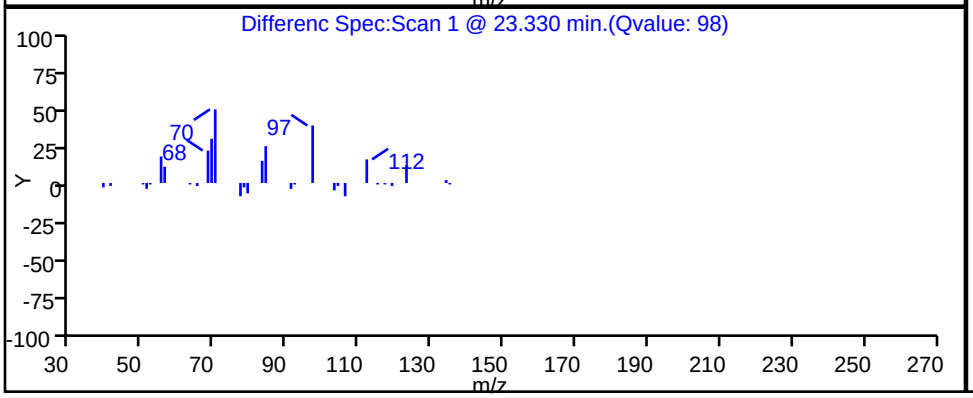








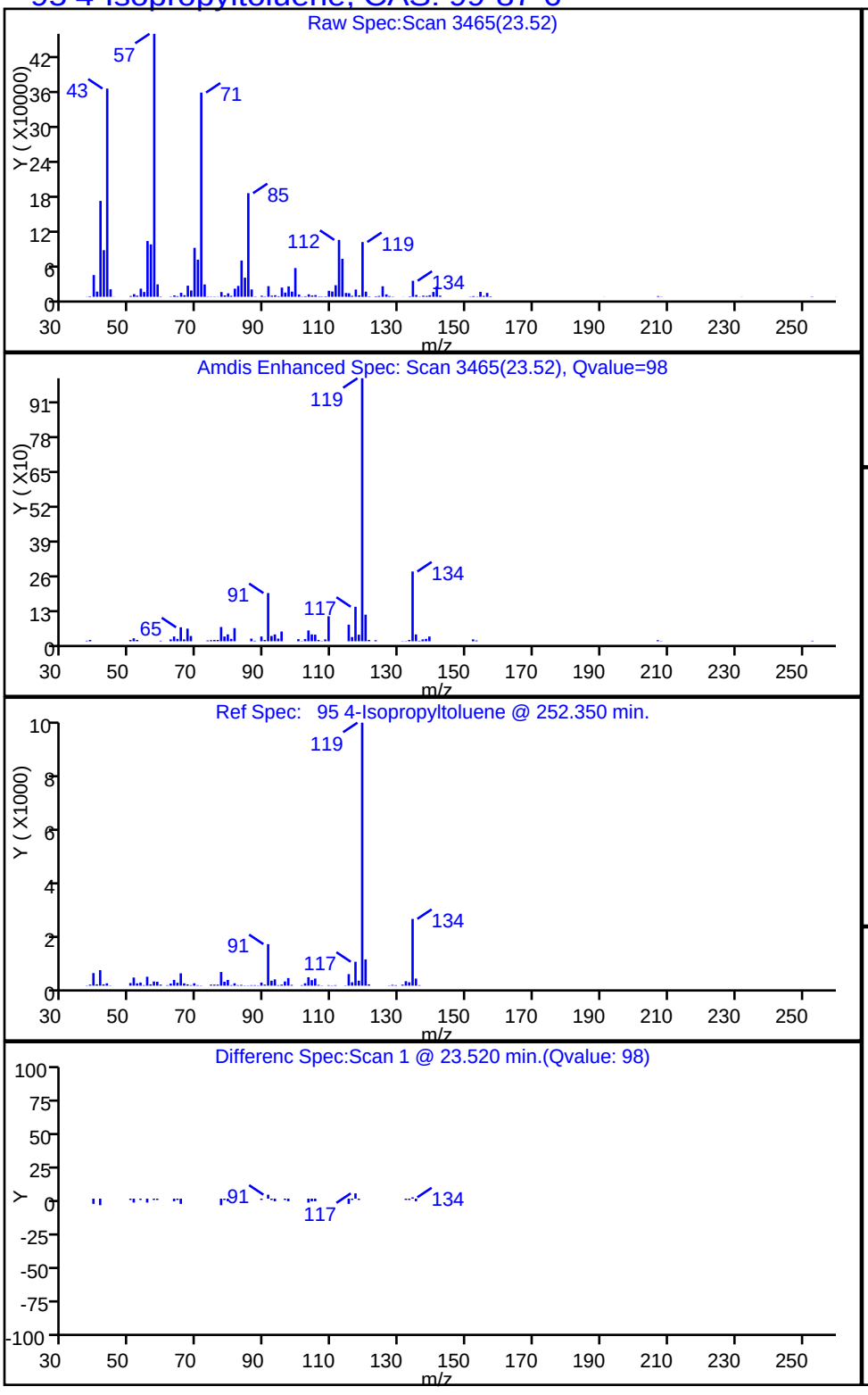


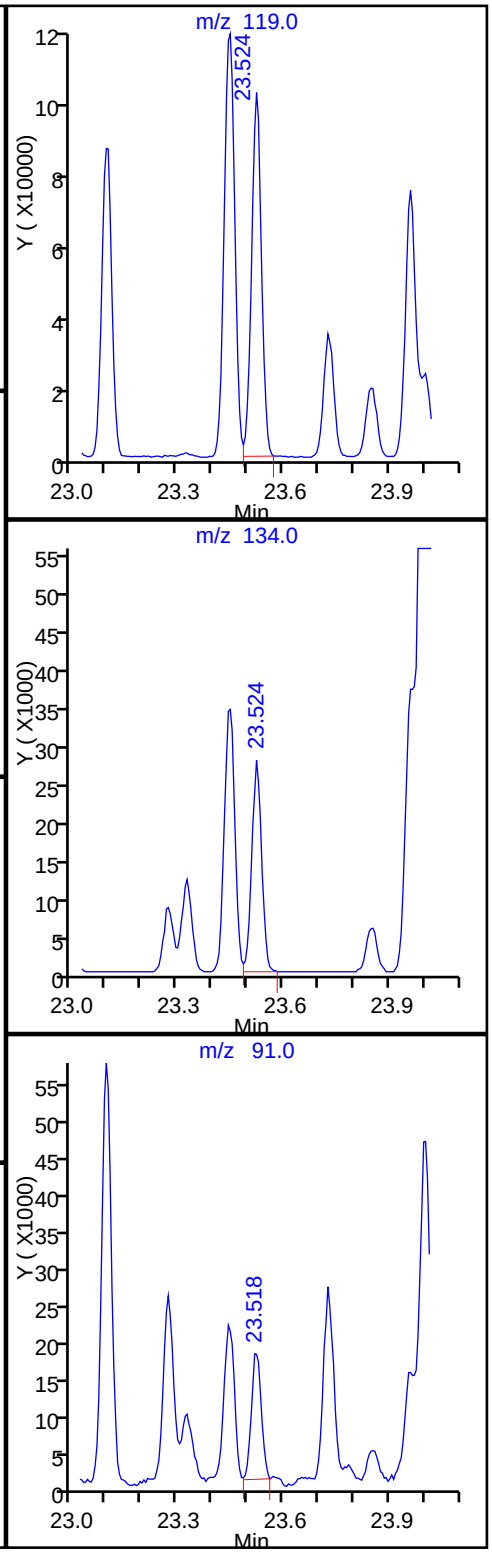


TestAmerica Burlington

Data File:	\\ChromNA\Burlington\ChromData\CHW.i\20160902-21628.b\21628_24.d				
Injection Date:	03-Sep-2016 06:23:30	Instrument ID:	CHW.i		
Lims ID:	200-35064-A-3	Lab Sample ID:	200-35064-3		
Client ID:	SS-3				
Operator ID:	pad	ALS Bottle#:	20	Worklist Smp#:	24
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_MasterMethod_(v1)	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

95 4-Isopropyltoluene, CAS: 99-87-6

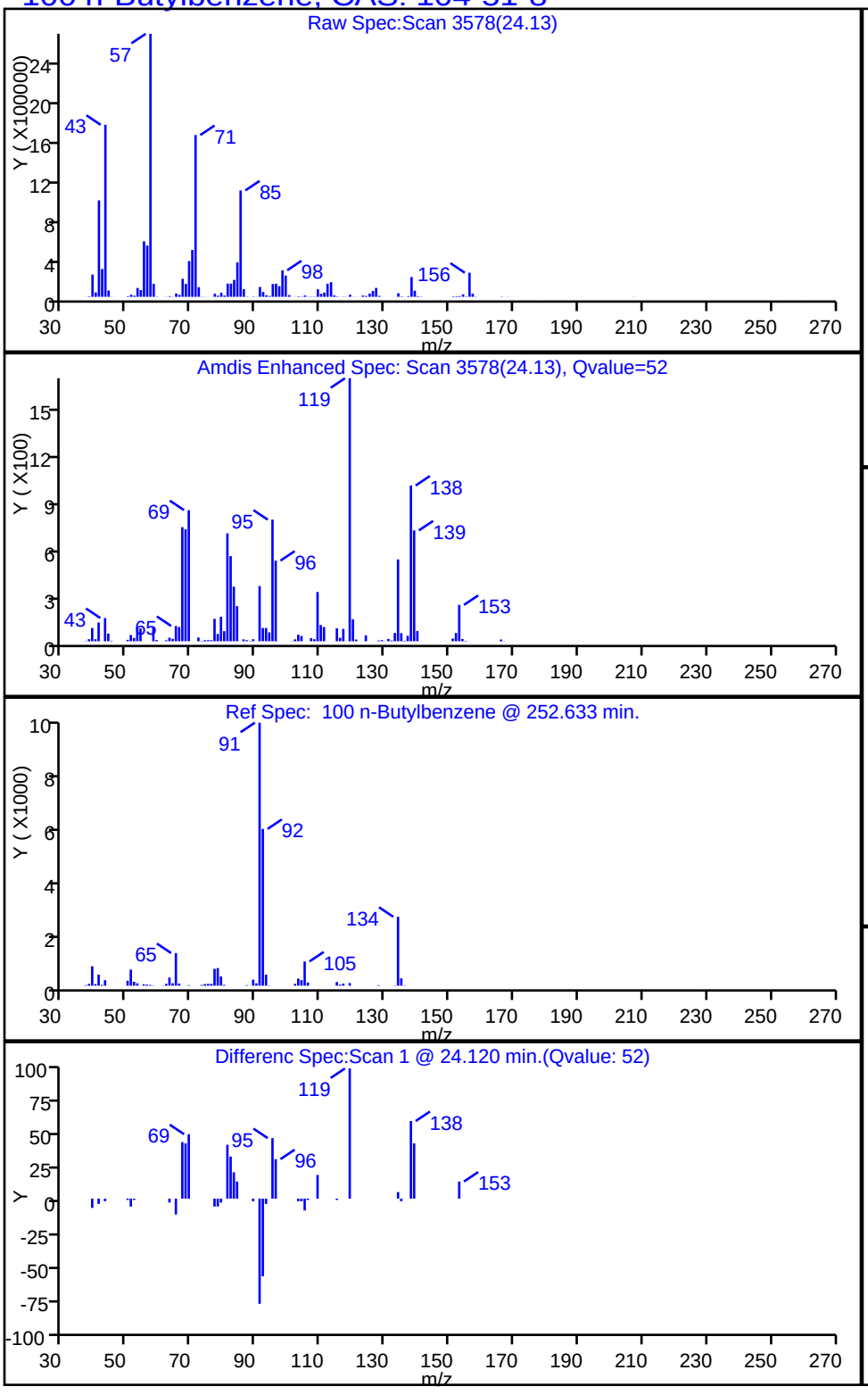


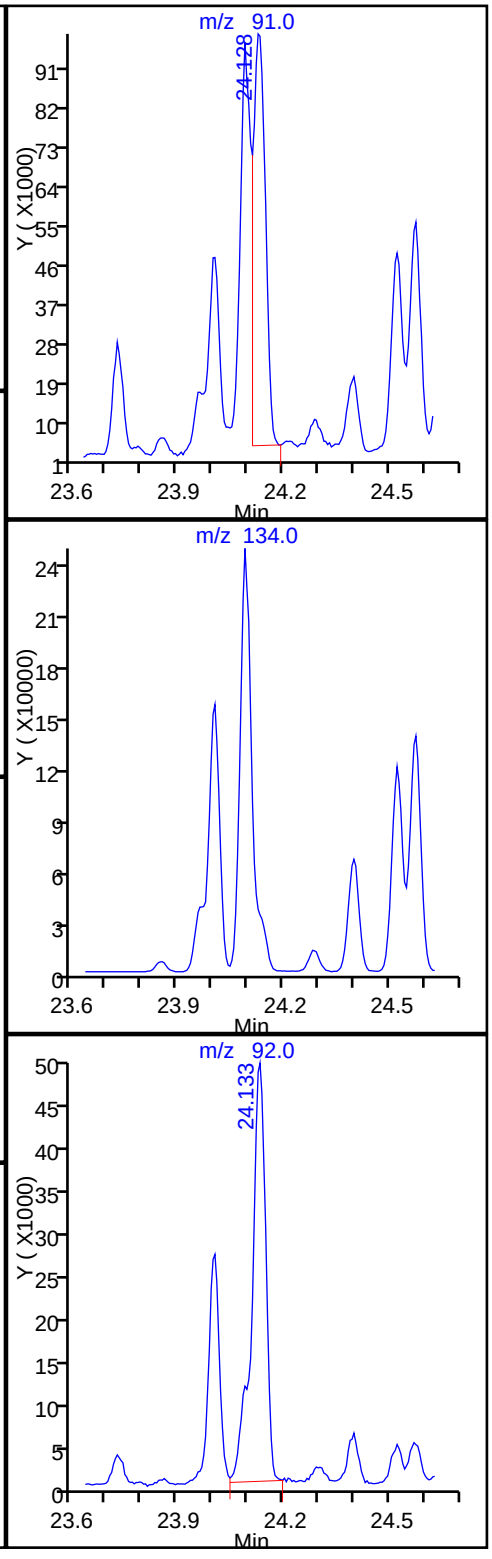


TestAmerica Burlington

Data File:	\\ChromNA\Burlington\ChromData\CHW.i\20160902-21628.b\21628_24.d		
Injection Date:	03-Sep-2016 06:23:30	Instrument ID:	CHW.i
Lims ID:	200-35064-A-3	Lab Sample ID:	200-35064-3
Client ID:	SS-3		
Operator ID:	pad	ALS Bottle#:	20 Worklist Smp#: 24
Purge Vol:	200.000 mL	Dil. Factor:	1.0000
Method:	TO15_MasterMethod_(v1)	Limit Group:	AI_TO15_ICAL
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN

100 n-Butylbenzene, CAS: 104-51-8



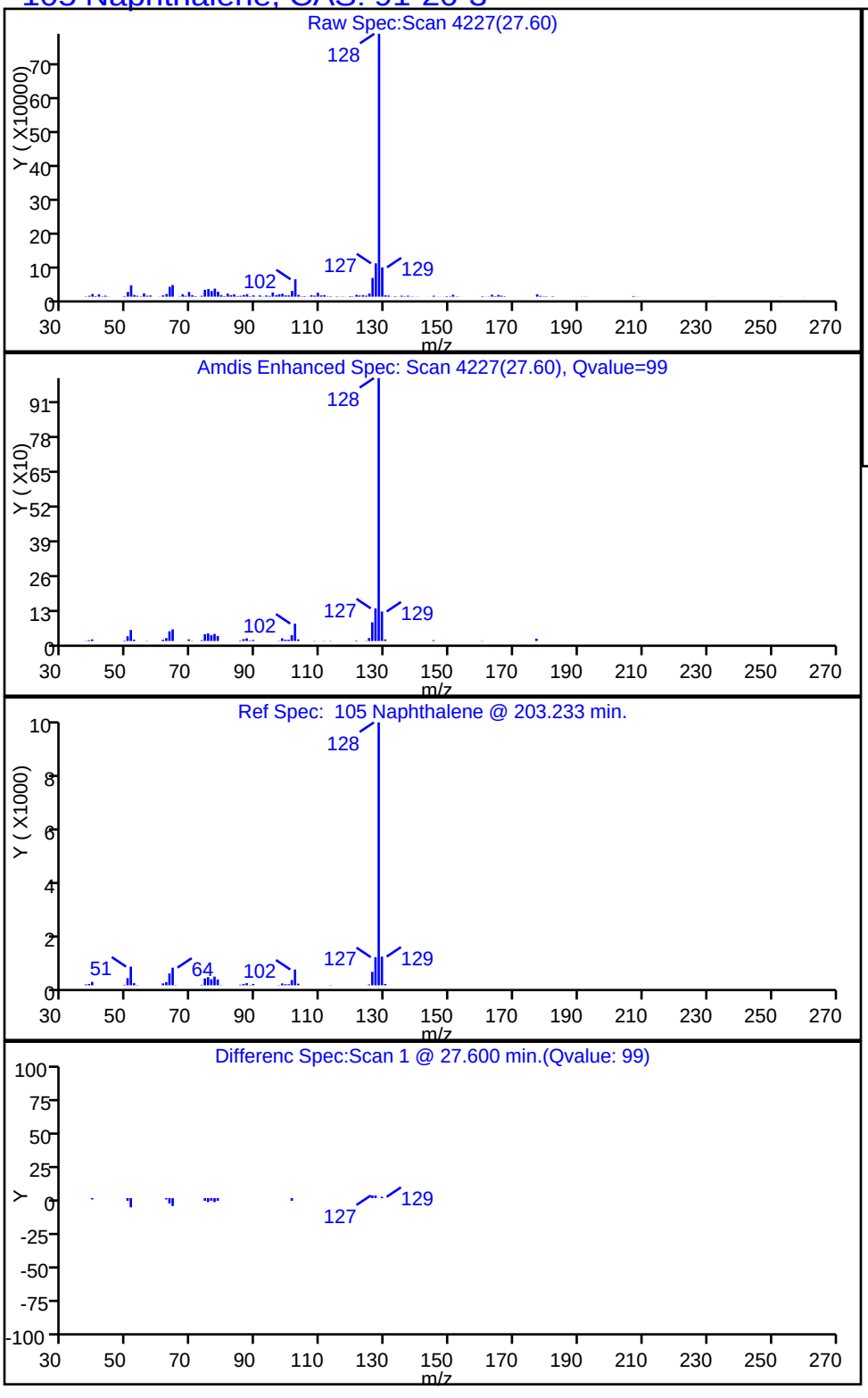


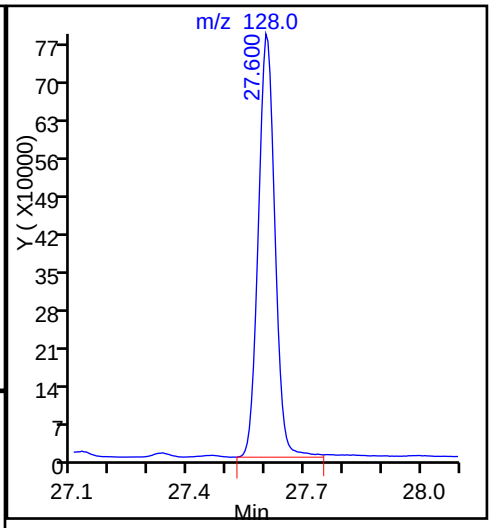
Report Date: 07-Sep-2016 08:42:39 Chrom Revision: 2.2 02-Sep-2016 12:39:46

TestAmerica Burlington

Data File:	\\ChromNA\Burlington\ChromData\CHW.i\20160902-21628.b\21628_24.d				
Injection Date:	03-Sep-2016 06:23:30	Instrument ID:	CHW.i		
Lims ID:	200-35064-A-3	Lab Sample ID:	200-35064-3		
Client ID:	SS-3				
Operator ID:	pad	ALS Bottle#:	20	Worklist Smp#:	24
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_MasterMethod_(v1)	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

105 Naphthalene, CAS: 91-20-3





Manual Integration/User Assign Peak Report

TestAmerica Burlington

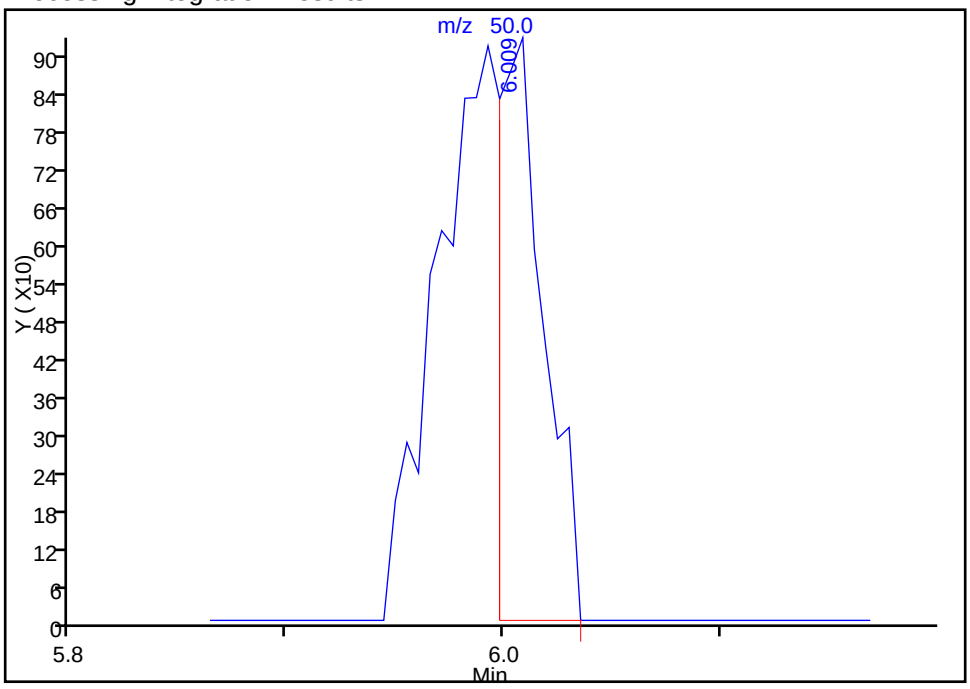
Data File:	\\ChromNA\Burlington\ChromData\CHW.i\20160902-21628.b\21628_24.d				
Injection Date:	03-Sep-2016 06:23:30	Instrument ID:	CHW.i		
Lims ID:	200-35064-A-3	Lab Sample ID:	200-35064-3		
Client ID:	SS-3				
Operator ID:	pad	ALS Bottle#:	20	Worklist Smp#:	24
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_MasterMethod_(v1)	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

5 Chloromethane, CAS: 74-87-3

Signal: 1

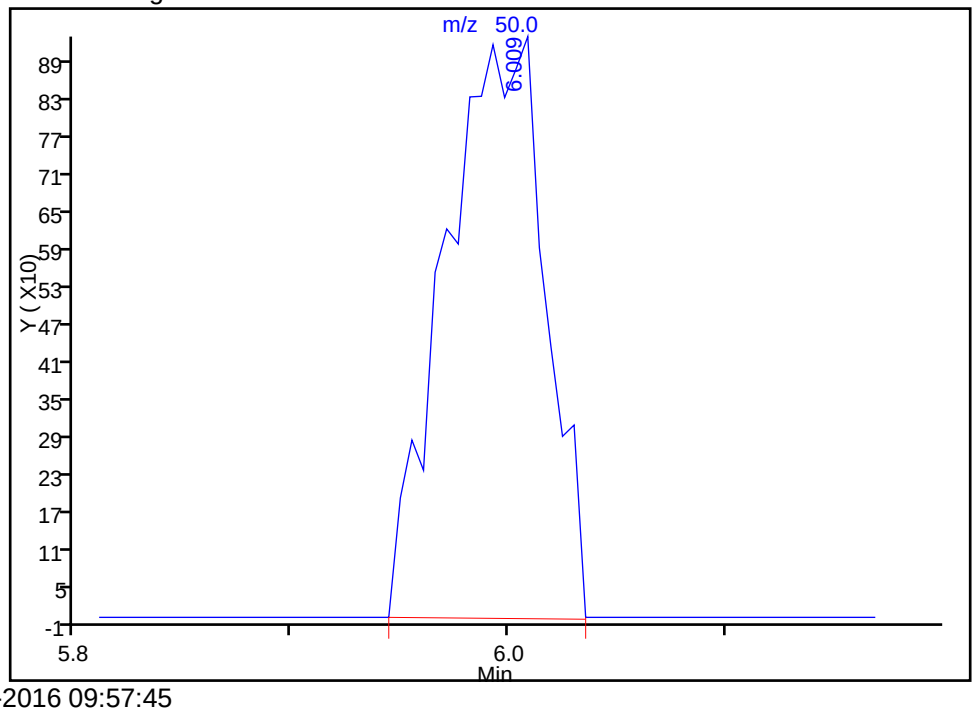
Processing Integration Results

RT: 6.01
Area: 1359
Amount: 0.057317
Amount Units: ppb v/v



Manual Integration Results

RT: 6.01
Area: 2984
Amount: 0.125852
Amount Units: ppb v/v



Reviewer: puangmaleek, 07-Sep-2016 09:57:45

Audit Action: Manually Integrated Audit Reason: Assign Peak

Manual Integration/User Assign Peak Report

TestAmerica Burlington

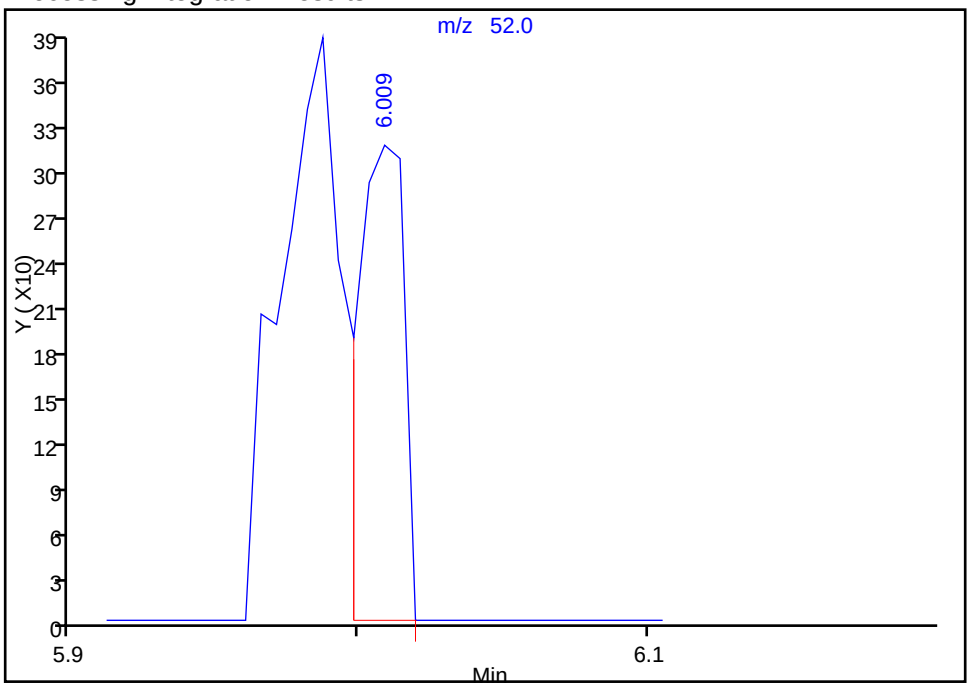
Data File:	\\ChromNA\Burlington\ChromData\CHW.i\20160902-21628.b\21628_24.d				
Injection Date:	03-Sep-2016 06:23:30	Instrument ID:	CHW.i		
Lims ID:	200-35064-A-3	Lab Sample ID:	200-35064-3		
Client ID:	SS-3				
Operator ID:	pad	ALS Bottle#:	20	Worklist Smp#:	24
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_MasterMethod_(v1)	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

5 Chloromethane, CAS: 74-87-3

Signal: 2

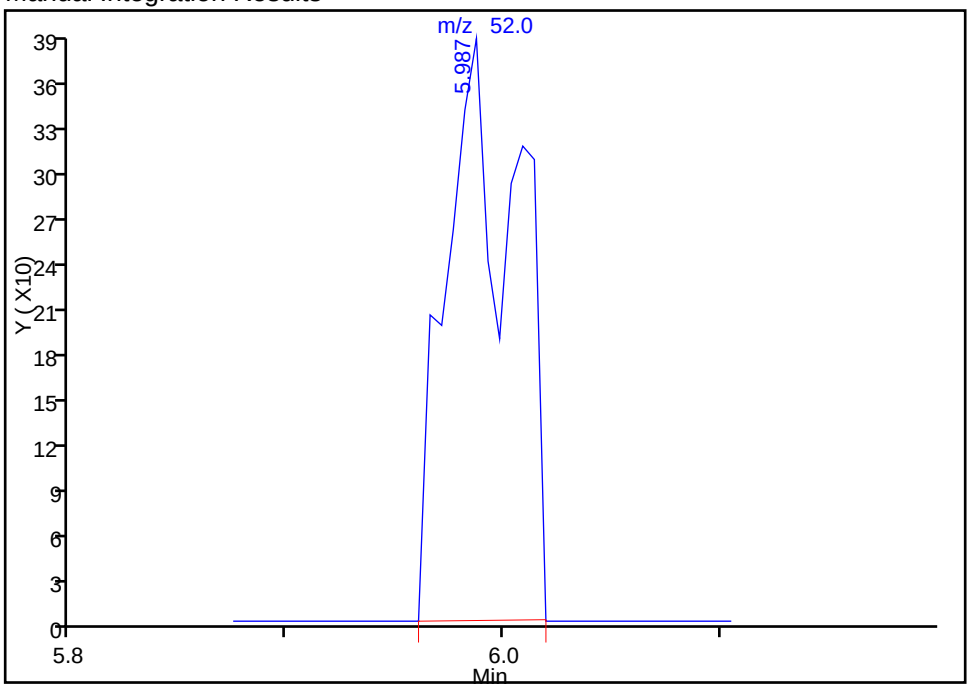
Processing Integration Results

RT: 6.01
Area: 356
Amount: 0.057317
Amount Units: ppb v/v



Manual Integration Results

RT: 5.99
Area: 880
Amount: 0.125852
Amount Units: ppb v/v



Reviewer: puangmaleek, 07-Sep-2016 09:57:45

Audit Action: Manually Integrated Audit Reason: Assign Peak

Manual Integration/User Assign Peak Report

TestAmerica Burlington

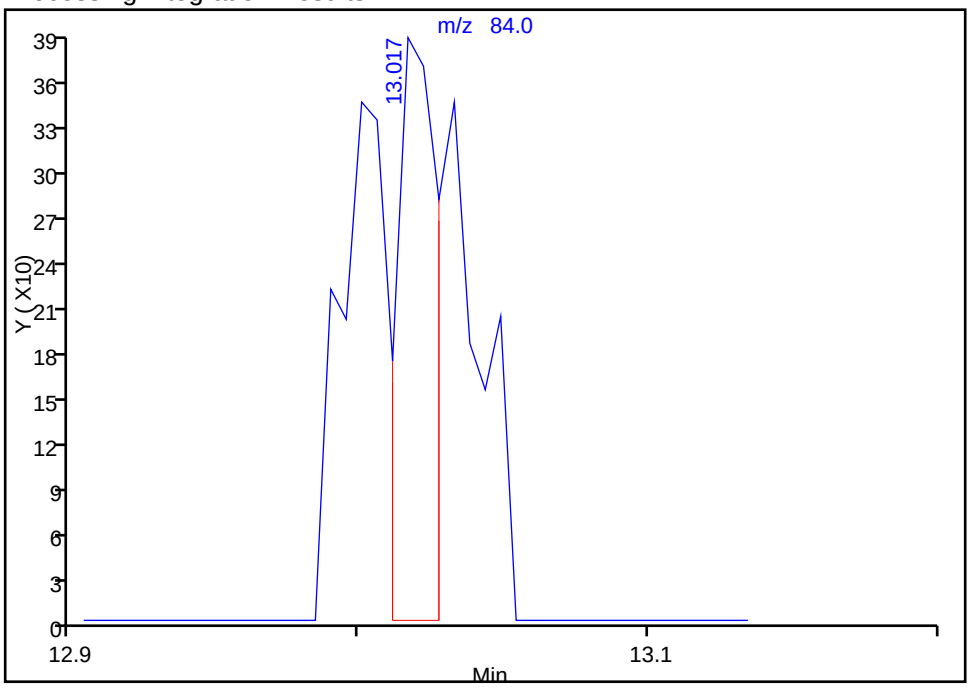
Data File:	\\ChromNA\Burlington\ChromData\CHW.i\20160902-21628.b\21628_24.d				
Injection Date:	03-Sep-2016 06:23:30	Instrument ID:	CHW.i		
Lims ID:	200-35064-A-3	Lab Sample ID:	200-35064-3		
Client ID:	SS-3				
Operator ID:	pad	ALS Bottle#:	20	Worklist Smp#:	24
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_MasterMethod_(v1)	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

43 Cyclohexane, CAS: 110-82-7

Signal: 1

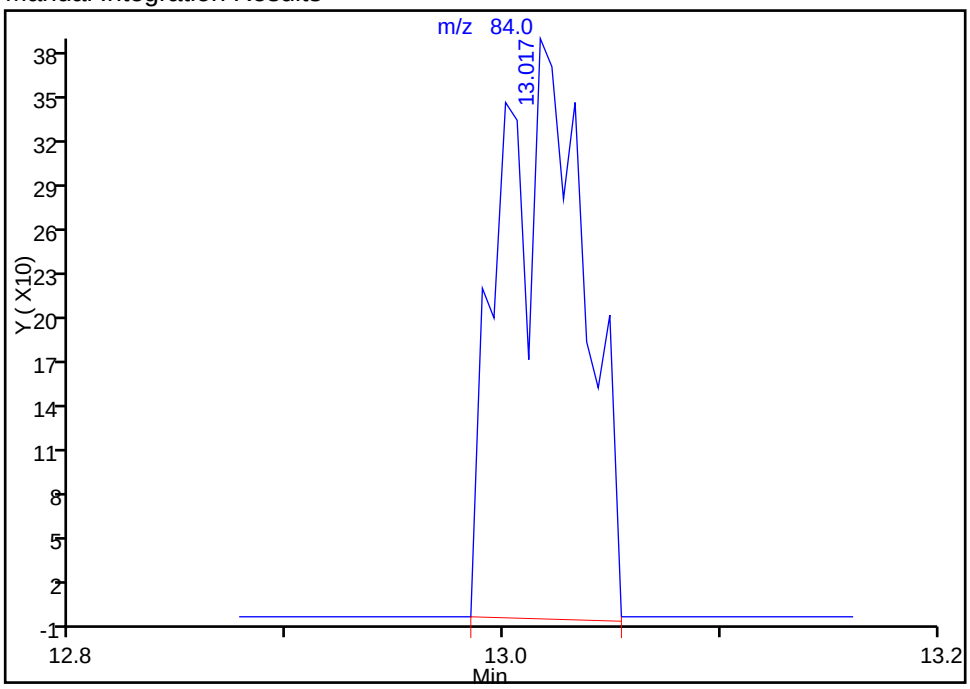
Processing Integration Results

RT: 13.02
Area: 389
Amount: 0.007489
Amount Units: ppb v/v



Manual Integration Results

RT: 13.02
Area: 1035
Amount: 0.019926
Amount Units: ppb v/v



Reviewer: puangmaleek, 07-Sep-2016 09:57:45

Audit Action: Manually Integrated Audit Reason: Assign Peak

Manual Integration/User Assign Peak Report

TestAmerica Burlington

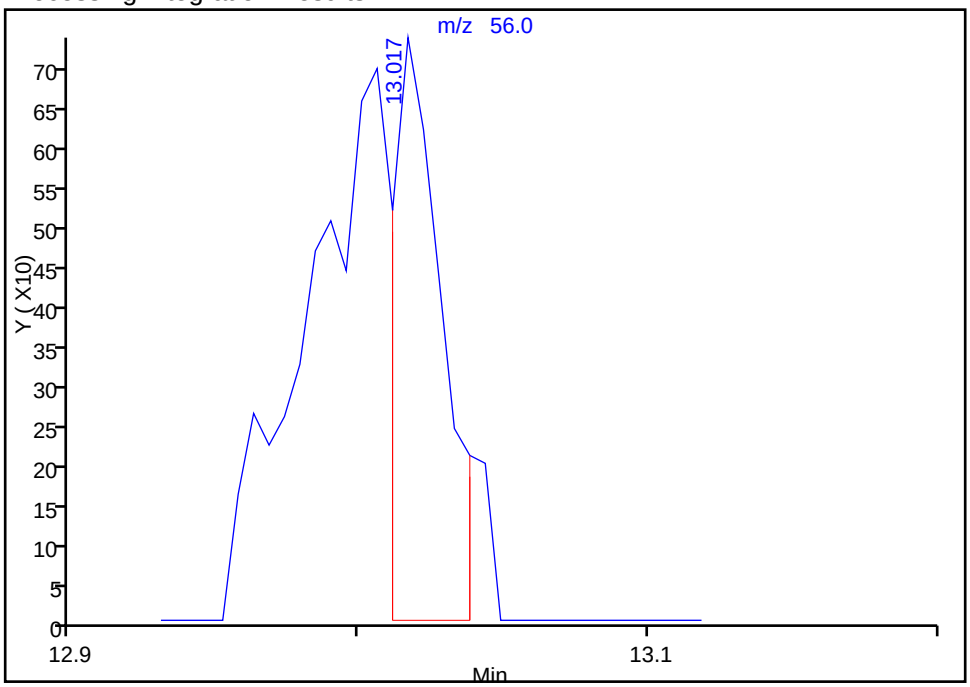
Data File:	\\ChromNA\Burlington\ChromData\CHW.i\20160902-21628.b\21628_24.d				
Injection Date:	03-Sep-2016 06:23:30	Instrument ID:	CHW.i		
Lims ID:	200-35064-A-3	Lab Sample ID:	200-35064-3		
Client ID:	SS-3				
Operator ID:	pad	ALS Bottle#:	20	Worklist Smp#:	24
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_MasterMethod_(v1)	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

43 Cyclohexane, CAS: 110-82-7

Signal: 2

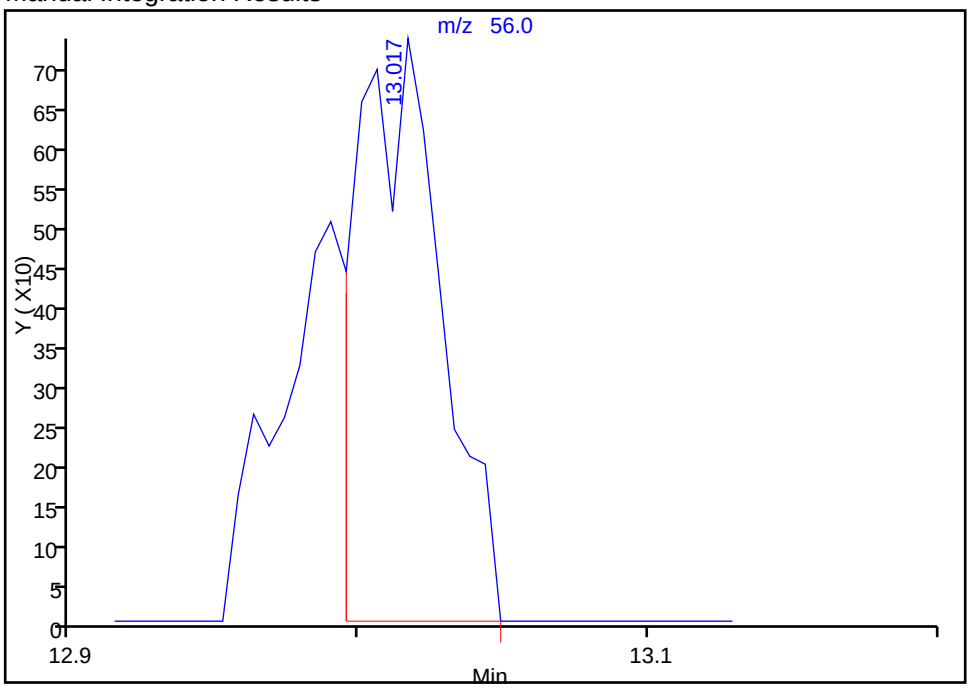
Processing Integration Results

RT: 13.02
Area: 884
Amount: 0.007489
Amount Units: ppb v/v



Manual Integration Results

RT: 13.02
Area: 1523
Amount: 0.019926
Amount Units: ppb v/v



Reviewer: puangmaleek, 07-Sep-2016 09:57:45

Audit Action: Manually Integrated Audit Reason: Assign Peak

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Burlington Job No.: 200-35064-1 Analy Batch No.: 108448

SDG No.: 200-35064-1

Instrument ID: CHW.i GC Column: RTX-624 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/22/2016 18:30 Calibration End Date: 08/23/2016 00:38 Calibration ID: 35583

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 200-108448/4	21457_06.d
Level 2	IC 200-108448/5	21457_07.d
Level 3	IC 200-108448/6	21457_08.d
Level 4	IC 200-108448/7	21457_09.d
Level 5	ICIS 200-108448/8	21457_10.d
Level 6	IC 200-108448/9	21457_11.d
Level 7	IC 200-108448/10	21457_12.d
Level 8	IC 200-108448/11	21457_13.d

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
Propylene	+++++ 0.6311	+++++ 0.6871	+++++ 0.6040	0.6454	0.6953	Ave		0.6526				5.9		30.0			
Dichlorodifluoromethane	+++++ 2.9437	+++++ 3.1899	3.1356 2.8125	2.9857	3.2371	Ave		3.0507				5.4		30.0			
Freon 22	+++++ 1.3415	+++++ 1.4727	1.4651 1.2893	1.3490	1.4838	Ave		1.4002				6.0		30.0			
1,2-Dichlorotetrafluoroethane	+++++ 2.8638	3.0070 3.1187	3.0526 2.7699	2.8796	3.1321	Ave		2.9748				4.7		30.0			
Chloromethane	+++++ 0.7374	+++++ 0.8057	0.8561 0.7160	0.7434	0.8063	Ave		0.7775				6.9		30.0			
n-Butane	+++++ 1.3133	+++++ 1.3995	1.5289 1.2864	1.2933	1.4447	Ave		1.3777				7.1		30.0			
Vinyl chloride	0.9712 1.0048	0.9746 1.0963	1.0387 0.9832	0.9850	1.0890	Ave		1.0179				5.0		30.0			
1,3-Butadiene	+++++ 0.7231	0.7954 0.8101	0.7871 0.7363	0.7328	0.8056	Ave		0.7701				4.9		30.0			
Bromomethane	+++++ 1.1147	1.2039 1.2214	1.1746 1.0906	1.1284	1.2284	Ave		1.1660				4.7		30.0			
Chloroethane	+++++ 0.5720	+++++ 0.6221	0.5896 0.5551	0.5660	0.6225	Ave		0.5879				4.9		30.0			
Isopentane	+++++ 0.9837	1.0800 1.0752	1.2212 0.9572	0.9874	1.0804	Ave		1.0550				8.5		30.0			
Bromoethene(Vinyl Bromide)	+++++ 1.2852	1.3056 1.4036	1.3579 1.2419	1.2884	1.4056	Ave		1.3269				4.8		30.0			
Trichlorofluoromethane	+++++ 2.9469	3.1439 3.2108	3.2034 2.7951	2.9983	3.2560	Ave		3.0792				5.5		30.0			
n-Pentane	+++++ 1.5507	+++++ 1.6743	1.7551 1.4787	1.5721	1.6785	Ave		1.6182				6.3		30.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Burlington Job No.: 200-35064-1 Analy Batch No.: 108448

SDG No.: 200-35064-1

Instrument ID: CHW.i GC Column: RTX-624 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/22/2016 18:30 Calibration End Date: 08/23/2016 00:38 Calibration ID: 35583

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
Ethanol	+++++ 0.4840	+++++ 0.4660	0.7321 0.4068	0.5409	0.4571	Ave		0.5145				22.4		30.0			
Ethyl ether	+++++ 0.7229	0.7096 0.7858	0.7502 0.6988	0.7374	0.7888	Ave		0.7419				4.8		30.0			
Acrolein	+++++ 0.3145	+++++ 0.3223	+++++ 0.2544	0.3060	0.3121	Ave		0.3019				9.0		30.0			
Freon TF	+++++ 2.3617	2.7642 2.5717	2.5779 2.2530	2.4221	2.6051	Ave		2.5080				6.9		30.0			
1,1-Dichloroethene	+++++ 1.1892	1.2194 1.2896	1.2636 1.1488	1.1878	1.2875	Ave		1.2266				4.5		30.0			
Acetone	+++++ 1.1945	+++++ 1.2989	+++++ 1.1046	1.3848	1.4586	Ave		1.2883				11.0		30.0			
Carbon disulfide	+++++ 2.9236	+++++ 3.1632	3.0833 2.7833	2.9427	3.2222	Ave		3.0197				5.5		30.0			
Isopropyl alcohol	+++++ 1.2530	+++++ 1.2853	+++++ 1.1199	1.3559	1.5124	Ave		1.3053				11.0		30.0			
3-Chloropropene	+++++ 1.0596	1.1213 1.1202	1.1734 0.9579	1.0373	0.9382	Ave		1.0582				8.3		30.0			
Acetonitrile	+++++ 0.5732	+++++ 0.6252	+++++ 0.5398	0.6018	0.6683	Ave		0.6017				8.2		30.0			
Methylene Chloride	+++++ 0.9715	+++++ 1.0440	1.1587 0.9113	0.9889	1.0616	Ave		1.0227				8.4		30.0			
tert-Butyl alcohol	+++++ 1.9125	+++++ 1.9934	+++++ 1.7495	1.9731	2.2350	Ave		1.9727				8.9		30.0			
Methyl tert-butyl ether	+++++ 3.1728	3.2286 3.4247	3.4123 2.9873	3.2484	3.5065	Ave		3.2829				5.4		30.0			
trans-1,2-Dichloroethene	+++++ 1.4186	1.4258 1.5400	1.4823 1.3433	1.4472	1.5614	Ave		1.4598				5.1		30.0			
Acrylonitrile	+++++ 0.6800	+++++ 0.7439	0.7016 0.6571	0.6904	0.7475	Ave		0.7034				5.1		30.0			
n-Hexane	+++++ 1.5896	1.9163 1.7399	1.7857 1.5070	1.6396	1.7765	Ave		1.7078				8.1		30.0			
1,1-Dichloroethane	1.8886 1.8596	1.8974 2.0271	2.0078 1.7571	1.9020	2.0612	Ave		1.9251				5.2		30.0			
Vinyl acetate	+++++ 2.1646	+++++ 2.3565	+++++ 2.0456	2.1826	2.3507	Ave		2.2200				6.0		30.0			
cis-1,2-Dichloroethene	+++++ 1.3143	1.4475 1.4240	1.3989 1.2541	1.3345	1.4518	Ave		1.3750				5.5		30.0			
Methyl Ethyl Ketone	+++++ 0.5802	+++++ 0.6316	0.6830 0.5536	0.6021	0.6612	Ave		0.6186				8.0		30.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Burlington Job No.: 200-35064-1 Analy Batch No.: 108448

SDG No.: 200-35064-1

Instrument ID: CHW.i GC Column: RTX-624 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/22/2016 18:30 Calibration End Date: 08/23/2016 00:38 Calibration ID: 35583

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
Ethyl acetate	+++++ 0.1051	+++++ 0.1165	+++++ 0.1011	0.1054	0.1174	Ave		0.1091				6.7		30.0			
Tetrahydrofuran	+++++ 0.2111	+++++ 0.2279	+++++ 0.2054	0.2219	0.2389	Ave		0.2211				6.0		30.0			
Chloroform	+++++ 2.2655	2.3403 2.4483	2.4334 2.1412	2.3074	2.4996	Ave		2.3479				5.3		30.0			
Cyclohexane	+++++ 0.3576	0.3520 0.3850	0.3764 0.3481	0.3572	0.3907	Ave		0.3667				4.6		30.0			
1,1,1-Trichloroethane	+++++ 0.4898	0.5147 0.5279	0.5149 0.4748	0.4925	0.5378	Ave		0.5075				4.4		30.0			
Carbon tetrachloride	0.5411 0.5296	0.5093 0.5613	0.5462 0.5142	0.5196	0.3626	Ave		0.5105				12.2		30.0			
2,2,4-Trimethylpentane	+++++ 1.1224	1.1817 1.2117	1.2056 1.0823	1.1370	1.2387	Ave		1.1685				4.8		30.0			
Benzene	+++++ 0.7789	0.8538 0.8397	0.8379 0.7581	0.7787	0.8542	Ave		0.8145				5.0		30.0			
1,2-Dichloroethane	+++++ 0.2528	0.2275 0.2743	0.2613 0.2494	0.2534	0.2767	Ave		0.2565				6.5		30.0			
n-Heptane	+++++ 0.3623	0.4200 0.3908	0.4050 0.3484	0.3686	0.3975	Ave		0.3846				6.7		30.0			
n-Butanol	+++++ 0.1228	+++++ 0.1347	+++++ 0.1208	0.1280	0.1535	Ave		0.1320				10.0		30.0			
Trichloroethene	0.3771 0.3487	0.3409 0.3823	0.3612 0.3455	0.3526	0.3860	Ave		0.3618				4.9		30.0			
1,2-Dichloropropane	+++++ 0.2690	0.2583 0.2916	0.2853 0.2653	0.2707	0.2944	Ave		0.2764				5.1		30.0			
Methyl methacrylate	+++++ 0.2738	+++++ 0.2968	0.2798 0.2713	0.2671	0.2971	Ave		0.2810				4.6		30.0			
1,4-Dioxane	+++++ 0.1294	+++++ 0.1334	+++++ 0.1224	0.1355	0.1701	Ave		0.1382				13.4		30.0			
Dibromomethane	+++++ 0.4089	0.4018 0.4437	0.4097 0.4106	0.4111	0.4555	Ave		0.4202				4.9		30.0			
Bromodichloromethane	+++++ 0.5236	0.5090 0.5652	0.5476 0.5111	0.5252	0.5589	Ave		0.5344				4.3		30.0			
cis-1,3-Dichloropropene	+++++ 0.4187	0.3968 0.4514	0.4150 0.4118	0.4113	0.4509	Ave		0.4223				4.9		30.0			
methyl isobutyl ketone	+++++ 0.4564	+++++ 0.4847	0.4944 0.4411	0.4589	0.5252	Ave		0.4768				6.4		30.0			
n-Octane	+++++ 0.5013	0.5774 0.5287	0.5538 0.4597	0.5107	0.5560	Ave		0.5268				7.6		30.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Burlington Job No.: 200-35064-1 Analy Batch No.: 108448

SDG No.: 200-35064-1

Instrument ID: CHW.i GC Column: RTX-624 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/22/2016 18:30 Calibration End Date: 08/23/2016 00:38 Calibration ID: 35583

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
Toluene	+++++ 0.6662	0.7133 0.7124	0.7115 0.6286	0.6796	0.7327	Ave		0.6920				5.2		30.0			
trans-1,3-Dichloropropene	+++++ 0.4035	0.3784 0.4308	0.3861 0.3989	0.3944	0.4201	Ave		0.4018				4.6		30.0			
1,1,2-Trichloroethane	+++++ 0.3092	0.3093 0.3332	0.3237 0.3045	0.3096	0.3379	Ave		0.3182				4.2		30.0			
Tetrachloroethene	0.6521 0.6708	0.6694 0.7272	0.6984 0.6520	0.6687	0.7332	Ave		0.6840				4.7		30.0			
Methyl Butyl Ketone (2-Hexanone)	+++++ 0.4689	+++++ 0.5052	0.3721 0.4663	0.4470	0.5310	Ave		0.4651				11.8		30.0			
Dibromochloromethane	+++++ 0.7066	0.6351 0.7545	0.7146 0.6760	0.6826	0.6922	Ave		0.6945				5.3		30.0			
1,2-Dibromoethane	+++++ 0.5976	0.5607 0.6454	0.5918 0.5866	0.5918	0.6472	Ave		0.6030				5.3		30.0			
Chlorobenzene	+++++ 0.9293	0.8873 0.9971	0.9256 0.8915	0.9282	1.0096	Ave		0.9384				5.1		30.0			
Ethylbenzene	+++++ 1.4213	1.4428 1.5238	1.4861 1.3502	1.4423	1.5580	Ave		1.4606				4.7		30.0			
n-Nonane	+++++ 0.6066	0.6407 0.6478	0.6440 0.5725	0.6211	0.6660	Ave		0.6284				5.0		30.0			
m,p-Xylene	+++++ 0.6007	0.5936 0.6396	0.6229 0.5548	0.6108	0.6586	Ave		0.6115				5.5		30.0			
Xylene, o-	+++++ 0.6050	0.5923 0.6494	0.6201 0.5751	0.6059	0.6601	Ave		0.6154				4.9		30.0			
Styrene	+++++ 0.9396	0.8422 1.0028	0.8708 0.8917	0.9333	1.0311	Ave		0.9302				7.4		30.0			
Bromoform	+++++ 0.7273	0.5886 0.7544	0.7058 0.6635	0.6310	0.5719	Ave		0.6632				10.5		30.0			
Cumene	+++++ 1.6797	1.7029 1.7946	1.7987 1.5613	1.7132	1.8425	Ave		1.7276				5.5		30.0			
1,1,2,2-Tetrachloroethane	+++++ 0.7966	0.7920 0.8555	0.8258 0.7618	0.7887	0.8681	Ave		0.8127				4.7		30.0			
n-Propylbenzene	+++++ 1.9431	1.8390 2.0713	1.9597 1.7780	1.9806	2.1267	Ave		1.9569				6.2		30.0			
1,2,3-Trichloropropane	+++++ 0.5820	+++++ 0.6277	0.5849 0.5568	0.5733	0.6382	Ave		0.5938				5.4		30.0			
n-Decane	+++++ 0.7795	+++++ 0.8321	0.7349 0.7235	0.7926	0.8465	Ave		0.7849				6.3		30.0			
4-Ethyltoluene	+++++ 1.6884	1.6634 1.7998	1.6651 1.5363	1.7133	1.8373	Ave		1.7005				5.8		30.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Burlington Job No.: 200-35064-1 Analy Batch No.: 108448

SDG No.: 200-35064-1

Instrument ID: CHW.i GC Column: RTX-624 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/22/2016 18:30 Calibration End Date: 08/23/2016 00:38 Calibration ID: 35583

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
2-Chlorotoluene	+++++ 1.3290	1.2886 1.4326	1.3178 1.2444	1.3369	1.4401	Ave		1.3413				5.4		30.0			
1,3,5-Trimethylbenzene	+++++ 1.4227	1.3369 1.5185	1.4216 1.3277	1.4379	1.5459	Ave		1.4302				5.8		30.0			
Alpha Methyl Styrene	+++++ 0.7766	0.6556 0.8337	0.6703 0.7422	0.7584	0.8171	Ave		0.7506				9.0		30.0			
tert-Butylbenzene	+++++ 1.4181	1.4292 1.5095	1.4935 1.3092	1.4537	1.5535	Ave		1.4524				5.4		30.0			
1,2,4-Trimethylbenzene	+++++ 1.4134	1.3622 1.5073	1.3733 1.3119	1.4366	1.5261	Ave		1.4187				5.5		30.0			
sec-Butylbenzene	+++++ 2.0522	2.0365 2.1789	2.0870 1.8583	2.1053	2.2500	Ave		2.0812				5.9		30.0			
4-Isopropyltoluene	+++++ 1.8048	1.7233 1.9138	1.7671 1.6378	1.8427	1.9631	Ave		1.8075				6.2		30.0			
1,3-Dichlorobenzene	+++++ 1.0625	0.8925 1.1343	0.9289 1.0111	1.0318	1.1269	Ave		1.0269				9.0		30.0			
1,4-Dichlorobenzene	+++++ 1.0491	0.8357 1.1160	0.8593 1.0016	0.9972	1.1006	Ave		0.9942				11.1		30.0			
Benzyl chloride	+++++ 1.0564	0.7711 1.0721	0.8236 1.0552	1.0499	0.9170	Ave		0.9636				13.1		30.0			
n-Undecane	+++++ 0.8217	+++++ 0.8497	+++++ 0.6928	0.8493	0.8596	Ave		0.8146				8.5		30.0			
n-Butylbenzene	+++++ 1.4726	1.2369 1.5404	1.2511 1.2750	1.5001	1.5865	Ave		1.4089				10.6		30.0			
1,2-Dichlorobenzene	+++++ 0.9926	0.8698 1.0636	0.8991 0.9544	0.9706	1.0525	Ave		0.9718				7.4		30.0			
n-Dodecane	+++++ 0.6811	+++++ 0.6506	+++++ 0.6159	0.6732	0.5746	Ave		0.6391				6.9		30.0			
1,2,4-Trichlorobenzene	+++++ 0.6981	+++++ 0.6918	0.2822 0.6532	0.6513	0.6482	Ave		0.6041				26.4		30.0			
Hexachlorobutadiene	+++++ 0.7363	0.6771 0.7786	0.6501 0.7008	0.7366	0.7869	Ave		0.7238				7.0		30.0			
Naphthalene	+++++ 1.2993	+++++ 1.1915	0.4240 1.2427	1.1908	1.0928	Ave		1.0735				30.3	*	30.0			
1,2,3-Trichlorobenzene	+++++ 0.5852	0.3088 0.5874	0.2747 0.5553	0.5334	0.5367	Ave		0.4831				27.5		30.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Burlington Job No.: 200-35064-1 Analy Batch No.: 108448

SDG No.: 200-35064-1

Instrument ID: CHW.i GC Column: RTX-624 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/22/2016 18:30 Calibration End Date: 08/23/2016 00:38 Calibration ID: 35583

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 200-108448/4	21457_06.d
Level 2	IC 200-108448/5	21457_07.d
Level 3	IC 200-108448/6	21457_08.d
Level 4	IC 200-108448/7	21457_09.d
Level 5	ICIS 200-108448/8	21457_10.d
Level 6	IC 200-108448/9	21457_11.d
Level 7	IC 200-108448/10	21457_12.d
Level 8	IC 200-108448/11	21457_13.d

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (PPB V/V)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
Propylene	BCM	Ave	+++++ 243833	+++++ 333792	+++++ 643644	79027	163554	+++++ 15.0	+++++ 20.0	+++++ 40.0	4.99	10.00
Dichlorodifluoromethane	BCM	Ave	+++++ 1137335	+++++ 1549677	38071 2997033	365586	761479	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
Freon 22	BCM	Ave	+++++ 518311	+++++ 715440	17789 1373908	165173	349038	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
1,2-Dichlorotetrafluoroethane	BCM	Ave	+++++ 1106491	14369 1515112	37063 2951589	352592	736793	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Chloromethane	BCM	Ave	+++++ 284901	+++++ 391417	10395 762924	91026	189669	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
n-Butane	BCM	Ave	+++++ 507425	+++++ 679896	18563 1370733	158363	339843	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
Vinyl chloride	BCM	Ave	956 388215	4657 532617	12612 1047675	120609	256185	0.0401 15.0	0.200 20.0	0.500 40.0	4.99	10.00
1,3-Butadiene	BCM	Ave	+++++ 279400	3801 393558	9557 784641	89733	189503	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Bromomethane	BCM	Ave	+++++ 430684	5753 593385	14261 1162159	138173	288975	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Chloroethane	BCM	Ave	+++++ 221019	+++++ 302208	7159 591529	69309	146447	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
Isopentane	BCM	Ave	+++++ 380072	5161 522326	14827 1020022	120905	254163	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Bromoethene(Vinyl Bromide)	BCM	Ave	+++++ 496550	6239 681860	16487 1323386	157756	330647	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Trichlorofluoromethane	BCM	Ave	+++++ 1138584	15023 1559862	38895 2978445	367124	765927	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
n-Pentane	BCM	Ave	+++++ 599160	+++++ 813387	21310 1575702	192494	394840	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
Ethanol	BCM	Ave	+++++ 249879	+++++ 452813	88997 1083834	132544	161355	+++++ 20.0	+++++ 40.0	5.01 100.0	9.99	15.0

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Burlington Job No.: 200-35064-1 Analy Batch No.: 108448

SDG No.: 200-35064-1

Instrument ID: CHW.i GC Column: RTX-624 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/22/2016 18:30 Calibration End Date: 08/23/2016 00:38 Calibration ID: 35583

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (PPB V/V)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
Ethyl ether	BCM	Ave	+++++ 279291	3391 381727	9109 744650	90295	185547	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Acrolein	BCM	Ave	+++++ 121518	+++++ 156595	+++++ 271127	37473	73415	+++++ 15.0	+++++ 20.0	+++++ 40.0	4.99	10.00
Freon TF	BCM	Ave	+++++ 912491	13209 1249369	31300 2400740	296571	612827	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
1,1-Dichloroethene	BCM	Ave	+++++ 459471	5827 626498	15342 1224133	145441	302873	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Acetone	BCM	Ave	+++++ 461516	+++++ 631039	+++++ 1177095	169562	343113	+++++ 15.0	+++++ 20.0	+++++ 40.0	4.99	10.00
Carbon disulfide	BCM	Ave	+++++ 1129569	+++++ 1536721	37436 2965904	360320	757981	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
Isopropyl alcohol	BCM	Ave	+++++ 484121	+++++ 624391	+++++ 1193335	166025	355780	+++++ 15.0	+++++ 20.0	+++++ 40.0	4.99	10.00
3-Chloropropene	BCM	Ave	+++++ 409384	5358 544181	14247 1020683	127014	220692	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Acetonitrile	BCM	Ave	+++++ 221467	+++++ 303725	+++++ 575201	73691	157219	+++++ 15.0	+++++ 20.0	+++++ 40.0	4.99	10.00
Methylene Chloride	BCM	Ave	+++++ 375368	+++++ 507186	14069 971035	121092	249720	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
tert-Butyl alcohol	BCM	Ave	+++++ 738949	+++++ 968408	+++++ 1864240	241602	525755	+++++ 15.0	+++++ 20.0	+++++ 40.0	4.99	10.00
Methyl tert-butyl ether	BCM	Ave	+++++ 1225877	15428 1663766	41431 3183214	397755	824854	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
trans-1,2-Dichloroethene	BCM	Ave	+++++ 548113	6813 748161	17998 1431378	177207	367310	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Acrylonitrile	BCM	Ave	+++++ 262720	+++++ 361394	8519 700257	84540	175846	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
n-Hexane	BCM	Ave	+++++ 614155	9157 845248	21681 1605893	200765	417912	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
1,1-Dichloroethane	BCM	Ave	1859 718485	9067 984788	24378 1872383	232885	484873	0.0401 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Vinyl acetate	BCM	Ave	+++++ 836316	+++++ 1144830	+++++ 2179742	267252	552965	+++++ 15.0	+++++ 20.0	+++++ 40.0	4.99	10.00
cis-1,2-Dichloroethene	BCM	Ave	+++++ 507799	6917 691791	16985 1336337	163405	341517	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Methyl Ethyl Ketone	BCM	Ave	+++++ 224173	+++++ 306823	8293 589964	73728	155535	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
Ethyl acetate	BCM	Ave	+++++ 40622	+++++ 56579	+++++ 107721	12908	27622	+++++ 15.0	+++++ 20.0	+++++ 40.0	4.99	10.00
Tetrahydrofuran	DFBZ	Ave	+++++ 391681	+++++ 534262	+++++ 1016992	132198	271809	+++++ 15.0	+++++ 20.0	+++++ 40.0	4.99	10.00

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Burlington Job No.: 200-35064-1 Analy Batch No.: 108448

SDG No.: 200-35064-1

Instrument ID: CHW.i GC Column: RTX-624 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/22/2016 18:30 Calibration End Date: 08/23/2016 00:38 Calibration ID: 35583

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (PPB V/V)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
Chloroform	BCM	Ave	+++++ 875334	11183 1189392	29545 2281628	282528	587997	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Cyclohexane	DFBZ	Ave	+++++ 663548	8406 902277	22504 1723453	212781	444425	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
1,1,1-Trichloroethane	DFBZ	Ave	+++++ 908976	12292 1237416	30787 2350649	293416	611788	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Carbon tetrachloride	DFBZ	Ave	2668 982693	12164 1315710	32654 2545656	309538	412422	0.0401 15.0	0.200 20.0	0.500 40.0	4.99	10.00
2,2,4-Trimethylpentane	DFBZ	Ave	+++++ 2082771	28223 2840119	72077 5357714	677390	1409142	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Benzene	DFBZ	Ave	+++++ 1445432	20393 1968172	50095 3752855	463902	971696	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
1,2-Dichloroethane	DFBZ	Ave	+++++ 469193	5434 642961	15621 1234659	150963	314714	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
n-Heptane	DFBZ	Ave	+++++ 672252	10030 915958	24211 1724622	219610	452124	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
n-Butanol	DFBZ	Ave	+++++ 227884	+++++ 315697	+++++ 598203	76226	174663	+++++ 15.0	+++++ 20.0	+++++ 40.0	4.99	10.00
Trichloroethene	DFBZ	Ave	1859 647013	8141 896057	21597 1710150	210086	439103	0.0401 15.0	0.200 20.0	0.500 40.0	4.99	10.00
1,2-Dichloropropane	DFBZ	Ave	+++++ 499248	6169 683530	17059 1313497	161272	334847	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Methyl methacrylate	DFBZ	Ave	+++++ 508008	+++++ 695762	16726 1342822	159129	337921	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
1,4-Dioxane	DFBZ	Ave	+++++ 240086	+++++ 312744	+++++ 605822	80751	193455	+++++ 15.0	+++++ 20.0	+++++ 40.0	4.99	10.00
Dibromomethane	DFBZ	Ave	+++++ 758808	9596 1040061	24494 2032596	244895	518102	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Bromodichloromethane	DFBZ	Ave	+++++ 971556	12156 1324756	32741 2530182	312891	635753	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
cis-1,3-Dichloropropene	DFBZ	Ave	+++++ 776879	9476 1057945	24813 2038619	245049	512927	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
methyl isobutyl ketone	DFBZ	Ave	+++++ 846858	+++++ 1136132	29556 2183617	273365	597394	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
n-Octane	DFBZ	Ave	+++++ 930257	13790 1239210	33111 2275746	304259	632506	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Toluene	CBNZ d5	Ave	+++++ 1120620	15204 1515223	38073 2822289	366203	756272	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
trans-1,3-Dichloropropene	DFBZ	Ave	+++++ 748778	9038 1009701	23085 1974791	234954	477936	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
1,1,2-Trichloroethane	CBNZ d5	Ave	+++++ 520024	6593 708718	17323 1367061	166824	348752	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Burlington Job No.: 200-35064-1 Analy Batch No.: 108448

SDG No.: 200-35064-1

Instrument ID: CHW.i GC Column: RTX-624 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/22/2016 18:30 Calibration End Date: 08/23/2016 00:38 Calibration ID: 35583

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (PPB V/V)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
Tetrachloroethene	CBNZ d5	Ave	2856 1128370	14268 1546775	37372 2927673	360315	756750	0.0401 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Methyl Butyl Ketone (2-Hexanone)	CBNZ d5	Ave	+++++ 788672	+++++ 1074552	19911 2093662	240852	548062	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
Dibromochloromethane	CBNZ d5	Ave	+++++ 1188563	13536 1604815	38236 3035371	367848	714415	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
1,2-Dibromoethane	CBNZ d5	Ave	+++++ 1005181	11951 1372701	31666 2633720	318906	668019	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Chlorobenzene	CBNZ d5	Ave	+++++ 1563177	18912 2120968	49528 4003032	500177	1042113	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Ethylbenzene	CBNZ d5	Ave	+++++ 2390645	30752 3241094	79517 6062334	777219	1608126	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
n-Nonane	CBNZ d5	Ave	+++++ 1020342	13657 1377855	34457 2570317	334716	687387	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
m,p-Xylene	CBNZ d5	Ave	+++++ 2020635	25303 2720896	66662 4981703	658241	1359561	+++++ 30.0	0.401 40.0	1.00 80.0	9.99	20.0
Xylene, o-	CBNZ d5	Ave	+++++ 1017586	12624 1381331	33181 2582004	326503	681340	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Styrene	CBNZ d5	Ave	+++++ 1580458	17952 2133001	46596 4003794	502902	1064280	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Bromoform	CBNZ d5	Ave	+++++ 1223249	12545 1604718	37764 2979095	340043	590280	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Cumene	CBNZ d5	Ave	+++++ 2825365	36297 3817132	96247 7010410	923180	1901750	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
1,1,2,2-Tetrachloroethane	CBNZ d5	Ave	+++++ 1339910	16882 1819790	44186 3420638	425019	895995	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
n-Propylbenzene	CBNZ d5	Ave	+++++ 3268357	39197 4405678	104863 7983078	1067300	2195056	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
1,2,3-Trichloropropane	CBNZ d5	Ave	+++++ 978857	+++++ 1335240	31299 2500229	308930	658753	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
n-Decane	CBNZ d5	Ave	+++++ 1311150	+++++ 1769977	39326 3248595	427122	873703	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
4-Ethyltoluene	CBNZ d5	Ave	+++++ 2839846	35454 3828186	89099 6898110	923252	1896403	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
2-Chlorotoluene	CBNZ d5	Ave	+++++ 2235482	27466 3047117	70512 5587405	720424	1486404	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
1,3,5-Trimethylbenzene	CBNZ d5	Ave	+++++ 2393000	28495 3229843	76070 5961318	774837	1595609	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Alpha Methyl Styrene	CBNZ d5	Ave	+++++ 1306240	13973 1773381	35866 3332505	408665	843421	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
tert-Butylbenzene	CBNZ d5	Ave	+++++ 2385205	30462 3210712	79913 5878133	783364	1603468	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Burlington Job No.: 200-35064-1 Analy Batch No.: 108448

SDG No.: 200-35064-1

Instrument ID: CHW.i GC Column: RTX-624 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/22/2016 18:30 Calibration End Date: 08/23/2016 00:38 Calibration ID: 35583

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (PPB V/V)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
1,2,4-Trimethylbenzene	CBNZ d5	Ave	+++++ 2377417	29035 3206104	73481 5890624	774159	1575128	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
sec-Butylbenzene	CBNZ d5	Ave	+++++ 3451863	43407 4634559	111670 8343566	1134468	2322389	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
4-Isopropyltoluene	CBNZ d5	Ave	+++++ 3035727	36731 4070782	94557 7353592	992975	2026199	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
1,3-Dichlorobenzene	CBNZ d5	Ave	+++++ 1787099	19023 2412721	49704 4539942	556030	1163172	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
1,4-Dichlorobenzene	CBNZ d5	Ave	+++++ 1764596	17813 2373798	45978 4496959	537352	1136036	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Benzyl chloride	CBNZ d5	Ave	+++++ 1776950	16435 2280503	44069 4737834	565771	946448	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
n-Undecane	CBNZ d5	Ave	+++++ 1382046	+++++ 1807359	+++++ 3110656	457665	887217	+++++ 15.0	+++++ 20.0	+++++ 40.0	4.99	10.00
n-Butylbenzene	CBNZ d5	Ave	+++++ 2476886	26364 3276423	66946 5724501	808335	1637571	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
1,2-Dichlorobenzene	CBNZ d5	Ave	+++++ 1669642	18540 2262351	48112 4285342	523027	1086350	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
n-Dodecane	CBNZ d5	Ave	+++++ 1145552	+++++ 1383836	+++++ 2765288	362789	593039	+++++ 15.0	+++++ 20.0	+++++ 40.0	4.99	10.00
1,2,4-Trichlorobenzene	CBNZ d5	Ave	+++++ 1174157	+++++ 1471565	15098 2932641	350956	669088	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
Hexachlorobutadiene	CBNZ d5	Ave	+++++ 1238470	14433 1656131	34787 3146445	396925	812228	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Naphthalene	CBNZ d5	Ave	+++++ 2185392	+++++ 2534270	22688 5579540	641700	1127894	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
1,2,3-Trichlorobenzene	CBNZ d5	Ave	+++++ 984272	6582 1249346	14698 2493338	287451	553994	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00

Curve Type Legend:
Ave = Average ISTD

TestAmerica Burlington
Target Compound Quantitation Report

Data File: \\ChromNA\Burlington\ChromData\CHW.i\20160822-21457.b\21457_06.d
Lims ID: ic
Client ID:
Sample Type: IC Calib Level: 1
Inject. Date: 22-Aug-2016 18:30:30 ALS Bottle#: 3 Worklist Smp#: 4
Purge Vol: 200.000 mL Dil. Factor: 1.0000
Sample Info: 200-0021457-004
Misc. Info.: viblk
Operator ID: ggg Instrument ID: CHW.i
Sublist: chrom-TO15_MasterMethod_(v1)*sub1

Method: \\ChromNA\Burlington\ChromData\CHW.i\20160822-21457.b\TO15_MasterMethod_(v1).m
Limit Group: AI_TO15_ICAL
Last Update: 25-Aug-2016 12:22:00 Calib Date: 23-Aug-2016 00:38:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Burlington\ChromData\CHW.i\20160822-21457.b\21457_13.d

Column 1 : RTX-624 (0.32 mm) Det: MS SCAN
Process Host: XAWRK010

First Level Reviewer: nelsona Date: 25-Aug-2016 10:24:35

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
1 Propene	41	5.292	5.287	0.006	59	833	0.0401	0.0520	
2 Dichlorodifluoromethane	85	5.393	5.399	-0.006	95	3490	0.0401	0.0466	
3 Chlorodifluoromethane	51	5.479	5.479	0.000	1	776	0.0401	0.0226	
4 1,2-Dichloro-1,1,2,2-tetra	85	5.800	5.805	-0.005	87	2992	0.0401	0.0410	
5 Chloromethane	50	6.009	5.998	0.011	1	920	0.0401	0.0482	
6 Butane	43	6.271	6.271	0.000	51	1168	0.0401	0.0345	
7 Vinyl chloride	62	6.330	6.324	0.006	1	956	0.0401	0.0383	
8 Butadiene	54	6.410	6.421	-0.011	1	1239	0.0401	0.0655	
10 Bromomethane	94	7.228	7.223	0.005	19	1064	0.0401	0.0372	
9 BFB									
11 Chloroethane	64	7.480	7.469	0.011	82	450	0.0401	0.0312	
12 2-Methylbutane	43	7.544	7.544	0.000	48	1188	0.0401	0.0459	
13 Vinyl bromide	106	7.876	7.881	-0.005	91	1288	0.0401	0.0395	
14 Trichlorofluoromethane	101	7.967	7.972	-0.005	95	3163	0.0401	0.0418	
16 Pentane	43	8.100	8.106	-0.006	93	2912	0.0401	0.0733	
17 Ethanol	45	8.486	8.470	0.016	93	2009	0.0802	0.1590	
18 Ethyl ether	59	8.598	8.587	0.011	47	689	0.0401	0.0378	
19 Acrolein	56	8.988	8.972	0.016	34	621	0.0401	0.0838	
20 1,1,2-Trichloro-1,2,2-trif	101	8.988	8.978	0.010	89	2712	0.0401	0.0440	
21 1,1-Dichloroethene	96	9.047	9.047	0.000	84	1384	0.0401	0.0460	
22 Acetone	43	9.256	9.240	0.016	94	14442	0.0401	0.4565	
23 Carbon disulfide	76	9.432	9.443	-0.011	46	3206	0.0401	0.0432	
24 Isopropyl alcohol	45	9.449	9.443	0.005	98	8832	0.0401	0.2756	
25 3-Chloro-1-propene	41	9.743	9.748	-0.005	1	636	0.0401	0.0245	
26 Acetonitrile	41	9.893	9.866	0.027	12	713	0.0401	0.0483	
27 Methylene Chloride	49	10.010	10.010	0.000	77	2401	0.0401	0.0956	
28 2-Methyl-2-propanol	59	10.144	10.128	0.016	85	1637	0.0401	0.0338	
S 30 1,2-Dichloroethene, Total	61				0		0.0802	0.0819	
29 Methyl tert-butyl ether	73	10.374	10.353	0.021	87	3302	0.0401	0.0410	
31 trans-1,2-Dichloroethene	61	10.411	10.406	0.005	93	1213	0.0401	0.0338	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
32 Acrylonitrile	53	10.540	10.545	-0.005	1	276	0.0401	0.0160	
33 Hexane	57	10.727	10.738	-0.011	87	2245	0.0401	0.0535	
34 1,1-Dichloroethane	63	11.214	11.214	0.000	95	1859	0.0401	0.0393	
35 Vinyl acetate	43	11.235	11.241	-0.006	62	3188	0.0401	0.0585	
37 cis-1,2-Dichloroethene	96	12.214	12.225	-0.011	78	1621	0.0401	0.0480	
38 2-Butanone (MEK)	72	12.252	12.241	0.011	97	715	0.0401	0.0471	
39 Ethyl acetate	88		12.252				ND	ND	
41 Tetrahydrofuran	42	12.669	12.648	0.021	43	3511	0.0401	0.1291	
* 40 Chlorobromomethane	128	12.648	12.653	-0.005	78	245544	10.0	10.0	
42 Chloroform	83	12.744	12.744	0.000	86	2738	0.0401	0.0475	
43 Cyclohexane	84	13.022	13.011	0.011	78	781	0.0401	0.0173	
44 1,1,1-Trichloroethane	97	13.011	13.028	-0.017	88	2610	0.0401	0.0418	
45 Carbon tetrachloride	117	13.252	13.252	0.000	91	2668	0.0401	0.0425	
46 Isooctane	57	13.611	13.605	0.006	98	6521	0.0401	0.0454	
47 Benzene	78	13.675	13.669	0.006	93	3449	0.0401	0.0344	
48 1,2-Dichloroethane	62		13.819				ND	ND	
49 n-Heptane	43	13.926	13.921	0.005	74	2256	0.0401	0.0477	
* 50 1,4-Difluorobenzene	114	14.365	14.365	0.000	92	1229885	10.0	10.0	
52 n-Butanol	56	14.632	14.616	0.016	30	1299	0.0401	0.0800	
53 Trichloroethene	95	14.782	14.798	-0.016	89	1859	0.0401	0.0418	M
A 51 GRO	1	14.972	(7.534-22.410)		0	886266	0.0401	0	
54 1,2-Dichloropropane	63		15.296				ND	ND	
55 Methyl methacrylate	69	15.371	15.371	0.000	86	1951	0.0401	0.0565	
56 1,4-Dioxane	88	15.467	15.456	0.011	47	868	0.0401	0.0511	
57 Dibromomethane	174	15.531	15.520	0.011	90	2287	0.0401	0.0443	
58 Dichlorobromomethane	83	15.761	15.756	0.005	92	1873	0.0401	0.0285	
60 cis-1,3-Dichloropropene	75	16.590	16.585	0.005	1	859	0.0401	0.0165	
A 59 TVOC as Toluene	92	16.711	(5.277-28.145)		0	1210608	0.0401	14.2	
61 4-Methyl-2-pentanone (MIBK	43	16.826	16.820	0.006	87	3259	0.0401	0.0556	
64 n-Octane	43	17.120	17.125	-0.005	70	3898	0.0401	0.0602	
A 62 C8 Range	1	17.131	(17.075-17.175)		0	27572	NC	NC	
65 Toluene	92	17.125	17.131	-0.006	51	1756	0.0401	0.0232	
A 63 Toluene Range	92	17.131	(17.091-17.171)		0	23898	0.0401	0.3161	
66 trans-1,3-Dichloropropene	75	17.650	17.655	-0.005	84	1674	0.0401	0.0339	
67 1,1,2-Trichloroethane	83		18.008				ND	ND	
68 Tetrachloroethene	166	18.115	18.131	-0.016	88	2856	0.0401	0.0382	M
69 2-Hexanone	43	18.399	18.399	0.000	1	413	0.0401	0.008129	
71 Chlorodibromomethane	129	18.746	18.736	0.010	92	2923	0.0401	0.0385	
72 Ethylene Dibromide	107	19.024	19.019	0.005	98	2365	0.0401	0.0359	
* 74 Chlorobenzene-d5	117	19.854	19.859	-0.005	84	1092465	10.0	10.0	
75 Chlorobenzene	112	19.907	19.918	-0.011	91	4058	0.0401	0.0396	
76 Ethylbenzene	91	20.041	20.046	-0.005	95	7261	0.0401	0.0455	
S 73 Xylenes, Total	106				0		0.1203	0.1225	
77 n-Nonane	57	20.110	20.116	-0.006	83	3507	0.0401	0.0511	
78 m-Xylene & p-Xylene	106	20.282	20.276	0.006	0	5566	0.0802	0.0833	
79 o-Xylene	106	21.015	21.020	-0.005	96	2632	0.0401	0.0391	
80 Styrene	104	21.057	21.063	-0.006	94	3525	0.0401	0.0347	
81 Bromoform	173	21.443	21.443	0.000	95	2436	0.0401	0.0336	
82 Isopropylbenzene	105	21.603	21.608	-0.005	95	7871	0.0401	0.0417	
$ 83 4-Bromofluorobenzene	95	21.951	21.951	0.000	98	697357	NC	NC	
84 1,1,2,2-Tetrachloroethane	83	22.186	22.192	-0.006	95	3962	0.0401	0.0446	
85 N-Propylbenzene	91	22.266	22.266	0.000	99	8947	0.0401	0.0419	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
86 1,2,3-Trichloropropane	75	22.293	22.299	-0.006	92	2833	0.0401	0.0437	
87 n-Decane	57	22.400	22.400	0.000	90	4009	0.0401	0.0468	
88 4-Ethyltoluene	105	22.438	22.443	-0.005	97	7530	0.0401	0.0405	
89 2-Chlorotoluene	91	22.464	22.464	0.000	94	6057	0.0401	0.0413	
90 1,3,5-Trimethylbenzene	105	22.539	22.539	0.000	95	7012	0.0401	0.0449	
91 Alpha Methyl Styrene	118	22.887	22.887	0.000	88	2681	0.0401	0.0327	
92 tert-Butylbenzene	119	23.010	23.010	0.000	94	6756	0.0401	0.0426	
93 1,2,4-Trimethylbenzene	105	23.101	23.096	0.005	96	6726	0.0401	0.0434	
94 sec-Butylbenzene	105	23.326	23.326	0.000	98	9676	0.0401	0.0426	
95 4-Isopropyltoluene	119	23.529	23.524	0.005	97	7885	0.0401	0.0399	
96 1,3-Dichlorobenzene	146	23.577	23.577	0.000	93	3585	0.0401	0.0320	
97 1,4-Dichlorobenzene	146	23.711	23.716	-0.005	92	3374	0.0401	0.0311	
98 Benzyl chloride	91	23.936	23.925	0.011	96	2840	0.0401	0.0270	
99 Undecane	57	24.139	24.134	0.005	74	3519	0.0401	0.0395	
100 n-Butylbenzene	91	24.139	24.134	0.005	94	5320	0.0401	0.0346	
101 1,2-Dichlorobenzene	146	24.289	24.294	-0.005	93	3346	0.0401	0.0315	
102 Dodecane	57	25.867	25.861	0.006	88	2167	0.0401	0.0310	
103 1,2,4-Trichlorobenzene	180	27.060	27.044	0.016	58	897	0.0401	0.0136	
104 Hexachlorobutadiene	225	27.247	27.242	0.005	92	2749	0.0401	0.0348	
105 Naphthalene	128	27.595	27.605	-0.010	1	121	0.0401	0.001032	
106 1,2,3-Trichlorobenzene	180	28.146	28.135	0.011	1	670	0.0401	0.0127	

QC Flag Legend

Processing Flags

NC - Not Calibrated

ND - Not Detected or Marked ND

Review Flags

M - Manually Integrated

Reagents:

ATTO15CAL1w_00161	Amount Added: 40.00	Units: mL	
ATTO15WISs_00004	Amount Added: 20.00	Units: mL	Run Reagent

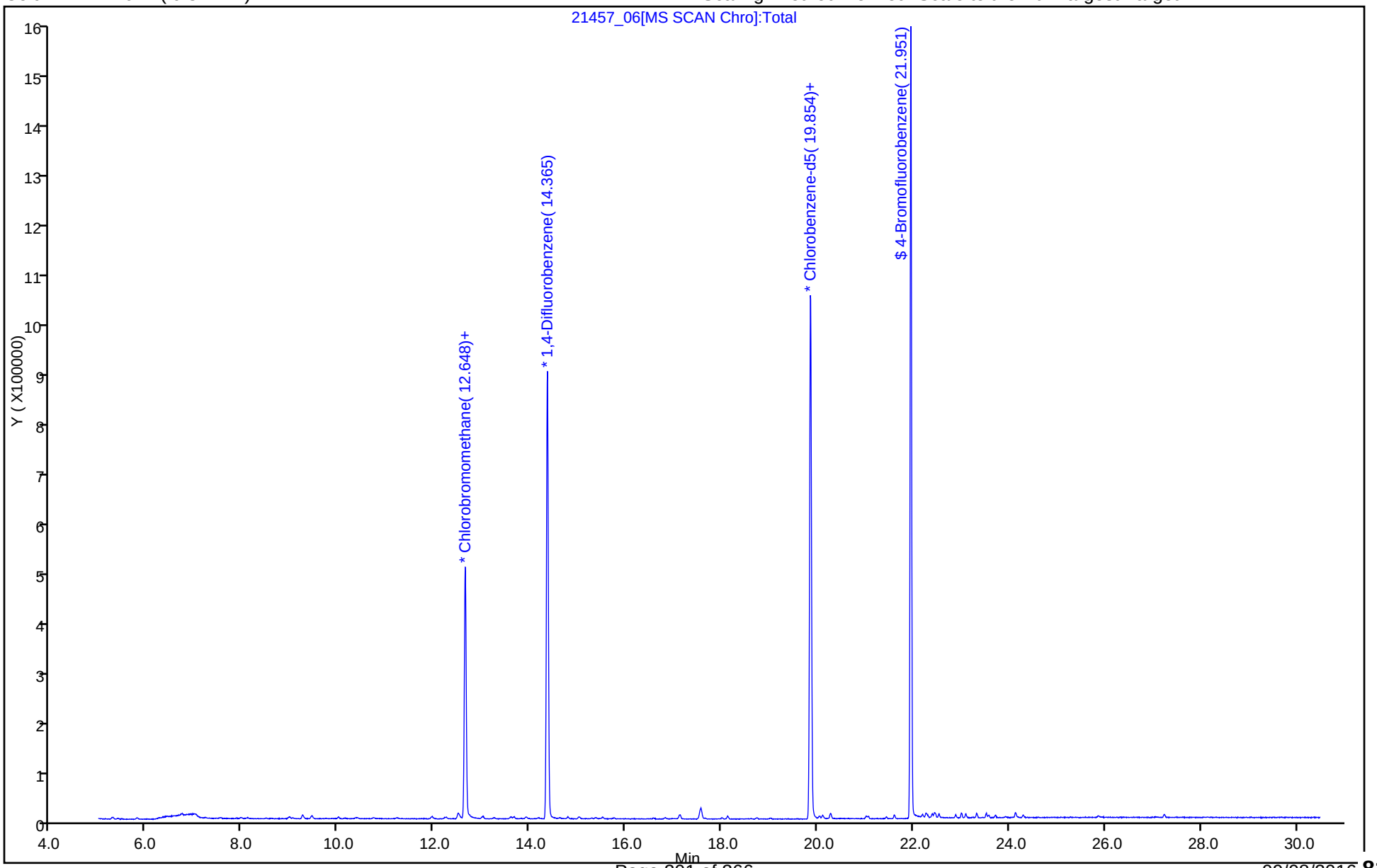
Report Date: 25-Aug-2016 12:22:01 Chrom Revision: 2.2 04-Mar-2016 14:36:24

TestAmerica Burlington

Data File: \\ChromNA\Burlington\ChromData\CHW.i\20160822-21457.b\21457_06.d

Injection Date:	22-Aug-2016 18:30:30	Instrument ID:	CHW.i	Operator ID:	ggg
Lims ID:	ic			Worklist Smp#:	4
Client ID:					
Purge Vol:	200.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	3
Method:	TO15_MasterMethod_(v1)	Limit Group:	AI_TO15_ICAL		

Column: RTX-624 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Manual Integration/User Assign Peak Report

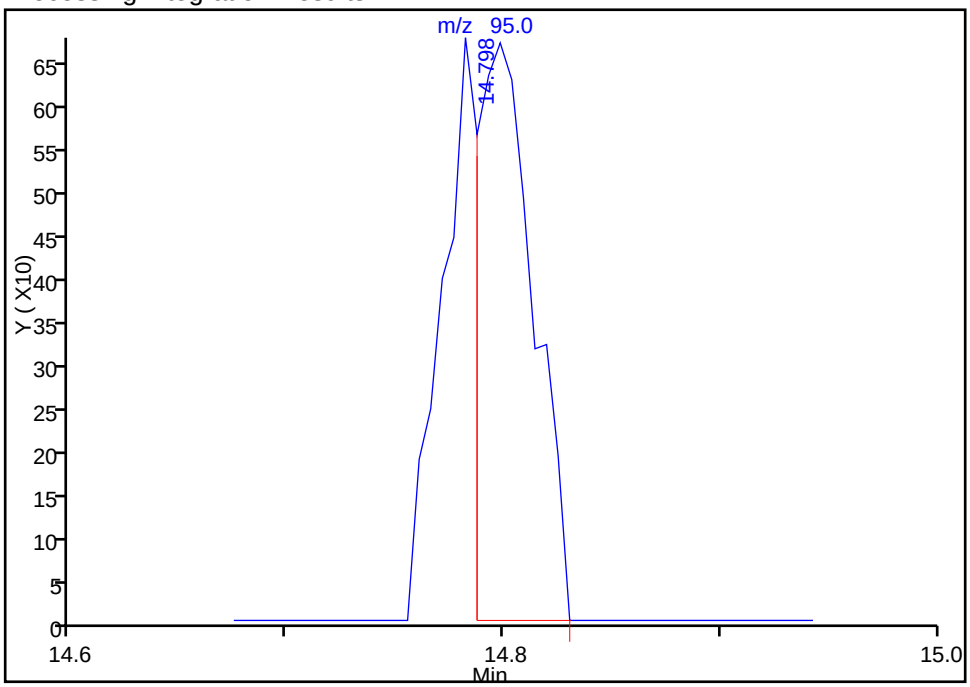
TestAmerica Burlington

Data File: \\ChromNA\Burlington\ChromData\CHW.i\20160822-21457.b\21457_06.d
Injection Date: 22-Aug-2016 18:30:30 Instrument ID: CHW.i
Lims ID: ic
Client ID:
Operator ID: ggg ALS Bottle#: 3 Worklist Smp#: 4
Purge Vol: 200.000 mL Dil. Factor: 1.0000
Method: TO15_MasterMethod_(v1) Limit Group: AI_TO15_ICAL
Column: RTX-624 (0.32 mm) Detector MS SCAN

53 Trichloroethene, CAS: 79-01-6

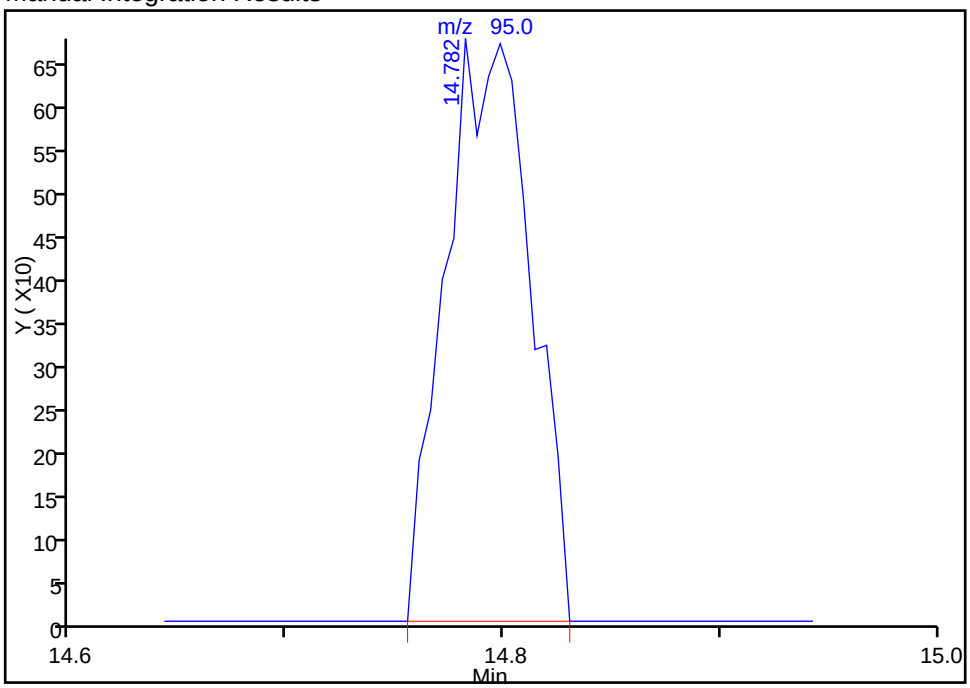
Processing Integration Results

RT: 14.80
Area: 1230
Amount: 0.028919
Amount Units: ppb v/v



Manual Integration Results

RT: 14.78
Area: 1859
Amount: 0.041780
Amount Units: ppb v/v



Reviewer: guazzonig, 25-Aug-2016 10:47:28
Audit Action: Manually Integrated
Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

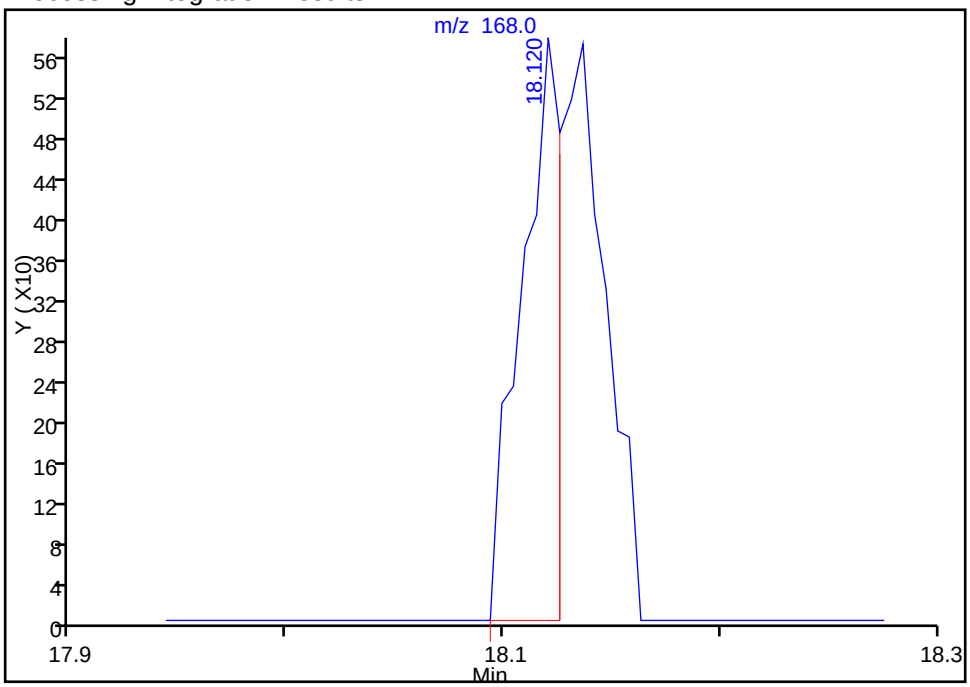
TestAmerica Burlington

Data File:	\\ChromNA\Burlington\ChromData\CHW.i\20160822-21457.b\21457_06.d				
Injection Date:	22-Aug-2016 18:30:30	Instrument ID:	CHW.i		
Lims ID:	ic				
Client ID:					
Operator ID:	ggg	ALS Bottle#:	3	Worklist Smp#:	4
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_MasterMethod_(v1)	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

68 Tetrachloroethene, CAS: 127-18-4

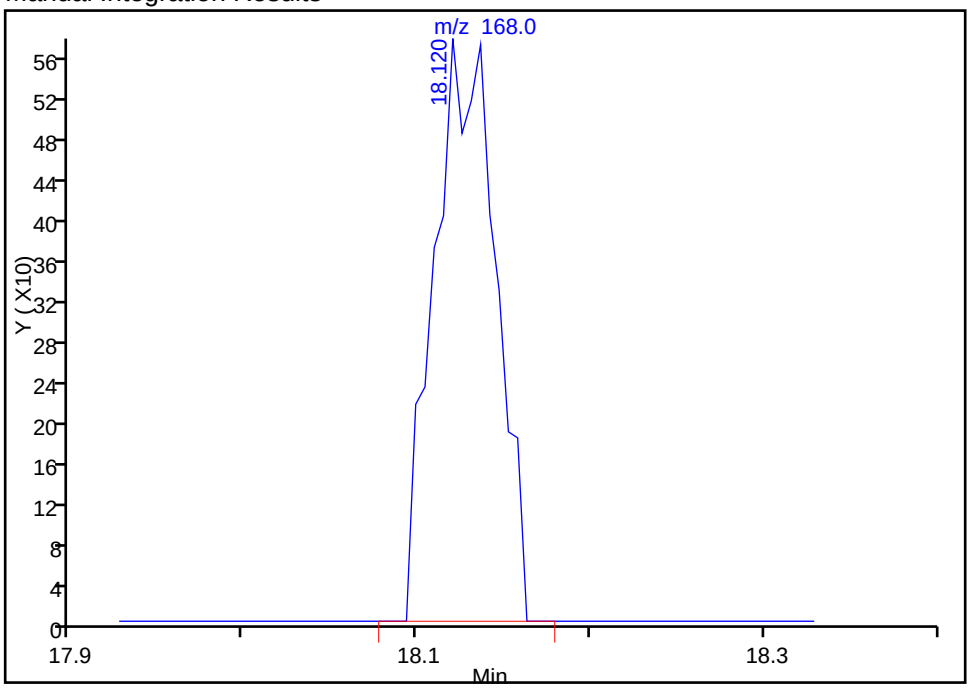
Processing Integration Results

RT: 18.12
Area: 725
Amount: 0.038221
Amount Units: ppb v/v



Manual Integration Results

RT: 18.12
Area: 1421
Amount: 0.038221
Amount Units: ppb v/v



Reviewer: guazzonig, 25-Aug-2016 10:47:28
Audit Action: Manually Integrated
Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

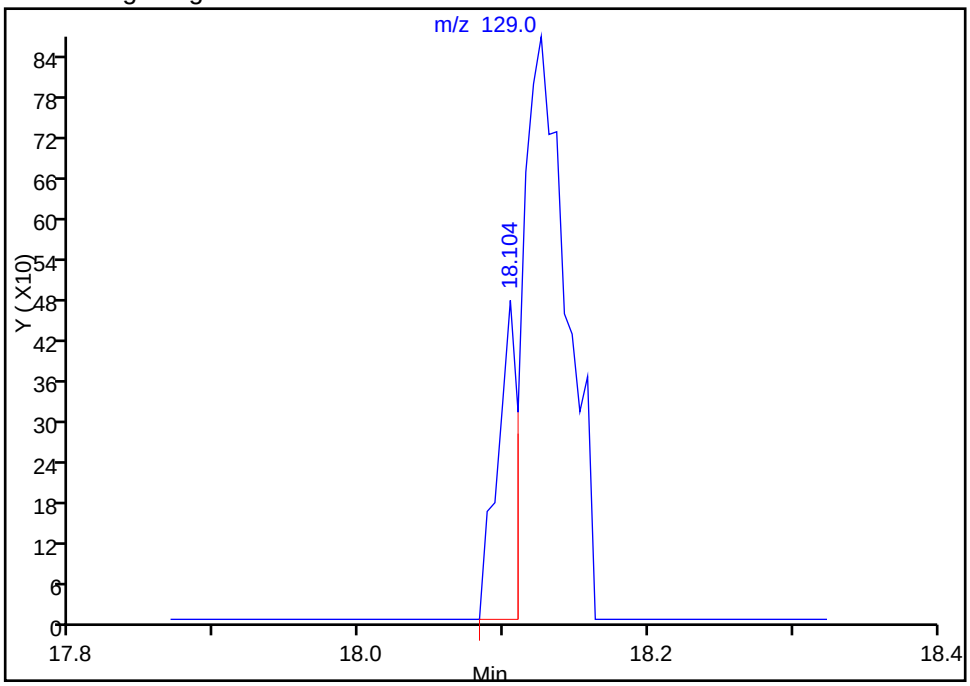
TestAmerica Burlington

Data File:	\\ChromNA\Burlington\ChromData\CHW.i\20160822-21457.b\21457_06.d				
Injection Date:	22-Aug-2016 18:30:30	Instrument ID:	CHW.i		
Lims ID:	ic				
Client ID:					
Operator ID:	ggg	ALS Bottle#:	3	Worklist Smp#:	4
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_MasterMethod_(v1)	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

68 Tetrachloroethene, CAS: 127-18-4

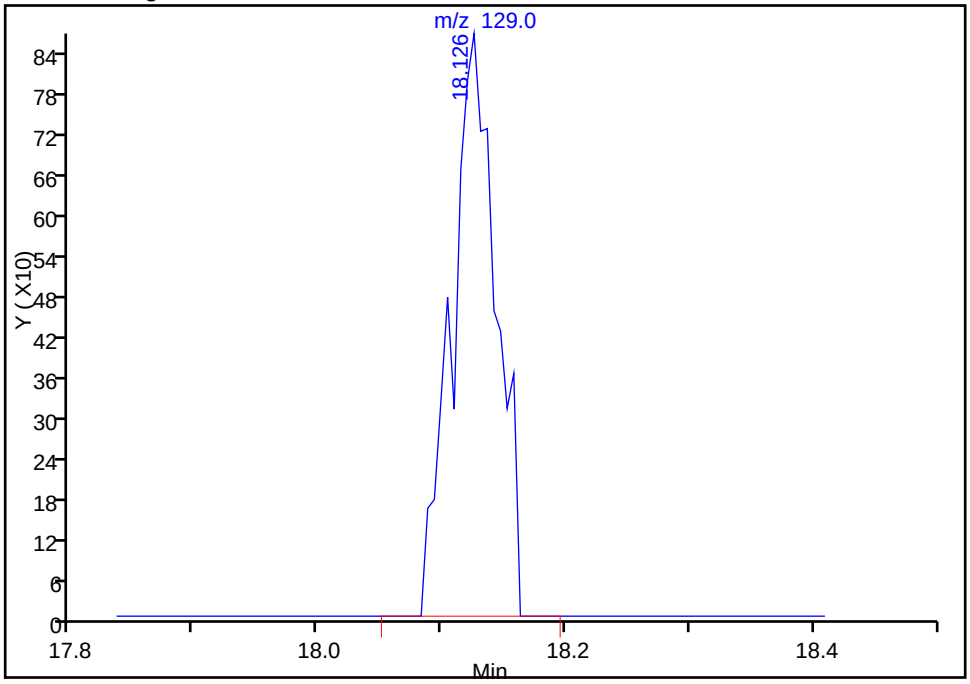
Processing Integration Results

RT: 18.10
Area: 460
Amount: 0.038221
Amount Units: ppb v/v



Manual Integration Results

RT: 18.13
Area: 2163
Amount: 0.038221
Amount Units: ppb v/v



Reviewer: guazzonig, 25-Aug-2016 10:47:28
Audit Action: Manually Integrated
Audit Reason: Incomplete Integration

TestAmerica Burlington
Target Compound Quantitation Report

Data File: \\ChromNA\Burlington\ChromData\CHW.i\20160822-21457.b\21457_07.d
Lims ID: ic
Client ID:
Sample Type: IC Calib Level: 2
Inject. Date: 22-Aug-2016 19:23:30 ALS Bottle#: 4 Worklist Smp#: 5
Purge Vol: 200.000 mL Dil. Factor: 1.0000
Sample Info: 200-0021457-005
Misc. Info.: viblk
Operator ID: ggg Instrument ID: CHW.i
Sublist: chrom-TO15_MasterMethod_(v1)*sub1

Method: \\ChromNA\Burlington\ChromData\CHW.i\20160822-21457.b\TO15_MasterMethod_(v1).m
Limit Group: AI_TO15_ICAL
Last Update: 25-Aug-2016 12:22:03 Calib Date: 23-Aug-2016 00:38:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Burlington\ChromData\CHW.i\20160822-21457.b\21457_13.d

Column 1 : RTX-624 (0.32 mm) Det: MS SCAN
Process Host: XAWRK010

First Level Reviewer: guazzonig Date: 25-Aug-2016 10:48:06

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
1 Propene	41	5.276	5.287	-0.010	62	5329	0.2004	0.3425	
2 Dichlorodifluoromethane	85	5.388	5.399	-0.011	98	15227	0.2004	0.2094	
3 Chlorodifluoromethane	51	5.474	5.479	-0.005	95	7749	0.2004	0.2321	
4 1,2-Dichloro-1,1,2,2-tetra	85	5.789	5.805	-0.016	83	14369	0.2004	0.2026	
5 Chloromethane	50	5.993	5.998	-0.005	95	4139	0.2004	0.2233	
6 Butane	43	6.260	6.271	-0.011	98	8004	0.2004	0.2437	
7 Vinyl chloride	62	6.314	6.324	-0.010	87	4657	0.2004	0.1919	
8 Butadiene	54	6.410	6.421	-0.011	92	3801	0.2004	0.2070	
10 Bromomethane	94	7.218	7.223	-0.005	97	5753	0.2004	0.2070	
9 BFB									
11 Chloroethane	64	7.464	7.469	-0.005	96	2808	0.2004	0.2003	
12 2-Methylbutane	43	7.528	7.544	-0.016	93	5161	0.2004	0.2052	
13 Vinyl bromide	106	7.876	7.881	-0.005	99	6239	0.2004	0.1972	
14 Trichlorofluoromethane	101	7.967	7.972	-0.005	98	15023	0.2004	0.2046	
16 Pentane	43	8.106	8.106	0.000	95	9062	0.2004	0.2349	
17 Ethanol	45	8.475	8.470	0.005	99	6447	0.4009	0.5256	
18 Ethyl ether	59	8.592	8.587	0.005	95	3391	0.2004	0.1917	
19 Acrolein	56	8.978	8.972	0.006	36	2727	0.2004	0.3789	
20 1,1,2-Trichloro-1,2,2-trif	101	8.978	8.978	0.000	95	13209	0.2004	0.2209	
21 1,1-Dichloroethene	96	9.042	9.047	-0.005	94	5827	0.2004	0.1993	
22 Acetone	43	9.250	9.240	0.010	96	28689	0.2004	0.9341	
23 Carbon disulfide	76	9.432	9.443	-0.011	99	14015	0.2004	0.1947	
24 Isopropyl alcohol	45	9.448	9.443	0.005	98	13613	0.2004	0.4375	
25 3-Chloro-1-propene	41	9.743	9.748	-0.005	88	5358	0.2004	0.2124	
26 Acetonitrile	41	9.871	9.866	0.005	98	4043	0.2004	0.2819	
27 Methylene Chloride	49	10.005	10.010	-0.005	86	6389	0.2004	0.2621	
28 2-Methyl-2-propanol	59	10.133	10.128	0.005	92	8949	0.2004	0.1903	
S 30 1,2-Dichloroethene, Total	61				0		0.4009	0.4068	
29 Methyl tert-butyl ether	73	10.353	10.353	0.000	97	15428	0.2004	0.1971	
31 trans-1,2-Dichloroethene	61	10.401	10.406	-0.005	93	6813	0.2004	0.1958	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
32 Acrylonitrile	53	10.545	10.545	0.000	97	3318	0.2004	0.1979	
33 Hexane	57	10.732	10.738	-0.006	85	9157	0.2004	0.2249	
34 1,1-Dichloroethane	63	11.203	11.214	-0.011	97	9067	0.2004	0.1976	
35 Vinyl acetate	43	11.241	11.241	0.000	99	11602	0.2004	0.2192	
37 cis-1,2-Dichloroethene	96	12.220	12.225	-0.005	82	6917	0.2004	0.2110	
38 2-Butanone (MEK)	72	12.252	12.241	0.011	98	3910	0.2004	0.2651	
39 Ethyl acetate	88		12.252				ND	ND	
41 Tetrahydrofuran	42	12.664	12.648	0.016	50	7570	0.2004	0.2874	
* 40 Chlorobromomethane	128	12.653	12.653	0.000	83	238402	10.0	10.0	
42 Chloroform	83	12.733	12.744	-0.011	95	11183	0.2004	0.1998	
43 Cyclohexane	84	13.011	13.011	0.000	74	8406	0.2004	0.1924	M
44 1,1,1-Trichloroethane	97	13.027	13.028	-0.001	94	12292	0.2004	0.2033	
45 Carbon tetrachloride	117	13.252	13.252	0.000	97	12164	0.2004	0.2000	
46 Isooctane	57	13.611	13.605	0.005	99	28223	0.2004	0.2027	
47 Benzene	78	13.669	13.669	0.000	93	20393	0.2004	0.2101	
48 1,2-Dichloroethane	62	13.819	13.819	0.000	91	5434	0.2004	0.1778	
49 n-Heptane	43	13.921	13.921	0.000	86	10030	0.2004	0.2188	
* 50 1,4-Difluorobenzene	114	14.365	14.365	0.000	92	1191567	10.0	10.0	
52 n-Butanol	56	14.622	14.616	0.006	80	4824	0.2004	0.3068	
53 Trichloroethene	95	14.798	14.798	0.000	94	8141	0.2004	0.1889	
A 51 GRO	1	14.972	(7.534-22.410)		0	2802586	0.2004	0	
54 1,2-Dichloropropane	63	15.290	15.296	-0.006	94	6169	0.2004	0.1873	
55 Methyl methacrylate	69	15.376	15.371	0.005	90	6886	0.2004	0.2057	
56 1,4-Dioxane	88	15.478	15.456	0.022	88	3671	0.2004	0.2230	
57 Dibromomethane	174	15.515	15.520	-0.005	88	9596	0.2004	0.1917	
58 Dichlorobromomethane	83	15.756	15.756	0.000	97	12156	0.2004	0.1909	
60 cis-1,3-Dichloropropene	75	16.585	16.585	0.000	86	9476	0.2004	0.1883	
A 59 TVOC as Toluene	92	16.711	(5.277-28.145)		0	4381760	0.2004	53.1	
61 4-Methyl-2-pentanone (MIBK	43	16.826	16.820	0.006	91	11618	0.2004	0.2045	
64 n-Octane	43	17.125	17.125	0.000	74	13790	0.2004	0.2197	
A 62 C8 Range	1	17.125	(17.075-17.175)		0	108042	NC	NC	
65 Toluene	92	17.131	17.131	0.000	93	15204	0.2004	0.2066	
A 63 Toluene Range	92	17.131	(17.091-17.171)		0	108042	0.2004	1.47	
66 trans-1,3-Dichloropropene	75	17.660	17.655	0.005	92	9038	0.2004	0.1888	
67 1,1,2-Trichloroethane	83	18.008	18.008	0.000	92	6593	0.2004	0.1948	
68 Tetrachloroethene	166	18.126	18.131	-0.005	92	14268	0.2004	0.1962	
69 2-Hexanone	43	18.398	18.399	-0.001	94	2780	0.2004	0.0562	M
71 Chlorodibromomethane	129	18.736	18.736	0.000	97	13536	0.2004	0.1833	
72 Ethylene Dibromide	107	19.019	19.019	0.000	98	11951	0.2004	0.1864	
* 74 Chlorobenzene-d5	117	19.859	19.859	0.000	82	1063400	10.0	10.0	
75 Chlorobenzene	112	19.918	19.918	0.000	96	18912	0.2004	0.1895	
76 Ethylbenzene	91	20.041	20.046	-0.005	96	30752	0.2004	0.1980	
S 73 Xylenes, Total	106				0		0.6013	0.5820	
77 n-Nonane	57	20.110	20.116	-0.006	83	13657	0.2004	0.2044	
78 m-Xylene & p-Xylene	106	20.276	20.276	0.000	0	25303	0.4009	0.3891	
79 o-Xylene	106	21.020	21.020	0.000	97	12624	0.2004	0.1929	
80 Styrene	104	21.063	21.063	0.000	94	17952	0.2004	0.1815	
81 Bromoform	173	21.442	21.443	-0.001	98	12545	0.2004	0.1779	
82 Isopropylbenzene	105	21.608	21.608	0.000	95	36297	0.2004	0.1976	
$ 83 4-Bromofluorobenzene	95	21.951	21.951	0.000	98	681988	NC	NC	
84 1,1,2,2-Tetrachloroethane	83	22.197	22.192	0.005	98	16882	0.2004	0.1954	
85 N-Propylbenzene	91	22.266	22.266	0.000	99	39197	0.2004	0.1884	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
86 1,2,3-Trichloropropane	75	22.293	22.299	-0.006	95	12166	0.2004	0.1927	
87 n-Decane	57	22.395	22.400	-0.005	91	16683	0.2004	0.1999	
88 4-Ethyltoluene	105	22.443	22.443	0.000	97	35454	0.2004	0.1961	
89 2-Chlorotoluene	91	22.470	22.464	0.006	95	27466	0.2004	0.1926	
90 1,3,5-Trimethylbenzene	105	22.539	22.539	0.000	95	28495	0.2004	0.1874	
91 Alpha Methyl Styrene	118	22.887	22.887	0.000	94	13973	0.2004	0.1751	
92 tert-Butylbenzene	119	23.010	23.010	0.000	97	30462	0.2004	0.1972	
93 1,2,4-Trimethylbenzene	105	23.101	23.096	0.005	96	29035	0.2004	0.1925	
94 sec-Butylbenzene	105	23.326	23.326	0.000	99	43407	0.2004	0.1961	
95 4-Isopropyltoluene	119	23.529	23.524	0.005	98	36731	0.2004	0.1911	
96 1,3-Dichlorobenzene	146	23.577	23.577	0.000	95	19023	0.2004	0.1742	
97 1,4-Dichlorobenzene	146	23.716	23.716	0.000	97	17813	0.2004	0.1685	
98 Benzyl chloride	91	23.925	23.925	0.000	100	16435	0.2004	0.1604	
99 Undecane	57	24.133	24.134	-0.001	87	15122	0.2004	0.1746	
100 n-Butylbenzene	91	24.139	24.134	0.005	98	26364	0.2004	0.1760	
101 1,2-Dichlorobenzene	146	24.294	24.294	0.000	98	18540	0.2004	0.1794	
102 Dodecane	57	25.861	25.861	0.000	94	10681	0.2004	0.1572	
103 1,2,4-Trichlorobenzene	180	27.054	27.044	0.010	90	6721	0.2004	0.1046	
104 Hexachlorobutadiene	225	27.252	27.242	0.010	95	14433	0.2004	0.1875	
105 Naphthalene	128	27.621	27.605	0.016	96	9839	0.2004	0.0862	M
106 1,2,3-Trichlorobenzene	180	28.146	28.135	0.011	95	6582	0.2004	0.1281	

QC Flag Legend

Processing Flags
- NC - Not Calibrated
- ND - Not Detected or Marked ND

Review Flags
- M - Manually Integrated

Reagents:

ATTO15CAL1w_00161	Amount Added: 200.00	Units: mL	
ATTO15WISs_00004	Amount Added: 20.00	Units: mL	Run Reagent

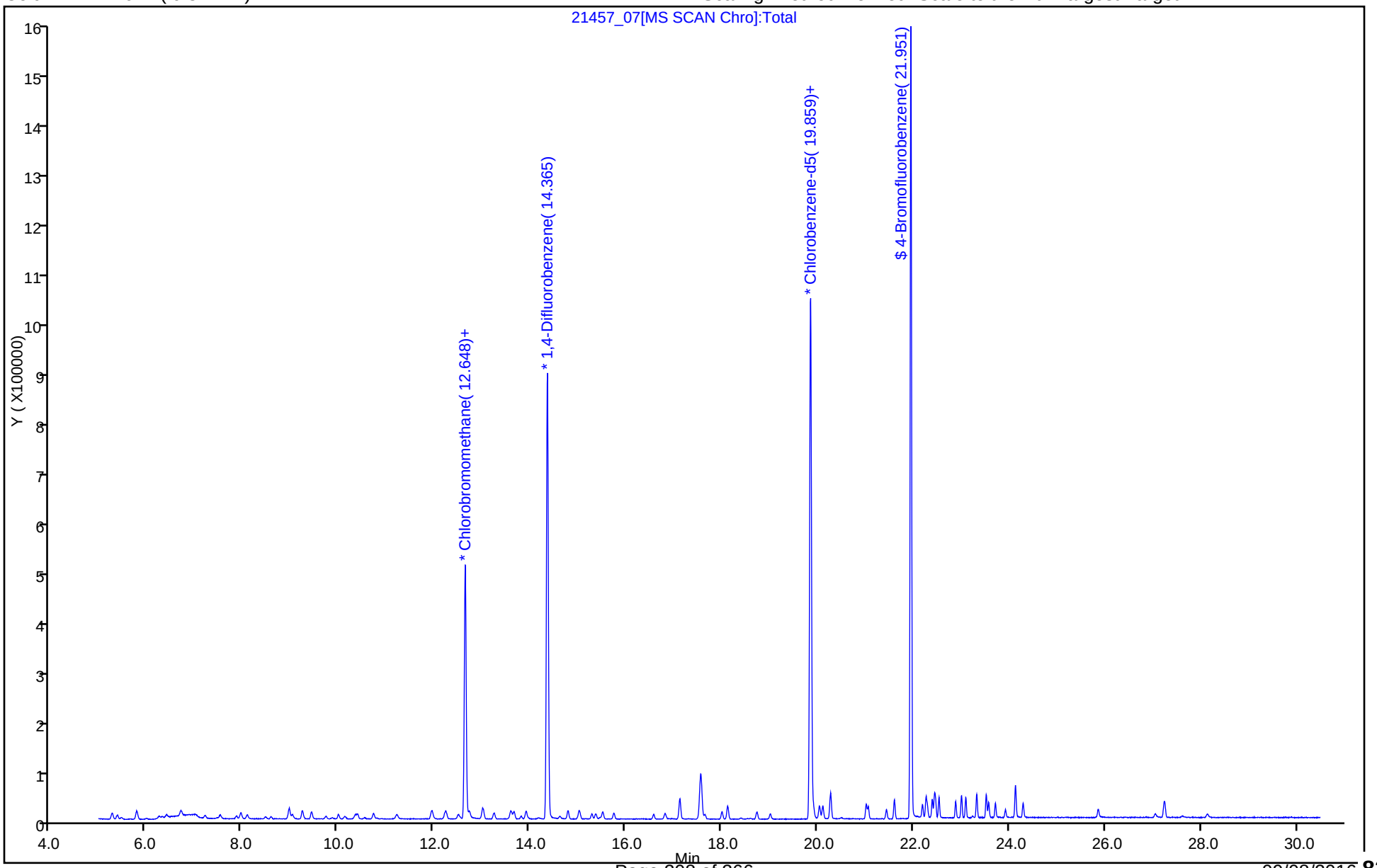
Report Date: 25-Aug-2016 12:22:04 Chrom Revision: 2.2 04-Mar-2016 14:36:24

TestAmerica Burlington

Data File: \\ChromNA\Burlington\ChromData\CHW.i\20160822-21457.b\21457_07.d

Injection Date:	22-Aug-2016 19:23:30	Instrument ID:	CHW.i	Operator ID:	ggg
Lims ID:	ic			Worklist Smp#:	5
Client ID:					
Purge Vol:	200.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	4
Method:	TO15_MasterMethod_(v1)	Limit Group:	AI_TO15_ICAL		

Column: RTX-624 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Manual Integration/User Assign Peak Report

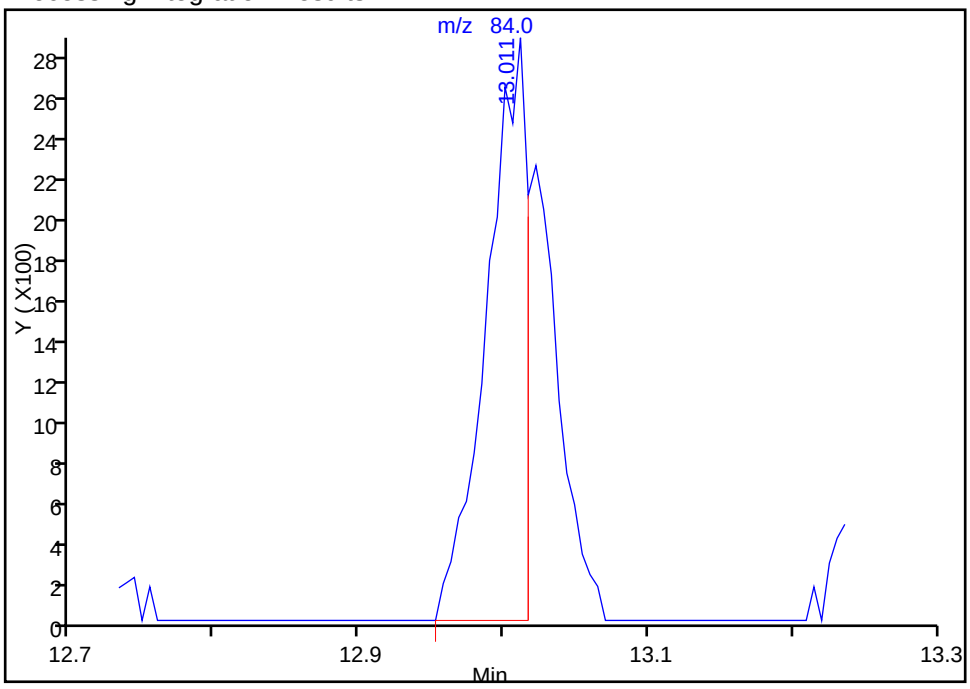
TestAmerica Burlington

Data File: \\ChromNA\Burlington\ChromData\CHW.i\20160822-21457.b\21457_07.d
Injection Date: 22-Aug-2016 19:23:30 Instrument ID: CHW.i
Lims ID: ic
Client ID:
Operator ID: ggg ALS Bottle#: 4 Worklist Smp#: 5
Purge Vol: 200.000 mL Dil. Factor: 1.0000
Method: TO15_MasterMethod_(v1) Limit Group: AI_TO15_ICAL
Column: RTX-624 (0.32 mm) Detector MS SCAN

43 Cyclohexane, CAS: 110-82-7

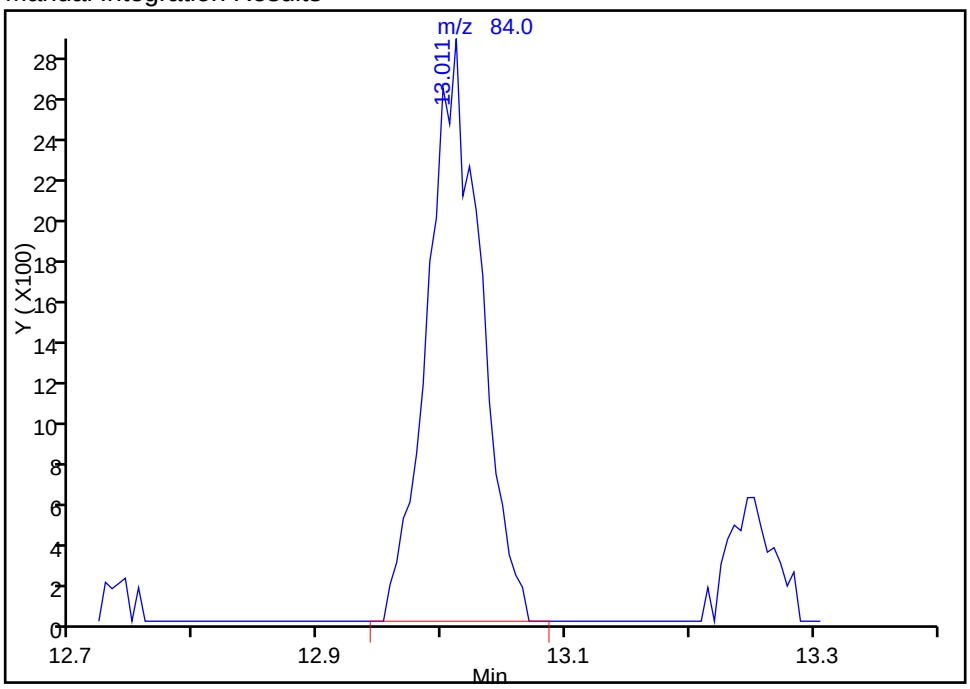
Processing Integration Results

RT: 13.01
Area: 5521
Amount: 0.132594
Amount Units: ppb v/v



Manual Integration Results

RT: 13.01
Area: 8406
Amount: 0.192381
Amount Units: ppb v/v



Reviewer: guazzonig, 25-Aug-2016 10:52:07
Audit Action: Manually Integrated
Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

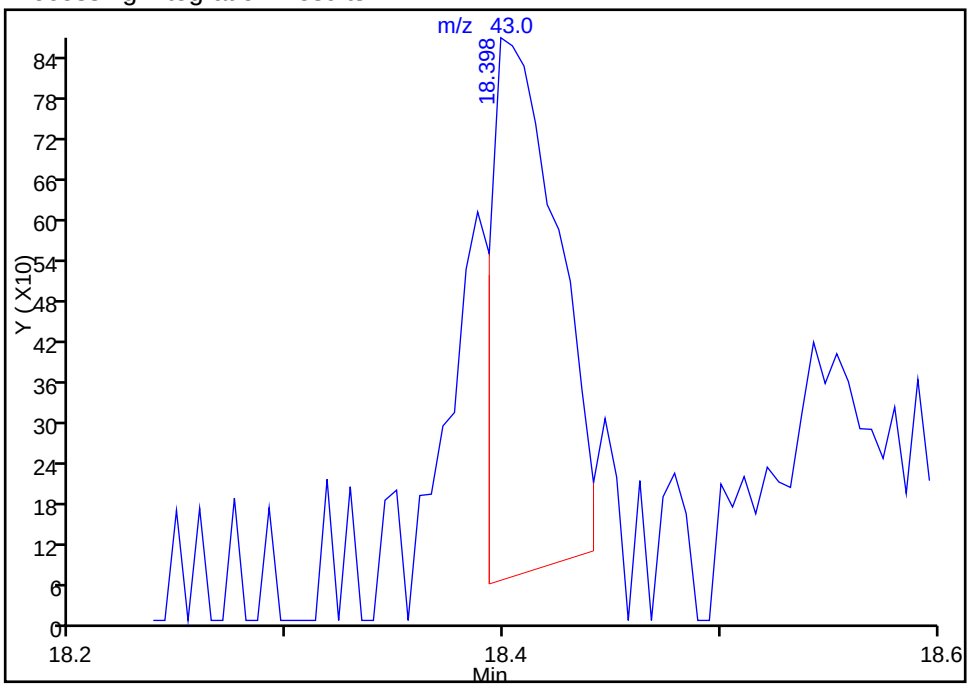
TestAmerica Burlington

Data File:	\\ChromNA\Burlington\ChromData\CHW.i\20160822-21457.b\21457_07.d				
Injection Date:	22-Aug-2016 19:23:30	Instrument ID:	CHW.i		
Lims ID:	ic				
Client ID:					
Operator ID:	ggg	ALS Bottle#:	4	Worklist Smp#:	5
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_MasterMethod_(v1)	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

69 2-Hexanone, CAS: 591-78-6

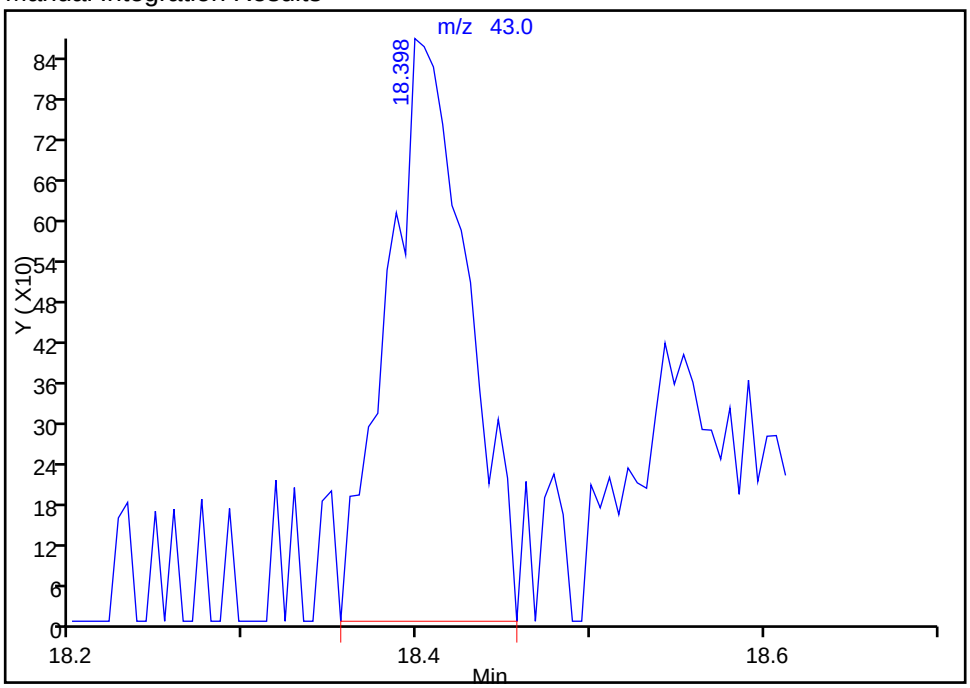
Processing Integration Results

RT: 18.40
Area: 1692
Amount: 0.034213
Amount Units: ppb v/v



Manual Integration Results

RT: 18.40
Area: 2780
Amount: 0.056212
Amount Units: ppb v/v



Reviewer: guazzonig, 25-Aug-2016 10:52:07
Audit Action: Manually Integrated
Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

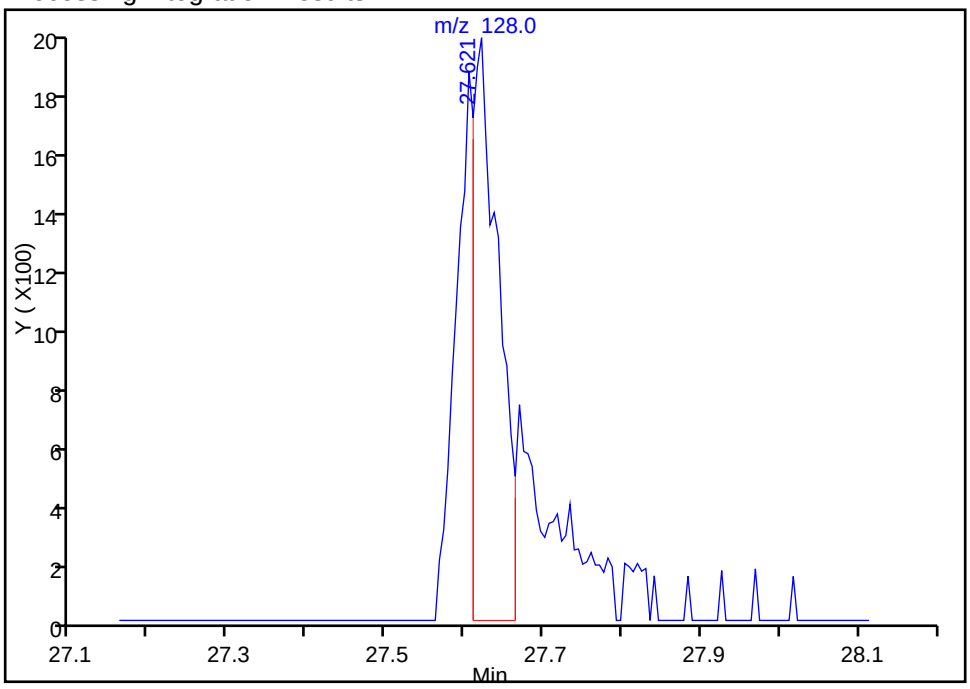
TestAmerica Burlington

Data File:	\\ChromNA\Burlington\ChromData\CHW.i\20160822-21457.b\21457_07.d				
Injection Date:	22-Aug-2016 19:23:30	Instrument ID:	CHW.i		
Lims ID:	ic				
Client ID:					
Operator ID:	ggg	ALS Bottle#:	4	Worklist Smp#:	5
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_MasterMethod_(v1)	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

105 Naphthalene, CAS: 91-20-3

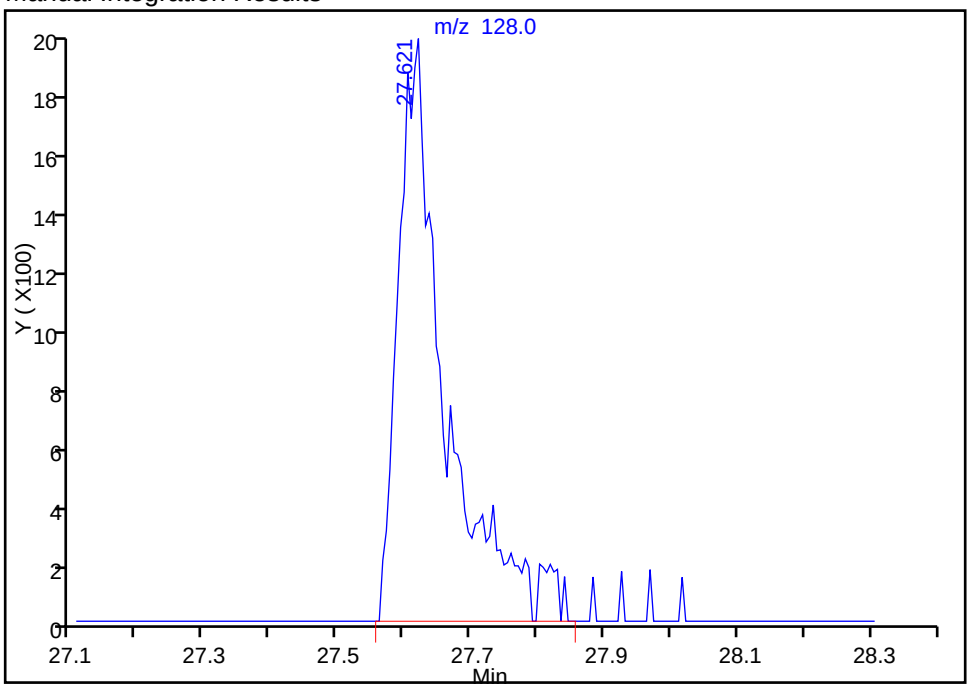
Processing Integration Results

RT: 27.62
Area: 4590
Amount: 0.042167
Amount Units: ppb v/v



Manual Integration Results

RT: 27.62
Area: 9839
Amount: 0.086189
Amount Units: ppb v/v



Reviewer: guazzonig, 25-Aug-2016 10:48:06
Audit Action: Manually Integrated
Audit Reason: Incomplete Integration

TestAmerica Burlington
Target Compound Quantitation Report

Data File: \\ChromNA\Burlington\ChromData\CHW.i\20160822-21457.b\21457_08.d
Lims ID: ic
Client ID:
Sample Type: IC Calib Level: 3
Inject. Date: 22-Aug-2016 20:16:30 ALS Bottle#: 5 Worklist Smp#: 6
Purge Vol: 200.000 mL Dil. Factor: 1.0000
Sample Info: 200-0021457-006
Misc. Info.: ic
Operator ID: ggg Instrument ID: CHW.i
Sublist: chrom-TO15_MasterMethod_(v1)*sub1

Method: \\ChromNA\Burlington\ChromData\CHW.i\20160822-21457.b\TO15_MasterMethod_(v1).m
Limit Group: AI_TO15_ICAL
Last Update: 25-Aug-2016 12:22:07 Calib Date: 23-Aug-2016 00:38:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Burlington\ChromData\CHW.i\20160822-21457.b\21457_13.d

Column 1 : RTX-624 (0.32 mm) Det: MS SCAN
Process Host: XAWRK010

First Level Reviewer: guazzonig Date: 25-Aug-2016 10:48:29

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
1 Propene	41	5.276	5.287	-0.010	96	10116	0.5005	0.6389	
2 Dichlorodifluoromethane	85	5.388	5.399	-0.011	99	38071	0.5005	0.5144	
3 Chlorodifluoromethane	51	5.468	5.479	-0.011	96	17789	0.5005	0.5236	
4 1,2-Dichloro-1,1,2,2-tetra	85	5.795	5.805	-0.010	82	37063	0.5005	0.5135	
5 Chloromethane	50	6.003	5.998	0.005	98	10395	0.5005	0.5511	
6 Butane	43	6.265	6.271	-0.006	99	18563	0.5005	0.5554	
7 Vinyl chloride	62	6.319	6.324	-0.005	97	12612	0.5005	0.5107	
8 Butadiene	54	6.415	6.421	-0.006	95	9557	0.5005	0.5115	
10 Bromomethane	94	7.212	7.223	-0.011	98	14261	0.5005	0.5041	
9 BFB									
11 Chloroethane	64	7.464	7.469	-0.005	95	7159	0.5005	0.5019	
12 2-Methylbutane	43	7.533	7.544	-0.011	89	14827	0.5005	0.5793	
13 Vinyl bromide	106	7.876	7.881	-0.005	99	16487	0.5005	0.5121	
14 Trichlorofluoromethane	101	7.967	7.972	-0.005	98	38895	0.5005	0.5206	
16 Pentane	43	8.100	8.106	-0.006	97	21310	0.5005	0.5428	
17 Ethanol	45	8.475	8.470	0.005	99	88997	5.01	7.13	
18 Ethyl ether	59	8.593	8.587	0.006	94	9109	0.5005	0.5061	
19 Acrolein	56	8.972	8.972	0.000	37	5258	0.5005	0.7179	
20 1,1,2-Trichloro-1,2,2-trif	101	8.972	8.978	-0.006	96	31300	0.5005	0.5144	
21 1,1-Dichloroethene	96	9.037	9.047	-0.010	92	15342	0.5005	0.5156	
22 Acetone	43	9.251	9.240	0.011	95	33066	0.5005	1.06	
23 Carbon disulfide	76	9.438	9.443	-0.005	99	37436	0.5005	0.5110	
24 Isopropyl alcohol	45	9.438	9.443	-0.005	65	23485	0.5005	0.7416	
25 3-Chloro-1-propene	41	9.743	9.748	-0.005	92	14247	0.5005	0.5549	
26 Acetonitrile	41	9.866	9.866	0.000	97	7081	0.5005	0.4851	
27 Methylene Chloride	49	10.005	10.010	-0.005	82	14069	0.5005	0.5670	
28 2-Methyl-2-propanol	59	10.139	10.128	0.011	92	24843	0.5005	0.5191	
S 30 1,2-Dichloroethene, Total	61				0		1.00	1.02	
29 Methyl tert-butyl ether	73	10.353	10.353	0.000	96	41431	0.5005	0.5202	
31 trans-1,2-Dichloroethene	61	10.406	10.406	0.000	92	17998	0.5005	0.5082	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
32 Acrylonitrile	53	10.545	10.545	0.000	97	8519	0.5005	0.4992	
33 Hexane	57	10.738	10.738	0.000	87	21681	0.5005	0.5233	
34 1,1-Dichloroethane	63	11.209	11.214	-0.005	99	24378	0.5005	0.5220	
35 Vinyl acetate	43	11.235	11.241	-0.006	99	27566	0.5005	0.5118	
37 cis-1,2-Dichloroethene	96	12.220	12.225	-0.005	84	16985	0.5005	0.5091	
38 2-Butanone (MEK)	72	12.252	12.241	0.011	98	8293	0.5005	0.5525	
39 Ethyl acetate	88	12.252	12.252	0.000	96	1166	0.5005	0.4405	
41 Tetrahydrofuran	42	12.658	12.648	0.010	34	15320	0.5005	0.5801	
* 40 Chlorobromomethane	128	12.653	12.653	0.000	78	242613	10.0	10.0	
42 Chloroform	83	12.739	12.744	-0.005	94	29545	0.5005	0.5187	
43 Cyclohexane	84	13.011	13.011	0.000	94	22504	0.5005	0.5137	
44 1,1,1-Trichloroethane	97	13.028	13.028	0.000	95	30787	0.5005	0.5078	
45 Carbon tetrachloride	117	13.252	13.252	0.000	97	32654	0.5005	0.5354	
46 Isooctane	57	13.605	13.605	0.000	99	72077	0.5005	0.5163	
47 Benzene	78	13.669	13.669	0.000	93	50095	0.5005	0.5148	
48 1,2-Dichloroethane	62	13.819	13.819	0.000	96	15621	0.5005	0.5098	
49 n-Heptane	43	13.921	13.921	0.000	86	24211	0.5005	0.5269	
* 50 1,4-Difluorobenzene	114	14.365	14.365	0.000	92	1194658	10.0	10.0	
52 n-Butanol	56	14.622	14.616	0.006	83	9038	0.5005	0.5733	
53 Trichloroethene	95	14.793	14.798	-0.005	95	21597	0.5005	0.4997	
A 51 GRO	1	14.972	(7.534-22.410)		0	6438886	0.5005	0	
54 1,2-Dichloropropane	63	15.290	15.296	-0.006	93	17059	0.5005	0.5167	
55 Methyl methacrylate	69	15.371	15.371	0.000	93	16726	0.5005	0.4983	
56 1,4-Dioxane	88	15.467	15.456	0.011	87	8386	0.5005	0.5081	
57 Dibromomethane	174	15.520	15.520	0.000	89	24494	0.5005	0.4880	
58 Dichlorobromomethane	83	15.751	15.756	-0.006	97	32741	0.5005	0.5129	
60 cis-1,3-Dichloropropene	75	16.585	16.585	0.000	87	24813	0.5005	0.4919	
A 59 TVOC as Toluene	92	16.711	(5.277-28.145)		0	9921205	0.5005	120.0	
61 4-Methyl-2-pentanone (MIBK	43	16.815	16.820	-0.005	92	29556	0.5005	0.5189	
64 n-Octane	43	17.125	17.125	0.000	87	33111	0.5005	0.5261	
A 62 C8 Range	1	17.125	(17.075-17.175)		0	273805	NC	NC	
65 Toluene	92	17.131	17.131	0.000	93	38073	0.5005	0.5145	
A 63 Toluene Range	92	17.131	(17.091-17.171)		0	273805	0.5005	3.70	
66 trans-1,3-Dichloropropene	75	17.650	17.655	-0.005	93	23085	0.5005	0.4810	
67 1,1,2-Trichloroethane	83	18.008	18.008	0.000	94	17323	0.5005	0.5092	
68 Tetrachloroethene	166	18.126	18.131	-0.005	96	37372	0.5005	0.5110	
69 2-Hexanone	43	18.399	18.399	0.000	97	19911	0.5005	0.4004	
71 Chlorodibromomethane	129	18.736	18.736	0.000	98	38236	0.5005	0.5149	
72 Ethylene Dibromide	107	19.019	19.019	0.000	99	31666	0.5005	0.4911	
* 74 Chlorobenzene-d5	117	19.859	19.859	0.000	82	1069203	10.0	10.0	
75 Chlorobenzene	112	19.913	19.918	-0.005	97	49528	0.5005	0.4936	
76 Ethylbenzene	91	20.041	20.046	-0.005	96	79517	0.5005	0.5092	
S 73 Xylenes, Total	106				0		1.50	1.52	
77 n-Nonane	57	20.111	20.116	-0.005	85	34457	0.5005	0.5129	
78 m-Xylene & p-Xylene	106	20.276	20.276	0.000	0	66662	1.00	1.02	
79 o-Xylene	106	21.020	21.020	0.000	96	33181	0.5005	0.5043	
80 Styrene	104	21.063	21.063	0.000	94	46596	0.5005	0.4685	
81 Bromoform	173	21.437	21.443	-0.006	99	37764	0.5005	0.5326	
82 Isopropylbenzene	105	21.608	21.608	0.000	94	96247	0.5005	0.5211	
$ 83 4-Bromofluorobenzene	95	21.951	21.951	0.000	98	680882	NC	NC	
84 1,1,2,2-Tetrachloroethane	83	22.192	22.192	0.000	98	44186	0.5005	0.5085	
85 N-Propylbenzene	91	22.266	22.266	0.000	100	104863	0.5005	0.5012	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
86 1,2,3-Trichloropropane	75	22.293	22.299	-0.006	95	31299	0.5005	0.4930	
87 n-Decane	57	22.395	22.400	-0.005	91	39326	0.5005	0.4686	
88 4-Ethyltoluene	105	22.443	22.443	0.000	97	89099	0.5005	0.4900	
89 2-Chlorotoluene	91	22.464	22.464	0.000	95	70512	0.5005	0.4917	
90 1,3,5-Trimethylbenzene	105	22.539	22.539	0.000	95	76070	0.5005	0.4975	
91 Alpha Methyl Styrene	118	22.887	22.887	0.000	92	35866	0.5005	0.4469	
92 tert-Butylbenzene	119	23.005	23.010	-0.005	96	79913	0.5005	0.5146	
93 1,2,4-Trimethylbenzene	105	23.096	23.096	0.000	96	73481	0.5005	0.4844	
94 sec-Butylbenzene	105	23.326	23.326	0.000	99	111670	0.5005	0.5018	
95 4-Isopropyltoluene	119	23.524	23.524	0.000	98	94557	0.5005	0.4893	
96 1,3-Dichlorobenzene	146	23.577	23.577	0.000	94	49704	0.5005	0.4527	
97 1,4-Dichlorobenzene	146	23.716	23.716	0.000	98	45978	0.5005	0.4325	
98 Benzyl chloride	91	23.920	23.925	-0.005	100	44069	0.5005	0.4277	
99 Undecane	57	24.128	24.134	-0.006	94	29978	0.5005	0.3442	
100 n-Butylbenzene	91	24.133	24.134	-0.001	98	66946	0.5005	0.4444	
101 1,2-Dichlorobenzene	146	24.294	24.294	0.000	99	48112	0.5005	0.4630	
102 Dodecane	57	25.867	25.861	0.006	95	12762	0.5005	0.1868	
103 1,2,4-Trichlorobenzene	180	27.054	27.044	0.010	93	15098	0.5005	0.2337	
104 Hexachlorobutadiene	225	27.247	27.242	0.005	85	34787	0.5005	0.4495	
105 Naphthalene	128	27.616	27.605	0.011	77	22688	0.5005	0.1977	M
106 1,2,3-Trichlorobenzene	180	28.140	28.135	0.005	96	14698	0.5005	0.2846	

QC Flag Legend

Processing Flags
NC - Not Calibrated
Review Flags
M - Manually Integrated

Reagents:

ATTO15CAL2w_00219	Amount Added: 200.00	Units: mL	
ATTO15WISs_00004	Amount Added: 20.00	Units: mL	Run Reagent

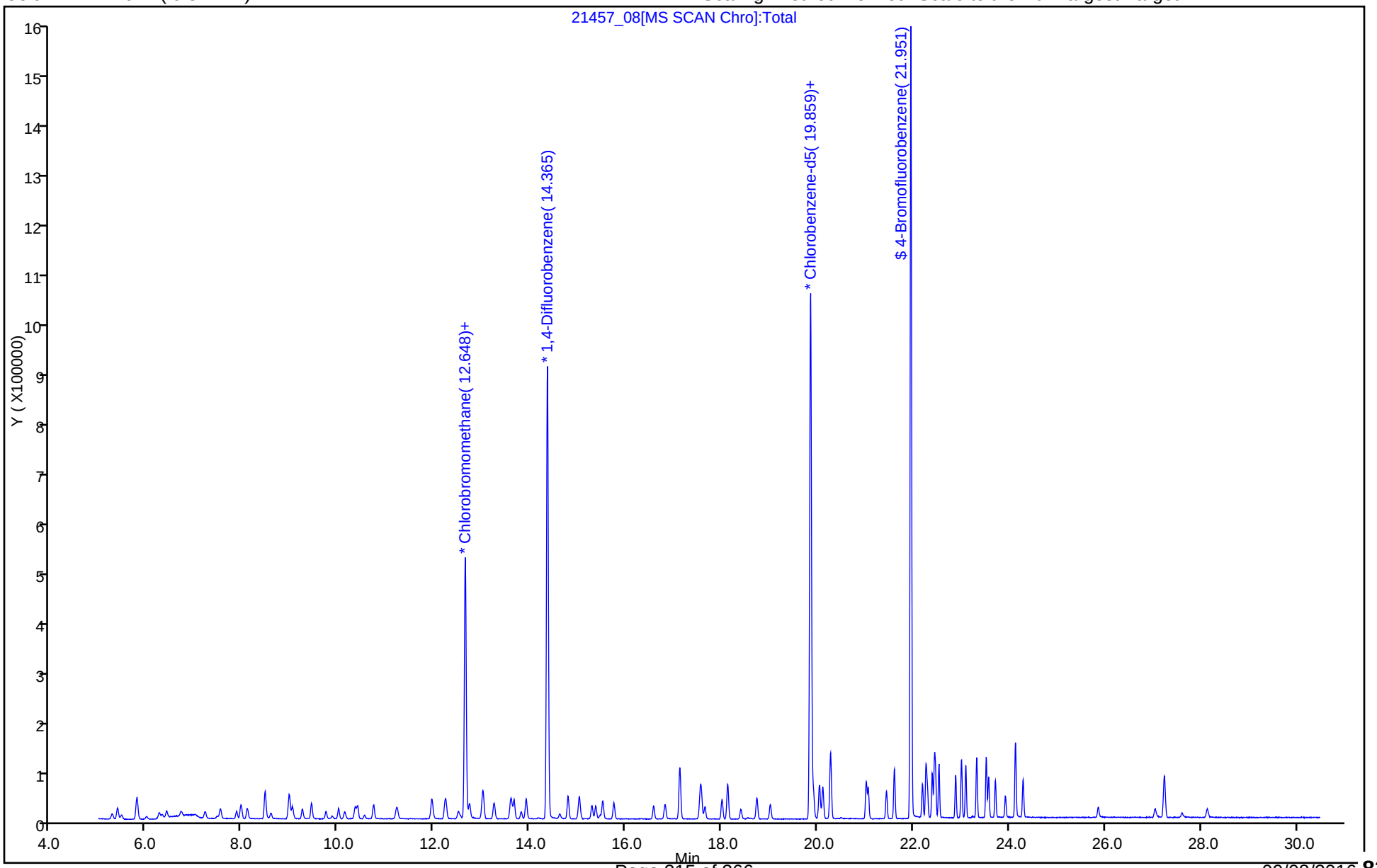
Report Date: 25-Aug-2016 12:22:08 Chrom Revision: 2.2 04-Mar-2016 14:36:24

TestAmerica Burlington

Data File: \\ChromNA\Burlington\ChromData\CHW.i\20160822-21457.b\21457_08.d

Injection Date:	22-Aug-2016 20:16:30	Instrument ID:	CHW.i	Operator ID:	ggg
Lims ID:	ic			Worklist Smp#:	6
Client ID:					
Purge Vol:	200.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	5
Method:	TO15_MasterMethod_(v1)	Limit Group:	AI_TO15_ICAL		

Column: RTX-624 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Manual Integration/User Assign Peak Report

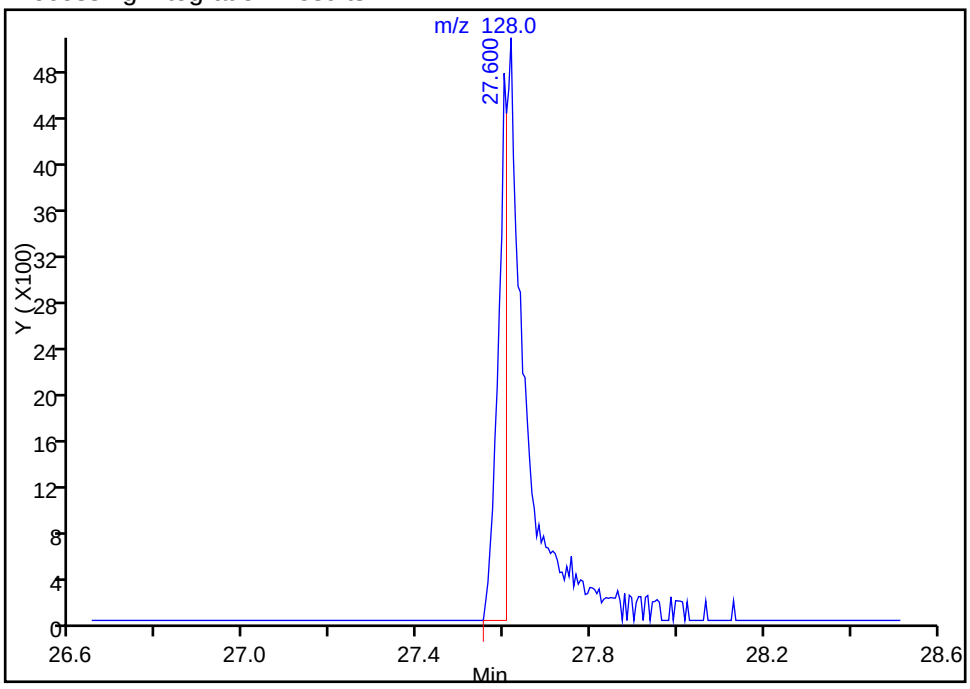
TestAmerica Burlington

Data File:	\\ChromNA\Burlington\ChromData\CHW.i\20160822-21457.b\21457_08.d				
Injection Date:	22-Aug-2016 20:16:30	Instrument ID:	CHW.i		
Lims ID:	ic				
Client ID:					
Operator ID:	ggg	ALS Bottle#:	5	Worklist Smp#:	6
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_MasterMethod_(v1)	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

105 Naphthalene, CAS: 91-20-3

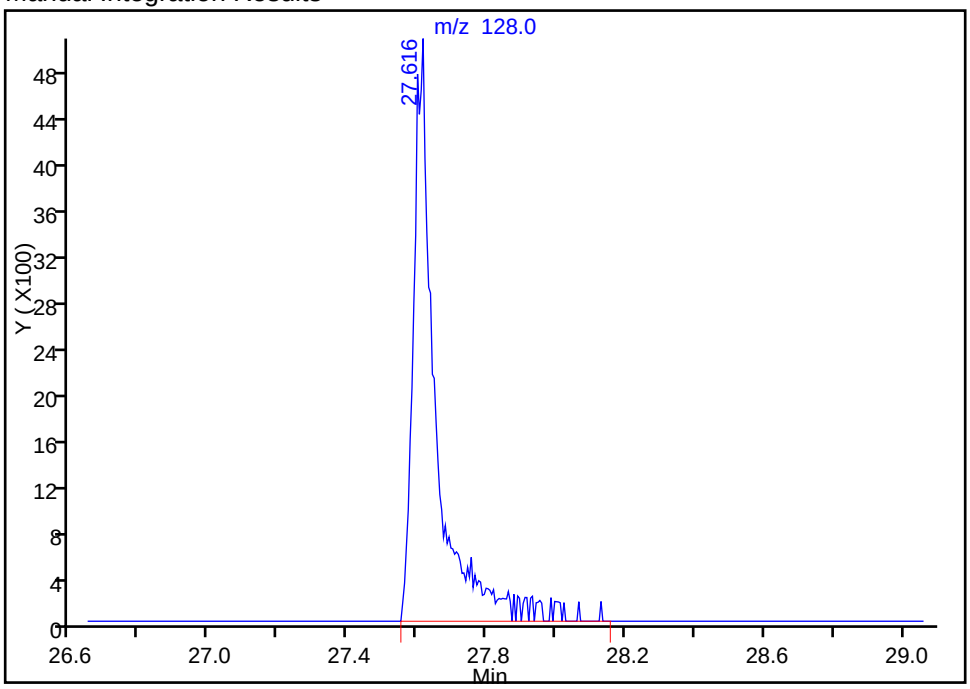
Processing Integration Results

RT: 27.60
Area: 6678
Amount: 0.061016
Amount Units: ppb v/v



Manual Integration Results

RT: 27.62
Area: 22688
Amount: 0.197668
Amount Units: ppb v/v



Reviewer: guazzonig, 25-Aug-2016 10:49:38
Audit Action: Manually Integrated
Audit Reason: Incomplete Integration

TestAmerica Burlington
Target Compound Quantitation Report

Data File: \\ChromNA\Burlington\ChromData\CHW.i\20160822-21457.b\21457_09.d
Lims ID: ic
Client ID:
Sample Type: IC Calib Level: 4
Inject. Date: 22-Aug-2016 21:08:30 ALS Bottle#: 6 Worklist Smp#: 7
Purge Vol: 200.000 mL Dil. Factor: 1.0000
Sample Info: 200-0021457-007
Misc. Info.: ic
Operator ID: ggg Instrument ID: CHW.i
Sublist: chrom-TO15_MasterMethod_(v1)*sub1

Method: \\ChromNA\Burlington\ChromData\CHW.i\20160822-21457.b\TO15_MasterMethod_(v1).m
Limit Group: AI_TO15_ICAL
Last Update: 25-Aug-2016 12:22:10 Calib Date: 23-Aug-2016 00:38:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Burlington\ChromData\CHW.i\20160822-21457.b\21457_13.d

Column 1 : RTX-624 (0.32 mm) Det: MS SCAN
Process Host: XAWRK010

First Level Reviewer: guazzonig Date: 25-Aug-2016 10:53:28

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
1 Propene	41	5.292	5.287	0.006	100	79027	4.99	4.94	
2 Dichlorodifluoromethane	85	5.404	5.399	0.005	99	365586	4.99	4.89	
3 Chlorodifluoromethane	51	5.484	5.479	0.005	96	165173	4.99	4.81	
4 1,2-Dichloro-1,1,2,2-tetra	85	5.805	5.805	0.000	84	352592	4.99	4.83	
5 Chloromethane	50	6.003	5.998	0.005	99	91026	4.99	4.77	
6 Butane	43	6.276	6.271	0.005	98	158363	4.99	4.69	
7 Vinyl chloride	62	6.329	6.324	0.005	98	120609	4.99	4.83	
8 Butadiene	54	6.426	6.421	0.005	93	89733	4.99	4.75	
10 Bromomethane	94	7.223	7.223	0.000	99	138173	4.99	4.83	
9 BFB									
11 Chloroethane	64	7.474	7.469	0.005	98	69309	4.99	4.81	
12 2-Methylbutane	43	7.544	7.544	0.000	90	120905	4.99	4.67	
13 Vinyl bromide	106	7.876	7.881	-0.005	100	157756	4.99	4.85	
14 Trichlorofluoromethane	101	7.972	7.972	0.000	98	367124	4.99	4.86	
16 Pentane	43	8.106	8.106	0.000	97	192494	4.99	4.85	
17 Ethanol	45	8.475	8.470	0.005	98	132544	10.0	10.5	
18 Ethyl ether	59	8.587	8.587	0.000	93	90295	4.99	4.96	
19 Acrolein	56	8.972	8.972	0.000	95	37473	4.99	5.06	
20 1,1,2-Trichloro-1,2,2-trif	101	8.978	8.978	0.000	96	296571	4.99	4.82	
21 1,1-Dichloroethene	96	9.047	9.047	0.000	92	145441	4.99	4.83	
22 Acetone	43	9.245	9.240	0.005	95	169562	4.99	5.37	
23 Carbon disulfide	76	9.438	9.443	-0.005	98	360320	4.99	4.87	
24 Isopropyl alcohol	45	9.438	9.443	-0.005	59	166025	4.99	5.19	
25 3-Chloro-1-propene	41	9.748	9.748	0.000	92	127014	4.99	4.89	
26 Acetonitrile	41	9.866	9.866	0.000	100	73691	4.99	4.99	
27 Methylene Chloride	49	10.010	10.010	0.000	84	121092	4.99	4.83	
28 2-Methyl-2-propanol	59	10.133	10.128	0.005	92	241602	4.99	4.99	
S 30 1,2-Dichloroethene, Total	61				0		9.99	9.80	
29 Methyl tert-butyl ether	73	10.347	10.353	-0.006	96	397755	4.99	4.94	
31 trans-1,2-Dichloroethene	61	10.406	10.406	0.000	93	177207	4.99	4.95	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
32 Acrylonitrile	53	10.545	10.545	0.000	97	84540	4.99	4.90	
33 Hexane	57	10.738	10.738	0.000	88	200765	4.99	4.79	
34 1,1-Dichloroethane	63	11.214	11.214	0.000	99	232885	4.99	4.93	
35 Vinyl acetate	43	11.235	11.241	-0.006	99	267252	4.99	4.91	
37 cis-1,2-Dichloroethene	96	12.225	12.225	0.000	86	163405	4.99	4.85	
38 2-Butanone (MEK)	72	12.241	12.241	0.000	97	73728	4.99	4.86	
39 Ethyl acetate	88	12.252	12.252	0.000	97	12908	4.99	4.82	
41 Tetrahydrofuran	42	12.653	12.648	0.005	62	132198	4.99	5.01	
* 40 Chlorobromomethane	128	12.653	12.653	0.000	84	245255	10.0	10.0	
42 Chloroform	83	12.744	12.744	0.000	94	282528	4.99	4.91	
43 Cyclohexane	84	13.011	13.011	0.000	94	212781	4.99	4.86	
44 1,1,1-Trichloroethane	97	13.027	13.028	-0.001	94	293416	4.99	4.85	
45 Carbon tetrachloride	117	13.252	13.252	0.000	97	309538	4.99	5.08	
46 Isooctane	57	13.605	13.605	0.000	99	677390	4.99	4.86	
47 Benzene	78	13.669	13.669	0.000	93	463902	4.99	4.77	
48 1,2-Dichloroethane	62	13.819	13.819	0.000	96	150963	4.99	4.93	
49 n-Heptane	43	13.921	13.921	0.000	86	219610	4.99	4.78	
* 50 1,4-Difluorobenzene	114	14.365	14.365	0.000	92	1193267	10.0	10.0	
52 n-Butanol	56	14.616	14.616	0.000	82	76226	4.99	4.84	
53 Trichloroethene	95	14.793	14.798	-0.005	95	210086	4.99	4.87	
A 51 GRO	1	14.972	(7.534-22.410)		0	55570102	4.99	0	
54 1,2-Dichloropropane	63	15.290	15.296	-0.006	94	161272	4.99	4.89	
55 Methyl methacrylate	69	15.371	15.371	-0.001	94	159129	4.99	4.75	
56 1,4-Dioxane	88	15.461	15.456	0.005	88	80751	4.99	4.90	
57 Dibromomethane	174	15.520	15.520	0.000	89	244895	4.99	4.88	
58 Dichlorobromomethane	83	15.756	15.756	0.000	97	312891	4.99	4.91	
60 cis-1,3-Dichloropropene	75	16.580	16.585	-0.005	87	245049	4.99	4.86	
A 59 TVOC as Toluene	92	16.711	(5.277-28.145)		0	95285408	4.99	1153.9	
61 4-Methyl-2-pentanone (MIBK	43	16.815	16.820	-0.005	92	273365	4.99	4.81	
64 n-Octane	43	17.125	17.125	0.000	87	304259	4.99	4.84	
A 62 C8 Range	1	17.125	(17.075-17.175)		0	2608689	NC	NC	
65 Toluene	92	17.136	17.131	0.005	95	366203	4.99	4.90	
A 63 Toluene Range	92	17.131	(17.091-17.171)		0	2608689	4.99	34.9	
66 trans-1,3-Dichloropropene	75	17.649	17.655	-0.006	93	234954	4.99	4.90	
67 1,1,2-Trichloroethane	83	18.008	18.008	0.000	92	166824	4.99	4.86	
68 Tetrachloroethene	166	18.131	18.131	0.000	95	360315	4.99	4.88	
69 2-Hexanone	43	18.398	18.399	-0.001	98	240852	4.99	4.80	
71 Chlorodibromomethane	129	18.735	18.736	-0.001	98	367848	4.99	4.91	
72 Ethylene Dibromide	107	19.014	19.019	-0.005	98	318906	4.99	4.90	
* 74 Chlorobenzene-d5	117	19.859	19.859	0.000	82	1079344	10.0	10.0	
75 Chlorobenzene	112	19.918	19.918	0.000	98	500177	4.99	4.94	
76 Ethylbenzene	91	20.046	20.046	0.000	97	777219	4.99	4.93	
S 73 Xylenes, Total	106				0		15.0	14.9	
77 n-Nonane	57	20.116	20.116	0.000	85	334716	4.99	4.94	
78 m-Xylene & p-Xylene	106	20.276	20.276	0.000	0	658241	9.99	9.97	
79 o-Xylene	106	21.020	21.020	0.000	99	326503	4.99	4.92	
80 Styrene	104	21.063	21.063	0.000	94	502902	4.99	5.01	
81 Bromoform	173	21.442	21.443	-0.001	99	340043	4.99	4.75	
82 Isopropylbenzene	105	21.608	21.608	0.000	94	923180	4.99	4.95	
$ 83 4-Bromofluorobenzene	95	21.951	21.951	0.000	98	697123	NC	NC	
84 1,1,2,2-Tetrachloroethane	83	22.191	22.192	-0.001	98	425019	4.99	4.85	
85 N-Propylbenzene	91	22.266	22.266	0.000	100	1067300	4.99	5.05	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
86 1,2,3-Trichloropropane	75	22.298	22.299	-0.001	95	308930	4.99	4.82	
87 n-Decane	57	22.400	22.400	0.000	90	427122	4.99	5.04	
88 4-Ethyltoluene	105	22.443	22.443	0.000	98	923252	4.99	5.03	
89 2-Chlorotoluene	91	22.464	22.464	0.000	96	720424	4.99	4.98	
90 1,3,5-Trimethylbenzene	105	22.539	22.539	0.000	95	774837	4.99	5.02	
91 Alpha Methyl Styrene	118	22.887	22.887	0.000	92	408665	4.99	5.04	
92 tert-Butylbenzene	119	23.010	23.010	0.000	96	783364	4.99	5.00	
93 1,2,4-Trimethylbenzene	105	23.101	23.096	0.005	96	774159	4.99	5.06	
94 sec-Butylbenzene	105	23.326	23.326	0.000	99	1134468	4.99	5.05	
95 4-Isopropyltoluene	119	23.523	23.524	-0.001	98	992975	4.99	5.09	
96 1,3-Dichlorobenzene	146	23.577	23.577	0.000	94	556030	4.99	5.02	
97 1,4-Dichlorobenzene	146	23.716	23.716	0.000	97	537352	4.99	5.01	
98 Benzyl chloride	91	23.925	23.925	0.000	100	565771	4.99	5.44	
99 Undecane	57	24.128	24.134	-0.006	93	457665	4.99	5.21	
100 n-Butylbenzene	91	24.133	24.134	-0.001	96	808335	4.99	5.32	
101 1,2-Dichlorobenzene	146	24.294	24.294	0.000	99	523027	4.99	4.99	
102 Dodecane	57	25.861	25.861	0.000	96	362789	4.99	5.26	
103 1,2,4-Trichlorobenzene	180	27.044	27.044	0.000	93	350956	4.99	5.38	
104 Hexachlorobutadiene	225	27.241	27.242	-0.001	94	396925	4.99	5.08	
105 Naphthalene	128	27.605	27.605	0.000	99	641700	4.99	5.54	
106 1,2,3-Trichlorobenzene	180	28.135	28.135	0.000	95	287451	4.99	5.51	

QC Flag Legend

Processing Flags

NC - Not Calibrated

Reagents:

ATTO15CAL3w_00170	Amount Added: 200.00	Units: mL	
ATTO15WISs_00004	Amount Added: 20.00	Units: mL	Run Reagent

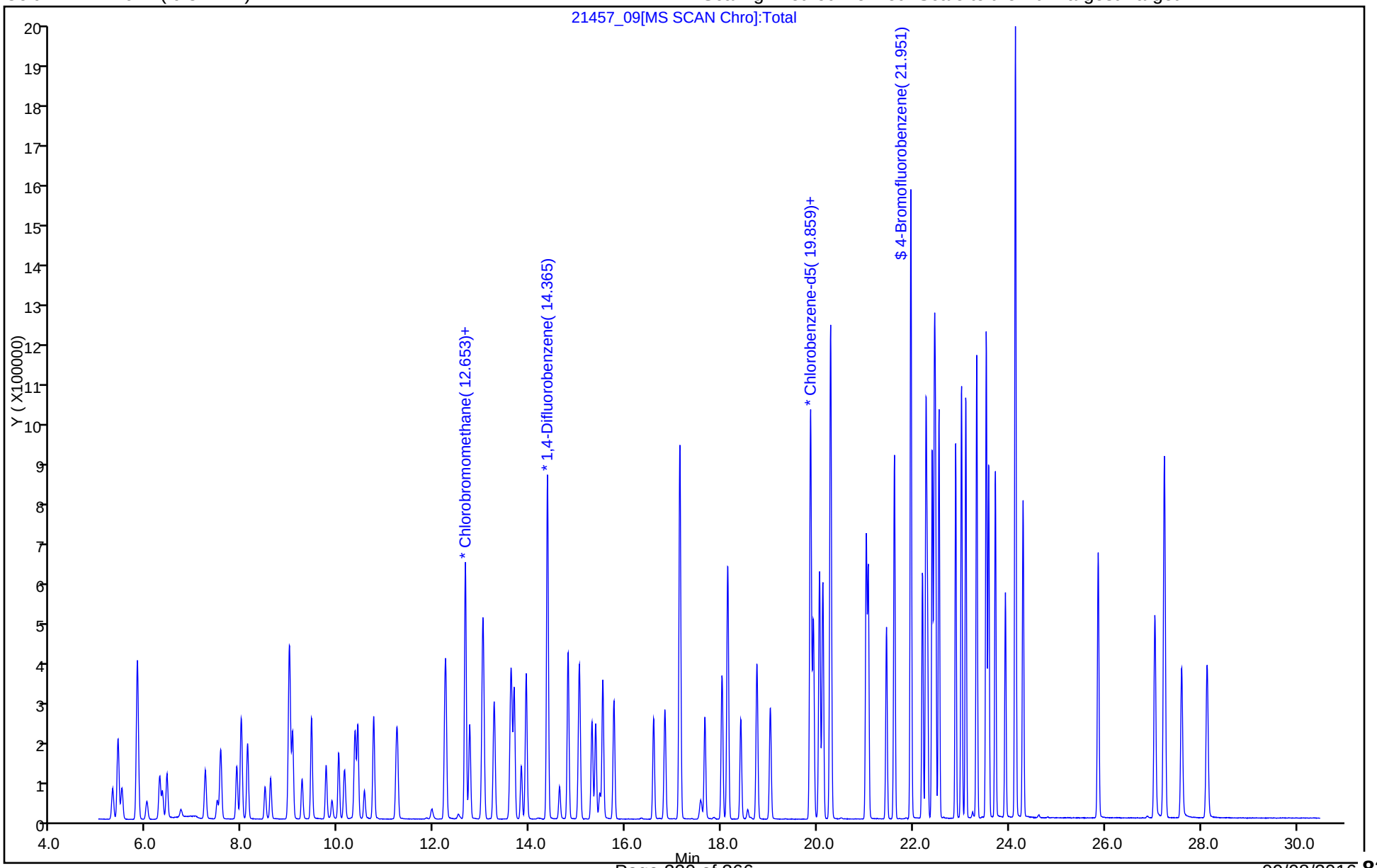
Report Date: 25-Aug-2016 12:22:11 Chrom Revision: 2.2 04-Mar-2016 14:36:24

TestAmerica Burlington

Data File: \\ChromNA\Burlington\ChromData\CHW.i\20160822-21457.b\21457_09.d

Injection Date:	22-Aug-2016 21:08:30	Instrument ID:	CHW.i	Operator ID:	ggg
Lims ID:	ic			Worklist Smp#:	7
Client ID:					
Purge Vol:	200.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	6
Method:	TO15_MasterMethod_(v1)	Limit Group:	AI_TO15_ICAL		

Column: RTX-624 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



TestAmerica Burlington
Target Compound Quantitation Report

Data File: \\ChromNA\Burlington\ChromData\CHW.i\20160822-21457.b\21457_10.d
Lims ID: icis
Client ID:
Sample Type: ICIS Calib Level: 5
Inject. Date: 22-Aug-2016 22:01:30 ALS Bottle#: 7 Worklist Smp#: 8
Purge Vol: 200.000 mL Dil. Factor: 1.0000
Sample Info: 200-0021457-008
Misc. Info.: ic
Operator ID: ggg Instrument ID: CHW.i
Sublist: chrom-TO15_MasterMethod_(v1)*sub1

Method: \\ChromNA\Burlington\ChromData\CHW.i\20160822-21457.b\TO15_MasterMethod_(v1).m
Limit Group: AI_TO15_ICAL
Last Update: 25-Aug-2016 12:22:12 Calib Date: 23-Aug-2016 00:38:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Burlington\ChromData\CHW.i\20160822-21457.b\21457_13.d

Column 1 : RTX-624 (0.32 mm) Det: MS SCAN
Process Host: XAWRK010

First Level Reviewer: guazzonig Date: 25-Aug-2016 10:46:02

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
1 Propene	41	5.287	5.287	0.000	98	163554	10.0	10.7	
2 Dichlorodifluoromethane	85	5.399	5.399	0.000	99	761479	10.0	10.6	
3 Chlorodifluoromethane	51	5.479	5.479	0.000	96	349038	10.0	10.6	
4 1,2-Dichloro-1,1,2,2-tetra	85	5.805	5.805	0.000	88	736793	10.0	10.5	
5 Chloromethane	50	5.998	5.998	0.000	99	189669	10.0	10.4	
6 Butane	43	6.271	6.271	0.000	99	339843	10.0	10.5	
7 Vinyl chloride	62	6.324	6.324	0.000	97	256185	10.0	10.7	
8 Butadiene	54	6.421	6.421	0.000	93	189503	10.0	10.5	
10 Bromomethane	94	7.223	7.223	0.000	99	288975	10.0	10.5	
9 BFB									
11 Chloroethane	64	7.469	7.469	0.000	99	146447	10.0	10.6	
12 2-Methylbutane	43	7.544	7.544	0.000	91	254163	10.0	10.2	
13 Vinyl bromide	106	7.881	7.881	0.000	100	330647	10.0	10.6	
14 Trichlorofluoromethane	101	7.972	7.972	0.000	98	765927	10.0	10.6	
16 Pentane	43	8.106	8.106	0.000	97	394840	10.0	10.4	
17 Ethanol	45	8.470	8.470	0.000	98	161355	15.0	13.3	
18 Ethyl ether	59	8.587	8.587	0.000	94	185547	10.0	10.6	
19 Acrolein	56	8.972	8.972	0.000	49	73415	10.0	10.3	
20 1,1,2-Trichloro-1,2,2-trif	101	8.978	8.978	0.000	96	612827	10.0	10.4	
21 1,1-Dichloroethene	96	9.047	9.047	0.000	92	302873	10.0	10.5	
22 Acetone	43	9.240	9.240	0.000	95	343113	10.0	11.3	
23 Carbon disulfide	76	9.443	9.443	0.000	98	757981	10.0	10.7	
24 Isopropyl alcohol	45	9.443	9.443	0.000	58	355780	10.0	11.6	
25 3-Chloro-1-propene	41	9.748	9.748	0.000	92	220692	10.0	8.86	
26 Acetonitrile	41	9.866	9.866	0.000	100	157219	10.0	11.1	
27 Methylene Chloride	49	10.010	10.010	0.000	84	249720	10.0	10.4	
28 2-Methyl-2-propanol	59	10.128	10.128	0.000	92	525755	10.0	11.3	
S 30 1,2-Dichloroethene, Total	61				0		20.0	21.3	
29 Methyl tert-butyl ether	73	10.353	10.353	0.000	96	824854	10.0	10.7	
31 trans-1,2-Dichloroethene	61	10.406	10.406	0.000	93	367310	10.0	10.7	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
32 Acrylonitrile	53	10.545	10.545	0.000	97	175846	10.0	10.6	
33 Hexane	57	10.738	10.738	0.000	88	417912	10.0	10.4	
34 1,1-Dichloroethane	63	11.214	11.214	0.000	99	484873	10.0	10.7	
35 Vinyl acetate	43	11.241	11.241	0.000	99	552965	10.0	10.6	
37 cis-1,2-Dichloroethene	96	12.225	12.225	0.000	91	341517	10.0	10.6	
38 2-Butanone (MEK)	72	12.241	12.241	0.000	97	155535	10.0	10.7	
39 Ethyl acetate	88	12.252	12.252	0.000	96	27622	10.0	10.8	
41 Tetrahydrofuran	42	12.648	12.648	0.000	95	271809	10.0	10.8	
* 40 Chlorobromomethane	128	12.653	12.653	0.000	78	235284	10.0	10.0	
42 Chloroform	83	12.744	12.744	0.000	94	587997	10.0	10.6	
43 Cyclohexane	84	13.011	13.011	0.000	94	444425	10.0	10.7	
44 1,1,1-Trichloroethane	97	13.028	13.028	0.000	94	611788	10.0	10.6	
45 Carbon tetrachloride	117	13.252	13.252	0.000	96	412422	10.0	7.10	
46 Isooctane	57	13.605	13.605	0.000	99	1409142	10.0	10.6	
47 Benzene	78	13.669	13.669	0.000	93	971696	10.0	10.5	
48 1,2-Dichloroethane	62	13.819	13.819	0.000	97	314714	10.0	10.8	
49 n-Heptane	43	13.921	13.921	0.000	86	452124	10.0	10.3	
* 50 1,4-Difluorobenzene	114	14.365	14.365	0.000	92	1137773	10.0	10.0	
52 n-Butanol	56	14.616	14.616	0.000	82	174663	10.0	11.6	
53 Trichloroethene	95	14.798	14.798	0.000	95	439103	10.0	10.7	
A 51 GRO	1	14.972	(7.534-22.410)		0	114980265	10.0	0	
54 1,2-Dichloropropane	63	15.296	15.296	0.000	94	334847	10.0	10.6	
55 Methyl methacrylate	69	15.371	15.371	0.000	93	337921	10.0	10.6	
56 1,4-Dioxane	88	15.456	15.456	0.000	88	193455	10.0	12.3	
57 Dibromomethane	174	15.520	15.520	0.000	89	518102	10.0	10.8	
58 Dichlorobromomethane	83	15.756	15.756	0.000	97	635753	10.0	10.5	
60 cis-1,3-Dichloropropene	75	16.585	16.585	0.000	87	512927	10.0	10.7	
A 59 TVOC as Toluene	92	16.711	(5.277-28.145)		0	194201869	10.0	2466.4	
61 4-Methyl-2-pentanone (MIBK	43	16.820	16.820	0.000	92	597394	10.0	11.0	
64 n-Octane	43	17.125	17.125	0.000	87	632506	10.0	10.6	
A 62 C8 Range	1	17.125	(17.075-17.175)		0	5388109	NC	NC	
65 Toluene	92	17.131	17.131	0.000	94	756272	10.0	10.6	
A 63 Toluene Range	92	17.131	(17.091-17.171)		0	5388109	10.0	75.4	
66 trans-1,3-Dichloropropene	75	17.655	17.655	0.000	93	477936	10.0	10.5	
67 1,1,2-Trichloroethane	83	18.008	18.008	0.000	93	348752	10.0	10.6	
68 Tetrachloroethene	166	18.131	18.131	0.000	94	756750	10.0	10.7	
69 2-Hexanone	43	18.399	18.399	0.000	98	548062	10.0	11.4	
71 Chlorodibromomethane	129	18.736	18.736	0.000	98	714415	10.0	9.96	
72 Ethylene Dibromide	107	19.019	19.019	0.000	99	668019	10.0	10.7	
* 74 Chlorobenzene-d5	117	19.859	19.859	0.000	82	1032359	10.0	10.0	
75 Chlorobenzene	112	19.918	19.918	0.000	98	1042113	10.0	10.8	
76 Ethylbenzene	91	20.046	20.046	0.000	96	1608126	10.0	10.7	
S 73 Xylenes, Total	106				0		30.0	32.3	
77 n-Nonane	57	20.116	20.116	0.000	85	687387	10.0	10.6	
78 m-Xylene & p-Xylene	106	20.276	20.276	0.000	0	1359561	20.0	21.5	
79 o-Xylene	106	21.020	21.020	0.000	99	681340	10.0	10.7	
80 Styrene	104	21.063	21.063	0.000	95	1064280	10.0	11.1	
81 Bromoform	173	21.443	21.443	0.000	99	590280	10.0	8.62	
82 Isopropylbenzene	105	21.608	21.608	0.000	94	1901750	10.0	10.7	
$ 83 4-Bromofluorobenzene	95	21.951	21.951	0.000	98	671961	NC	NC	
84 1,1,2,2-Tetrachloroethane	83	22.192	22.192	0.000	98	895995	10.0	10.7	
85 N-Propylbenzene	91	22.266	22.266	0.000	100	2195056	10.0	10.9	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
86 1,2,3-Trichloropropane	75	22.299	22.299	0.000	96	658753	10.0	10.7	
87 n-Decane	57	22.400	22.400	0.000	90	873703	10.0	10.8	
88 4-Ethyltoluene	105	22.443	22.443	0.000	98	1896403	10.0	10.8	
89 2-Chlorotoluene	91	22.464	22.464	0.000	96	1486404	10.0	10.7	
90 1,3,5-Trimethylbenzene	105	22.539	22.539	0.000	95	1595609	10.0	10.8	
91 Alpha Methyl Styrene	118	22.887	22.887	0.000	92	843421	10.0	10.9	
92 tert-Butylbenzene	119	23.010	23.010	0.000	96	1603468	10.0	10.7	
93 1,2,4-Trimethylbenzene	105	23.096	23.096	0.000	96	1575128	10.0	10.8	
94 sec-Butylbenzene	105	23.326	23.326	0.000	99	2322389	10.0	10.8	
95 4-Isopropyltoluene	119	23.524	23.524	0.000	98	2026199	10.0	10.9	
96 1,3-Dichlorobenzene	146	23.577	23.577	0.000	94	1163172	10.0	11.0	
97 1,4-Dichlorobenzene	146	23.716	23.716	0.000	97	1136036	10.0	11.1	
98 Benzyl chloride	91	23.925	23.925	0.000	100	946448	10.0	9.51	
99 Undecane	57	24.134	24.134	0.000	93	887217	10.0	10.5	
100 n-Butylbenzene	91	24.134	24.134	0.000	97	1637571	10.0	11.3	
101 1,2-Dichlorobenzene	146	24.294	24.294	0.000	99	1086350	10.0	10.8	
102 Dodecane	57	25.861	25.861	0.000	96	593039	10.0	8.99	
103 1,2,4-Trichlorobenzene	180	27.044	27.044	0.000	93	669088	10.0	10.7	
104 Hexachlorobutadiene	225	27.242	27.242	0.000	95	812228	10.0	10.9	
105 Naphthalene	128	27.605	27.605	0.000	99	1127894	10.0	10.2	
106 1,2,3-Trichlorobenzene	180	28.135	28.135	0.000	96	553994	10.0	11.1	

QC Flag Legend

Processing Flags

NC - Not Calibrated

Reagents:

ATTO15CAL4w_00558	Amount Added: 200.00	Units: mL	
ATTO15WISs_00004	Amount Added: 20.00	Units: mL	Run Reagent

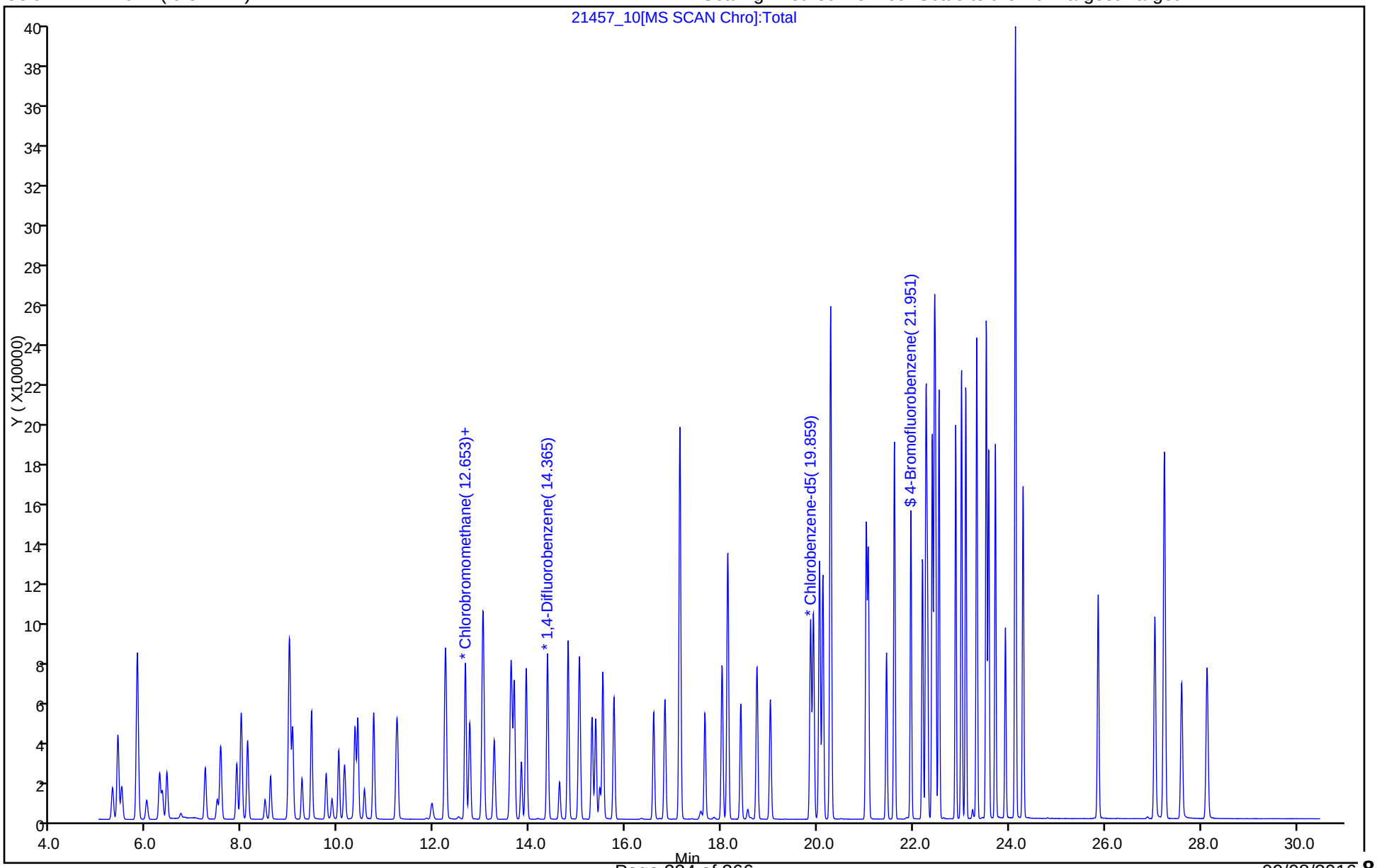
Report Date: 25-Aug-2016 12:22:13 Chrom Revision: 2.2 04-Mar-2016 14:36:24

TestAmerica Burlington

Data File: \\ChromNA\Burlington\ChromData\CHW.i\20160822-21457.b\21457_10.d

Injection Date:	22-Aug-2016 22:01:30	Instrument ID:	CHW.i	Operator ID:	ggg
Lims ID:	icis			Worklist Smp#:	8
Client ID:					
Purge Vol:	200.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	7
Method:	TO15_MasterMethod_(v1)	Limit Group:	AI_TO15_ICAL		

Column: RTX-624 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



TestAmerica Burlington
Target Compound Quantitation Report

Data File: \\ChromNA\Burlington\ChromData\CHW.i\20160822-21457.b\21457_11.d
Lims ID: ic
Client ID:
Sample Type: IC Calib Level: 6
Inject. Date: 22-Aug-2016 22:53:30 ALS Bottle#: 8 Worklist Smp#: 9
Purge Vol: 200.000 mL Dil. Factor: 1.0000
Sample Info: 200-0021457-009
Misc. Info.: ic
Operator ID: ggg Instrument ID: CHW.i
Sublist: chrom-TO15_MasterMethod_(v1)*sub1

Method: \\ChromNA\Burlington\ChromData\CHW.i\20160822-21457.b\TO15_MasterMethod_(v1).m
Limit Group: AI_TO15_ICAL
Last Update: 25-Aug-2016 12:35:35 Calib Date: 23-Aug-2016 00:38:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Burlington\ChromData\CHW.i\20160822-21457.b\21457_13.d

Column 1 : RTX-624 (0.32 mm) Det: MS SCAN
Process Host: XAWRK010

First Level Reviewer: guazzonig Date: 25-Aug-2016 10:54:06

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
1 Propene	41	5.292	5.287	0.006	99	243833	15.0	14.5	
2 Dichlorodifluoromethane	85	5.404	5.399	0.005	99	1137335	15.0	14.5	
3 Chlorodifluoromethane	51	5.484	5.479	0.005	96	518311	15.0	14.4	
4 1,2-Dichloro-1,1,2,2-tetra	85	5.805	5.805	0.000	97	1106491	15.0	14.4	
5 Chloromethane	50	6.009	5.998	0.011	98	284901	15.0	14.2	
6 Butane	43	6.276	6.271	0.005	98	507425	15.0	14.3	
7 Vinyl chloride	62	6.330	6.324	0.006	98	388215	15.0	14.8	
8 Butadiene	54	6.426	6.421	0.005	94	279400	15.0	14.1	
10 Bromomethane	94	7.228	7.223	0.005	99	430684	15.0	14.3	
9 BFB									
11 Chloroethane	64	7.475	7.469	0.005	98	221019	15.0	14.6	
12 2-Methylbutane	43	7.544	7.544	0.000	91	380072	15.0	14.0	
13 Vinyl bromide	106	7.881	7.881	0.000	99	496550	15.0	14.5	
14 Trichlorofluoromethane	101	7.977	7.972	0.005	98	1138584	15.0	14.4	
16 Pentane	43	8.106	8.106	0.000	97	599160	15.0	14.4	
17 Ethanol	45	8.475	8.470	0.005	98	249879	20.0	18.9	
18 Ethyl ether	59	8.587	8.587	0.000	94	279291	15.0	14.6	
19 Acrolein	56	8.972	8.972	0.000	94	121518	15.0	15.6	
20 1,1,2-Trichloro-1,2,2-trif	101	8.983	8.978	0.005	96	912491	15.0	14.1	
21 1,1-Dichloroethene	96	9.047	9.047	0.000	92	459471	15.0	14.5	
22 Acetone	43	9.240	9.240	0.000	95	461516	15.0	13.9	
23 Carbon disulfide	76	9.443	9.443	0.000	98	1129569	15.0	14.5	
24 Isopropyl alcohol	45	9.438	9.443	-0.005	99	484121	15.0	14.4	
25 3-Chloro-1-propene	41	9.748	9.748	0.000	92	409384	15.0	15.0	
26 Acetonitrile	41	9.871	9.866	0.005	100	221467	15.0	14.3	
27 Methylene Chloride	49	10.010	10.010	0.000	84	375368	15.0	14.3	
28 2-Methyl-2-propanol	59	10.133	10.128	0.005	92	738949	15.0	14.5	
S 30 1,2-Dichloroethene, Total	61				0		30.0	28.9	
29 Methyl tert-butyl ether	73	10.347	10.353	-0.006	96	1225877	15.0	14.5	
31 trans-1,2-Dichloroethene	61	10.411	10.406	0.005	93	548113	15.0	14.6	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
32 Acrylonitrile	53	10.545	10.545	0.000	96	262720	15.0	14.5	
33 Hexane	57	10.743	10.738	0.005	88	614155	15.0	14.0	
34 1,1-Dichloroethane	63	11.214	11.214	0.000	99	718485	15.0	14.5	
35 Vinyl acetate	43	11.241	11.241	0.000	99	836316	15.0	14.6	
37 cis-1,2-Dichloroethene	96	12.225	12.225	0.000	92	507799	15.0	14.3	
38 2-Butanone (MEK)	72	12.241	12.241	0.000	98	224173	15.0	14.1	
39 Ethyl acetate	88	12.252	12.252	0.000	97	40622	15.0	14.5	
41 Tetrahydrofuran	42	12.648	12.648	0.000	96	391681	15.0	14.3	
* 40 Chlorobromomethane	128	12.653	12.653	0.000	79	257518	10.0	10.0	
42 Chloroform	83	12.744	12.744	0.000	95	875334	15.0	14.5	
43 Cyclohexane	84	13.011	13.011	0.000	93	663548	15.0	14.6	
44 1,1,1-Trichloroethane	97	13.028	13.028	0.000	94	908976	15.0	14.5	
45 Carbon tetrachloride	117	13.258	13.252	0.006	97	982693	15.0	15.6	
46 Isooctane	57	13.611	13.605	0.006	99	2082771	15.0	14.4	
47 Benzene	78	13.669	13.669	0.000	93	1445432	15.0	14.3	
48 1,2-Dichloroethane	62	13.819	13.819	0.000	97	469193	15.0	14.8	
49 n-Heptane	43	13.926	13.921	0.005	86	672252	15.0	14.1	
* 50 1,4-Difluorobenzene	114	14.365	14.365	0.000	92	1236799	10.0	10.0	
52 n-Butanol	56	14.616	14.616	0.000	82	227884	15.0	14.0	
53 Trichloroethene	95	14.798	14.798	0.000	95	647013	15.0	14.5	
A 51 GRO	1	14.972	(7.534-22.410)		0	172847616	15.0	0	
54 1,2-Dichloropropane	63	15.296	15.296	0.000	94	499248	15.0	14.6	
55 Methyl methacrylate	69	15.376	15.371	0.005	92	508008	15.0	14.6	
56 1,4-Dioxane	88	15.456	15.456	0.000	87	240086	15.0	14.1	
57 Dibromomethane	174	15.520	15.520	0.000	89	758808	15.0	14.6	
58 Dichlorobromomethane	83	15.756	15.756	0.000	97	971556	15.0	14.7	
60 cis-1,3-Dichloropropene	75	16.585	16.585	0.000	87	776879	15.0	14.9	
A 59 TVOC as Toluene	92	16.711	(5.277-28.145)		0	297175156	15.0	3472.0	
61 4-Methyl-2-pentanone (MIBK	43	16.815	16.820	-0.005	91	846858	15.0	14.4	
64 n-Octane	43	17.125	17.125	0.000	87	930257	15.0	14.3	
A 62 C8 Range	1	17.125	(17.075-17.175)		0	7962160	NC	NC	
65 Toluene	92	17.136	17.131	0.005	94	1120620	15.0	14.4	
A 63 Toluene Range	92	17.131	(17.091-17.171)		0	7962160	15.0	102.6	
66 trans-1,3-Dichloropropene	75	17.655	17.655	0.000	92	748778	15.0	15.1	
67 1,1,2-Trichloroethane	83	18.008	18.008	0.000	92	520024	15.0	14.6	
68 Tetrachloroethene	166	18.131	18.131	0.000	95	1128370	15.0	14.7	
69 2-Hexanone	43	18.404	18.399	0.005	98	788672	15.0	15.1	
71 Chlorodibromomethane	129	18.741	18.736	0.005	98	1188563	15.0	15.3	
72 Ethylene Dibromide	107	19.019	19.019	0.000	98	1005181	15.0	14.9	
* 74 Chlorobenzene-d5	117	19.859	19.859	0.000	82	1121079	10.0	10.0	
75 Chlorobenzene	112	19.918	19.918	0.000	98	1563177	15.0	14.9	
76 Ethylbenzene	91	20.046	20.046	0.000	96	2390645	15.0	14.6	
S 73 Xylenes, Total	106				0		45.0	44.2	
77 n-Nonane	57	20.116	20.116	0.000	84	1020342	15.0	14.5	
78 m-Xylene & p-Xylene	106	20.276	20.276	0.000	0	2020635	30.0	29.5	
79 o-Xylene	106	21.020	21.020	0.000	98	1017586	15.0	14.7	
80 Styrene	104	21.063	21.063	0.000	95	1580458	15.0	15.2	
81 Bromoform	173	21.443	21.443	0.000	99	1223249	15.0	16.5	
82 Isopropylbenzene	105	21.608	21.608	0.000	94	2825365	15.0	14.6	
$ 83 4-Bromofluorobenzene	95	21.951	21.951	0.000	98	729857	NC	NC	
84 1,1,2,2-Tetrachloroethane	83	22.192	22.192	0.000	98	1339910	15.0	14.7	
85 N-Propylbenzene	91	22.266	22.266	0.000	100	3268357	15.0	14.9	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
86 1,2,3-Trichloropropane	75	22.299	22.299	0.000	94	978857	15.0	14.7	
87 n-Decane	57	22.400	22.400	0.000	90	1311150	15.0	14.9	
88 4-Ethyltoluene	105	22.443	22.443	0.000	98	2839846	15.0	14.9	
89 2-Chlorotoluene	91	22.464	22.464	0.000	96	2235482	15.0	14.9	
90 1,3,5-Trimethylbenzene	105	22.539	22.539	0.000	95	2393000	15.0	14.9	
91 Alpha Methyl Styrene	118	22.887	22.887	0.000	92	1306240	15.0	15.5	
92 tert-Butylbenzene	119	23.010	23.010	0.000	96	2385205	15.0	14.6	
93 1,2,4-Trimethylbenzene	105	23.101	23.096	0.005	95	2377417	15.0	14.9	
94 sec-Butylbenzene	105	23.326	23.326	0.000	99	3451863	15.0	14.8	
95 4-Isopropyltoluene	119	23.529	23.524	0.005	97	3035727	15.0	15.0	
96 1,3-Dichlorobenzene	146	23.577	23.577	0.000	94	1787099	15.0	15.5	
97 1,4-Dichlorobenzene	146	23.716	23.716	0.000	97	1764596	15.0	15.8	
98 Benzyl chloride	91	23.925	23.925	0.000	100	1776950	15.0	16.4	
99 Undecane	57	24.133	24.134	-0.001	92	1382046	15.0	15.1	
100 n-Butylbenzene	91	24.133	24.134	-0.001	97	2476886	15.0	15.7	
101 1,2-Dichlorobenzene	146	24.294	24.294	0.000	99	1669642	15.0	15.3	
102 Dodecane	57	25.861	25.861	0.000	95	1145552	15.0	16.0	
103 1,2,4-Trichlorobenzene	180	27.044	27.044	0.000	93	1174157	15.0	17.3	
104 Hexachlorobutadiene	225	27.242	27.242	0.000	95	1238470	15.0	15.3	
105 Naphthalene	128	27.605	27.605	0.000	99	2185392	15.0	18.2	
106 1,2,3-Trichlorobenzene	180	28.135	28.135	0.000	96	984272	15.0	18.2	

QC Flag Legend

Processing Flags

NC - Not Calibrated

Reagents:

ATTO15CAL5w_00063	Amount Added: 200.00	Units: mL	
ATTO15WISs_00004	Amount Added: 20.00	Units: mL	Run Reagent

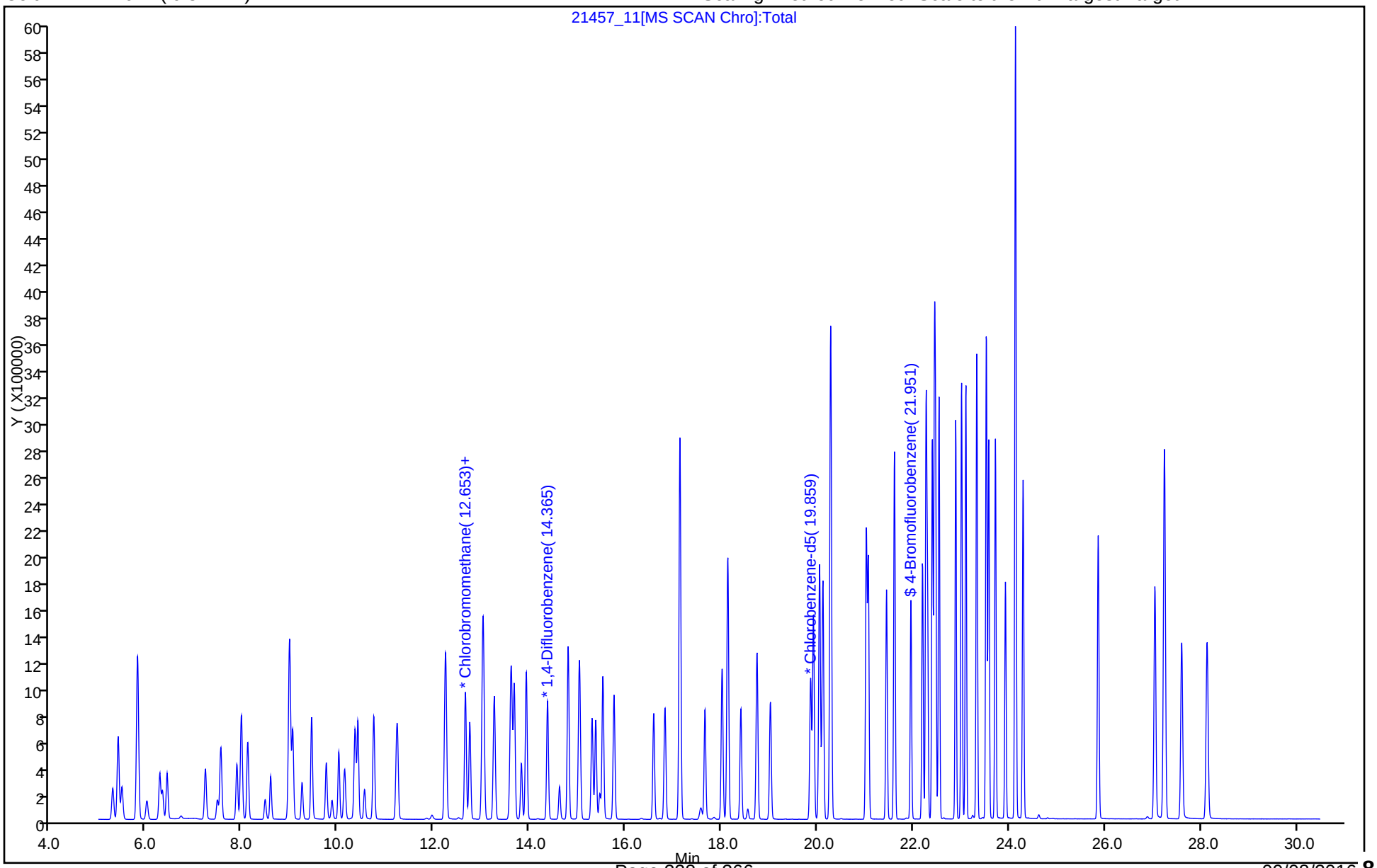
Report Date: 25-Aug-2016 12:35:36 Chrom Revision: 2.2 04-Mar-2016 14:36:24

TestAmerica Burlington

Data File: \\ChromNA\Burlington\ChromData\CHW.i\20160822-21457.b\21457_11.d

Injection Date:	22-Aug-2016 22:53:30	Instrument ID:	CHW.i	Operator ID:	ggg
Lims ID:	ic			Worklist Smp#:	9
Client ID:					
Purge Vol:	200.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	8
Method:	TO15_MasterMethod_(v1)	Limit Group:	AI_TO15_ICAL		

Column: RTX-624 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



TestAmerica Burlington
Target Compound Quantitation Report

Data File: \\ChromNA\Burlington\ChromData\CHW.i\20160822-21457.b\21457_12.d
Lims ID: ic
Client ID:
Sample Type: IC Calib Level: 7
Inject. Date: 22-Aug-2016 23:46:30 ALS Bottle#: 9 Worklist Smp#: 10
Purge Vol: 200.000 mL Dil. Factor: 1.0000
Sample Info: 200-0021457-010
Misc. Info.: icis
Operator ID: ggg Instrument ID: CHW.i
Sublist: chrom-TO15_MasterMethod_(v1)*sub1

Method: \\ChromNA\Burlington\ChromData\CHW.i\20160822-21457.b\TO15_MasterMethod_(v1).m
Limit Group: AI_TO15_ICAL
Last Update: 25-Aug-2016 12:35:32 Calib Date: 23-Aug-2016 00:38:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Burlington\ChromData\CHW.i\20160822-21457.b\21457_13.d

Column 1 : RTX-624 (0.32 mm) Det: MS SCAN
Process Host: XAWRK010

First Level Reviewer: guazzonig Date: 25-Aug-2016 10:54:43

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
1 Propene	41	5.276	5.287	-0.010	99	333792	20.0	21.1	
2 Dichlorodifluoromethane	85	5.383	5.399	-0.016	99	1549677	20.0	20.9	
3 Chlorodifluoromethane	51	5.463	5.479	-0.016	96	715440	20.0	21.0	
4 1,2-Dichloro-1,1,2,2-tetra	85	5.795	5.805	-0.010	98	1515112	20.0	21.0	
5 Chloromethane	50	5.987	5.998	-0.011	99	391417	20.0	20.7	
6 Butane	43	6.266	6.271	-0.005	98	679896	20.0	20.3	
7 Vinyl chloride	62	6.319	6.324	-0.005	97	532617	20.0	21.5	
8 Butadiene	54	6.415	6.421	-0.006	93	393558	20.0	21.0	
10 Bromomethane	94	7.218	7.223	-0.005	99	593385	20.0	20.9	
9 BFB									
11 Chloroethane	64	7.469	7.469	0.000	98	302208	20.0	21.2	
12 2-Methylbutane	43	7.539	7.544	-0.005	91	522326	20.0	20.4	
13 Vinyl bromide	106	7.876	7.881	-0.005	100	681860	20.0	21.2	
14 Trichlorofluoromethane	101	7.972	7.972	0.000	98	1559862	20.0	20.9	
16 Pentane	43	8.106	8.106	0.000	97	813387	20.0	20.7	
17 Ethanol	45	8.475	8.470	0.005	99	452813	40.0	36.2	
18 Ethyl ether	59	8.587	8.587	0.000	94	381727	20.0	21.2	
19 Acrolein	56	8.967	8.972	-0.005	94	156595	20.0	21.4	
20 1,1,2-Trichloro-1,2,2-trif	101	8.978	8.978	0.000	96	1249369	20.0	20.5	
21 1,1-Dichloroethene	96	9.042	9.047	-0.005	94	626498	20.0	21.0	
22 Acetone	43	9.240	9.240	0.000	95	631039	20.0	20.2	
23 Carbon disulfide	76	9.438	9.443	-0.005	98	1536721	20.0	20.9	
24 Isopropyl alcohol	45	9.443	9.443	0.000	54	624391	20.0	19.7	
25 3-Chloro-1-propene	41	9.748	9.748	0.000	92	544181	20.0	21.2	
26 Acetonitrile	41	9.871	9.866	0.005	100	303725	20.0	20.8	
27 Methylene Chloride	49	10.005	10.010	-0.005	83	507186	20.0	20.4	
28 2-Methyl-2-propanol	59	10.133	10.128	0.005	92	968408	20.0	20.2	
S 30 1,2-Dichloroethene, Total	61				0		40.0	41.8	
29 Methyl tert-butyl ether	73	10.347	10.353	-0.006	96	1663766	20.0	20.9	
31 trans-1,2-Dichloroethene	61	10.406	10.406	0.000	92	748161	20.0	21.1	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
32 Acrylonitrile	53	10.545	10.545	0.000	96	361394	20.0	21.1	
33 Hexane	57	10.738	10.738	0.000	88	845248	20.0	20.4	
34 1,1-Dichloroethane	63	11.214	11.214	0.000	99	984788	20.0	21.1	
35 Vinyl acetate	43	11.241	11.241	0.000	99	1144830	20.0	21.2	
37 cis-1,2-Dichloroethene	96	12.225	12.225	0.000	93	691791	20.0	20.7	
38 2-Butanone (MEK)	72	12.246	12.241	0.005	98	306823	20.0	20.4	
39 Ethyl acetate	88	12.252	12.252	0.000	97	56579	20.0	21.3	
41 Tetrahydrofuran	42	12.653	12.648	0.005	96	534262	20.0	20.6	
* 40 Chlorobromomethane	128	12.653	12.653	0.000	83	242952	10.0	10.0	
42 Chloroform	83	12.744	12.744	0.000	94	1189392	20.0	20.9	
43 Cyclohexane	84	13.012	13.011	0.001	93	902277	20.0	21.0	
44 1,1,1-Trichloroethane	97	13.028	13.028	0.000	94	1237416	20.0	20.8	
45 Carbon tetrachloride	117	13.252	13.252	0.000	96	1315710	20.0	22.0	
46 Isooctane	57	13.605	13.605	0.000	99	2840119	20.0	20.7	
47 Benzene	78	13.675	13.669	0.006	93	1968172	20.0	20.6	
48 1,2-Dichloroethane	62	13.819	13.819	0.000	97	642961	20.0	21.4	
49 n-Heptane	43	13.921	13.921	0.000	86	915958	20.0	20.3	
* 50 1,4-Difluorobenzene	114	14.365	14.365	0.000	92	1172160	10.0	10.0	
52 n-Butanol	56	14.622	14.616	0.006	82	315697	20.0	20.4	
53 Trichloroethene	95	14.798	14.798	0.000	95	896057	20.0	21.1	
A 51 GRO	1	14.972	(7.534-22.410)		0	241041112	20.0	0	
54 1,2-Dichloropropane	63	15.296	15.296	0.000	94	683530	20.0	21.1	
55 Methyl methacrylate	69	15.376	15.371	0.005	92	695762	20.0	21.1	
56 1,4-Dioxane	88	15.456	15.456	0.000	87	312744	20.0	19.3	
57 Dibromomethane	174	15.526	15.520	0.006	89	1040061	20.0	21.1	
58 Dichlorobromomethane	83	15.756	15.756	0.000	97	1324756	20.0	21.2	
60 cis-1,3-Dichloropropene	75	16.585	16.585	0.000	87	1057945	20.0	21.4	
A 59 TVOC as Toluene	92	16.711	(5.277-28.145)		0	406140600	20.0	5006.8	
61 4-Methyl-2-pentanone (MIBK	43	16.820	16.820	0.000	91	1136132	20.0	20.3	
64 n-Octane	43	17.125	17.125	0.000	91	1239210	20.0	20.1	
A 62 C8 Range	1	17.125	(17.075-17.175)		0	10721233	NC	NC	
65 Toluene	92	17.136	17.131	0.005	94	1515223	20.0	20.6	
A 63 Toluene Range	92	17.131	(17.091-17.171)		0	10721233	20.0	145.6	
66 trans-1,3-Dichloropropene	75	17.655	17.655	0.000	92	1009701	20.0	21.4	
67 1,1,2-Trichloroethane	83	18.013	18.008	0.005	92	708718	20.0	20.9	
68 Tetrachloroethene	166	18.131	18.131	0.000	95	1546775	20.0	21.3	
69 2-Hexanone	43	18.399	18.399	0.000	98	1074552	20.0	21.7	
71 Chlorodibromomethane	129	18.741	18.736	0.005	98	1604815	20.0	21.7	
72 Ethylene Dibromide	107	19.019	19.019	0.000	98	1372701	20.0	21.4	
* 74 Chlorobenzene-d5	117	19.859	19.859	0.000	81	1063729	10.0	10.0	
75 Chlorobenzene	112	19.918	19.918	0.000	98	2120968	20.0	21.2	
76 Ethylbenzene	91	20.046	20.046	0.000	96	3241094	20.0	20.9	
S 73 Xylenes, Total	106				0		60.0	62.9	
77 n-Nonane	57	20.116	20.116	0.000	84	1377855	20.0	20.6	
78 m-Xylene & p-Xylene	106	20.276	20.276	0.000	0	2720896	40.0	41.8	
79 o-Xylene	106	21.020	21.020	0.000	98	1381331	20.0	21.1	
80 Styrene	104	21.063	21.063	0.000	95	2133001	20.0	21.6	
81 Bromoform	173	21.443	21.443	0.000	99	1604718	20.0	22.7	
82 Isopropylbenzene	105	21.608	21.608	0.000	94	3817132	20.0	20.8	
$ 83 4-Bromofluorobenzene	95	21.951	21.951	0.000	98	699276	NC	NC	
84 1,1,2,2-Tetrachloroethane	83	22.197	22.192	0.005	98	1819790	20.0	21.1	
85 N-Propylbenzene	91	22.272	22.266	0.006	99	4405678	20.0	21.2	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
86 1,2,3-Trichloropropane	75	22.299	22.299	0.000	95	1335240	20.0	21.1	
87 n-Decane	57	22.400	22.400	0.000	90	1769977	20.0	21.2	
88 4-Ethyltoluene	105	22.443	22.443	0.000	98	3828186	20.0	21.2	
89 2-Chlorotoluene	91	22.464	22.464	0.000	96	3047117	20.0	21.4	
90 1,3,5-Trimethylbenzene	105	22.539	22.539	0.000	95	3229843	20.0	21.2	
91 Alpha Methyl Styrene	118	22.887	22.887	0.000	92	1773381	20.0	22.2	
92 tert-Butylbenzene	119	23.010	23.010	0.000	96	3210712	20.0	20.8	
93 1,2,4-Trimethylbenzene	105	23.101	23.096	0.005	95	3206104	20.0	21.2	
94 sec-Butylbenzene	105	23.326	23.326	0.000	99	4634559	20.0	20.9	
95 4-Isopropyltoluene	119	23.524	23.524	0.000	97	4070782	20.0	21.2	
96 1,3-Dichlorobenzene	146	23.577	23.577	0.000	94	2412721	20.0	22.1	
97 1,4-Dichlorobenzene	146	23.716	23.716	0.000	96	2373798	20.0	22.4	
98 Benzyl chloride	91	23.925	23.925	0.000	100	2280503	20.0	22.2	
99 Undecane	57	24.134	24.134	0.000	92	1807359	20.0	20.9	
100 n-Butylbenzene	91	24.134	24.134	0.000	97	3276423	20.0	21.9	
101 1,2-Dichlorobenzene	146	24.294	24.294	0.000	99	2262351	20.0	21.9	
102 Dodecane	57	25.861	25.861	0.000	95	1383836	20.0	20.4	
103 1,2,4-Trichlorobenzene	180	27.044	27.044	0.000	93	1471565	20.0	22.9	
104 Hexachlorobutadiene	225	27.242	27.242	0.000	95	1656131	20.0	21.5	
105 Naphthalene	128	27.605	27.605	0.000	99	2534270	20.0	22.2	
106 1,2,3-Trichlorobenzene	180	28.135	28.135	0.000	96	1249346	20.0	24.3	

QC Flag Legend

Processing Flags

NC - Not Calibrated

Reagents:

ATTO15CAL6w_00130	Amount Added: 200.00	Units: mL	
ATTO15WISs_00004	Amount Added: 20.00	Units: mL	Run Reagent

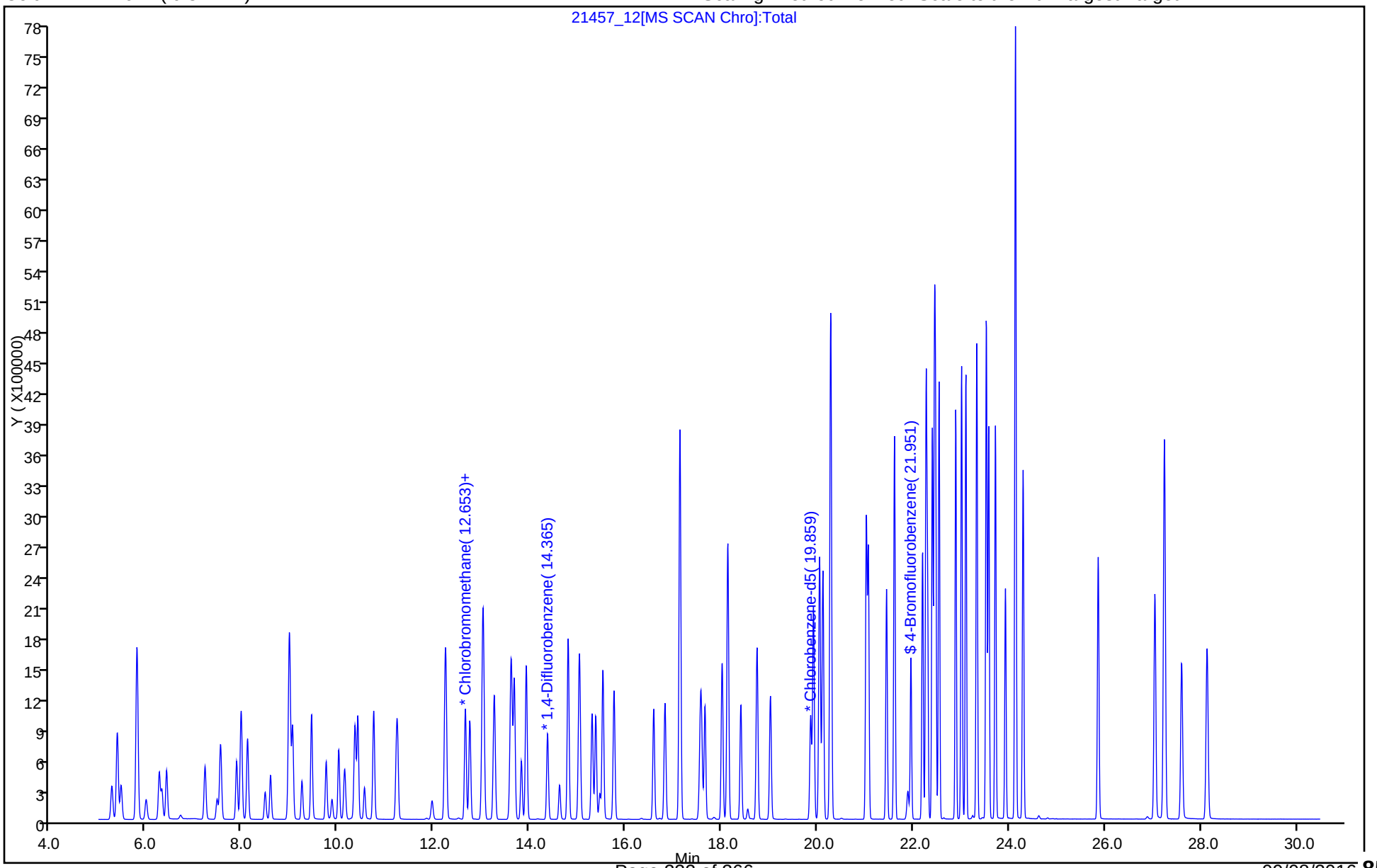
Report Date: 25-Aug-2016 12:35:34 Chrom Revision: 2.2 04-Mar-2016 14:36:24

TestAmerica Burlington

Data File: \\ChromNA\Burlington\ChromData\CHW.i\20160822-21457.b\21457_12.d

Injection Date:	22-Aug-2016 23:46:30	Instrument ID:	CHW.i	Operator ID:	ggg
Lims ID:	ic			Worklist Smp#:	10
Client ID:					
Purge Vol:	200.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	9
Method:	TO15_MasterMethod_(v1)	Limit Group:	AI_TO15_ICAL		

Column: RTX-624 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



TestAmerica Burlington
Target Compound Quantitation Report

Data File: \\ChromNA\Burlington\ChromData\CHW.i\20160822-21457.b\21457_13.d
Lims ID: ic
Client ID:
Sample Type: IC Calib Level: 8
Inject. Date: 23-Aug-2016 00:38:30 ALS Bottle#: 10 Worklist Smp#: 11
Purge Vol: 200.000 mL Dil. Factor: 1.0000
Sample Info: 200-0021457-011
Misc. Info.: ic
Operator ID: ggg Instrument ID: CHW.i
Sublist: chrom-TO15_MasterMethod_(v1)*sub1

Method: \\ChromNA\Burlington\ChromData\CHW.i\20160822-21457.b\TO15_MasterMethod_(v1).m
Limit Group: AI_TO15_ICAL
Last Update: 25-Aug-2016 12:22:17 Calib Date: 23-Aug-2016 00:38:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Burlington\ChromData\CHW.i\20160822-21457.b\21457_13.d

Column 1 : RTX-624 (0.32 mm) Det: MS SCAN
Process Host: XAWRK010

First Level Reviewer: guazzonig Date: 25-Aug-2016 10:55:14

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
1 Propene	41	5.276	5.287	-0.010	99	643644	40.0	37.0	
2 Dichlorodifluoromethane	85	5.388	5.399	-0.011	99	2997033	40.0	36.9	
3 Chlorodifluoromethane	51	5.468	5.479	-0.011	96	1373908	40.0	36.8	
4 1,2-Dichloro-1,1,2,2-tetra	85	5.800	5.805	-0.005	98	2951589	40.0	37.2	
5 Chloromethane	50	5.993	5.998	-0.005	99	762924	40.0	36.8	
6 Butane	43	6.265	6.271	-0.006	98	1370733	40.0	37.3	
7 Vinyl chloride	62	6.319	6.324	-0.005	98	1047675	40.0	38.6	
8 Butadiene	54	6.421	6.421	0.000	93	784641	40.0	38.2	
10 Bromomethane	94	7.223	7.223	0.000	99	1162159	40.0	37.4	
9 BFB									
11 Chloroethane	64	7.474	7.469	0.005	98	591529	40.0	37.8	
12 2-Methylbutane	43	7.544	7.544	0.000	91	1020022	40.0	36.3	
13 Vinyl bromide	106	7.881	7.881	0.000	99	1323386	40.0	37.4	
14 Trichlorofluoromethane	101	7.977	7.972	0.005	98	2978445	40.0	36.3	
16 Pentane	43	8.111	8.106	0.005	97	1575702	40.0	36.5	
17 Ethanol	45	8.480	8.470	0.010	98	1083834	100.0	79.1	
18 Ethyl ether	59	8.587	8.587	0.000	94	744650	40.0	37.7	
19 Acrolein	56	8.972	8.972	0.000	95	271127	40.0	33.7	
20 1,1,2-Trichloro-1,2,2-trif	101	8.983	8.978	0.005	96	2400740	40.0	35.9	
21 1,1-Dichloroethene	96	9.047	9.047	0.000	92	1224133	40.0	37.5	
22 Acetone	43	9.245	9.240	0.005	95	1177095	40.0	34.3	
23 Carbon disulfide	76	9.443	9.443	0.000	98	2965904	40.0	36.9	
24 Isopropyl alcohol	45	9.449	9.443	0.006	99	1193335	40.0	34.3	
25 3-Chloro-1-propene	41	9.748	9.748	0.000	92	1020683	40.0	36.2	
26 Acetonitrile	41	9.871	9.866	0.005	100	575201	40.0	35.9	
27 Methylene Chloride	49	10.010	10.010	0.000	83	971035	40.0	35.6	
28 2-Methyl-2-propanol	59	10.139	10.128	0.011	92	1864240	40.0	35.5	
S 30 1,2-Dichloroethene, Total	61				0		80.0	73.3	
29 Methyl tert-butyl ether	73	10.353	10.353	0.000	96	3183214	40.0	36.4	
31 trans-1,2-Dichloroethene	61	10.411	10.406	0.005	92	1431378	40.0	36.8	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
32 Acrylonitrile	53	10.551	10.545	0.006	96	700257	40.0	37.4	
33 Hexane	57	10.743	10.738	0.005	87	1605893	40.0	35.3	
34 1,1-Dichloroethane	63	11.219	11.214	0.005	99	1872383	40.0	36.5	
35 Vinyl acetate	43	11.246	11.241	0.005	99	2179742	40.0	36.8	
37 cis-1,2-Dichloroethene	96	12.225	12.225	0.000	92	1336337	40.0	36.5	
38 2-Butanone (MEK)	72	12.246	12.241	0.005	98	589964	40.0	35.8	
39 Ethyl acetate	88	12.252	12.252	0.000	97	107721	40.0	37.1	
41 Tetrahydrofuran	42	12.653	12.648	0.005	90	1016992	40.0	37.2	
* 40 Chlorobromomethane	128	12.658	12.653	0.005	78	266451	10.0	10.0	
42 Chloroform	83	12.749	12.744	0.005	94	2281628	40.0	36.5	
43 Cyclohexane	84	13.017	13.011	0.006	93	1723453	40.0	38.0	
44 1,1,1-Trichloroethane	97	13.033	13.028	0.005	94	2350649	40.0	37.4	
45 Carbon tetrachloride	117	13.258	13.252	0.006	97	2545656	40.0	40.3	
46 Isooctane	57	13.611	13.605	0.006	99	5357714	40.0	37.0	
47 Benzene	78	13.675	13.669	0.006	93	3752855	40.0	37.2	
48 1,2-Dichloroethane	62	13.825	13.819	0.006	96	1234659	40.0	38.9	
49 n-Heptane	43	13.926	13.921	0.005	85	1724622	40.0	36.2	
* 50 1,4-Difluorobenzene	114	14.370	14.365	0.005	92	1237845	10.0	10.0	
52 n-Butanol	56	14.622	14.616	0.006	82	598203	40.0	36.6	
53 Trichloroethene	95	14.798	14.798	0.000	95	1710150	40.0	38.2	
A 51 GRO	1	14.972	(7.534-22.410)		0	445459317	40.0	0	
54 1,2-Dichloropropane	63	15.301	15.296	0.005	94	1313497	40.0	38.4	
55 Methyl methacrylate	69	15.376	15.371	0.005	92	1342822	40.0	38.6	
56 1,4-Dioxane	88	15.462	15.456	0.006	88	605822	40.0	35.4	
57 Dibromomethane	174	15.526	15.520	0.006	89	2032596	40.0	39.1	
58 Dichlorobromomethane	83	15.756	15.756	0.000	98	2530182	40.0	38.3	
60 cis-1,3-Dichloropropene	75	16.585	16.585	0.000	87	2038619	40.0	39.0	
A 59 TVOC as Toluene	92	16.711	(5.277-28.145)		0	759553592	40.0	8866.6	
61 4-Methyl-2-pentanone (MIBK	43	16.820	16.820	0.000	91	2183617	40.0	37.0	
64 n-Octane	43	17.125	17.125	0.000	85	2275746	40.0	34.9	
A 62 C8 Range	1	17.125	(17.075-17.175)		0	19958858	NC	NC	
65 Toluene	92	17.136	17.131	0.005	94	2822289	40.0	36.3	
A 63 Toluene Range	92	17.131	(17.091-17.171)		0	19958858	40.0	256.9	
66 trans-1,3-Dichloropropene	75	17.655	17.655	0.000	93	1974791	40.0	39.7	
67 1,1,2-Trichloroethane	83	18.013	18.008	0.005	93	1367061	40.0	38.3	
68 Tetrachloroethene	166	18.131	18.131	0.000	95	2927673	40.0	38.1	
69 2-Hexanone	43	18.404	18.399	0.005	97	2093662	40.0	40.1	
71 Chlorodibromomethane	129	18.741	18.736	0.005	98	3035371	40.0	38.9	
72 Ethylene Dibromide	107	19.019	19.019	0.000	98	2633720	40.0	38.9	
* 74 Chlorobenzene-d5	117	19.859	19.859	0.000	81	1122713	10.0	10.0	
75 Chlorobenzene	112	19.918	19.918	0.000	98	4003032	40.0	38.0	
76 Ethylbenzene	91	20.046	20.046	0.000	96	6062334	40.0	37.0	
S 73 Xylenes, Total	106				0		120.0	109.9	
77 n-Nonane	57	20.116	20.116	0.000	84	2570317	40.0	36.4	
78 m-Xylene & p-Xylene	106	20.282	20.276	0.006	0	4981703	80.0	72.6	
79 o-Xylene	106	21.025	21.020	0.005	98	2582004	40.0	37.4	
80 Styrene	104	21.063	21.063	0.000	95	4003794	40.0	38.3	
81 Bromoform	173	21.443	21.443	0.000	99	2979095	40.0	40.0	
82 Isopropylbenzene	105	21.608	21.608	0.000	94	7010410	40.0	36.1	
$ 83 4-Bromofluorobenzene	95	21.951	21.951	0.000	98	742385	NC	NC	
84 1,1,2,2-Tetrachloroethane	83	22.197	22.192	0.005	98	3420638	40.0	37.5	
85 N-Propylbenzene	91	22.272	22.266	0.006	99	7983078	40.0	36.3	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
86 1,2,3-Trichloropropane	75	22.299	22.299	0.000	95	2500229	40.0	37.5	
87 n-Decane	57	22.400	22.400	0.000	90	3248595	40.0	36.9	
88 4-Ethyltoluene	105	22.443	22.443	0.000	98	6898110	40.0	36.1	
89 2-Chlorotoluene	91	22.470	22.464	0.006	96	5587405	40.0	37.1	
90 1,3,5-Trimethylbenzene	105	22.539	22.539	0.000	95	5961318	40.0	37.1	
91 Alpha Methyl Styrene	118	22.887	22.887	0.000	92	3332505	40.0	39.5	
92 tert-Butylbenzene	119	23.010	23.010	0.000	95	5878133	40.0	36.0	
93 1,2,4-Trimethylbenzene	105	23.101	23.096	0.005	95	5890624	40.0	37.0	
94 sec-Butylbenzene	105	23.331	23.326	0.005	98	8343566	40.0	35.7	
95 4-Isopropyltoluene	119	23.529	23.524	0.005	97	7353592	40.0	36.2	
96 1,3-Dichlorobenzene	146	23.577	23.577	0.000	94	4539942	40.0	39.4	
97 1,4-Dichlorobenzene	146	23.716	23.716	0.000	96	4496959	40.0	40.3	
98 Benzyl chloride	91	23.925	23.925	0.000	100	4737834	40.0	43.8	
99 Undecane	57	24.133	24.134	-0.001	91	3110656	40.0	34.0	
100 n-Butylbenzene	91	24.139	24.134	0.005	97	5724501	40.0	36.2	
101 1,2-Dichlorobenzene	146	24.294	24.294	0.000	98	4285342	40.0	39.3	
102 Dodecane	57	25.861	25.861	0.000	95	2765288	40.0	38.5	
103 1,2,4-Trichlorobenzene	180	27.044	27.044	0.000	93	2932641	40.0	43.2	
104 Hexachlorobutadiene	225	27.247	27.242	0.005	95	3146445	40.0	38.7	
105 Naphthalene	128	27.605	27.605	0.000	99	5579540	40.0	46.3	
106 1,2,3-Trichlorobenzene	180	28.135	28.135	0.000	96	2493338	40.0	46.0	

QC Flag Legend

Processing Flags

NC - Not Calibrated

Reagents:

ATTO15CAL7w_00064	Amount Added: 200.00	Units: mL	
ATTO15WISs_00004	Amount Added: 20.00	Units: mL	Run Reagent

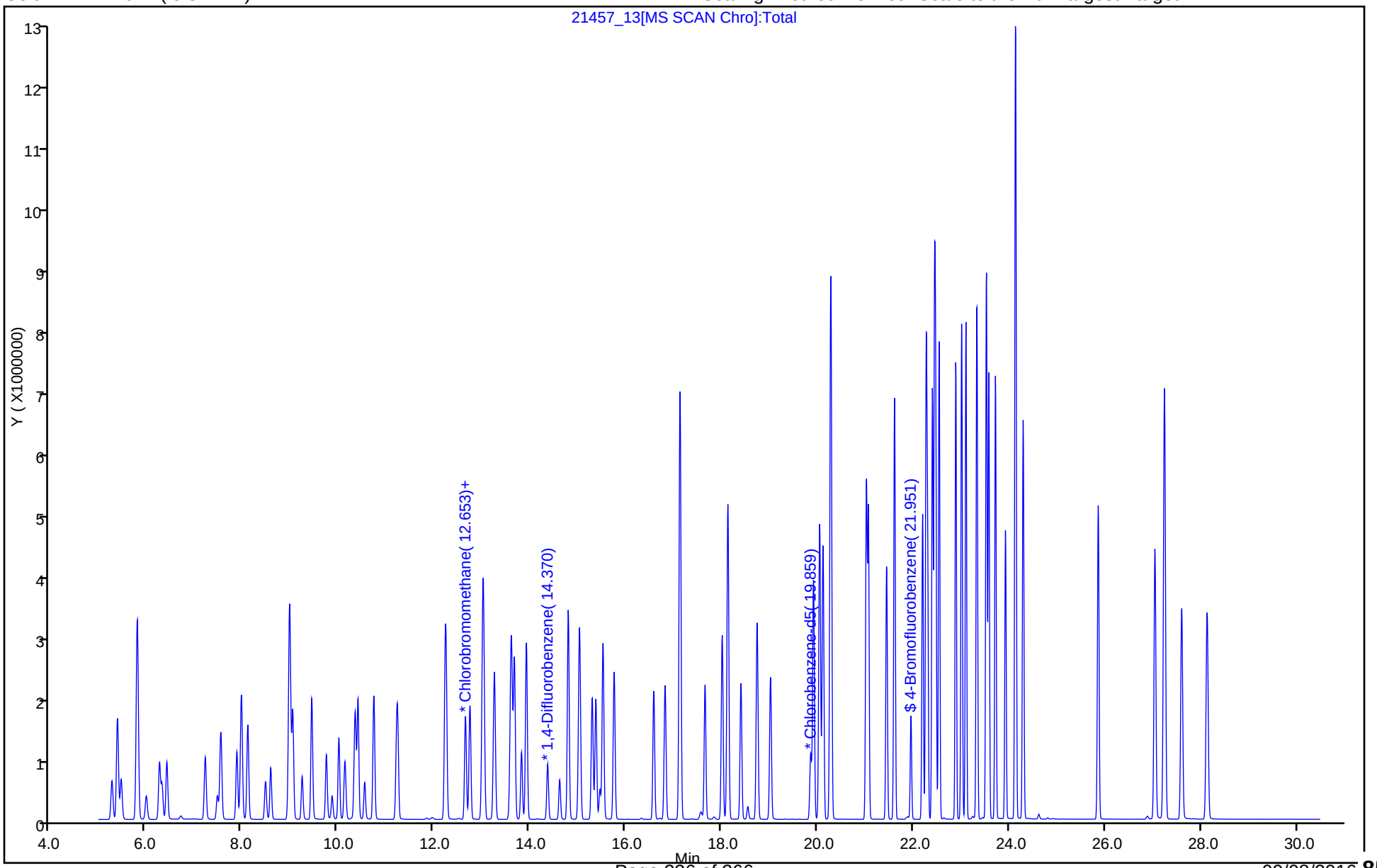
Report Date: 25-Aug-2016 12:22:18 Chrom Revision: 2.2 04-Mar-2016 14:36:24

TestAmerica Burlington

Data File: \\ChromNA\Burlington\ChromData\CHW.i\20160822-21457.b\21457_13.d

Injection Date:	23-Aug-2016 00:38:30	Instrument ID:	CHW.i	Operator ID:	ggg
Lims ID:	ic			Worklist Smp#:	11
Client ID:					
Purge Vol:	200.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	10
Method:	TO15_MasterMethod_(v1)	Limit Group:	AI_TO15_ICAL		

Column: RTX-624 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



FORM VII
AIR - GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Burlington Job No.: 200-35064-1

SDG No.: 200-35064-1

Lab Sample ID: ICV 200-108448/15 Calibration Date: 08/23/2016 04:08

Instrument ID: CHW.i Calib Start Date: 08/22/2016 18:30

GC Column: RTX-624 ID: 0.32(mm) Calib End Date: 08/23/2016 00:38

Lab File ID: 21457_17.d Conc. Units: ppb v/v Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Propylene	Ave	0.6526	0.5948		9.11	10.0	-8.9	30.0
Dichlorodifluoromethane	Ave	3.051	2.884		9.45	10.0	-5.5	30.0
Freon 22	Ave	1.400	1.305		9.32	10.0	-6.8	30.0
1,2-Dichlorotetrafluoroethane	Ave	2.975	3.167		10.6	10.0	6.5	30.0
Chloromethane	Ave	0.7775	0.7058		9.08	10.0	-9.2	30.0
n-Butane	Ave	1.378	1.272		9.23	10.0	-7.7	30.0
Vinyl chloride	Ave	1.018	0.9884		9.71	10.0	-2.9	30.0
1,3-Butadiene	Ave	0.7701	0.7200		9.35	10.0	-6.5	30.0
Bromomethane	Ave	1.166	1.116		9.57	10.0	-4.3	30.0
Chloroethane	Ave	0.5879	0.5571		9.47	10.0	-5.2	30.0
Isopentane	Ave	1.055	1.069		10.1	10.0	1.3	30.0
Bromoethene(Vinyl Bromide)	Ave	1.327	1.277		9.63	10.0	-3.7	30.0
Trichlorofluoromethane	Ave	3.079	2.944		9.56	10.0	-4.4	30.0
n-Pentane	Ave	1.618	1.692		10.5	10.0	4.5	30.0
Ethanol	Ave	0.5145	0.4625		13.5	15.0	-10.1	30.0
Ethyl ether	Ave	0.7419	0.7961		10.7	10.0	7.3	30.0
Acrolein	Ave	0.3019	0.3889		12.9	10.0	28.8	30.0
Freon TF	Ave	2.508	2.423		9.66	10.0	-3.4	30.0
1,1-Dichloroethene	Ave	1.227	1.194		9.74	10.0	-2.6	30.0
Acetone	Ave	1.288	1.255		9.74	10.0	-2.5	30.0
Carbon disulfide	Ave	3.020	3.377		11.2	10.0	11.8	30.0
Isopropyl alcohol	Ave	1.305	1.158		8.87	10.0	-11.3	30.0
3-Chloropropene	Ave	1.058	0.9802		9.26	10.0	-7.4	30.0
Acetonitrile	Ave	0.6017	0.5996		9.96	10.0	-0.3	30.0
Methylene Chloride	Ave	1.023	0.9671		9.45	10.0	-5.4	30.0
tert-Butyl alcohol	Ave	1.973	1.832		9.28	10.0	-7.1	30.0
Methyl tert-butyl ether	Ave	3.283	3.200		9.75	10.0	-2.5	30.0
trans-1,2-Dichloroethene	Ave	1.460	1.511		10.3	10.0	3.5	30.0
Acrylonitrile	Ave	0.7034	0.7114		10.1	10.0	1.1	30.0
n-Hexane	Ave	1.708	1.738		10.2	10.0	1.8	30.0
1,1-Dichloroethane	Ave	1.925	1.913		9.94	10.0	-0.6	30.0
Vinyl acetate	Ave	2.220	2.205		9.93	10.0	-0.7	30.0
cis-1,2-Dichloroethene	Ave	1.375	1.305		9.49	10.0	-5.1	30.0
Methyl Ethyl Ketone	Ave	0.6186	0.5981		9.67	10.0	-3.3	30.0
Ethyl acetate	Ave	0.1091	0.1163		10.7	10.0	6.6	30.0
Tetrahydrofuran	Ave	0.2211	0.2142		9.69	10.0	-3.1	30.0
Chloroform	Ave	2.348	2.305		9.81	10.0	-1.8	30.0
Cyclohexane	Ave	0.3667	0.3628		9.89	10.0	-1.1	30.0
1,1,1-Trichloroethane	Ave	0.5075	0.4944		9.74	10.0	-2.6	30.0
Carbon tetrachloride	Ave	0.5105	0.5312		10.4	10.0	4.1	30.0

FORM VII
AIR - GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Burlington Job No.: 200-35064-1

SDG No.: 200-35064-1

Lab Sample ID: ICV 200-108448/15 Calibration Date: 08/23/2016 04:08

Instrument ID: CHW.i Calib Start Date: 08/22/2016 18:30

GC Column: RTX-624 ID: 0.32(mm) Calib End Date: 08/23/2016 00:38

Lab File ID: 21457_17.d Conc. Units: ppb v/v Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
2,2,4-Trimethylpentane	Ave	1.168	1.114		9.54	10.0	-4.6	30.0
Benzene	Ave	0.8145	0.7832		9.61	10.0	-3.8	30.0
1,2-Dichloroethane	Ave	0.2565	0.2532		9.87	10.0	-1.3	30.0
n-Heptane	Ave	0.3846	0.3604		9.37	10.0	-6.3	30.0
n-Butanol	Ave	0.1320	0.1290		9.77	10.0	-2.3	30.0
Trichloroethene	Ave	0.3618	0.3531		9.76	10.0	-2.4	30.0
1,2-Dichloropropane	Ave	0.2764	0.2653		9.60	10.0	-4.0	30.0
Methyl methacrylate	Ave	0.2810	0.2748		9.78	10.0	-2.2	30.0
1,4-Dioxane	Ave	0.1382	0.1307		9.46	10.0	-5.4	30.0
Dibromomethane	Ave	0.4202	0.4099		9.75	10.0	-2.5	30.0
Bromodichloromethane	Ave	0.5344	0.5170		9.67	10.0	-3.3	30.0
cis-1,3-Dichloropropene	Ave	0.4223	0.4178		9.89	10.0	-1.1	30.0
methyl isobutyl ketone	Ave	0.4768	0.4445		9.32	10.0	-6.8	30.0
n-Octane	Ave	0.5268	0.4994		9.48	10.0	-5.2	30.0
Toluene	Ave	0.6920	0.6775		9.79	10.0	-2.1	30.0
trans-1,3-Dichloropropene	Ave	0.4018	0.3972		9.89	10.0	-1.1	30.0
1,1,2-Trichloroethane	Ave	0.3182	0.3145		9.88	10.0	-1.2	30.0
Tetrachloroethene	Ave	0.6840	0.6760		9.88	10.0	-1.2	30.0
Methyl Butyl Ketone (2-Hexanone)	Ave	0.4651	0.4523		9.72	10.0	-2.7	30.0
Dibromochloromethane	Ave	0.6945	0.6684		9.62	10.0	-3.8	30.0
1,2-Dibromoethane	Ave	0.6030	0.6000		9.95	10.0	-0.5	30.0
Chlorobenzene	Ave	0.9384	0.9316		9.93	10.0	-0.7	30.0
Ethylbenzene	Ave	1.461	1.423		9.74	10.0	-2.6	30.0
n-Nonane	Ave	0.6284	0.6048		9.62	10.0	-3.7	30.0
m,p-Xylene	Ave	0.6115	0.5993		19.6	20.0	-2.0	30.0
Xylene, o-	Ave	0.6154	0.5923		9.62	10.0	-3.8	30.0
Styrene	Ave	0.9302	0.9193		9.88	10.0	-1.2	30.0
Bromoform	Ave	0.6632	0.6423		9.68	10.0	-3.2	30.0
Cumene	Ave	1.728	1.655		9.58	10.0	-4.2	30.0
1,1,2,2-Tetrachloroethane	Ave	0.8127	0.7895		9.71	10.0	-2.8	30.0
n-Propylbenzene	Ave	1.957	1.902		9.72	10.0	-2.8	30.0
1,2,3-Trichloropropane	Ave	0.5938	0.5650		9.51	10.0	-4.9	30.0
n-Decane	Ave	0.7849	0.7613		9.70	10.0	-3.0	30.0
4-Ethyltoluene	Ave	1.701	1.696		9.97	10.0	-0.3	30.0
2-Chlorotoluene	Ave	1.341	1.296		9.66	10.0	-3.4	30.0
1,3,5-Trimethylbenzene	Ave	1.430	1.391		9.73	10.0	-2.7	30.0
Alpha Methyl Styrene	Ave	0.7506	0.7612		10.1	10.0	1.4	30.0
tert-Butylbenzene	Ave	1.452	1.389		9.56	10.0	-4.4	30.0
1,2,4-Trimethylbenzene	Ave	1.419	1.377		9.70	10.0	-2.9	30.0
sec-Butylbenzene	Ave	2.081	2.004		9.63	10.0	-3.7	30.0

FORM VII
AIR - GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Burlington Job No.: 200-35064-1

SDG No.: 200-35064-1

Lab Sample ID: ICV 200-108448/15 Calibration Date: 08/23/2016 04:08

Instrument ID: CHW.i Calib Start Date: 08/22/2016 18:30

GC Column: RTX-624 ID: 0.32(mm) Calib End Date: 08/23/2016 00:38

Lab File ID: 21457_17.d Conc. Units: ppb v/v Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
4-Isopropyltoluene	Ave	1.808	1.761		9.74	10.0	-2.6	30.0
1,3-Dichlorobenzene	Ave	1.027	1.030		10.0	10.0	0.3	30.0
1,4-Dichlorobenzene	Ave	0.9942	1.006		10.1	10.0	1.2	30.0
Benzyl chloride	Ave	0.9636	0.9356		9.71	10.0	-2.9	30.0
n-Undecane	Ave	0.8146	0.8074		9.91	10.0	-0.9	30.0
n-Butylbenzene	Ave	1.409	1.432		10.2	10.0	1.7	30.0
1,2-Dichlorobenzene	Ave	0.9718	0.9504		9.78	10.0	-2.2	30.0
n-Dodecane	Ave	0.6391	0.5946		9.30	10.0	-7.0	30.0
1,2,4-Trichlorobenzene	Ave	0.6041	0.5856		9.69	10.0	-3.1	30.0
Hexachlorobutadiene	Ave	0.7238	0.6685		9.23	10.0	-7.6	30.0
Naphthalene	Ave	1.073	0.9404		8.76	10.0	-12.4	30.0
1,2,3-Trichlorobenzene	Ave	0.4831	0.4342		8.99	10.0	-10.1	30.0

TestAmerica Burlington
Target Compound Quantitation Report

Data File: \\ChromNA\Burlington\ChromData\CHW.i\20160822-21457.b\21457_17.d
Lims ID: icv
Client ID:
Sample Type: ICV
Inject. Date: 23-Aug-2016 04:08:30 ALS Bottle#: 14 Worklist Smp#: 15
Purge Vol: 200.000 mL Dil. Factor: 1.0000
Sample Info: 200-0021457-015
Misc. Info.: vibkl
Operator ID: ggg Instrument ID: CHW.i
Sublist:

Method: \\ChromNA\Burlington\ChromData\CHW.i\20160822-21457.b\TO15_MasterMethod_(v1).m
Limit Group: AI_TO15_ICAL
Last Update: 25-Aug-2016 12:22:17 Calib Date: 23-Aug-2016 00:38:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Burlington\ChromData\CHW.i\20160822-21457.b\21457_13.d

Column 1 : RTX-624 (0.32 mm) Det: MS SCAN
Process Host: XAWRK010

First Level Reviewer: nelsona Date: 25-Aug-2016 11:11:19

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
1 Propene	41	5.281	5.287	-0.005	99	154825	10.0	9.11	
2 Dichlorodifluoromethane	85	5.393	5.399	-0.006	99	750667	10.0	9.45	
3 Chlorodifluoromethane	51	5.474	5.479	-0.005	96	339652	10.0	9.32	
4 1,2-Dichloro-1,1,2,2-tetra	85	5.795	5.805	-0.010	90	824357	10.0	10.6	
5 Chloromethane	50	5.993	5.998	-0.006	99	183716	10.0	9.08	
6 Butane	43	6.265	6.271	-0.006	98	330987	10.0	9.23	
7 Vinyl chloride	62	6.319	6.324	-0.005	98	257271	10.0	9.71	
8 Butadiene	54	6.415	6.421	-0.006	93	187418	10.0	9.35	
10 Bromomethane	94	7.218	7.223	-0.005	99	290574	10.0	9.57	
9 BFB									
11 Chloroethane	64	7.469	7.469	0.000	99	145006	10.0	9.47	
12 2-Methylbutane	43	7.539	7.544	-0.005	92	278193	10.0	10.1	
13 Vinyl bromide	106	7.876	7.881	-0.005	100	332509	10.0	9.63	
14 Trichlorofluoromethane	101	7.972	7.972	0.000	98	766224	10.0	9.56	
16 Pentane	43	8.106	8.106	0.000	97	440389	10.0	10.5	
17 Ethanol	45	8.469	8.470	-0.001	98	180668	15.0	13.5	
18 Ethyl ether	59	8.582	8.587	-0.005	94	207230	10.0	10.7	
19 Acrolein	56	8.967	8.972	-0.005	95	101235	10.0	12.9	
20 1,1,2-Trichloro-1,2,2-trif	101	8.978	8.978	0.000	96	630740	10.0	9.66	
21 1,1-Dichloroethene	96	9.042	9.047	-0.005	92	310891	10.0	9.74	
22 Acetone	43	9.240	9.240	0.000	95	326795	10.0	9.74	
23 Carbon disulfide	76	9.438	9.443	-0.005	98	879016	10.0	11.2	
24 Isopropyl alcohol	45	9.438	9.443	-0.005	98	301409	10.0	8.87	
25 3-Chloro-1-propene	41	9.743	9.748	-0.005	92	255145	10.0	9.26	
26 Acetonitrile	41	9.866	9.866	0.000	100	156069	10.0	9.96	
27 Methylene Chloride	49	10.005	10.010	-0.005	83	251737	10.0	9.45	
28 2-Methyl-2-propanol	59	10.128	10.128	0.000	92	476806	10.0	9.28	
S 30 1,2-Dichloroethene, Total	61				0		20.0	19.8	
29 Methyl tert-butyl ether	73	10.347	10.353	-0.006	96	833013	10.0	9.75	
31 trans-1,2-Dichloroethene	61	10.406	10.406	0.000	93	393318	10.0	10.3	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
32 Acrylonitrile	53	10.545	10.545	0.000	96	185176	10.0	10.1	
33 Hexane	57	10.738	10.738	0.000	88	452409	10.0	10.2	
34 1,1-Dichloroethane	63	11.214	11.214	0.000	99	497942	10.0	9.94	
35 Vinyl acetate	43	11.241	11.241	0.000	99	573868	10.0	9.93	
37 cis-1,2-Dichloroethene	96	12.225	12.225	0.000	92	339778	10.0	9.49	
38 2-Butanone (MEK)	72	12.241	12.241	0.000	98	155672	10.0	9.67	
39 Ethyl acetate	88	12.252	12.252	0.000	97	30283	10.0	10.7	
41 Tetrahydrofuran	42	12.648	12.648	0.000	92	271176	10.0	9.69	
* 40 Chlorobromomethane	128	12.653	12.653	0.000	77	260349	10.0	10.0	
42 Chloroform	83	12.744	12.744	0.000	95	599918	10.0	9.81	
43 Cyclohexane	84	13.006	13.011	-0.005	94	459332	10.0	9.89	
44 1,1,1-Trichloroethane	97	13.027	13.028	-0.001	93	625963	10.0	9.74	
45 Carbon tetrachloride	117	13.252	13.252	0.000	96	672642	10.0	10.4	
46 Isooctane	57	13.605	13.605	0.000	99	1411156	10.0	9.54	
47 Benzene	78	13.669	13.669	0.000	93	991622	10.0	9.61	
48 1,2-Dichloroethane	62	13.819	13.819	0.000	96	320592	10.0	9.87	
49 n-Heptane	43	13.921	13.921	0.000	86	456282	10.0	9.37	
* 50 1,4-Difluorobenzene	114	14.365	14.365	0.000	92	1266445	10.0	10.0	
52 n-Butanol	56	14.616	14.616	0.000	83	163318	10.0	9.77	
53 Trichloroethene	95	14.793	14.798	-0.005	95	447134	10.0	9.76	
A 51 GRO	1	14.972	(7.534-22.410)		0	114904289	10.0	0	
54 1,2-Dichloropropane	63	15.296	15.296	0.000	94	335876	10.0	9.60	
55 Methyl methacrylate	69	15.371	15.371	0.000	93	347935	10.0	9.78	
56 1,4-Dioxane	88	15.456	15.456	0.000	88	165439	10.0	9.46	
57 Dibromomethane	174	15.520	15.520	0.000	89	518990	10.0	9.75	
58 Dichlorobromomethane	83	15.756	15.756	0.000	97	654571	10.0	9.67	
60 cis-1,3-Dichloropropene	75	16.585	16.585	0.000	87	529013	10.0	9.89	
A 59 TVOC as Toluene	92	16.711	(5.277-28.145)		0	194965178	10.0	2224.5	
61 4-Methyl-2-pentanone (MIBK	43	16.815	16.820	-0.005	92	562778	10.0	9.32	
64 n-Octane	43	17.125	17.125	0.000	86	632336	10.0	9.48	
A 62 C8 Range	1	17.125	(17.075-17.175)		0	5474292	NC	NC	
65 Toluene	92	17.131	17.131	0.000	94	777319	10.0	9.79	
A 63 Toluene Range	92	17.131	(17.091-17.171)		0	5474292	10.0	68.9	E
66 trans-1,3-Dichloropropene	75	17.655	17.655	0.000	92	502973	10.0	9.89	
67 1,1,2-Trichloroethane	83	18.008	18.008	0.000	93	360825	10.0	9.88	
68 Tetrachloroethene	166	18.131	18.131	0.000	95	775551	10.0	9.88	
69 2-Hexanone	43	18.398	18.399	-0.001	98	518965	10.0	9.72	
71 Chlorodibromomethane	129	18.741	18.736	0.005	98	766896	10.0	9.62	
72 Ethylene Dibromide	107	19.019	19.019	0.000	98	688370	10.0	9.95	
* 74 Chlorobenzene-d5	117	19.859	19.859	0.000	82	1147513	10.0	10.0	
75 Chlorobenzene	112	19.918	19.918	0.000	98	1068805	10.0	9.93	
76 Ethylbenzene	91	20.046	20.046	0.000	96	1632258	10.0	9.74	
S 73 Xylenes, Total	106				0		30.0	29.2	
77 n-Nonane	57	20.116	20.116	0.000	85	693903	10.0	9.62	
78 m-Xylene & p-Xylene	106	20.276	20.276	0.000	0	1375145	20.0	19.6	
79 o-Xylene	106	21.020	21.020	0.000	98	679527	10.0	9.62	
80 Styrene	104	21.063	21.063	0.000	94	1054747	10.0	9.88	
81 Bromoform	173	21.442	21.443	-0.001	99	736881	10.0	9.68	
82 Isopropylbenzene	105	21.608	21.608	0.000	94	1898330	10.0	9.58	
$ 83 4-Bromofluorobenzene	95	21.951	21.951	0.000	98	742975	NC	NC	
84 1,1,2,2-Tetrachloroethane	83	22.191	22.192	-0.001	98	905832	10.0	9.71	
85 N-Propylbenzene	91	22.266	22.266	0.000	100	2181668	10.0	9.72	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
86 1,2,3-Trichloropropane	75	22.298	22.299	-0.001	96	648226	10.0	9.51	
87 n-Decane	57	22.400	22.400	0.000	90	873431	10.0	9.70	
88 4-Ethyltoluene	105	22.443	22.443	0.000	98	1945943	10.0	9.97	
89 2-Chlorotoluene	91	22.464	22.464	0.000	95	1486629	10.0	9.66	
90 1,3,5-Trimethylbenzene	105	22.539	22.539	0.000	95	1596355	10.0	9.73	
91 Alpha Methyl Styrene	118	22.887	22.887	0.000	92	873298	10.0	10.1	
92 tert-Butylbenzene	119	23.010	23.010	0.000	96	1593138	10.0	9.56	
93 1,2,4-Trimethylbenzene	105	23.101	23.096	0.005	95	1579746	10.0	9.70	
94 sec-Butylbenzene	105	23.326	23.326	0.000	99	2298846	10.0	9.63	
95 4-Isopropyltoluene	119	23.523	23.524	-0.001	98	2020378	10.0	9.74	
96 1,3-Dichlorobenzene	146	23.577	23.577	0.000	94	1181212	10.0	10.0	
97 1,4-Dichlorobenzene	146	23.716	23.716	0.000	97	1154641	10.0	10.1	
98 Benzyl chloride	91	23.925	23.925	0.000	100	1073413	10.0	9.71	
99 Undecane	57	24.128	24.134	-0.006	92	926314	10.0	9.91	
100 n-Butylbenzene	91	24.133	24.134	-0.001	97	1643348	10.0	10.2	
101 1,2-Dichlorobenzene	146	24.294	24.294	0.000	99	1090424	10.0	9.78	
102 Dodecane	57	25.861	25.861	0.000	96	682219	10.0	9.30	
103 1,2,4-Trichlorobenzene	180	27.044	27.044	0.000	93	671801	10.0	9.69	
104 Hexachlorobutadiene	225	27.242	27.242	0.000	95	766955	10.0	9.23	
105 Naphthalene	128	27.600	27.605	-0.005	99	1078914	10.0	8.76	
106 1,2,3-Trichlorobenzene	180	28.135	28.135	0.000	95	498107	10.0	8.99	

QC Flag Legend

Processing Flags

NC - Not Calibrated

E - Exceeded Maximum Amount

7 - Failed Limit of Detection

Reagents:

ATTO15LCSW_00629	Amount Added: 200.00	Units: mL	
ATTO15WISs_00004	Amount Added: 20.00	Units: mL	Run Reagent

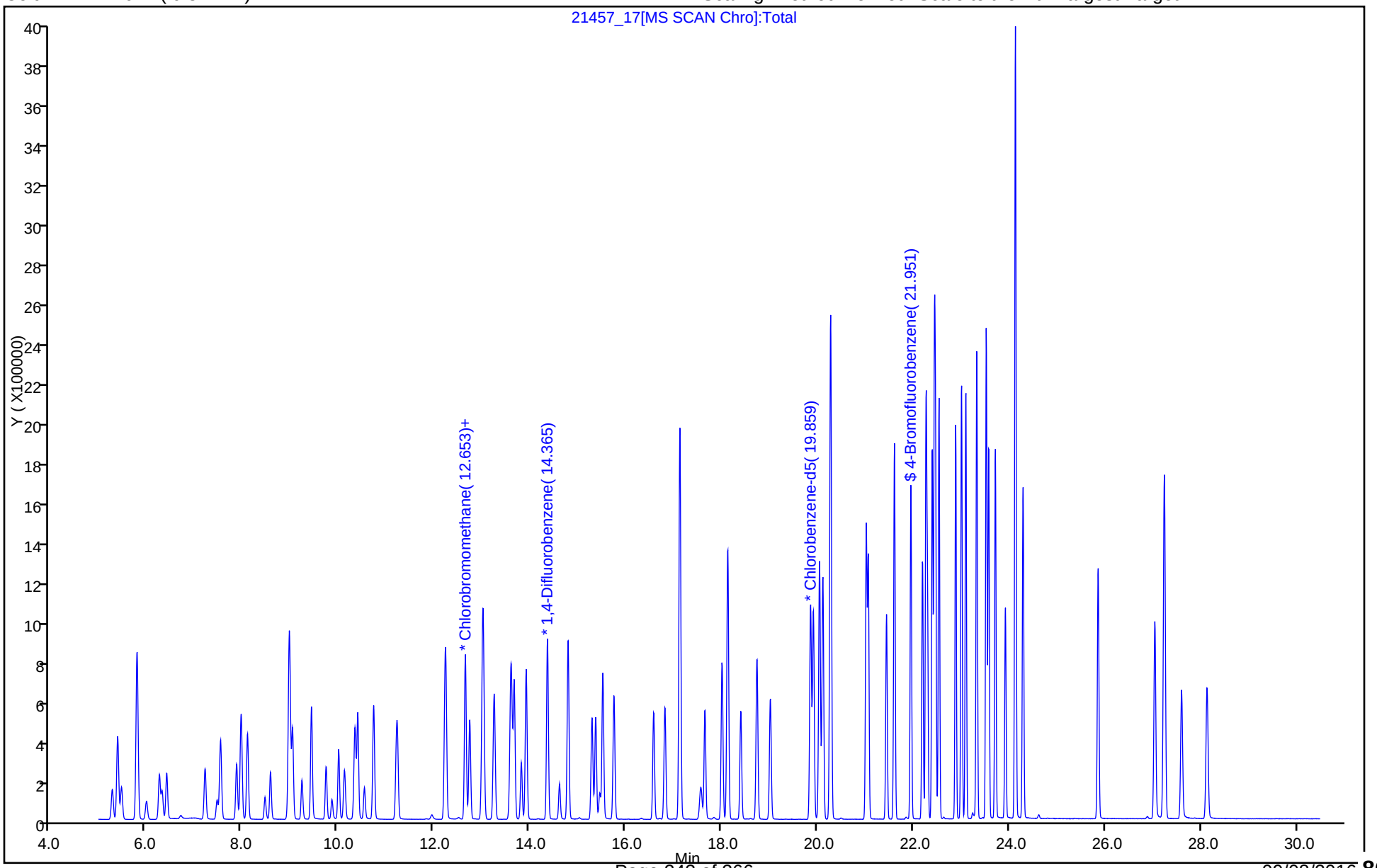
Report Date: 25-Aug-2016 12:22:40 Chrom Revision: 2.2 04-Mar-2016 14:36:24

TestAmerica Burlington

Data File: \\ChromNA\Burlington\ChromData\CHW.i\20160822-21457.b\21457_17.d

Injection Date:	23-Aug-2016 04:08:30	Instrument ID:	CHW.i	Operator ID:	ggg
Lims ID:	icv			Worklist Smp#:	15
Client ID:					
Purge Vol:	200.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	14
Method:	TO15_MasterMethod_(v1)	Limit Group:	AI_TO15_ICAL		

Column: RTX-624 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



FORM VII
AIR - GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Burlington Job No.: 200-35064-1

SDG No.: 200-35064-1

Lab Sample ID: CCVIS 200-108809/2 Calibration Date: 09/02/2016 11:37

Instrument ID: CHW.i Calib Start Date: 08/22/2016 18:30

GC Column: RTX-624 ID: 0.32(mm) Calib End Date: 08/23/2016 00:38

Lab File ID: 21628_02.d Conc. Units: ppb v/v Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Propylene	Ave	0.6526	0.6316		9.68	10.0	-3.2	30.0
Dichlorodifluoromethane	Ave	3.051	2.811		9.21	10.0	-7.9	30.0
Freon 22	Ave	1.400	1.392		9.94	10.0	-0.6	30.0
1,2-Dichlorotetrafluoroethane	Ave	2.975	3.036		10.2	10.0	2.1	30.0
Chloromethane	Ave	0.7775	0.8061		10.4	10.0	3.7	30.0
n-Butane	Ave	1.378	1.367		9.92	10.0	-0.8	30.0
Vinyl chloride	Ave	1.018	1.118		11.0	10.0	9.8	30.0
1,3-Butadiene	Ave	0.7701	0.8156		10.6	10.0	5.9	30.0
Bromomethane	Ave	1.166	1.202		10.3	10.0	3.1	30.0
Chloroethane	Ave	0.5879	0.5956		10.1	10.0	1.3	30.0
Isopentane	Ave	1.055	1.007		9.54	10.0	-4.6	30.0
Bromoethene(Vinyl Bromide)	Ave	1.327	1.335		10.1	10.0	0.6	30.0
Trichlorofluoromethane	Ave	3.079	3.014		9.79	10.0	-2.1	30.0
n-Pentane	Ave	1.618	1.566		9.67	10.0	-3.2	30.0
Ethanol	Ave	0.5145	0.5091		14.8	15.0	-1.0	30.0
Ethyl ether	Ave	0.7419	0.7328		9.87	10.0	-1.2	30.0
Acrolein	Ave	0.3019	0.3125		10.3	10.0	3.5	30.0
Freon TF	Ave	2.508	2.499		9.96	10.0	-0.3	30.0
1,1-Dichloroethene	Ave	1.227	1.221		9.95	10.0	-0.5	30.0
Acetone	Ave	1.288	1.235		9.59	10.0	-4.1	30.0
Carbon disulfide	Ave	3.020	3.026		10.0	10.0	0.2	30.0
Isopropyl alcohol	Ave	1.305	1.166		8.93	10.0	-10.7	30.0
3-Chloropropene	Ave	1.058	0.9813		9.27	10.0	-7.3	30.0
Acetonitrile	Ave	0.6017	0.5538		9.20	10.0	-8.0	30.0
Methylene Chloride	Ave	1.023	0.8797		8.60	10.0	-14.0	30.0
tert-Butyl alcohol	Ave	1.973	1.676		8.49	10.0	-15.0	30.0
Methyl tert-butyl ether	Ave	3.283	3.109		9.47	10.0	-5.3	30.0
trans-1,2-Dichloroethene	Ave	1.460	1.390		9.52	10.0	-4.8	30.0
Acrylonitrile	Ave	0.7034	0.6596		9.37	10.0	-6.2	30.0
n-Hexane	Ave	1.708	1.595		9.34	10.0	-6.6	30.0
1,1-Dichloroethane	Ave	1.925	1.767		9.18	10.0	-8.2	30.0
Vinyl acetate	Ave	2.220	1.851		8.34	10.0	-16.6	30.0
cis-1,2-Dichloroethene	Ave	1.375	1.274		9.27	10.0	-7.3	30.0
Methyl Ethyl Ketone	Ave	0.6186	0.5550		8.97	10.0	-10.3	30.0
Ethyl acetate	Ave	0.1091	0.1023		9.37	10.0	-6.3	30.0
Tetrahydrofuran	Ave	0.2211	0.1750		7.92	10.0	-20.8	30.0
Chloroform	Ave	2.348	1.968		8.38	10.0	-16.2	30.0
Cyclohexane	Ave	0.3667	0.3407		9.29	10.0	-7.1	30.0
1,1,1-Trichloroethane	Ave	0.5075	0.4629		9.12	10.0	-8.8	30.0
Carbon tetrachloride	Ave	0.5105	0.4672		9.15	10.0	-8.5	30.0

FORM VII
AIR - GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Burlington Job No.: 200-35064-1

SDG No.: 200-35064-1

Lab Sample ID: CCVIS 200-108809/2 Calibration Date: 09/02/2016 11:37

Instrument ID: CHW.i Calib Start Date: 08/22/2016 18:30

GC Column: RTX-624 ID: 0.32(mm) Calib End Date: 08/23/2016 00:38

Lab File ID: 21628_02.d Conc. Units: ppb v/v Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
2,2,4-Trimethylpentane	Ave	1.168	1.022		8.74	10.0	-12.5	30.0
Benzene	Ave	0.8145	0.7263		8.92	10.0	-10.8	30.0
1,2-Dichloroethane	Ave	0.2565	0.2344		9.14	10.0	-8.6	30.0
n-Heptane	Ave	0.3846	0.3353		8.72	10.0	-12.8	30.0
n-Butanol	Ave	0.1320	0.1066		8.08	10.0	-19.2	30.0
Trichloroethene	Ave	0.3618	0.3503		9.68	10.0	-3.2	30.0
1,2-Dichloropropane	Ave	0.2764	0.2635		9.53	10.0	-4.7	30.0
Methyl methacrylate	Ave	0.2810	0.2585		9.20	10.0	-8.0	30.0
1,4-Dioxane	Ave	0.1382	0.1252		9.06	10.0	-9.4	30.0
Dibromomethane	Ave	0.4202	0.4277		10.2	10.0	1.8	30.0
Bromodichloromethane	Ave	0.5344	0.5086		9.52	10.0	-4.8	30.0
cis-1,3-Dichloropropene	Ave	0.4223	0.3983		9.43	10.0	-5.7	30.0
methyl isobutyl ketone	Ave	0.4768	0.4114		8.63	10.0	-13.7	30.0
n-Octane	Ave	0.5268	0.4564		8.66	10.0	-13.4	30.0
Toluene	Ave	0.6920	0.7082		10.2	10.0	2.3	30.0
trans-1,3-Dichloropropene	Ave	0.4018	0.3811		9.48	10.0	-5.1	30.0
1,1,2-Trichloroethane	Ave	0.3182	0.3317		10.4	10.0	4.3	30.0
Tetrachloroethene	Ave	0.6840	0.7573		11.1	10.0	10.7	30.0
Methyl Butyl Ketone (2-Hexanone)	Ave	0.4651	0.4579		9.84	10.0	-1.5	30.0
Dibromochloromethane	Ave	0.6945	0.7696		11.1	10.0	10.8	30.0
1,2-Dibromoethane	Ave	0.6030	0.6488		10.8	10.0	7.6	30.0
Chlorobenzene	Ave	0.9384	0.9360		9.97	10.0	-0.3	30.0
Ethylbenzene	Ave	1.461	1.375		9.41	10.0	-5.8	30.0
n-Nonane	Ave	0.6284	0.5625		8.95	10.0	-10.5	30.0
m,p-Xylene	Ave	0.6115	0.6314		20.6	20.0	3.2	30.0
Xylene, o-	Ave	0.6154	0.6504		10.6	10.0	5.7	30.0
Styrene	Ave	0.9302	0.999		10.7	10.0	7.4	30.0
Bromoform	Ave	0.6632	0.7714		11.6	10.0	16.3	30.0
Cumene	Ave	1.728	1.810		10.5	10.0	4.8	30.0
1,1,2,2-Tetrachloroethane	Ave	0.8127	0.8549		10.5	10.0	5.2	30.0
n-Propylbenzene	Ave	1.957	2.092		10.7	10.0	6.9	30.0
1,2,3-Trichloropropane	Ave	0.5938	0.6187		10.4	10.0	4.2	30.0
n-Decane	Ave	0.7849	0.8148		10.4	10.0	3.8	30.0
4-Ethyltoluene	Ave	1.701	1.817		10.7	10.0	6.8	30.0
2-Chlorotoluene	Ave	1.341	1.403		10.5	10.0	4.6	30.0
1,3,5-Trimethylbenzene	Ave	1.430	1.504		10.5	10.0	5.1	30.0
Alpha Methyl Styrene	Ave	0.7506	0.8262		11.0	10.0	10.1	30.0
tert-Butylbenzene	Ave	1.452	1.542		10.6	10.0	6.2	30.0
1,2,4-Trimethylbenzene	Ave	1.419	1.500		10.6	10.0	5.7	30.0
sec-Butylbenzene	Ave	2.081	2.221		10.7	10.0	6.7	30.0

FORM VII
AIR - GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Burlington Job No.: 200-35064-1

SDG No.: 200-35064-1

Lab Sample ID: CCVIS 200-108809/2 Calibration Date: 09/02/2016 11:37

Instrument ID: CHW.i Calib Start Date: 08/22/2016 18:30

GC Column: RTX-624 ID: 0.32(mm) Calib End Date: 08/23/2016 00:38

Lab File ID: 21628_02.d Conc. Units: ppb v/v Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
4-Isopropyltoluene	Ave	1.808	1.943		10.7	10.0	7.5	30.0
1,3-Dichlorobenzene	Ave	1.027	1.147		11.2	10.0	11.7	30.0
1,4-Dichlorobenzene	Ave	0.9942	1.124		11.3	10.0	13.0	30.0
Benzyl chloride	Ave	0.9636	1.051		10.9	10.0	9.0	30.0
n-Undecane	Ave	0.8146	0.6731		8.26	10.0	-17.4	30.0
n-Butylbenzene	Ave	1.409	1.315		9.33	10.0	-6.7	30.0
1,2-Dichlorobenzene	Ave	0.9718	1.022		10.5	10.0	5.2	30.0
n-Dodecane	Ave	0.6391	0.6470		10.1	10.0	1.2	30.0
1,2,4-Trichlorobenzene	Ave	0.6041	0.7300		12.1	10.0	20.8	30.0
Hexachlorobutadiene	Ave	0.7238	0.8117		11.2	10.0	12.1	30.0
Naphthalene	Ave	1.073	1.222		11.4	10.0	13.8	30.0
1,2,3-Trichlorobenzene	Ave	0.4831	0.5998		12.4	10.0	24.2	30.0

TestAmerica Burlington
Target Compound Quantitation Report

Data File: \\ChromNA\Burlington\ChromData\CHW.i\20160902-21628.b\21628_02.d
Lims ID: ccvis
Client ID:
Sample Type: CCVIS
Inject. Date: 02-Sep-2016 11:37:30 ALS Bottle#: 1 Worklist Smp#: 2
Purge Vol: 200.000 mL Dil. Factor: 1.0000
Sample Info: 200-0021628-002
Operator ID: pad Instrument ID: CHW.i
Sublist: chrom-TO15_MasterMethod_(v1)*sub1

Method: \\ChromNA\Burlington\ChromData\CHW.i\20160902-21628.b\TO15_MasterMethod_(v1).m
Limit Group: AI_TO15_ICAL
Last Update: 07-Sep-2016 07:57:09 Calib Date: 23-Aug-2016 00:38:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Burlington\ChromData\CHW.i\20160822-21457.b\21457_13.d

Column 1 : RTX-624 (0.32 mm) Det: MS SCAN
Process Host: XAWRK021

First Level Reviewer: puangmaleek Date: 07-Sep-2016 07:57:09

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
1 Propene	41	5.270	5.270	0.000	99	194685	10.0	9.68	
2 Dichlorodifluoromethane	85	5.383	5.383	0.000	99	866411	10.0	9.21	
3 Chlorodifluoromethane	51	5.463	5.463	0.000	96	429008	10.0	9.94	
4 1,2-Dichloro-1,1,2,2-tetra	85	5.789	5.789	0.000	97	935760	10.0	10.2	
5 Chloromethane	50	5.987	5.987	0.000	99	248465	10.0	10.4	
6 Butane	43	6.260	6.260	0.000	98	421443	10.0	9.92	
7 Vinyl chloride	62	6.314	6.314	0.000	97	344487	10.0	11.0	
8 Butadiene	54	6.415	6.415	0.000	91	251389	10.0	10.6	
10 Bromomethane	94	7.212	7.212	0.000	99	370390	10.0	10.3	
9 BFB									
11 Chloroethane	64	7.464	7.464	0.000	98	183574	10.0	10.1	
12 2-Methylbutane	43	7.539	7.539	0.000	91	310334	10.0	9.54	
13 Vinyl bromide	106	7.876	7.876	0.000	100	411637	10.0	10.1	
14 Trichlorofluoromethane	101	7.967	7.967	0.000	98	929087	10.0	9.79	
16 Pentane	43	8.100	8.100	0.000	97	482666	10.0	9.67	
17 Ethanol	45	8.470	8.470	0.000	99	235484	15.0	14.8	
18 Ethyl ether	59	8.582	8.582	0.000	94	225858	10.0	9.87	
19 Acrolein	56	8.967	8.967	0.000	95	96325	10.0	10.3	
20 1,1,2-Trichloro-1,2,2-trif	101	8.978	8.978	0.000	96	770353	10.0	9.96	
21 1,1-Dichloroethene	96	9.042	9.042	0.000	91	376246	10.0	9.95	
22 Acetone	43	9.240	9.240	0.000	94	380761	10.0	9.59	
24 Isopropyl alcohol	45	9.438	9.438	0.000	54	359418	10.0	8.93	
23 Carbon disulfide	76	9.438	9.438	0.000	98	932825	10.0	10.0	
25 3-Chloro-1-propene	41	9.743	9.743	0.000	90	302464	10.0	9.27	
26 Acetonitrile	41	9.866	9.866	0.000	100	170699	10.0	9.20	
27 Methylene Chloride	49	10.005	10.005	0.000	81	271151	10.0	8.60	
28 2-Methyl-2-propanol	59	10.128	10.128	0.000	92	516544	10.0	8.49	
S 30 1,2-Dichloroethene, Total	61				0		20.0	18.8	
29 Methyl tert-butyl ether	73	10.347	10.347	0.000	96	958216	10.0	9.47	
31 trans-1,2-Dichloroethene	61	10.401	10.401	0.000	91	428546	10.0	9.52	
32 Acrylonitrile	53	10.545	10.545	0.000	96	203303	10.0	9.37	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
33 Hexane	57	10.738	10.738	0.000	86	491770	10.0	9.34	
34 1,1-Dichloroethane	63	11.214	11.214	0.000	99	544685	10.0	9.18	
35 Vinyl acetate	43	11.241	11.241	0.000	99	570632	10.0	8.34	
37 cis-1,2-Dichloroethene	96	12.220	12.220	0.000	86	392761	10.0	9.27	
38 2-Butanone (MEK)	72	12.241	12.241	0.000	98	171063	10.0	8.97	
39 Ethyl acetate	88	12.252	12.252	0.000	97	31524	10.0	9.37	
41 Tetrahydrofuran	42	12.648	12.648	0.000	84	268429	10.0	7.92	
* 40 Chlorobromomethane	128	12.653	12.653	0.000	75	308291	10.0	10.0	
42 Chloroform	83	12.744	12.744	0.000	94	606641	10.0	8.38	
43 Cyclohexane	84	13.011	13.011	0.000	92	522429	10.0	9.29	
44 1,1,1-Trichloroethane	97	13.028	13.028	0.000	94	709886	10.0	9.12	
45 Carbon tetrachloride	117	13.252	13.252	0.000	96	716406	10.0	9.15	
46 Isooctane	57	13.605	13.605	0.000	99	1567081	10.0	8.74	
47 Benzene	78	13.670	13.670	0.000	93	1113754	10.0	8.92	
48 1,2-Dichloroethane	62	13.819	13.819	0.000	96	359506	10.0	9.14	
49 n-Heptane	43	13.921	13.921	0.000	84	514173	10.0	8.72	
* 50 1,4-Difluorobenzene	114	14.365	14.365	0.000	92	1533827	10.0	10.0	
52 n-Butanol	56	14.616	14.616	0.000	81	163537	10.0	8.08	
53 Trichloroethene	95	14.793	14.793	0.000	93	537138	10.0	9.68	
A 51 GRO	1	14.967	(7.529-22.405)		0	142941306	10.0	0	
54 1,2-Dichloropropane	63	15.296	15.296	0.000	95	404068	10.0	9.53	
55 Methyl methacrylate	69	15.371	15.371	0.000	91	396470	10.0	9.20	
56 1,4-Dioxane	88	15.456	15.456	0.000	86	191919	10.0	9.06	
57 Dibromomethane	174	15.521	15.521	0.000	88	655896	10.0	10.2	
58 Dichlorobromomethane	83	15.751	15.751	0.000	97	779987	10.0	9.52	
60 cis-1,3-Dichloropropene	75	16.580	16.580	0.000	86	610722	10.0	9.43	
A 59 TVOC as Toluene	92	16.700	(5.260-28.140)		0	240045262	10.0	2261.4	
61 4-Methyl-2-pentanone (MIBK	43	16.815	16.815	0.000	91	630812	10.0	8.63	
64 n-Octane	43	17.125	17.125	0.000	86	699837	10.0	8.66	
65 Toluene	92	17.131	17.131	0.000	93	906159	10.0	10.2	
66 trans-1,3-Dichloropropene	75	17.650	17.650	0.000	92	584429	10.0	9.48	
67 1,1,2-Trichloroethane	83	18.008	18.008	0.000	91	424472	10.0	10.4	
68 Tetrachloroethene	166	18.126	18.126	0.000	95	969015	10.0	11.1	
69 2-Hexanone	43	18.399	18.399	0.000	97	585941	10.0	9.84	
71 Chlorodibromomethane	129	18.736	18.736	0.000	98	984839	10.0	11.1	
72 Ethylene Dibromide	107	19.019	19.019	0.000	99	830200	10.0	10.8	
* 74 Chlorobenzene-d5	117	19.859	19.859	0.000	81	1279857	10.0	10.0	
75 Chlorobenzene	112	19.918	19.918	0.000	99	1197664	10.0	9.97	
76 Ethylbenzene	91	20.041	20.041	0.000	96	1759884	10.0	9.41	
S 73 Xylenes, Total	106				0		30.0	31.2	
77 n-Nonane	57	20.111	20.111	0.000	83	719807	10.0	8.95	
78 m-Xylene & p-Xylene	106	20.276	20.276	0.000	0	1615828	20.0	20.6	
79 o-Xylene	106	21.020	21.020	0.000	98	832287	10.0	10.6	
80 Styrene	104	21.063	21.063	0.000	94	1278373	10.0	10.7	
81 Bromoform	173	21.443	21.443	0.000	99	987098	10.0	11.6	
82 Isopropylbenzene	105	21.608	21.608	0.000	94	2316576	10.0	10.5	
84 1,1,2,2-Tetrachloroethane	83	22.192	22.192	0.000	98	1093986	10.0	10.5	
85 N-Propylbenzene	91	22.266	22.266	0.000	100	2677410	10.0	10.7	
86 1,2,3-Trichloropropane	75	22.299	22.299	0.000	95	791674	10.0	10.4	
87 n-Decane	57	22.395	22.395	0.000	90	1042555	10.0	10.4	
88 4-Ethyltoluene	105	22.443	22.443	0.000	97	2324791	10.0	10.7	
89 2-Chlorotoluene	91	22.464	22.464	0.000	96	1795182	10.0	10.5	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
90 1,3,5-Trimethylbenzene	105	22.539	22.539	0.000	95	1923937	10.0	10.5	
91 Alpha Methyl Styrene	118	22.887	22.887	0.000	93	1057200	10.0	11.0	
92 tert-Butylbenzene	119	23.010	23.010	0.000	97	1973118	10.0	10.6	
93 1,2,4-Trimethylbenzene	105	23.096	23.096	0.000	95	1918828	10.0	10.6	
94 sec-Butylbenzene	105	23.326	23.326	0.000	99	2842528	10.0	10.7	
95 4-Isopropyltoluene	119	23.524	23.524	0.000	98	2486819	10.0	10.7	
96 1,3-Dichlorobenzene	146	23.577	23.577	0.000	93	1468172	10.0	11.2	
97 1,4-Dichlorobenzene	146	23.716	23.716	0.000	97	1438005	10.0	11.3	
98 Benzyl chloride	91	23.925	23.925	0.000	99	1344618	10.0	10.9	
99 Undecane	57	24.128	24.128	0.000	91	861321	10.0	8.26	
100 n-Butylbenzene	91	24.134	24.134	0.000	97	1682779	10.0	9.33	
101 1,2-Dichlorobenzene	146	24.294	24.294	0.000	99	1308218	10.0	10.5	
102 Dodecane	57	25.861	25.861	0.000	95	827921	10.0	10.1	
103 1,2,4-Trichlorobenzene	180	27.044	27.044	0.000	91	934092	10.0	12.1	
104 Hexachlorobutadiene	225	27.242	27.242	0.000	94	1038669	10.0	11.2	
105 Naphthalene	128	27.600	27.600	0.000	99	1563149	10.0	11.4	
106 1,2,3-Trichlorobenzene	180	28.130	28.130	0.000	95	767541	10.0	12.4	

QC Flag Legend

Processing Flags

7 - Failed Limit of Detection

Reagents:

ATTO15CAL4w_00558	Amount Added: 200.00	Units: mL	
ATTO15WISs_00004	Amount Added: 20.00	Units: mL	Run Reagent

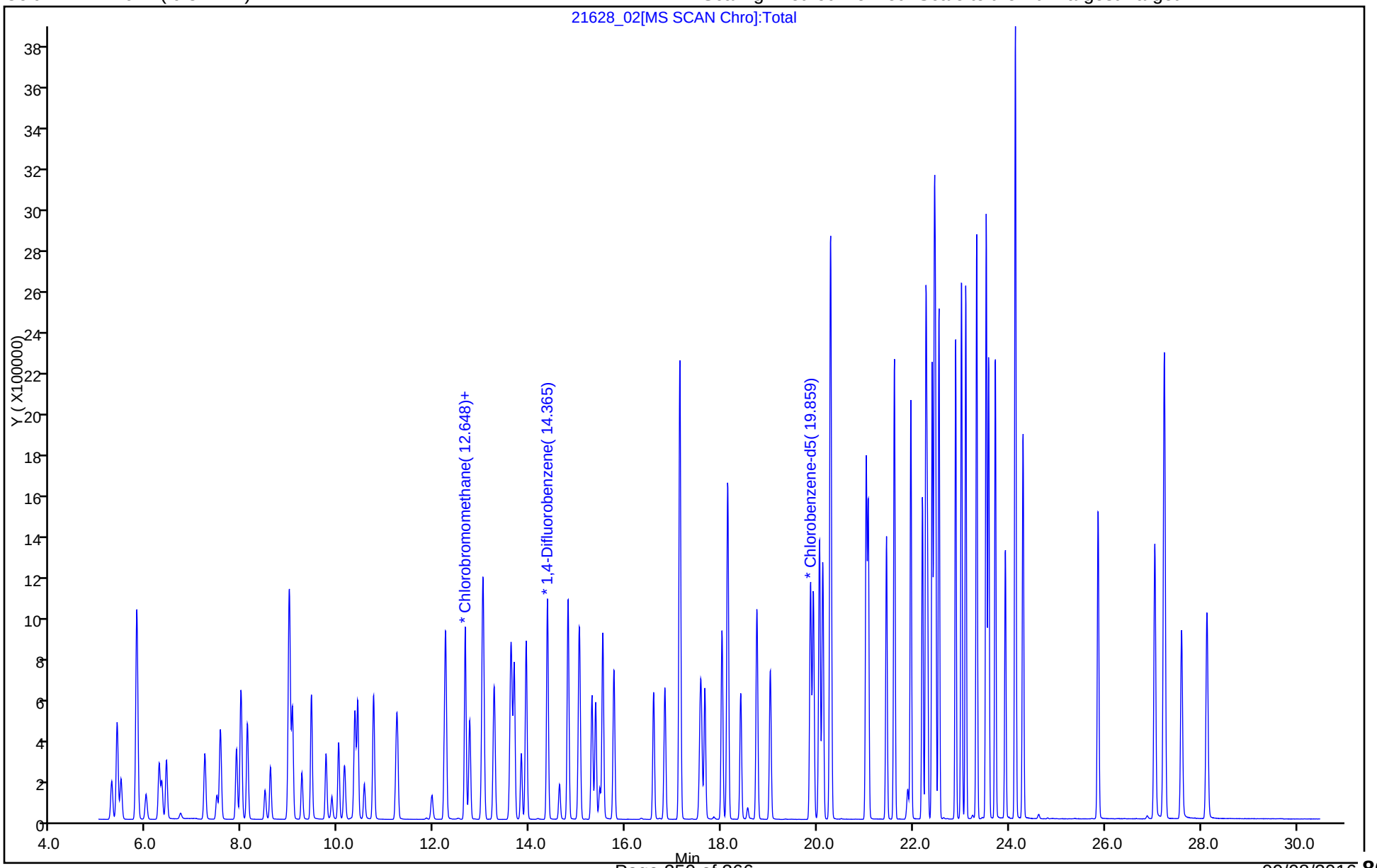
Report Date: 07-Sep-2016 07:57:10 Chrom Revision: 2.2 04-Mar-2016 14:36:24

TestAmerica Burlington

Data File: \\ChromNA\Burlington\ChromData\CHW.i\20160902-21628.b\21628_02.d

Injection Date:	02-Sep-2016 11:37:30	Instrument ID:	CHW.i	Operator ID:	pad
Lims ID:	ccvis			Worklist Smp#:	2
Client ID:					
Purge Vol:	200.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	1
Method:	TO15_MasterMethod_(v1)	Limit Group:	AI_TO15_ICAL		

Column: RTX-624 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



TestAmerica Burlington
Target Compound Quantitation Report

Data File: \\ChromNA\Burlington\ChromData\CHW.i\20160822-21457.b\21457_1b.d
Lims ID: bfb
Client ID:
Sample Type: BFB
Inject. Date: 22-Aug-2016 15:49:30 ALS Bottle#: 1 Worklist Smp#: 1
Injection Vol: 200.0 mL Dil. Factor: 1.0000
Sample Info: 200-0021457-001
Misc. Info.: bfb
Operator ID: ggg Instrument ID: CHW.i

Method: \\ChromNA\Burlington\ChromData\CHW.i\20160822-21457.b\TO15_MasterMethod_(v1).m
Limit Group: AI_TO15_ICAL
Last Update: 25-Aug-2016 12:51:33 Calib Date: 23-Aug-2016 00:38:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Burlington\ChromData\CHW.i\20160822-21457.b\21457_13.d

Column 1 : RTX-624 (0.32 mm) Det: MS SCAN
Process Host: XAWRK018

First Level Reviewer: daiglep Date: 25-Aug-2016 12:50:52

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
9 BFB									
* 40 Chlorobromomethane	128		12.653				10.0	ND	
* 50 1,4-Difluorobenzene	114		14.365				10.0	ND	
* 74 Chlorobenzene-d5	117		19.859				10.0	ND	
$ 83 4-Bromofluorobenzene	95		21.951				ND	ND	

QC Flag Legend

Processing Flags
ND - Not Detected or Marked ND
7 - Failed Limit of Detection

Reagents:

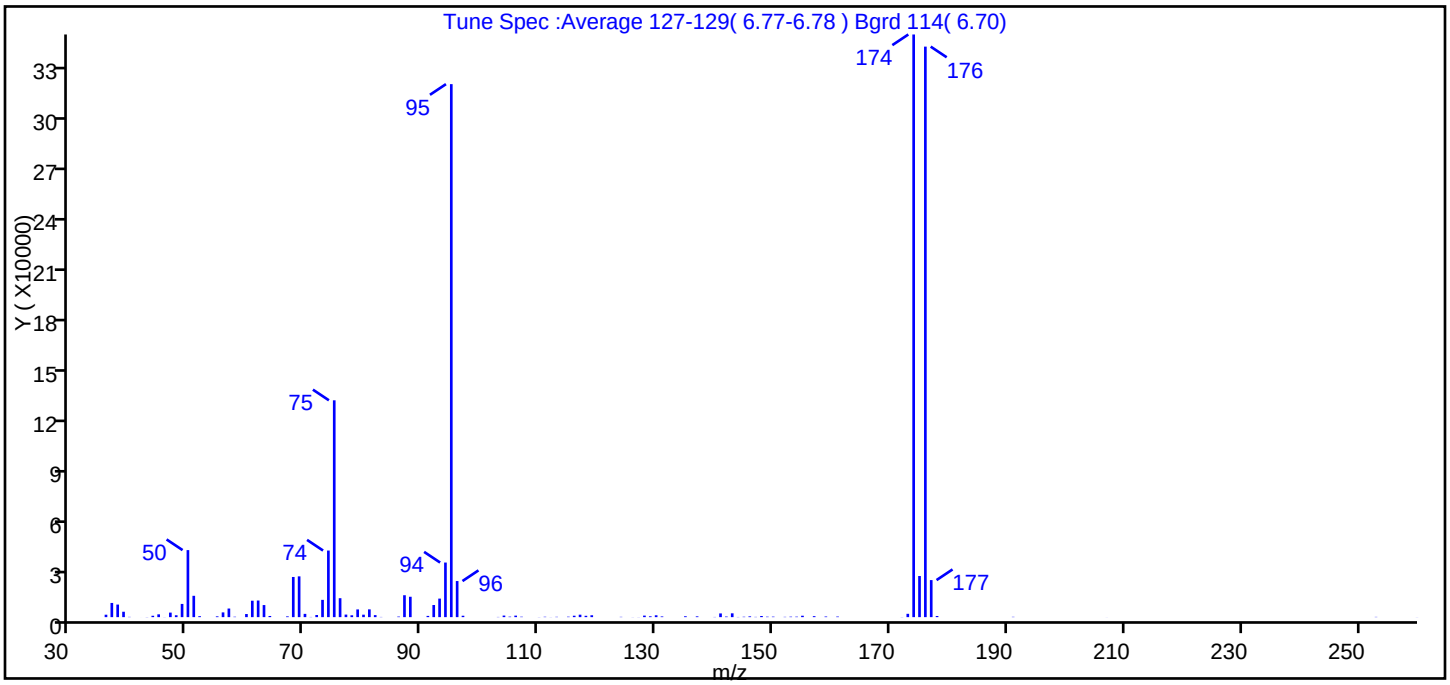
ATTO15WISs_00004 Amount Added: 20.00 Units: mL Run Reagent

MS Tune Report

TestAmerica Burlington

Data File: \\ChromNA\Burlington\ChromData\CHW.i\20160822-21457.b\21457_1b.d
Injection Date: 22-Aug-2016 15:49:30 Instrument ID: CHW.i
Lims ID: bfb
Client ID:
Operator ID: ggg ALS Bottle#: 1 Worklist Smp#: 1
Injection Vol: 200.0 mL Dil. Factor: 1.0000
Method: TO15_MasterMethod_(v1) Limit Group: AI_TO15_ICAL
Tune Method: BFB Method TO-15

9 BFB



m/z	Ion Abundance Criteria	% Relative Abundance
95	Base Peak, 100 Percent Relative Abundance	100.0
50	8.0 to 40.0 Percent of m/e 95	12.6
75	30.0 to 66.0 Percent of m/e 95	40.7
96	5.0 to 9.0 Percent of m/e 95	6.8
173	Less than 2.0 Percent of m/e 174	0.6 (0.6)
174	50.0 to 120.0 Percent of m/e 95	109.3
175	4.0 to 9.0 Percent of m/e 174	7.7 (7.1)
176	93.0 to 101.0 Percent of m/e 174	107.0 (97.9)
177	5.0 to 9.0 Percent of m/e 176	7.0 (6.5)

Data File: \\ChromNA\Burlington\ChromData\CHW.i\20160822-21457.b\21457_1b.d\TO15_MasterMethod_(v1).rslt\s
Injection Date: 22-Aug-2016 15:49:30
Spectrum: Tune Spec :Average 127-129(6.77-6.78) Bgrd 114(6.70)
Base Peak: 174.00
Minimum % Base Peak: 0
Number of Points: 104

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	1462	68.00	24128	103.00	122	143.00	2295
37.00	8524	69.00	24496	104.00	945	144.00	108
38.00	7551	70.00	1971	105.00	296	145.00	241
39.00	3246	71.00	116	106.00	908	146.00	471
40.00	156	72.00	1284	107.00	258	147.00	152
42.00	12	73.00	10386	110.00	64	148.00	685
43.00	75	74.00	40000	111.00	229	149.00	275
44.00	826	75.00	130232	112.00	50	150.00	296
45.00	1684	76.00	11380	113.00	191	152.00	177
46.00	53	77.00	1534	115.00	274	153.00	290
47.00	2727	78.00	1108	116.00	856	154.00	295
48.00	1139	79.00	4640	117.00	1472	155.00	846
49.00	7938	80.00	1479	118.00	816	157.00	587
50.00	40264	81.00	4675	119.00	1131	159.00	382
51.00	12817	82.00	1213	124.00	177	161.00	353
52.00	564	83.00	121	126.00	52	172.00	70
55.00	476	86.00	338	127.00	55	173.00	2004
56.00	2856	87.00	13162	128.00	928	174.00	349952
57.00	5172	88.00	12245	129.00	502	175.00	24704
58.00	246	91.00	749	130.00	1110	176.00	342656
60.00	1871	92.00	7285	131.00	421	177.00	22256
61.00	9864	93.00	11136	135.00	531	178.00	677
62.00	9988	94.00	32792	137.00	476	191.00	188
63.00	7255	95.00	320128	140.00	114	207.00	26
64.00	698	96.00	21680	141.00	2237	253.00	155
67.00	460	97.00	841	142.00	351	260.00	41

TestAmerica Burlington
Target Compound Quantitation Report

Data File: \\ChromNA\Burlington\ChromData\CHW.i\20160902-21628.b\21628_01.d
Lims ID: bfb
Client ID:
Sample Type: BFB
Inject. Date: 02-Sep-2016 10:39:30 ALS Bottle#: 1 Worklist Smp#: 1
Injection Vol: 200.0 mL Dil. Factor: 1.0000
Sample Info: 200-0021628-001
Misc. Info.: bfb
Operator ID: pad Instrument ID: CHW.i

Method: \\ChromNA\Burlington\ChromData\CHW.i\20160902-21628.b\TO15_MasterMethod_(v1).m
Limit Group: AI_TO15_ICAL
Last Update: 07-Sep-2016 07:54:42 Calib Date: 23-Aug-2016 00:38:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Burlington\ChromData\CHW.i\20160822-21457.b\21457_13.d

Column 1 : RTX-624 (0.32 mm) Det: MS SCAN
Process Host: XAWRK021

First Level Reviewer: puangmaleek Date: 07-Sep-2016 07:54:42

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
9 BFB									
* 40 Chlorobromomethane	128		12.653				10.0	ND	
* 50 1,4-Difluorobenzene	114		14.365				10.0	ND	
* 74 Chlorobenzene-d5	117		19.859				10.0	ND	

QC Flag Legend

Processing Flags
7 - Failed Limit of Detection

Reagents:

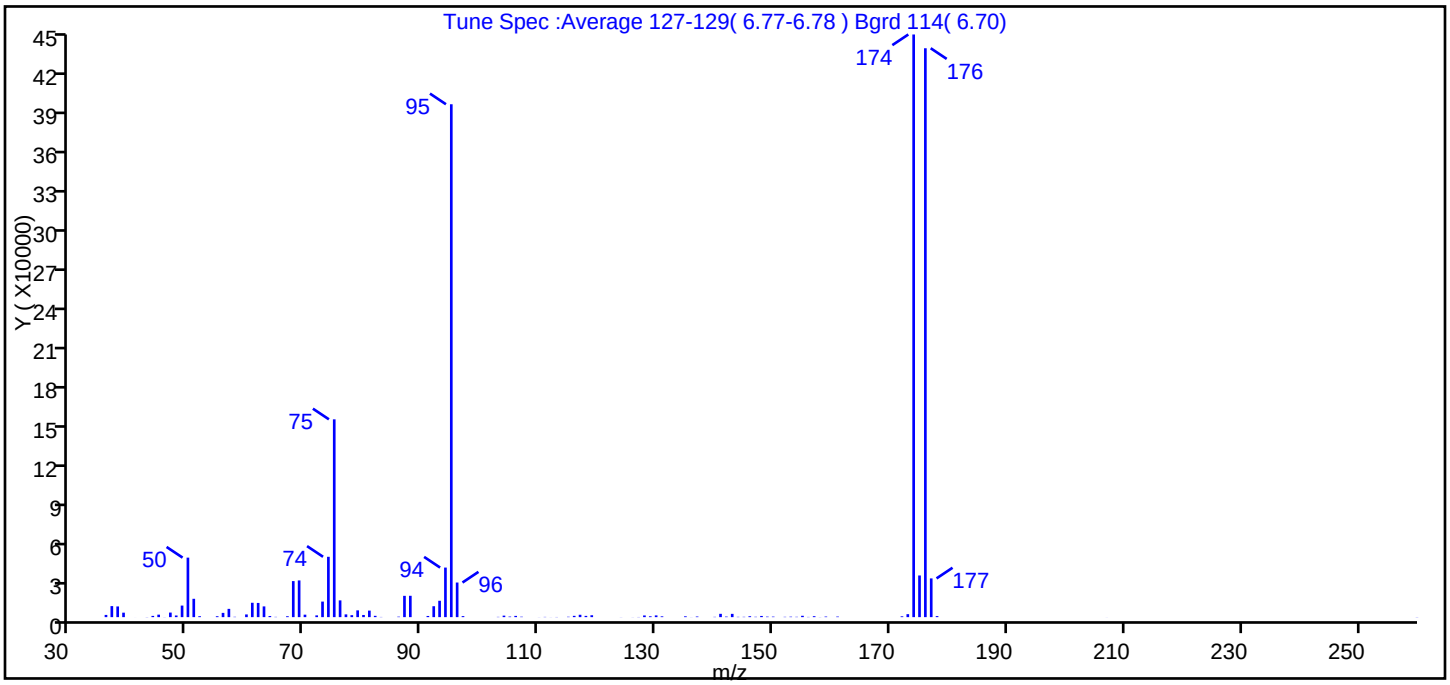
ATTO15WISs_00004 Amount Added: 20.00 Units: mL Run Reagent

MS Tune Report

TestAmerica Burlington

Data File: \\ChromNA\Burlington\ChromData\CHW.i\20160902-21628.b\21628_01.d
Injection Date: 02-Sep-2016 10:39:30 Instrument ID: CHW.i
Lims ID: bfb
Client ID:
Operator ID: pad ALS Bottle#: 1 Worklist Smp#: 1
Injection Vol: 200.0 mL Dil. Factor: 1.0000
Method: TO15_MasterMethod_(v1) Limit Group: AI_TO15_ICAL
Tune Method: BFB Method TO-15

9 BFB



m/z	Ion Abundance Criteria	% Relative Abundance
95	Base Peak, 100 Percent Relative Abundance	100.0
50	8.0 to 40.0 Percent of m/e 95	11.6
75	30.0 to 66.0 Percent of m/e 95	38.6
96	5.0 to 9.0 Percent of m/e 95	6.7
173	Less than 2.0 Percent of m/e 174	0.6 (0.5)
174	50.0 to 120.0 Percent of m/e 95	113.6
175	4.0 to 9.0 Percent of m/e 174	8.1 (7.2)
176	93.0 to 101.0 Percent of m/e 174	110.9 (97.6)
177	5.0 to 9.0 Percent of m/e 176	7.6 (6.8)

Data File: \\ChromNA\Burlington\ChromData\CHW.i\20160902-21628.b\21628_01.d\TO15_MasterMethod_(v1).rslt\s
Injection Date: 02-Sep-2016 10:39:30
Spectrum: Tune Spec :Average 127-129(6.77-6.78) Bgrd 114(6.70)
Base Peak: 174.00
Minimum % Base Peak: 0
Number of Points: 104

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	1705	68.00	27640	104.00	1153	143.00	2519
37.00	8461	69.00	28152	105.00	436	144.00	237
38.00	8205	70.00	1896	106.00	962	145.00	243
39.00	3431	72.00	1352	107.00	330	146.00	703
41.00	19	73.00	11927	110.00	54	147.00	270
43.00	102	74.00	46280	111.00	184	148.00	918
44.00	957	75.00	151680	112.00	50	149.00	387
45.00	1913	76.00	12858	113.00	127	150.00	395
46.00	75	77.00	2115	115.00	295	152.00	242
47.00	3507	78.00	1502	116.00	997	153.00	355
48.00	1273	79.00	5198	117.00	1817	154.00	255
49.00	8869	80.00	1658	118.00	976	155.00	1038
50.00	45632	81.00	5011	119.00	1454	156.00	168
51.00	14069	82.00	1008	124.00	65	157.00	722
52.00	699	83.00	150	126.00	59	158.00	77
55.00	696	86.00	364	127.00	127	159.00	448
56.00	3268	87.00	16336	128.00	1295	161.00	439
57.00	6350	88.00	16373	129.00	652	172.00	630
58.00	256	91.00	905	130.00	1325	173.00	2283
60.00	2079	92.00	8375	131.00	606	174.00	446784
61.00	11021	93.00	12560	135.00	632	175.00	31952
62.00	10891	94.00	38008	136.00	51	176.00	436224
63.00	8235	95.00	393280	137.00	476	177.00	29704
64.00	836	96.00	26544	140.00	221	178.00	799
65.00	201	97.00	783	141.00	2543	207.00	34
67.00	689	103.00	206	142.00	413	260.00	114

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington Job No.: 200-35064-1

SDG No.: 200-35064-1

Client Sample ID: Lab Sample ID: MB 200-108809/4

Matrix: Air Lab File ID: 21628_04.d

Analysis Method: TO-15 Date Collected:

Sample wt/vol: 200(mL) Date Analyzed: 09/02/2016 13:22

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-624 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 108809 Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	
75-71-8	Dichlorodifluoromethane	120.91	0.50	U	0.50	
75-45-6	Freon 22	86.47	0.50	U	0.50	
76-14-2	1,2-Dichlorotetrafluoroethane	170.92	0.20	U	0.20	
74-87-3	Chloromethane	50.49	0.50	U	0.50	
106-97-8	n-Butane	58.12	0.50	U	0.50	
75-01-4	Vinyl chloride	62.50	0.040	U	0.040	
106-99-0	1,3-Butadiene	54.09	0.20	U	0.20	
74-83-9	Bromomethane	94.94	0.20	U	0.20	
75-00-3	Chloroethane	64.52	0.50	U	0.50	
593-60-2	Bromoethene(Vinyl Bromide)	106.96	0.20	U	0.20	
75-69-4	Trichlorofluoromethane	137.37	0.20	U	0.20	
76-13-1	Freon TF	187.38	0.20	U	0.20	
75-35-4	1,1-Dichloroethene	96.94	0.20	U	0.20	
67-64-1	Acetone	58.08	5.0	U	5.0	
67-63-0	Isopropyl alcohol	60.10	5.0	U	5.0	
75-15-0	Carbon disulfide	76.14	0.50	U	0.50	
107-05-1	3-Chloropropene	76.53	0.50	U	0.50	
75-09-2	Methylene Chloride	84.93	0.50	U	0.50	
75-65-0	tert-Butyl alcohol	74.12	5.0	U	5.0	
1634-04-4	Methyl tert-butyl ether	88.15	0.20	U	0.20	
156-60-5	trans-1,2-Dichloroethene	96.94	0.20	U	0.20	
110-54-3	n-Hexane	86.17	0.20	U	0.20	
75-34-3	1,1-Dichloroethane	98.96	0.20	U	0.20	
78-93-3	Methyl Ethyl Ketone	72.11	0.50	U	0.50	
156-59-2	cis-1,2-Dichloroethene	96.94	0.20	U	0.20	
540-59-0	1,2-Dichloroethene, Total	96.94	0.40	U	0.40	
67-66-3	Chloroform	119.38	0.20	U	0.20	
109-99-9	Tetrahydrofuran	72.11	5.0	U	5.0	
71-55-6	1,1,1-Trichloroethane	133.41	0.20	U	0.20	
110-82-7	Cyclohexane	84.16	0.20	U	0.20	
56-23-5	Carbon tetrachloride	153.81	0.040	U	0.040	
540-84-1	2,2,4-Trimethylpentane	114.23	0.20	U	0.20	
71-43-2	Benzene	78.11	0.20	U	0.20	
107-06-2	1,2-Dichloroethane	98.96	0.20	U	0.20	

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington Job No.: 200-35064-1

SDG No.: 200-35064-1

Client Sample ID: Lab Sample ID: MB 200-108809/4

Matrix: Air Lab File ID: 21628_04.d

Analysis Method: TO-15 Date Collected:

Sample wt/vol: 200(mL) Date Analyzed: 09/02/2016 13:22

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-624 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 108809 Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	
142-82-5	n-Heptane	100.21	0.20	U	0.20	
79-01-6	Trichloroethene	131.39	0.040	U	0.040	
80-62-6	Methyl methacrylate	100.12	0.50	U	0.50	
78-87-5	1,2-Dichloropropane	112.99	0.20	U	0.20	
123-91-1	1,4-Dioxane	88.11	5.0	U	5.0	
75-27-4	Bromodichloromethane	163.83	0.20	U	0.20	
10061-01-5	cis-1,3-Dichloropropene	110.97	0.20	U	0.20	
108-10-1	methyl isobutyl ketone	100.16	0.50	U	0.50	
108-88-3	Toluene	92.14	0.20	U	0.20	
10061-02-6	trans-1,3-Dichloropropene	110.97	0.20	U	0.20	
79-00-5	1,1,2-Trichloroethane	133.41	0.20	U	0.20	
127-18-4	Tetrachloroethene	165.83	0.20	U	0.20	
591-78-6	Methyl Butyl Ketone (2-Hexanone)	100.20	0.50	U	0.50	
124-48-1	Dibromochloromethane	208.29	0.20	U	0.20	
106-93-4	1,2-Dibromoethane	187.87	0.20	U	0.20	
108-90-7	Chlorobenzene	112.56	0.20	U	0.20	
100-41-4	Ethylbenzene	106.17	0.20	U	0.20	
179601-23-1	m,p-Xylene	106.17	0.50	U	0.50	
95-47-6	Xylene, o-	106.17	0.20	U	0.20	
1330-20-7	Xylene (total)	106.17	0.70	U	0.70	
100-42-5	Styrene	104.15	0.20	U	0.20	
75-25-2	Bromoform	252.75	0.20	U	0.20	
98-82-8	Cumene	120.19	0.20	U	0.20	
79-34-5	1,1,2,2-Tetrachloroethane	167.85	0.20	U	0.20	
103-65-1	n-Propylbenzene	120.19	0.20	U	0.20	
622-96-8	4-Ethyltoluene	120.20	0.20	U	0.20	
108-67-8	1,3,5-Trimethylbenzene	120.20	0.20	U	0.20	
95-49-8	2-Chlorotoluene	126.59	0.20	U	0.20	
98-06-6	tert-Butylbenzene	134.22	0.20	U	0.20	
95-63-6	1,2,4-Trimethylbenzene	120.20	0.20	U	0.20	
135-98-8	sec-Butylbenzene	134.22	0.20	U	0.20	
99-87-6	4-Isopropyltoluene	134.22	0.20	U	0.20	
541-73-1	1,3-Dichlorobenzene	147.00	0.20	U	0.20	
106-46-7	1,4-Dichlorobenzene	147.00	0.20	U	0.20	

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington Job No.: 200-35064-1

SDG No.: 200-35064-1

Client Sample ID: Lab Sample ID: MB 200-108809/4

Matrix: Air Lab File ID: 21628_04.d

Analysis Method: TO-15 Date Collected:

Sample wt/vol: 200(mL) Date Analyzed: 09/02/2016 13:22

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-624 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 108809 Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	
100-44-7	Benzyl chloride	126.58	0.20	U	0.20	
104-51-8	n-Butylbenzene	134.22	0.20	U	0.20	
95-50-1	1,2-Dichlorobenzene	147.00	0.20	U	0.20	
120-82-1	1,2,4-Trichlorobenzene	181.45	0.50	U	0.50	
87-68-3	Hexachlorobutadiene	260.76	0.20	U	0.20	
91-20-3	Naphthalene	128.17	0.50	U	0.50	

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington Job No.: 200-35064-1

SDG No.: 200-35064-1

Client Sample ID: Lab Sample ID: MB 200-108809/4

Matrix: Air Lab File ID: 21628_04.d

Analysis Method: TO-15 Date Collected:

Sample wt/vol: 200(mL) Date Analyzed: 09/02/2016 13:22

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-624 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 108809 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	
75-71-8	Dichlorodifluoromethane	120.91	2.5	U	2.5	
75-45-6	Freon 22	86.47	1.8	U	1.8	
76-14-2	1,2-Dichlorotetrafluoroethane	170.92	1.4	U	1.4	
74-87-3	Chloromethane	50.49	1.0	U	1.0	
106-97-8	n-Butane	58.12	1.2	U	1.2	
75-01-4	Vinyl chloride	62.50	0.10	U	0.10	
106-99-0	1,3-Butadiene	54.09	0.44	U	0.44	
74-83-9	Bromomethane	94.94	0.78	U	0.78	
75-00-3	Chloroethane	64.52	1.3	U	1.3	
593-60-2	Bromoethene(Vinyl Bromide)	106.96	0.87	U	0.87	
75-69-4	Trichlorofluoromethane	137.37	1.1	U	1.1	
76-13-1	Freon TF	187.38	1.5	U	1.5	
75-35-4	1,1-Dichloroethene	96.94	0.79	U	0.79	
67-64-1	Acetone	58.08	12	U	12	
67-63-0	Isopropyl alcohol	60.10	12	U	12	
75-15-0	Carbon disulfide	76.14	1.6	U	1.6	
107-05-1	3-Chloropropene	76.53	1.6	U	1.6	
75-09-2	Methylene Chloride	84.93	1.7	U	1.7	
75-65-0	tert-Butyl alcohol	74.12	15	U	15	
1634-04-4	Methyl tert-butyl ether	88.15	0.72	U	0.72	
156-60-5	trans-1,2-Dichloroethene	96.94	0.79	U	0.79	
110-54-3	n-Hexane	86.17	0.70	U	0.70	
75-34-3	1,1-Dichloroethane	98.96	0.81	U	0.81	
78-93-3	Methyl Ethyl Ketone	72.11	1.5	U	1.5	
156-59-2	cis-1,2-Dichloroethene	96.94	0.79	U	0.79	
540-59-0	1,2-Dichloroethene, Total	96.94	1.6	U	1.6	
67-66-3	Chloroform	119.38	0.98	U	0.98	
109-99-9	Tetrahydrofuran	72.11	15	U	15	
71-55-6	1,1,1-Trichloroethane	133.41	1.1	U	1.1	
110-82-7	Cyclohexane	84.16	0.69	U	0.69	
56-23-5	Carbon tetrachloride	153.81	0.25	U	0.25	
540-84-1	2,2,4-Trimethylpentane	114.23	0.93	U	0.93	
71-43-2	Benzene	78.11	0.64	U	0.64	
107-06-2	1,2-Dichloroethane	98.96	0.81	U	0.81	

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington | Job No.: 200-35064-1

SDG No.: 200-35064-1

Client Sample ID: | Lab Sample ID: MB 200-108809/4

Matrix: Air | Lab File ID: 21628_04.d

Analysis Method: TO-15 | Date Collected:

Sample wt/vol: 200(mL) | Date Analyzed: 09/02/2016 13:22

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: RTX-624 ID: 0.32(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 108809 | Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	
142-82-5	n-Heptane	100.21	0.82	U	0.82	
79-01-6	Trichloroethene	131.39	0.21	U	0.21	
80-62-6	Methyl methacrylate	100.12	2.0	U	2.0	
78-87-5	1,2-Dichloropropane	112.99	0.92	U	0.92	
123-91-1	1,4-Dioxane	88.11	18	U	18	
75-27-4	Bromodichloromethane	163.83	1.3	U	1.3	
10061-01-5	cis-1,3-Dichloropropene	110.97	0.91	U	0.91	
108-10-1	methyl isobutyl ketone	100.16	2.0	U	2.0	
108-88-3	Toluene	92.14	0.75	U	0.75	
10061-02-6	trans-1,3-Dichloropropene	110.97	0.91	U	0.91	
79-00-5	1,1,2-Trichloroethane	133.41	1.1	U	1.1	
127-18-4	Tetrachloroethene	165.83	1.4	U	1.4	
591-78-6	Methyl Butyl Ketone (2-Hexanone)	100.20	2.0	U	2.0	
124-48-1	Dibromochloromethane	208.29	1.7	U	1.7	
106-93-4	1,2-Dibromoethane	187.87	1.5	U	1.5	
108-90-7	Chlorobenzene	112.56	0.92	U	0.92	
100-41-4	Ethylbenzene	106.17	0.87	U	0.87	
179601-23-1	m,p-Xylene	106.17	2.2	U	2.2	
95-47-6	Xylene, o-	106.17	0.87	U	0.87	
1330-20-7	Xylene (total)	106.17	3.0	U	3.0	
100-42-5	Styrene	104.15	0.85	U	0.85	
75-25-2	Bromoform	252.75	2.1	U	2.1	
98-82-8	Cumene	120.19	0.98	U	0.98	
79-34-5	1,1,2,2-Tetrachloroethane	167.85	1.4	U	1.4	
103-65-1	n-Propylbenzene	120.19	0.98	U	0.98	
622-96-8	4-Ethyltoluene	120.20	0.98	U	0.98	
108-67-8	1,3,5-Trimethylbenzene	120.20	0.98	U	0.98	
95-49-8	2-Chlorotoluene	126.59	1.0	U	1.0	
98-06-6	tert-Butylbenzene	134.22	1.1	U	1.1	
95-63-6	1,2,4-Trimethylbenzene	120.20	0.98	U	0.98	
135-98-8	sec-Butylbenzene	134.22	1.1	U	1.1	
99-87-6	4-Isopropyltoluene	134.22	1.1	U	1.1	
541-73-1	1,3-Dichlorobenzene	147.00	1.2	U	1.2	
106-46-7	1,4-Dichlorobenzene	147.00	1.2	U	1.2	

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington Job No.: 200-35064-1

SDG No.: 200-35064-1

Client Sample ID: Lab Sample ID: MB 200-108809/4

Matrix: Air Lab File ID: 21628_04.d

Analysis Method: TO-15 Date Collected:

Sample wt/vol: 200(mL) Date Analyzed: 09/02/2016 13:22

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-624 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 108809 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	
100-44-7	Benzyl chloride	126.58	1.0	U	1.0	
104-51-8	n-Butylbenzene	134.22	1.1	U	1.1	
95-50-1	1,2-Dichlorobenzene	147.00	1.2	U	1.2	
120-82-1	1,2,4-Trichlorobenzene	181.45	3.7	U	3.7	
87-68-3	Hexachlorobutadiene	260.76	2.1	U	2.1	
91-20-3	Naphthalene	128.17	2.6	U	2.6	

TestAmerica Burlington
Target Compound Quantitation Report

Data File: \\ChromNA\Burlington\ChromData\CHW.i\20160902-21628.b\21628_04.d
Lims ID: mb
Client ID:
Sample Type: MB
Inject. Date: 02-Sep-2016 13:22:30 ALS Bottle#: 3 Worklist Smp#: 4
Purge Vol: 200.000 mL Dil. Factor: 1.0000
Sample Info: 200-0021628-004
Operator ID: pad Instrument ID: CHW.i

Method: \\ChromNA\Burlington\ChromData\CHW.i\20160902-21628.b\TO15_MasterMethod_(v1).m
Limit Group: AI_TO15_ICAL
Last Update: 07-Sep-2016 08:07:38 Calib Date: 23-Aug-2016 00:38:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Burlington\ChromData\CHW.i\20160822-21457.b\21457_13.d

Column 1 : RTX-624 (0.32 mm) Det: MS SCAN
Process Host: XAWRK021

First Level Reviewer: puangmaleek Date: 07-Sep-2016 08:07:38

	Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
	1 Propene	41		5.270					ND	
	2 Dichlorodifluoromethane	85		5.383					ND	
	3 Chlorodifluoromethane	51		5.463					ND	
	4 1,2-Dichloro-1,1,2,2-tetra	85		5.789					ND	
	5 Chloromethane	50		5.987					ND	
	6 Butane	43		6.260					ND	
	7 Vinyl chloride	62		6.314					ND	
	8 Butadiene	54		6.415					ND	
	10 Bromomethane	94		7.212					ND	
	11 Chloroethane	64		7.464					ND	
	12 2-Methylbutane	43		7.539					ND	
	13 Vinyl bromide	106		7.876					ND	
	14 Trichlorofluoromethane	101		7.967					ND	
	16 Pentane	43		8.100					ND	
	17 Ethanol	45		8.470					ND	
T	15 Methyl Acetate TIC	43		8.481					ND	
	18 Ethyl ether	59		8.582					ND	
	19 Acrolein	56		8.967					ND	
	20 1,1,2-Trichloro-1,2,2-trif	101		8.978					ND	
	21 1,1-Dichloroethene	96		9.042					ND	
	22 Acetone	43		9.240					ND	
	24 Isopropyl alcohol	45		9.438					ND	
	23 Carbon disulfide	76		9.438					ND	
	25 3-Chloro-1-propene	41		9.743					ND	
	26 Acetonitrile	41		9.866					ND	
	27 Methylene Chloride	49		10.005					ND	
	28 2-Methyl-2-propanol	59		10.128					ND	
S	30 1,2-Dichloroethene, Total	61		10.200					ND	
	29 Methyl tert-butyl ether	73		10.347					ND	
	31 trans-1,2-Dichloroethene	61		10.401					ND	
	32 Acrylonitrile	53		10.545					ND	
	33 Hexane	57		10.738					ND	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
34 1,1-Dichloroethane	63		11.214					ND	
35 Vinyl acetate	43		11.241					ND	
T 36 Methyl cyclohexane TIC	55		11.500					ND	
37 cis-1,2-Dichloroethene	96		12.220					ND	
38 2-Butanone (MEK)	72		12.241					ND	
39 Ethyl acetate	88		12.252					ND	
41 Tetrahydrofuran	42		12.648					ND	
* 40 Chlorobromomethane	128	12.647	12.653	-0.006	76	319421	10.0	10.0	
42 Chloroform	83		12.744					ND	
43 Cyclohexane	84		13.011					ND	
44 1,1,1-Trichloroethane	97		13.028					ND	
45 Carbon tetrachloride	117		13.252					ND	
46 Isooctane	57		13.605					ND	
47 Benzene	78	13.659	13.670	-0.011	82	1982		0.0168	
48 1,2-Dichloroethane	62		13.819					ND	
49 n-Heptane	43		13.921					ND	
* 50 1,4-Difluorobenzene	114	14.359	14.365	-0.006	91	1444794	10.0	10.0	
52 n-Butanol	56		14.616					ND	
53 Trichloroethene	95		14.793					ND	
A 51 GRO	1	14.967	(7.529-22.405)		0	4444915		0	
54 1,2-Dichloropropane	63		15.296					ND	
55 Methyl methacrylate	69		15.371					ND	
56 1,4-Dioxane	88		15.456					ND	
57 Dibromomethane	174	15.520	15.521	0.000	54	768		0.0127	
58 Dichlorobromomethane	83		15.751					ND	
60 cis-1,3-Dichloropropene	75		16.580					ND	
A 59 TVOC as Toluene	92	16.700	(5.260-28.140)		0	4715509		47.2	
61 4-Methyl-2-pentanone (MIBK	43		16.815					ND	
64 n-Octane	43		17.125					ND	
65 Toluene	92		17.131					ND	
66 trans-1,3-Dichloropropene	75		17.650					ND	
67 1,1,2-Trichloroethane	83		18.008					ND	
68 Tetrachloroethene	166		18.126					ND	
69 2-Hexanone	43		18.399					ND	
71 Chlorodibromomethane	129		18.736					ND	
72 Ethylene Dibromide	107		19.019					ND	
T 70 1,2-Dibromo-3-Chloropropan	75		19.141					ND	
* 74 Chlorobenzene-d5	117	19.859	19.859	0.000	81	1372696	10.0	10.0	
75 Chlorobenzene	112		19.918					ND	
76 Ethylbenzene	91		20.041					ND	
S 73 Xylenes, Total	106				0			0.0269	
77 n-Nonane	57		20.111					ND	
78 m-Xylene & p-Xylene	106	20.276	20.276	0.000	0	2254		0.0269	
79 o-Xylene	106		21.020					ND	
80 Styrene	104		21.063					ND	
81 Bromoform	173		21.443					ND	
82 Isopropylbenzene	105		21.608					ND	
84 1,1,2,2-Tetrachloroethane	83		22.192					ND	
85 N-Propylbenzene	91		22.266					ND	
86 1,2,3-Trichloropropane	75		22.299					ND	
87 n-Decane	57		22.395					ND	
88 4-Ethyltoluene	105	22.437	22.443	-0.006	1	2352		0.0101	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
89 2-Chlorotoluene	91		22.464					ND	
90 1,3,5-Trimethylbenzene	105	22.539	22.544	0.000	1	1478		0.007529	7M
91 Alpha Methyl Styrene	118	22.887	22.887	0.000	83	984		0.009551	
92 tert-Butylbenzene	119		23.010					ND	
93 1,2,4-Trimethylbenzene	105	23.106	23.096	0.010	92	2041		0.0105	
94 sec-Butylbenzene	105		23.326					ND	
95 4-Isopropyltoluene	119		23.524					ND	
96 1,3-Dichlorobenzene	146	23.588	23.577	0.011	91	2941		0.0209	
97 1,4-Dichlorobenzene	146	23.711	23.716	-0.005	95	3294		0.0241	
98 Benzyl chloride	91	23.925	23.925	0.000	94	2428		0.0184	
99 Undecane	57		24.128					ND	
100 n-Butylbenzene	91		24.134					ND	
101 1,2-Dichlorobenzene	146	24.299	24.294	0.005	24	2575		0.0193	
102 Dodecane	57		25.861					ND	
103 1,2,4-Trichlorobenzene	180	27.060	27.044	0.016	83	2658		0.0321	
104 Hexachlorobutadiene	225		27.242					ND	
105 Naphthalene	128	27.621	27.600	0.021	93	2632		0.0179	
106 1,2,3-Trichlorobenzene	180	28.156	28.130	0.026	73	1992		0.0300	
T 119 Difluoroethane TIC	1		0.000					ND	
T 120 Freon 115 TIC	1		0.000					ND	
T 121 1,1,1-Trifluoro-2,2-dichlo	1		0.000					ND	
T 118 Chlorotrifluoroethene TIC	1		0.000					ND	
T 107 Methyl acetylene TIC	1		0.000					ND	
T 108 1,1,1,2-Tetrachloroethane	1		0.000					ND	
T 109 1,3-Dichloropropane TIC	1		0.000					ND	

QC Flag Legend

Processing Flags

7 - Failed Limit of Detection

Review Flags

M - Manually Integrated

Reagents:

ATTO15WISs_00004 Amount Added: 20.00 Units: mL Run Reagent

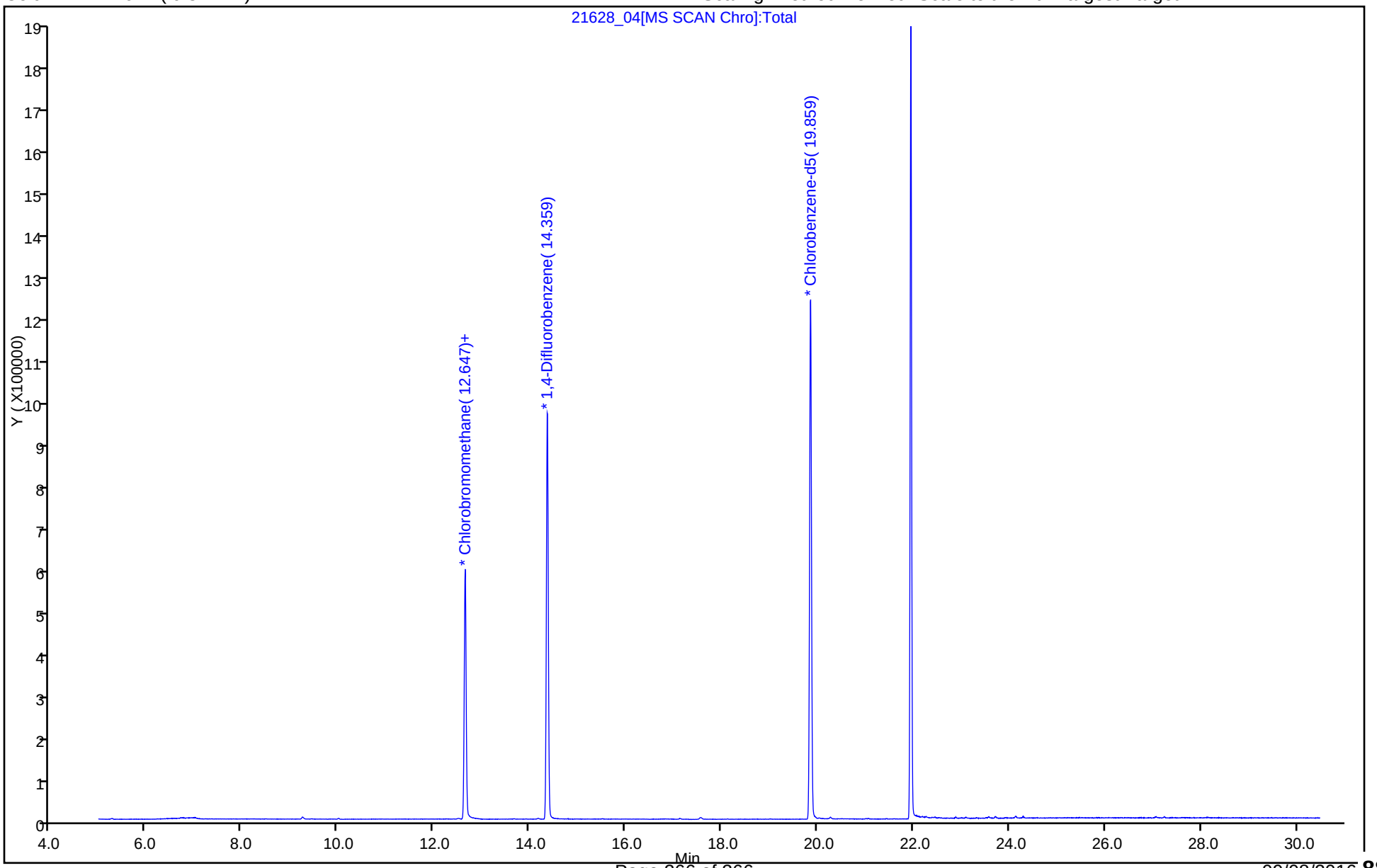
Report Date: 07-Sep-2016 08:07:40 Chrom Revision: 2.2 04-Mar-2016 14:36:24

TestAmerica Burlington

Data File: \\ChromNA\Burlington\ChromData\CHW.i\20160902-21628.b\21628_04.d

Injection Date:	02-Sep-2016 13:22:30	Instrument ID:	CHW.i	Operator ID:	pad
Lims ID:	mb			Worklist Smp#:	4
Client ID:					
Purge Vol:	200.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	3
Method:	TO15_MasterMethod_(v1)	Limit Group:	AI_TO15_ICAL		

Column: RTX-624 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Manual Integration/User Assign Peak Report

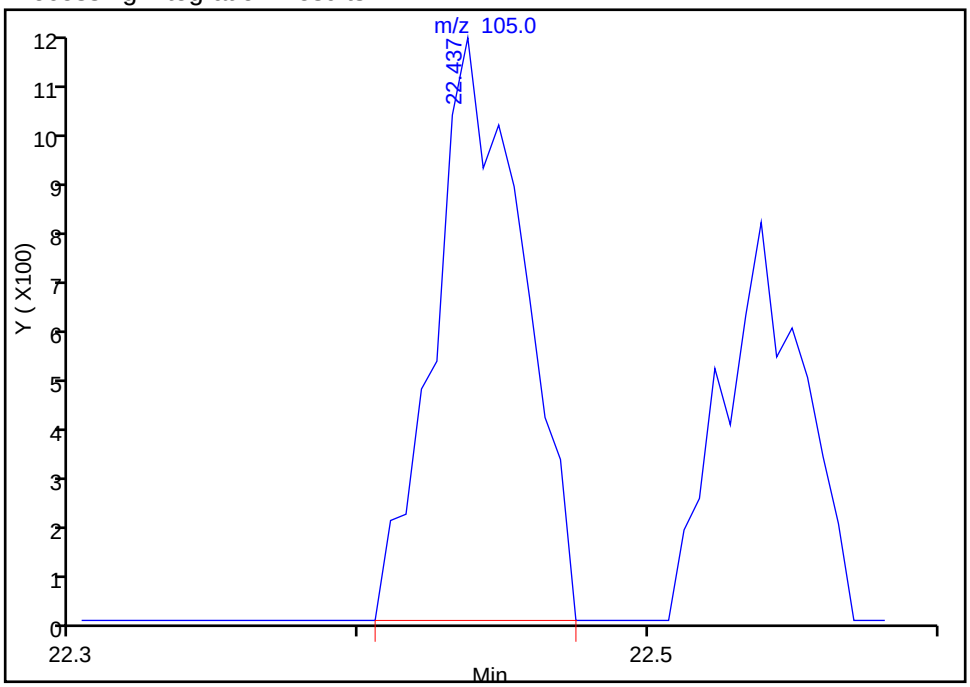
TestAmerica Burlington

Data File:	\\ChromNA\Burlington\ChromData\CHW.i\20160902-21628.b\21628_04.d				
Injection Date:	02-Sep-2016 13:22:30	Instrument ID:	CHW.i		
Lims ID:	mb				
Client ID:					
Operator ID:	pad	ALS Bottle#:	3	Worklist Smp#:	4
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_MasterMethod_(v1)	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

90 1,3,5-Trimethylbenzene, CAS: 108-67-8

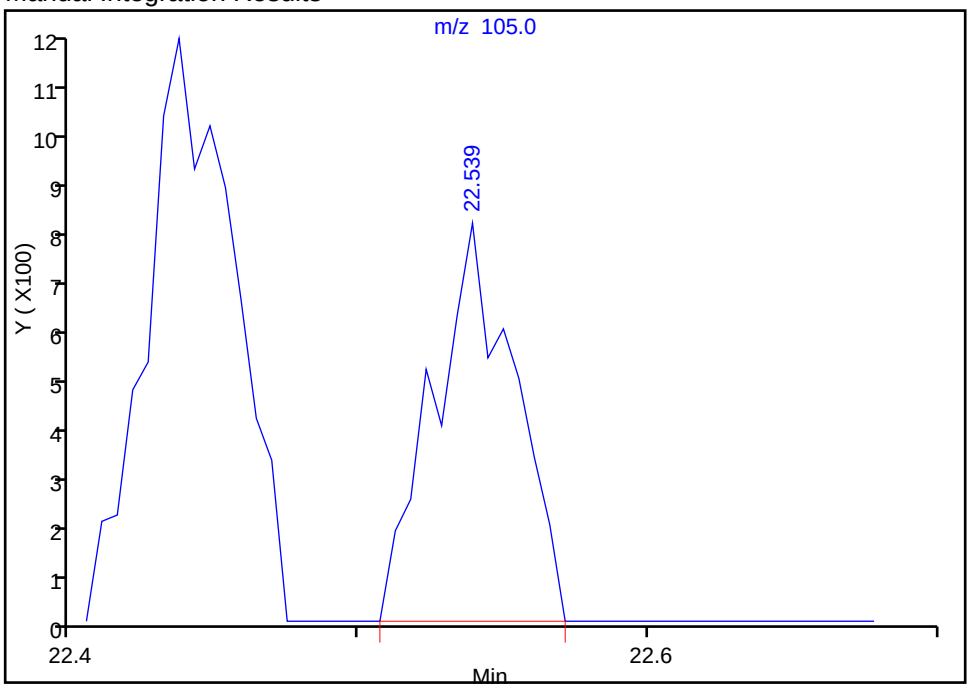
Processing Integration Results

RT: 22.44
Area: 2352
Amount: 0.011981
Amount Units: ppb v/v



Manual Integration Results

RT: 22.54
Area: 1478
Amount: 0.007529
Amount Units: ppb v/v



Reviewer: puangmaleek, 07-Sep-2016 08:07:38
Audit Action: Manually Integrated
Audit Reason: Assign Peak

Manual Integration/User Assign Peak Report

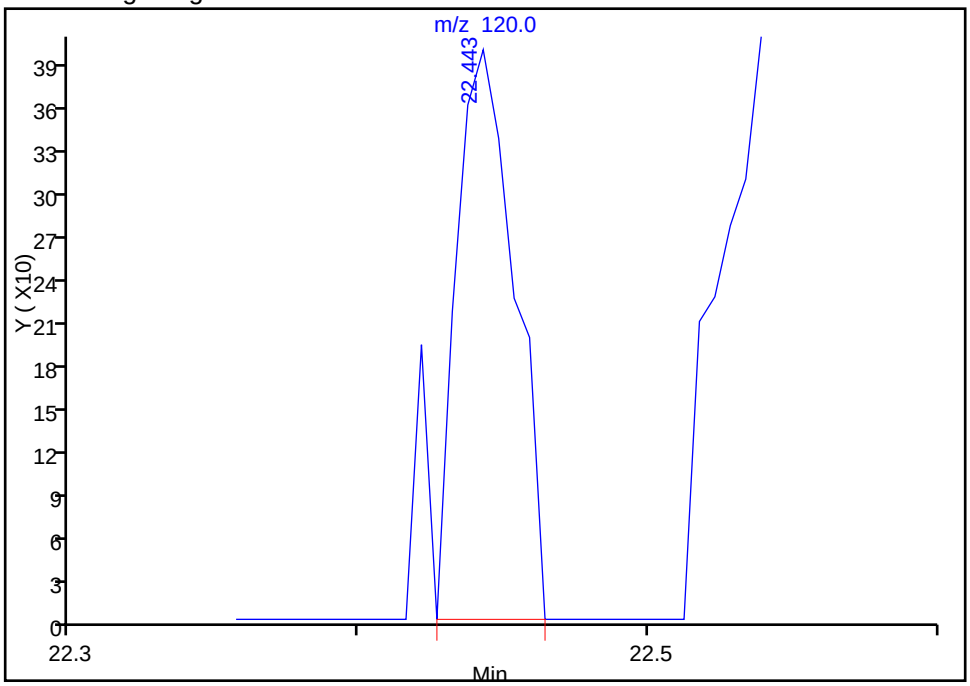
TestAmerica Burlington

Data File:	\\ChromNA\Burlington\ChromData\CHW.i\20160902-21628.b\21628_04.d				
Injection Date:	02-Sep-2016 13:22:30	Instrument ID:	CHW.i		
Lims ID:	mb				
Client ID:					
Operator ID:	pad	ALS Bottle#:	3	Worklist Smp#:	4
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_MasterMethod_(v1)	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

90 1,3,5-Trimethylbenzene, CAS: 108-67-8

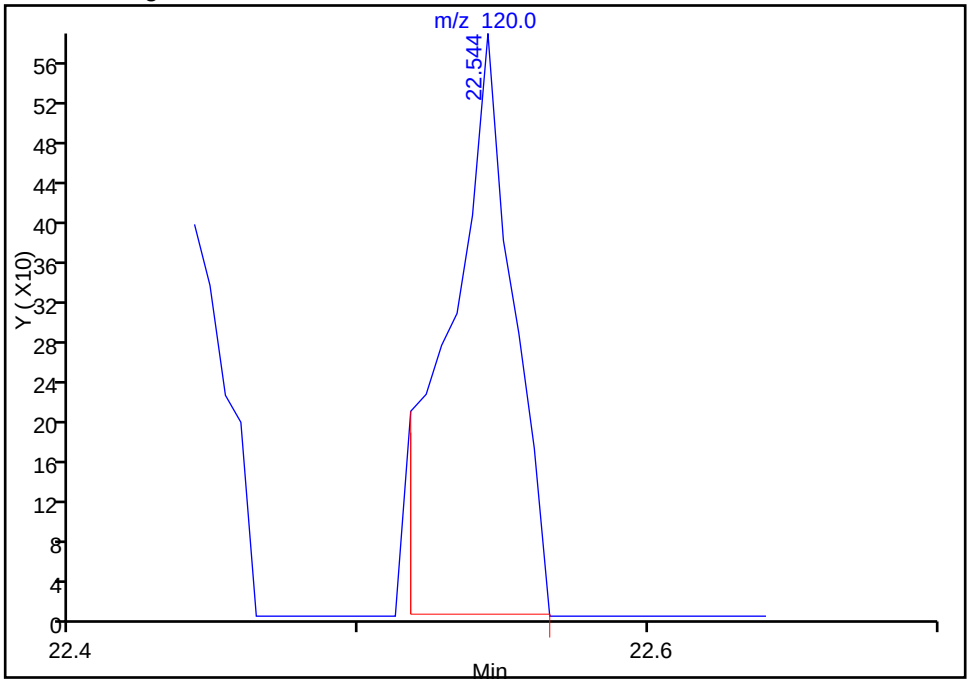
Processing Integration Results

RT: 22.44
Area: 547
Amount: 0.011981
Amount Units: ppb v/v



Manual Integration Results

RT: 22.54
Area: 896
Amount: 0.007529
Amount Units: ppb v/v



Reviewer: puangmaleek, 07-Sep-2016 08:07:38
Audit Action: Manually Integrated
Audit Reason: Assign Peak

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington Job No.: 200-35064-1

SDG No.: 200-35064-1

Client Sample ID: Lab Sample ID: LCS 200-108809/3

Matrix: Air Lab File ID: 21628_03.d

Analysis Method: TO-15 Date Collected:

Sample wt/vol: 200(mL) Date Analyzed: 09/02/2016 12:30

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-624 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 108809 Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	
75-71-8	Dichlorodifluoromethane	120.91	9.29		0.50	
75-45-6	Freon 22	86.47	9.20		0.50	
76-14-2	1,2-Dichlorotetrafluoroethane	170.92	11.0		0.20	
74-87-3	Chloromethane	50.49	9.68		0.50	
106-97-8	n-Butane	58.12	9.72		0.50	
75-01-4	Vinyl chloride	62.50	10.4		0.040	
106-99-0	1,3-Butadiene	54.09	9.75		0.20	
74-83-9	Bromomethane	94.94	10.0		0.20	
75-00-3	Chloroethane	64.52	9.74		0.50	
593-60-2	Bromoethene(Vinyl Bromide)	106.96	9.79		0.20	
75-69-4	Trichlorofluoromethane	137.37	9.40		0.20	
76-13-1	Freon TF	187.38	9.62		0.20	
75-35-4	1,1-Dichloroethene	96.94	9.69		0.20	
67-64-1	Acetone	58.08	9.00		5.0	
67-63-0	Isopropyl alcohol	60.10	7.90		5.0	
75-15-0	Carbon disulfide	76.14	11.1		0.50	
107-05-1	3-Chloropropene	76.53	8.42		0.50	
75-09-2	Methylene Chloride	84.93	9.02		0.50	
75-65-0	tert-Butyl alcohol	74.12	8.28		5.0	
1634-04-4	Methyl tert-butyl ether	88.15	9.15		0.20	
156-60-5	trans-1,2-Dichloroethene	96.94	9.82		0.20	
110-54-3	n-Hexane	86.17	9.68		0.20	
75-34-3	1,1-Dichloroethane	98.96	9.57		0.20	
78-93-3	Methyl Ethyl Ketone	72.11	9.38		0.50	
156-59-2	cis-1,2-Dichloroethene	96.94	9.62		0.20	
540-59-0	1,2-Dichloroethene, Total	96.94	19.4		0.40	
67-66-3	Chloroform	119.38	9.70		0.20	
109-99-9	Tetrahydrofuran	72.11	9.38		5.0	
71-55-6	1,1,1-Trichloroethane	133.41	9.94		0.20	
110-82-7	Cyclohexane	84.16	10.2		0.20	
56-23-5	Carbon tetrachloride	153.81	10.7		0.040	
540-84-1	2,2,4-Trimethylpentane	114.23	9.36		0.20	
71-43-2	Benzene	78.11	9.28		0.20	
107-06-2	1,2-Dichloroethane	98.96	9.52		0.20	

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington Job No.: 200-35064-1

SDG No.: 200-35064-1

Client Sample ID: Lab Sample ID: LCS 200-108809/3

Matrix: Air Lab File ID: 21628_03.d

Analysis Method: TO-15 Date Collected:

Sample wt/vol: 200(mL) Date Analyzed: 09/02/2016 12:30

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-624 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 108809 Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	
142-82-5	n-Heptane	100.21	8.77		0.20	
79-01-6	Trichloroethene	131.39	10.2		0.040	
80-62-6	Methyl methacrylate	100.12	9.85		0.50	
78-87-5	1,2-Dichloropropane	112.99	9.79		0.20	
123-91-1	1,4-Dioxane	88.11	9.56		5.0	
75-27-4	Bromodichloromethane	163.83	9.78		0.20	
10061-01-5	cis-1,3-Dichloropropene	110.97	9.61		0.20	
108-10-1	methyl isobutyl ketone	100.16	8.70		0.50	
108-88-3	Toluene	92.14	9.87		0.20	
10061-02-6	trans-1,3-Dichloropropene	110.97	9.96		0.20	
79-00-5	1,1,2-Trichloroethane	133.41	10.1		0.20	
127-18-4	Tetrachloroethene	165.83	10.6		0.20	
591-78-6	Methyl Butyl Ketone (2-Hexanone)	100.20	9.53		0.50	
124-48-1	Dibromochloromethane	208.29	10.2		0.20	
106-93-4	1,2-Dibromoethane	187.87	10.3		0.20	
108-90-7	Chlorobenzene	112.56	10.3		0.20	
100-41-4	Ethylbenzene	106.17	9.85		0.20	
179601-23-1	m,p-Xylene	106.17	20.1		0.50	
95-47-6	Xylene, o-	106.17	9.80		0.20	
1330-20-7	Xylene (total)	106.17	29.9		0.70	
100-42-5	Styrene	104.15	9.98		0.20	
75-25-2	Bromoform	252.75	10.3		0.20	
98-82-8	Cumene	120.19	9.72		0.20	
79-34-5	1,1,2,2-Tetrachloroethane	167.85	9.90		0.20	
103-65-1	n-Propylbenzene	120.19	9.86		0.20	
622-96-8	4-Ethyltoluene	120.20	10.2		0.20	
108-67-8	1,3,5-Trimethylbenzene	120.20	9.78		0.20	
95-49-8	2-Chlorotoluene	126.59	9.71		0.20	
98-06-6	tert-Butylbenzene	134.22	9.35		0.20	
95-63-6	1,2,4-Trimethylbenzene	120.20	9.53		0.20	
135-98-8	sec-Butylbenzene	134.22	8.31		0.20	
99-87-6	4-Isopropyltoluene	134.22	9.61		0.20	
541-73-1	1,3-Dichlorobenzene	147.00	10.0		0.20	
106-46-7	1,4-Dichlorobenzene	147.00	9.44		0.20	

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington Job No.: 200-35064-1

SDG No.: 200-35064-1

Client Sample ID: Lab Sample ID: LCS 200-108809/3

Matrix: Air Lab File ID: 21628_03.d

Analysis Method: TO-15 Date Collected:

Sample wt/vol: 200(mL) Date Analyzed: 09/02/2016 12:30

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-624 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 108809 Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	
100-44-7	Benzyl chloride	126.58	8.22		0.20	
104-51-8	n-Butylbenzene	134.22	9.83		0.20	
95-50-1	1,2-Dichlorobenzene	147.00	9.91		0.20	
120-82-1	1,2,4-Trichlorobenzene	181.45	10.2		0.50	
87-68-3	Hexachlorobutadiene	260.76	9.59		0.20	
91-20-3	Naphthalene	128.17	8.87		0.50	

TestAmerica Burlington
Target Compound Quantitation Report

Data File: \\ChromNA\Burlington\ChromData\CHW.i\20160902-21628.b\21628_03.d
Lims ID: lcs
Client ID:
Sample Type: LCS
Inject. Date: 02-Sep-2016 12:30:30 ALS Bottle#: 2 Worklist Smp#: 3
Purge Vol: 200.000 mL Dil. Factor: 1.0000
Sample Info: 200-0021628-003
Operator ID: pad Instrument ID: CHW.i

Method: \\ChromNA\Burlington\ChromData\CHW.i\20160902-21628.b\TO15_MasterMethod_(v1).m
Limit Group: AI_TO15_ICAL
Last Update: 07-Sep-2016 07:57:09 Calib Date: 23-Aug-2016 00:38:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Burlington\ChromData\CHW.i\20160822-21457.b\21457_13.d

Column 1 : RTX-624 (0.32 mm) Det: MS SCAN
Process Host: XAWRK021

First Level Reviewer: puangmaleek Date: 07-Sep-2016 07:59:53

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
1 Propene	41	5.270	5.270	0.000	97	195405	10.0	9.47	
2 Dichlorodifluoromethane	85	5.393	5.383	0.010	99	895378	10.0	9.29	
3 Chlorodifluoromethane	51	5.468	5.463	0.005	97	406944	10.0	9.20	
4 1,2-Dichloro-1,1,2,2-tetra	85	5.795	5.789	0.006	88	1031710	10.0	11.0	
5 Chloromethane	50	5.987	5.987	0.000	99	237763	10.0	9.68	
6 Butane	43	6.260	6.260	0.000	98	423216	10.0	9.72	
7 Vinyl chloride	62	6.319	6.314	0.005	97	335598	10.0	10.4	
8 Butadiene	54	6.415	6.415	0.000	92	237197	10.0	9.75	
10 Bromomethane	94	7.218	7.212	0.006	100	369483	10.0	10.0	
9 BFB									
11 Chloroethane	64	7.469	7.464	0.005	98	180910	10.0	9.74	
12 2-Methylbutane	43	7.539	7.539	0.000	91	336662	10.0	10.1	
13 Vinyl bromide	106	7.876	7.876	0.000	100	410575	10.0	9.79	
14 Trichlorofluoromethane	101	7.967	7.967	0.000	98	914718	10.0	9.40	
16 Pentane	43	8.100	8.100	0.000	97	519694	10.0	10.2	
17 Ethanol	45	8.469	8.470	-0.001	99	216560	15.0	13.3	
18 Ethyl ether	59	8.587	8.582	0.005	93	245771	10.0	10.5	
19 Acrolein	56	8.967	8.967	0.000	94	114676	10.0	12.0	
20 1,1,2-Trichloro-1,2,2-trif	101	8.978	8.978	0.000	95	762381	10.0	9.62	
21 1,1-Dichloroethene	96	9.042	9.042	0.000	90	375764	10.0	9.69	
22 Acetone	43	9.240	9.240	0.000	94	366624	10.0	9.00	
24 Isopropyl alcohol	45	9.438	9.438	0.000	48	325800	10.0	7.90	
23 Carbon disulfide	76	9.438	9.438	0.000	98	1054556	10.0	11.1	
25 3-Chloro-1-propene	41	9.743	9.743	0.000	90	281706	10.0	8.42	
26 Acetonitrile	41	9.866	9.866	0.000	100	172992	10.0	9.10	
27 Methylene Chloride	49	10.005	10.005	0.000	82	291586	10.0	9.02	
28 2-Methyl-2-propanol	59	10.128	10.128	0.000	92	516242	10.0	8.28	
S 30 1,2-Dichloroethene, Total	61				0		20.0	19.4	
29 Methyl tert-butyl ether	73	10.347	10.347	0.000	96	949608	10.0	9.15	
31 trans-1,2-Dichloroethene	61	10.406	10.401	0.005	90	452893	10.0	9.82	
32 Acrylonitrile	53	10.540	10.545	-0.005	97	212081	10.0	9.54	
33 Hexane	57	10.732	10.738	-0.006	86	522334	10.0	9.68	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
34 1,1-Dichloroethane	63	11.214	11.214	0.000	99	582294	10.0	9.57	
35 Vinyl acetate	43	11.235	11.241	-0.006	99	611882	10.0	8.72	
37 cis-1,2-Dichloroethene	96	12.225	12.220	0.005	91	417906	10.0	9.62	
38 2-Butanone (MEK)	72	12.241	12.241	0.000	98	183360	10.0	9.38	
39 Ethyl acetate	88	12.246	12.252	-0.006	98	35381	10.0	10.3	
41 Tetrahydrofuran	42	12.648	12.648	0.000	94	307588	10.0	9.38	
* 40 Chlorobromomethane	128	12.653	12.653	0.000	76	316040	10.0	10.0	
42 Chloroform	83	12.744	12.744	0.000	94	719412	10.0	9.70	
43 Cyclohexane	84	13.011	13.011	0.000	92	552816	10.0	10.2	
44 1,1,1-Trichloroethane	97	13.027	13.028	-0.001	93	747670	10.0	9.94	
45 Carbon tetrachloride	117	13.252	13.252	0.000	96	812344	10.0	10.7	
46 Isooctane	57	13.605	13.605	0.000	99	1620777	10.0	9.36	
47 Benzene	78	13.664	13.670	-0.006	93	1121085	10.0	9.28	
48 1,2-Dichloroethane	62	13.819	13.819	0.000	97	362197	10.0	9.52	
49 n-Heptane	43	13.921	13.921	0.000	86	500281	10.0	8.77	
* 50 1,4-Difluorobenzene	114	14.365	14.365	0.000	92	1482649	10.0	10.0	
52 n-Butanol	56	14.616	14.616	0.000	81	185260	10.0	9.47	
53 Trichloroethene	95	14.793	14.793	0.000	94	549256	10.0	10.2	
A 51 GRO	1	14.967	(7.529-22.405)		0	140914647	10.0	0	
54 1,2-Dichloropropane	63	15.296	15.296	0.000	95	401114	10.0	9.79	
55 Methyl methacrylate	69	15.371	15.371	0.000	91	410375	10.0	9.85	
56 1,4-Dioxane	88	15.456	15.456	0.000	87	195846	10.0	9.56	
57 Dibromomethane	174	15.520	15.521	0.000	88	664678	10.0	10.7	
58 Dichlorobromomethane	83	15.750	15.751	-0.001	97	774737	10.0	9.78	
60 cis-1,3-Dichloropropene	75	16.580	16.580	0.000	86	601879	10.0	9.61	
A 59 TVOC as Toluene	92	16.700	(5.260-28.140)		0	232948668	10.0	2270.3	
61 4-Methyl-2-pentanone (MIBK	43	16.815	16.815	0.000	91	615202	10.0	8.70	
64 n-Octane	43	17.125	17.125	0.000	84	697879	10.0	8.93	
65 Toluene	92	17.131	17.131	0.000	94	927955	10.0	9.87	
66 trans-1,3-Dichloropropene	75	17.649	17.650	-0.001	91	593490	10.0	9.96	
67 1,1,2-Trichloroethane	83	18.008	18.008	0.000	92	437227	10.0	10.1	
68 Tetrachloroethene	166	18.131	18.126	0.005	94	988762	10.0	10.6	
69 2-Hexanone	43	18.398	18.399	-0.001	97	602686	10.0	9.53	
71 Chlorodibromomethane	129	18.741	18.736	0.005	98	960829	10.0	10.2	
72 Ethylene Dibromide	107	19.019	19.019	0.000	99	847709	10.0	10.3	
* 74 Chlorobenzene-d5	117	19.859	19.859	0.000	81	1359209	10.0	10.0	
75 Chlorobenzene	112	19.918	19.918	0.000	99	1318812	10.0	10.3	
76 Ethylbenzene	91	20.046	20.041	0.005	96	1954680	10.0	9.85	
S 73 Xylenes, Total	106				0		30.0	29.9	
77 n-Nonane	57	20.116	20.111	0.005	84	801483	10.0	9.38	
78 m-Xylene & p-Xylene	106	20.276	20.276	0.000	0	1671367	20.0	20.1	
79 o-Xylene	106	21.020	21.020	0.000	98	820029	10.0	9.80	
80 Styrene	104	21.063	21.063	0.000	94	1261734	10.0	9.98	
81 Bromoform	173	21.442	21.443	-0.001	99	927525	10.0	10.3	
82 Isopropylbenzene	105	21.608	21.608	0.000	94	2282165	10.0	9.72	
84 1,1,2,2-Tetrachloroethane	83	22.191	22.192	-0.001	97	1094049	10.0	9.90	
85 N-Propylbenzene	91	22.266	22.266	0.000	100	2623072	10.0	9.86	
86 1,2,3-Trichloropropane	75	22.298	22.299	-0.001	95	770889	10.0	9.55	
87 n-Decane	57	22.400	22.395	0.005	89	1009204	10.0	9.46	
88 4-Ethyltoluene	105	22.443	22.443	0.000	97	2350196	10.0	10.2	
89 2-Chlorotoluene	91	22.464	22.464	0.000	95	1770419	10.0	9.71	
90 1,3,5-Trimethylbenzene	105	22.539	22.539	0.000	95	1900890	10.0	9.78	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
91 Alpha Methyl Styrene	118	22.887	22.887	0.000	93	1030993	10.0	10.1	
92 tert-Butylbenzene	119	23.010	23.010	0.000	97	1846277	10.0	9.35	
93 1,2,4-Trimethylbenzene	105	23.095	23.096	-0.001	95	1837124	10.0	9.53	
94 sec-Butylbenzene	105	23.326	23.326	0.000	99	2350051	10.0	8.31	
95 4-Isopropyltoluene	119	23.523	23.524	-0.001	98	2361108	10.0	9.61	
96 1,3-Dichlorobenzene	146	23.572	23.577	-0.005	93	1395441	10.0	10.0	
97 1,4-Dichlorobenzene	146	23.716	23.716	0.000	97	1276260	10.0	9.44	
98 Benzyl chloride	91	23.925	23.925	0.000	99	1076634	10.0	8.22	
99 Undecane	57	24.128	24.128	0.000	91	999452	10.0	9.03	
100 n-Butylbenzene	91	24.133	24.134	-0.001	97	1881637	10.0	9.83	
101 1,2-Dichlorobenzene	146	24.294	24.294	0.000	100	1309328	10.0	9.91	
102 Dodecane	57	25.861	25.861	0.000	95	738448	10.0	8.50	
103 1,2,4-Trichlorobenzene	180	27.044	27.044	0.000	93	835613	10.0	10.2	
104 Hexachlorobutadiene	225	27.242	27.242	0.000	94	943337	10.0	9.59	
105 Naphthalene	128	27.600	27.600	0.000	99	1294920	10.0	8.87	
106 1,2,3-Trichlorobenzene	180	28.130	28.130	0.000	95	603351	10.0	9.19	

QC Flag Legend

Processing Flags

7 - Failed Limit of Detection

Reagents:

ATTO15LCSW_00629	Amount Added: 200.00	Units: mL	
ATTO15WISs_00004	Amount Added: 20.00	Units: mL	Run Reagent

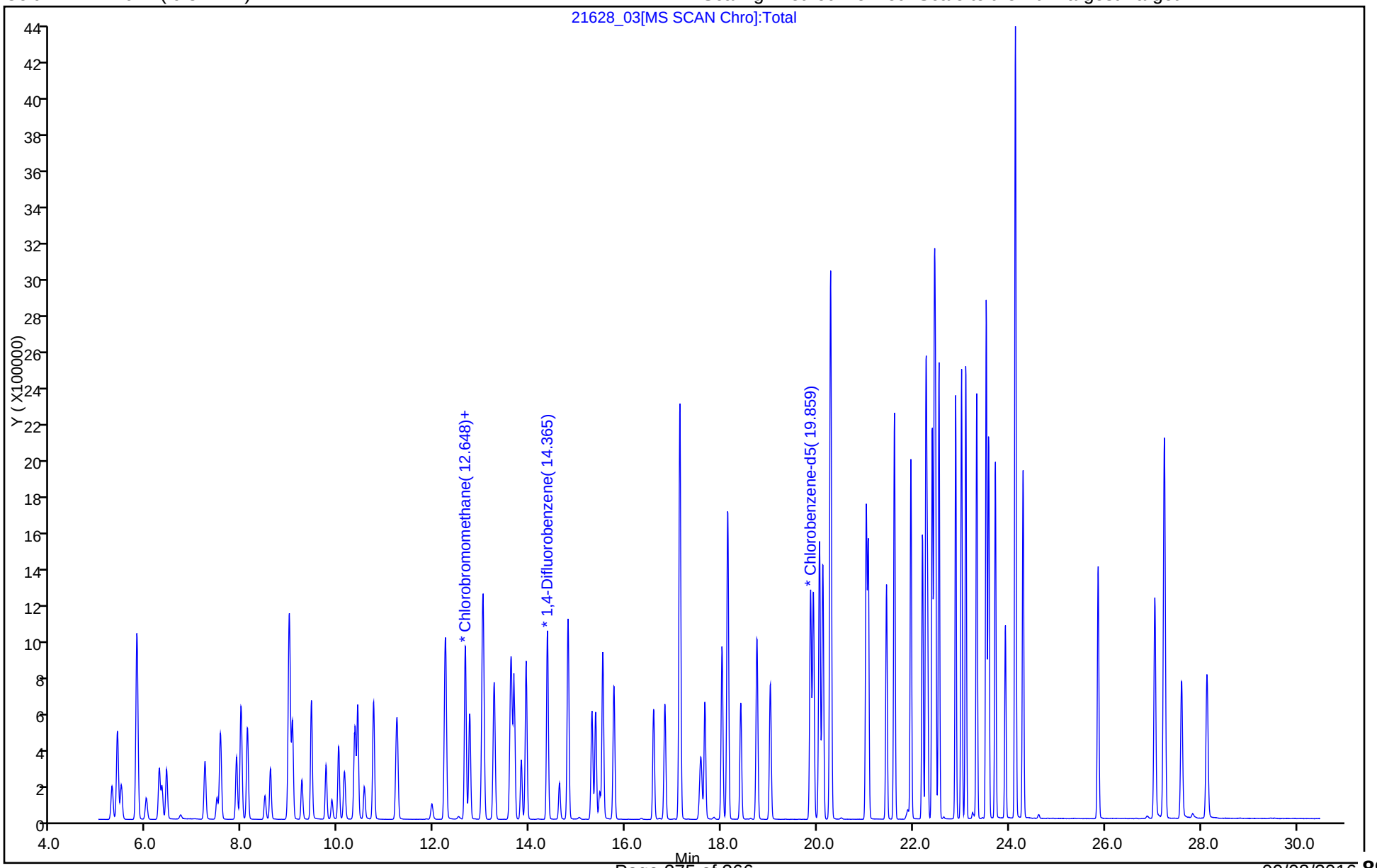
Report Date: 07-Sep-2016 07:59:53 Chrom Revision: 2.2 04-Mar-2016 14:36:24

TestAmerica Burlington

Data File: \\ChromNA\Burlington\ChromData\CHW.i\20160902-21628.b\21628_03.d

Injection Date:	02-Sep-2016 12:30:30	Instrument ID:	CHW.i	Operator ID:	pad
Lims ID:	lcs			Worklist Smp#:	3
Client ID:					
Purge Vol:	200.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	2
Method:	TO15_MasterMethod_(v1)	Limit Group:	AI_TO15_ICAL		

Column: RTX-624 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



AIR - GC/MS VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Burlington Job No.: 200-35064-1

SDG No.: 200-35064-1

Instrument ID: CHW.i Start Date: 08/22/2016 15:49

Analysis Batch Number: 108448 End Date: 08/23/2016 05:54

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 200-108448/1		08/22/2016 15:49	1	21457_1b.d	RTX-624 0.32(mm)
VIBLK 200-108448/2		08/22/2016 16:49	1		RTX-624 0.32(mm)
VIBLK 200-108448/3		08/22/2016 17:42	1		RTX-624 0.32(mm)
IC 200-108448/4		08/22/2016 18:30	1	21457_06.d	RTX-624 0.32(mm)
IC 200-108448/5		08/22/2016 19:23	1	21457_07.d	RTX-624 0.32(mm)
IC 200-108448/6		08/22/2016 20:16	1	21457_08.d	RTX-624 0.32(mm)
IC 200-108448/7		08/22/2016 21:08	1	21457_09.d	RTX-624 0.32(mm)
ICIS 200-108448/8		08/22/2016 22:01	1	21457_10.d	RTX-624 0.32(mm)
IC 200-108448/9		08/22/2016 22:53	1	21457_11.d	RTX-624 0.32(mm)
IC 200-108448/10		08/22/2016 23:46	1	21457_12.d	RTX-624 0.32(mm)
IC 200-108448/11		08/23/2016 00:38	1	21457_13.d	RTX-624 0.32(mm)
VIBLK 200-108448/12		08/23/2016 01:31	1		RTX-624 0.32(mm)
VIBLK 200-108448/13		08/23/2016 02:23	1		RTX-624 0.32(mm)
VIBLK 200-108448/14		08/23/2016 03:16	1		RTX-624 0.32(mm)
ICV 200-108448/15		08/23/2016 04:08	1	21457_17.d	RTX-624 0.32(mm)
ZZZZZ		08/23/2016 05:01	1		RTX-624 0.32(mm)
ZZZZZ		08/23/2016 05:54	1		RTX-624 0.32(mm)

AIR - GC/MS VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Burlington Job No.: 200-35064-1

SDG No.: 200-35064-1

Instrument ID: CHW.i Start Date: 09/02/2016 10:39

Analysis Batch Number: 108809 End Date: 09/03/2016 06:23

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 200-108809/1		09/02/2016 10:39	1	21628_01.d	RTX-624 0.32(mm)
CCVIS 200-108809/2		09/02/2016 11:37	1	21628_02.d	RTX-624 0.32(mm)
LCS 200-108809/3		09/02/2016 12:30	1	21628_03.d	RTX-624 0.32(mm)
MB 200-108809/4		09/02/2016 13:22	1	21628_04.d	RTX-624 0.32(mm)
ZZZZZ		09/02/2016 14:15	1		RTX-624 0.32(mm)
ZZZZZ		09/02/2016 15:09	1		RTX-624 0.32(mm)
ZZZZZ		09/02/2016 15:58	10		RTX-624 0.32(mm)
ZZZZZ		09/02/2016 16:47	10		RTX-624 0.32(mm)
ZZZZZ		09/02/2016 17:36	100		RTX-624 0.32(mm)
ZZZZZ		09/02/2016 18:24	100		RTX-624 0.32(mm)
ZZZZZ		09/02/2016 19:14	10		RTX-624 0.32(mm)
ZZZZZ		09/02/2016 20:04	10		RTX-624 0.32(mm)
ZZZZZ		09/02/2016 20:53	10		RTX-624 0.32(mm)
ZZZZZ		09/02/2016 21:42	206		RTX-624 0.32(mm)
ZZZZZ		09/02/2016 22:31	9.09		RTX-624 0.32(mm)
ZZZZZ		09/02/2016 23:22	2.5		RTX-624 0.32(mm)
ZZZZZ		09/03/2016 00:12	6.06		RTX-624 0.32(mm)
ZZZZZ		09/03/2016 01:05	1		RTX-624 0.32(mm)
ZZZZZ		09/03/2016 01:59	1		RTX-624 0.32(mm)
ZZZZZ		09/03/2016 02:52	1		RTX-624 0.32(mm)
ZZZZZ		09/03/2016 03:45	1		RTX-624 0.32(mm)
200-35064-1		09/03/2016 04:36	1.5	21628_22.d	RTX-624 0.32(mm)
200-35064-2		09/03/2016 05:30	1	21628_23.d	RTX-624 0.32(mm)
200-35064-3		09/03/2016 06:23	1	21628_24.d	RTX-624 0.32(mm)

Post-Sampling Air Canister Pressure Check Record

Login # (w/ Location Code)	Date	Time (Military)	Lab BP ("Hg)	Lab Temp (℃)	Pressure Gauge ID	Analyst
200-35064	08/31/16	12:29	29.4	22	G20	SML III

Sampling Information and Return Equipment Check	Yes	N o	Comments
(1) Is a Field Test Data Sheet (FTDS) or similar sampling documentation present?	X		
(2) Is the flow controller ID used for each canister recorded?	X		
(3) MA MCP & NJ DKQP: Check return flow rate for flow controllers		X	
(4) Is visible sign of damage to canister and/or flow controller (FC) present?		X	
If damage observed, list equipment IDs and describe condition:			

Post-Sampling Return Pressure Check

Lab ID	Canister ID	Pressure[1] ("Hg)	Anomaly[2] (Y/N)	FC ID[3]	FC Check[4] Reference	FC Return (Y/N)	Can Cert Batch ID	Comments
200-35064-A-1	4270	-5.6	N	4533	72/29	Y	3486-21352	
200-35064-A-2	4294	-6.0	N	5188	72/29	Y	3833-21185	
200-35064-A-3	4359	-6.7	N	4173	72/29	Y	3833-21185	

[1] Criteria: Return Pressure should be between -1 and -10 ("Hg) with the exception of grab samples or those using 100 or 200mL/minute flow controllers. These samples must be returned at no lower than -10"Hg, but have no specific criteria otherwise.

[2] If return pressure is not within criteria, initiate Non-Conformance Memo.

[3] Record the ID of the FC used for sampling if information is provided, otherwise leave blank.

[4] Record the Flow Controller Set Flow Rate Logbook ID and Page number in which the original FC Check was recorded

Pre-Shipment Clean Canister Certification Report

Canister Cleaning & Pre-Shipment Leak Test

System ID	# Cycles	Cleaning Date	Technician	Canister Size		Certification Type:	
Bottom Rack	20	7/27/2016	MLT	1L	6L	Batch	Individual

Port	Can ID	Initial[1] ("Hg)	Final ("Hg)	Adj. Initial[2] ("Hg)	Diff.[3]	Initial Reading Gauge:	Date:	Time:	Tech:	BP:	Temp:	Final Reading Gauge:	Date:	Time:	Tech:	BP:	Temp:
1	3662	-29.5	-29.3	-29.5	+0.2	G9	7/28/2016	1300	MLT	29.3	23		8/12/16	945		29.3	
2	4294		-29.7		+0.2												
3	3161		-29.6		+0.1												
4	3339		-29.5		0												
5	4359		-29.8		+0.3												
6	5404		-29.7		+0.2												
7	4918		-29.5		0												
8	5104		-29.6		+0.1												
9	5640		-29.6		+0.1												
10	5043		-29.6		+0.1												
11	3833	-29.7	-29.9	-29.7	+0.2		8/10/16	1300		29.5	22	G9	8/11/16	1230	MC	29.5	22
12	4792	-29.5	-29.7	-29.5	+0.2		7/28/16	1300		29.3	22		8/12/16	945		29.3	

[1] Batch Certification: The reading is taken on the "batch" canister and this value is used as the initial pressure for all canisters in the batch.

[2] Adjusted Initial Pressure = Initial Pressure + (Initial BP - Final BP).

[3] Difference = Final Pressure - Adjusted Initial Pressure . Acceptance Criteria: (1) The difference must be less than or equal to + 0.5. (2) Pressure readings must be at least 24 hours apart.

If time frame was not met, the PM must authorize shipment of canister **PM Authorization Signature:** **Date:**

Clean Canister Certification Analysis & Authorization of Release to Inventory

Test Method: ~~≤ TO15 Routine~~ ≤ TO15 LL ≤ NJDEP-LL TO15

Can ID	Date	Sequence	Analyst	Inventory Level 1	2	3	4	Limited	Secondary Review: Review Date	Review
3833	8/05/16	21185	PAD		XXXX				8/5/16	ANL

Inventory Level 1: Individual Canister Certification (TO15LL 0.01).

Inventory Level 2: Individual or Batch Certification (TO15 0.04 ppbv).

Inventory Level 3: Individual or Batch Certification (TO15 0.2 ppbv).

Inventory Level 4: Individual or Batch Certification (TO15LLNJ 0.08 ppbv).

Inventory Level Limited: Canisters may only be used for certain projects.

Comments:

FAI023:04.13.16:9

TestAmerica Burlington

200-34570-A-11
3833
Location: Air-Storage
Bottle: Summa Canister 6L
Sampled: 7/27/2016 12:00 AM 200-956236

Loc: 200
34570
#11
A

Pre-Shipment Clean Canister Certification Report

Canister Cleaning & Pre-Shipment Leak Test

System ID	# Cycles	Cleaning Date	Technician	Canister Size		Certification Type:	
Top Rack	20	8/12/2016	MLT	1L	6L	Batch	Individual

Port	Can ID	Initial[1] ("Hg)	Final ("Hg)	Adj. Initial[2] ("Hg)	Diff.[3]	Initial Reading Gauge:	Date:	Time:	Tech:	BP:	Temp:	Final Reading Gauge:	Date:	Time:	Tech:	BP:	Temp:
1	4716	-29.5	-29.9	-29.6	-0.3	G9	8/13/2016	1500	MLT	29.3	22	G9	8/29/16	1400	mo	29.4	22
2	5612	"	-29.5	"	-0.1	"	"	"	"	"	"	"	"	"	"	"	"
3	5418	"	-29.7	"	-0.1	"	"	"	"	"	"	"	"	"	"	"	"
4	4093	"	-29.8	"	-0.2	"	"	"	"	"	"	"	"	"	"	"	"
5	3486	-29.5	-29.9	-29.9	0	"	8/20/16	1700	"	29.3	22	"	8/23/16	0930	"	29.7	27
6	3086	-29.5	29.9	-29.6	-0.3	"	"	"	"	"	"	"	8/20/16	1400	MLT	29.4	"
7	2699	"	-29.6	"	0	"	"	"	"	"	"	"	"	"	"	"	"
8	4270	"	-29.5	"	-0.1	"	"	"	"	"	"	"	"	"	"	"	"
9	4673	"	-29.9	"	-0.3	"	"	"	"	"	"	"	"	"	"	"	"
10	5635	"	-29.6	"	0	"	"	"	"	"	"	"	"	"	"	"	"
11	4288	"	-29.7	"	-0.1	"	"	"	"	"	"	"	"	"	"	"	"
12	2694	"	-29.9	-29.9	0	"	"	"	"	"	"	"	"	"	"	"	"

[1] Batch Certification: The reading is taken on the "batch" canister and this value is used as the initial pressure for all canisters in the batch.

[2] Adjusted Initial Pressure = Initial Pressure + (Initial BP - Final BP).

[3] Difference = Final Pressure - Adjusted Initial Pressure . Acceptance Criteria: (1) The difference must be less than or equal to + 0.5. (2) Pressure readings must be at least 24 hours apart.

If time frame was not met, the PM must authorize shipment of canister **PM Authorization Signature:** **Date:**

Clean Canister Certification Analysis & Authorization of Release to Inventory

Test Method: ≤ TO15 Routine ≥ TO15 LL ≤ NJDEP-LL TO15

Can ID	Date	Sequence	Analyst	Inventory Level 1	2	3	4	Limited	Secondary Review: Review Date	Reviewer
3486	8/16/16	21352	CGC		XXXX				8/17/16	ANJ

Inventory Level 1: Individual Canister Certification (TO15LL 0.01).

Inventory Level 2: Individual or Batch Certification (TO15 0.04 ppbv).

Inventory Level 3: Individual or Batch Certification (TO15 0.2 ppbv).

Inventory Level 4: Individual or Batch Certification (TO15LLNJ 0.08 ppbv).

Inventory Level Limited: Canisters may only be used for certain projects.

Comments:

200-34834-A-5
3486
Location: Air-Storage
Bottle: Summa Canister 6L
Sampled: 8/12/2016 12:00 AM 200-962660

Loc: 200 34834 #5 A

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08/08/2016 898

FAI023:04.13.16:9
TestAmerica Burlington

FORM III
AIR - GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Burlington Job No.: 200-34570-1

SDG No.:

Matrix: Air Level: Low Lab File ID: 21185_03.D

Lab ID: LCS 200-107784/3 Client ID:

COMPOUND	SPIKE ADDED (ppb v/v)	LCS CONCENTRATION (ppb v/v)	LCS % REC	QC LIMITS REC	#
Propylene	10.0	8.51	85	58-129	
Dichlorodifluoromethane	10.0	9.11	91	68-128	
Freon 22	10.0	9.04	90	64-128	
1,2-Dichlorotetrafluoroethane	10.0	10.5	105	78-138	
Chloromethane	10.0	8.65	86	57-126	
n-Butane	10.0	8.35	84	56-130	
Vinyl chloride	10.0	8.95	89	62-125	
1,3-Butadiene	10.0	8.81	88	59-125	
Bromomethane	10.0	9.57	96	68-128	
Chloroethane	10.0	9.19	92	65-125	
Bromoethene(Vinyl Bromide)	10.0	9.96	100	67-127	
Trichlorofluoromethane	10.0	9.74	97	67-127	
Ethanol	15.0	12.3	82	28-168	
Freon TF	10.0	10.1	101	68-128	
1,1-Dichloroethene	10.0	9.75	97	67-127	
Acetone	10.0	9.23	92	64-136	
Isopropyl alcohol	10.0	8.13	81	55-124	
Carbon disulfide	10.0	11.2	112	81-141	
3-Chloropropene	10.0	8.92	89	53-133	
Methylene Chloride	10.0	9.07	91	62-122	
tert-Butyl alcohol	10.0	9.05	91	64-124	
Methyl tert-butyl ether	10.0	9.72	97	67-127	
trans-1,2-Dichloroethene	10.0	10.2	102	72-132	
n-Hexane	10.0	9.82	98	71-131	
1,1-Dichloroethane	10.0	9.95	100	66-126	
Vinyl acetate	10.0	9.07	91	62-130	
Ethyl acetate	10.0	10.6	106	75-135	
Methyl Ethyl Ketone	10.0	9.82	98	62-122	
cis-1,2-Dichloroethene	10.0	9.71	97	67-127	
Chloroform	10.0	10.1	101	69-129	
Tetrahydrofuran	10.0	8.74	87	61-136	
1,1,1-Trichloroethane	10.0	9.68	97	70-130	
Cyclohexane	10.0	9.82	98	69-129	
Carbon tetrachloride	10.0	10.0	100	62-143	
2,2,4-Trimethylpentane	10.0	9.42	94	67-127	
Benzene	10.0	9.41	94	67-127	
1,2-Dichloroethane	10.0	9.61	96	67-132	
n-Heptane	10.0	9.07	91	62-130	
Trichloroethene	10.0	9.91	99	68-128	
Methyl methacrylate	10.0	9.97	100	70-130	
1,2-Dichloropropane	10.0	9.72	97	67-127	
1,4-Dioxane	10.0	9.57	96	66-132	

Column to be used to flag recovery and RPD values

FORM III TO-15

FORM III
AIR - GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Burlington Job No.: 200-34570-1

SDG No.:

Matrix: Air Level: Low Lab File ID: 21185_03.D

Lab ID: LCS 200-107784/3 Client ID:

COMPOUND	SPIKE ADDED (ppb v/v)	LCS CONCENTRATION (ppb v/v)	LCS % REC	QC LIMITS REC	#
Bromodichloromethane	10.0	9.98	100	69-129	
cis-1,3-Dichloropropene	10.0	9.94	99	70-130	
methyl isobutyl ketone	10.0	9.62	96	62-130	
Toluene	10.0	9.76	98	67-127	
trans-1,3-Dichloropropene	10.0	9.25	92	69-129	
1,1,2-Trichloroethane	10.0	10.0	100	69-129	
Tetrachloroethene	10.0	9.35	94	70-130	
Methyl Butyl Ketone (2-Hexanone)	10.0	9.65	97	61-127	
Dibromochloromethane	10.0	10.2	102	66-130	
1,2-Dibromoethane	10.0	9.99	100	70-130	
Chlorobenzene	10.0	9.60	96	68-128	
Ethylbenzene	10.0	9.74	97	68-128	
m,p-Xylene	20.0	19.2	96	68-128	
Xylene, o-	10.0	9.56	96	67-127	
Styrene	10.0	9.86	99	68-128	
Bromoform	10.0	10.1	101	34-170	
Cumene	10.0	9.66	97	67-127	
1,1,2,2-Tetrachloroethane	10.0	10.1	101	69-129	
n-Propylbenzene	10.0	9.69	97	67-127	
4-Ethyltoluene	10.0	9.95	100	69-129	
1,3,5-Trimethylbenzene	10.0	9.78	98	65-125	
2-Chlorotoluene	10.0	9.67	97	67-127	
tert-Butylbenzene	10.0	9.76	98	63-125	
1,2,4-Trimethylbenzene	10.0	9.75	98	65-125	
sec-Butylbenzene	10.0	9.77	98	66-126	
4-Isopropyltoluene	10.0	9.73	97	67-129	
1,3-Dichlorobenzene	10.0	9.27	93	67-127	
1,4-Dichlorobenzene	10.0	9.20	92	66-126	
Benzyl chloride	10.0	8.54	85	54-135	
n-Butylbenzene	10.0	9.60	96	67-127	
1,2-Dichlorobenzene	10.0	9.37	94	67-127	
1,2,4-Trichlorobenzene	10.0	8.08	81	59-126	
Hexachlorobutadiene	10.0	8.69	87	62-130	
Naphthalene	10.0	7.66	77	50-121	

Column to be used to flag recovery and RPD values

FORM III TO-15

FORM III
AIR - GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Burlington Job No.: 200-34834-1

SDG No.:

Matrix: Air Level: Low Lab File ID: 21352_04.D

Lab ID: LCS 200-108166/4 Client ID:

COMPOUND	SPIKE ADDED (ppb v/v)	LCS CONCENTRATION (ppb v/v)	LCS % REC	QC LIMITS REC	#
Propylene	10.0	10.8	108	58-129	
Dichlorodifluoromethane	10.0	11.1	111	68-128	
Freon 22	10.0	11.0	110	64-128	
1,2-Dichlorotetrafluoroethane	10.0	12.3	123	78-138	
Chloromethane	10.0	10.2	102	57-126	
n-Butane	10.0	11.2	112	56-130	
Vinyl chloride	10.0	10.8	108	62-125	
1,3-Butadiene	10.0	10.5	105	59-125	
Bromomethane	10.0	10.7	107	68-128	
Chloroethane	10.0	10.4	104	65-125	
Bromoethene(Vinyl Bromide)	10.0	10.8	108	67-127	
Trichlorofluoromethane	10.0	10.9	109	67-127	
Ethanol	15.0	15.6	104	28-168	
Freon TF	10.0	11.0	110	68-128	
1,1-Dichloroethene	10.0	10.9	109	67-127	
Acetone	10.0	11.2	112	64-136	
Isopropyl alcohol	10.0	9.92	99	55-124	
Carbon disulfide	10.0	12.4	124	81-141	
3-Chloropropene	10.0	11.3	113	53-133	
Methylene Chloride	10.0	11.2	112	62-122	
tert-Butyl alcohol	10.0	11.0	110	64-124	
Methyl tert-butyl ether	10.0	11.5	115	67-127	
trans-1,2-Dichloroethene	10.0	12.4	124	72-132	
n-Hexane	10.0	12.5	125	71-131	
1,1-Dichloroethane	10.0	11.7	117	66-126	
Vinyl acetate	10.0	11.4	114	62-130	
Ethyl acetate	10.0	11.6	116	75-135	
Methyl Ethyl Ketone	10.0	11.0	110	62-122	
cis-1,2-Dichloroethene	10.0	10.8	109	67-127	
Chloroform	10.0	11.4	114	69-129	
Tetrahydrofuran	10.0	12.1	121	61-136	
1,1,1-Trichloroethane	10.0	12.2	122	70-130	
Cyclohexane	10.0	12.4	124	69-129	
Carbon tetrachloride	10.0	12.4	124	62-143	
2,2,4-Trimethylpentane	10.0	12.6	126	67-127	
Benzene	10.0	11.7	117	67-127	
1,2-Dichloroethane	10.0	12.3	123	67-132	
n-Heptane	10.0	12.9	129	62-130	
Trichloroethene	10.0	12.1	121	68-128	
Methyl methacrylate	10.0	12.5	125	70-130	
1,2-Dichloropropane	10.0	12.1	121	67-127	
1,4-Dioxane	10.0	11.4	114	66-132	

Column to be used to flag recovery and RPD values

FORM III TO-15

FORM III
AIR - GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Burlington Job No.: 200-34834-1

SDG No.:

Matrix: Air Level: Low Lab File ID: 21352_04.D

Lab ID: LCS 200-108166/4 Client ID:

COMPOUND	SPIKE ADDED (ppb v/v)	LCS CONCENTRATION (ppb v/v)	LCS % REC	QC LIMITS REC	#
Bromodichloromethane	10.0	12.3	123	69-129	
cis-1,3-Dichloropropene	10.0	12.6	126	70-130	
methyl isobutyl ketone	10.0	13.3	133	62-130	*
Toluene	10.0	11.8	118	67-127	
trans-1,3-Dichloropropene	10.0	13.1	131	69-129	*
1,1,2-Trichloroethane	10.0	12.3	123	69-129	
Tetrachloroethene	10.0	11.4	114	70-130	
Methyl Butyl Ketone (2-Hexanone)	10.0	13.5	135	61-127	*
Dibromochloromethane	10.0	11.4	114	66-130	
1,2-Dibromoethane	10.0	12.1	121	70-130	
Chlorobenzene	10.0	11.6	116	68-128	
Ethylbenzene	10.0	12.0	120	68-128	
m,p-Xylene	20.0	23.4	117	68-128	
Xylene, o-	10.0	11.5	115	67-127	
Styrene	10.0	12.3	123	68-128	
Bromoform	10.0	10.9	109	34-170	
Cumene	10.0	11.6	116	67-127	
1,1,2,2-Tetrachloroethane	10.0	12.0	120	69-129	
n-Propylbenzene	10.0	11.8	118	67-127	
4-Ethyltoluene	10.0	12.1	121	69-129	
1,3,5-Trimethylbenzene	10.0	11.4	114	65-125	
2-Chlorotoluene	10.0	12.0	120	67-127	
tert-Butylbenzene	10.0	11.1	111	63-125	
1,2,4-Trimethylbenzene	10.0	11.5	115	65-125	
sec-Butylbenzene	10.0	11.3	113	66-126	
4-Isopropyltoluene	10.0	11.7	117	67-129	
1,3-Dichlorobenzene	10.0	12.2	122	67-127	
1,4-Dichlorobenzene	10.0	11.8	118	66-126	
Benzyl chloride	10.0	12.5	125	54-135	
n-Butylbenzene	10.0	11.9	119	67-127	
1,2-Dichlorobenzene	10.0	11.8	118	67-127	
1,2,4-Trichlorobenzene	10.0	11.5	115	59-126	
Hexachlorobutadiene	10.0	10.6	106	62-130	
Naphthalene	10.0	10.7	107	50-121	

Column to be used to flag recovery and RPD values

FORM III TO-15

FORM IV
AIR - GC/MS VOA METHOD BLANK SUMMARY

Lab Name: TestAmerica Burlington Job No.: 200-34570-1

SDG No.:

Lab File ID: 21185_04.D Lab Sample ID: MB 200-107784/4

Matrix: Air Heated Purge:(Y/N) N

Instrument ID: CHC.i Date Analyzed: 08/04/2016 13:51

GC Column: RTX-624 ID: 0.32(mm)

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	LCS 200-107784/3	21185_03.D	08/04/2016 12:57
3833	200-34570-11	21185_11.D	08/04/2016 20:15

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington | Job No.: 200-34570-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 200-107784/4

Matrix: Air | Lab File ID: 21185_04.D

Analysis Method: TO-15 | Date Collected:

Sample wt/vol: 200(mL) | Date Analyzed: 08/04/2016 13:51

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: RTX-624 ID: 0.32(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 107784 | Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	RL
115-07-1	Propylene	5.0	U	5.0	5.0
75-71-8	Dichlorodifluoromethane	0.50	U	0.50	0.50
75-45-6	Freon 22	0.50	U	0.50	0.50
76-14-2	1,2-Dichlorotetrafluoroethane	0.20	U	0.20	0.20
74-87-3	Chloromethane	0.50	U	0.50	0.50
106-97-8	n-Butane	0.50	U	0.50	0.50
75-01-4	Vinyl chloride	0.20	U	0.20	0.20
106-99-0	1,3-Butadiene	0.20	U	0.20	0.20
74-83-9	Bromomethane	0.20	U	0.20	0.20
75-00-3	Chloroethane	0.50	U	0.50	0.50
593-60-2	Bromoethene(Vinyl Bromide)	0.20	U	0.20	0.20
75-69-4	Trichlorofluoromethane	0.20	U	0.20	0.20
64-17-5	Ethanol	5.0	U	5.0	5.0
76-13-1	Freon TF	0.20	U	0.20	0.20
75-35-4	1,1-Dichloroethene	0.20	U	0.20	0.20
67-64-1	Acetone	5.0	U	5.0	5.0
67-63-0	Isopropyl alcohol	5.0	U	5.0	5.0
75-15-0	Carbon disulfide	0.50	U	0.50	0.50
107-05-1	3-Chloropropene	0.50	U	0.50	0.50
75-09-2	Methylene Chloride	0.50	U	0.50	0.50
75-65-0	tert-Butyl alcohol	5.0	U	5.0	5.0
1634-04-4	Methyl tert-butyl ether	0.20	U	0.20	0.20
156-60-5	trans-1,2-Dichloroethene	0.20	U	0.20	0.20
110-54-3	n-Hexane	0.20	U	0.20	0.20
75-34-3	1,1-Dichloroethane	0.20	U	0.20	0.20
108-05-4	Vinyl acetate	5.0	U	5.0	5.0
141-78-6	Ethyl acetate	5.0	U	5.0	5.0
78-93-3	Methyl Ethyl Ketone	0.50	U	0.50	0.50
156-59-2	cis-1,2-Dichloroethene	0.20	U	0.20	0.20
540-59-0	1,2-Dichloroethene, Total	0.40	U	0.40	0.40
67-66-3	Chloroform	0.20	U	0.20	0.20
109-99-9	Tetrahydrofuran	5.0	U	5.0	5.0
71-55-6	1,1,1-Trichloroethane	0.20	U	0.20	0.20
110-82-7	Cyclohexane	0.20	U	0.20	0.20
56-23-5	Carbon tetrachloride	0.20	U	0.20	0.20
540-84-1	2,2,4-Trimethylpentane	0.20	U	0.20	0.20

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington Job No.: 200-34570-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 200-107784/4

Matrix: Air Lab File ID: 21185_04.D

Analysis Method: TO-15 Date Collected:

Sample wt/vol: 200(mL) Date Analyzed: 08/04/2016 13:51

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-624 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 107784 Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	RL
71-43-2	Benzene	0.20	U	0.20	0.20
107-06-2	1,2-Dichloroethane	0.20	U	0.20	0.20
142-82-5	n-Heptane	0.20	U	0.20	0.20
79-01-6	Trichloroethene	0.20	U	0.20	0.20
80-62-6	Methyl methacrylate	0.50	U	0.50	0.50
78-87-5	1,2-Dichloropropane	0.20	U	0.20	0.20
123-91-1	1,4-Dioxane	5.0	U	5.0	5.0
75-27-4	Bromodichloromethane	0.20	U	0.20	0.20
10061-01-5	cis-1,3-Dichloropropene	0.20	U	0.20	0.20
108-10-1	methyl isobutyl ketone	0.50	U	0.50	0.50
108-88-3	Toluene	0.20	U	0.20	0.20
10061-02-6	trans-1,3-Dichloropropene	0.20	U	0.20	0.20
79-00-5	1,1,2-Trichloroethane	0.20	U	0.20	0.20
127-18-4	Tetrachloroethene	0.20	U	0.20	0.20
591-78-6	Methyl Butyl Ketone (2-Hexanone)	0.50	U	0.50	0.50
124-48-1	Dibromochloromethane	0.20	U	0.20	0.20
106-93-4	1,2-Dibromoethane	0.20	U	0.20	0.20
108-90-7	Chlorobenzene	0.20	U	0.20	0.20
100-41-4	Ethylbenzene	0.20	U	0.20	0.20
179601-23-1	m,p-Xylene	0.50	U	0.50	0.50
95-47-6	Xylene, o-	0.20	U	0.20	0.20
1330-20-7	Xylene (total)	0.70	U	0.70	0.70
100-42-5	Styrene	0.20	U	0.20	0.20
75-25-2	Bromoform	0.20	U	0.20	0.20
98-82-8	Cumene	0.20	U	0.20	0.20
79-34-5	1,1,2,2-Tetrachloroethane	0.20	U	0.20	0.20
103-65-1	n-Propylbenzene	0.20	U	0.20	0.20
622-96-8	4-Ethyltoluene	0.20	U	0.20	0.20
108-67-8	1,3,5-Trimethylbenzene	0.20	U	0.20	0.20
95-49-8	2-Chlorotoluene	0.20	U	0.20	0.20
98-06-6	tert-Butylbenzene	0.20	U	0.20	0.20
95-63-6	1,2,4-Trimethylbenzene	0.20	U	0.20	0.20
135-98-8	sec-Butylbenzene	0.20	U	0.20	0.20
99-87-6	4-Isopropyltoluene	0.20	U	0.20	0.20
541-73-1	1,3-Dichlorobenzene	0.20	U	0.20	0.20
106-46-7	1,4-Dichlorobenzene	0.20	U	0.20	0.20

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington Job No.: 200-34570-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 200-107784/4

Matrix: Air Lab File ID: 21185_04.D

Analysis Method: TO-15 Date Collected:

Sample wt/vol: 200(mL) Date Analyzed: 08/04/2016 13:51

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-624 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 107784 Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	RL
100-44-7	Benzyl chloride	0.20	U	0.20	0.20
104-51-8	n-Butylbenzene	0.20	U	0.20	0.20
95-50-1	1,2-Dichlorobenzene	0.20	U	0.20	0.20
120-82-1	1,2,4-Trichlorobenzene	0.50	U	0.50	0.50
87-68-3	Hexachlorobutadiene	0.20	U	0.20	0.20
91-20-3	Naphthalene	0.50	U	0.50	0.50

TestAmerica Burlington
Target Compound Quantitation Report

Data File: \\ChromNA\Burlington\ChromData\CHC.i\20160804-21185.b\21185_04.D
Lims ID: mb
Client ID:
Sample Type: MB
Inject. Date: 04-Aug-2016 13:51:30 ALS Bottle#: 5 Worklist Smp#: 4
Purge Vol: 200.000 mL Dil. Factor: 1.0000
Sample Info: 200-0021185-004
Misc. Info.: mb
Operator ID: pad Instrument ID: CHC.i

Method: \\ChromNA\Burlington\ChromData\CHC.i\20160804-21185.b\TO15_MasterMethod_(v1)_CHC.i.m
Limit Group: AI_TO15_ICAL
Last Update: 05-Aug-2016 11:42:36 Calib Date: 30-Jun-2016 22:11:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Burlington\ChromData\CHC.i\20160630-20687.b\20687_10.D

Column 1 : RTX-624 (0.32 mm) Det: MS SCAN
Process Host: XAWRK020

First Level Reviewer: daiglep Date: 05-Aug-2016 11:44:24

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
1 Propene	41		2.983					ND	
2 Dichlorodifluoromethane	85		3.053					ND	
3 Chlorodifluoromethane	51		3.106					ND	
4 1,2-Dichloro-1,1,2,2-tetra	85		3.320					ND	
5 Chloromethane	50		3.458					ND	
6 Butane	43		3.661					ND	
7 Vinyl chloride	62		3.704					ND	
8 Butadiene	54		3.784					ND	
10 Bromomethane	94		4.472					ND	
11 Chloroethane	64		4.718					ND	
12 2-Methylbutane	43		4.793					ND	
13 Vinyl bromide	106		5.118					ND	
14 Trichlorofluoromethane	101		5.225					ND	
16 Pentane	43		5.374					ND	
17 Ethanol	45		5.833					ND	
18 Ethyl ether	59		5.908					ND	
19 Acrolein	56	6.308	6.292	0.016	13	685		0.1127	
20 1,1,2-Trichloro-1,2,2-trif	101		6.335					ND	
21 1,1-Dichloroethene	96		6.367					ND	
22 Acetone	43		6.612					ND	
23 Carbon disulfide	76		6.746					ND	
24 Isopropyl alcohol	45		6.938					ND	
25 3-Chloro-1-propene	41		7.173					ND	
26 Acetonitrile	41		7.306					ND	
T 15 Methyl Acetate TIC	43		7.308					ND	
27 Methylene Chloride	49		7.477					ND	
28 2-Methyl-2-propanol	59		7.723					ND	
29 Methyl tert-butyl ether	73		7.888					ND	
31 trans-1,2-Dichloroethene	61		7.925					ND	
32 Acrylonitrile	53		8.080					ND	
33 Hexane	57		8.320					ND	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
34 1,1-Dichloroethane	63		8.811					ND	
35 Vinyl acetate	43		8.902					ND	
37 cis-1,2-Dichloroethene	96		9.943					ND	
38 2-Butanone (MEK)	72		9.991					ND	
39 Ethyl acetate	88		10.049					ND	
S 30 1,2-Dichloroethene, Total	61		10.200					ND	
* 40 Chlorobromomethane	128	10.407	10.412	-0.005	93	291669	10.0	10.0	
41 Tetrahydrofuran	42		10.412					ND	
42 Chloroform	83		10.551					ND	
43 Cyclohexane	84		10.786					ND	
44 1,1,1-Trichloroethane	97		10.818					ND	
45 Carbon tetrachloride	117		11.069					ND	
46 Isooctane	57		11.517					ND	
47 Benzene	78		11.544					ND	
48 1,2-Dichloroethane	62		11.736					ND	
49 n-Heptane	43		11.923					ND	
* 50 1,4-Difluorobenzene	114	12.408	12.408	0.000	98	1725465	10.0	10.0	
52 n-Butanol	56		12.830					ND	
53 Trichloroethene	95		12.878					ND	
A 51 GRO	1	13.073	(4.783-21.363)		0	7289688		0	
T 36 Methyl cyclohexane TIC	55		13.179					ND	
54 1,2-Dichloropropane	63		13.438					ND	
55 Methyl methacrylate	69		13.625					ND	
56 1,4-Dioxane	88		13.673					ND	
57 Dibromomethane	174		13.700					ND	
58 Dichlorobromomethane	83		14.015					ND	
A 59 TVOC as Toluene	1	14.773	(2.973-26.572)		0	7486161		0	
60 cis-1,3-Dichloropropene	75		14.959					ND	
61 4-Methyl-2-pentanone (MIBK	43		15.253					ND	
65 Toluene	92		15.546					ND	
64 n-Octane	43		15.621					ND	
66 trans-1,3-Dichloropropene	75		16.160					ND	
67 1,1,2-Trichloroethane	83		16.534					ND	
68 Tetrachloroethene	166		16.635					ND	
69 2-Hexanone	43		16.982					ND	
71 Chlorodibromomethane	129		17.292					ND	
72 Ethylene Dibromide	107		17.558					ND	
* 74 Chlorobenzene-d5	117	18.455	18.455	0.000	95	1691434	10.0	10.0	
75 Chlorobenzene	112		18.514					ND	
76 Ethylbenzene	91		18.669					ND	
77 n-Nonane	57		18.802					ND	
78 m-Xylene & p-Xylene	106		18.919					ND	
T 70 1,2-Dibromo-3-Chloropropan	75		18.980					ND	
79 o-Xylene	106		19.757					ND	
80 Styrene	104		19.811					ND	
S 73 Xylenes, Total	106		20.100					ND	
81 Bromoform	173		20.238					ND	
82 Isopropylbenzene	105		20.446					ND	
84 1,1,2,2-Tetrachloroethane	83		21.107					ND	
85 N-Propylbenzene	91		21.172					ND	
86 1,2,3-Trichloropropane	75		21.198					ND	
87 n-Decane	57		21.353					ND	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
88 4-Ethyltoluene	105		21.358					ND	
89 2-Chlorotoluene	91	21.364	21.369	-0.005	93	4083		0.0330	
90 1,3,5-Trimethylbenzene	105		21.470					ND	
91 Alpha Methyl Styrene	118		21.839					ND	
92 tert-Butylbenzene	119		21.956					ND	
93 1,2,4-Trimethylbenzene	105	22.057	22.052	0.005	91	1670		0.0141	
94 sec-Butylbenzene	105		22.282					ND	
95 4-Isopropyltoluene	119		22.484					ND	
96 1,3-Dichlorobenzene	146		22.511					ND	
97 1,4-Dichlorobenzene	146	22.650	22.650	0.000	90	945		0.0130	
98 Benzyl chloride	91	22.842	22.842	0.000	94	1139		0.0105	
100 n-Butylbenzene	91		23.050					ND	
99 Undecane	57		23.077					ND	
101 1,2-Dichlorobenzene	146		23.173					ND	
102 Dodecane	57		24.630					ND	
103 1,2,4-Trichlorobenzene	180	25.623	25.628	-0.005	83	1112		0.0211	
104 Hexachlorobutadiene	225		25.809					ND	
105 Naphthalene	128	26.092	26.097	-0.005	1	2494		0.0226	
106 1,2,3-Trichlorobenzene	180	26.567	26.562	0.005	1	916		0.0203	
T 119 Difluoroethane TIC	1		0.000					ND	
T 120 Freon 115 TIC	1		0.000					ND	
T 121 1,1,1-Trifluoro-2,2-dichlo	1		0.000					ND	
T 118 Chlorotrifluoroethene TIC	1		0.000					ND	
T 109 1,3-Dichloropropane TIC	1		0.000					ND	
T 108 1,1,1,2-Tetrachloroethane	1		0.000					ND	
T 107 Methyl acetylene TIC	1		0.000					ND	

Reagents:

ATTO15CISs_00010 Amount Added: 20.00 Units: mL Run Reagent

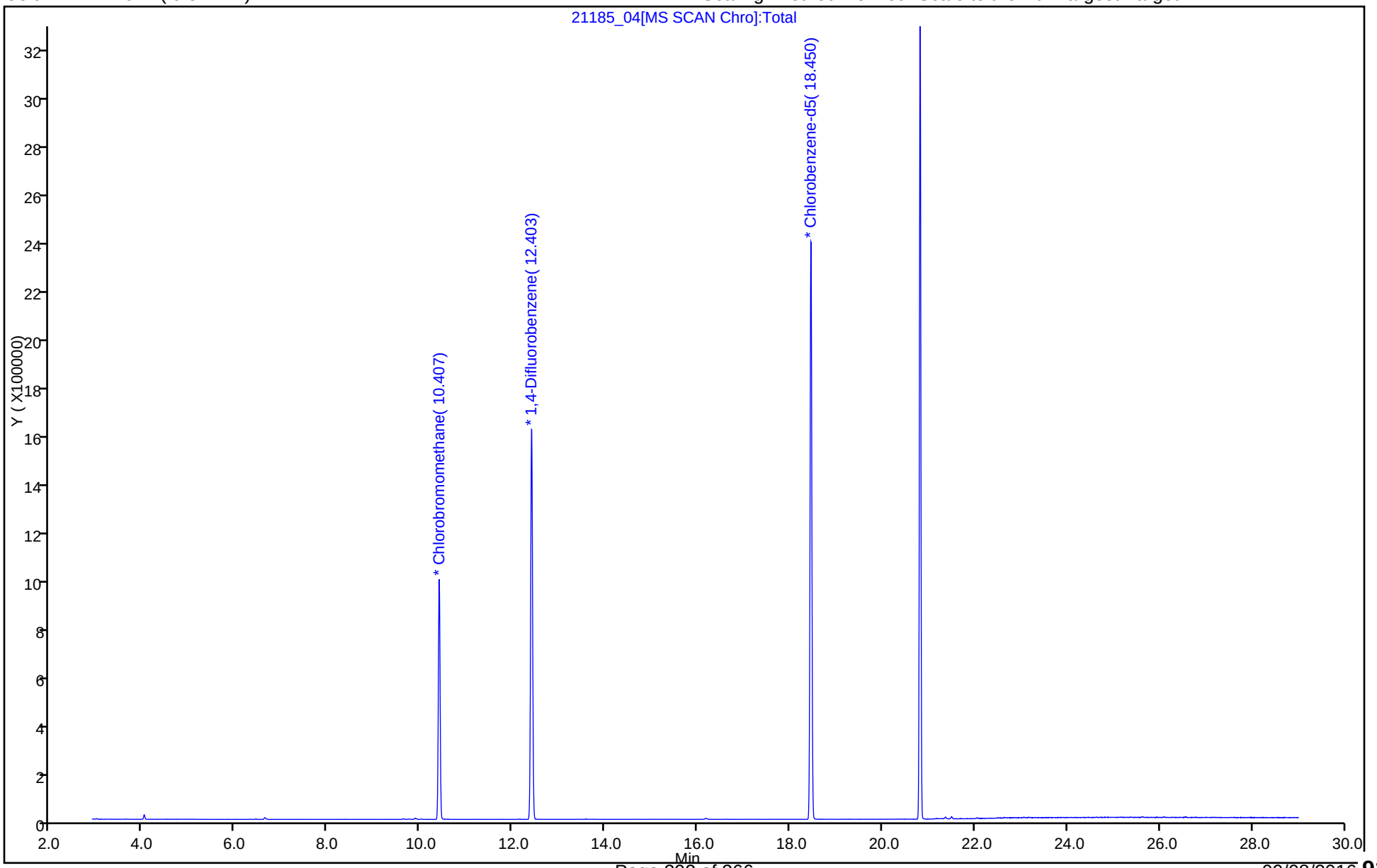
Report Date: 05-Aug-2016 11:44:25 Chrom Revision: 2.2 04-Mar-2016 14:36:24

TestAmerica Burlington

Data File: \\ChromNA\Burlington\ChromData\CHC.i\20160804-21185.b\21185_04.D

Injection Date:	04-Aug-2016 13:51:30	Instrument ID:	CHC.i	Operator ID:	pad
Lims ID:	mb			Worklist Smp#:	4
Client ID:					
Purge Vol:	200.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	5
Method:	TO15_MasterMethod_(v1)_CHC.i	Limit Group:	AI_TO15_ICAL		

Column: RTX-624 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



FORM IV
AIR - GC/MS VOA METHOD BLANK SUMMARY

Lab Name: TestAmerica Burlington Job No.: 200-34834-1

SDG No.:

Lab File ID: 21352_05.D Lab Sample ID: MB 200-108166/5

Matrix: Air Heated Purge:(Y/N) N

Instrument ID: CHG.i Date Analyzed: 08/15/2016 13:52

GC Column: RTX-624 ID: 0.32(mm)

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	LCS 200-108166/4	21352_04.D	08/15/2016 13:00
3486	200-34834-5	21352_06.D	08/15/2016 14:44

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington | Job No.: 200-34834-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 200-108166/5

Matrix: Air | Lab File ID: 21352_05.D

Analysis Method: TO-15 | Date Collected:

Sample wt/vol: 200(mL) | Date Analyzed: 08/15/2016 13:52

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: RTX-624 ID: 0.32(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 108166 | Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	RL
115-07-1	Propylene	5.0	U	5.0	5.0
75-71-8	Dichlorodifluoromethane	0.50	U	0.50	0.50
75-45-6	Freon 22	0.50	U	0.50	0.50
76-14-2	1,2-Dichlorotetrafluoroethane	0.20	U	0.20	0.20
74-87-3	Chloromethane	0.50	U	0.50	0.50
106-97-8	n-Butane	0.50	U	0.50	0.50
75-01-4	Vinyl chloride	0.20	U	0.20	0.20
106-99-0	1,3-Butadiene	0.20	U	0.20	0.20
74-83-9	Bromomethane	0.20	U	0.20	0.20
75-00-3	Chloroethane	0.50	U	0.50	0.50
593-60-2	Bromoethene(Vinyl Bromide)	0.20	U	0.20	0.20
75-69-4	Trichlorofluoromethane	0.20	U	0.20	0.20
64-17-5	Ethanol	5.0	U	5.0	5.0
76-13-1	Freon TF	0.20	U	0.20	0.20
75-35-4	1,1-Dichloroethene	0.20	U	0.20	0.20
67-64-1	Acetone	5.0	U	5.0	5.0
67-63-0	Isopropyl alcohol	5.0	U	5.0	5.0
75-15-0	Carbon disulfide	0.50	U	0.50	0.50
107-05-1	3-Chloropropene	0.50	U	0.50	0.50
75-09-2	Methylene Chloride	0.50	U	0.50	0.50
75-65-0	tert-Butyl alcohol	5.0	U	5.0	5.0
1634-04-4	Methyl tert-butyl ether	0.20	U	0.20	0.20
156-60-5	trans-1,2-Dichloroethene	0.20	U	0.20	0.20
110-54-3	n-Hexane	0.20	U	0.20	0.20
75-34-3	1,1-Dichloroethane	0.20	U	0.20	0.20
108-05-4	Vinyl acetate	5.0	U	5.0	5.0
141-78-6	Ethyl acetate	5.0	U	5.0	5.0
78-93-3	Methyl Ethyl Ketone	0.50	U	0.50	0.50
156-59-2	cis-1,2-Dichloroethene	0.20	U	0.20	0.20
540-59-0	1,2-Dichloroethene, Total	0.40	U	0.40	0.40
67-66-3	Chloroform	0.20	U	0.20	0.20
109-99-9	Tetrahydrofuran	5.0	U	5.0	5.0
71-55-6	1,1,1-Trichloroethane	0.20	U	0.20	0.20
110-82-7	Cyclohexane	0.20	U	0.20	0.20
56-23-5	Carbon tetrachloride	0.20	U	0.20	0.20
540-84-1	2,2,4-Trimethylpentane	0.20	U	0.20	0.20

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington | Job No.: 200-34834-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 200-108166/5

Matrix: Air | Lab File ID: 21352_05.D

Analysis Method: TO-15 | Date Collected:

Sample wt/vol: 200(mL) | Date Analyzed: 08/15/2016 13:52

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: RTX-624 ID: 0.32(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 108166 | Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	RL
71-43-2	Benzene	0.20	U	0.20	0.20
107-06-2	1,2-Dichloroethane	0.20	U	0.20	0.20
142-82-5	n-Heptane	0.20	U	0.20	0.20
79-01-6	Trichloroethene	0.20	U	0.20	0.20
80-62-6	Methyl methacrylate	0.50	U	0.50	0.50
78-87-5	1,2-Dichloropropane	0.20	U	0.20	0.20
123-91-1	1,4-Dioxane	5.0	U	5.0	5.0
75-27-4	Bromodichloromethane	0.20	U	0.20	0.20
10061-01-5	cis-1,3-Dichloropropene	0.20	U	0.20	0.20
108-10-1	methyl isobutyl ketone	0.50	U	0.50	0.50
108-88-3	Toluene	0.20	U	0.20	0.20
10061-02-6	trans-1,3-Dichloropropene	0.20	U	0.20	0.20
79-00-5	1,1,2-Trichloroethane	0.20	U	0.20	0.20
127-18-4	Tetrachloroethene	0.20	U	0.20	0.20
591-78-6	Methyl Butyl Ketone (2-Hexanone)	0.50	U	0.50	0.50
124-48-1	Dibromochloromethane	0.20	U	0.20	0.20
106-93-4	1,2-Dibromoethane	0.20	U	0.20	0.20
108-90-7	Chlorobenzene	0.20	U	0.20	0.20
100-41-4	Ethylbenzene	0.20	U	0.20	0.20
179601-23-1	m,p-Xylene	0.50	U	0.50	0.50
95-47-6	Xylene, o-	0.20	U	0.20	0.20
1330-20-7	Xylene (total)	0.70	U	0.70	0.70
100-42-5	Styrene	0.20	U	0.20	0.20
75-25-2	Bromoform	0.20	U	0.20	0.20
98-82-8	Cumene	0.20	U	0.20	0.20
79-34-5	1,1,2,2-Tetrachloroethane	0.20	U	0.20	0.20
103-65-1	n-Propylbenzene	0.20	U	0.20	0.20
622-96-8	4-Ethyltoluene	0.20	U	0.20	0.20
108-67-8	1,3,5-Trimethylbenzene	0.20	U	0.20	0.20
95-49-8	2-Chlorotoluene	0.20	U	0.20	0.20
98-06-6	tert-Butylbenzene	0.20	U	0.20	0.20
95-63-6	1,2,4-Trimethylbenzene	0.20	U	0.20	0.20
135-98-8	sec-Butylbenzene	0.20	U	0.20	0.20
99-87-6	4-Isopropyltoluene	0.20	U	0.20	0.20
541-73-1	1,3-Dichlorobenzene	0.20	U	0.20	0.20
106-46-7	1,4-Dichlorobenzene	0.20	U	0.20	0.20

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington Job No.: 200-34834-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 200-108166/5

Matrix: Air Lab File ID: 21352_05.D

Analysis Method: TO-15 Date Collected:

Sample wt/vol: 200(mL) Date Analyzed: 08/15/2016 13:52

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-624 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 108166 Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	RL
100-44-7	Benzyl chloride	0.20	U	0.20	0.20
104-51-8	n-Butylbenzene	0.20	U	0.20	0.20
95-50-1	1,2-Dichlorobenzene	0.20	U	0.20	0.20
120-82-1	1,2,4-Trichlorobenzene	0.50	U	0.50	0.50
87-68-3	Hexachlorobutadiene	0.20	U	0.20	0.20
91-20-3	Naphthalene	0.50	U	0.50	0.50

TestAmerica Burlington
Target Compound Quantitation Report

Data File: \\ChromNA\Burlington\ChromData\CHG.i\20160815-21352.b\21352_05.D
Lims ID: mb
Client ID:
Sample Type: MB
Inject. Date: 15-Aug-2016 13:52:30 ALS Bottle#: 4 Worklist Smp#: 5
Purge Vol: 200.000 mL Dil. Factor: 1.0000
Sample Info: 200-0021352-005
Operator ID: ggg Instrument ID: CHG.i

Method: \\ChromNA\Burlington\ChromData\CHG.i\20160815-21352.b\TO15_MasterMethod_(v1)_G.m
Limit Group: AI_TO15_ICAL
Last Update: 16-Aug-2016 11:25:49 Calib Date: 10-Aug-2016 01:26:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Burlington\ChromData\CHG.i\20160809-21273.b\21273_11.D

Column 1 : RTX-624 (0.32 mm) Det: MS SCAN
Process Host: XAWRK022

First Level Reviewer: guazzonig Date: 15-Aug-2016 15:18:26

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
1 Propene	41		2.738					ND	
2 Dichlorodifluoromethane	85		2.803					ND	
3 Chlorodifluoromethane	51		2.840					ND	
4 1,2-Dichloro-1,1,2,2-tetra	85		3.043					ND	
5 Chloromethane	50	3.166	3.156	0.010	97	1998		0.0807	
6 Butane	43		3.359					ND	
7 Vinyl chloride	62		3.380					ND	
8 Butadiene	54		3.461					ND	
10 Bromomethane	94		4.076					ND	
11 Chloroethane	64		4.306					ND	
12 2-Methylbutane	43		4.418					ND	
13 Vinyl bromide	106		4.691					ND	
14 Trichlorofluoromethane	101		4.814					ND	
16 Pentane	43		4.975					ND	
17 Ethanol	45		5.365					ND	
18 Ethyl ether	59		5.483					ND	
19 Acrolein	56		5.788					ND	
21 1,1-Dichloroethene	96		5.900					ND	
20 1,1,2-Trichloro-1,2,2-trif	101		5.900					ND	
22 Acetone	43		6.098					ND	
23 Carbon disulfide	76		6.269					ND	
24 Isopropyl alcohol	45		6.451					ND	
25 3-Chloro-1-propene	41		6.670					ND	
26 Acetonitrile	41		6.713					ND	
27 Methylene Chloride	49	6.949	6.949	0.000	96	3635		0.1238	
28 2-Methyl-2-propanol	59		7.232					ND	
31 trans-1,2-Dichloroethene	61		7.419					ND	
29 Methyl tert-butyl ether	73		7.425					ND	
32 Acrylonitrile	53		7.489					ND	
33 Hexane	57		7.874					ND	
34 1,1-Dichloroethane	63		8.265					ND	
35 Vinyl acetate	43		8.372					ND	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
37 cis-1,2-Dichloroethene	96		9.361					ND	
38 2-Butanone (MEK)	72		9.404					ND	
39 Ethyl acetate	88		9.500					ND	
S 30 1,2-Dichloroethene, Total	61		9.665					ND	
* 40 Chlorobromomethane	128	9.800	9.800	0.000	94	249216	10.0	10.0	
41 Tetrahydrofuran	42		9.859					ND	
42 Chloroform	83		9.955					ND	
44 1,1,1-Trichloroethane	97		10.244					ND	
43 Cyclohexane	84		10.260					ND	
45 Carbon tetrachloride	117		10.511					ND	
47 Benzene	78	10.934	10.934	0.000	86	2922		0.0308	
46 Isooctane	57		11.009					ND	
48 1,2-Dichloroethane	62		11.079					ND	
49 n-Heptane	43		11.410					ND	
* 50 1,4-Difluorobenzene	114	11.774	11.774	0.000	96	1588121	10.0	10.0	
52 n-Butanol	56		12.207					ND	
53 Trichloroethene	95		12.245					ND	
T 36 Methyl cyclohexane TIC	55		12.585					ND	
A 51 GRO	1	12.732	(4.408-21.055)		0	630584		0	
54 1,2-Dichloropropane	63		12.742					ND	
55 Methyl methacrylate	69		12.978					ND	
57 Dibromomethane	174		12.983					ND	
56 1,4-Dioxane	88		13.004					ND	
58 Dichlorobromomethane	83		13.299					ND	
60 cis-1,3-Dichloropropene	75		14.272					ND	
A 59 TVOC as Toluene	92	14.395	(2.728-26.062)		0	716760		0	
61 4-Methyl-2-pentanone (MIBK	43		14.593					ND	
A 63 Toluene Range	92	14.920	(14.880-14.960)		0	9059		NC	
65 Toluene	92	14.925	14.920	0.005	31	1088		0.0143	
64 n-Octane	43		15.107					ND	
A 62 C8 Range	1	15.120	(15.057-15.157)		0	1968		NC	
66 trans-1,3-Dichloropropene	75		15.508					ND	
67 1,1,2-Trichloroethane	83		15.883					ND	
68 Tetrachloroethene	166		16.080					ND	
69 2-Hexanone	43		16.391					ND	
71 Chlorodibromomethane	129		16.674					ND	
72 Ethylene Dibromide	107		16.936					ND	
* 74 Chlorobenzene-d5	117	17.894	17.894	0.000	92	1620124	10.0	10.0	
75 Chlorobenzene	112		17.958					ND	
76 Ethylbenzene	91		18.145					ND	
77 n-Nonane	57		18.381					ND	
78 m-Xylene & p-Xylene	106		18.402					ND	
79 o-Xylene	106		19.242					ND	
80 Styrene	104	19.301	19.290	0.011	13	750		0.009110	
S 73 Xylenes, Total	106		19.600					ND	
81 Bromoform	173		19.692					ND	
82 Isopropylbenzene	105		20.002					ND	
* 83 4-Bromofluorobenzene	95	20.366	20.366	0.000	83	1057226	10.0	10.0	
84 1,1,2,2-Tetrachloroethane	83		20.644					ND	
86 1,2,3-Trichloropropane	75		20.735					ND	
85 N-Propylbenzene	91		20.778					ND	
89 2-Chlorotoluene	91	20.976	20.965	0.011	87	4030		0.0259	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
88 4-Ethyltoluene	105	20.986	20.981	0.005	88	2602		0.0159	
87 n-Decane	57		21.045					ND	
90 1,3,5-Trimethylbenzene	105	21.109	21.093	0.016	92	1877		0.0127	
91 Alpha Methyl Styrene	118		21.468					ND	
92 tert-Butylbenzene	119		21.607					ND	
93 1,2,4-Trimethylbenzene	105		21.703					ND	
94 sec-Butylbenzene	105		21.944					ND	
95 4-Isopropyltoluene	119		22.158					ND	
96 1,3-Dichlorobenzene	146	22.163	22.158	0.005	90	3762		0.0470	
97 1,4-Dichlorobenzene	146	22.297	22.297	0.000	90	4422		0.0571	
98 Benzyl chloride	91	22.490	22.479	0.011	96	5318		0.0550	
100 n-Butylbenzene	91	22.741	22.730	0.011	95	3941		0.0256	
101 1,2-Dichlorobenzene	146	22.821	22.810	0.011	89	3764		0.0484	
99 Undecane	57		22.816					ND	
102 Dodecane	57		24.324					ND	
103 1,2,4-Trichlorobenzene	180	25.191	25.180	0.011	88	4231		0.1214	
104 Hexachlorobutadiene	225		25.400					ND	
105 Naphthalene	128	25.619	25.603	0.016	97	8109		0.0957	
106 1,2,3-Trichlorobenzene	180	26.068	26.052	0.016	88	3665		0.1127	
T 15 Methyl Acetate TIC	43		0.000					ND	
T 70 1,2-Dibromo-3-Chloropropan	75		0.000					ND	
T 109 1,3-Dichloropropane TIC	1		0.000					ND	
T 108 1,1,1,2-Tetrachloroethane	1		0.000					ND	
T 107 Methyl acetylene TIC	1		0.000					ND	

QC Flag Legend

Processing Flags

NC - Not Calibrated

Reagents:

ATTO15GIS_00011 Amount Added: 20.00 Units: mL Run Reagent

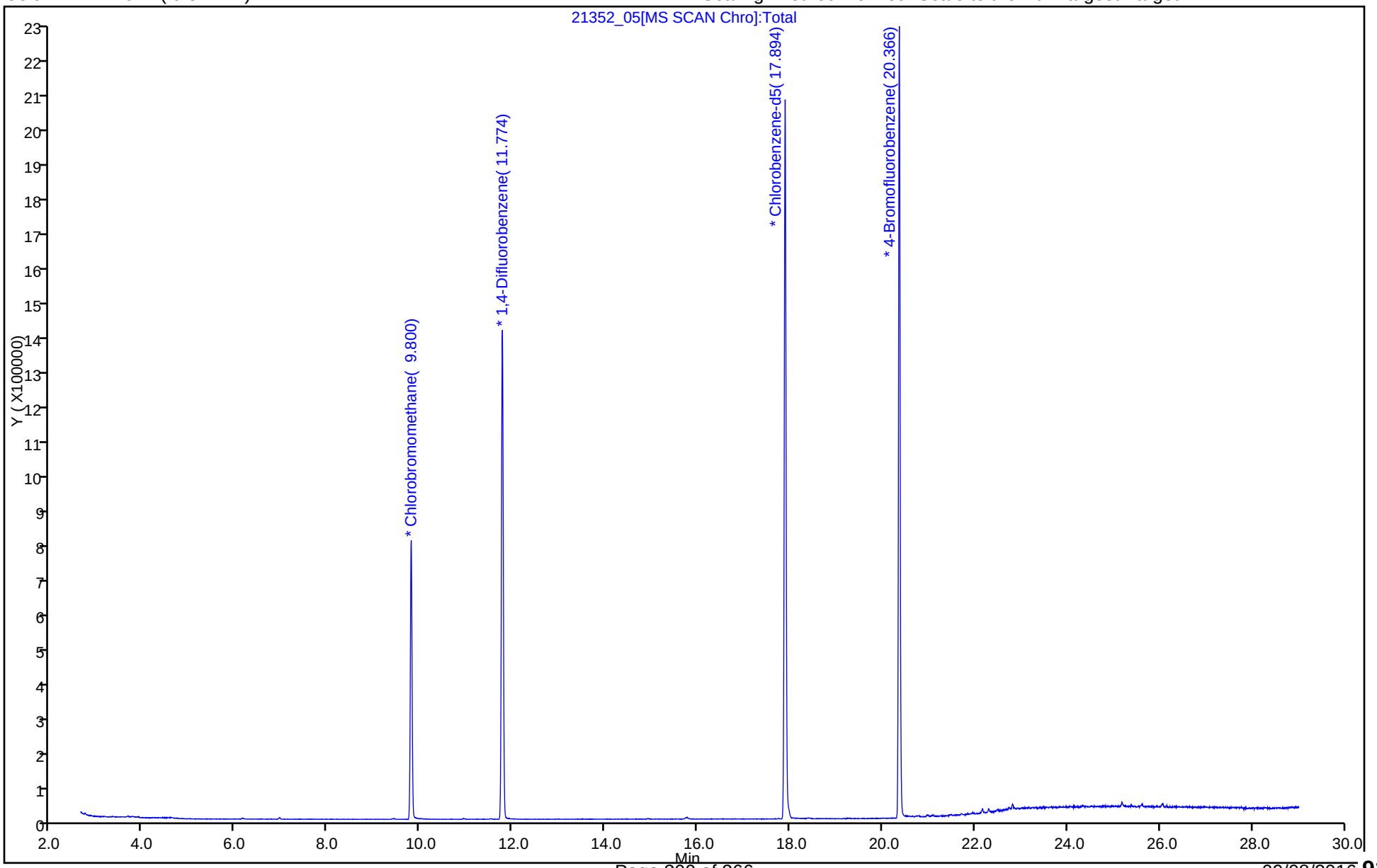
Report Date: 16-Aug-2016 11:25:56 Chrom Revision: 2.2 04-Mar-2016 14:36:24

TestAmerica Burlington

Data File: \\ChromNA\Burlington\ChromData\CHG.i\20160815-21352.b\21352_05.D

Injection Date:	15-Aug-2016 13:52:30	Instrument ID:	CHG.i	Operator ID:	ggg
Lims ID:	mb			Worklist Smp#:	5
Client ID:					
Purge Vol:	200.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	4
Method:	TO15_MasterMethod_(v1)_G	Limit Group:	AI_TO15_ICAL		

Column: RTX-624 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



FORM V
AIR - GC/MS VOA INSTRUMENT PERFORMANCE CHECK

Lab Name: TestAmerica Burlington Job No.: 200-34570-1

SDG No.:

Lab File ID: 20687_01.D BFB Injection Date: 06/30/2016

Instrument ID: CHC.i BFB Injection Time: 14:20

Analysis Batch No.: 106489

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	8.0 - 40.0% of mass 95	25.9	
75	30.0 - 66.0% of mass 95	54.2	
95	Base peak, 100% relative abundance	100.0	
96	5.0 - 9.0% of mass 95	6.5	
173	Less than 2.0% of mass 174	0.0	(0.0) 1
174	50.0 - 120.0% of mass 95	78.5	
175	4.0 - 9.0 % of mass 174	5.9	(7.5) 1
176	93.0 - 101.0% of mass 174	76.7	(97.8) 1
177	5.0 - 9.0% of mass 176	5.0	(6.5) 2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	IC 200-106489/3	20687_03.D	06/30/2016	15:58
	IC 200-106489/4	20687_04.D	06/30/2016	16:51
	IC 200-106489/5	20687_05.D	06/30/2016	17:44
	IC 200-106489/6	20687_06.D	06/30/2016	18:38
	ICIS 200-106489/7	20687_07.D	06/30/2016	19:32
	IC 200-106489/8	20687_08.D	06/30/2016	20:25
	IC 200-106489/9	20687_09.D	06/30/2016	21:18
	IC 200-106489/10	20687_10.D	06/30/2016	22:11
	ICV 200-106489/15	20687_15.D	07/01/2016	02:37

FORM V
AIR - GC/MS VOA INSTRUMENT PERFORMANCE CHECK

Lab Name: TestAmerica Burlington Job No.: 200-34570-1

SDG No.:

Lab File ID: 21185_01.D BFB Injection Date: 08/04/2016

Instrument ID: CHC.i BFB Injection Time: 11:18

Analysis Batch No.: 107784

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	8.0 - 40.0% of mass 95	25.5	
75	30.0 - 66.0% of mass 95	54.6	
95	Base peak, 100% relative abundance	100.0	
96	5.0 - 9.0% of mass 95	6.6	
173	Less than 2.0% of mass 174	0.0	(0.0) 1
174	50.0 - 120.0% of mass 95	70.4	
175	4.0 - 9.0 % of mass 174	5.5	(7.8) 1
176	93.0 - 101.0% of mass 174	69.0	(98.0) 1
177	5.0 - 9.0% of mass 176	4.6	(6.6) 2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	CCVIS 200-107784/2	21185_02.D	08/04/2016	12:04
	LCS 200-107784/3	21185_03.D	08/04/2016	12:57
	MB 200-107784/4	21185_04.D	08/04/2016	13:51
3833	200-34570-11	21185_11.D	08/04/2016	20:15

FORM V
AIR - GC/MS VOA INSTRUMENT PERFORMANCE CHECK

Lab Name: TestAmerica Burlington Job No.: 200-34834-1

SDG No.:

Lab File ID: 21273_01.D BFB Injection Date: 08/09/2016

Instrument ID: CHG.i BFB Injection Time: 17:02

Analysis Batch No.: 107979

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	8.0 - 40.0% of mass 95	25.8	
75	30.0 - 66.0% of mass 95	57.7	
95	Base peak, 100% relative abundance	100.0	
96	5.0 - 9.0% of mass 95	6.9	
173	Less than 2.0% of mass 174	0.3	(0.5) 1
174	50.0 - 120.0% of mass 95	64.7	
175	4.0 - 9.0 % of mass 174	4.6	(7.1) 1
176	93.0 - 101.0% of mass 174	63.2	(97.8) 1
177	5.0 - 9.0% of mass 176	4.0	(6.4) 2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	IC 200-107979/4	21273_04.D	08/09/2016	19:25
	IC 200-107979/5	21273_05.D	08/09/2016	20:17
	IC 200-107979/6	21273_06.D	08/09/2016	21:09
	IC 200-107979/7	21273_07.D	08/09/2016	22:00
	ICIS 200-107979/8	21273_08.D	08/09/2016	22:52
	IC 200-107979/9	21273_09.D	08/09/2016	23:43
	IC 200-107979/10	21273_10.D	08/10/2016	00:34
	IC 200-107979/11	21273_11.D	08/10/2016	01:26
	ICV 200-107979/17	21273_17.D	08/10/2016	06:36

FORM V
AIR - GC/MS VOA INSTRUMENT PERFORMANCE CHECK

Lab Name: TestAmerica Burlington Job No.: 200-34834-1

SDG No.:

Lab File ID: 21352_01.D BFB Injection Date: 08/15/2016

Instrument ID: CHG.i BFB Injection Time: 10:19

Analysis Batch No.: 108166

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	8.0 - 40.0% of mass 95	27.6	
75	30.0 - 66.0% of mass 95	59.9	
95	Base peak, 100% relative abundance	100.0	
96	5.0 - 9.0% of mass 95	6.7	
173	Less than 2.0% of mass 174	0.3	(0.5) 1
174	50.0 - 120.0% of mass 95	61.6	
175	4.0 - 9.0 % of mass 174	4.3	(7.0) 1
176	93.0 - 101.0% of mass 174	60.2	(97.7) 1
177	5.0 - 9.0% of mass 176	3.8	(6.3) 2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	CCVIS 200-108166/2	21352_02.D	08/15/2016	11:06
	LCS 200-108166/4	21352_04.D	08/15/2016	13:00
	MB 200-108166/5	21352_05.D	08/15/2016	13:52
3486	200-34834-5	21352_06.D	08/15/2016	14:44

FORM VIII
AIR - GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Burlington Job No.: 200-34570-1

SDG No.:

Sample No.: ICIS 200-106489/7 Date Analyzed: 06/30/2016 19:32

Instrument ID: CHC.i GC Column: RTX-624 ID: 0.32(mm)

Lab File ID (Standard): 20687_07.D Heated Purge: (Y/N) N

Calibration ID: 35139

		BCM		DFBZ		CBNZd5	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
INITIAL CALIBRATION MID-POINT		329332	10.42	1812668	12.42	1760732	18.47
UPPER LIMIT		461065	10.75	2537735	12.75	2465025	18.80
LOWER LIMIT		197599	10.09	1087601	12.09	1056439	18.14
LAB SAMPLE ID	CLIENT SAMPLE ID						
ICV 200-106489/15		341611	10.42	1912804	12.42	1822726	18.47

BCM = Bromochloromethane
DFBZ = 1,4-Difluorobenzene
CBNZd5 = Chlorobenzene-d5

Area Limit = 60%-140% of internal standard area
RT Limit = ± 0.33 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII TO-15

FORM VIII
AIR - GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Burlington Job No.: 200-34570-1

SDG No.:

Sample No.: CCVIS 200-107784/2 Date Analyzed: 08/04/2016 12:04

Instrument ID: CHC.i GC Column: RTX-624 ID: 0.32(mm)

Lab File ID (Standard): 21185_02.D Heated Purge: (Y/N) N

Calibration ID: 35139

		BCM		DFBZ		CBNZd5	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		291410	10.41	1658108	12.41	1592641	18.46
UPPER LIMIT		407974	10.74	2321351	12.74	2229697	18.79
LOWER LIMIT		174846	10.08	994865	12.08	955585	18.13
LAB SAMPLE ID	CLIENT SAMPLE ID						
LCS 200-107784/3		288859	10.41	1668736	12.41	1608186	18.46
MB 200-107784/4		291669	10.41	1725465	12.41	1691434	18.46
200-34570-11	3833	304344	10.41	1783238	12.41	1723735	18.46

BCM = Bromochloromethane
DFBZ = 1,4-Difluorobenzene
CBNZd5 = Chlorobenzene-d5

Area Limit = 60%-140% of internal standard area
RT Limit = ± 0.33 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII TO-15

FORM VIII
AIR - GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Burlington Job No.: 200-34834-1

SDG No.:

Sample No.: ICIS 200-107979/8 Date Analyzed: 08/09/2016 22:52

Instrument ID: CHG.i GC Column: RTX-624 ID: 0.32(mm)

Lab File ID (Standard): 21273_08.D Heated Purge: (Y/N) N

Calibration ID: 35497

		BCM		DFBZ		CBNZd5	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
INITIAL CALIBRATION MID-POINT		308879	9.81	1828388	11.78	2113924	17.90
UPPER LIMIT		432431	10.14	2559743	12.11	2959494	18.23
LOWER LIMIT		185327	9.48	1097033	11.45	1268354	17.57
LAB SAMPLE ID	CLIENT SAMPLE ID						
ICV 200-107979/17		295794	9.81	1744742	11.78	2191668	17.90

BCM = Bromochloromethane
DFBZ = 1,4-Difluorobenzene
CBNZd5 = Chlorobenzene-d5

Area Limit = 60%-140% of internal standard area
RT Limit = ± 0.33 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII TO-15

FORM VIII
AIR - GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Burlington Job No.: 200-34834-1

SDG No.:

Sample No.: CCVIS 200-108166/2 Date Analyzed: 08/15/2016 11:06

Instrument ID: CHG.i GC Column: RTX-624 ID: 0.32(mm)

Lab File ID (Standard): 21352_02.D Heated Purge: (Y/N) N

Calibration ID: 35497

		BCM		DFBZ		CBNZd5	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		275716	9.80	1641119	11.77	1766879	17.89
UPPER LIMIT		386002	10.13	2297567	12.10	2473631	18.22
LOWER LIMIT		165430	9.47	984671	11.44	1060127	17.56
LAB SAMPLE ID	CLIENT SAMPLE ID						
LCS 200-108166/4		259600	9.80	1450460	11.77	1683093	17.90
MB 200-108166/5		249216	9.80	1588121	11.77	1620124	17.89
200-34834-5	3486	271182	9.80	1657895	11.77	1770377	17.89

BCM = Bromochloromethane
DFBZ = 1,4-Difluorobenzene
CBNZd5 = Chlorobenzene-d5

Area Limit = 60%-140% of internal standard area
RT Limit = ± 0.33 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII TO-15

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington | Job No.: 200-34570-1

SDG No.:

Client Sample ID: 3833 | Lab Sample ID: 200-34570-11

Matrix: Air | Lab File ID: 21185_11.D

Analysis Method: TO-15 | Date Collected: 07/27/2016 00:00

Sample wt/vol: 1000(mL) | Date Analyzed: 08/04/2016 20:15

Soil Aliquot Vol: | Dilution Factor: 0.2

Soil Extract Vol.: | GC Column: RTX-624 ID: 0.32(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 107784 | Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	RL
115-07-1	Propylene	1.0	U	1.0	1.0
75-71-8	Dichlorodifluoromethane	0.10	U	0.10	0.10
75-45-6	Freon 22	0.10	U	0.10	0.10
76-14-2	1,2-Dichlorotetrafluoroethane	0.040	U	0.040	0.040
74-87-3	Chloromethane	0.10	U	0.10	0.10
106-97-8	n-Butane	0.10	U	0.10	0.10
75-01-4	Vinyl chloride	0.040	U	0.040	0.040
106-99-0	1,3-Butadiene	0.040	U	0.040	0.040
74-83-9	Bromomethane	0.040	U	0.040	0.040
75-00-3	Chloroethane	0.10	U	0.10	0.10
593-60-2	Bromoethene(Vinyl Bromide)	0.040	U	0.040	0.040
75-69-4	Trichlorofluoromethane	0.040	U	0.040	0.040
64-17-5	Ethanol	1.0	U	1.0	1.0
76-13-1	Freon TF	0.040	U	0.040	0.040
75-35-4	1,1-Dichloroethene	0.040	U	0.040	0.040
67-64-1	Acetone	1.0	U	1.0	1.0
67-63-0	Isopropyl alcohol	1.0	U	1.0	1.0
75-15-0	Carbon disulfide	0.10	U	0.10	0.10
107-05-1	3-Chloropropene	0.10	U	0.10	0.10
75-09-2	Methylene Chloride	0.10	U	0.10	0.10
75-65-0	tert-Butyl alcohol	1.0	U	1.0	1.0
1634-04-4	Methyl tert-butyl ether	0.040	U	0.040	0.040
156-60-5	trans-1,2-Dichloroethene	0.040	U	0.040	0.040
110-54-3	n-Hexane	0.040	U	0.040	0.040
75-34-3	1,1-Dichloroethane	0.040	U	0.040	0.040
108-05-4	Vinyl acetate	1.0	U	1.0	1.0
141-78-6	Ethyl acetate	1.0	U	1.0	1.0
78-93-3	Methyl Ethyl Ketone	0.10	U	0.10	0.10
156-59-2	cis-1,2-Dichloroethene	0.040	U	0.040	0.040
540-59-0	1,2-Dichloroethene, Total	0.080	U	0.080	0.080
67-66-3	Chloroform	0.040	U	0.040	0.040
109-99-9	Tetrahydrofuran	1.0	U	1.0	1.0
71-55-6	1,1,1-Trichloroethane	0.040	U	0.040	0.040
110-82-7	Cyclohexane	0.040	U	0.040	0.040
56-23-5	Carbon tetrachloride	0.040	U	0.040	0.040
540-84-1	2,2,4-Trimethylpentane	0.040	U	0.040	0.040

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington | Job No.: 200-34570-1

SDG No.:

Client Sample ID: 3833 | Lab Sample ID: 200-34570-11

Matrix: Air | Lab File ID: 21185_11.D

Analysis Method: TO-15 | Date Collected: 07/27/2016 00:00

Sample wt/vol: 1000(mL) | Date Analyzed: 08/04/2016 20:15

Soil Aliquot Vol: | Dilution Factor: 0.2

Soil Extract Vol.: | GC Column: RTX-624 ID: 0.32(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 107784 | Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	RL
71-43-2	Benzene	0.040	U	0.040	0.040
107-06-2	1,2-Dichloroethane	0.040	U	0.040	0.040
142-82-5	n-Heptane	0.040	U	0.040	0.040
79-01-6	Trichloroethene	0.040	U	0.040	0.040
80-62-6	Methyl methacrylate	0.10	U	0.10	0.10
78-87-5	1,2-Dichloropropane	0.040	U	0.040	0.040
123-91-1	1,4-Dioxane	1.0	U	1.0	1.0
75-27-4	Bromodichloromethane	0.040	U	0.040	0.040
10061-01-5	cis-1,3-Dichloropropene	0.040	U	0.040	0.040
108-10-1	methyl isobutyl ketone	0.10	U	0.10	0.10
108-88-3	Toluene	0.040	U	0.040	0.040
10061-02-6	trans-1,3-Dichloropropene	0.040	U	0.040	0.040
79-00-5	1,1,2-Trichloroethane	0.040	U	0.040	0.040
127-18-4	Tetrachloroethene	0.040	U	0.040	0.040
591-78-6	Methyl Butyl Ketone (2-Hexanone)	0.10	U	0.10	0.10
124-48-1	Dibromochloromethane	0.040	U	0.040	0.040
106-93-4	1,2-Dibromoethane	0.040	U	0.040	0.040
108-90-7	Chlorobenzene	0.040	U	0.040	0.040
100-41-4	Ethylbenzene	0.040	U	0.040	0.040
179601-23-1	m,p-Xylene	0.10	U	0.10	0.10
95-47-6	Xylene, o-	0.040	U	0.040	0.040
1330-20-7	Xylene (total)	0.14	U	0.14	0.14
100-42-5	Styrene	0.040	U	0.040	0.040
75-25-2	Bromoform	0.040	U	0.040	0.040
98-82-8	Cumene	0.040	U	0.040	0.040
79-34-5	1,1,2,2-Tetrachloroethane	0.040	U	0.040	0.040
103-65-1	n-Propylbenzene	0.040	U	0.040	0.040
622-96-8	4-Ethyltoluene	0.040	U	0.040	0.040
108-67-8	1,3,5-Trimethylbenzene	0.040	U	0.040	0.040
95-49-8	2-Chlorotoluene	0.040	U	0.040	0.040
98-06-6	tert-Butylbenzene	0.040	U	0.040	0.040
95-63-6	1,2,4-Trimethylbenzene	0.040	U	0.040	0.040
135-98-8	sec-Butylbenzene	0.040	U	0.040	0.040
99-87-6	4-Isopropyltoluene	0.040	U	0.040	0.040
541-73-1	1,3-Dichlorobenzene	0.040	U	0.040	0.040
106-46-7	1,4-Dichlorobenzene	0.040	U	0.040	0.040

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington Job No.: 200-34570-1

SDG No.:

Client Sample ID: 3833 Lab Sample ID: 200-34570-11

Matrix: Air Lab File ID: 21185_11.D

Analysis Method: TO-15 Date Collected: 07/27/2016 00:00

Sample wt/vol: 1000(mL) Date Analyzed: 08/04/2016 20:15

Soil Aliquot Vol: Dilution Factor: 0.2

Soil Extract Vol.: GC Column: RTX-624 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 107784 Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	RL
100-44-7	Benzyl chloride	0.040	U	0.040	0.040
104-51-8	n-Butylbenzene	0.040	U	0.040	0.040
95-50-1	1,2-Dichlorobenzene	0.040	U	0.040	0.040
120-82-1	1,2,4-Trichlorobenzene	0.10	U	0.10	0.10
87-68-3	Hexachlorobutadiene	0.040	U	0.040	0.040
91-20-3	Naphthalene	0.10	U	0.10	0.10

TestAmerica Burlington
Target Compound Quantitation Report

Data File: \\ChromNA\Burlington\ChromData\CHC.i\20160804-21185.b\21185_11.D
Lims ID: 200-34570-A-11 Lab Sample ID: 200-34570-11
Client ID: 3833
Sample Type: Client
Inject. Date: 04-Aug-2016 20:15:30 ALS Bottle#: 12 Worklist Smp#: 11
Purge Vol: 200.000 mL Dil. Factor: 0.2000
Sample Info: 200-0021185-011
Misc. Info.: 34570-11
Operator ID: pad Instrument ID: CHC.i

Method: \\ChromNA\Burlington\ChromData\CHC.i\20160804-21185.b\TO15_MasterMethod_(v1)_CHC.i.m
Limit Group: AI_TO15_ICAL
Last Update: 05-Aug-2016 11:44:30 Calib Date: 30-Jun-2016 22:11:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Burlington\ChromData\CHC.i\20160630-20687.b\20687_10.D

Column 1 : RTX-624 (0.32 mm) Det: MS SCAN
Process Host: XAWRK020

First Level Reviewer: daiglep Date: 05-Aug-2016 11:09:25

	Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
	1 Propene	41		2.983				ND	
	2 Dichlorodifluoromethane	85		3.053				ND	
	3 Chlorodifluoromethane	51		3.106				ND	
	4 1,2-Dichloro-1,1,2,2-tetra	85		3.320				ND	
	5 Chloromethane	50		3.458				ND	
	6 Butane	43		3.661				ND	
	7 Vinyl chloride	62		3.704				ND	
	8 Butadiene	54		3.784				ND	
	10 Bromomethane	94		4.472				ND	
	11 Chloroethane	64		4.718				ND	
	13 Vinyl bromide	106		5.118				ND	
	14 Trichlorofluoromethane	101		5.225				ND	
	17 Ethanol	45		5.833				ND	
	20 1,1,2-Trichloro-1,2,2-trif	101		6.335				ND	
	21 1,1-Dichloroethene	96		6.367				ND	
	22 Acetone	43		6.612				ND	
	23 Carbon disulfide	76	6.741	6.746	-0.005	95	1940	0.0392	
	24 Isopropyl alcohol	45		6.938				ND	
	25 3-Chloro-1-propene	41		7.173				ND	
	27 Methylene Chloride	49		7.477				ND	
	28 2-Methyl-2-propanol	59		7.723				ND	
	29 Methyl tert-butyl ether	73		7.888				ND	
	31 trans-1,2-Dichloroethene	61		7.925				ND	
	33 Hexane	57		8.320				ND	
	34 1,1-Dichloroethane	63		8.811				ND	
	35 Vinyl acetate	43		8.902				ND	
*	40 Chlorobromomethane	128	10.407	10.412	-0.005	94	304344	10.0	
	37 cis-1,2-Dichloroethene	96		9.943				ND	
	38 2-Butanone (MEK)	72		9.991				ND	
	39 Ethyl acetate	88		10.049				ND	
S	30 1,2-Dichloroethene, Total	61		10.200				ND	

	Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
	41 Tetrahydrofuran	42		10.412				ND	
	42 Chloroform	83		10.551				ND	
	43 Cyclohexane	84		10.786				ND	
	44 1,1,1-Trichloroethane	97		10.818				ND	
	45 Carbon tetrachloride	117		11.069				ND	
	46 Isooctane	57		11.517				ND	
	47 Benzene	78		11.544				ND	
	48 1,2-Dichloroethane	62		11.736				ND	
	49 n-Heptane	43		11.923				ND	
*	50 1,4-Difluorobenzene	114	12.408	12.408	0.000	98	1783238	10.0	
	53 Trichloroethene	95		12.878				ND	
	54 1,2-Dichloropropane	63		13.438				ND	
	55 Methyl methacrylate	69		13.625				ND	
	56 1,4-Dioxane	88		13.673				ND	
	57 Dibromomethane	174		13.700				ND	
	58 Dichlorobromomethane	83		14.015				ND	
	60 cis-1,3-Dichloropropene	75		14.959				ND	
	61 4-Methyl-2-pentanone (MIBK	43		15.253				ND	
	65 Toluene	92		15.546				ND	
	66 trans-1,3-Dichloropropene	75		16.160				ND	
	67 1,1,2-Trichloroethane	83		16.534				ND	
	68 Tetrachloroethene	166		16.635				ND	
	69 2-Hexanone	43		16.982				ND	
	71 Chlorodibromomethane	129		17.292				ND	
	72 Ethylene Dibromide	107		17.558				ND	
*	74 Chlorobenzene-d5	117	18.455	18.455	0.000	96	1723735	10.0	
	75 Chlorobenzene	112		18.514				ND	
	76 Ethylbenzene	91		18.669				ND	
	78 m-Xylene & p-Xylene	106		18.919				ND	
	79 o-Xylene	106		19.757				ND	
	80 Styrene	104		19.811				ND	
S	73 Xylenes, Total	106		20.100				ND	
	81 Bromoform	173		20.238				ND	
	82 Isopropylbenzene	105		20.446				ND	
	84 1,1,2,2-Tetrachloroethane	83		21.107				ND	
	85 N-Propylbenzene	91		21.172				ND	
	88 4-Ethyltoluene	105		21.358				ND	
	89 2-Chlorotoluene	91		21.369				ND	
	90 1,3,5-Trimethylbenzene	105		21.470				ND	
	92 tert-Butylbenzene	119		21.956				ND	
	93 1,2,4-Trimethylbenzene	105		22.052				ND	
	94 sec-Butylbenzene	105		22.282				ND	
	95 4-Isopropyltoluene	119		22.484				ND	
	96 1,3-Dichlorobenzene	146		22.511				ND	
	97 1,4-Dichlorobenzene	146		22.650				ND	
	98 Benzyl chloride	91		22.842				ND	
	100 n-Butylbenzene	91		23.050				ND	
	101 1,2-Dichlorobenzene	146		23.173				ND	
	103 1,2,4-Trichlorobenzene	180		25.628				ND	
	104 Hexachlorobutadiene	225		25.809				ND	
	105 Naphthalene	128		26.097				ND	

Reagents:

ATTO15CISs_00010 Amount Added: 20.00 Units: mL Run Reagent

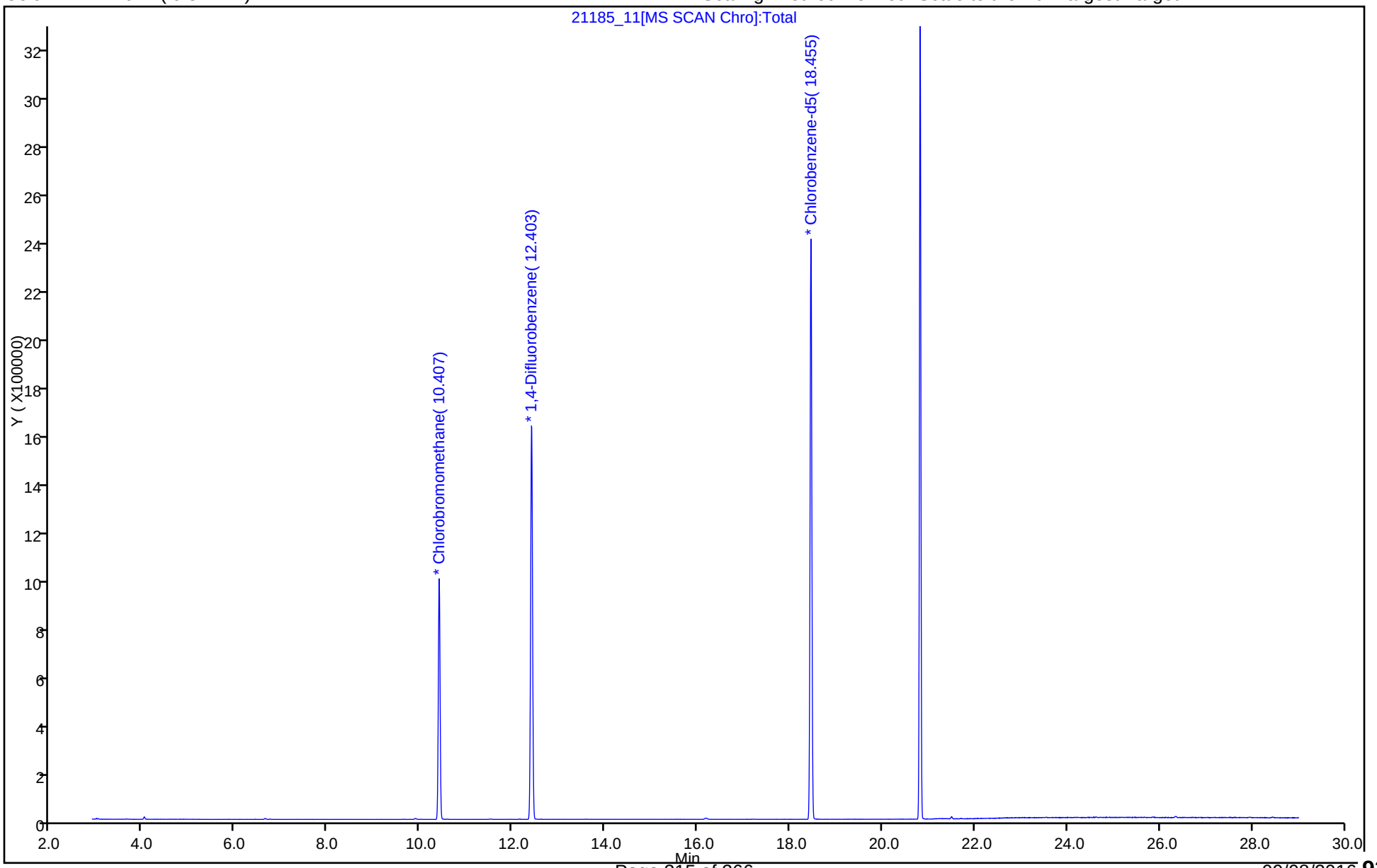
Report Date: 05-Aug-2016 11:44:46 Chrom Revision: 2.2 04-Mar-2016 14:36:24

TestAmerica Burlington

Data File: \\ChromNA\Burlington\ChromData\CHC.i\20160804-21185.b\21185_11.D

Injection Date:	04-Aug-2016 20:15:30	Instrument ID:	CHC.i	Operator ID:	pad
Lims ID:	200-34570-A-11	Lab Sample ID:	200-34570-11	Worklist Smp#:	11
Client ID:	3833				
Purge Vol:	200.000 mL	Dil. Factor:	0.2000	ALS Bottle#:	12
Method:	TO15_MasterMethod_(v1)_CHC.i	Limit Group:	AI_TO15_ICAL		

Column: RTX-624 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington | Job No.: 200-34834-1

SDG No.:

Client Sample ID: 3486 | Lab Sample ID: 200-34834-5

Matrix: Air | Lab File ID: 21352_06.D

Analysis Method: TO-15 | Date Collected: 08/12/2016 00:00

Sample wt/vol: 1000(mL) | Date Analyzed: 08/15/2016 14:44

Soil Aliquot Vol: | Dilution Factor: 0.2

Soil Extract Vol.: | GC Column: RTX-624 ID: 0.32(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 108166 | Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	RL
115-07-1	Propylene	1.0	U	1.0	1.0
75-71-8	Dichlorodifluoromethane	0.10	U	0.10	0.10
75-45-6	Freon 22	0.10	U	0.10	0.10
76-14-2	1,2-Dichlorotetrafluoroethane	0.040	U	0.040	0.040
74-87-3	Chloromethane	0.10	U	0.10	0.10
106-97-8	n-Butane	0.10	U	0.10	0.10
75-01-4	Vinyl chloride	0.040	U	0.040	0.040
106-99-0	1,3-Butadiene	0.040	U	0.040	0.040
74-83-9	Bromomethane	0.040	U	0.040	0.040
75-00-3	Chloroethane	0.10	U	0.10	0.10
593-60-2	Bromoethene(Vinyl Bromide)	0.040	U	0.040	0.040
75-69-4	Trichlorofluoromethane	0.040	U	0.040	0.040
64-17-5	Ethanol	1.0	U	1.0	1.0
76-13-1	Freon TF	0.040	U	0.040	0.040
75-35-4	1,1-Dichloroethene	0.040	U	0.040	0.040
67-64-1	Acetone	1.0	U	1.0	1.0
67-63-0	Isopropyl alcohol	1.0	U	1.0	1.0
75-15-0	Carbon disulfide	0.10	U	0.10	0.10
107-05-1	3-Chloropropene	0.10	U	0.10	0.10
75-09-2	Methylene Chloride	0.10	U	0.10	0.10
75-65-0	tert-Butyl alcohol	1.0	U	1.0	1.0
1634-04-4	Methyl tert-butyl ether	0.040	U	0.040	0.040
156-60-5	trans-1,2-Dichloroethene	0.040	U	0.040	0.040
110-54-3	n-Hexane	0.040	U	0.040	0.040
75-34-3	1,1-Dichloroethane	0.040	U	0.040	0.040
108-05-4	Vinyl acetate	1.0	U	1.0	1.0
141-78-6	Ethyl acetate	1.0	U	1.0	1.0
78-93-3	Methyl Ethyl Ketone	0.10	U	0.10	0.10
156-59-2	cis-1,2-Dichloroethene	0.040	U	0.040	0.040
540-59-0	1,2-Dichloroethene, Total	0.080	U	0.080	0.080
67-66-3	Chloroform	0.040	U	0.040	0.040
109-99-9	Tetrahydrofuran	1.0	U	1.0	1.0
71-55-6	1,1,1-Trichloroethane	0.040	U	0.040	0.040
110-82-7	Cyclohexane	0.040	U	0.040	0.040
56-23-5	Carbon tetrachloride	0.040	U	0.040	0.040
540-84-1	2,2,4-Trimethylpentane	0.040	U	0.040	0.040

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington | Job No.: 200-34834-1

SDG No.:

Client Sample ID: 3486 | Lab Sample ID: 200-34834-5

Matrix: Air | Lab File ID: 21352_06.D

Analysis Method: TO-15 | Date Collected: 08/12/2016 00:00

Sample wt/vol: 1000(mL) | Date Analyzed: 08/15/2016 14:44

Soil Aliquot Vol: | Dilution Factor: 0.2

Soil Extract Vol.: | GC Column: RTX-624 ID: 0.32(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 108166 | Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	RL
71-43-2	Benzene	0.040	U	0.040	0.040
107-06-2	1,2-Dichloroethane	0.040	U	0.040	0.040
142-82-5	n-Heptane	0.040	U	0.040	0.040
79-01-6	Trichloroethene	0.040	U	0.040	0.040
80-62-6	Methyl methacrylate	0.10	U	0.10	0.10
78-87-5	1,2-Dichloropropane	0.040	U	0.040	0.040
123-91-1	1,4-Dioxane	1.0	U	1.0	1.0
75-27-4	Bromodichloromethane	0.040	U	0.040	0.040
10061-01-5	cis-1,3-Dichloropropene	0.040	U	0.040	0.040
108-10-1	methyl isobutyl ketone	0.10	U *	0.10	0.10
108-88-3	Toluene	0.040	U	0.040	0.040
10061-02-6	trans-1,3-Dichloropropene	0.040	U *	0.040	0.040
79-00-5	1,1,2-Trichloroethane	0.040	U	0.040	0.040
127-18-4	Tetrachloroethene	0.040	U	0.040	0.040
591-78-6	Methyl Butyl Ketone (2-Hexanone)	0.10	U *	0.10	0.10
124-48-1	Dibromochloromethane	0.040	U	0.040	0.040
106-93-4	1,2-Dibromoethane	0.040	U	0.040	0.040
108-90-7	Chlorobenzene	0.040	U	0.040	0.040
100-41-4	Ethylbenzene	0.040	U	0.040	0.040
179601-23-1	m,p-Xylene	0.10	U	0.10	0.10
95-47-6	Xylene, o-	0.040	U	0.040	0.040
1330-20-7	Xylene (total)	0.14	U	0.14	0.14
100-42-5	Styrene	0.040	U	0.040	0.040
75-25-2	Bromoform	0.040	U	0.040	0.040
98-82-8	Cumene	0.040	U	0.040	0.040
79-34-5	1,1,2,2-Tetrachloroethane	0.040	U	0.040	0.040
103-65-1	n-Propylbenzene	0.040	U	0.040	0.040
622-96-8	4-Ethyltoluene	0.040	U	0.040	0.040
108-67-8	1,3,5-Trimethylbenzene	0.040	U	0.040	0.040
95-49-8	2-Chlorotoluene	0.040	U	0.040	0.040
98-06-6	tert-Butylbenzene	0.040	U	0.040	0.040
95-63-6	1,2,4-Trimethylbenzene	0.040	U	0.040	0.040
135-98-8	sec-Butylbenzene	0.040	U	0.040	0.040
99-87-6	4-Isopropyltoluene	0.040	U	0.040	0.040
541-73-1	1,3-Dichlorobenzene	0.040	U	0.040	0.040
106-46-7	1,4-Dichlorobenzene	0.040	U	0.040	0.040

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington Job No.: 200-34834-1

SDG No.:

Client Sample ID: 3486 Lab Sample ID: 200-34834-5

Matrix: Air Lab File ID: 21352_06.D

Analysis Method: TO-15 Date Collected: 08/12/2016 00:00

Sample wt/vol: 1000(mL) Date Analyzed: 08/15/2016 14:44

Soil Aliquot Vol: Dilution Factor: 0.2

Soil Extract Vol.: GC Column: RTX-624 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 108166 Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	RL
100-44-7	Benzyl chloride	0.040	U	0.040	0.040
104-51-8	n-Butylbenzene	0.040	U	0.040	0.040
95-50-1	1,2-Dichlorobenzene	0.040	U	0.040	0.040
120-82-1	1,2,4-Trichlorobenzene	0.10	U	0.10	0.10
87-68-3	Hexachlorobutadiene	0.040	U	0.040	0.040
91-20-3	Naphthalene	0.10	U	0.10	0.10

TestAmerica Burlington
Target Compound Quantitation Report

Data File: \\ChromNA\Burlington\ChromData\CHG.i\20160815-21352.b\21352_06.D
Lims ID: 200-34834-A-5 Lab Sample ID: 200-34834-5
Client ID: 3486
Sample Type: Client
Inject. Date: 15-Aug-2016 14:44:30 ALS Bottle#: 5 Worklist Smp#: 6
Purge Vol: 200.000 mL Dil. Factor: 0.2000
Sample Info: 200-0021352-006
Misc. Info.: 34834-05
Operator ID: ggg Instrument ID: CHG.i

Method: \\ChromNA\Burlington\ChromData\CHG.i\20160815-21352.b\TO15_MasterMethod_(v1)_G.m
Limit Group: AI_TO15_ICAL
Last Update: 16-Aug-2016 11:25:49 Calib Date: 10-Aug-2016 01:26:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Burlington\ChromData\CHG.i\20160809-21273.b\21273_11.D

Column 1 : RTX-624 (0.32 mm) Det: MS SCAN
Process Host: XAWRK022

First Level Reviewer: guazzonig Date: 16-Aug-2016 10:29:32

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
1 Propene	41	2.744	2.738	0.006	81	3085	0.1500	
2 Dichlorodifluoromethane	85	2.808	2.803	0.005	97	2968	0.0350	
3 Chlorodifluoromethane	51		2.840				ND	
4 1,2-Dichloro-1,1,2,2-tetra	85		3.043				ND	
5 Chloromethane	50	3.166	3.156	0.010	97	3904	0.1449	
6 Butane	43		3.359				ND	
7 Vinyl chloride	62		3.380				ND	
8 Butadiene	54		3.461				ND	
10 Bromomethane	94		4.076				ND	
11 Chloroethane	64		4.306				ND	
13 Vinyl bromide	106		4.691				ND	
14 Trichlorofluoromethane	101		4.814				ND	
17 Ethanol	45	5.424	5.365	0.059	87	2151	0.1740	
21 1,1-Dichloroethene	96		5.900				ND	
20 1,1,2-Trichloro-1,2,2-trif	101		5.900				ND	
22 Acetone	43	6.130	6.098	0.032	100	36103	1.02	
23 Carbon disulfide	76	6.269	6.269	0.000	97	12951	0.1908	
24 Isopropyl alcohol	45	6.542	6.451	0.091	63	2509	0.0913	
25 3-Chloro-1-propene	41		6.670				ND	
27 Methylene Chloride	49	6.959	6.949	0.010	64	4083	0.1278	M
28 2-Methyl-2-propanol	59		7.232				ND	
31 trans-1,2-Dichloroethene	61		7.419				ND	
29 Methyl tert-butyl ether	73		7.425				ND	
33 Hexane	57		7.874				ND	
34 1,1-Dichloroethane	63		8.265				ND	
35 Vinyl acetate	43		8.372				ND	
37 cis-1,2-Dichloroethene	96		9.361				ND	
38 2-Butanone (MEK)	72	9.468	9.404	0.064	99	690	0.0690	
39 Ethyl acetate	88		9.500				ND	
S 30 1,2-Dichloroethene, Total	61		9.665				ND	
* 40 Chlorobromomethane	128	9.800	9.800	0.000	94	271182	10.0	

	Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
	41 Tetrahydrofuran	42		9.859				ND	
	42 Chloroform	83		9.955				ND	
	44 1,1,1-Trichloroethane	97		10.244				ND	
	43 Cyclohexane	84		10.260				ND	
	45 Carbon tetrachloride	117		10.511				ND	
	47 Benzene	78	10.934	10.934	0.000	96	6029	0.0609	M
	46 Isooctane	57	11.009	11.009	0.000	92	9866	0.0701	
	48 1,2-Dichloroethane	62		11.079				ND	
	49 n-Heptane	43		11.410				ND	
*	50 1,4-Difluorobenzene	114	11.774	11.774	0.000	96	1657895	10.0	
	53 Trichloroethene	95		12.245				ND	
	54 1,2-Dichloropropane	63		12.742				ND	
	55 Methyl methacrylate	69		12.978				ND	
	57 Dibromomethane	174		12.983				ND	
	56 1,4-Dioxane	88		13.004				ND	
	58 Dichlorobromomethane	83		13.299				ND	
	60 cis-1,3-Dichloropropene	75		14.272				ND	
	61 4-Methyl-2-pentanone (MIBK	43		14.593				ND	
	65 Toluene	92	14.930	14.920	0.010	92	2095	0.0252	M
	66 trans-1,3-Dichloropropene	75		15.508				ND	
	67 1,1,2-Trichloroethane	83		15.883				ND	
	68 Tetrachloroethene	166		16.080				ND	
	69 2-Hexanone	43		16.391				ND	
	71 Chlorodibromomethane	129		16.674				ND	
	72 Ethylene Dibromide	107		16.936				ND	
*	74 Chlorobenzene-d5	117	17.894	17.894	0.000	92	1770377	10.0	
	75 Chlorobenzene	112		17.958				ND	
	76 Ethylbenzene	91		18.145				ND	
	78 m-Xylene & p-Xylene	106		18.402				ND	
	79 o-Xylene	106		19.242				ND	
	80 Styrene	104		19.290				ND	
S	73 Xylenes, Total	106		19.600				ND	
	81 Bromoform	173		19.692				ND	
	82 Isopropylbenzene	105		20.002				ND	
	84 1,1,2,2-Tetrachloroethane	83		20.644				ND	
	85 N-Propylbenzene	91		20.778				ND	
	89 2-Chlorotoluene	91		20.965				ND	
	88 4-Ethyltoluene	105		20.981				ND	
	90 1,3,5-Trimethylbenzene	105		21.093				ND	
	92 tert-Butylbenzene	119		21.607				ND	
	93 1,2,4-Trimethylbenzene	105		21.703				ND	
	94 sec-Butylbenzene	105		21.944				ND	
	95 4-Isopropyltoluene	119		22.158				ND	
	96 1,3-Dichlorobenzene	146		22.158				ND	
	97 1,4-Dichlorobenzene	146	22.297	22.297	0.000	88	3972	0.0470	
	98 Benzyl chloride	91		22.479				ND	
	100 n-Butylbenzene	91		22.730				ND	
	101 1,2-Dichlorobenzene	146		22.810				ND	
	103 1,2,4-Trichlorobenzene	180	25.197	25.180	0.017	1	1567	0.0411	
	104 Hexachlorobutadiene	225		25.400				ND	
	105 Naphthalene	128	25.614	25.603	0.011	88	3637	0.0393	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

ATTO15GIS_00011	Amount Added: 20.00	Units: mL	Run Reagent

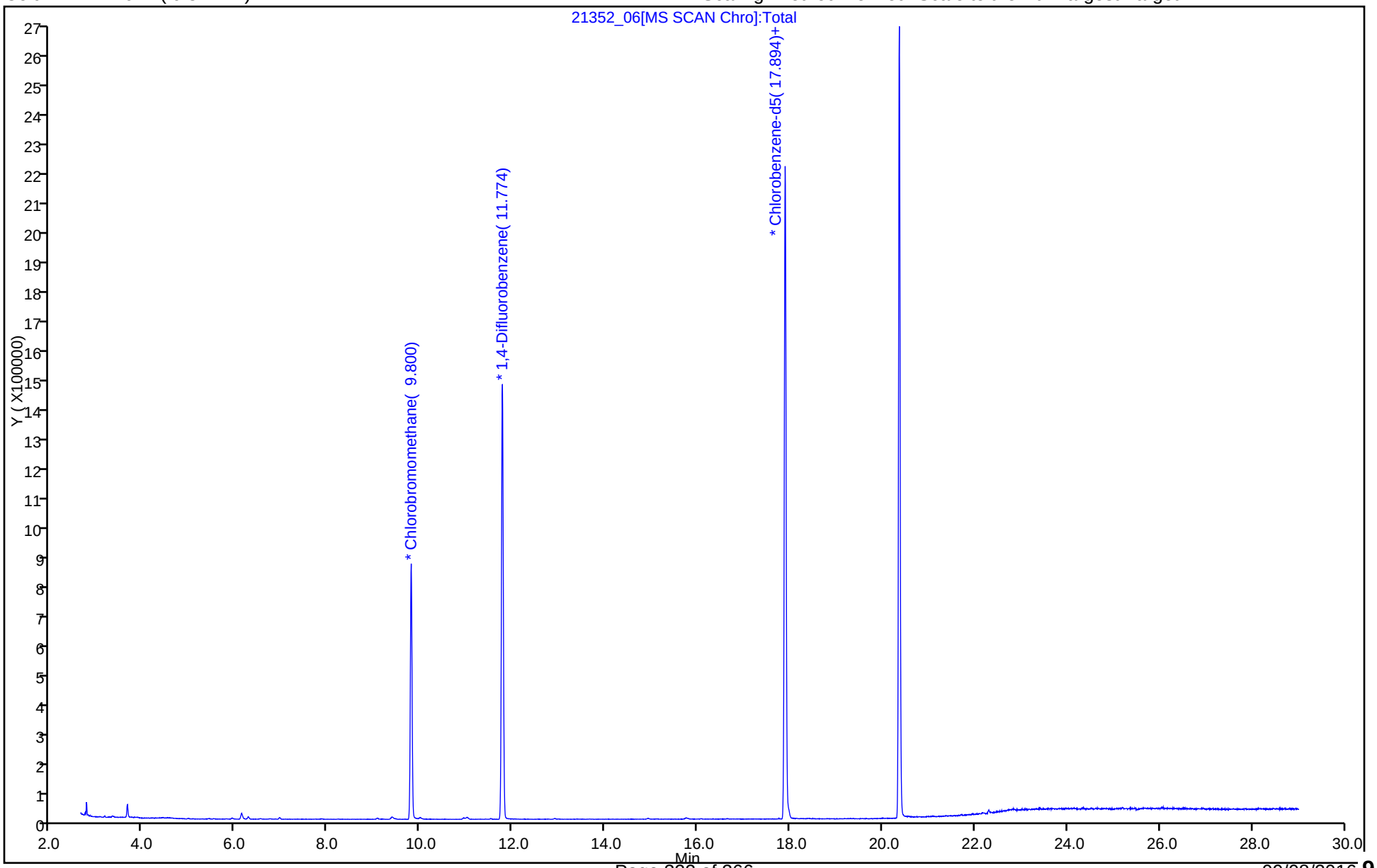
Report Date: 16-Aug-2016 11:25:59 Chrom Revision: 2.2 04-Mar-2016 14:36:24

TestAmerica Burlington

Data File: \\ChromNA\Burlington\ChromData\CHG.i\20160815-21352.b\21352_06.D

Injection Date:	15-Aug-2016 14:44:30	Instrument ID:	CHG.i	Operator ID:	ggg
Lims ID:	200-34834-A-5	Lab Sample ID:	200-34834-5	Worklist Smp#:	6
Client ID:	3486				
Purge Vol:	200.000 mL	Dil. Factor:	0.2000	ALS Bottle#:	5
Method:	TO15_MasterMethod_(v1)_G	Limit Group:	AI_TO15_ICAL		

Column: RTX-624 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Manual Integration/User Assign Peak Report

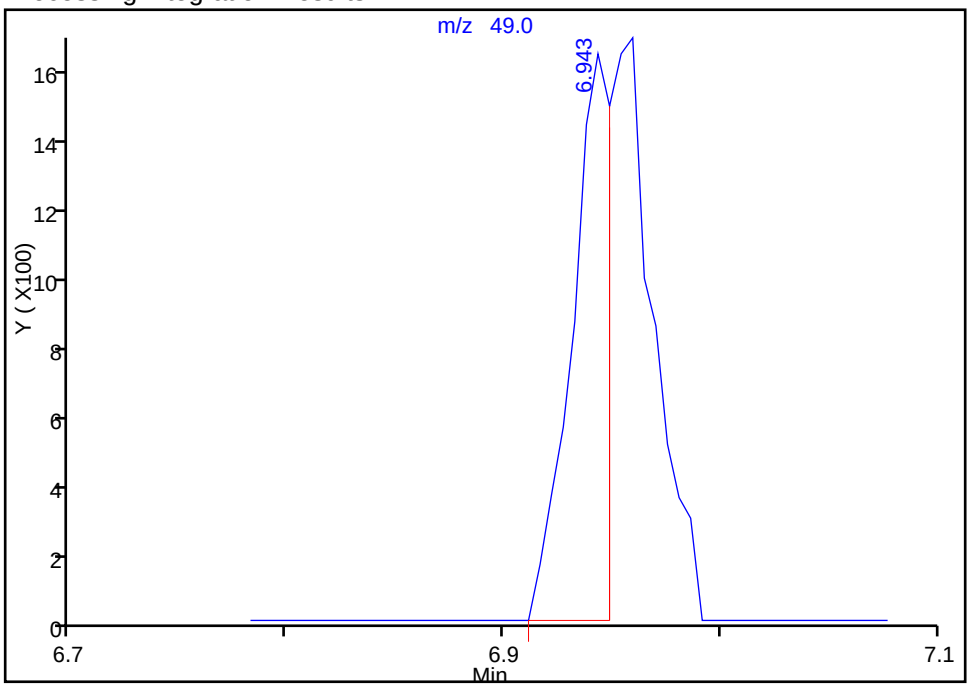
TestAmerica Burlington

Data File:	\\ChromNA\Burlington\ChromData\CHG.i\20160815-21352.b\21352_06.D				
Injection Date:	15-Aug-2016 14:44:30	Instrument ID:	CHG.i		
Lims ID:	200-34834-A-5	Lab Sample ID:	200-34834-5		
Client ID:	3486				
Operator ID:	ggg	ALS Bottle#:	5	Worklist Smp#:	6
Purge Vol:	200.000 mL	Dil. Factor:	0.2000		
Method:	TO15_MasterMethod_(v1)_G	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

27 Methylene Chloride, CAS: 75-09-2

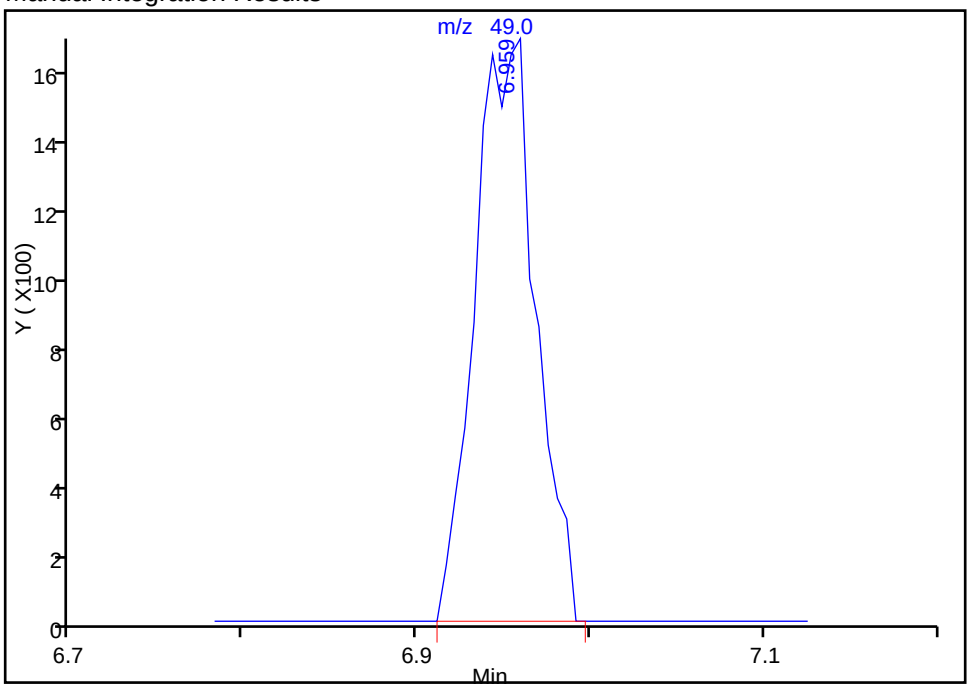
Processing Integration Results

RT: 6.94
Area: 2071
Amount: 0.064804
Amount Units: ppb v/v



Manual Integration Results

RT: 6.96
Area: 4083
Amount: 0.127763
Amount Units: ppb v/v



Reviewer: guazzonig, 16-Aug-2016 10:29:32
Audit Action: Manually Integrated
Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

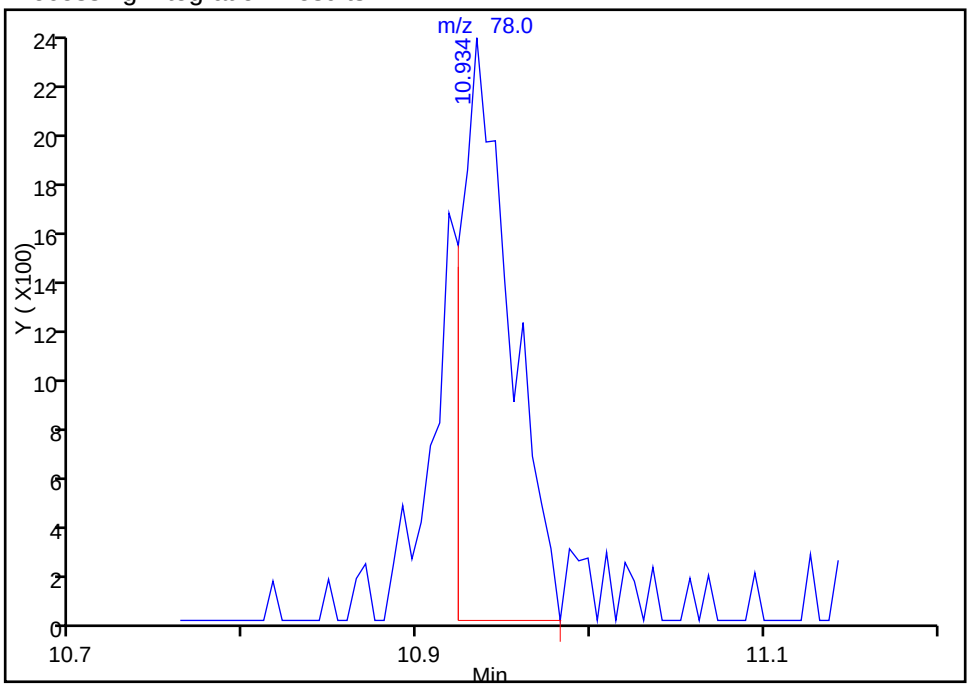
TestAmerica Burlington

Data File:	\\ChromNA\Burlington\ChromData\CHG.i\20160815-21352.b\21352_06.D				
Injection Date:	15-Aug-2016 14:44:30	Instrument ID:	CHG.i		
Lims ID:	200-34834-A-5	Lab Sample ID:	200-34834-5		
Client ID:	3486				
Operator ID:	ggg	ALS Bottle#:	5	Worklist Smp#:	6
Purge Vol:	200.000 mL	Dil. Factor:	0.2000		
Method:	TO15_MasterMethod_(v1)_G	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

47 Benzene, CAS: 71-43-2

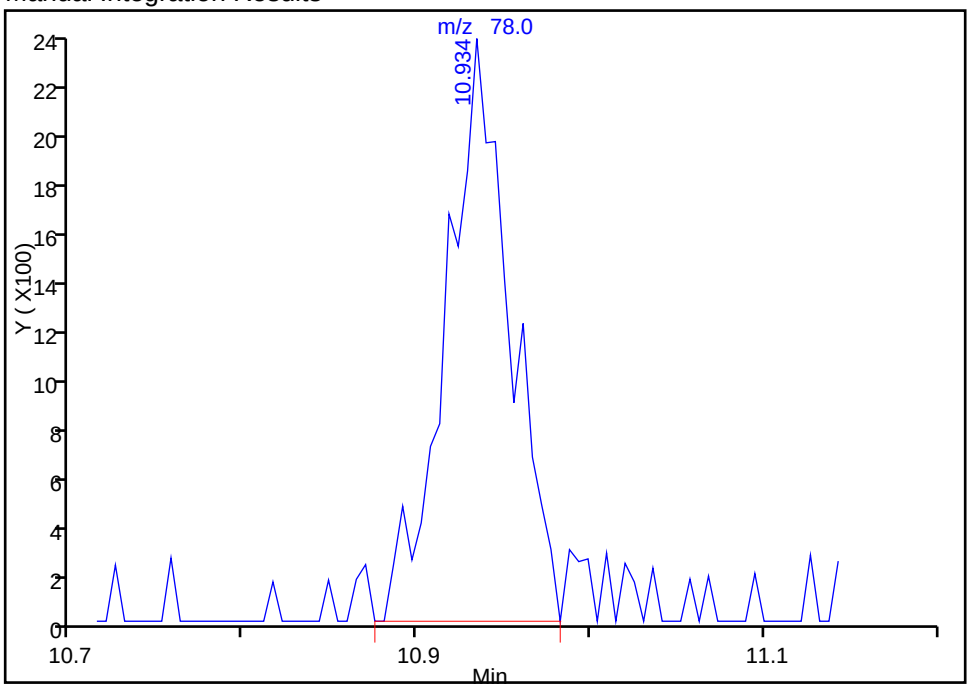
Processing Integration Results

RT: 10.93
Area: 4601
Amount: 0.046501
Amount Units: ppb v/v



Manual Integration Results

RT: 10.93
Area: 6029
Amount: 0.060934
Amount Units: ppb v/v



Reviewer: guazzonig, 16-Aug-2016 10:29:32
Audit Action: Manually Integrated
Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

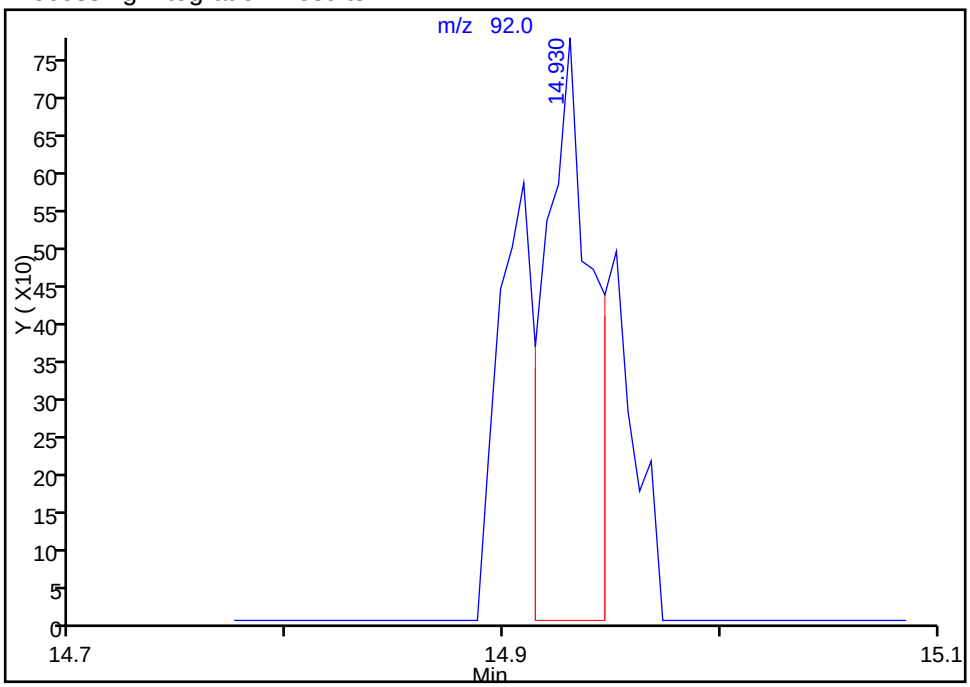
TestAmerica Burlington

Data File:	\\ChromNA\Burlington\ChromData\CHG.i\20160815-21352.b\21352_06.D				
Injection Date:	15-Aug-2016 14:44:30	Instrument ID:	CHG.i		
Lims ID:	200-34834-A-5	Lab Sample ID:	200-34834-5		
Client ID:	3486				
Operator ID:	ggg	ALS Bottle#:	5	Worklist Smp#:	6
Purge Vol:	200.000 mL	Dil. Factor:	0.2000		
Method:	TO15_MasterMethod_(v1)_G	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

65 Toluene, CAS: 108-88-3

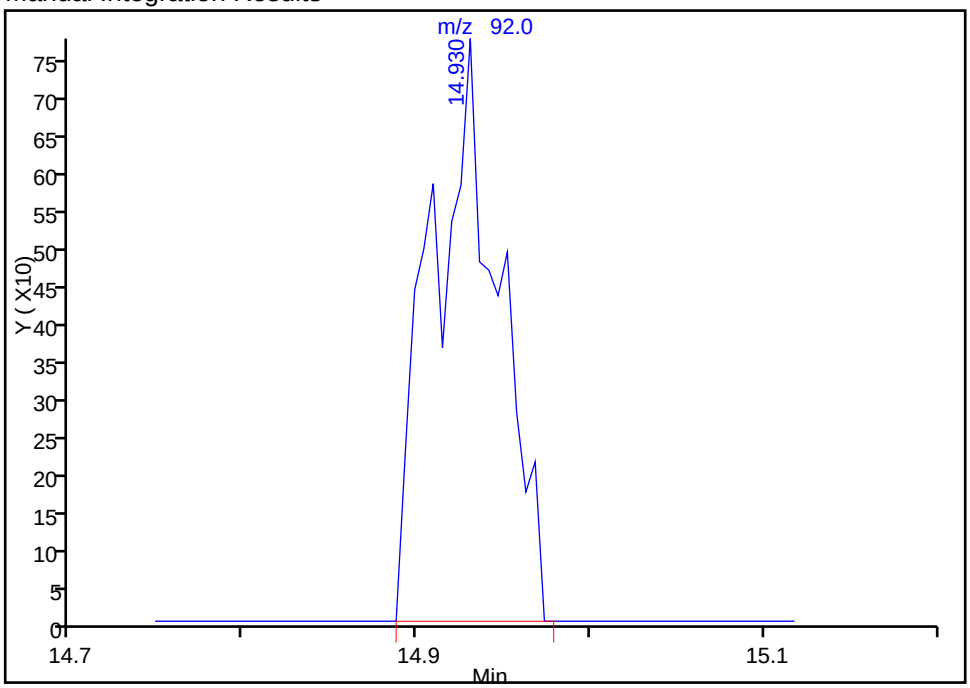
Processing Integration Results

RT: 14.93
Area: 1165
Amount: 0.013993
Amount Units: ppb v/v



Manual Integration Results

RT: 14.93
Area: 2095
Amount: 0.025163
Amount Units: ppb v/v



Reviewer: guazzonig, 16-Aug-2016 10:29:32
Audit Action: Manually Integrated
Audit Reason: Incomplete Integration

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Burlington Job No.: 200-34570-1 Analy Batch No.: 106489

SDG No.:

Instrument ID: CHC.i GC Column: RTX-624 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 06/30/2016 15:58 Calibration End Date: 06/30/2016 22:11 Calibration ID: 35139

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 200-106489/3	20687_03.D
Level 2	IC 200-106489/4	20687_04.D
Level 3	IC 200-106489/5	20687_05.D
Level 4	IC 200-106489/6	20687_06.D
Level 5	ICIS 200-106489/7	20687_07.D
Level 6	IC 200-106489/8	20687_08.D
Level 7	IC 200-106489/9	20687_09.D
Level 8	IC 200-106489/10	20687_10.D

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
Propylene	+++++ 0.7311	+++++ 0.7604	+++++ 0.7024	0.7323	0.7977	Ave		0.7448				4.8		30.0			
Dichlorodifluoromethane	+++++ 1.5632	+++++ 1.6824	1.4715 1.5014	1.5482	1.8817	Ave		1.6081				9.5		30.0			
Freon 22	+++++ 1.3639	+++++ 1.4126	1.3494 1.3154	1.3614	1.4901	Ave		1.3821				4.4		30.0			
1,2-Dichlorotetrafluoroethane	+++++ 1.5821	1.5083 1.6345	1.5984 1.5525	1.6007	1.7472	Ave		1.6034				4.7		30.0			
Chloromethane	+++++ 0.7494	+++++ 0.7759	0.8096 0.7246	0.7635	0.8226	Ave		0.7743				4.8		30.0			
n-Butane	+++++ 1.3940	+++++ 1.4490	1.4867 1.3328	1.3734	1.5164	Ave		1.4254				4.9		30.0			
Vinyl chloride	0.7263 0.7439	0.7368 0.7694	0.7750 0.7195	0.7430	0.8197	Ave		0.7542				4.3		30.0			
1,3-Butadiene	+++++ 0.5911	0.5374 0.6134	0.5672 0.5744	0.5799	0.6402	Ave		0.5862				5.7		30.0			
Bromomethane	+++++ 0.5324	0.5403 0.5493	0.5565 0.5287	0.5495	0.5927	Ave		0.5499				3.9		30.0			
Chloroethane	+++++ 0.3342	+++++ 0.3447	0.3418 0.3279	0.3371	0.3607	Ave		0.3411				3.3		30.0			
Isopentane	+++++ 0.8917	0.8750 0.9275	0.8817 0.8621	0.8717	0.9631	Ave		0.8961				4.0		30.0			
Bromoethene(Vinyl Bromide)	+++++ 0.5267	0.5417 0.5527	0.5349 0.5292	0.5372	0.5817	Ave		0.5435				3.5		30.0			
Trichlorofluoromethane	+++++ 1.5433	1.5827 1.5888	1.5568 1.4981	1.5712	1.6891	Ave		1.5757				3.7		30.0			
n-Pentane	+++++ 1.4363	+++++ 1.4957	1.4319 1.4050	1.4168	1.5546	Ave		1.4567				3.9		30.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Burlington Job No.: 200-34570-1 Analy Batch No.: 106489

SDG No.:

Instrument ID: CHC.i GC Column: RTX-624 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 06/30/2016 15:58 Calibration End Date: 06/30/2016 22:11 Calibration ID: 35139

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
Ethanol	+++++ 0.4118	+++++ 0.4125	0.3849 0.3633	0.4093	0.4378	Ave		0.4033				6.4		30.0			
Ethyl ether	+++++ 0.4668	0.4400 0.4878	0.4522 0.4599	0.4557	0.5054	Ave		0.4668				4.8		30.0			
Acrolein	+++++ 0.1676	+++++ 0.2251	+++++ 0.2147	0.2036	0.2315	Ave		0.2085				12.1		30.0			
Freon TF	+++++ 1.0851	1.0295 1.1277	1.1028 1.0656	1.1123	1.1898	Ave		1.1018				4.6		30.0			
1,1-Dichloroethene	+++++ 0.5145	0.4978 0.5305	0.5083 0.5096	0.5120	0.5594	Ave		0.5189				3.9		30.0			
Acetone	+++++ 1.4132	+++++ 1.3836	+++++ 1.2907	1.4611	1.6097	Ave		1.4317				8.2		30.0			
Carbon disulfide	+++++ 1.5929	+++++ 1.6636	1.5819 1.5941	1.5927	1.7387	Ave		1.6273				3.8		30.0			
Isopropyl alcohol	+++++ 1.1441	+++++ 1.1863	+++++ 1.1455	1.3324	1.4303	Ave		1.2477				10.3		30.0			
3-Chloropropene	+++++ 1.0989	1.0866 1.1725	1.1069 1.0824	1.0749	1.0026	Ave		1.0893				4.6		30.0			
Acetonitrile	+++++ 0.6502	+++++ 0.6651	+++++ 0.6314	0.6563	0.7363	Ave		0.6679				6.0		30.0			
Methylene Chloride	+++++ 0.9265	+++++ 0.9644	0.9304 0.8990	0.9241	1.0105	Ave		0.9425				4.2		30.0			
tert-Butyl alcohol	+++++ 1.4098	+++++ 1.4773	+++++ 1.4243	1.4691	1.7101	Ave		1.4981				8.1		30.0			
Methyl tert-butyl ether	+++++ 1.9336	1.7850 2.0104	1.8541 1.8938	1.8915	2.0887	Ave		1.9224				5.2		30.0			
trans-1,2-Dichloroethene	+++++ 1.0715	1.0310 1.1160	1.0639 1.0429	1.0634	1.1618	Ave		1.0786				4.2		30.0			
Acrylonitrile	+++++ 0.5485	+++++ 0.5743	0.5269 0.5439	0.5330	0.5919	Ave		0.5531				4.5		30.0			
n-Hexane	+++++ 1.1028	1.1440 1.1486	1.1147 1.0731	1.0873	1.1842	Ave		1.1221				3.5		30.0			
1,1-Dichloroethane	1.1598 1.3823	1.2869 1.4371	1.3472 1.3487	1.3624	1.4976	Ave		1.3528				7.4		30.0			
Vinyl acetate	+++++ 2.5511	+++++ 2.6680	+++++ 2.4881	2.4190	2.7210	Ave		2.5694				4.9		30.0			
cis-1,2-Dichloroethene	+++++ 0.6644	0.6512 0.6893	0.6651 0.6571	0.6551	0.7165	Ave		0.6712				3.5		30.0			
Methyl Ethyl Ketone	+++++ 0.3537	+++++ 0.3654	0.3549 0.3494	0.3553	0.3934	Ave		0.3620				4.5		30.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Burlington Job No.: 200-34570-1 Analy Batch No.: 106489

SDG No.:

Instrument ID: CHC.i GC Column: RTX-624 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 06/30/2016 15:58 Calibration End Date: 06/30/2016 22:11 Calibration ID: 35139

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
Ethyl acetate	+++++ 0.0523	+++++ 0.0548	+++++ 0.0512	0.0491	0.0560	Ave		0.0527				5.3		30.0			
Tetrahydrofuran	+++++ 0.2247	+++++ 0.2313	+++++ 0.2144	0.2259	0.2491	Ave		0.2291				5.6		30.0			
Chloroform	+++++ 1.5150	1.4324 1.5703	1.5027 1.4900	1.4910	1.6287	Ave		1.5186				4.2		30.0			
Cyclohexane	+++++ 0.1741	0.1597 0.1801	0.1684 0.1717	0.1741	0.1880	Ave		0.1737				5.1		30.0			
1,1,1-Trichloroethane	+++++ 0.2742	0.2547 0.2824	0.2723 0.2675	0.2726	0.2984	Ave		0.2746				4.9		30.0			
Carbon tetrachloride	0.2370 0.2731	0.2471 0.2869	0.2640 0.2702	0.2698	0.2397	Ave		0.2610				6.8		30.0			
2,2,4-Trimethylpentane	+++++ 0.8883	0.8331 0.9188	0.8464 0.8603	0.8694	0.9603	Ave		0.8824				5.0		30.0			
Benzene	+++++ 0.4366	0.4564 0.4525	0.4460 0.4296	0.4314	0.4718	Ave		0.4463				3.4		30.0			
1,2-Dichloroethane	+++++ 0.2489	0.2331 0.2575	0.2378 0.2430	0.2414	0.2656	Ave		0.2468				4.6		30.0			
n-Heptane	+++++ 0.4441	0.4587 0.4541	0.4323 0.4185	0.4315	0.4768	Ave		0.4451				4.4		30.0			
n-Butanol	+++++ 0.1072	+++++ 0.1123	+++++ 0.1065	0.1099	0.1376	Ave		0.1147				11.3		30.0			
Trichloroethene	0.1659 0.2126	0.1798 0.1927	0.1837 0.1882	0.1807	0.1990	Ave		0.1878				7.5		30.0			
1,2-Dichloropropane	+++++ 0.2207	0.2035 0.2289	0.2097 0.2145	0.2171	0.2361	Ave		0.2186				5.1		30.0			
Methyl methacrylate	+++++ 0.1892	+++++ 0.2002	0.1627 0.1920	0.1783	0.2034	Ave		0.1876				8.0		30.0			
1,4-Dioxane	+++++ 0.0668	+++++ 0.0688	+++++ 0.0665	0.0757	0.0898	Ave		0.0735				13.4		30.0			
Dibromomethane	+++++ 0.1524	0.1468 0.1590	0.1464 0.1589	0.1507	0.1631	Ave		0.1539				4.2		30.0			
Bromodichloromethane	+++++ 0.3498	0.3049 0.3709	0.3225 0.3514	0.3393	0.3758	Ave		0.3449				7.3		30.0			
cis-1,3-Dichloropropene	+++++ 0.3006	0.2715 0.3118	0.2830 0.2957	0.2890	0.3211	Ave		0.2961				5.7		30.0			
methyl isobutyl ketone	+++++ 0.6514	+++++ 0.6793	0.5664 0.6273	0.6196	0.7040	Ave		0.6413				7.6		30.0			
Toluene	+++++ 0.3442	0.3250 0.3567	0.3424 0.3446	0.3368	0.3679	Ave		0.3454				4.0		30.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Burlington Job No.: 200-34570-1 Analy Batch No.: 106489

SDG No.:

Instrument ID: CHC.i GC Column: RTX-624 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 06/30/2016 15:58 Calibration End Date: 06/30/2016 22:11 Calibration ID: 35139

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
n-Octane	+++++ 0.7194	0.6858 0.7410	0.6888 0.6751	0.6923	0.7737	Ave		0.7109				5.0		30.0			
trans-1,3-Dichloropropene	+++++ 0.3169	0.4340 0.3351	0.3116 0.3145	0.3079	0.3386	Ave		0.3369				13.2		30.0			
1,1,2-Trichloroethane	+++++ 0.1753	0.1606 0.1803	0.1651 0.1739	0.1694	0.1888	Ave		0.1734				5.5		30.0			
Tetrachloroethene	0.2061 0.2397	0.2263 0.2480	0.2411 0.2483	0.2341	0.2606	Ave		0.2380				6.9		30.0			
Methyl Butyl Ketone (2-Hexanone)	+++++ 0.6537	+++++ 0.6724	0.5639 0.6328	0.6110	0.7093	Ave		0.6405				7.9		30.0			
Dibromochloromethane	+++++ 0.2807	0.2330 0.3152	0.2374 0.2950	0.2764	0.3140	Ave		0.2788				11.9		30.0			
1,2-Dibromoethane	+++++ 0.2771	0.2438 0.2876	0.2511 0.2814	0.2665	0.2984	Ave		0.2723				7.2		30.0			
Chlorobenzene	+++++ 0.4234	0.4111 0.4382	0.4407 0.4244	0.4225	0.4626	Ave		0.4318				3.9		30.0			
Ethylbenzene	+++++ 0.7776	0.7149 0.8071	0.7454 0.7852	0.7529	0.8354	Ave		0.7741				5.2		30.0			
n-Nonane	+++++ 0.5332	0.4771 0.5465	0.5033 0.5142	0.5121	0.5721	Ave		0.5226				5.9		30.0			
m,p-Xylene	+++++ 0.2886	0.2591 0.3008	0.2736 0.2928	0.2782	0.3108	Ave		0.2863				6.1		30.0			
Xylene, o-	+++++ 0.2809	0.2530 0.2943	0.2660 0.2857	0.2761	0.3046	Ave		0.2801				6.2		30.0			
Styrene	+++++ 0.4497	0.3357 0.4752	0.3583 0.4709	0.4237	0.4849	Ave		0.4283				13.9		30.0			
Bromoform	+++++ 0.2075	0.1821 0.2831	0.1766 0.2424	0.2277	0.2634	Ave		0.2261				17.7		30.0			
Cumene	+++++ 0.8287	0.7641 0.8625	0.7754 0.8353	0.8064	0.8947	Ave		0.8239				5.6		30.0			
1,1,2,2-Tetrachloroethane	+++++ 0.3858	0.4291 0.4617	0.4402 0.4355	0.4453	0.4908	Ave		0.4412				7.2		30.0			
n-Propylbenzene	+++++ 1.0727	0.9661 1.1037	1.0079 1.0514	1.0381	1.1481	Ave		1.0554				5.7		30.0			
1,2,3-Trichloropropane	+++++ 0.4025	+++++ 0.4136	0.3850 0.3892	0.3939	0.4333	Ave		0.4029				4.5		30.0			
n-Decane	+++++ 0.6666	+++++ 0.6581	0.6439 0.6013	0.6742	0.7392	Ave		0.6639				6.8		30.0			
4-Ethyltoluene	+++++ 0.8379	0.7560 0.8546	0.7794 0.7855	0.8074	0.8977	Ave		0.8169				6.0		30.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Burlington Job No.: 200-34570-1 Analy Batch No.: 106489

SDG No.:

Instrument ID: CHC.i GC Column: RTX-624 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 06/30/2016 15:58 Calibration End Date: 06/30/2016 22:11 Calibration ID: 35139

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
2-Chlorotoluene	+++++ 0.7400	0.6839 0.7642	0.7056 0.7087	0.7162	0.7949	Ave		0.7305				5.3		30.0			
1,3,5-Trimethylbenzene	+++++ 0.7086	0.6203 0.7215	0.6487 0.7067	0.6808	0.7600	Ave		0.6924				6.8		30.0			
Alpha Methyl Styrene	+++++ 0.3305	0.2296 0.3366	0.2720 0.3377	0.3120	0.3567	Ave		0.3107				14.4		30.0			
tert-Butylbenzene	+++++ 0.6360	0.5718 0.6415	0.5926 0.6400	0.6202	0.6873	Ave		0.6271				6.0		30.0			
1,2,4-Trimethylbenzene	+++++ 0.7067	0.6415 0.7081	0.6497 0.7223	0.6917	0.7646	Ave		0.6978				6.1		30.0			
sec-Butylbenzene	+++++ 0.9944	0.8841 0.9996	0.9342 1.0265	0.9831	1.0877	Ave		0.9871				6.6		30.0			
4-Isopropyltoluene	+++++ 0.7904	0.7239 0.8237	0.7730 0.8701	0.8088	0.8963	Ave		0.8123				7.2		30.0			
1,3-Dichlorobenzene	+++++ 0.4349	0.3962 0.4390	0.4175 0.4501	0.4263	0.4744	Ave		0.4341				5.7		30.0			
1,4-Dichlorobenzene	+++++ 0.4267	0.3856 0.4297	0.4203 0.4488	0.4212	0.4698	Ave		0.4289				6.1		30.0			
Benzyl chloride	+++++ 0.6497	0.5220 0.6468	0.5980 0.6983	0.6259	0.7358	Ave		0.6395				10.8		30.0			
n-Butylbenzene	+++++ 0.7798	0.7552 0.8392	0.8028 0.8735	0.8280	0.8820	Ave		0.8229				5.7		30.0			
n-Undecane	+++++ 0.6995	+++++ 0.7348	+++++ 0.7061	0.7044	0.7513	Ave		0.7192				3.1		30.0			
1,2-Dichlorobenzene	+++++ 0.3928	0.3735 0.3961	0.3891 0.4277	0.3980	0.4375	Ave		0.4021				5.6		30.0			
n-Dodecane	+++++ 0.5977	+++++ 0.6215	+++++ 0.3963	0.6216	0.7015	Ave		0.5877				19.4		30.0			
1,2,4-Trichlorobenzene	+++++ 0.3119	+++++ 0.3260	0.3114 0.2902	0.2794	0.3466	Ave		0.3109				7.8		30.0			
Hexachlorobutadiene	+++++ 0.2861	0.2814 0.3026	0.3029 0.2489	0.2919	0.3170	Ave		0.2901				7.5		30.0			
Naphthalene	+++++ 0.6653	+++++ 0.6589	0.6576 0.6333	0.5338	0.7740	Ave		0.6538				11.7		30.0			
1,2,3-Trichlorobenzene	+++++ 0.2732	0.2352 0.2834	0.2878 0.2223	0.2573	0.3112	Ave		0.2672				11.6		30.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Burlington Job No.: 200-34570-1 Analy Batch No.: 106489

SDG No.:

Instrument ID: CHC.i GC Column: RTX-624 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 06/30/2016 15:58 Calibration End Date: 06/30/2016 22:11 Calibration ID: 35139

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 200-106489/3	20687_03.D
Level 2	IC 200-106489/4	20687_04.D
Level 3	IC 200-106489/5	20687_05.D
Level 4	IC 200-106489/6	20687_06.D
Level 5	ICIS 200-106489/7	20687_07.D
Level 6	IC 200-106489/8	20687_08.D
Level 7	IC 200-106489/9	20687_09.D
Level 8	IC 200-106489/10	20687_10.D

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (PPB V/V)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
Propylene	BCM	Ave	+++++ 362349	+++++ 509895	+++++ 994826	120339	262656	+++++ 15.0	+++++ 20.0	+++++ 40.0	4.99	10.00
Dichlorodifluoromethane	BCM	Ave	+++++ 774782	+++++ 1128051	24942 2126283	254420	619600	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
Freon 22	BCM	Ave	+++++ 676014	+++++ 947155	22872 1862946	223723	490648	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
1,2-Dichlorotetrafluoroethane	BCM	Ave	+++++ 784148	9832 1095970	27092 2198766	263059	575308	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Chloromethane	BCM	Ave	+++++ 371415	+++++ 520288	13722 1026271	125463	270853	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
n-Butane	BCM	Ave	+++++ 690935	+++++ 971576	25199 1887562	225705	499286	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
Vinyl chloride	BCM	Ave	985 368694	4803 515913	13136 1018923	122098	269905	0.0401 15.0	0.200 20.0	0.500 40.0	4.99	10.00
1,3-Butadiene	BCM	Ave	+++++ 292968	3503 411281	9614 813420	95299	210808	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Bromomethane	BCM	Ave	+++++ 263878	3522 368295	9433 748717	90309	195150	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Chloroethane	BCM	Ave	+++++ 165654	+++++ 231160	5794 464421	55399	118775	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
Isopentane	BCM	Ave	+++++ 441952	5704 621932	14944 1220998	143259	317131	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Bromoethene(Vinyl Bromide)	BCM	Ave	+++++ 261075	3531 370628	9067 749408	88287	191522	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Trichlorofluoromethane	BCM	Ave	+++++ 764898	10317 1065327	26388 2121595	258210	556154	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
n-Pentane	BCM	Ave	+++++ 711862	+++++ 1002905	24271 1989855	232827	511878	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
Ethanol	BCM	Ave	+++++ 272756	+++++ 553227	65320 1286208	134619	216330	+++++ 20.0	+++++ 40.0	5.01 100.0	9.99	15.0

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Burlington Job No.: 200-34570-1 Analy Batch No.: 106489

SDG No.:

Instrument ID: CHC.i GC Column: RTX-624 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 06/30/2016 15:58 Calibration End Date: 06/30/2016 22:11 Calibration ID: 35139

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (PPB V/V)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
Ethyl ether	BCM	Ave	+++++ 231351	2868 327062	7664 651325	74891	166396	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Acrolein	BCM	Ave	+++++ 83056	+++++ 150959	+++++ 304020	33453	76213	+++++ 15.0	+++++ 20.0	+++++ 40.0	4.99	10.00
Freon TF	BCM	Ave	+++++ 537813	6711 756155	18693 1509116	182798	391765	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
1,1-Dichloroethene	BCM	Ave	+++++ 255009	3245 355708	8615 721776	84135	184205	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Acetone	BCM	Ave	+++++ 700415	+++++ 927744	+++++ 1827946	240108	530022	+++++ 15.0	+++++ 20.0	+++++ 40.0	4.99	10.00
Carbon disulfide	BCM	Ave	+++++ 789498	+++++ 1115465	26812 2257661	261742	572487	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
Isopropyl alcohol	BCM	Ave	+++++ 567073	+++++ 795461	+++++ 1622263	218963	470945	+++++ 15.0	+++++ 20.0	+++++ 40.0	4.99	10.00
3-Chloropropene	BCM	Ave	+++++ 544669	7083 786209	18761 1532943	176648	330125	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Acetonitrile	BCM	Ave	+++++ 322267	+++++ 445952	+++++ 894218	107855	242455	+++++ 15.0	+++++ 20.0	+++++ 40.0	4.99	10.00
Methylene Chloride	BCM	Ave	+++++ 459207	+++++ 646680	15770 1273200	151867	332714	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
tert-Butyl alcohol	BCM	Ave	+++++ 698748	+++++ 990582	+++++ 2017192	241426	563066	+++++ 15.0	+++++ 20.0	+++++ 40.0	4.99	10.00
Methyl tert-butyl ether	BCM	Ave	+++++ 958359	11636 1348031	31427 2682071	310837	687733	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
trans-1,2-Dichloroethene	BCM	Ave	+++++ 531064	6721 748300	18032 1477045	174761	382536	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Acrylonitrile	BCM	Ave	+++++ 271840	+++++ 385056	8930 770346	87598	194897	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
n-Hexane	BCM	Ave	+++++ 546614	7457 770153	18894 1519807	178686	389935	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
1,1-Dichloroethane	BCM	Ave	1573 685134	8389 963612	22835 1910112	223886	493101	0.0401 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Vinyl acetate	BCM	Ave	+++++ 1264408	+++++ 1788918	+++++ 3523740	397527	895927	+++++ 15.0	+++++ 20.0	+++++ 40.0	4.99	10.00
cis-1,2-Dichloroethene	BCM	Ave	+++++ 329297	4245 462173	11273 930627	107653	235925	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Methyl Ethyl Ketone	BCM	Ave	+++++ 175285	+++++ 245004	6015 494864	58383	129542	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
Ethyl acetate	BCM	Ave	+++++ 25920	+++++ 36722	+++++ 72522	8061	18449	+++++ 15.0	+++++ 20.0	+++++ 40.0	4.99	10.00
Tetrahydrofuran	DFBZ	Ave	+++++ 617173	+++++ 866504	+++++ 1699032	203815	451406	+++++ 15.0	+++++ 20.0	+++++ 40.0	4.99	10.00

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Burlington Job No.: 200-34570-1 Analy Batch No.: 106489

SDG No.:

Instrument ID: CHC.i GC Column: RTX-624 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 06/30/2016 15:58 Calibration End Date: 06/30/2016 22:11 Calibration ID: 35139

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (PPB V/V)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
Chloroform	BCM	Ave	+++++ 750883	9337 1052893	25471 2110157	245026	536289	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Cyclohexane	DFBZ	Ave	+++++ 478278	5779 674667	15803 1360319	157053	340647	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
1,1,1-Trichloroethane	DFBZ	Ave	+++++ 753059	9218 1057828	25555 2119902	245943	540815	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Carbon tetrachloride	DFBZ	Ave	1776 750165	8941 1074684	24778 2140885	243398	434409	0.0401 15.0	0.200 20.0	0.500 40.0	4.99	10.00
2,2,4-Trimethylpentane	DFBZ	Ave	+++++ 2439996	30150 3441718	79446 6818038	784287	1740389	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Benzene	DFBZ	Ave	+++++ 1199237	16517 1695061	41859 3404777	389132	855084	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
1,2-Dichloroethane	DFBZ	Ave	+++++ 683632	8435 964674	22323 1925862	217779	481368	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
n-Heptane	DFBZ	Ave	+++++ 1219786	16600 1700881	40576 3316860	389228	864169	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
n-Butanol	DFBZ	Ave	+++++ 294375	+++++ 420542	+++++ 844221	99144	249322	+++++ 15.0	+++++ 20.0	+++++ 40.0	4.99	10.00
Trichloroethene	DFBZ	Ave	1243 583875	6508 721886	17246 1491273	163009	360568	0.0401 15.0	0.200 20.0	0.500 40.0	4.99	10.00
1,2-Dichloropropane	DFBZ	Ave	+++++ 606229	7365 857538	19680 1699605	195818	427907	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Methyl methacrylate	DFBZ	Ave	+++++ 519572	+++++ 749916	15269 1521440	160802	368628	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
1,4-Dioxane	DFBZ	Ave	+++++ 183428	+++++ 257528	+++++ 527059	68261	162705	+++++ 15.0	+++++ 20.0	+++++ 40.0	4.99	10.00
Dibromomethane	DFBZ	Ave	+++++ 418544	5314 595483	13737 1259126	135966	295597	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Bromodichloromethane	DFBZ	Ave	+++++ 960951	11035 1389178	30269 2785069	306030	681003	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
cis-1,3-Dichloropropene	DFBZ	Ave	+++++ 825739	9825 1167831	26562 2343379	260707	581973	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
methyl isobutyl ketone	DFBZ	Ave	+++++ 1789284	+++++ 2544431	53166 4971417	558877	1275796	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
Toluene	CBNZ d5	Ave	+++++ 913508	11432 1299496	31715 2631917	298229	647603	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
n-Octane	DFBZ	Ave	+++++ 1976120	24817 2775551	64655 5349875	624505	1402188	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
trans-1,3-Dichloropropene	DFBZ	Ave	+++++ 870606	15704 1255335	29248 2492610	277715	613581	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
1,1,2-Trichloroethane	CBNZ d5	Ave	+++++ 465309	5650 656942	15293 1328034	149966	332413	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Burlington Job No.: 200-34570-1 Analy Batch No.: 106489

SDG No.:

Instrument ID: CHC.i GC Column: RTX-624 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 06/30/2016 15:58 Calibration End Date: 06/30/2016 22:11 Calibration ID: 35139

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (PPB V/V)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
Tetrachloroethene	CBNZ d5	Ave	1505 636237	7960 903262	22332 1896499	207310	458827	0.0401 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Methyl Butyl Ketone (2-Hexanone)	CBNZ d5	Ave	+++++ 1735051	+++++ 2449493	52226 4833770	540963	1248631	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
Dibromochloromethane	CBNZ d5	Ave	+++++ 744937	8197 1148310	21991 2252902	244759	552745	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
1,2-Dibromoethane	CBNZ d5	Ave	+++++ 735443	8576 1047765	23260 2149447	235977	525264	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Chlorobenzene	CBNZ d5	Ave	+++++ 1123739	14460 1596213	40818 3241384	374097	814321	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Ethylbenzene	CBNZ d5	Ave	+++++ 2063810	25146 2940093	69045 5997842	666611	1470588	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
n-Nonane	CBNZ d5	Ave	+++++ 1415060	16781 1990974	46619 3927283	453445	1007181	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
m,p-Xylene	CBNZ d5	Ave	+++++ 1531952	18228 2191616	50682 4472910	492672	1094316	+++++ 30.0	0.401 40.0	1.00 80.0	9.99	20.0
Xylene, o-	CBNZ d5	Ave	+++++ 745577	8898 1072169	24634 2182477	244511	536240	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Styrene	CBNZ d5	Ave	+++++ 1193558	11807 1731043	33186 3596677	375176	853701	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Bromoform	CBNZ d5	Ave	+++++ 550788	6406 1031364	16361 1851829	201646	463755	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Cumene	CBNZ d5	Ave	+++++ 2199488	26878 3141936	71817 6380011	713985	1575080	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
1,1,2,2-Tetrachloroethane	CBNZ d5	Ave	+++++ 1024027	15094 1682064	40776 3326423	394263	863918	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
n-Propylbenzene	CBNZ d5	Ave	+++++ 2846887	33983 4020543	93351 8030796	919182	2021108	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
1,2,3-Trichloropropane	CBNZ d5	Ave	+++++ 1068151	+++++ 1506726	35664 2972861	348782	762699	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
n-Decane	CBNZ d5	Ave	+++++ 1769244	+++++ 2397442	59641 4592879	596959	1301216	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
4-Ethyltoluene	CBNZ d5	Ave	+++++ 2223839	26590 3113195	72188 5999845	714949	1580215	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
2-Chlorotoluene	CBNZ d5	Ave	+++++ 1964012	24056 2783874	65350 5413387	634151	1399387	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
1,3,5-Trimethylbenzene	CBNZ d5	Ave	+++++ 1880545	21817 2628194	60086 5398040	602836	1337936	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Alpha Methyl Styrene	CBNZ d5	Ave	+++++ 877206	8077 1226322	25194 2579712	276268	627871	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
tert-Butylbenzene	CBNZ d5	Ave	+++++ 1688044	20114 2336837	54889 4888534	549112	1209928	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Burlington Job No.: 200-34570-1 Analy Batch No.: 106489

SDG No.:

Instrument ID: CHC.i GC Column: RTX-624 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 06/30/2016 15:58 Calibration End Date: 06/30/2016 22:11 Calibration ID: 35139

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (PPB V/V)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
1,2,4-Trimethylbenzene	CBNZ d5	Ave	+++++ 1875587	22565 2579516	60176 5517035	612446	1345994	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
sec-Butylbenzene	CBNZ d5	Ave	+++++ 2639302	31097 3641600	86532 7840504	870465	1914793	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
4-Isopropyltoluene	CBNZ d5	Ave	+++++ 2097658	25464 3000597	71595 6646237	716173	1577865	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
1,3-Dichlorobenzene	CBNZ d5	Ave	+++++ 1154344	13937 1599118	38667 3438073	377495	835172	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
1,4-Dichlorobenzene	CBNZ d5	Ave	+++++ 1132539	13562 1565521	38926 3427977	372986	827115	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Benzyl chloride	CBNZ d5	Ave	+++++ 1724363	18362 2356261	55392 5333778	554209	1295258	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
n-Butylbenzene	CBNZ d5	Ave	+++++ 2069605	26562 3057193	74361 6671560	733142	1552615	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
n-Undecane	CBNZ d5	Ave	+++++ 1856605	+++++ 2676726	+++++ 5393527	623710	1322514	+++++ 15.0	+++++ 20.0	+++++ 40.0	4.99	10.00
1,2-Dichlorobenzene	CBNZ d5	Ave	+++++ 1042587	13138 1442894	36043 3266605	352372	770112	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
n-Dodecane	CBNZ d5	Ave	+++++ 1586357	+++++ 2264225	+++++ 3027294	550426	1234882	+++++ 15.0	+++++ 20.0	+++++ 40.0	4.99	10.00
1,2,4-Trichlorobenzene	CBNZ d5	Ave	+++++ 827799	+++++ 1187684	28841 2216502	247357	610196	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
Hexachlorobutadiene	CBNZ d5	Ave	+++++ 759267	9898 1102240	28059 1901156	258468	558017	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Naphthalene	CBNZ d5	Ave	+++++ 1765727	+++++ 2400144	60904 4837512	472684	1362542	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
1,2,3-Trichlorobenzene	CBNZ d5	Ave	+++++ 724973	8274 1032294	26654 1697864	227827	547920	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00

Curve Type Legend:
Ave = Average ISTD

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Burlington Job No.: 200-34834-1 Analy Batch No.: 107979

SDG No.:

Instrument ID: CHG.i GC Column: RTX-624 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/09/2016 19:25 Calibration End Date: 08/10/2016 01:26 Calibration ID: 35497

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 200-107979/4	21273_04.D
Level 2	IC 200-107979/5	21273_05.D
Level 3	IC 200-107979/6	21273_06.D
Level 4	IC 200-107979/7	21273_07.D
Level 5	ICIS 200-107979/8	21273_08.D
Level 6	IC 200-107979/9	21273_09.D
Level 7	IC 200-107979/10	21273_10.D
Level 8	IC 200-107979/11	21273_11.D

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
Propylene	+++++ 0.7702	+++++ 0.7789	+++++ 0.7227	0.7739	0.7456	Ave		0.7583				3.1		30.0			
Dichlorodifluoromethane	+++++ 3.1398	+++++ 3.0628	3.4084 2.6870	3.3341	3.1152	Ave		3.1245				8.1		30.0			
Freon 22	+++++ 1.9210	+++++ 1.8714	2.0280 1.7410	2.0047	1.9185	Ave		1.9141				5.4		30.0			
1,2-Dichlorotetrafluoroethane	+++++ 2.5925	2.6552 2.5351	2.8337 2.2584	2.7933	2.6239	Ave		2.6132				7.3		30.0			
Chloromethane	+++++ 0.9569	+++++ 0.9437	1.2545 0.8831	0.9905	0.9312	Ave		0.9933				13.4		30.0			
n-Butane	+++++ 1.3352	+++++ 1.3336	1.4058 1.2511	1.3541	1.3089	Ave		1.3315				3.8		30.0			
Vinyl chloride	0.9318 0.9955	0.9622 0.9919	1.0587 0.9234	1.0206	0.9920	Ave		0.9845				4.6		30.0			
1,3-Butadiene	+++++ 0.6840	0.6280 0.6721	0.6955 0.6387	0.6922	0.6646	Ave		0.6679				3.9		30.0			
Bromomethane	+++++ 1.0060	1.0444 0.9792	1.0806 0.9202	1.0421	0.9887	Ave		1.0087				5.2		30.0			
Chloroethane	+++++ 0.3788	+++++ 0.3756	0.3911 0.3547	0.3822	0.3762	Ave		0.3765				3.2		30.0			
Isopentane	+++++ 0.8415	1.0444 0.7757	0.9194 0.7806	0.8180	0.8179	Ave		0.8568				11.1		30.0			
Bromoethene(Vinyl Bromide)	+++++ 0.9901	0.9012 0.9730	1.0015 0.9140	1.0221	0.9682	Ave		0.9671				4.6		30.0			
Trichlorofluoromethane	+++++ 3.0006	3.0894 2.9102	3.3288 2.6628	3.2189	3.0194	Ave		3.0329				7.1		30.0			
n-Pentane	+++++ 1.3129	+++++ 1.3076	1.2937 1.2408	1.3146	1.2770	Ave		1.2911				2.2		30.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Burlington Job No.: 200-34834-1 Analy Batch No.: 107979

SDG No.:

Instrument ID: CHG.i GC Column: RTX-624 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/09/2016 19:25 Calibration End Date: 08/10/2016 01:26 Calibration ID: 35497

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
Ethanol	+++++ 0.4515	+++++ 0.4170	0.6045 0.3606	0.4738	0.4279	Ave		0.4559				18.0		30.0			
Ethyl ether	+++++ 0.5039	0.4108 0.4943	0.4761 0.4628	0.4807	0.4717	Ave		0.4715				6.4		30.0			
Acrolein	+++++ 0.2308	+++++ 0.2342	+++++ 0.2067	0.2014	0.2402	Ave		0.2227				7.8		30.0			
Freon TF	+++++ 1.8772	2.0240 1.8085	2.0227 1.6465	2.0130	1.8689	Ave		1.8944				7.4		30.0			
1,1-Dichloroethene	+++++ 0.7973	0.7580 0.7753	0.7901 0.7016	0.8372	0.8162	Ave		0.7823				5.6		30.0			
Acetone	+++++ 1.3298	+++++ 1.2960	+++++ 1.2004	1.4077	1.2782	Ave		1.3024				5.8		30.0			
Carbon disulfide	+++++ 2.5385	+++++ 2.5155	2.5478 2.3790	2.5584	2.4776	Ave		2.5028				2.7		30.0			
Isopropyl alcohol	+++++ 1.0743	+++++ 1.0539	+++++ 0.9741	0.9735	0.9892	Ave		1.0130				4.7		30.0			
3-Chloropropene	+++++ 1.0658	0.9223 1.0473	0.8810 1.0024	0.9198	0.9753	Ave		0.9734				7.1		30.0			
Acetonitrile	+++++ 0.5349	+++++ 0.4725	+++++ 0.5463	0.5727	0.5643	Ave		0.5381				7.4		30.0			
Methylene Chloride	+++++ 1.1590	+++++ 1.1370	1.3925 1.0732	1.1748	1.1342	Ave		1.1785				9.4		30.0			
tert-Butyl alcohol	+++++ 1.4911	+++++ 1.4630	+++++ 1.3967	1.3277	1.1847	Ave		1.3726				8.9		30.0			
trans-1,2-Dichloroethene	+++++ 1.4220	1.2291 1.3856	1.3805 1.2735	1.4452	1.4096	Ave		1.3637				5.9		30.0			
Methyl tert-butyl ether	+++++ 2.3880	2.1311 2.3257	2.1273 2.1067	2.2758	1.9967	Ave		2.1931				6.4		30.0			
Acrylonitrile	+++++ 0.5240	+++++ 0.5318	0.4476 0.5020	0.4954	0.4966	Ave		0.4996				5.9		30.0			
n-Hexane	+++++ 1.1243	0.9306 1.1093	0.9881 1.0558	1.0893	1.0840	Ave		1.0545				6.7		30.0			
1,1-Dichloroethane	1.4117 1.8429	1.7277 1.8182	1.8384 1.7061	1.8033	1.7558	Ave		1.7380				8.1		30.0			
Vinyl acetate	+++++ 2.0524	+++++ 2.1118	+++++ 1.9971	1.9055	1.8009	Ave		1.9735				6.2		30.0			
cis-1,2-Dichloroethene	+++++ 1.0813	0.9993 1.0569	1.0497 0.9840	1.0620	1.0411	Ave		1.0392				3.4		30.0			
Methyl Ethyl Ketone	+++++ 0.3957	+++++ 0.3902	0.3353 0.3593	0.3659	0.3652	Ave		0.3686				6.0		30.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Burlington Job No.: 200-34834-1 Analy Batch No.: 107979

SDG No.:

Instrument ID: CHG.i GC Column: RTX-624 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/09/2016 19:25 Calibration End Date: 08/10/2016 01:26 Calibration ID: 35497

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
Ethyl acetate	+++++ 0.0511	+++++ 0.0507	+++++ 0.0453	0.0475	0.0457	Ave		0.0480				5.7		30.0			
Tetrahydrofuran	+++++ 0.1657	+++++ 0.1576	+++++ 0.1508	0.1595	0.1583	Ave		0.1584				3.4		30.0			
Chloroform	+++++ 2.7680	2.4937 2.6949	2.7488 2.5019	2.7496	2.6711	Ave		2.6611				4.4		30.0			
1,1,1-Trichloroethane	+++++ 0.4762	0.4677 0.4441	0.4904 0.4142	0.4961	0.4645	Ave		0.4648				6.1		30.0			
Cyclohexane	+++++ 0.2122	0.1927 0.1995	0.1975 0.1900	0.2159	0.2089	Ave		0.2024				4.9		30.0			
Carbon tetrachloride	0.4701 0.5220	0.4656 0.5009	0.5248 0.4806	0.5304	0.5189	Ave		0.5017				5.2		30.0			
Benzene	+++++ 0.6025	0.6223 0.5840	0.6125 0.5648	0.5997	0.5918	Ave		0.5968				3.2		30.0			
2,2,4-Trimethylpentane	+++++ 0.9052	0.7502 0.8679	0.8016 0.8414	0.8927	0.8858	Ave		0.8493				6.6		30.0			
1,2-Dichloroethane	+++++ 0.3699	0.3424 0.3561	0.3780 0.3444	0.3762	0.3696	Ave		0.3624				4.1		30.0			
n-Heptane	+++++ 0.3559	0.2868 0.3421	0.2965 0.3351	0.3380	0.3445	Ave		0.3284				8.0		30.0			
n-Butanol	+++++ 0.0866	+++++ 0.0842	+++++ 0.0857	0.0719	0.0794	Ave		0.0816				7.5		30.0			
Trichloroethene	0.3634 0.3426	0.2948 0.3318	0.3331 0.3236	0.3397	0.3339	Ave		0.3329				5.8		30.0			
1,2-Dichloropropane	+++++ 0.2863	0.2348 0.2796	0.2468 0.2732	0.2724	0.2706	Ave		0.2662				7.0		30.0			
Methyl methacrylate	+++++ 0.2186	+++++ 0.2159	0.1343 0.2013	0.1891	0.1962	Ave		0.1926				16.0		30.0			
Dibromomethane	+++++ 0.2793	0.2482 0.2678	0.2601 0.2534	0.2889	0.2810	Ave		0.2684				5.7		30.0			
1,4-Dioxane	+++++ 0.1037	+++++ 0.0974	+++++ 0.0879	0.1039	0.0989	Ave		0.0984				6.6		30.0			
Bromodichloromethane	+++++ 0.7038	0.5297 0.6927	0.5774 0.6757	0.6570	0.6798	Ave		0.6451				10.2		30.0			
cis-1,3-Dichloropropene	+++++ 0.5018	0.3202 0.5004	0.3672 0.5059	0.4416	0.4470	Ave		0.4406				16.5		30.0			
methyl isobutyl ketone	+++++ 0.6479	+++++ 0.6330	0.4182 0.6209	0.5546	0.5936	Ave		0.5780				14.7		30.0			
Toluene	+++++ 0.5161	0.4297 0.4862	0.4508 0.4562	0.4705	0.4824	Ave		0.4703				6.0		30.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Burlington Job No.: 200-34834-1 Analy Batch No.: 107979

SDG No.:

Instrument ID: CHG.i GC Column: RTX-624 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/09/2016 19:25 Calibration End Date: 08/10/2016 01:26 Calibration ID: 35497

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
n-Octane	+++++ 0.7005	0.4924 0.6923	0.5558 0.6667	0.6757	0.6787	Ave		0.6375				12.6		30.0			
trans-1,3-Dichloropropene	+++++ 0.5310	0.3139 0.5311	0.3438 0.5254	0.4675	0.4455	Ave		0.4512				20.0		30.0			
1,1,2-Trichloroethane	+++++ 0.2855	0.2241 0.2679	0.2577 0.2518	0.2592	0.2676	Ave		0.2591				7.3		30.0			
Tetrachloroethene	0.3848 0.4215	0.3929 0.3926	0.4109 0.3695	0.3956	0.4030	Ave		0.3963				4.0		30.0			
Methyl Butyl Ketone (2-Hexanone)	+++++ 0.5520	+++++ 0.5114	0.3529 0.4990	0.4507	0.4972	Ave		0.4772				14.5		30.0			
Dibromochloromethane	+++++ 0.6203	0.4103 0.5857	0.4743 0.5522	0.5310	0.5696	Ave		0.5348				13.4		30.0			
1,2-Dibromoethane	+++++ 0.4848	0.3326 0.4558	0.3746 0.4436	0.4261	0.4425	Ave		0.4229				12.3		30.0			
Chlorobenzene	+++++ 0.6587	0.5722 0.6163	0.5953 0.5980	0.5982	0.6069	Ave		0.6065				4.4		30.0			
Ethylbenzene	+++++ 1.1341	0.8785 1.0635	0.9385 1.0121	1.0302	1.0546	Ave		1.0159				8.3		30.0			
n-Nonane	+++++ 0.5311	0.3832 0.4934	0.4480 0.4501	0.5053	0.5060	Ave		0.4739				10.6		30.0			
m,p-Xylene	+++++ 0.4169	0.3333 0.3882	0.3640 0.3574	0.3848	0.3871	Ave		0.3760				7.2		30.0			
Xylene, o-	+++++ 0.4339	0.3396 0.4071	0.3697 0.3903	0.3934	0.4010	Ave		0.3907				7.6		30.0			
Styrene	+++++ 0.6213	0.3433 0.5884	0.3547 0.5876	0.5097	0.5520	Ave		0.5082				22.5		30.0			
Bromoform	+++++ 0.5016	0.2957 0.4756	0.3337 0.4436	0.3863	0.4454	Ave		0.4117				18.4		30.0			
Cumene	+++++ 1.2408	0.9297 1.1518	1.0537 1.0919	1.1450	1.1549	Ave		1.1097				8.9		30.0			
1,1,2,2-Tetrachloroethane	+++++ 0.7059	0.5686 0.6564	0.6008 0.6211	0.6370	0.6438	Ave		0.6334				6.9		30.0			
1,2,3-Trichloropropane	+++++ 0.5828	+++++ 0.5415	0.5177 0.5147	0.5314	0.5406	Ave		0.5381				4.6		30.0			
n-Propylbenzene	+++++ 1.5150	1.0926 1.4062	1.1982 1.3325	1.3626	1.3959	Ave		1.3290				10.6		30.0			
2-Chlorotoluene	+++++ 1.0697	0.8620 0.9870	0.9123 0.9099	0.9929	1.0009	Ave		0.9621				7.3		30.0			
4-Ethyltoluene	+++++ 1.1720	0.8265 1.0865	0.8732 1.0066	1.0440	1.0731	Ave		1.0117				12.1		30.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Burlington Job No.: 200-34834-1 Analy Batch No.: 107979

SDG No.:

Instrument ID: CHG.i GC Column: RTX-624 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/09/2016 19:25 Calibration End Date: 08/10/2016 01:26 Calibration ID: 35497

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
n-Decane	+++++ 0.6830	+++++ 0.6407	0.4521 0.5985	0.6228	0.6344	Ave		0.6052				13.2		30.0			
1,3,5-Trimethylbenzene	+++++ 1.0248	0.7552 0.9440	0.8562 0.9129	0.9314	0.9417	Ave		0.9095				9.3		30.0			
Alpha Methyl Styrene	+++++ 0.4723	0.2423 0.4401	0.2590 0.4463	0.3770	0.4161	Ave		0.3790				24.4		30.0			
tert-Butylbenzene	+++++ 0.9414	0.7767 0.8613	0.8376 0.8266	0.8691	0.8693	Ave		0.8546				5.9		30.0			
1,2,4-Trimethylbenzene	+++++ 1.0242	0.7376 0.9343	0.7918 0.9061	0.9151	0.9314	Ave		0.8915				10.8		30.0			
sec-Butylbenzene	+++++ 1.4652	1.1087 1.3339	1.2216 1.2755	1.3336	1.3517	Ave		1.2986				8.6		30.0			
1,3-Dichlorobenzene	+++++ 0.5818	0.4263 0.5278	0.4317 0.4719	0.4968	0.5193	Ave		0.4936				11.2		30.0			
4-Isopropyltoluene	+++++ 1.1540	0.8134 1.0474	0.8779 0.9082	1.0393	1.0658	Ave		0.9866				12.3		30.0			
1,4-Dichlorobenzene	+++++ 0.5643	0.4066 0.5133	0.3941 0.5297	0.4530	0.4822	Ave		0.4776				13.3		30.0			
Benzyl chloride	+++++ 0.7612	0.3984 0.7249	0.4424 0.7745	0.6166	0.4634	Ave		0.5973				27.0		30.0			
n-Butylbenzene	+++++ 1.1291	0.7768 1.0584	0.7414 0.9847	0.9608	1.0098	Ave		0.9516				15.0		30.0			
1,2-Dichlorobenzene	+++++ 0.5608	0.4184 0.5110	0.4219 0.4553	0.4911	0.5000	Ave		0.4798				10.7		30.0			
n-Undecane	+++++ 0.6080	+++++ 0.5821	+++++ 0.5058	0.5286	0.5499	Ave		0.5549				7.4		30.0			
n-Dodecane	+++++ 0.5269	+++++ 0.4626	+++++ 0.2136	0.4215	0.4451	Ave		0.4140				28.7		30.0			
1,2,4-Trichlorobenzene	+++++ 0.2784	+++++ 0.2530	0.1314 0.2124	0.2005	0.2151	Ave		0.2151				23.4		30.0			
Hexachlorobutadiene	+++++ 0.3694	0.3050 0.3478	0.3051 0.2308	0.3339	0.3436	Ave		0.3194				14.2		30.0			
Naphthalene	+++++ 0.6825	+++++ 0.6249	0.2663 0.5499	0.5033	0.5120	Ave		0.5231				27.4		30.0			
1,2,3-Trichlorobenzene	+++++ 0.2616	0.1909 0.2407	0.1472 0.1549	0.1986	0.2113	Ave		0.2007				20.8		30.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Burlington Job No.: 200-34834-1 Analy Batch No.: 107979

SDG No.:

Instrument ID: CHG.i GC Column: RTX-624 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/09/2016 19:25 Calibration End Date: 08/10/2016 01:26 Calibration ID: 35497

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 200-107979/4	21273_04.D
Level 2	IC 200-107979/5	21273_05.D
Level 3	IC 200-107979/6	21273_06.D
Level 4	IC 200-107979/7	21273_07.D
Level 5	ICIS 200-107979/8	21273_08.D
Level 6	IC 200-107979/9	21273_09.D
Level 7	IC 200-107979/10	21273_10.D
Level 8	IC 200-107979/11	21273_11.D

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (PPB V/V)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
Propylene	BCM	Ave	+++++ 362633	+++++ 476343	+++++ 861573	113221	230261	+++++ 15.0	+++++ 20.0	+++++ 40.0	4.99	10.00
Dichlorodifluoromethane	BCM	Ave	+++++ 1478250	+++++ 1873074	51691 3203357	487763	962022	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
Freon 22	BCM	Ave	+++++ 904444	+++++ 1144491	30757 2075619	293279	592484	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
1,2-Dichlorotetrafluoroethane	BCM	Ave	+++++ 1220604	15966 1550339	42976 2692398	408647	810298	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Chloromethane	BCM	Ave	+++++ 450526	+++++ 577125	19026 1052788	144910	287558	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
n-Butane	BCM	Ave	+++++ 628627	+++++ 815565	21321 1491567	198100	404198	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
Vinyl chloride	BCM	Ave	1033 468717	5786 606622	16056 1100802	149303	306347	0.0401 15.0	0.200 20.0	0.500 40.0	4.99	10.00
1,3-Butadiene	BCM	Ave	+++++ 322017	3776 411027	10548 761381	101267	205238	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Bromomethane	BCM	Ave	+++++ 473661	6280 598863	16388 1097076	152452	305321	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Chloroethane	BCM	Ave	+++++ 178342	+++++ 229731	5932 422914	55908	116186	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
Isopentane	BCM	Ave	+++++ 396213	6280 474418	13944 930663	119663	252573	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Bromoethene(Vinyl Bromide)	BCM	Ave	+++++ 466148	5419 595042	15188 1089698	149522	298989	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Trichlorofluoromethane	BCM	Ave	+++++ 1412712	18577 1779793	50484 3174506	470910	932450	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
n-Pentane	BCM	Ave	+++++ 618128	+++++ 799697	19620 1479282	192316	394352	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
Ethanol	BCM	Ave	+++++ 284057	+++++ 510085	91794 1074835	138724	198303	+++++ 20.0	+++++ 40.0	5.01 100.0	9.99	15.0

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Burlington Job No.: 200-34834-1 Analy Batch No.: 107979

SDG No.:

Instrument ID: CHG.i GC Column: RTX-624 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/09/2016 19:25 Calibration End Date: 08/10/2016 01:26 Calibration ID: 35497

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (PPB V/V)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
Ethyl ether	BCM	Ave	+++++ 237264	2470 302269	7221 551763	70321	145675	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Acrolein	BCM	Ave	+++++ 108678	+++++ 143205	+++++ 246455	29465	74180	+++++ 15.0	+++++ 20.0	+++++ 40.0	4.99	10.00
Freon TF	BCM	Ave	+++++ 883815	12171 1105986	30676 1962961	294486	577164	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
1,1-Dichloroethene	BCM	Ave	+++++ 375395	4558 474172	11982 836478	122475	252071	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Acetone	BCM	Ave	+++++ 626101	+++++ 792565	+++++ 1431089	205933	394718	+++++ 15.0	+++++ 20.0	+++++ 40.0	4.99	10.00
Carbon disulfide	BCM	Ave	+++++ 1195151	+++++ 1538361	38640 2836222	374269	765143	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
Isopropyl alcohol	BCM	Ave	+++++ 505817	+++++ 644530	+++++ 1161337	142419	305474	+++++ 15.0	+++++ 20.0	+++++ 40.0	4.99	10.00
3-Chloropropene	BCM	Ave	+++++ 501782	5546 640503	13361 1195017	134567	301200	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Acetonitrile	BCM	Ave	+++++ 251833	+++++ 288968	+++++ 651238	83783	174253	+++++ 15.0	+++++ 20.0	+++++ 40.0	4.99	10.00
Methylene Chloride	BCM	Ave	+++++ 545674	+++++ 695369	21118 1279419	171869	350278	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
tert-Butyl alcohol	BCM	Ave	+++++ 702039	+++++ 894696	+++++ 1665085	194229	365846	+++++ 15.0	+++++ 20.0	+++++ 40.0	4.99	10.00
trans-1,2-Dichloroethene	BCM	Ave	+++++ 669486	7391 847391	20936 1518277	211429	435319	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Methyl tert-butyl ether	BCM	Ave	+++++ 1124296	12815 1422333	32263 2511532	332930	616631	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Acrylonitrile	BCM	Ave	+++++ 246705	+++++ 325210	6789 598441	72468	153365	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
n-Hexane	BCM	Ave	+++++ 529350	5596 678386	14985 1258695	159356	334745	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
1,1-Dichloroethane	BCM	Ave	1565 867667	10389 1111927	27881 2033919	263806	542232	0.0401 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Vinyl acetate	BCM	Ave	+++++ 966290	+++++ 1291487	+++++ 2380842	278766	556143	+++++ 15.0	+++++ 20.0	+++++ 40.0	4.99	10.00
cis-1,2-Dichloroethene	BCM	Ave	+++++ 509109	6009 646329	15920 1173146	155364	321504	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Methyl Ethyl Ketone	BCM	Ave	+++++ 186293	+++++ 238646	5085 428362	53534	112791	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
Ethyl acetate	BCM	Ave	+++++ 24045	+++++ 31033	+++++ 54003	6943	14105	+++++ 15.0	+++++ 20.0	+++++ 40.0	4.99	10.00
Tetrahydrofuran	DFBZ	Ave	+++++ 471977	+++++ 608153	+++++ 1102622	138380	289346	+++++ 15.0	+++++ 20.0	+++++ 40.0	4.99	10.00

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Burlington Job No.: 200-34834-1 Analy Batch No.: 107979

SDG No.:

Instrument ID: CHG.i GC Column: RTX-624 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/09/2016 19:25 Calibration End Date: 08/10/2016 01:26 Calibration ID: 35497

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (PPB V/V)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
Chloroform	BCM	Ave	+++++ 1303214	14995 1648089	41688 2982741	402248	824896	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
1,1,1-Trichloroethane	DFBZ	Ave	+++++ 1356679	16793 1714223	44722 3029130	430321	849196	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Cyclohexane	DFBZ	Ave	+++++ 604597	6918 770046	18014 1389571	187296	381911	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Carbon tetrachloride	DFBZ	Ave	2749 1487028	16718 1933579	47861 3514084	460095	948653	0.0401 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Benzene	DFBZ	Ave	+++++ 1716473	22345 2254070	55856 4130075	520224	1081757	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
2,2,4-Trimethylpentane	DFBZ	Ave	+++++ 2578761	26936 3350127	73095 6152340	774409	1619302	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
1,2-Dichloroethane	DFBZ	Ave	+++++ 1053942	12294 1374534	34473 2518664	326293	675687	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
n-Heptane	DFBZ	Ave	+++++ 1014083	10297 1320599	27036 2450482	293168	629691	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
n-Butanol	DFBZ	Ave	+++++ 246793	+++++ 324986	+++++ 626922	62340	145061	+++++ 15.0	+++++ 20.0	+++++ 40.0	4.99	10.00
Trichloroethene	DFBZ	Ave	2125 975945	10584 1280766	30377 2366600	294683	610434	0.0401 15.0	0.200 20.0	0.500 40.0	4.99	10.00
1,2-Dichloropropane	DFBZ	Ave	+++++ 815531	8429 1079256	22503 1997856	236266	494704	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Methyl methacrylate	DFBZ	Ave	+++++ 622841	+++++ 833252	12244 1472145	164002	358680	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
Dibromomethane	DFBZ	Ave	+++++ 795726	8910 1033522	23718 1853077	250639	513665	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
1,4-Dioxane	DFBZ	Ave	+++++ 295387	+++++ 375927	+++++ 643053	90105	180755	+++++ 15.0	+++++ 20.0	+++++ 40.0	4.99	10.00
Bromodichloromethane	DFBZ	Ave	+++++ 2005148	19018 2673859	52652 4940820	569888	1242626	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
cis-1,3-Dichloropropene	DFBZ	Ave	+++++ 1429538	11495 1931481	33484 3699153	383071	817172	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
methyl isobutyl ketone	DFBZ	Ave	+++++ 1845788	+++++ 2443172	38135 4540407	481121	1085117	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
Toluene	CBNZ d5	Ave	+++++ 1675847	16871 2233043	45126 4108849	477080	1019641	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
n-Octane	DFBZ	Ave	+++++ 1995749	17681 2672056	50687 4875356	586170	1240734	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
trans-1,3-Dichloropropene	DFBZ	Ave	+++++ 1512734	11269 2050134	31352 3841866	405511	814326	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
1,1,2-Trichloroethane	CBNZ d5	Ave	+++++ 926844	8798 1230365	25802 2267597	262822	565611	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Burlington Job No.: 200-34834-1 Analy Batch No.: 107979

SDG No.:

Instrument ID: CHG.i GC Column: RTX-624 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/09/2016 19:25 Calibration End Date: 08/10/2016 01:26 Calibration ID: 35497

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (PPB V/V)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
Tetrachloroethene	CBNZ d5	Ave	2656 1368384	15425 1803084	41141 3327902	401155	851785	0.0401 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Methyl Butyl Ketone (2-Hexanone)	CBNZ d5	Ave	+++++ 1792292	+++++ 2348850	35328 4494037	457018	1050895	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
Dibromochloromethane	CBNZ d5	Ave	+++++ 2014057	16111 2690171	47481 4973718	538432	1203842	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
1,2-Dibromoethane	CBNZ d5	Ave	+++++ 1574196	13060 2093356	37501 3995353	432075	935241	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Chlorobenzene	CBNZ d5	Ave	+++++ 2138537	22465 2830819	59593 5386058	606521	1282780	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Ethylbenzene	CBNZ d5	Ave	+++++ 3682303	34494 4885048	93953 9116121	1044530	2228862	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
n-Nonane	CBNZ d5	Ave	+++++ 1724551	15044 2266298	44851 4054078	512301	1069517	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
m,p-Xylene	CBNZ d5	Ave	+++++ 2707454	26172 3565836	72888 6437979	780328	1636281	+++++ 30.0	0.401 40.0	1.00 80.0	9.99	20.0
Xylene, o-	CBNZ d5	Ave	+++++ 1408668	13332 1870088	37014 3515715	398881	847443	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Styrene	CBNZ d5	Ave	+++++ 2017275	13480 2702684	35511 5292670	516829	1166651	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Bromoform	CBNZ d5	Ave	+++++ 1628616	11608 2184745	33411 3995306	391659	941331	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Cumene	CBNZ d5	Ave	+++++ 4028716	36501 5290451	105489 9834710	1160948	2440811	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
1,1,2,2-Tetrachloroethane	CBNZ d5	Ave	+++++ 2291929	22324 3014954	60151 5594462	645886	1360707	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
1,2,3-Trichloropropane	CBNZ d5	Ave	+++++ 1892229	+++++ 2487113	51830 4636022	538859	1142583	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
n-Propylbenzene	CBNZ d5	Ave	+++++ 4919114	42899 6458927	119954 12001071	1381606	2950153	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
2-Chlorotoluene	CBNZ d5	Ave	+++++ 3473289	33845 4533395	91333 8195115	1006707	2115454	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
4-Ethyltoluene	CBNZ d5	Ave	+++++ 3805144	32452 4990357	87415 9065990	1058517	2267990	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
n-Decane	CBNZ d5	Ave	+++++ 2217497	+++++ 2942748	45260 5390439	631491	1340746	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
1,3,5-Trimethylbenzene	CBNZ d5	Ave	+++++ 3327331	29653 4335801	85721 8221818	944417	1990356	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Alpha Methyl Styrene	CBNZ d5	Ave	+++++ 1533539	9513 2021681	25931 4019647	382297	879441	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
tert-Butylbenzene	CBNZ d5	Ave	+++++ 3056616	30497 3956247	83856 7444798	881222	1837255	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Burlington Job No.: 200-34834-1 Analy Batch No.: 107979

SDG No.:

Instrument ID: CHG.i GC Column: RTX-624 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/09/2016 19:25 Calibration End Date: 08/10/2016 01:26 Calibration ID: 35497

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (PPB V/V)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
1,2,4-Trimethylbenzene	CBNZ d5	Ave	+++++ 3325443	28959 4291278	79270 8160963	927816	1968583	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
sec-Butylbenzene	CBNZ d5	Ave	+++++ 4757309	43529 6126688	122301 11488119	1352237	2856855	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
1,3-Dichlorobenzene	CBNZ d5	Ave	+++++ 1888924	16736 2424147	43220 4250163	503728	1097506	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
4-Isopropyltoluene	CBNZ d5	Ave	+++++ 3747019	31935 4810914	87893 8180152	1053771	2252550	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
1,4-Dichlorobenzene	CBNZ d5	Ave	+++++ 1832190	15966 2357739	39458 4771267	459269	1019237	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Benzyl chloride	CBNZ d5	Ave	+++++ 2471542	15643 3329655	44291 6975403	625219	979407	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
n-Butylbenzene	CBNZ d5	Ave	+++++ 3666008	30500 4861523	74227 8869267	974177	2134212	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
1,2-Dichlorobenzene	CBNZ d5	Ave	+++++ 1820811	16427 2347007	42241 4100472	497930	1056862	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
n-Undecane	CBNZ d5	Ave	+++++ 1973996	+++++ 2673917	+++++ 4555330	536021	1162302	+++++ 15.0	+++++ 20.0	+++++ 40.0	4.99	10.00
n-Dodecane	CBNZ d5	Ave	+++++ 1710881	+++++ 2124653	+++++ 1924266	427428	940739	+++++ 15.0	+++++ 20.0	+++++ 40.0	4.99	10.00
1,2,4-Trichlorobenzene	CBNZ d5	Ave	+++++ 904028	+++++ 1162011	13154 1913022	203300	454718	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
Hexachlorobutadiene	CBNZ d5	Ave	+++++ 1199474	11976 1597702	30542 2078570	338584	726244	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Naphthalene	CBNZ d5	Ave	+++++ 2215928	+++++ 2870063	26659 4952674	510285	1082067	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
1,2,3-Trichlorobenzene	CBNZ d5	Ave	+++++ 849258	7494 1105742	14733 1395096	201337	446562	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00

Curve Type Legend:
Ave = Average ISTD

FORM VII
AIR - GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Burlington Job No.: 200-34570-1

SDG No.:

Lab Sample ID: ICV 200-106489/15 Calibration Date: 07/01/2016 02:37

Instrument ID: CHC.i Calib Start Date: 06/30/2016 15:58

GC Column: RTX-624 ID: 0.32(mm) Calib End Date: 06/30/2016 22:11

Lab File ID: 20687_15.D Conc. Units: ppb v/v Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Propylene	Ave	0.7448	0.6874		9.23	10.0	-7.7	30.0
Dichlorodifluoromethane	Ave	1.608	1.588		9.87	10.0	-1.3	30.0
Freon 22	Ave	1.382	1.334		9.65	10.0	-3.5	30.0
1,2-Dichlorotetrafluoroethane	Ave	1.603	1.772		11.1	10.0	10.5	30.0
Chloromethane	Ave	0.7743	0.7311		9.44	10.0	-5.6	30.0
n-Butane	Ave	1.425	1.354		9.49	10.0	-5.0	30.0
Vinyl chloride	Ave	0.7542	0.7286		9.66	10.0	-3.4	30.0
1,3-Butadiene	Ave	0.5862	0.5630		9.60	10.0	-4.0	30.0
Bromomethane	Ave	0.5499	0.5413		9.84	10.0	-1.6	30.0
Chloroethane	Ave	0.3411	0.3318		9.73	10.0	-2.7	30.0
Isopentane	Ave	0.8961	0.9531		10.6	10.0	6.4	30.0
Bromoethene(Vinyl Bromide)	Ave	0.5435	0.5273		9.70	10.0	-3.0	30.0
Trichlorofluoromethane	Ave	1.576	1.537		9.75	10.0	-2.5	30.0
n-Pentane	Ave	1.457	1.560		10.7	10.0	7.1	30.0
Ethanol	Ave	0.4033	0.3642		13.6	15.0	-9.7	30.0
Ethyl ether	Ave	0.4668	0.5167		11.1	10.0	10.7	30.0
Acrolein	Ave	0.2085	0.2650		12.7	10.0	27.1	30.0
Freon TF	Ave	1.102	1.099		9.97	10.0	-0.3	30.0
1,1-Dichloroethene	Ave	0.5189	0.5093		9.81	10.0	-1.9	30.0
Acetone	Ave	1.432	1.401		9.78	10.0	-2.2	30.0
Carbon disulfide	Ave	1.627	1.836		11.3	10.0	12.8	30.0
Isopropyl alcohol	Ave	1.248	1.158		9.28	10.0	-7.2	30.0
3-Chloropropene	Ave	1.089	1.097		10.1	10.0	0.7	30.0
Acetonitrile	Ave	0.6679	0.7053		10.6	10.0	5.6	30.0
Methylene Chloride	Ave	0.9425	0.9247		9.81	10.0	-1.9	30.0
tert-Butyl alcohol	Ave	1.498	1.459		9.73	10.0	-2.6	30.0
Methyl tert-butyl ether	Ave	1.922	1.911		9.94	10.0	-0.6	30.0
trans-1,2-Dichloroethene	Ave	1.079	1.125		10.4	10.0	4.3	30.0
Acrylonitrile	Ave	0.5531	0.5729		10.4	10.0	3.6	30.0
n-Hexane	Ave	1.122	1.180		10.5	10.0	5.1	30.0
1,1-Dichloroethane	Ave	1.353	1.384		10.2	10.0	2.3	30.0
Vinyl acetate	Ave	2.569	2.551		9.93	10.0	-0.7	30.0
cis-1,2-Dichloroethene	Ave	0.6712	0.6515		9.70	10.0	-2.9	30.0
Methyl Ethyl Ketone	Ave	0.3620	0.3633		10.0	10.0	0.4	30.0
Ethyl acetate	Ave	0.0527	0.0545		10.3	10.0	3.4	30.0
Tetrahydrofuran	Ave	0.2291	0.2271		9.91	10.0	-0.9	30.0
Chloroform	Ave	1.519	1.512		9.95	10.0	-0.5	30.0
Cyclohexane	Ave	0.1737	0.1741		10.0	10.0	0.2	30.0
1,1,1-Trichloroethane	Ave	0.2746	0.2734		9.95	10.0	-0.4	30.0
Carbon tetrachloride	Ave	0.2610	0.2733		10.5	10.0	4.7	30.0

FORM VII
AIR - GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Burlington Job No.: 200-34570-1

SDG No.:

Lab Sample ID: ICV 200-106489/15 Calibration Date: 07/01/2016 02:37

Instrument ID: CHC.i Calib Start Date: 06/30/2016 15:58

GC Column: RTX-624 ID: 0.32(mm) Calib End Date: 06/30/2016 22:11

Lab File ID: 20687_15.D Conc. Units: ppb v/v Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
2,2,4-Trimethylpentane	Ave	0.8824	0.8718		9.88	10.0	-1.2	30.0
Benzene	Ave	0.4463	0.4330		9.70	10.0	-3.0	30.0
1,2-Dichloroethane	Ave	0.2468	0.2427		9.83	10.0	-1.6	30.0
n-Heptane	Ave	0.4451	0.4301		9.66	10.0	-3.4	30.0
n-Butanol	Ave	0.1147	0.1246		10.9	10.0	8.7	30.0
Trichloroethene	Ave	0.1878	0.1838		9.78	10.0	-2.1	30.0
1,2-Dichloropropane	Ave	0.2186	0.2135		9.76	10.0	-2.4	30.0
Methyl methacrylate	Ave	0.1876	0.1893		10.1	10.0	0.9	30.0
1,4-Dioxane	Ave	0.0735	0.0759		10.3	10.0	3.2	30.0
Dibromomethane	Ave	0.1539	0.1452		9.43	10.0	-5.7	30.0
Bromodichloromethane	Ave	0.3449	0.3441		9.97	10.0	-0.2	30.0
cis-1,3-Dichloropropene	Ave	0.2961	0.2963		10.0	10.0	0.0	30.0
methyl isobutyl ketone	Ave	0.6413	0.6216		9.69	10.0	-3.1	30.0
Toluene	Ave	0.3454	0.3474		10.1	10.0	0.6	30.0
n-Octane	Ave	0.7109	0.6967		9.80	10.0	-2.0	30.0
trans-1,3-Dichloropropene	Ave	0.3369	0.3206		9.51	10.0	-4.8	30.0
1,1,2-Trichloroethane	Ave	0.1734	0.1763		10.2	10.0	1.7	30.0
Tetrachloroethene	Ave	0.2380	0.2375		9.98	10.0	-0.2	30.0
Methyl Butyl Ketone (2-Hexanone)	Ave	0.6405	0.6333		9.88	10.0	-1.1	30.0
Dibromochloromethane	Ave	0.2788	0.2928		10.5	10.0	5.0	30.0
1,2-Dibromoethane	Ave	0.2723	0.2777		10.2	10.0	2.0	30.0
Chlorobenzene	Ave	0.4318	0.4235		9.80	10.0	-1.9	30.0
Ethylbenzene	Ave	0.7741	0.7639		9.87	10.0	-1.3	30.0
n-Nonane	Ave	0.5226	0.5244		10.0	10.0	0.3	30.0
m,p-Xylene	Ave	0.2863	0.2837		19.8	20.0	-0.9	30.0
Xylene, o-	Ave	0.2801	0.2743		9.79	10.0	-2.1	30.0
Styrene	Ave	0.4283	0.4380		10.2	10.0	2.3	30.0
Bromoform	Ave	0.2261	0.2645		11.7	10.0	17.0	30.0
Cumene	Ave	0.8239	0.8037		9.75	10.0	-2.5	30.0
1,1,2,2-Tetrachloroethane	Ave	0.4412	0.4509		10.2	10.0	2.2	30.0
n-Propylbenzene	Ave	1.055	1.032		9.78	10.0	-2.2	30.0
1,2,3-Trichloropropane	Ave	0.4029	0.3917		9.72	10.0	-2.8	30.0
n-Decane	Ave	0.6639	0.6635		9.99	10.0	-0.0	30.0
4-Ethyltoluene	Ave	0.8169	0.8305		10.2	10.0	1.7	30.0
2-Chlorotoluene	Ave	0.7305	0.7154		9.79	10.0	-2.1	30.0
1,3,5-Trimethylbenzene	Ave	0.6924	0.6873		9.93	10.0	-0.7	30.0
Alpha Methyl Styrene	Ave	0.3107	0.3264		10.5	10.0	5.1	30.0
tert-Butylbenzene	Ave	0.6271	0.6163		9.83	10.0	-1.7	30.0
1,2,4-Trimethylbenzene	Ave	0.6978	0.6898		9.88	10.0	-1.1	30.0
sec-Butylbenzene	Ave	0.9871	0.9744		9.87	10.0	-1.3	30.0

FORM VII
AIR - GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Burlington Job No.: 200-34570-1

SDG No.:

Lab Sample ID: ICV 200-106489/15 Calibration Date: 07/01/2016 02:37

Instrument ID: CHC.i Calib Start Date: 06/30/2016 15:58

GC Column: RTX-624 ID: 0.32(mm) Calib End Date: 06/30/2016 22:11

Lab File ID: 20687_15.D Conc. Units: ppb v/v Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
4-Isopropyltoluene	Ave	0.8123	0.8067		9.93	10.0	-0.7	30.0
1,3-Dichlorobenzene	Ave	0.4341	0.4316		9.94	10.0	-0.6	30.0
1,4-Dichlorobenzene	Ave	0.4289	0.4245		9.90	10.0	-1.0	30.0
Benzyl chloride	Ave	0.6395	0.6121		9.57	10.0	-4.3	30.0
n-Butylbenzene	Ave	0.8229	0.8081		9.82	10.0	-1.8	30.0
n-Undecane	Ave	0.7192	0.6678		9.28	10.0	-7.1	30.0
1,2-Dichlorobenzene	Ave	0.4021	0.3976		9.89	10.0	-1.1	30.0
n-Dodecane	Ave	0.5877	0.5678		9.66	10.0	-3.4	30.0
1,2,4-Trichlorobenzene	Ave	0.3109	0.2764		8.89	10.0	-11.1	30.0
Hexachlorobutadiene	Ave	0.2901	0.2789		9.61	10.0	-3.9	30.0
Naphthalene	Ave	0.6538	0.5287		8.09	10.0	-19.1	30.0
1,2,3-Trichlorobenzene	Ave	0.2672	0.2312		8.65	10.0	-13.5	30.0

FORM VII
AIR - GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Burlington Job No.: 200-34570-1

SDG No.:

Lab Sample ID: CCVIS 200-107784/2 Calibration Date: 08/04/2016 12:04

Instrument ID: CHC.i Calib Start Date: 06/30/2016 15:58

GC Column: RTX-624 ID: 0.32(mm) Calib End Date: 06/30/2016 22:11

Lab File ID: 21185_02.D Conc. Units: ppb v/v Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Propylene	Ave	0.7448	0.7010		9.41	10.0	-5.9	30.0
Dichlorodifluoromethane	Ave	1.608	1.699		10.6	10.0	5.7	30.0
Freon 22	Ave	1.382	1.340		9.69	10.0	-3.0	30.0
1,2-Dichlorotetrafluoroethane	Ave	1.603	1.596		9.95	10.0	-0.4	30.0
Chloromethane	Ave	0.7743	0.7172		9.26	10.0	-7.4	30.0
n-Butane	Ave	1.425	1.265		8.87	10.0	-11.2	30.0
Vinyl chloride	Ave	0.7542	0.7273		9.64	10.0	-3.6	30.0
1,3-Butadiene	Ave	0.5862	0.5617		9.58	10.0	-4.2	30.0
Bromomethane	Ave	0.5499	0.5528		10.1	10.0	0.5	30.0
Chloroethane	Ave	0.3411	0.3322		9.74	10.0	-2.6	30.0
Isopentane	Ave	0.8961	0.7985		8.91	10.0	-10.9	30.0
Bromoethene(Vinyl Bromide)	Ave	0.5435	0.5695		10.5	10.0	4.8	30.0
Trichlorofluoromethane	Ave	1.576	1.669		10.6	10.0	5.9	30.0
n-Pentane	Ave	1.457	1.346		9.24	10.0	-7.6	30.0
Ethanol	Ave	0.4033	0.3706		13.8	15.0	-8.1	30.0
Ethyl ether	Ave	0.4668	0.4688		10.0	10.0	0.4	30.0
Acrolein	Ave	0.2085	0.1877		9.00	10.0	-10.0	30.0
Freon TF	Ave	1.102	1.150		10.4	10.0	4.4	30.0
1,1-Dichloroethene	Ave	0.5189	0.5349		10.3	10.0	3.1	30.0
Acetone	Ave	1.432	1.365		9.53	10.0	-4.7	30.0
Carbon disulfide	Ave	1.627	1.653		10.2	10.0	1.6	30.0
Isopropyl alcohol	Ave	1.248	1.192		9.55	10.0	-4.5	30.0
3-Chloropropene	Ave	1.089	1.002		9.20	10.0	-8.0	30.0
Acetonitrile	Ave	0.6679	0.6032		9.03	10.0	-9.7	30.0
Methylene Chloride	Ave	0.9425	0.8904		9.45	10.0	-5.5	30.0
tert-Butyl alcohol	Ave	1.498	1.508		10.1	10.0	0.7	30.0
Methyl tert-butyl ether	Ave	1.922	1.949		10.1	10.0	1.4	30.0
trans-1,2-Dichloroethene	Ave	1.079	1.077		9.98	10.0	-0.2	30.0
Acrylonitrile	Ave	0.5531	0.5226		9.45	10.0	-5.5	30.0
n-Hexane	Ave	1.122	1.072		9.55	10.0	-4.5	30.0
1,1-Dichloroethane	Ave	1.353	1.385		10.2	10.0	2.4	30.0
Vinyl acetate	Ave	2.569	2.340		9.11	10.0	-8.9	30.0
cis-1,2-Dichloroethene	Ave	0.6712	0.6852		10.2	10.0	2.1	30.0
Methyl Ethyl Ketone	Ave	0.3620	0.3663		10.1	10.0	1.2	30.0
Ethyl acetate	Ave	0.0527	0.0536		10.2	10.0	1.7	30.0
Tetrahydrofuran	Ave	0.2291	0.2074		9.05	10.0	-9.5	30.0
Chloroform	Ave	1.519	1.593		10.5	10.0	4.9	30.0
Cyclohexane	Ave	0.1737	0.1761		10.1	10.0	1.4	30.0
1,1,1-Trichloroethane	Ave	0.2746	0.2793		10.2	10.0	1.7	30.0
Carbon tetrachloride	Ave	0.2610	0.2604		9.98	10.0	-0.2	30.0

FORM VII
AIR - GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Burlington Job No.: 200-34570-1

SDG No.:

Lab Sample ID: CCVIS 200-107784/2 Calibration Date: 08/04/2016 12:04

Instrument ID: CHC.i Calib Start Date: 06/30/2016 15:58

GC Column: RTX-624 ID: 0.32(mm) Calib End Date: 06/30/2016 22:11

Lab File ID: 21185_02.D Conc. Units: ppb v/v Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
2,2,4-Trimethylpentane	Ave	0.8824	0.8790		9.96	10.0	-0.4	30.0
Benzene	Ave	0.4463	0.4382		9.82	10.0	-1.8	30.0
1,2-Dichloroethane	Ave	0.2468	0.2498		10.1	10.0	1.2	30.0
n-Heptane	Ave	0.4451	0.4280		9.61	10.0	-3.8	30.0
n-Butanol	Ave	0.1147	0.1166		10.2	10.0	1.7	30.0
Trichloroethene	Ave	0.1878	0.1916		10.2	10.0	2.0	30.0
1,2-Dichloropropane	Ave	0.2186	0.2233		10.2	10.0	2.1	30.0
Methyl methacrylate	Ave	0.1876	0.1897		10.1	10.0	1.1	30.0
1,4-Dioxane	Ave	0.0735	0.0768		10.4	10.0	4.5	30.0
Dibromomethane	Ave	0.1539	0.1485		9.65	10.0	-3.5	30.0
Bromodichloromethane	Ave	0.3449	0.3539		10.3	10.0	2.6	30.0
cis-1,3-Dichloropropene	Ave	0.2961	0.3048		10.3	10.0	2.9	30.0
methyl isobutyl ketone	Ave	0.6413	0.6609		10.3	10.0	3.1	30.0
Toluene	Ave	0.3454	0.3481		10.1	10.0	0.8	30.0
n-Octane	Ave	0.7109	0.7254		10.2	10.0	2.0	30.0
trans-1,3-Dichloropropene	Ave	0.3369	0.3231		9.59	10.0	-4.1	30.0
1,1,2-Trichloroethane	Ave	0.1734	0.1783		10.3	10.0	2.8	30.0
Tetrachloroethene	Ave	0.2380	0.2322		9.75	10.0	-2.5	30.0
Methyl Butyl Ketone (2-Hexanone)	Ave	0.6405	0.6702		10.5	10.0	4.6	30.0
Dibromochloromethane	Ave	0.2788	0.2789		10.0	10.0	0.0	30.0
1,2-Dibromoethane	Ave	0.2723	0.2803		10.3	10.0	2.9	30.0
Chlorobenzene	Ave	0.4318	0.4304		9.97	10.0	-0.3	30.0
Ethylbenzene	Ave	0.7741	0.7850		10.1	10.0	1.4	30.0
n-Nonane	Ave	0.5226	0.5380		10.3	10.0	2.9	30.0
m,p-Xylene	Ave	0.2863	0.2919		20.4	20.0	2.0	30.0
Xylene, o-	Ave	0.2801	0.2846		10.2	10.0	1.6	30.0
Styrene	Ave	0.4283	0.4462		10.4	10.0	4.2	30.0
Bromoform	Ave	0.2261	0.1874		8.29	10.0	-17.1	30.0
Cumene	Ave	0.8239	0.8514		10.3	10.0	3.3	30.0
1,1,2,2-Tetrachloroethane	Ave	0.4412	0.4578		10.4	10.0	3.8	30.0
n-Propylbenzene	Ave	1.055	1.092		10.3	10.0	3.5	30.0
1,2,3-Trichloropropane	Ave	0.4029	0.4158		10.3	10.0	3.2	30.0
n-Decane	Ave	0.6639	0.6836		10.3	10.0	3.0	30.0
4-Ethyltoluene	Ave	0.8169	0.8440		10.3	10.0	3.3	30.0
2-Chlorotoluene	Ave	0.7305	0.7540		10.3	10.0	3.2	30.0
1,3,5-Trimethylbenzene	Ave	0.6924	0.7217		10.4	10.0	4.2	30.0
Alpha Methyl Styrene	Ave	0.3107	0.3284		10.6	10.0	5.7	30.0
tert-Butylbenzene	Ave	0.6271	0.6530		10.4	10.0	4.1	30.0
1,2,4-Trimethylbenzene	Ave	0.6978	0.7324		10.5	10.0	5.0	30.0
sec-Butylbenzene	Ave	0.9871	1.051		10.6	10.0	6.5	30.0

FORM VII
AIR - GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Burlington Job No.: 200-34570-1

SDG No.:

Lab Sample ID: CCVIS 200-107784/2 Calibration Date: 08/04/2016 12:04

Instrument ID: CHC.i Calib Start Date: 06/30/2016 15:58

GC Column: RTX-624 ID: 0.32(mm) Calib End Date: 06/30/2016 22:11

Lab File ID: 21185_02.D Conc. Units: ppb v/v Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
4-Isopropyltoluene	Ave	0.8123	0.8554		10.5	10.0	5.3	30.0
1,3-Dichlorobenzene	Ave	0.4341	0.4341		10.0	10.0	0.0	30.0
1,4-Dichlorobenzene	Ave	0.4289	0.4316		10.1	10.0	0.6	30.0
Benzyl chloride	Ave	0.6395	0.5722		8.95	10.0	-10.5	30.0
n-Butylbenzene	Ave	0.8229	0.8644		10.5	10.0	5.0	30.0
n-Undecane	Ave	0.7192	0.6817		9.48	10.0	-5.2	30.0
1,2-Dichlorobenzene	Ave	0.4021	0.4072		10.1	10.0	1.3	30.0
n-Dodecane	Ave	0.5877	0.6330		10.8	10.0	7.7	30.0
1,2,4-Trichlorobenzene	Ave	0.3109	0.3042		9.78	10.0	-2.2	30.0
Hexachlorobutadiene	Ave	0.2901	0.2647		9.12	10.0	-8.7	30.0
Naphthalene	Ave	0.6538	0.6979		10.7	10.0	6.7	30.0
1,2,3-Trichlorobenzene	Ave	0.2672	0.2791		10.4	10.0	4.4	30.0

FORM VII
AIR - GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Burlington Job No.: 200-34834-1

SDG No.:

Lab Sample ID: ICV 200-107979/17 Calibration Date: 08/10/2016 06:36

Instrument ID: CHG.i Calib Start Date: 08/09/2016 19:25

GC Column: RTX-624 ID: 0.32(mm) Calib End Date: 08/10/2016 01:26

Lab File ID: 21273_17.D Conc. Units: ppb v/v Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Propylene	Ave	0.7583	0.7070		9.32	10.0	-6.8	30.0
Dichlorodifluoromethane	Ave	3.125	3.096		9.91	10.0	-0.9	30.0
Freon 22	Ave	1.914	1.810		9.46	10.0	-5.4	30.0
1,2-Dichlorotetrafluoroethane	Ave	2.613	2.885		11.0	10.0	10.4	30.0
Chloromethane	Ave	0.9933	0.8959		9.02	10.0	-9.8	30.0
n-Butane	Ave	1.331	1.272		9.55	10.0	-4.5	30.0
Vinyl chloride	Ave	0.9845	0.9645		9.79	10.0	-2.0	30.0
1,3-Butadiene	Ave	0.6679	0.6415		9.60	10.0	-3.9	30.0
Bromomethane	Ave	1.009	0.9931		9.84	10.0	-1.6	30.0
Chloroethane	Ave	0.3765	0.3572		9.49	10.0	-5.1	30.0
Isopentane	Ave	0.8568	0.8751		10.2	10.0	2.1	30.0
Bromoethene(Vinyl Bromide)	Ave	0.9671	0.9783		10.1	10.0	1.2	30.0
Trichlorofluoromethane	Ave	3.033	2.958		9.75	10.0	-2.5	30.0
n-Pentane	Ave	1.291	1.385		10.7	10.0	7.3	30.0
Ethanol	Ave	0.4559	0.4016		13.2	15.0	-11.9	30.0
Ethyl ether	Ave	0.4715	0.5247		11.1	10.0	11.3	30.0
Acrolein	Ave	0.2227	0.2718		12.2	10.0	22.1	30.0
Freon TF	Ave	1.894	1.894		10.0	10.0	0.0	30.0
1,1-Dichloroethene	Ave	0.7823	0.7936		10.1	10.0	1.4	30.0
Acetone	Ave	1.302	1.278		9.81	10.0	-1.9	30.0
Carbon disulfide	Ave	2.503	2.854		11.4	10.0	14.0	30.0
Isopropyl alcohol	Ave	1.013	0.9001		8.88	10.0	-11.1	30.0
3-Chloropropene	Ave	0.9734	0.9312		9.56	10.0	-4.3	30.0
Acetonitrile	Ave	0.5381	0.5941		11.0	10.0	10.4	30.0
Methylene Chloride	Ave	1.178	1.103		9.36	10.0	-6.4	30.0
tert-Butyl alcohol	Ave	1.373	1.356		9.87	10.0	-1.2	30.0
trans-1,2-Dichloroethene	Ave	1.364	1.480		10.9	10.0	8.5	30.0
Methyl tert-butyl ether	Ave	2.193	2.268		10.3	10.0	3.4	30.0
Acrylonitrile	Ave	0.4996	0.5273		10.6	10.0	5.5	30.0
n-Hexane	Ave	1.054	1.153		10.9	10.0	9.4	30.0
1,1-Dichloroethane	Ave	1.738	1.773		10.2	10.0	2.0	30.0
Vinyl acetate	Ave	1.974	2.001		10.1	10.0	1.4	30.0
cis-1,2-Dichloroethene	Ave	1.039	1.035		9.96	10.0	-0.4	30.0
Methyl Ethyl Ketone	Ave	0.3686	0.3737		10.1	10.0	1.4	30.0
Ethyl acetate	Ave	0.0480	0.0539		11.2	10.0	12.1	30.0
Tetrahydrofuran	Ave	0.1584	0.1562		9.86	10.0	-1.3	30.0
Chloroform	Ave	2.661	2.710		10.2	10.0	1.8	30.0
1,1,1-Trichloroethane	Ave	0.4648	0.4884		10.5	10.0	5.1	30.0
Cyclohexane	Ave	0.2024	0.2186		10.8	10.0	8.0	30.0
Carbon tetrachloride	Ave	0.5017	0.5489		10.9	10.0	9.4	30.0

FORM VII
AIR - GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Burlington Job No.: 200-34834-1

SDG No.:

Lab Sample ID: ICV 200-107979/17 Calibration Date: 08/10/2016 06:36

Instrument ID: CHG.i Calib Start Date: 08/09/2016 19:25

GC Column: RTX-624 ID: 0.32(mm) Calib End Date: 08/10/2016 01:26

Lab File ID: 21273_17.D Conc. Units: ppb v/v Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Benzene	Ave	0.5968	0.6120		10.3	10.0	2.5	30.0
2,2,4-Trimethylpentane	Ave	0.8493	0.8901		10.5	10.0	4.8	30.0
1,2-Dichloroethane	Ave	0.3624	0.3688		10.2	10.0	1.8	30.0
n-Heptane	Ave	0.3284	0.3385		10.3	10.0	3.1	30.0
n-Butanol	Ave	0.0816	0.0906		11.1	10.0	11.1	30.0
Trichloroethene	Ave	0.3329	0.3626		10.9	10.0	8.9	30.0
1,2-Dichloropropane	Ave	0.2662	0.2833		10.6	10.0	6.4	30.0
Methyl methacrylate	Ave	0.1926	0.2194		11.4	10.0	13.9	30.0
Dibromomethane	Ave	0.2684	0.3037		11.3	10.0	13.2	30.0
1,4-Dioxane	Ave	0.0984	0.1071		10.9	10.0	8.9	30.0
Bromodichloromethane	Ave	0.6451	0.7087		11.0	10.0	9.9	30.0
cis-1,3-Dichloropropene	Ave	0.4406	0.5134		11.6	10.0	16.5	30.0
methyl isobutyl ketone	Ave	0.5780	0.6009		10.4	10.0	4.0	30.0
Toluene	Ave	0.4703	0.4896		10.4	10.0	4.1	30.0
n-Octane	Ave	0.6375	0.6838		10.7	10.0	7.3	30.0
trans-1,3-Dichloropropene	Ave	0.4512	0.5419		12.0	10.0	20.1	30.0
1,1,2-Trichloroethane	Ave	0.2591	0.2695		10.4	10.0	4.0	30.0
Tetrachloroethene	Ave	0.3963	0.4161		10.5	10.0	5.0	30.0
Methyl Butyl Ketone (2-Hexanone)	Ave	0.4772	0.4766		9.99	10.0	-0.1	30.0
Dibromochloromethane	Ave	0.5348	0.5550		10.4	10.0	3.8	30.0
1,2-Dibromoethane	Ave	0.4229	0.4527		10.7	10.0	7.1	30.0
Chlorobenzene	Ave	0.6065	0.6249		10.3	10.0	3.0	30.0
Ethylbenzene	Ave	1.016	1.046		10.3	10.0	3.0	30.0
n-Nonane	Ave	0.4739	0.4848		10.2	10.0	2.3	30.0
m,p-Xylene	Ave	0.3760	0.3832		20.4	20.0	1.9	30.0
Xylene, o-	Ave	0.3907	0.3957		10.1	10.0	1.3	30.0
Styrene	Ave	0.5082	0.5486		10.8	10.0	8.0	30.0
Bromoform	Ave	0.4117	0.4131		10.0	10.0	0.3	30.0
Cumene	Ave	1.110	1.129		10.2	10.0	1.7	30.0
1,1,2,2-Tetrachloroethane	Ave	0.6334	0.6408		10.1	10.0	1.2	30.0
1,2,3-Trichloropropane	Ave	0.5381	0.5130		9.53	10.0	-4.7	30.0
n-Propylbenzene	Ave	1.329	1.338		10.1	10.0	0.7	30.0
2-Chlorotoluene	Ave	0.9621	0.9654		10.0	10.0	0.3	30.0
4-Ethyltoluene	Ave	1.012	1.062		10.5	10.0	4.9	30.0
n-Decane	Ave	0.6052	0.5874		9.70	10.0	-3.0	30.0
1,3,5-Trimethylbenzene	Ave	0.9095	0.9156		10.1	10.0	0.7	30.0
Alpha Methyl Styrene	Ave	0.3790	0.4154		11.0	10.0	9.6	30.0
tert-Butylbenzene	Ave	0.8546	0.8487		9.93	10.0	-0.7	30.0
1,2,4-Trimethylbenzene	Ave	0.8915	0.9001		10.1	10.0	1.0	30.0
sec-Butylbenzene	Ave	1.299	1.303		10.0	10.0	0.3	30.0

FORM VII
AIR - GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Burlington Job No.: 200-34834-1

SDG No.:

Lab Sample ID: ICV 200-107979/17 Calibration Date: 08/10/2016 06:36

Instrument ID: CHG.i Calib Start Date: 08/09/2016 19:25

GC Column: RTX-624 ID: 0.32(mm) Calib End Date: 08/10/2016 01:26

Lab File ID: 21273_17.D Conc. Units: ppb v/v Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,3-Dichlorobenzene	Ave	0.4936	0.5142		10.4	10.0	4.2	30.0
4-Isopropyltoluene	Ave	0.9866	1.021		10.3	10.0	3.4	30.0
1,4-Dichlorobenzene	Ave	0.4776	0.4850		10.2	10.0	1.6	30.0
Benzyl chloride	Ave	0.5973	0.6235		10.4	10.0	4.4	30.0
n-Butylbenzene	Ave	0.9516	0.9497		9.98	10.0	-0.2	30.0
1,2-Dichlorobenzene	Ave	0.4798	0.4963		10.3	10.0	3.4	30.0
n-Undecane	Ave	0.5549	0.5050		9.10	10.0	-9.0	30.0
n-Dodecane	Ave	0.4140	0.4044		9.77	10.0	-2.3	30.0
1,2,4-Trichlorobenzene	Ave	0.2151	0.1956		9.09	10.0	-9.1	30.0
Hexachlorobutadiene	Ave	0.3194	0.3061		9.58	10.0	-4.2	30.0
Naphthalene	Ave	0.5231	0.4329		8.27	10.0	-17.2	30.0
1,2,3-Trichlorobenzene	Ave	0.2007	0.1755		8.74	10.0	-12.6	30.0

FORM VII
AIR - GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Burlington Job No.: 200-34834-1

SDG No.:

Lab Sample ID: CCVIS 200-108166/2 Calibration Date: 08/15/2016 11:06

Instrument ID: CHG.i Calib Start Date: 08/09/2016 19:25

GC Column: RTX-624 ID: 0.32(mm) Calib End Date: 08/10/2016 01:26

Lab File ID: 21352_02.D Conc. Units: ppb v/v Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Propylene	Ave	0.7583	0.8213		10.8	10.0	8.3	30.0
Dichlorodifluoromethane	Ave	3.125	3.529		11.3	10.0	12.9	30.0
Freon 22	Ave	1.914	2.049		10.7	10.0	7.0	30.0
1,2-Dichlorotetrafluoroethane	Ave	2.613	2.800		10.7	10.0	7.1	30.0
Chloromethane	Ave	0.9933	0.9759		9.82	10.0	-1.8	30.0
n-Butane	Ave	1.331	1.387		10.4	10.0	4.2	30.0
Vinyl chloride	Ave	0.9845	1.015		10.3	10.0	3.1	30.0
1,3-Butadiene	Ave	0.6679	0.6954		10.4	10.0	4.1	30.0
Bromomethane	Ave	1.009	1.047		10.4	10.0	3.8	30.0
Chloroethane	Ave	0.3765	0.3785		10.1	10.0	0.6	30.0
Isopentane	Ave	0.8568	0.8552		9.98	10.0	-0.2	30.0
Bromoethene(Vinyl Bromide)	Ave	0.9671	1.007		10.4	10.0	4.1	30.0
Trichlorofluoromethane	Ave	3.033	3.251		10.7	10.0	7.2	30.0
n-Pentane	Ave	1.291	1.301		10.1	10.0	0.8	30.0
Ethanol	Ave	0.4559	0.4339		14.3	15.0	-4.8	30.0
Ethyl ether	Ave	0.4715	0.4824		10.2	10.0	2.3	30.0
Acrolein	Ave	0.2227	0.2021		9.08	10.0	-9.2	30.0
1,1-Dichloroethene	Ave	0.7823	0.8053		10.3	10.0	2.9	30.0
Freon TF	Ave	1.894	1.952		10.3	10.0	3.0	30.0
Acetone	Ave	1.302	1.319		10.1	10.0	1.3	30.0
Carbon disulfide	Ave	2.503	2.488		9.94	10.0	-0.6	30.0
Isopropyl alcohol	Ave	1.013	0.9440		9.32	10.0	-6.8	30.0
3-Chloropropene	Ave	0.9734	0.9610		9.87	10.0	-1.3	30.0
Acetonitrile	Ave	0.5381	0.4868		9.04	10.0	-9.5	30.0
Methylene Chloride	Ave	1.178	1.143		9.70	10.0	-3.0	30.0
tert-Butyl alcohol	Ave	1.373	1.289		9.39	10.0	-6.1	30.0
trans-1,2-Dichloroethene	Ave	1.364	1.397		10.2	10.0	2.4	30.0
Methyl tert-butyl ether	Ave	2.193	2.270		10.3	10.0	3.5	30.0
Acrylonitrile	Ave	0.4996	0.4977		9.96	10.0	-0.4	30.0
n-Hexane	Ave	1.054	1.059		10.0	10.0	0.5	30.0
1,1-Dichloroethane	Ave	1.738	1.762		10.1	10.0	1.4	30.0
Vinyl acetate	Ave	1.974	1.947		9.86	10.0	-1.4	30.0
cis-1,2-Dichloroethene	Ave	1.039	1.035		9.96	10.0	-0.4	30.0
Methyl Ethyl Ketone	Ave	0.3686	0.3615		9.80	10.0	-1.9	30.0
Ethyl acetate	Ave	0.0480	0.0482		10.0	10.0	0.3	30.0
Tetrahydrofuran	Ave	0.1584	0.1557		9.83	10.0	-1.7	30.0
Chloroform	Ave	2.661	2.692		10.1	10.0	1.2	30.0
1,1,1-Trichloroethane	Ave	0.4648	0.4845		10.4	10.0	4.2	30.0
Cyclohexane	Ave	0.2024	0.2038		10.1	10.0	0.7	30.0
Carbon tetrachloride	Ave	0.5017	0.5305		10.6	10.0	5.7	30.0

FORM VII
AIR - GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Burlington Job No.: 200-34834-1

SDG No.:

Lab Sample ID: CCVIS 200-108166/2 Calibration Date: 08/15/2016 11:06

Instrument ID: CHG.i Calib Start Date: 08/09/2016 19:25

GC Column: RTX-624 ID: 0.32(mm) Calib End Date: 08/10/2016 01:26

Lab File ID: 21352_02.D Conc. Units: ppb v/v Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Benzene	Ave	0.5968	0.5797		9.71	10.0	-2.9	30.0
2,2,4-Trimethylpentane	Ave	0.8493	0.8613		10.1	10.0	1.4	30.0
1,2-Dichloroethane	Ave	0.3624	0.3757		10.4	10.0	3.7	30.0
n-Heptane	Ave	0.3284	0.3385		10.3	10.0	3.1	30.0
n-Butanol	Ave	0.0816	0.0706		8.66	10.0	-13.4	30.0
Trichloroethene	Ave	0.3329	0.3330		10.0	10.0	0.0	30.0
1,2-Dichloropropane	Ave	0.2662	0.2699		10.1	10.0	1.4	30.0
Methyl methacrylate	Ave	0.1926	0.1999		10.4	10.0	3.8	30.0
Dibromomethane	Ave	0.2684	0.2745		10.2	10.0	2.3	30.0
1,4-Dioxane	Ave	0.0984	0.1001		10.2	10.0	1.8	30.0
Bromodichloromethane	Ave	0.6451	0.6704		10.4	10.0	3.9	30.0
cis-1,3-Dichloropropene	Ave	0.4406	0.4588		10.4	10.0	4.1	30.0
methyl isobutyl ketone	Ave	0.5780	0.6090		10.5	10.0	5.4	30.0
Toluene	Ave	0.4703	0.5044		10.7	10.0	7.3	30.0
n-Octane	Ave	0.6375	0.7185		11.3	10.0	12.7	30.0
trans-1,3-Dichloropropene	Ave	0.4512	0.4841		10.7	10.0	7.3	30.0
1,1,2-Trichloroethane	Ave	0.2591	0.2821		10.9	10.0	8.9	30.0
Tetrachloroethene	Ave	0.3963	0.4078		10.3	10.0	2.9	30.0
Methyl Butyl Ketone (2-Hexanone)	Ave	0.4772	0.5442		11.4	10.0	14.0	30.0
Dibromochloromethane	Ave	0.5348	0.5815		10.9	10.0	8.7	30.0
1,2-Dibromoethane	Ave	0.4229	0.4573		10.8	10.0	8.1	30.0
Chlorobenzene	Ave	0.6065	0.6239		10.3	10.0	2.9	30.0
Ethylbenzene	Ave	1.016	1.099		10.8	10.0	8.2	30.0
n-Nonane	Ave	0.4739	0.5504		11.6	10.0	16.2	30.0
m,p-Xylene	Ave	0.3760	0.4042		21.5	20.0	7.5	30.0
Xylene, o-	Ave	0.3907	0.4128		10.6	10.0	5.7	30.0
Styrene	Ave	0.5082	0.5605		11.0	10.0	10.3	30.0
Bromoform	Ave	0.4117	0.4343		10.5	10.0	5.5	30.0
Cumene	Ave	1.110	1.188		10.7	10.0	7.0	30.0
1,1,2,2-Tetrachloroethane	Ave	0.6334	0.6716		10.6	10.0	6.0	30.0
1,2,3-Trichloropropane	Ave	0.5381	0.5747		10.7	10.0	6.8	30.0
n-Propylbenzene	Ave	1.329	1.456		11.0	10.0	9.6	30.0
2-Chlorotoluene	Ave	0.9621	1.051		10.9	10.0	9.3	30.0
4-Ethyltoluene	Ave	1.012	1.111		11.0	10.0	9.8	30.0
n-Decane	Ave	0.6052	0.6800		11.2	10.0	12.4	30.0
1,3,5-Trimethylbenzene	Ave	0.9095	0.9610		10.6	10.0	5.7	30.0
Alpha Methyl Styrene	Ave	0.3790	0.4131		10.9	10.0	9.0	30.0
tert-Butylbenzene	Ave	0.8546	0.8907		10.4	10.0	4.2	30.0
1,2,4-Trimethylbenzene	Ave	0.8915	0.9602		10.8	10.0	7.7	30.0
sec-Butylbenzene	Ave	1.299	1.387		10.7	10.0	6.8	30.0

FORM VII
AIR - GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Burlington Job No.: 200-34834-1

SDG No.:

Lab Sample ID: CCVIS 200-108166/2 Calibration Date: 08/15/2016 11:06

Instrument ID: CHG.i Calib Start Date: 08/09/2016 19:25

GC Column: RTX-624 ID: 0.32(mm) Calib End Date: 08/10/2016 01:26

Lab File ID: 21352_02.D Conc. Units: ppb v/v Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,3-Dichlorobenzene	Ave	0.4936	0.5422		11.0	10.0	9.8	30.0
4-Isopropyltoluene	Ave	0.9866	1.107		11.2	10.0	12.2	30.0
1,4-Dichlorobenzene	Ave	0.4776	0.4927		10.3	10.0	3.2	30.0
Benzyl chloride	Ave	0.5973	0.7040		11.8	10.0	17.9	30.0
n-Butylbenzene	Ave	0.9516	1.072		11.3	10.0	12.6	30.0
1,2-Dichlorobenzene	Ave	0.4798	0.5236		10.9	10.0	9.1	30.0
n-Undecane	Ave	0.5549	0.6082		11.0	10.0	9.6	30.0
n-Dodecane	Ave	0.4140	0.4573		11.0	10.0	10.5	30.0
1,2,4-Trichlorobenzene	Ave	0.2151	0.2244		10.4	10.0	4.3	30.0
Hexachlorobutadiene	Ave	0.3194	0.3586		11.2	10.0	12.3	30.0
Naphthalene	Ave	0.5231	0.5171		9.88	10.0	-1.2	30.0
1,2,3-Trichlorobenzene	Ave	0.2007	0.2118		10.5	10.0	5.5	30.0

AIR - GC/MS VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Burlington Job No.: 200-34570-1

SDG No.:

Instrument ID: CHC.i Start Date: 06/30/2016 14:20

Analysis Batch Number: 106489 End Date: 07/01/2016 05:17

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 200-106489/1		06/30/2016 14:20	1	20687_01.D	RTX-624 0.32(mm)
VIBLK 200-106489/2		06/30/2016 15:05	1		RTX-624 0.32(mm)
IC 200-106489/3		06/30/2016 15:58	1	20687_03.D	RTX-624 0.32(mm)
IC 200-106489/4		06/30/2016 16:51	1	20687_04.D	RTX-624 0.32(mm)
IC 200-106489/5		06/30/2016 17:44	1	20687_05.D	RTX-624 0.32(mm)
IC 200-106489/6		06/30/2016 18:38	1	20687_06.D	RTX-624 0.32(mm)
ICIS 200-106489/7		06/30/2016 19:32	1	20687_07.D	RTX-624 0.32(mm)
IC 200-106489/8		06/30/2016 20:25	1	20687_08.D	RTX-624 0.32(mm)
IC 200-106489/9		06/30/2016 21:18	1	20687_09.D	RTX-624 0.32(mm)
IC 200-106489/10		06/30/2016 22:11	1	20687_10.D	RTX-624 0.32(mm)
ZZZZZ		06/30/2016 23:04	1		RTX-624 0.32(mm)
ZZZZZ		06/30/2016 23:58	1		RTX-624 0.32(mm)
ZZZZZ		07/01/2016 00:51	1		RTX-624 0.32(mm)
ZZZZZ		07/01/2016 01:44	1		RTX-624 0.32(mm)
ICV 200-106489/15		07/01/2016 02:37	1	20687_15.D	RTX-624 0.32(mm)
ZZZZZ		07/01/2016 03:30	1		RTX-624 0.32(mm)
ZZZZZ		07/01/2016 04:23	1		RTX-624 0.32(mm)
ZZZZZ		07/01/2016 05:17	1		RTX-624 0.32(mm)

AIR - GC/MS VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Burlington Job No.: 200-34570-1

SDG No.:

Instrument ID: CHC.i Start Date: 08/04/2016 11:18

Analysis Batch Number: 107784 End Date: 08/05/2016 03:13

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 200-107784/1		08/04/2016 11:18	1	21185_01.D	RTX-624 0.32(mm)
CCVIS 200-107784/2		08/04/2016 12:04	1	21185_02.D	RTX-624 0.32(mm)
LCS 200-107784/3		08/04/2016 12:57	1	21185_03.D	RTX-624 0.32(mm)
MB 200-107784/4		08/04/2016 13:51	1	21185_04.D	RTX-624 0.32(mm)
ZZZZZ		08/04/2016 14:44	1		RTX-624 0.32(mm)
ZZZZZ		08/04/2016 15:37	1		RTX-624 0.32(mm)
ZZZZZ		08/04/2016 16:31	1		RTX-624 0.32(mm)
ZZZZZ		08/04/2016 17:24	1		RTX-624 0.32(mm)
ZZZZZ		08/04/2016 18:17	1		RTX-624 0.32(mm)
ZZZZZ		08/04/2016 19:16	0.2		RTX-624 0.32(mm)
200-34570-11		08/04/2016 20:15	0.2	21185_11.D	RTX-624 0.32(mm)
ZZZZZ		08/04/2016 21:15	0.2		RTX-624 0.32(mm)
ZZZZZ		08/04/2016 22:14	0.2		RTX-624 0.32(mm)
ZZZZZ		08/04/2016 23:14	0.2		RTX-624 0.32(mm)
ZZZZZ		08/05/2016 00:13	0.2		RTX-624 0.32(mm)
ZZZZZ		08/05/2016 01:13	0.2		RTX-624 0.32(mm)
ZZZZZ		08/05/2016 02:13	0.2		RTX-624 0.32(mm)
ZZZZZ		08/05/2016 03:13	0.2		RTX-624 0.32(mm)

AIR - GC/MS VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Burlington Job No.: 200-34834-1

SDG No.:

Instrument ID: CHG.i Start Date: 08/09/2016 17:02

Analysis Batch Number: 107979 End Date: 08/10/2016 06:36

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 200-107979/1		08/09/2016 17:02	1	21273_01.D	RTX-624 0.32(mm)
VIBLK 200-107979/2		08/09/2016 17:42	1		RTX-624 0.32(mm)
VIBLK 200-107979/3		08/09/2016 18:34	1		RTX-624 0.32(mm)
IC 200-107979/4		08/09/2016 19:25	1	21273_04.D	RTX-624 0.32(mm)
IC 200-107979/5		08/09/2016 20:17	1	21273_05.D	RTX-624 0.32(mm)
IC 200-107979/6		08/09/2016 21:09	1	21273_06.D	RTX-624 0.32(mm)
IC 200-107979/7		08/09/2016 22:00	1	21273_07.D	RTX-624 0.32(mm)
ICIS 200-107979/8		08/09/2016 22:52	1	21273_08.D	RTX-624 0.32(mm)
IC 200-107979/9		08/09/2016 23:43	1	21273_09.D	RTX-624 0.32(mm)
IC 200-107979/10		08/10/2016 00:34	1	21273_10.D	RTX-624 0.32(mm)
IC 200-107979/11		08/10/2016 01:26	1	21273_11.D	RTX-624 0.32(mm)
VIBLK 200-107979/12		08/10/2016 02:18	1		RTX-624 0.32(mm)
VIBLK 200-107979/13		08/10/2016 03:09	1		RTX-624 0.32(mm)
VIBLK 200-107979/14		08/10/2016 04:01	1		RTX-624 0.32(mm)
ZZZZZ		08/10/2016 04:52	1		RTX-624 0.32(mm)
ZZZZZ		08/10/2016 05:44	1		RTX-624 0.32(mm)
ICV 200-107979/17		08/10/2016 06:36	1	21273_17.D	RTX-624 0.32(mm)

AIR - GC/MS VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Burlington Job No.: 200-34834-1

SDG No.:

Instrument ID: CHG.i Start Date: 08/15/2016 10:19

Analysis Batch Number: 108166 End Date: 08/16/2016 09:15

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 200-108166/1		08/15/2016 10:19	1	21352_01.D	RTX-624 0.32(mm)
CCVIS 200-108166/2		08/15/2016 11:06	1	21352_02.D	RTX-624 0.32(mm)
ZZZZZ		08/15/2016 12:09	1		RTX-624 0.32(mm)
LCS 200-108166/4		08/15/2016 13:00	1	21352_04.D	RTX-624 0.32(mm)
MB 200-108166/5		08/15/2016 13:52	1	21352_05.D	RTX-624 0.32(mm)
200-34834-5		08/15/2016 14:44	0.2	21352_06.D	RTX-624 0.32(mm)
ZZZZZ		08/15/2016 15:35	1		RTX-624 0.32(mm)
ZZZZZ		08/15/2016 16:26	1		RTX-624 0.32(mm)
ZZZZZ		08/15/2016 17:18	1		RTX-624 0.32(mm)
ZZZZZ		08/15/2016 18:09	1		RTX-624 0.32(mm)
ZZZZZ		08/15/2016 19:00	1		RTX-624 0.32(mm)
ZZZZZ		08/15/2016 19:52	1		RTX-624 0.32(mm)
ZZZZZ		08/15/2016 20:43	1		RTX-624 0.32(mm)
ZZZZZ		08/15/2016 21:35	1		RTX-624 0.32(mm)
ZZZZZ		08/15/2016 22:26	1		RTX-624 0.32(mm)
ZZZZZ		08/15/2016 23:18	1		RTX-624 0.32(mm)
ZZZZZ		08/16/2016 00:09	1		RTX-624 0.32(mm)
ZZZZZ		08/16/2016 01:00	1		RTX-624 0.32(mm)
ZZZZZ		08/16/2016 01:52	1		RTX-624 0.32(mm)
ZZZZZ		08/16/2016 02:43	1		RTX-624 0.32(mm)
ZZZZZ		08/16/2016 03:35	1		RTX-624 0.32(mm)
ZZZZZ		08/16/2016 04:26	0.2		RTX-624 0.32(mm)
ZZZZZ		08/16/2016 05:18	0.2		RTX-624 0.32(mm)
ZZZZZ		08/16/2016 08:23	0.2		RTX-624 0.32(mm)
ZZZZZ		08/16/2016 09:15	0.2		RTX-624 0.32(mm)

Shipping and Receiving Documents

TestAmerica Burlington
30 Community Drive
Suite 11
South Burlington, VT 05403
phone 802-660-1990 fax 802-660-1919

Canister Samples Chain of Custody Record

TestAmerica Analytical Testing Corp. assumes no liability with respect to the collection and shipment of these samples.

Client Contact Information	Project Manager: Fuad Dahan	**Samples Collected By: R. Toogood**	1 of 1 COCs
Company: SESI Consulting Engineers	Phone: 973.808.9050		
Address: 12A Maple Ave	Email:		
City/State/Zip Pine Brook, NJ			
Phone: 973.808.9050	Site Contact:		
FAX:	TA Contact:		
Project Name: 20 S West Street	**Analysis Turnaround Time**		
Site:	Standard (Specify) Std.		
PO #	Rush (Specify)		

Sample Identification	Sample Date(s)	Time Start	Time Stop	Canister Vacuum in Field, "Hg (Start)	Canister Vacuum in Field, 'Hg (Stop)	Flow Controller ID	Canister ID	TO-15	MA-APH	EPA 3C	EPA 25C	ASTM D-1946	Other (Please specify in notes section)	Sample Type	Indoor Air	Ambient Air	Soil Gas	Landfill Gas	Other (Please specify in notes section)
SS-1	8/30/16	0924	1124	-31.0	-8.0	4533	4270	X									X		
SS-2	8/30/16	1015	1215	-26.0	-3.0	5188	4294	X									X		
SS-3	8/30/16	1052	1252	-30.0	-5.0	4173	4359	X									X		

Temperature (Fahrenheit)	Interior	Ambient	
Start		78	
Stop		81	

Pressure (inches of Hg)	Interior	Ambient	
Start		30.16	
Stop		30.16	

200-35064 Chain of Custody

Special Instructions/QC Requirements & Comments:

Samples Shipped by: TA	Date/Time: 8/30/16	Samples Received by: 8/31/16 1030
Samples Relinquished by:	Date/Time:	Received by:
Relinquished by:	Date/Time:	Received by:

Lab Use Only **Shipper Name:** **Opened by:** **Condition:**

After printing this label:
1. Use the 'Print' button on this page to print your label to your laser or inkjet printer.
2. Fold the printed page along the horizontal line.
3. Place label in shipping pouch and affix it to your shipment so that the barcode portion of the label can be read and scanned.

Warning: Use only the printed original label for shipping. Using a photocopy of this label for shipping purposes is fraudulent and could result in additional billing charges, along with the cancellation of your FedEx account number.
Use of this system constitutes your agreement to the service conditions in the current FedEx Service Guide, available on fedex.com.FedEx will not be responsible for any claim in excess of $100 per package, whether the result of loss, damage, delay, non-delivery,misdelivery,or misinformation, unless you declare a higher value, pay an additional charge, document your actual loss and file a timely claim.Limitations found in the current FedEx Service Guide apply. Your right to recover from FedEx for any loss, including intrinsic value of the package, loss of sales, income interest, profit, attorney's fees, costs, and other forms of damage whether direct, incidental,consequential, or special is limited to the greater of $100 or the authorized declared value. Recovery cannot exceed actual documented loss.Maximum for items of extraordinary value is $1,000, e.g. jewelry, precious metals, negotiable instruments and other items listed in our ServiceGuide. Written claims must be filed within strict time limits, see current FedEx Service Guide.

Login Sample Receipt Checklist

Client: SESI Consulting Engineers

Job Number: 200-35064-1
SDG Number: 200-35064-1

Login Number: 35064
List Number: 1
Creator: Lavigne III, Scott M

List Source: TestAmerica Burlington

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	Lab does not accept radioactive samples.
The cooler's custody seal, if present, is intact.	True	600768
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	N/A	Thermal preservation not required.
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	N/A	Thermal preservation not required.
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	N/A	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

TestAmerica Burlington

INTERNAL CHAIN OF CUSTODY LOG (ICOC)

Project Information:

Log In #: 200-35064	**Method:** TO-15
Client: SESI CONSULTING	**LAB IDs:** 200-35064 1 - 3

Samples associated with this log-in were placed into storage on 8/31/2016 (Date) 12:30 (Time[2]) SCOTT LAVIGNE III

Sample Custodian Signature

Storage Location: AIR STORAGE *Specify storage location (refrigerator, freezer ID or lab location) for original sample containers*

Storage Condition: Refrigeration ☐ Frozen ☒ Ambient

Internal Transfer Information

Sample Type		Lab ID(s)	Transfer	Transfer	Purpose of Transfer			Relinquished	Received	Storage Location
Original	Prepared[1]		Date	Time[2]	Prep	Analysis	Storage	By:	By:	Prepared Sample[1]
✓		200-35064-1→3	9/1/16	1545		✓				Analysis
✓		11	9/7/16	1205			✓			Storage

[1] Extract, digestate, or any other prepared sample that is no longer in original sample container

[2] Military Time

BRFSR012:07.09.10:2
TestAmerica

Appendix F – Sanitary Report

SANITARY REPORT

For:

STATION PLAZA

20 South West Street
City of Mount Vernon
Westchester County, NY 10550
Section 167.67, Block 1057, Lot 16

Prepared For:

Macquesten Station Takeover, LLC

438 Fifth Avenue
Suite 100
Pelham, NY 10803

Prepared By:

AKRF, Inc.

34 S Broadway
Suite 300
White Plains, NY 10601

Preparation Date:

August 8, 2025
Revised December 11, 2025

Justin Seeney, PE

Registered Professional Engineer, State of New York No. 095227

AKRF Project No. 250566

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2.2 Existing Sanitary Flow Conditions 2
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3.1 Proposed Daily Flow Calculations 4
4.0 ANALYSIS METHODOLOGY 4
5.0 RESULTS 5

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Figure 1 Site Location Map

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Appendix A Flow Monitoring Report
Appendix B Municipal Utility Record Sheets
Appendix C Pipe Capacity Calculations

1.0 INTRODUCTION

On behalf of the Applicant, Macquesten Station Takeover, LLC, this Sanitary Report and accompanying project plans were prepared for the proposed project entitled "Station Plaza" located at 20 South West Street in the City of Mount Vernon in Westchester County, New York. The project proposes to redevelop a 0.50-acre property to construct a new 13-story residential building. A sanitary lateral will service the new building and connect to the existing municipal sanitary main within South West Street. A sanitary analysis was conducted to demonstrate that the municipal sanitary mains has adequate pipe capacity to accommodate the increase in flow generated from the new building.

2.0 EXISTING CONDITIONS

2.1 Sanitary Flow Monitoring

According to the Sanitary Sewer Flow Analysis report prepared by SESI Consulting Engineers, dated May 22, 2017, flow monitoring equipment was installed in the existing 18-inch sanitary main along South West Street and the existing 21-inch sanitary main along Mount Vernon Avenue from June 22, 2016 through July 13, 2016. A summary of the recorded depths and flow rates are described in the table below. Refer to Appendix A for additional information.

Table 1: Existing Conditions Flow Monitoring Results

Description	South West Street	Mount Vernon Avenue
Existing Pipe Diameter	18 inches	21 inches
Recorded Peak Flow Depth	1.09 inches (July 1, 2016)	8.37 inches (June 28, 2016) (July 12, 2016)
Existing Pipe Slope[1]	0.32%	3.88%
Calculated Peak Flow Rate[2]	0.03 cfs	7.66 cfs

1 Pipe slope was obtained from municipal utility record sheet #427 and #679. Refer to Appendix B.
2 Peak flow rate was calculated using Manning's Equation for pipes flowing less than half full. Refer to Appendix C.

2.2 Existing Sanitary Flow Conditions

Since the flowing monitoring was performed in 2017, a residential development located at 22 South West Street was constructed while three other residential development projects (115 S Macquesten Parkway, 1 N Macquesten Parkway, and 15 N Macquesten Parkway) were approved and/or under construction. Average daily flow calculations for both residential developments are summarized in the table below.

Table 2: Peak Daily Flow Calculations from Residential Developments

Description	Quantity	Hydraulic Loading Rate[1]	Average Daily Flow (GPD)
22 S West St			
Apartment Units	273 Bedrooms	110 GPD per Bedroom	30,030
Retail	4,157 SF	0.1 GPD per SF	416
			30,446 GPD
115 S Macquesten Pkwy			
Apartment Units	480 Bedrooms	110 GPD per Bedroom	52,800
Retail	4,800 SF	0.1 GPD per SF	480
			53,280 GPD
1 N Macquesten Pkwy			
Apartment Units	169 Bedrooms	110 GPD per Bedroom	**18,590 GPD**
25 N Macquesten Pkwy			
Apartment Units	141 Bedrooms	110 GPD per Bedroom	**15,510 GPD**

[1] Hydraulic loading rates were obtained from Table B-3 of the New York State Design Standards for Intermediate Sized Wastewater Treatment Systems, March 2014

Wastewater flow generated from the residential developments 22 S West Street and 115 S Macquesten Parkway are conveyed through the existing 18-inch sanitary main in South West Street before connecting to the existing 21-inch sanitary main in Mount Vernon Avenue and combining with residential developments 1 N Macquesten Parkway and 25 N Macquesten Parkway. The existing peak flow conditions account for the residential developments and combine them with the recorded peak flow rates. A summary of the existing peak sanitary flow conditions is described in the table below.

Table 3: Existing Peak Flow Conditions

Description	South West Street	Mount Vernon Avenue
2017 Peak Flow Rate	0.03 cfs	7.66 cfs
22 S West Street 30,446 GPD x 4 = 121,784 GPD (or 0.19 cfs)	0.19 cfs	0.19 cfs
115 S Macquesten Pkwy 53,280 GPD x 4 = 213,120 GPD (or 0.33 cfs)	0.33 cfs	0.33 cfs
1 N Macquesten Pkwy 18,590 GPD x 4 = 74,360 GPD (or 0.12 cfs)	-	0.12 cfs
25 N Macquesten Pkwy 15,510 GPD x 4 = 62,040 GPD (or 0.10 cfs)	-	0.10 cfs
Total Existing Peak Flow Rate	**0.55 cfs**	**8.40 cfs**

3.0 PROPOSED CONDITIONS

The project will include an 8-inch ductile iron sanitary lateral pipe and private sanitary manhole to service the new residential building. The proposed lateral will connect to the existing 18-inch sanitary main on South West Street using a doghouse sanitary manhole. Installation and testing of the proposed sanitary lateral and manholes will be in accordance with the Westchester County Department of Health requirements.

3.1 Proposed Daily Flow Calculations

The average daily flow generated from the proposed project was calculated based on the use type and hydraulic loading rates found in Table B-3 of the New York State Design Standards for Intermediate Sized Wastewater Treatment Systems, March 2014 and is summarized in the table below.

Table 4: Proposed Peak Flow Calculations

Description	Quantity	Hydraulic Loading Rate	Average Daily Flow (GPD)
20 S West St			
Apartment Units	180 Bedrooms	110 GPD per Bedroom	19,800
Retail	2,635 SF	0.1 GPD per SF	264
		Total Average Daily Flow =	20,064
		Peak Factor =	4
		Peak Daily Flow =	**80,256 GPD (0.12 cfs)**

4.0 ANALYSIS METHODOLOGY

A pipe capacity analysis was conducted for the existing sanitary mains within South West Street and Mount Vernon Avenue to determine the potential impact the proposed project may have on the municipal sewer system. As recommended by the City of Mount Vernon DPW, the capacity of the municipal sewer system shall not exceed the pipe flowing half full when combining the existing and proposed peak flow rates, known hereon in as the “design flow rate.” The design flow rates for each sanitary main are summarized in the table below.

Table 5: Proposed Daily Flow Calculations

Description	South West Street	Mount Vernon Avenue
Existing Peak Flow Rate (see Table 3)	0.55 cfs	8.40 cfs
Proposed Peak Flow Rate (see Table 4)	0.12 cfs	0.12 cfs
Design Flow Rate	**0.67 cfs**	**8.52 cfs**

The Manning's Equation for partially full pipe flow was used to calculate the flow depth based on the design flow rate at each sanitary main. This uses a variation of Manning's roughness coefficient, n, is used as a function of the flow depth in the pipe.

5.0 RESULTS

The flow depths were calculated using the design flow rates listed in Table 4 and Manning's Equation for partially full pipe flow for both sanitary mains and are summarized in the table below. Refer to Appendix C for additional information.

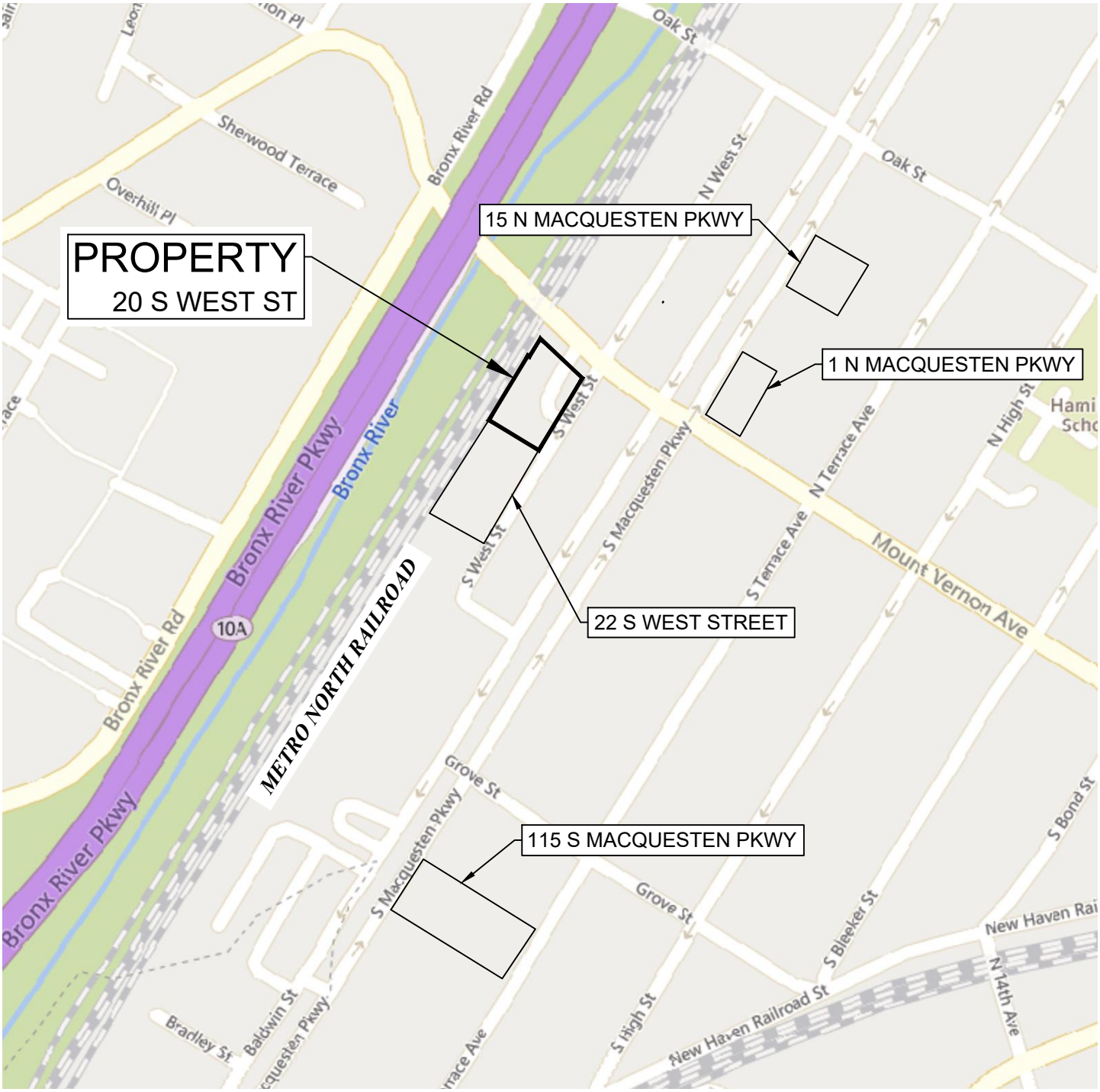
Table 6: Summary of Calculated Flow Depths

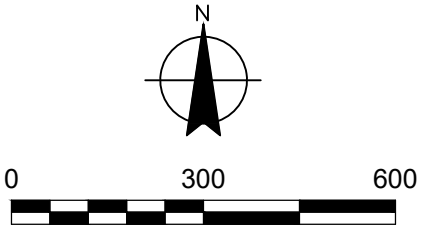
Sanitary Main	Design Flow Rate (cfs)	Design Flow Depth, y (inches)	Existing Pipe Diameter, D (inches)	Percent Full by Cross Section Area
South West Street	0.67	4.81	18	21%
Mount Vernon Avenue	8.52	8.86	21	40%

According to the results, the addition of the proposed sanitary flow to the existing sanitary mains at South West Street and Mount Vernon Avenue will result in a design flow depth that is less than half the diameter of the pipe. Therefore, the existing sanitary mains will have adequate pipe capacity to accommodate the proposed project in accordance with the City of Mount Vernon DPW requirements.

FIGURES

Site Location Map





CLIENT

MACQUESTEN
DEVELOPMENT, LLC

438 FIFTH AVENUE
SUITE 100
PELHAM, NY 10803

SITE/CIVIL ENGINEER

akrf

AKRF INC.
34 SOUTH BROADWAY, SUITE 300
WHITE PLAINS, NY 10601
(914) 949-7336 (PHONE)

PROJECT: STATION PLAZA	SHEET TITLE: **SITE LOCATION MAP**
DRAWN BY: JM/AL	CHECKED BY: JS
SCALE: AS SHOWN	DATE: 08/08/2025
	SHEET NO.: **FIGURE 1**

W:\Projects\250566 - 20 SOUTH WEST STREET\Drawings_Figures\Sanitary Figure.dwg, FIG 1, jmacalintal

APPENDIX A

Flow Monitoring Report

SESI
CONSULTING
ENGINEERS

SANITARY SEWER FLOW ANALYSIS
22 SOUTH WEST STREET
MOUNT VERNON, WESTCHESTER COUNTY, NEW YORK

PREPARED FOR

Macquesten Takeover Partners, LLC
438 Fifth Avenue, Suite 100
Pelham, NY 10803

PREPARED BY

SESI Consulting Engineers D.P.C.
12A Maple Ave.
Pine Brook, NJ 07058

Franz W. Laki, P.E.
NY License #96772

SESI Job No. 8964B
May 22, 2017

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INTRODUCTION

Macquesten Takeover Partners, LLC proposes to redevelop the existing gas station located at 22 South West Street in the City of Mount Vernon, New York to a multi-story affordable housing apartment building. In order to understand the impact this proposed project will have on the sanitary sewer system, flow monitoring was conducted at two manhole locations that will be directly impacted by the redevelopment. Flow monitoring devices were installed by Arold Construction Company, Inc (Arold) on South West Street and Mt. Vernon Avenue on June 22, 2016. After 22 days of data collection the devices were removed on July 13, 2016. The data collected included depth and velocity of flow. The information provided in this report reflects the data collected during this monitoring period.

FLOW ANALYSIS

South West Street

A flow monitoring device was installed at a manhole adjacent to the 22 South West Street Project Site and approximately 350 feet west of Mt. Vernon Avenue. At this location an 18 inch sanitary sewer enters the manhole from the west and exists to the east with an invert of 74.4. The pipe has a slope of 0.79%. Upon completion of the flow monitoring, the average daily maximum flow depth is 0.94 inches and the average daily minimum flow depth is 0.36 inches. Based on an average daily maximum flow depth of 0.94 inches it was determined the average existing flow in the South West Street sewer is 54.88 gallons per minute (gpm). The capacity of this pipe is 4,190 gpm, therefore the South West Street sewer is currently flowing at 1.31% of its capacity.

Mt. Vernon Avenue

A flow monitoring device was installed at a manhole at the corner of South West Street and Mt. Vernon Avenue. At this location a 21 inch sanitary sewer enters the manhole with an invert of 77.49. The pipe has a slope of 4%. Upon completion of the flow monitoring, the average daily maximum flow depth is 7.07 inches and the average daily minimum flow depth is 3.13 inches. Based on an average daily maximum flow depth of 7.07 inches it was determined the average existing flow in the Mt. Vernon Avenue sewer is 3,345 gallons per minute (gpm). The capacity of this pipe is 14,222 gpm, therefore the Mt. Vernon Avenue sewer is currently flowing at 23.5% of its capacity.

SANITARY SEWER CAPACITY

According to the flow data presented, the Mt. Vernon Avenue sewer is flowing at 23.5% of its capacity which makes this the critical link in the system for the purposes of this study.

The anticipated average daily sanitary sewer flows for the proposed 22 South West Street building is 24,357 gallons per day (gpd). Based on a 12-hour day and a peak factor of 4, the peak hourly flow is calculated to be 135 gpm. To calculate the post construction flow in the Mt. Vernon Avenue sewer the 22 South West Street peak flows were added to the existing Mt. Vernon Avenue flows. The post 22 South West Street flows are anticipated to be 3,480 gpm which is 24.8% of the Mt. Vernon Avenue sewer capacity.

A summary table of the data discussed in this section can be found below.

Mt. Vernon Avenue Sewer Flow Summary		
Description	**Flow (gpm)**	**Percent of Capacity**
Maximum Capacity	14,222	-
Existing Flow	3,345	23.5%
22 South West Street Peak Flow	135	0.95%
Post Construction Flow	**3,480**	**24.5%**

CONCLUSIONS

The flow monitoring data in this report indicates that the existing flow in the Mt. Vernon Avenue sewer is 23.5% of the capacity. After proposed 22 South West Street future demand is factored in, the post construction flow in the Mt Vernon Avenue sewer is 24.5% of the capacity. At 24.5%, sufficient capacity remains to conclude that the proposed development will not overburden the existing sewer.

Appendix

Note: Electronic versions of the raw data obtained from the flow monitoring devices can be provided upon request

Daily Tabular Report – South West Street

SESI Consulting Engineers
Job No. 8964B
22 South West Street
Mount Vernon, NJ

Sanitary Sewer Flow Daily Tabular Report: Southwest Street (18")

Date	Depth (in)					Velocity (ft/s)					Quantity (MGD - Total MG)						Rain (in)
	Time	Min	Time	Max	Avg	Time	Min	Time	Max	Avg	Time	Min	Time	Max	Avg	Total	Total
6/22/2016	19:28	0.43	11:23	1.07	0.70	11:13	0.41	11:48	0.86	0.55	19:28	0.0065	11:23	0.0392	0.0164	0.0164	
6/23/2016	2:33	0.38	9:03	1.03	0.65	5:03	0.34	5:23	0.65	0.51	2:33	0.0037	9:03	0.0392	0.0111	0.0111	
6/24/2016	3:28	0.33	11:13	1.05	0.66	5:03	0.33	13:03	0.69	0.52	3:28	0.0037	11:13	0.0392	0.0164	0.0164	
6/25/2016	4:13	0.35	9:43	0.63	0.53	4:23	0.35	10:55	0.64	0.49	4:13	0.0037	9:43	0.0225	0.0065	0.0065	
6/26/2016	4:28	0.34	10:03	0.70	0.51	3:43	0.33	10:55	0.61	0.47	4:28	0.0037	10:03	0.0164	0.0065	0.0065	
6/27/2016	3:43	0.35	11:33	1.07	0.72	4:43	0.32	23:28	0.72	0.53	3:43	0.0037	11:33	0.0392	0.0164	0.0164	0.21
6/28/2016	4:08	0.38	10:38	1.09	0.69	4:08	0.39	1:28	0.87	0.57	4:08	0.0037	10:38	0.0392	0.0164	0.0164	0.83
6/29/2016	4:03	0.34	15:38	1.05	0.66	4:23	0.34	12:43	0.66	0.54	4:03	0.0037	15:38	0.0392	0.0164	0.0164	
6/30/2016	3:33	0.33	10:53	1.08	0.66	4:28	0.35	10:48	0.66	0.53	3:33	0.0037	10:53	0.0392	0.0164	0.0164	
7/1/2016	3:28	0.35	10:28	1.09	0.67	3:08	0.33	21:43	0.75	0.54	3:28	0.0037	10:28	0.0392	0.0164	0.0164	0.37
7/2/2016	3:58	0.37	5:58	0.67	0.50	5:23	0.34	12:38	0.61	0.46	3:58	0.0037	5:58	0.0164	0.0065	0.0065	
7/3/2016	4:08	0.35	10:03	0.70	0.50	5:08	0.33	10:43	0.60	0.46	4:08	0.0037	10:03	0.0164	0.0065	0.0065	
7/4/2016	4:48	0.34	11:08	0.72	0.52	5:48	0.34	11:05	0.53	0.45	4:48	0.0037	11:08	0.0164	0.0065	0.0065	0.10
7/5/2016	3:53	0.44	9:43	1.06	0.73	4:03	0.41	1:18	0.73	0.55	3:53	0.0065	9:43	0.0392	0.0164	0.0164	0.87
7/6/2016	3:38	0.35	13:38	1.02	0.66	3:48	0.34	10:13	0.66	0.53	3:38	0.0037	13:38	0.0392	0.0164	0.0164	
7/7/2016	3:53	0.33	9:33	1.03	0.66	2:38	0.34	15:13	0.71	0.54	3:53	0.0037	9:33	0.0392	0.0164	0.0164	1.56
7/8/2016	3:43	0.35	9:33	1.03	0.62	4:23	0.35	12:43	0.69	0.54	3:43	0.0037	9:33	0.0392	0.0111	0.0111	
7/9/2016	4:23	0.35	11:13	0.67	0.50	4:43	0.35	22:48	0.63	0.46	4:23	0.0037	11:13	0.0164	0.0065	0.0065	0.25
7/10/2016	4:08	0.37	10:48	0.74	0.56	3:38	0.35	11:38	0.63	0.48	4:08	0.0037	10:48	0.0164	0.0111	0.0111	
7/11/2016	2:38	0.39	11:38	1.07	0.62	4:08	0.34	12:53	0.67	0.50	2:38	0.0037	11:38	0.0392	0.0111	0.0111	
7/12/2016	7:38	0.48	2:58	1.03	0.65	0:13	0.44	2:53	0.66	0.55	7:38	0.0065	2:58	0.0392	0.0111	0.0111	
7/13/2016	3:18	0.33	5:38	0.63	0.53	4:58	0.34	9:48	0.64	0.46	3:18	0.0037	5:38	0.0225	0.0065	0.0065	

Report Summary for the Period 6/22/2016 - 7/13/2016

	Depth (in)	Velocity (ft/s)	Quantity (MGD - Total MG)	Rain (in)
Total			0.2671	3.59
Avg	0.62	0.51	0.01	

Daily Tabular Report – Mt. Vernon Avenue

SESI Constulting Engineers
Job No. 8964B
22 Southwest Street
Mount Vernon, NJ

Sanitary Sewer Flow Daily Tabular Report: Mt. Vernon Avenue (21")

	Depth (in)					Velocity (ft/s)					Quantity (MGD - Total MG)						Rain (in)
Date	Time	Min	Time	Max	Avg	Time	Min	Time	Max	Avg	Time	Min	Time	Max	Avg	Total	Total
6/22/2016	23:51	4.44	14:01	7.66	5.89	23:56	2.14	13:46	2.88	2.56	23:51	0.95	14:01	2.96	1.71	1.71	
6/23/2016	3:36	3.23	9:01	7.93	5.28	5:01	1.64	8:21	2.81	2.35	3:36	0.49	9:01	3.16	1.37	1.37	
6/24/2016	3:26	3.02	11:11	8.09	5.41	5:01	1.58	13:01	2.98	2.36	3:26	0.42	11:11	3.25	1.43	1.43	
6/25/2016	4:11	3.22	9:46	6.39	4.62	4:21	1.68	10:56	2.77	2.29	4:11	0.49	9:46	2.01	1.06	1.06	
6/26/2016	4:26	3.12	10:11	5.40	4.48	3:46	1.58	11:01	2.67	2.21	4:26	0.45	10:11	1.43	0.95	0.95	
6/27/2016	4:41	3.18	11:31	8.22	5.72	4:41	1.50	23:26	3.12	2.41	4:41	0.49	11:31	3.45	1.64	1.64	0.21
6/28/2016	4:41	3.51	10:36	8.37	5.55	4:41	1.85	1:26	3.79	2.59	4:41	0.57	10:36	3.56	1.50	1.5	0.83
6/29/2016	4:01	3.09	15:36	8.07	5.54	4:21	1.64	9:50	2.95	2.45	4:01	0.45	15:36	3.25	1.50	1.5	
6/30/2016	3:31	3.01	11:01	8.16	5.39	4:26	1.65	10:46	2.87	2.39	3:31	0.42	11:01	3.35	1.43	1.43	
7/1/2016	3:36	3.16	10:26	8.36	5.46	3:06	1.57	21:41	3.24	2.43	3:36	0.45	10:26	3.56	1.50	1.5	0.07
7/2/2016	4:41	3.32	8:56	5.19	4.46	5:21	1.64	12:36	2.64	2.21	4:41	0.53	8:56	1.30	0.95	0.95	
7/3/2016	4:51	3.15	10:01	5.40	4.38	5:06	1.59	10:41	2.63	2.16	4:51	0.45	10:01	1.43	0.95	0.95	
7/4/2016	4:46	3.11	11:06	5.51	4.54	5:46	1.64	9:16	2.26	2.21	4:46	0.45	11:06	1.50	1.01	1.01	0.10
7/5/2016	3:56	4.00	11:16	8.19	5.84	4:36	1.94	1:16	3.18	2.61	3:56	0.75	11:16	3.35	1.71	1.71	0.87
7/6/2016	4:31	3.14	13:36	7.87	5.32	3:46	1.63	10:11	2.95	2.42	4:31	0.45	13:36	3.16	1.37	1.37	
7/7/2016	3:51	3.01	9:31	7.91	5.31	2:36	1.62	15:11	3.07	2.44	3:51	0.42	9:31	3.16	1.37	1.37	1.56
7/8/2016	4:36	3.16	9:31	7.93	5.16	4:21	1.68	12:41	3.02	2.44	4:36	0.45	9:31	3.16	1.30	1.3	
7/9/2016	4:41	3.15	12:11	5.18	4.45	4:46	1.66	22:56	2.76	2.27	4:41	0.45	12:11	1.30	0.95	0.95	0.25
7/10/2016	5:01	3.33	7:11	5.73	4.70	3:41	1.66	11:36	2.72	2.27	5:01	0.53	7:11	1.64	1.06	1.06	
7/11/2016	5:11	0.00	9:36	8.05	5.26	5:11	0.00	11:51	3.01	2.34	5:11		9:36	3.25	1.37	1.37	
7/12/2016	19:31	3.09	2:06	8.37	5.24	19:51	1.64	2:01	3.08	2.43	19:31	0.45	2:06	3.56	1.37	1.37	
7/13/2016	4:36	3.32	1:01	7.65	4.57	5:16	1.64	1:01	2.87	2.24	4:36	0.53	1:01	2.96	1.01	1.01	
7/14/2016	4:46	3.15	9:56	5.40	4.39	5:01	1.59	10:36	2.63	2.17	4:46	0.45	9:56	1.43	0.95	0.95	0.66
7/15/2016	5:06	3.15	9:01	4.58	3.77	5:21	1.59	8:56	2.37	1.88	5:06	0.45	9:01	1.01	0.66	0.66	

Report Summary for the Period 6/22/2016 - 7/15/2016

	Depth (in)	Velocity (ft/s)	Quantity (MGD - Total MG)	Rain (in)
Total			30.12	4.55
Avg	5.03	2.34	1.26	

SESI Consulting Engineers
Job No. 8964B
22 South West Street
Mount Vernon, NJ

Rainfall Data

8/31/2016

Date	Time (EDT)	Precip. (in)	Event Type	Date	Time (EDT)	Precip. (in)	Event Type	Date	Time (EDT)	Precip. (in)	Event Type
6/22/2016	12:51 AM	-		6/23/2016	6:51 PM	-		6/25/2016	10:51 AM	-	
6/22/2016	1:51 AM	-		6/23/2016	7:51 PM	-		6/25/2016	11:51 AM	-	
6/22/2016	2:51 AM	-		6/24/2016	8:51 PM	-		6/25/2016	12:51 PM	-	
6/22/2016	3:51 AM	-		6/24/2016	9:51 PM	-		6/25/2016	1:51 PM	-	
6/22/2016	4:51 AM	-		6/24/2016	10:51 PM	-		6/25/2016	2:51 PM	-	
6/22/2016	5:51 AM	-		6/24/2016	11:51 PM	-		6/25/2016	3:51 PM	-	
6/22/2016	6:51 AM	-		6/24/2016	12:51 AM	-		6/25/2016	4:51 PM	-	
6/22/2016	7:51 AM	-		6/24/2016	1:51 AM	-		6/25/2016	5:51 PM	-	
6/22/2016	8:51 AM	-		6/24/2016	2:51 AM	-		6/25/2016	6:51 PM	-	
6/22/2016	9:51 AM	-		6/24/2016	3:51 AM	-		6/25/2016	7:51 PM	-	
6/22/2016	10:51 AM	-		6/24/2016	4:51 AM	-		6/26/2016	8:51 PM	-	
6/22/2016	11:51 AM	-		6/24/2016	5:51 AM	-		6/26/2016	9:51 PM	-	
6/22/2016	12:51 PM	-		6/24/2016	6:51 AM	-		6/26/2016	10:51 PM	-	
6/22/2016	1:51 PM	-		6/24/2016	7:51 AM	-		6/26/2016	11:51 PM	-	
6/22/2016	2:51 PM	-		6/24/2016	8:51 AM	-		6/26/2016	12:51 AM	-	
6/22/2016	3:51 PM	-		6/24/2016	9:51 AM	-		6/26/2016	1:51 AM	-	
6/22/2016	4:51 PM	-		6/24/2016	10:51 AM	-		6/26/2016	2:51 AM	-	
6/22/2016	5:51 PM	-		6/24/2016	11:51 AM	-		6/26/2016	3:51 AM	-	
6/22/2016	6:51 PM	-		6/24/2016	12:51 PM	-		6/26/2016	4:51 AM	-	
6/22/2016	7:51 PM	-		6/24/2016	1:51 PM	-		6/26/2016	5:51 AM	-	
6/23/2016	8:51 PM	-		6/24/2016	2:51 PM	-		6/26/2016	6:51 AM	-	
6/23/2016	9:51 PM	-		6/24/2016	3:51 PM	-		6/26/2016	7:51 AM	-	
6/23/2016	10:51 PM	-		6/24/2016	4:51 PM	-		6/26/2016	8:51 AM	-	
6/23/2016	11:51 PM	-		6/24/2016	5:51 PM	-		6/26/2016	9:51 AM	-	
6/23/2016	12:51 AM	-		6/24/2016	6:51 PM	-		6/26/2016	10:51 AM	-	
6/23/2016	1:51 AM	-		6/24/2016	7:51 PM	-		6/26/2016	11:51 AM	-	
6/23/2016	2:51 AM	-		6/25/2016	8:51 PM	-		6/26/2016	12:51 PM	-	
6/23/2016	3:51 AM	-		6/25/2016	9:51 PM	-		6/26/2016	1:51 PM	-	
6/23/2016	4:51 AM	-		6/25/2016	10:51 PM	-		6/26/2016	2:51 PM	-	
6/23/2016	5:51 AM	-		6/25/2016	11:51 PM	-		6/26/2016	3:51 PM	-	
6/23/2016	6:51 AM	-		6/25/2016	12:51 AM	-		6/26/2016	4:51 PM	-	
6/23/2016	7:51 AM	-		6/25/2016	1:51 AM	-		6/26/2016	5:51 PM	-	
6/23/2016	8:51 AM	-		6/25/2016	2:51 AM	-		6/26/2016	6:51 PM	-	
6/23/2016	9:51 AM	-		6/25/2016	3:39 AM	-		6/26/2016	7:51 PM	-	
6/23/2016	10:51 AM	-		6/25/2016	3:51 AM	-		6/27/2016	8:51 PM	-	
6/23/2016	11:51 AM	-		6/25/2016	4:07 AM	-		6/27/2016	9:51 PM	-	
6/23/2016	12:51 PM	-		6/25/2016	4:51 AM	-		6/27/2016	10:51 PM	-	
6/23/2016	1:51 PM	-		6/25/2016	5:51 AM	-		6/27/2016	11:51 PM	-	
6/23/2016	2:51 PM	-		6/25/2016	6:51 AM	-		6/27/2016	12:51 AM	-	
6/23/2016	3:51 PM	-		6/25/2016	7:51 AM	-		6/27/2016	1:51 AM	-	
6/23/2016	4:51 PM	-		6/25/2016	8:51 AM	-		6/27/2016	2:51 AM	-	
6/23/2016	5:51 PM	-		6/25/2016	9:51 AM	-		6/27/2016	3:51 AM	-	

SESI Consulting Engineers
Job No. 89548
22 South West Street
Mount Vernon, NJ

Rainfall Data

8/31/2016

Date	Time (EDT)	Precip. (in)	Event Type	Date	Time (EDT)	Precip. (in)	Event Type	Date	Time (EDT)	Precip. (in)	Event Type
6/27/2016	4:51 AM	-		6/28/2016	2:20 PM	-		6/29/2016	11:16 AM	-	
6/27/2016	5:51 AM	-		6/28/2016	2:51 PM	-		6/29/2016	11:51 AM	-	
6/27/2016	6:51 AM	-		6/28/2016	3:06 PM	-		6/29/2016	12:51 PM	-	
6/27/2016	7:51 AM	-		6/28/2016	3:43 PM	-		6/29/2016	1:51 PM	-	
6/27/2016	8:51 AM	-		6/28/2016	3:51 PM	-		6/29/2016	2:51 PM	-	
6/27/2016	9:51 AM	-		6/28/2016	4:00 PM	-		6/29/2016	3:51 PM	-	
6/27/2016	10:51 AM	-		6/28/2016	4:10 PM	-		6/29/2016	4:51 PM	-	
6/27/2016	11:51 AM	-		6/28/2016	4:51 PM	-		6/29/2016	5:51 PM	-	
6/27/2016	12:51 PM	-		6/28/2016	5:51 PM	-		6/29/2016	6:51 PM	-	
6/27/2016	1:51 PM	-		6/28/2016	6:15 PM	-		6/29/2016	7:51 PM	-	
6/27/2016	2:51 PM	-		6/28/2016	6:29 PM	-		6/30/2016	8:51 PM	-	
6/27/2016	3:51 PM	-		6/28/2016	6:46 PM	-		6/30/2016	9:51 PM	-	
6/27/2016	3:58 PM	-		6/28/2016	6:51 PM	-		6/30/2016	10:51 PM	-	
6/27/2016	4:51 PM	-		6/28/2016	7:51 PM	-		6/30/2016	11:51 PM	-	
6/27/2016	5:51 PM	-		6/29/2016	8:51 PM	-		6/30/2016	12:51 AM	-	
6/27/2016	6:51 PM	-		6/29/2016	9:07 PM	-		6/30/2016	1:51 AM	-	
6/27/2016	7:51 PM	-		6/29/2016	9:19 PM	-		6/30/2016	2:51 AM	-	
6/28/2016	8:51 PM	-		6/29/2016	9:44 PM	-		6/30/2016	3:51 AM	-	
6/28/2016	9:51 PM	0.03	Rain	6/29/2016	9:51 PM	-		6/30/2016	4:51 AM	-	
6/28/2016	10:51 PM	0.04	Rain	6/29/2016	10:39 PM	-		6/30/2016	5:51 AM	-	
6/28/2016	11:51 PM	0.11	Rain	6/29/2016	10:51 PM	0.04	Rain	6/30/2016	6:51 AM	-	
6/28/2016	12:51 AM	0.10	Rain	6/29/2016	11:16 PM	0.03		6/30/2016	7:51 AM	-	
6/28/2016	1:14 AM	0.04	Rain	6/29/2016	11:42 PM	0.03		6/30/2016	8:51 AM	-	
6/28/2016	1:16 AM	0.07	Rain	6/29/2016	11:51 PM	0.03		6/30/2016	9:51 AM	-	
6/28/2016	1:29 AM	0.21	Rain	6/29/2016	12:14 AM	-		6/30/2016	10:51 AM	-	
6/28/2016	1:33 AM	0.23	Rain	6/29/2016	12:51 AM	-		6/30/2016	11:51 AM	-	
6/28/2016	1:48 AM	0.26	Rain	6/29/2016	1:51 AM	-		6/30/2016	12:51 PM	-	
6/28/2016	1:51 AM	0.26	Rain	6/29/2016	2:51 AM	-		6/30/2016	1:51 PM	-	
6/28/2016	2:21 AM	-		6/29/2016	3:27 AM	-		6/30/2016	2:51 PM	-	
6/28/2016	2:51 AM	-		6/29/2016	3:45 AM	-		6/30/2016	3:51 PM	-	
6/28/2016	3:18 AM	-		6/29/2016	3:51 AM	-		6/30/2016	4:51 PM	-	
6/28/2016	3:51 AM	-		6/29/2016	4:51 AM	-		6/30/2016	5:51 PM	-	
6/28/2016	4:51 AM	-		6/29/2016	5:01 AM	-		6/30/2016	6:51 PM	-	
6/28/2016	5:51 AM	-		6/29/2016	5:40 AM	-		6/30/2016	7:51 PM	-	
6/28/2016	6:43 AM	-		6/29/2016	5:51 AM	-		7/1/2016	8:51 PM	-	
6/28/2016	6:51 AM	-		6/29/2016	6:41 AM	-		7/1/2016	9:51 PM	-	
6/28/2016	7:44 AM	-		6/29/2016	6:51 AM	-		7/1/2016	10:51 PM	-	
6/28/2016	7:51 AM	-		6/29/2016	7:51 AM	-		7/1/2016	11:51 PM	-	
6/28/2016	8:51 AM	-		6/29/2016	8:49 AM	-		7/1/2016	12:51 AM	-	
6/28/2016	12:51 PM	-		6/29/2016	8:51 AM	-		7/1/2016	1:51 AM	-	
6/28/2016	1:51 PM	-		6/29/2016	9:51 AM	-		7/1/2016	2:51 AM	-	
6/28/2016	2:08 PM	-		6/29/2016	10:51 AM	-		7/1/2016	3:51 AM	-	

SESI Constulting Engineers
Job No. 8954B
22 South West Street
Mount Vernon, NJ

Rainfall Data

8/31/2016

Date	Time (EDT)	Precip. (in)	Event Type	Date	Time (EDT)	Precip. (in)	Event Type	Date	Time (EDT)	Precip. (in)	Event Type
7/1/2016	4:51 AM	-		7/2/2016	4:51 AM	-		7/4/2016	10:51 PM	-	
7/1/2016	5:51 AM	-		7/2/2016	5:51 AM	-		7/4/2016	11:51 PM	-	
7/1/2016	6:51 AM	-		7/2/2016	6:51 AM	-		7/4/2016	12:51 AM	-	
7/1/2016	7:47 AM	-		7/2/2016	7:51 AM	-		7/4/2016	1:51 AM	-	
7/1/2016	7:51 AM	-		7/2/2016	8:51 AM	-		7/4/2016	2:51 AM	-	
7/1/2016	8:51 AM	-		7/2/2016	9:51 AM	-		7/4/2016	3:51 AM	-	
7/1/2016	9:51 AM	-		7/2/2016	10:51 AM	-		7/4/2016	4:51 AM	-	
7/1/2016	10:51 AM	-		7/2/2016	11:51 AM	-		7/4/2016	5:51 AM	-	
7/1/2016	10:57 AM	-		7/2/2016	12:51 PM	-		7/4/2016	6:51 AM	-	
7/1/2016	11:43 AM	-		7/2/2016	1:51 PM	-		7/4/2016	7:51 AM	-	
7/1/2016	11:49 AM	-		7/2/2016	2:51 PM	-		7/4/2016	8:51 AM	-	
7/1/2016	11:51 AM	-		7/2/2016	3:51 PM	-		7/4/2016	9:51 AM	-	
7/1/2016	12:51 PM	-		7/2/2016	4:51 PM	-		7/4/2016	10:51 AM	-	
7/1/2016	1:51 PM	-		7/2/2016	5:51 PM	-		7/4/2016	11:51 AM	-	
7/1/2016	2:51 PM	-		7/2/2016	6:51 PM	-		7/4/2016	12:51 PM	-	
7/1/2016	3:51 PM	-	Rain	7/2/2016	7:51 PM	-		7/4/2016	1:51 PM	-	
7/1/2016	4:51 PM	-		7/3/2016	8:51 PM	-		7/4/2016	2:51 PM	-	
7/1/2016	5:11 PM	-	Rain	7/3/2016	9:51 PM	-		7/4/2016	3:51 PM	-	
7/1/2016	5:15 PM	-	Rain	7/3/2016	10:51 PM	-		7/4/2016	4:51 PM	-	
7/1/2016	5:51 PM	0.02	Rain	7/3/2016	11:51 PM	-		7/4/2016	5:51 PM	-	
7/1/2016	6:24 PM	0.03	Rain	7/3/2016	12:51 AM	-		7/4/2016	6:51 PM	-	
7/1/2016	6:51 PM	0.03		7/3/2016	1:51 AM	-		7/4/2016	7:51 PM	-	
7/1/2016	7:51 PM	-		7/3/2016	2:51 AM	-		7/5/2016	8:51 PM	-	Rain
7/2/2016	8:12 PM	0.01	Rain	7/3/2016	3:51 AM	-		7/5/2016	9:51 PM	0.08	Rain
7/2/2016	8:44 PM	0.04	Rain	7/3/2016	4:51 AM	-		7/5/2016	10:02 PM	-	Rain
7/2/2016	8:51 PM	0.04	Rain	7/3/2016	5:51 AM	-		7/5/2016	10:51 PM	-	Rain
7/2/2016	9:04 PM	-	Rain	7/3/2016	6:51 AM	-		7/5/2016	11:51 PM	0.08	Rain
7/2/2016	9:35 PM	-		7/3/2016	7:51 AM	-		7/5/2016	12:03 AM	0.06	Rain
7/2/2016	9:51 PM	-	Rain	7/3/2016	8:51 AM	-		7/5/2016	12:41 AM	0.18	Rain
7/2/2016	9:59 PM	-	Rain	7/3/2016	9:51 AM	-		7/5/2016	12:47 AM	0.22	Rain
7/2/2016	10:16 PM	0.01	Rain	7/3/2016	10:51 AM	-		7/5/2016	12:51 AM	0.27	Rain
7/2/2016	10:21 PM	0.07	Rain	7/3/2016	11:51 AM	-		7/5/2016	1:21 AM	0.14	Rain
7/2/2016	10:29 PM	0.19	Rain	7/3/2016	12:51 PM	-		7/5/2016	1:51 AM	0.16	Rain
7/2/2016	10:49 PM	0.19		7/3/2016	1:51 PM	-		7/5/2016	2:23 AM	0.03	Rain
7/2/2016	10:51 PM	0.19		7/3/2016	2:51 PM	-		7/5/2016	2:51 AM	0.04	Rain
7/2/2016	11:51 PM	-		7/3/2016	3:51 PM	-		7/5/2016	3:19 AM	0.22	Rain
7/2/2016	12:51 AM	-		7/3/2016	4:51 PM	-		7/5/2016	3:51 AM	0.43	Rain
7/2/2016	1:42 AM	-		7/3/2016	5:51 PM	-		7/5/2016	4:51 AM	0.01	Rain
7/2/2016	1:51 AM	-		7/3/2016	6:51 PM	-		7/5/2016	5:51 AM	0.01	
7/2/2016	2:13 AM	-		7/3/2016	7:51 PM	-		7/5/2016	6:10 AM	-	
7/2/2016	2:51 AM	-		7/4/2016	8:51 PM	-		7/5/2016	6:51 AM	-	
7/2/2016	3:51 AM	-		7/4/2016	9:51 PM	-		7/5/2016	7:51 AM	-	

SESI Consulting Engineers
Job No. 8964B
22 South West Street
Mount Vernon, NJ

Rainfall Data

8/31/2016

Date	Time (EDT)	Precip. (in)	Event Type	Date	Time (EDT)	Precip. (in)	Event Type	Date	Time (EDT)	Precip. (in)	Event Type
7/5/2016	7:55 AM	-		7/7/2016	9:51 PM	-		7/8/2016	3:46 PM	-	
7/5/2016	8:43 AM	-		7/7/2016	10:51 PM	-		7/8/2016	3:51 PM	-	
7/5/2016	8:51 AM	-		7/7/2016	11:51 PM	-		7/8/2016	4:51 PM	-	
7/5/2016	9:51 AM	-		7/7/2016	12:51 AM	-		7/8/2016	5:51 PM	-	
7/5/2016	10:51 AM	-		7/7/2016	1:51 AM	-		7/8/2016	6:51 PM	-	Rain
7/5/2016	11:51 AM	-		7/7/2016	2:51 AM	-		7/8/2016	7:03 PM	-	
7/5/2016	11:59 AM	-		7/7/2016	3:51 AM	-		7/8/2016	7:51 PM	-	
7/5/2016	12:51 PM	-		7/7/2016	4:51 AM	-		7/9/2016	8:48 PM	-	
7/5/2016	1:32 PM	-		7/7/2016	5:51 AM	-		7/9/2016	8:51 PM	-	
7/5/2016	1:46 PM	-		7/7/2016	6:51 AM	-		7/9/2016	9:51 PM	-	
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7/5/2016	2:51 PM	-		7/7/2016	8:51 AM	-		7/9/2016	11:51 PM	-	
7/5/2016	3:51 PM	-		7/7/2016	9:51 AM	-		7/9/2016	12:51 AM	-	
7/5/2016	4:51 PM	-		7/7/2016	10:51 AM	-		7/9/2016	1:51 AM	-	
7/5/2016	5:51 PM	-		7/7/2016	11:51 AM	-		7/9/2016	2:51 AM	-	
7/5/2016	6:51 PM	-		7/7/2016	12:51 PM	-		7/9/2016	3:51 AM	-	
7/5/2016	7:51 PM	-		7/7/2016	1:51 PM	-		7/9/2016	4:51 AM	-	
7/6/2016	8:51 PM	-		7/7/2016	2:51 PM	0.02		7/9/2016	5:51 AM	-	
7/6/2016	9:51 PM	-		7/7/2016	3:51 PM	-		7/9/2016	6:51 AM	-	
7/6/2016	10:51 PM	-		7/7/2016	4:51 PM	-		7/9/2016	7:37 AM	-	
7/6/2016	11:51 PM	-		7/7/2016	5:51 PM	-		7/9/2016	7:51 AM	-	
7/6/2016	12:51 AM	-		7/7/2016	6:51 PM	-		7/9/2016	8:51 AM	-	
7/6/2016	1:51 AM	-		7/7/2016	7:51 PM	-		7/9/2016	9:51 AM	-	
7/6/2016	2:51 AM	-		7/8/2016	8:51 PM	-		7/9/2016	10:51 AM	-	
7/6/2016	3:51 AM	-		7/8/2016	9:51 PM	-		7/9/2016	11:51 AM	-	
7/6/2016	4:51 AM	-		7/8/2016	10:51 PM	-		7/9/2016	12:51 PM	-	
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7/6/2016	6:51 AM	-		7/8/2016	12:51 AM	-		7/9/2016	2:51 PM	-	
7/6/2016	7:51 AM	-		7/8/2016	1:51 AM	-		7/9/2016	3:51 PM	-	
7/6/2016	8:51 AM	-		7/8/2016	2:51 AM	-		7/9/2016	4:51 PM	-	
7/6/2016	9:51 AM	-		7/8/2016	3:51 AM	-		7/9/2016	5:43 PM	-	
7/6/2016	10:51 AM	-		7/8/2016	4:51 AM	-		7/9/2016	5:51 PM	-	
7/6/2016	11:51 AM	-		7/8/2016	5:51 AM	-		7/9/2016	6:51 PM	-	
7/6/2016	12:51 PM	-		7/8/2016	6:51 AM	-		7/9/2016	7:51 PM	-	
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7/6/2016	4:51 PM	-		7/8/2016	10:51 AM	-		7/10/2016	10:32 PM	0.01	Rain
7/6/2016	5:51 PM	-		7/8/2016	11:51 AM	-		7/10/2016	10:51 PM	0.08	Rain
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7/6/2016	7:51 PM	-		7/8/2016	1:51 PM	-		7/10/2016	11:51 PM	0.09	Rain
7/7/2016	8:51 PM	-		7/8/2016	2:51 PM	-		7/10/2016	12:51 AM	-	

SESI Consulting Engineers
Job No. 8954B
22 South West Street
Mount Vernon, NJ

Rainfall Data

8/31/2016

Date	Time (EDT)	Precip. (in)	Event Type	Date	Time (EDT)	Precip. (in)	Event Type	Date	Time (EDT)	Precip. (in)	Event Type
7/10/2016	1:20 AM	-		7/11/2016	1:51 PM	-		7/13/2016	7:51 AM	-	
7/10/2016	1:48 AM	-		7/11/2016	2:51 PM	-		7/13/2016	8:51 AM	-	
7/10/2016	1:51 AM	-		7/11/2016	3:51 PM	-		7/13/2016	9:51 AM	-	
7/10/2016	2:09 AM	-		7/11/2016	4:51 PM	-		7/13/2016	10:51 AM	-	
7/10/2016	2:51 AM	-		7/11/2016	5:51 PM	-		7/13/2016	11:51 AM	-	
7/10/2016	3:51 AM	-		7/11/2016	6:51 PM	-		7/13/2016	12:51 PM	-	
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7/10/2016	5:51 AM	-		7/12/2016	9:51 PM	-		7/13/2016	3:51 PM	-	
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7/10/2016	8:51 AM	-		7/12/2016	1:51 AM	-		7/13/2016	7:51 PM	-	
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7/10/2016	6:51 PM	-		7/12/2016	12:51 PM	-		7/14/2016	3:41 AM	-	
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7/11/2016	8:51 PM	-		7/12/2016	2:51 PM	-		7/14/2016	3:51 AM	-	
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7/11/2016	11:51 PM	-		7/12/2016	5:51 PM	-		7/14/2016	5:41 AM	-	
7/11/2016	12:51 AM	-		7/12/2016	6:51 PM	-		7/14/2016	5:51 AM	-	
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7/11/2016	10:51 AM	-		7/13/2016	4:51 AM	-		7/14/2016	11:51 AM	-	
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7/11/2016	12:51 PM	-		7/13/2016	6:51 AM	-		7/14/2016	1:38 PM	-	

SESI Consulting Engineers
Job No. 8964B
22 South West Street
Mount Vernon, NJ

Rainfall Data

8/31/2016

Date	Time (EDT)	Precip. (in)	Event Type
7/14/2016	1:51 PM	-	
7/14/2016	2:51 PM	-	
7/14/2016	3:51 PM	-	
7/14/2016	4:08 PM	-	Rain
7/14/2016	4:14 PM	-	Rain
7/14/2016	4:16 PM	-	Rain
7/14/2016	4:29 PM	0.44	Rain
7/14/2016	4:38 PM	0.50	Rain
7/14/2016	4:51 PM	0.50	Rain
7/14/2016	5:13 PM	-	
7/14/2016	5:51 PM	-	
7/14/2016	6:51 PM	-	
7/14/2016	7:51 PM	-	
7/15/2016	8:51 PM	-	
7/15/2016	9:51 PM	-	
7/15/2016	10:51 PM	-	
7/15/2016	11:51 PM	-	

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Sanitary Sewer Demand Calculations

Average Daily Flow Assumptions		
Type of Use	**Gallons per Day (GPD)**	**Unit**
Apartment	110	per bedroom
Office	0.1	per square foot (SF)
Retail	0.1	per square foot (SF)

**Flows based on NYSDEC Design Standards for Intermediate Sized Wastewater*

Proposed Sewer Flow				
Description	**Type of Use**	**Size**	**Unit**	**GPD**
Apartment - 1 Bed	Apartment	88	bedrooms	9,680
Apartment - 2 Bed	Apartment	146	bedrooms	16,060
Apartment - 3 Bed	Apartment	39	bedrooms	4,290
Retail	Retail	4,157	area (SF)	416
			Average Daily flow with Water-Savings (20% Reduction)	24,357

Sanitary Sewer Summary		
Description	**Flow Rate**	**Unit**
Average Daily Flow	24,357	GPD
Average Hourly Flow	2,030	GPH
Average Flow	34	GPM
Peak Flow	135	GPM
Peak Flow	0.30	CFS

** Peak factor of 4 is used to calculate the peak flow*

APPENDIX B

Municipal Utility Record Sheets

Book 948 SEWER 944A
PAGE 123 Pg. 57

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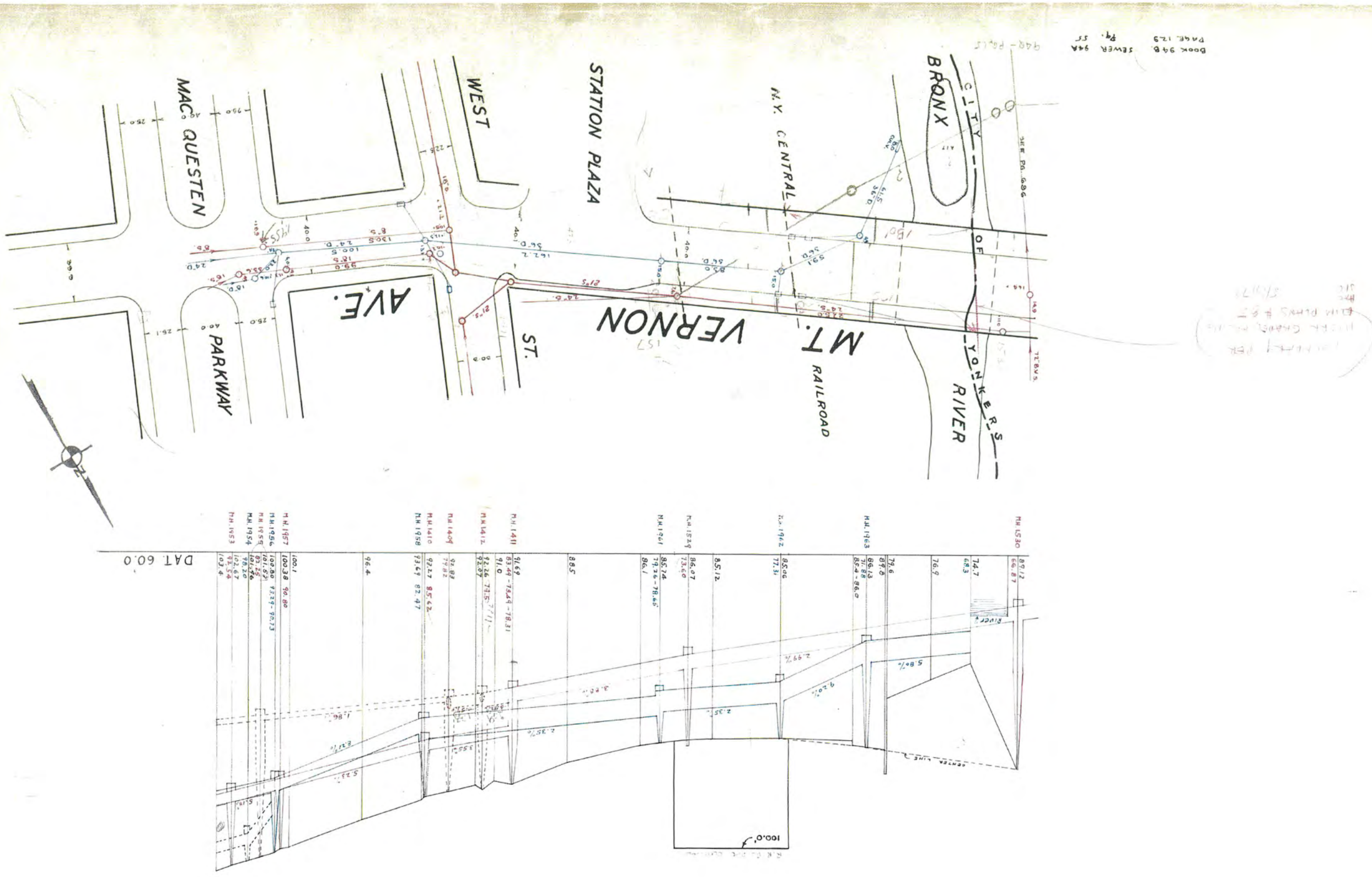

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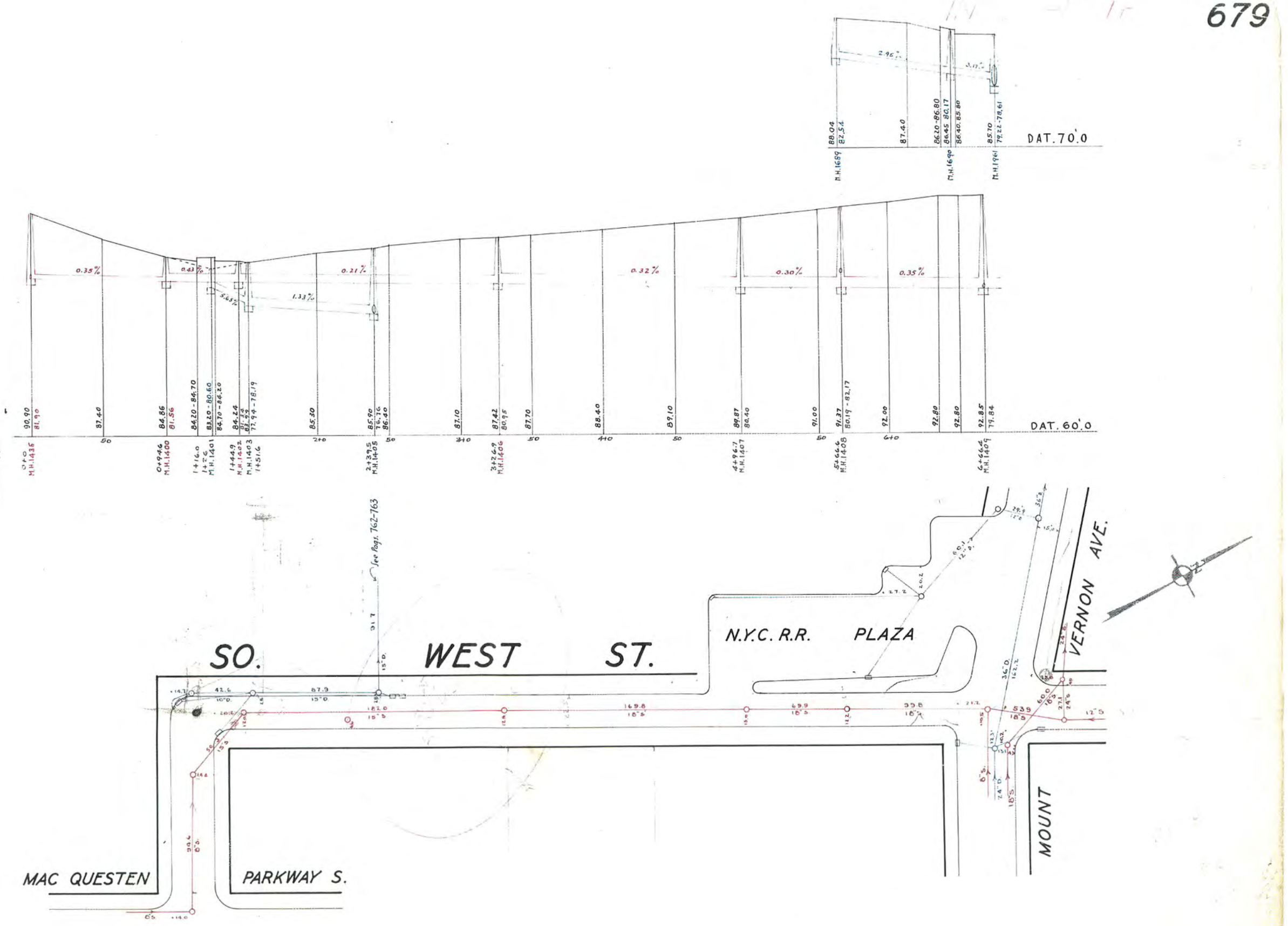

BOOK 94A
PAGE 3-117

APPENDIX C

Pipe Capacity Calculations

akrf
34 SOUTH BROADWAY
SUITE 300
WHITE PLAINS, NY 10601
(914) 949-7336

PROJECT	20 S West Street		
LOCATION	Mount Vernon, NY		
PREPARED BY	JM	DATE	12/5/2025

PARTIALLY FULL FLOW PIPE CAPACITY WORKSHEET

Pipe Location	Recorded 18"Ø sanitary main @ S West Street	
Pipe Diameter, D	18	in
Pipe Radius, r	9	in
Full Pipe Cross Sectional Area, A_{FULL}	1.7671	sf
Pipe Material	DIP	
Manning's Roughness Coeff, n	0.014	
Slope. S	0.0032	ft/ft
Flow Depth, y	1.09	in
Is the flow depth greater than or less than half the diameter of pipe?	Less than half full	
h = y	1.09	in
y/D	0.061	
n / n_{FULL}	1.1524	
Variable Manning's Roughness Coeff, n	0.016	
Angle, Θ	0.995	radians
Partially Full Pipe Cross Sectional Area, A	0.044	sf
Percent Full = 0.044 sf ÷ 1.767 sf	2.5	%
Wetted Perimeter, P	0.746	ft
Hydraulic Radius, R = A / P	0.059	ft

Flow Velocty, V =	**0.79**	**ft/s**
Flow Capacity, Q =	**0.03**	**cfs**
	22,416	GPD
	0.02	MGD

An 18-inch DIP at 0.32% slope conveying 0.03 cfs (or 0.022 MGD) of flow results in a flow depth of 1.09 inches which is less than half the diameter of the pipe.

akrf
34 SOUTH BROADWAY
SUITE 300
WHITE PLAINS, NY 10601
(914) 949-7336

PROJECT	20 S West Street		
LOCATION	Mount Vernon, NY		
PREPARED BY	JM	DATE	12/5/2025

PARTIALLY FULL FLOW PIPE CAPACITY WORKSHEET

Pipe Location	Recorded 21"Ø sanitary main @ Mount Vernon Ave	
Pipe Diameter, D	21	in
Pipe Radius, r	10.5	in
Full Pipe Cross Sectional Area, A_{FULL}	2.4053	sf
Pipe Material	DIP	
Manning's Roughness Coeff, n	0.014	
Slope. S	0.0388	ft/ft
Flow Depth, y	8.37	in
Is the flow depth greater than or less than half the diameter of pipe?	Less than half full	
h = y	8.37	in
y/D	0.399	
n / n_{FULL}	1.2703	
Variable Manning's Roughness Coeff, n	0.018	
Angle, Θ	2.733	radians
Partially Full Pipe Cross Sectional Area, A	0.894	sf
Percent Full = 0.894 sf ÷ 2.405 sf	37.2	%
Wetted Perimeter, P	2.391	ft
Hydraulic Radius, R = A / P	0.374	ft

Flow Velocty, V =	**8.57**	**ft/s**
Flow Capacity, Q =	**7.66**	**cfs**

4,950,339	GPD
4.95	MGD

A 21-inch DIP at 3.88% slope conveying 7.66 cfs (or 4.95 MGD) of flow results in a flow depth of 8.37 inches which is less than half the diameter of the pipe.

akrf
34 SOUTH BROADWAY
SUITE 300
WHITE PLAINS, NY 10601
(914) 949-7336

PROJECT	20 S West Street		
LOCATION	Mount Vernon, NY		
PREPARED BY	JM	DATE	12/5/2025

PARTIALLY FULL FLOW PIPE CAPACITY WORKSHEET

Pipe Location	Proposed 18"Ø sanitary main @ S West Street	
Pipe Diameter, D	18	in
Pipe Radius, r	9	in
Full Pipe Cross Sectional Area, A_{FULL}	1.7671	sf
Pipe Material	DIP	
Manning's Roughness Coeff, n	0.014	
Slope. S	0.0032	ft/ft
Flow Depth, y	4.81	in
Is the flow depth greater than or less than half the diameter of pipe?	Less than half full	
h = y	4.81	in
y/D	0.267	
n / n_{FULL}	1.2900	
Variable Manning's Roughness Coeff, n	0.018	
Angle, Θ	2.172	radians
Partially Full Pipe Cross Sectional Area, A	0.379	sf
Percent Full = 0.379 sf ÷ 1.767 sf	21.5	%
Wetted Perimeter, P	1.629	ft
Hydraulic Radius, R = A / P	0.233	ft

Flow Velocty, V =	**1.77**	**ft/s**
Flow Capacity, Q =	**0.67**	**cfs**

432,567	GPD
0.43	MGD

An 18-inch DIP at 0.32% slope conveying 0.67 cfs (or 0.433 MGD) of flow results in a flow depth of 4.81 inches which is less than half the diameter of the pipe.

akrf
34 SOUTH BROADWAY
SUITE 300
WHITE PLAINS, NY 10601
(914) 949-7336

PROJECT	20 S West Street		
LOCATION	Mount Vernon, NY		
PREPARED BY	JM	DATE	12/5/2025

PARTIALLY FULL FLOW PIPE CAPACITY WORKSHEET

Pipe Location	Proposed 21"Ø sanitary main @ Mount Vernon Ave	
Pipe Diameter, D	21	in
Pipe Radius, r	10.5	in
Full Pipe Cross Sectional Area, A_{FULL}	2.4053	sf
Pipe Material	DIP	
Manning's Roughness Coeff, n	0.014	
Slope. S	0.0388	ft/ft
Flow Depth, y	8.86	in
Is the flow depth greater than or less than half the diameter of pipe?	Less than half full	
h = y	8.86	in
y/D	0.422	
n / n_{FULL}	1.2656	
Variable Manning's Roughness Coeff, n	0.018	
Angle, Θ	2.827	radians
Partially Full Pipe Cross Sectional Area, A	0.964	sf
Percent Full = 0.964 sf ÷ 2.405 sf	40.1	%
Wetted Perimeter, P	2.474	ft
Hydraulic Radius, R = A / P	0.390	ft

Flow Velocty, V =	**8.84**	**ft/s**
Flow Capacity, Q =	**8.52**	**cfs**

5,506,938	GPD
5.51	MGD

A 21-inch DIP at 3.88% slope conveying 8.52 cfs (or 5.507 MGD) of flow results in a flow depth of 8.86 inches which is less than half the diameter of the pipe.

Appendix G – Stormwater Management Report

STORMWATER MANAGEMENT REPORT

For:

STATION PLAZA

20 South West Street
City of Mount Vernon
Westchester County, NY 10550
Section 167.67, Block 1057, Lot 16

Prepared For:

Macquesten Station Takeover, LLC

438 Fifth Avenue
Suite 100
Pelham, NY 10803

Prepared By:

AKRF, Inc.

34 S Broadway
Suite 300
White Plains, NY 10601

Preparation Date:

August 8, 2025
Revised December 11, 2025

Justin Seeney, PE

Registered Professional Engineer, State of New York No. 095227

AKRF Project No. 250566

akrf

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4.0 WATER QUALITY 3
4.1 Sizing Critieria 3
4.2 Water Quality Peak Flow Rate 3
4.3 Flow-Based Alternative SMP 4
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6.0 PIPE CAPACITY ANALYSIS 5
7.0 CONCLUSION 6

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Figure 2 Aerial Map
Figure 3 Flood Insurance Rate map
Figure 4 Hydrologic Soils Map
Figure 5 Pre-Development Drainage Map
Figure 6 Post-Development Drainage Map
Figure 7 Inlet Drainage Area Plan

Appendices

Appendix A Water Quality HydroCAD Report
Appendix B HydroShield Certification Letter
HydroShield Operation and Maintenance Manual
HydroShield Detail and Specifications
Appendix C Pre-Development HydroCAD Report
Appendix D Post-Development HydroCAD Report
Appendix E Pipe Capacity Calculations

1.0 EXECUTIVE SUMMARY

On behalf of the Applicant, Macquesten Station Takeover, LLC, this Stormwater Management Report and accompanying project plans were prepared for the proposed project entitled "Station Plaza" located at 20 South West Street in the City of Mount Vernon in Westchester County, New York. The project proposes to redevelop a 0.50-acre property by demolishing an existing building and surface parking lot and constructing a new 13-story residential building. Other proposed improvements include above and below grade parking, ±2,635 SF of retail space, stormwater management, utility infrastructure, and streetscape. The project will generate a soil disturbance area of less than one acre, and therefore, does not require coverage under the New York State Department of Environmental Conservation (NYSDEC) General Permit for Stormwater Discharges from Construction Activity.

To improve the water quality from runoff generated from the project, post-construction stormwater management measures were designed and implemented following the performance criteria in the NYSDEC Stormwater Management Design Manual, dated July 31, 2024 ("Stormwater Design Manual"). A hydrologic analysis was also conducted to compare the peak flow rate generated from the site under pre- and post-development conditions. A comparison of the overall peak flow rates under pre- and post-development conditions is summarized in the table below.

Table 1: Peak Flow Rate Summary Table

Storm Event	Pre-Development (cfs)	Post-Development (cfs)	Delta (cfs)
1-year	1.48	1.48	0%
10-year	2.49	2.49	0%
100-year	3.95	3.95	0%

2.0 EXISTING CONDITIONS

The 0.50-acre property is located at the intersection of Mount Vernon Avenue and South West Street in the Mount Vernon West Transit Oriented Development Zone (MVW-H). The property is bound by South West Street to the east, Mount Vernon Avenue to the north, Metro North Railroad Station to the west, and a newly constructed residential tower to the south. Existing site coverage is predominantly impervious area consisting of a 2-story multi-use building and paved surface parking. Drainage is collected via on-site drain inlets that convey surface runoff to the northern corner of the property where it ties into the existing stormwater conveyance system along Mount Vernon Avenue.

2.1 USDA Soil Description

According to the USDA Web Soil Survey, the soil within the site is defined as Urban Land (Uf) which does not have a designated hydrologic soil group ("HSG"). For the hydrologic analysis, a HSG D was used which the USDA describes as soils having a very slow infiltration rate or shallow soils over nearly impervious material.

3.0 PROPOSED CONDITIONS

The project proposes to demolish the existing multi-use building and remove the paved surface parking lot to construct a 13-story residential building with surface parking in the rear and below grade parking spanning most of the property footprint. Proposed drainage patterns will follow existing conditions in that proposed roof drains and internal plumbing will convey stormwater to connect to the same drainage manhole at the northern corner of the property. Prior to discharging to the existing drainage manhole, stormwater will be treated using a hydrodynamic separator designed to meet the NYSDEC performance criteria for proprietary practices for stormwater management.

4.0 WATER QUALITY

4.1 Sizing Critieria

Chapter 9 of the Stormwater Design Manual was used as a guideline to determine the sizing criteria for treating the water quality volume ("WQv") for redevelopment activity. The project will follow Method IV which requires that 100% of the WQv be captured and treated, for a minimum of 75% of the disturbed, redevelopment impervious area, by implementation of a flow-through alternative stormwater management practice ("SMP"). As demonstrated in the table below, the project will provide over 2,500 CF of water quality treatment.

Table 2: Water Quality Volume Calculations

Description	Provided
90% Rainfall Event Number, P	1.5
Percent Impervious Cover, I	100%
Rv = 0.05 x 0.009(I)	0.95
Contributing Area, A	0.50 acres x 100% = 0.50 acres
Water Quality Volume, WQv	**0.060 ac-ft (2,586 CF)**

4.2 Water Quality Peak Flow Rate

To implement a flow based alternative SMP such as a hydrodynamic separator, the WQv is converted to a peak runoff rate following Appendix B of the Stormwater Design Manual. This conversion is summarized below:

1. First, calculate the weighted Curve Number (CNw) for the contributing drainage area to the practice. For this project, the entire contributing area is a single impervious drainage area with a weighted CN value of 98.

CNw = 98

2. Then calculate the maximum basin retention (S) in inches, using the CNw.

$$S = \frac{1{,}000}{CNw} - 10$$

S = 0.20 inches

3. Next, calculate the runoff (Q), in inches, generated over the contributing area given the provided WQv:

$$Q = \frac{Provided\ WQv}{A}$$

Q = 0.12 ft (1.44 inches)

4. Finally, using the runoff (Q) in inches and maximum basin retention (S), determine the calculated rainfall value (P90):

$$P90 = \frac{S + 2.5Q + (6.25Q^2 + 25SQ)^{0.5}}{5}$$

P90 = 1.66 inches

Once the calculated rainfall value, P90 was determined, HydroCAD, a hydrologic modeling program that implements the USDA Soil Conservation Service Publication Technical Release (TR-55), was used to calculate the peak flow rate for the water quality storm. A synthetic rainfall distribution curve specific to the project site was generated following Section 4.9 of the Stormwater Design Manual. The results of the HydroCAD model determined a peak flow rate of 0.84 cfs for the water quality storm. Refer to Appendix A for the HydroCAD WQ report.

4.3 Flow-Based Alternative SMP

The flow-based alternative SMP proposed for this project is a 4-ft diameter Hydro-Shield Advance Plus hydrodynamic separator manufactured by OldCastle Infrastructure. This SMP has a maximum treatment flow rate of 1.49 cfs which provides 70% more treatment capacity than the peak flow rate of 0.84 cfs for the water quality storm. The Hydro-Shield Advance Plus system has a 50% total suspended solids removal rate and is certified by the NYSDEC to provide water quality treatment for redevelopment activities. Refer to Appendix B for additional information.

5.0 WATER QUANTITY

A hydrologic analysis was completed using HydroCAD to calculate the peak flow rates under pre- and post-development conditions for the 1-, 10-, and 100-year, 24-hour storm events. Precipitation data for these storm events were obtained from Cornell's Extreme Precipitation website which utilizes data collected from the Northeast Regional Climate Center (NRCC). A summary of the precipitation values can be found in Table 3 below.

Table 3: Precipitation Values

Storm Event	Precipitation
1-year	2.84 inches
10-year	5.07 inches
100-year	8.92 inches

The overall watershed of the site was analyzed at one design point located at the existing drainage manhole located at the northern corner of the site. Results of the hydrologic analysis comparing the peak flow rates and runoff volumes are summarized in Tables 4 and 5 below. Refer to Figures 5 and 6 as well as Appendices C and D for additional information.

Table 4: Pre- and Post-Developed Peak Flow Rate Summary

Storm Event	Pre-Development (cfs)	Post-Development (cfs)	% Change
1-year	1.48	1.48	0%
10-year	2.49	2.49	0%
100-year	3.95	3.95	0%

Table 5: Pre- and Post-Developed Volume Summary

Storm Event	Pre-Development (ac-ft)	Post-Development (ac-ft)	% Change
1-year	0.098	0.098	0%
10-year	0.179	0.179	0%
100-year	0.317	0.317	0%

Based on the results of the hydrologic analysis, a comparison of the pre- and post-development conditions concludes there to be no increase to the peak flow rate or stormwater volume due to the construction of the project.

6.0 PIPE CAPACITY ANALYSIS

A pipe capacity analysis was conducted for the proposed drainage system to demonstrate the storm pipes have adequate capacity to handle the 25-year storm event. The Rational Method was used to calculate the peak flow rates for each inlet drainage area. The peak flow rate calculations are summarized in the table below. Refer to Figure 7 for the delineated inlet drainage areas.

Table 6: Peak Flow Rate (Rational Method)

Drainage Structure	Contributing Area (A)	Runoff Coefficient (C)	Rainfall Intensity[1] (I_{25})	Peak Flow Rate (Q_{25})
WQU 102	0.50 acres	0.98	7.05 in/hr[2]	3.5 cfs
CB 202	0.30 acres	0.98	7.05 in/hr[2]	2.1 cfs

[1] Rainfall intensity was obtained from Cornell's Extreme Precipitation website.
[2] Rainfall Intensity assumed a time of concentration of 6 minutes.

The pipe capacities of the proposed storm pipes were calculated using Manning's Equation and are summarized in the table below. Refer to Appendix E for additional information.

Upstream Structure	Downstream Structure	Pipe Diameter	Pipe Slope	n	Pipe Capacity	Peak Flow Rate (Q_{25})
WQU 102	DMH 101	12" HDPE	2.00%	0.013	5.05 cfs	3.5 cfs (69%)
DMH 101	EX DMH 100	Ex 12" Clay	2.25%	0.013	5.36 cfs	3.5 cfs (65%)
CB 202	DMH 201	12" HDPE	0.75%	0.013	3.09 cfs	2.1 cfs (68%)

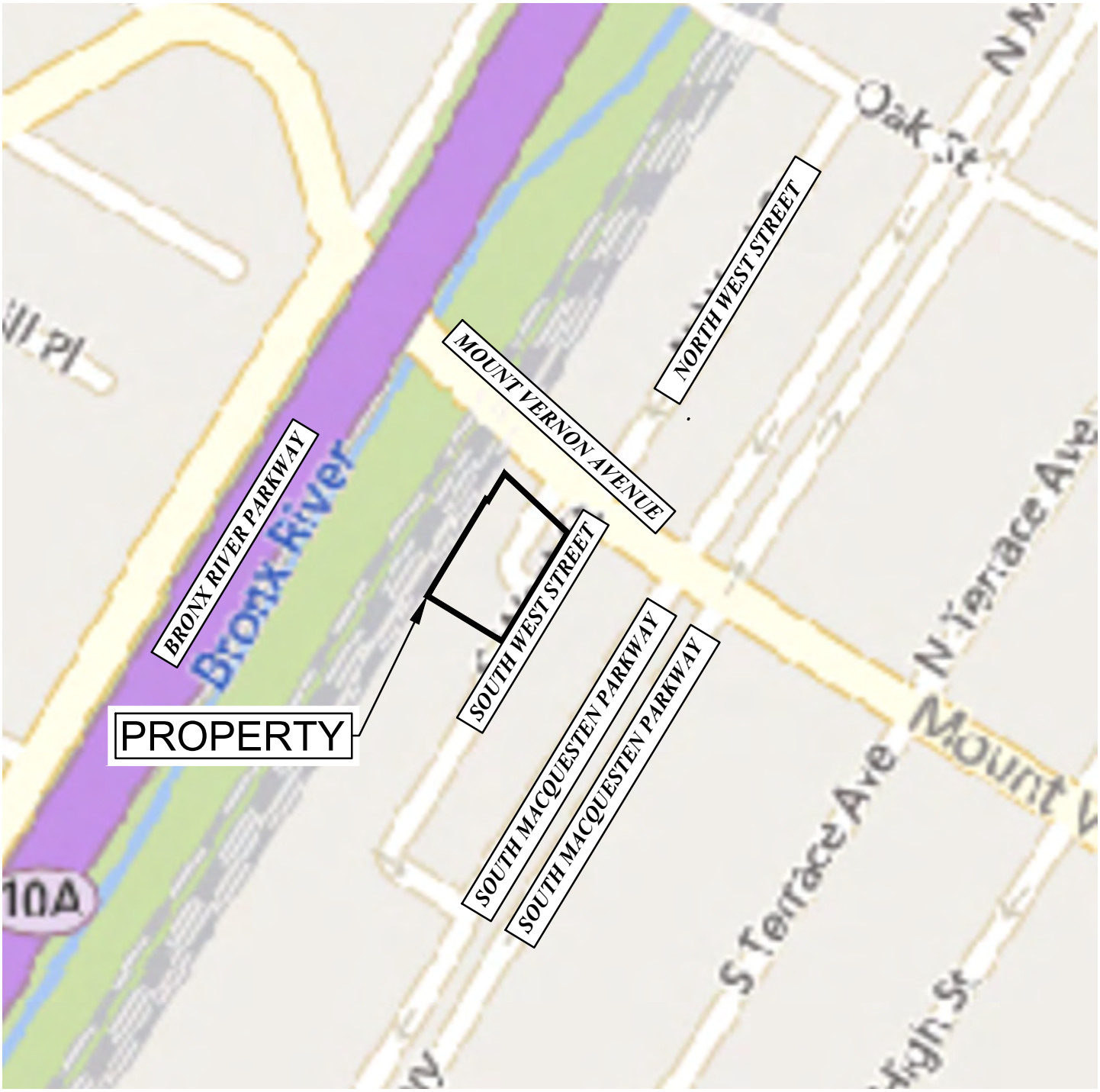
Based on the results of the pipe capacity analysis, the proposed storm pipes discharging from drainage structures WQU 102, DMH 101, and CB 202 have adequate pipe capacity to handle the 25-year storm event.

7.0 CONCLUSION

The project proposing to redevelop an existing site provides the opportunity to reduce pollutant discharges from older developed areas through the use of effective stormwater pollution controls. The water quality calculations and hydrologic analysis described in this Stormwater Management Report have demonstrated that effective measures will be implemented as part of this project in an effort to improve water quality within the surrounding and downstream areas. Furthermore, by proposing alternative SMP's with excess treatment capacity, the project further mitigates potential impacts to water quality as a result of projected increases in severity of future rainfall events.

FIGURES

Site Location Map
Aerial Map
Flood Insurance Rate Map
Hydrologic Soils Map
Pre-Development Drainage Map
Post-Development Drainage Map
Inlet Drainage Area Plan



N

0 200 400

SCALE: 1" = 200'

CLIENT

MACQUESTEN
DEVELOPMENT, LLC

438 FIFTH AVENUE
SUITE 100
PELHAM, NY 10803

SITE/CIVIL ENGINEER

akrf

AKRF INC.
34 SOUTH BROADWAY, SUITE 300
WHITE PLAINS, NY 10601
(914) 949-7336 (PHONE)

PROJECT

STATION PLAZA

SHEET TITLE

SITE LOCATION MAP

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JM/AL	JS
SCALE	DATE
AS SHOWN	08/08/2025

SHEET NO.

FIGURE 1

1026

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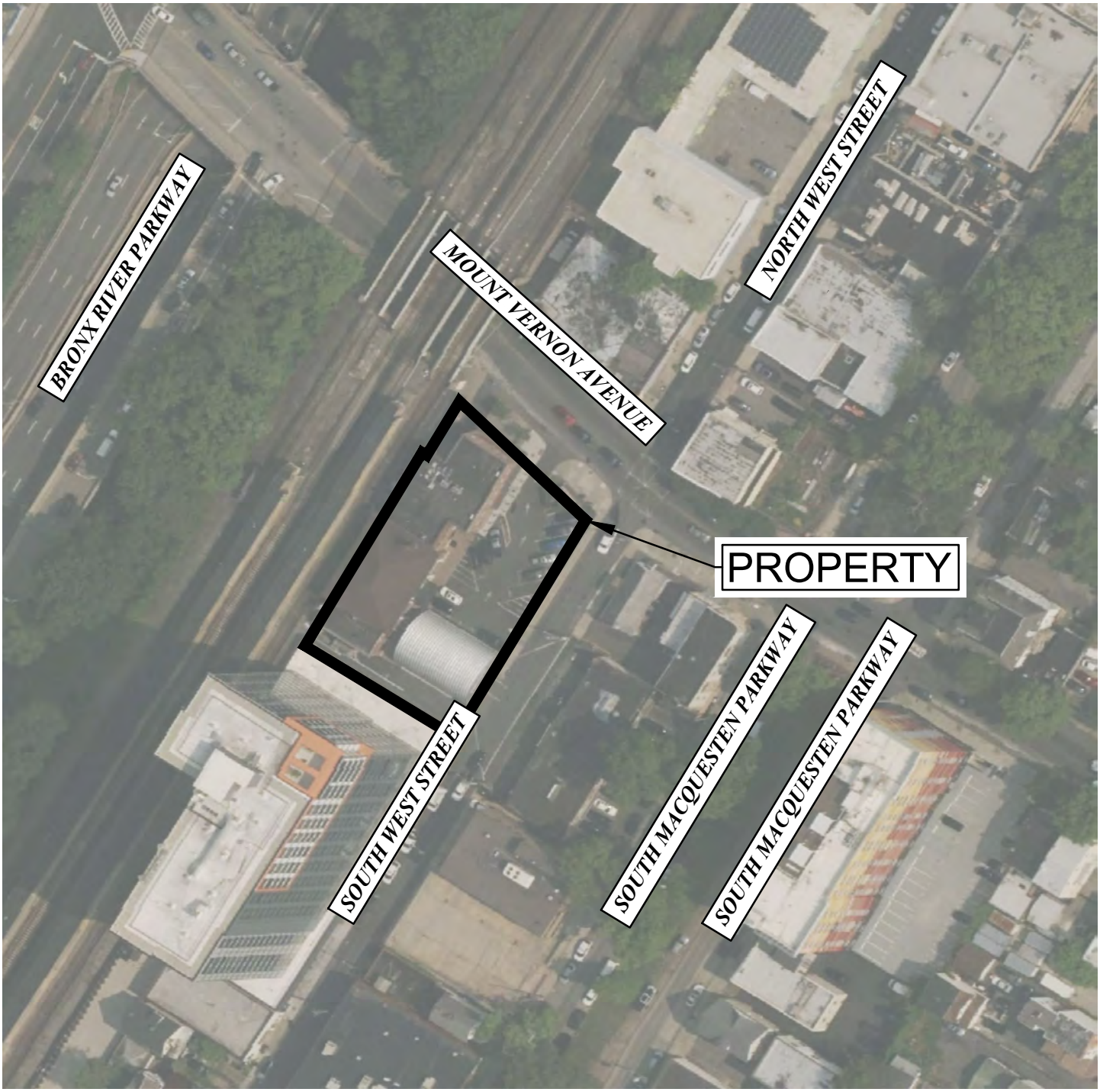

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PROJECT: STATION PLAZA		SHEET TITLE: **AERIAL MAP**
DRAWN BY: JM/AL	CHECKED BY: JS	SHEET NO.: **FIGURE 2**
SCALE: AS SHOWN	DATE: 08/08/2025	

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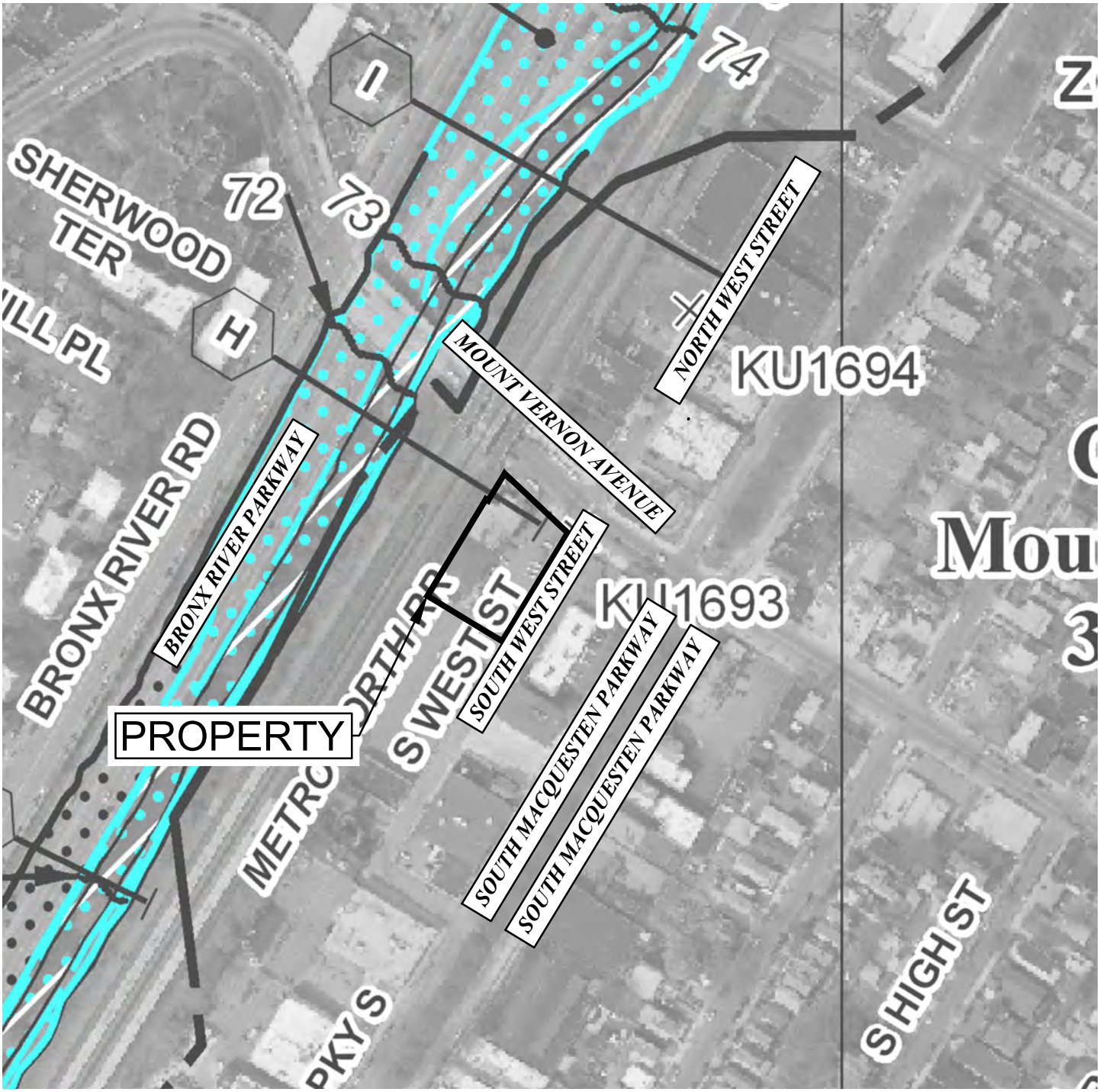

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FLOOD INSURANCE RATE MAP

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FIGURE 3

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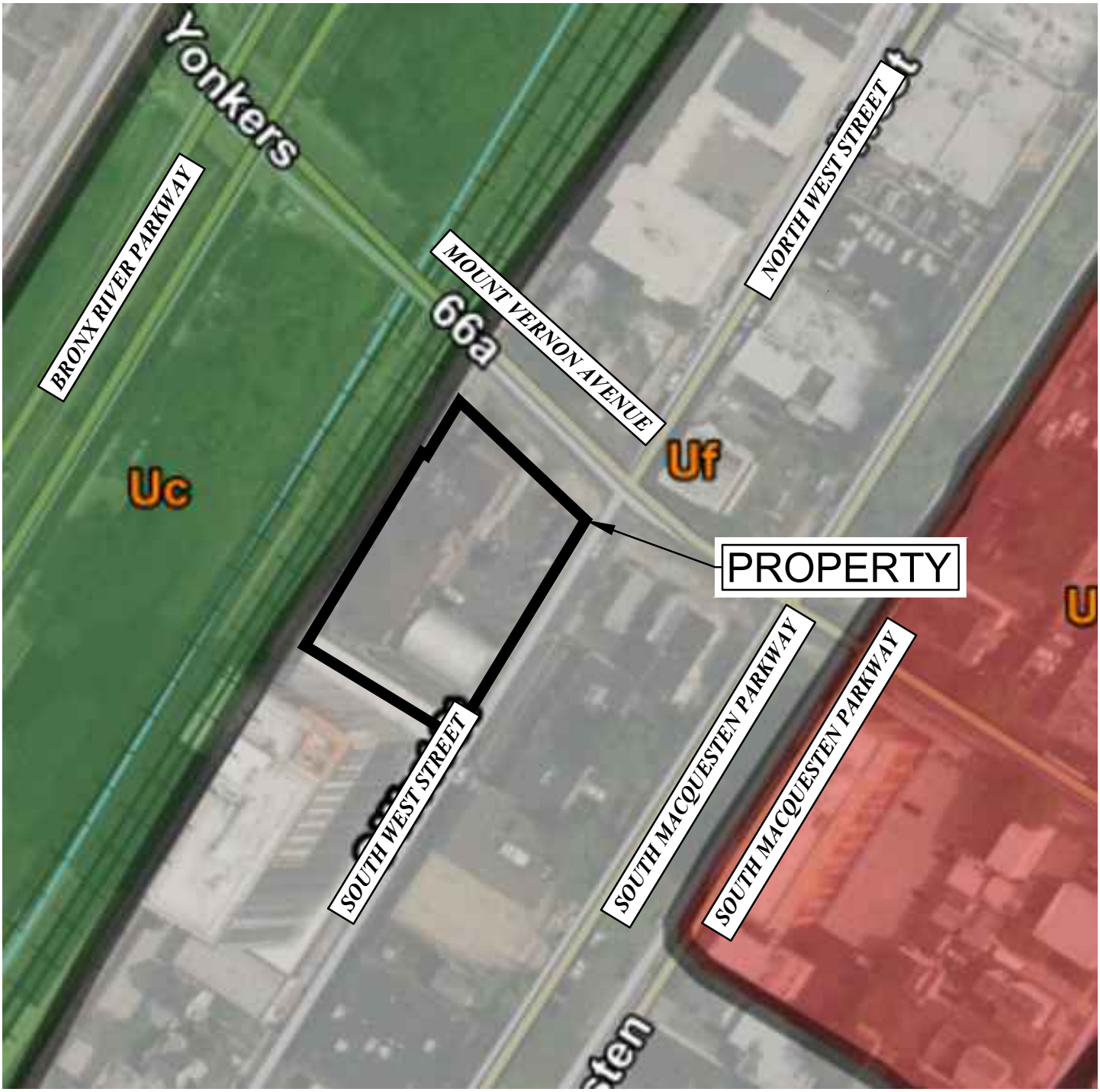

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PROJECT: STATION PLAZA	SHEET TITLE: **HYDROLOGIC SOILS MAP**
DRAWN BY: JM/AL	CHECKED BY: JS
SCALE: AS SHOWN	DATE: 08/08/2025
	SHEET NO.: **FIGURE 4**

1029

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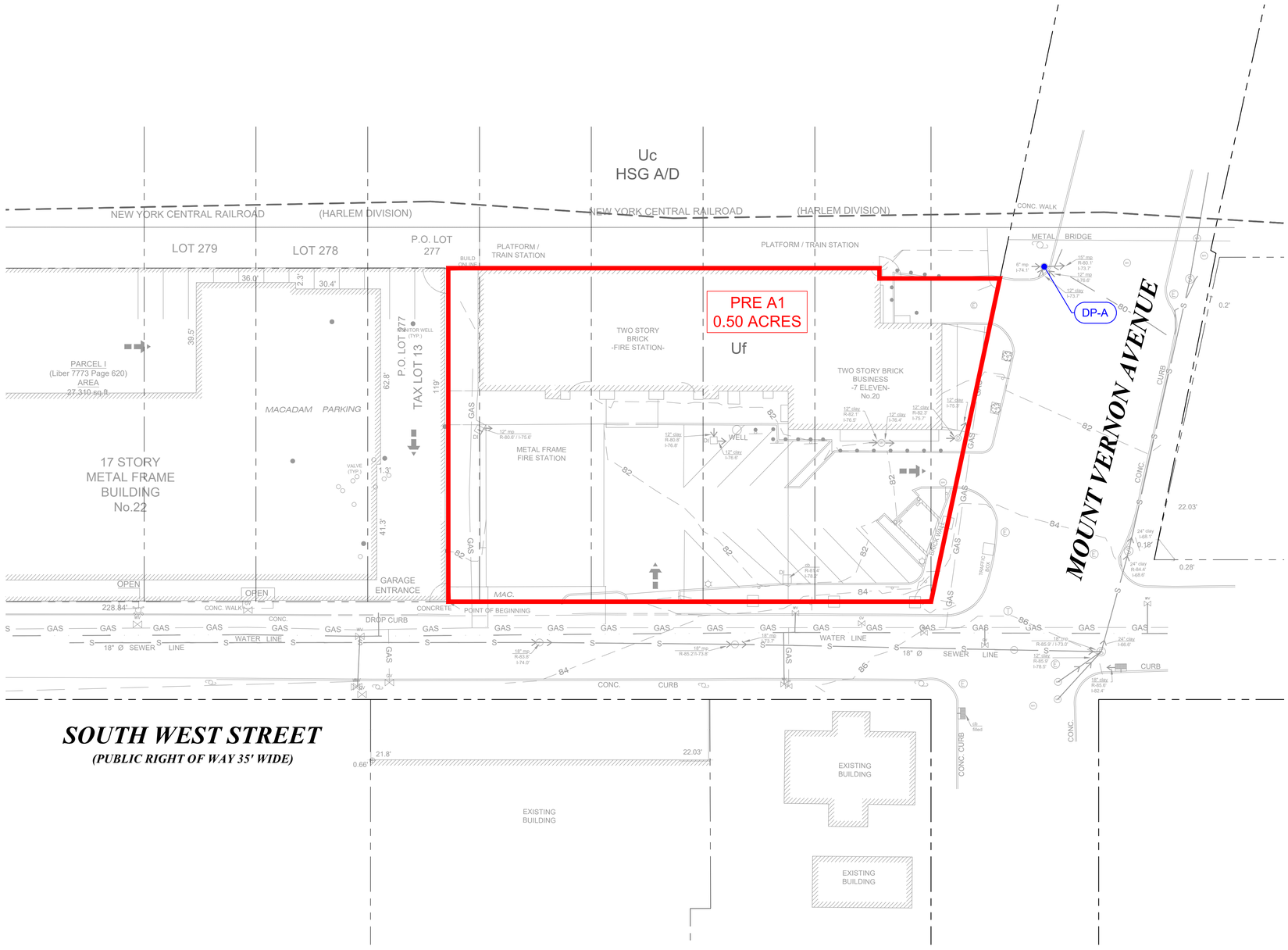
GENERAL NOTES

1. EXISTING CONDITIONS DEPICTED ON THIS PLAN ARE BASED ON SURVEY PREPARED BY GABRIEL E. SENOR, P.C, CONSULTING ENGINEER AND LAND SURVEYORS DATED JUNE 16, 2025.



LEGEND

- WATER SHED BOUNDARY
- DP-A — DESIGN POINT
- SOIL BOUNDARY

0 10 20 40
SCALE: 1" = 20'

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PROJECT

STATION PLAZA

20 SOUTH WEST STREET
MOUNT VERNON, NY 10550
LOT ID: 164.67-1057-16

MILESTONE

SITE PLAN APPROVAL

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1	Revised per City's Comments	12/11/25
	NOT FOR CONSTRUCTION	

DESIGN PROFESSIONAL

JUSTIN H. SEENEY P.E
NY PROFESSIONAL ENGINEER NO. 095227

PROJECT #:	250566
DATE:	08/08/2025
SCALE:	1" = 20'
FORMAT:	24" x 36" (ARCH D)
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PRE-DEVELOPMENT DRAINAGE MAP

SHEET NUMBER:

FIGURE 5

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1030

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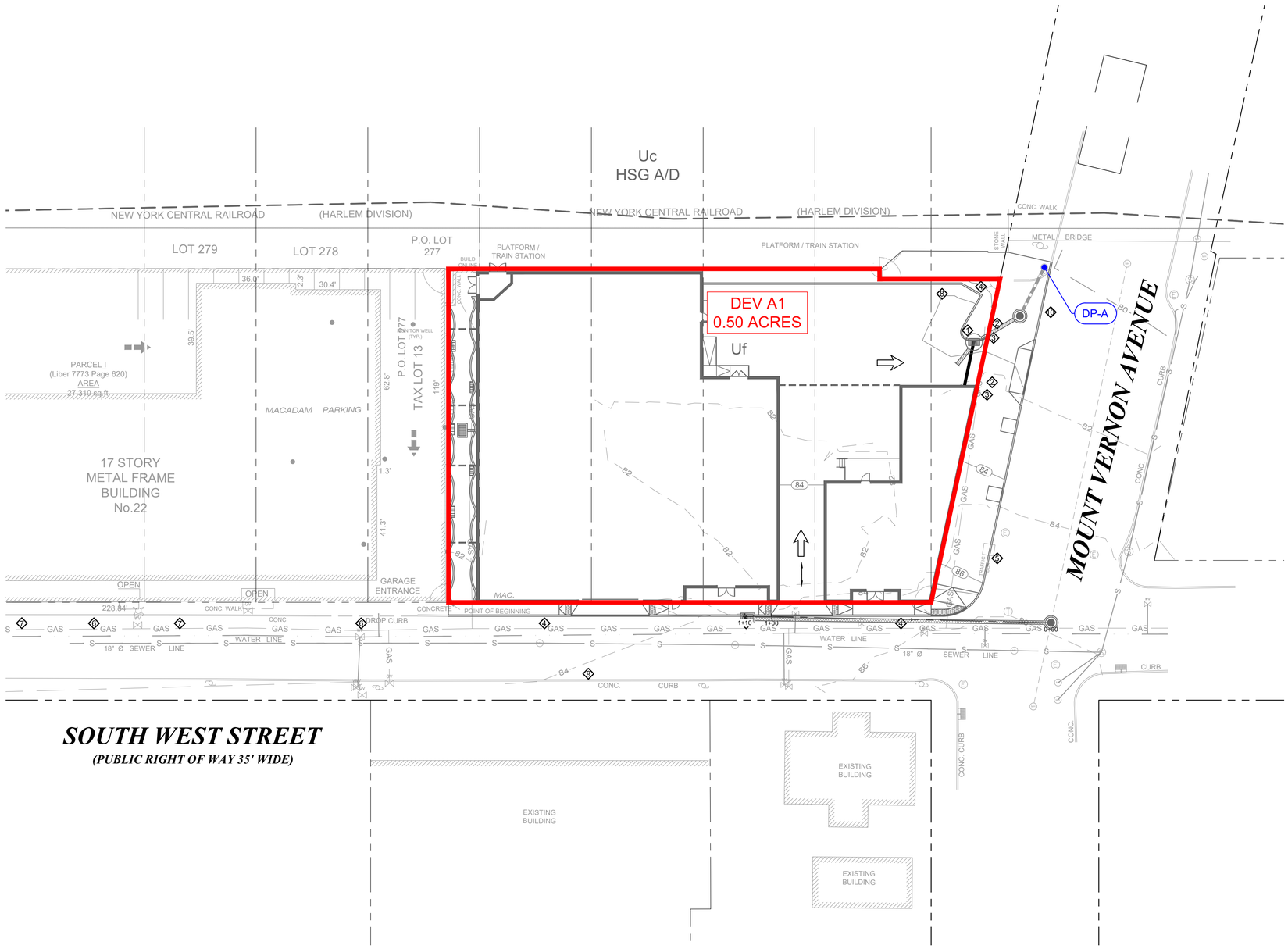

LEGEND

- WATER SHED BOUNDARY
- DP-A — DESIGN POINT
- SOIL BOUNDARY

SCALE: 1" = 20'

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STATION PLAZA

20 SOUTH WEST STREET
MOUNT VERNON, NY 10550
LOT ID: 164.67-1057-16

MILESTONE

SITE PLAN APPROVAL

REV.	DESCRIPTION	DATE
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NY PROFESSIONAL ENGINEER NO. 095227

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FORMAT:	24" x 36" (ARCH D)
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SHEET TITLE:

POST-DEVELOPMENT DRAINAGE MAP

SHEET NUMBER:

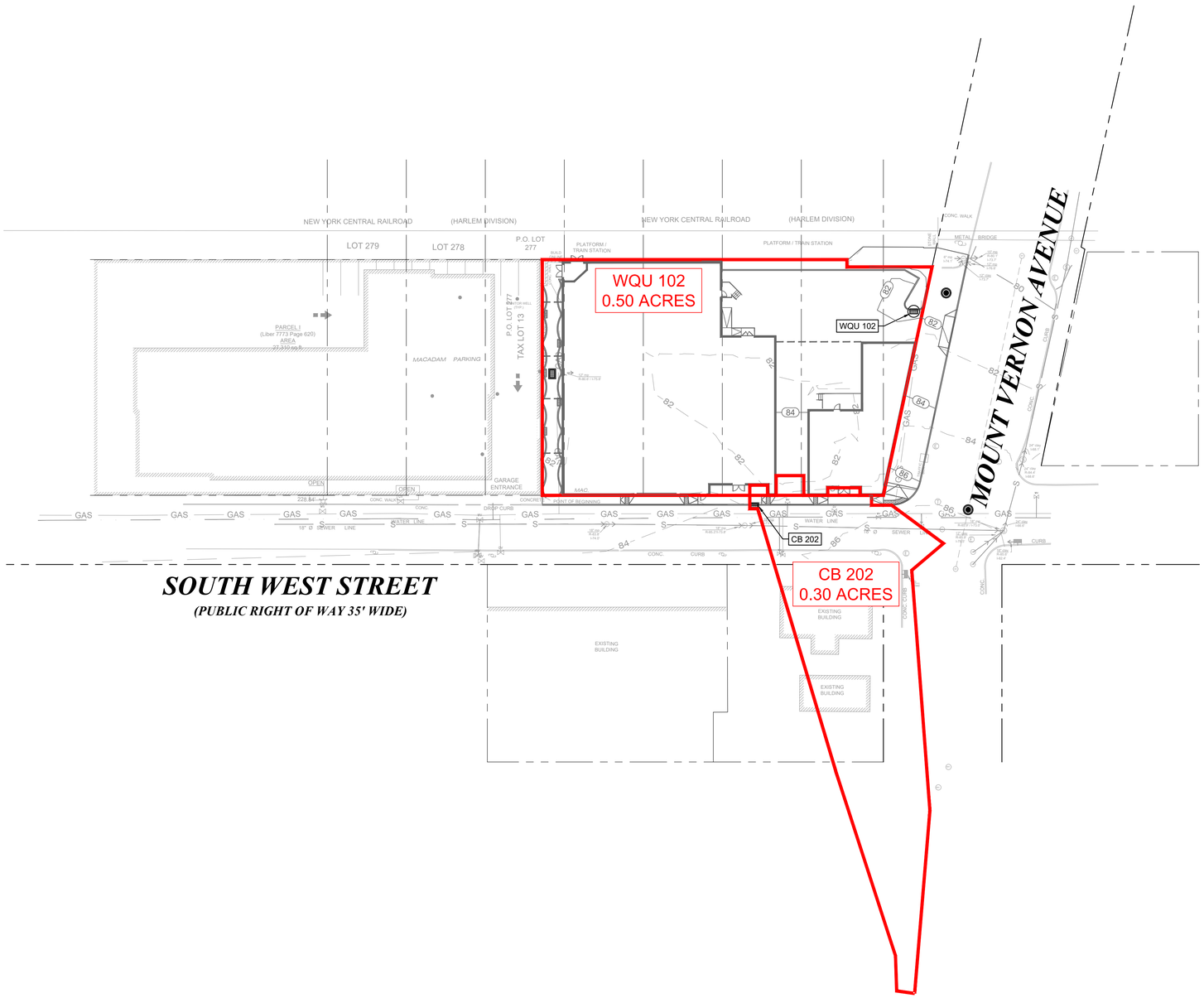
FIGURE 6

1031

I:\Projects\250566 - 20 SOUTH WEST STREET\Drawings_Figures\FIG 6_POST DEVELOPMENT DRAINAGE AREA MAP.dwg, FIG 6, dwg

GENERAL NOTES

1. EXISTING CONDITIONS DEPICTED ON THIS PLAN ARE BASED ON SURVEY PREPARED BY GABRIEL E. SENOR, P.C, CONSULTING ENGINEER AND LAND SURVEYORS DATED JUNE 16, 2025.



LEGEND

WATER SHED BOUNDARY

0 15 30 60
SCALE: 1" = 30'

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STATION PLAZA

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MOUNT VERNON, NY 10550
LOT ID: 164.67-1057-16

MILESTONE

SITE PLAN APPROVAL

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1	Revised per City's Comments	12/11/25
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NY PROFESSIONAL ENGINEER NO. 095227

PROJECT #:	250566
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INLET DRAINAGE AREA PLAN

SHEET NUMBER:

FIGURE 7

1032

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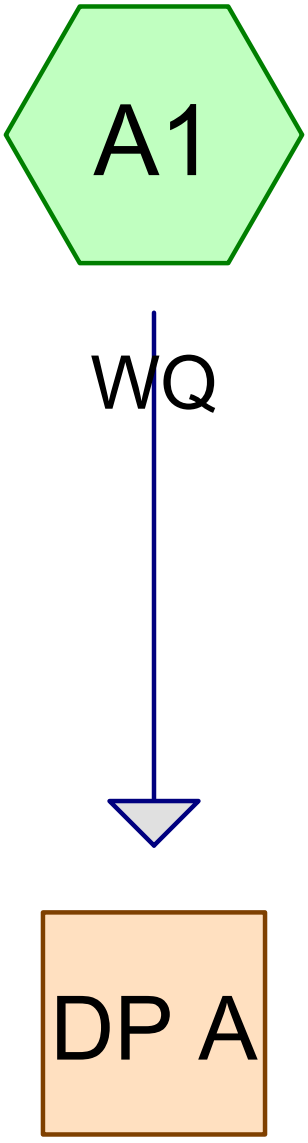
APPENDIX A

Water Quality HydroCAD Report



Subcat Reach Pond Link

Routing Diagram for WQ Model
Prepared by AKRF, Inc, Printed 8/8/2025
HydroCAD® 10.20-5b s/n 04852 © 2023 HydroCAD Software Solutions LLC

Rainfall Events Listing (selected events)

Event#	Event Name	Storm Type	Curve	Mode	Duration (hours)	B/B	Depth (inches)	AMC
1	90% WQv	NY-Mount Vernon 24-hr S1	1-yr	Default	24.00	1	1.66	2

Time span=5.00-20.00 hrs, dt=0.05 hrs, 301 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

SubcatchmentA1: WQ Runoff Area=0.500 ac 100.00% Impervious Runoff Depth>1.31"
Tc=6.0 min CN=98 Runoff=0.84 cfs 0.055 af

Reach DP A: Inflow=0.84 cfs 0.055 af
Outflow=0.84 cfs 0.055 af

Summary for Subcatchment A1: WQ

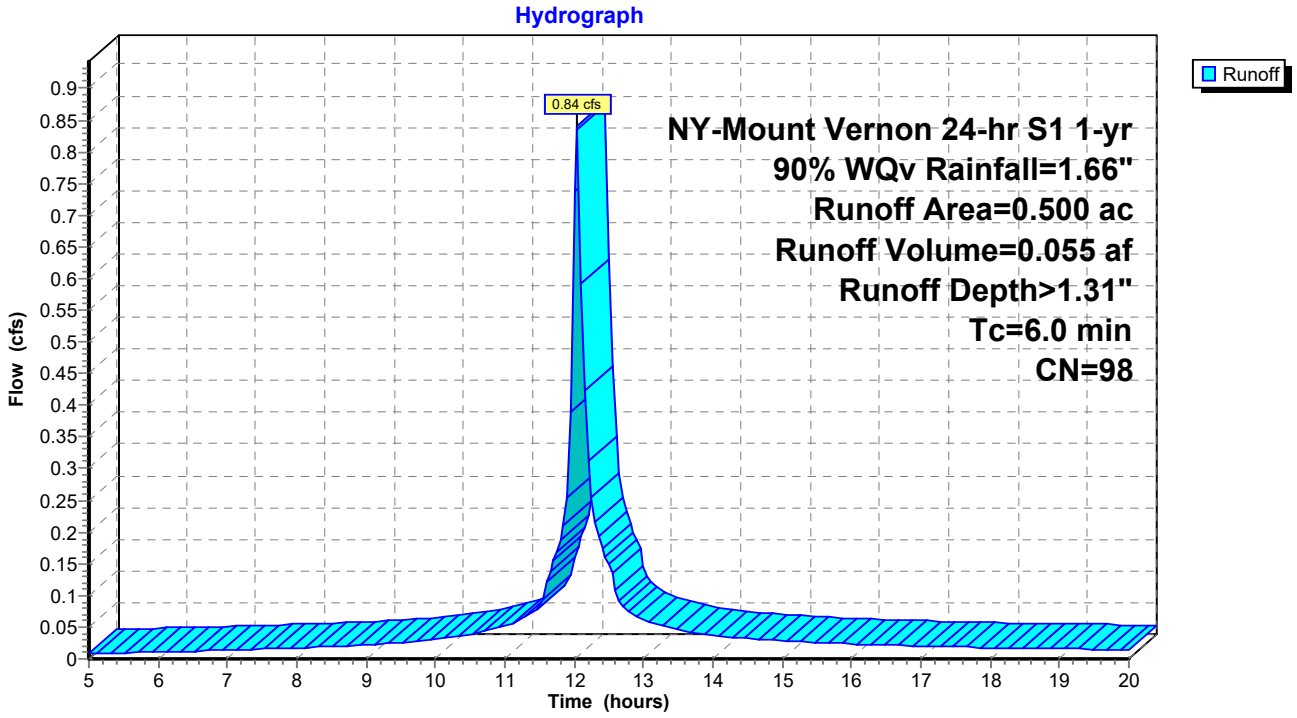
Runoff = 0.84 cfs @ 12.04 hrs, Volume= 0.055 af, Depth> 1.31"
Routed to Reach DP A :

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
NY-Mount Vernon 24-hr S1 1-yr 90% WQv Rainfall=1.66"

Area (ac)	CN	Description
0.500	98	Paved parking, HSG D
0.500		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Subcatchment A1: WQ

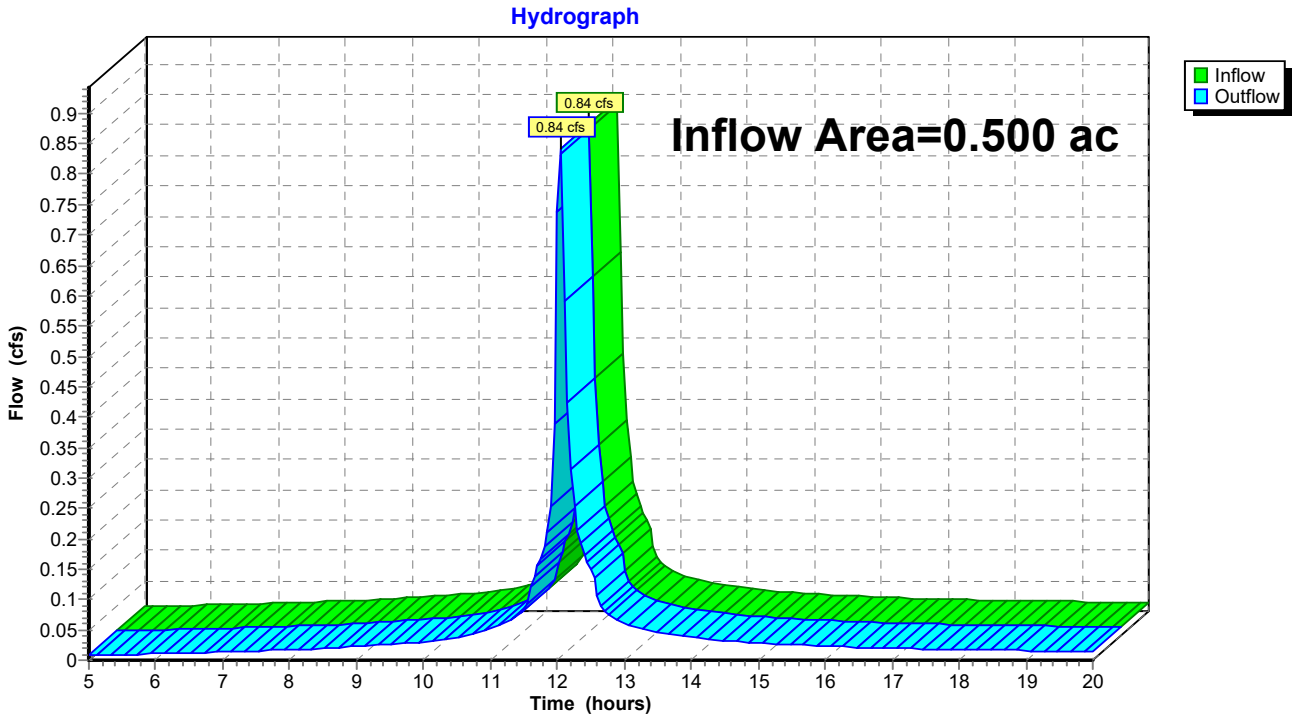


Summary for Reach DP A:

Inflow Area = 0.500 ac,100.00% Impervious, Inflow Depth > 1.31" for 90% WQv event
Inflow = 0.84 cfs @ 12.04 hrs, Volume= 0.055 af
Outflow = 0.84 cfs @ 12.04 hrs, Volume= 0.055 af, Atten= 0%, Lag= 0.0 min

Routing by Stor-Ind+Trans method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

Reach DP A:



APPENDIX B

HydroShield Lab Certification Letter
HydroShield Operation and Maintenance Manual
HydroShield Detail and Specifications

State of New Jersey

DEPARTMENT OF ENVIRONMENTAL PROTECTION

PHILIP D. MURPHY
Governor

TAHESHA L. WAY
Lt. Governor

DIVISION OF WATERSHED PROTECTION AND RESTORATION
BUREAU OF NJPDES STORMWATER PERMITTING & WATER QUALITY MANAGEMENT
P.O. Box 420 Mail Code 501-02A
Trenton, New Jersey 08625-0420
609-633-7021 / Fax: 609-777-0432
https://dep.nj.gov/stormwater/

SHAWN M. LATOURETTE
Commissioner

October 3, 2024

Jeremy Fink, P.E.
Associate Director of Product Development
Hydro International
94 Hutchins Drive
Portland, ME 04102

Re: MTD Lab Certification
Hydro-Shield Advance Plus Hydrodynamic Separator
Online Installation

TSS Removal Rate 50%

Dear Mr. Fink:

The Stormwater Management rules under N.J.A.C. 7:8-5.2(f) and 5.2(j) allow the use of manufactured treatment devices (MTDs) for compliance with the design and performance standards at N.J.A.C. 7:8-5 if the pollutant removal rates have been verified by the New Jersey Corporation for Advanced Technology (NJCAT) and have been certified by the New Jersey Department of Environmental Protection (NJDEP). Hydro International has requested a Laboratory Certification for the Hydro-Shield Advance Plus Hydrodynamic Separator (Hydro-Shield Advance Plus).

The project falls under the "Procedure for Obtaining Verification of a Stormwater Manufactured Treatment Device from New Jersey Corporation for Advance Technology" dated August 4, 2021. The applicable protocol is the "New Jersey Laboratory Testing Protocol to Assess Total Suspended Solids Removal by a Hydrodynamic Sedimentation Manufactured Treatment Device" dated January 1, 2021, and last updated April 25, 2023.

NJCAT verification documents submitted to the NJDEP indicate that the requirements of the aforementioned protocol have been met or exceeded. The NJCAT letter also included a recommended certification TSS removal rate and the required maintenance plan. The NJCAT Verification Report with the Verification Appendix (dated September 2024) for this device is published online at http://www.njcat.org/verification-process/technology-verification-database.html.

The NJDEP certifies the use of the Hydro-Shield Advance Plus by Hydro International at a TSS removal rate of 50% when designed, operated and maintained in accordance with the information provided in the Verification Appendix and the following conditions:

1. The maximum treatment flow rate (MTFR) for the manufactured treatment device (MTD) is calculated using the New Jersey Water Quality Design Storm (1.25 inches in 2 hrs) in N.J.A.C. 7:8-5.5.

2. The Hydro-Shield Advance Plus stormwater treatment device shall be installed using the same configuration reviewed by NJCAT and shall be sized in accordance with the criteria specified in item 6 below.

3. This Hydro-Shield Advance Plus stormwater treatment device cannot be used in series with another MTD or a media filter (such as a sand filter) to achieve an enhanced removal rate for total suspended solids (TSS) removal under N.J.A.C. 7:8-5.5.

4. Additional design criteria for MTDs can be found in Chapter 11.3 of the New Jersey Stormwater Best Management Practices (NJ Stormwater BMP) Manual which can be found on-line at https://dep.nj.gov/stormwater/.

5. The maintenance plan for a site using this device shall incorporate, at a minimum, the maintenance requirements for the Hydro-Shield Advance Plus. A copy of the maintenance plan is attached to this certification. However, it is recommended to review the maintenance website at https://hydro-int.com/sites/default/files/2024-09/HSA_OandM_.pdf for any changes to the maintenance requirements.

6. Sizing Requirements:

   The example below demonstrates the sizing procedure for the Hydro-Shield Advance Plus:

   Example: A 0.25-acre impervious site with a slope of 5% is to be treated to 50% TSS removal using a Hydro-Shield Advance Plus. The hydraulically most distant point to the inlet of the Hydro-Shield Advance Plus is 110 feet. The site is located in an area for which the projected 2-year storm rainfall depth was calculated to be 3.84 inches.

   Maximum Treatment Flow Rate (MTFR) Evaluation:

   The site runoff (Q) was based on the following:

   CN = 98 (Curve Number for impervious)
   Dimensionless Unit Hydrograph (DUH) = SCS Standard DUH (peak rate factor of 484)
   Time of concentration = 0.8 minutes
   Q = 0.77 cfs

   Given the site runoff is 0.77 cfs and based on Table 1 below, the Hydro-Shield Advance Plus 4-ft Model with an MTFR of 1.49 cfs would be the smallest model approved that could be used for this site that could remove 50% of the TSS from the impervious area without exceeding the MTFR.

   The sizing table corresponding to the available system models is noted below. Additional specifications regarding each model can be found in the Verification Appendix.

Table 1: Hydro-Shield Advance Plus Models and Associated MTFRs

Hydro-Shield Advance Plus Model	Diameter (ft)	Maximum Treatment Flow Rate (cfs)	Effective Treatment Area (sq. ft.)	Hydraulic Loading Rate (gpm/sq. ft.)
4-ft	4	1.49	12.6	53.1
6-ft	6	3.35	28.3	53.1
8-ft	8	5.95	50.3	53.1

Be advised a detailed maintenance plan is mandatory for any project with a Stormwater BMP subject to the Stormwater Management Rules, N.J.A.C. 7:8. The plan must include all the items identified in the Stormwater Management Rules, N.J.A.C. 7:8-5.8. Such items include, but are not limited to, the list of inspection and maintenance equipment and tools, specific corrective and preventative maintenance tasks, indication of problems in the system, and training of maintenance personnel. Additional information can be found in Chapter 8: Maintenance and Retrofit of Stormwater Management Measures.

If you have any questions regarding the above information, please contact Lisa Schaefer of my office at lisa.schaefer@dep.nj.gov.

Sincerely,

Gabriel Mahon, Chief
Bureau of NJPDES Stormwater Permitting & Water Quality Management
Division of Watershed Protection and Restoration
New Jersey Department of Environmental Protection

Attachment: Maintenance Plan

c: Richard Magee, NJCAT

Operation and Maintenance Manual

Hydro-Shield™ Advance

Hydrodynamic Separator for Stormwater Treatment

Table of Contents

3 Hydro-Shield™ Advance by Hydro International

- Introduction

- Operation

- Pollutant Capture and Retention

4 Model Sizes and Configuration

- Hydro-Shield™ Advance Components

5 Maintenance

- Overview

- Maintenance Equipment Considerations

- Determining Your Maintenance Schedule

6 Maintenance Procedures

- Inspection

- Floatables and Sediment Clean Out

8 Hydro-Shield™ Advance Installation Log

9 Hydro-Shield™ Advance Inspection and Maintenance Log

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I. Hydro-Shield™ Advance by Hydro International

Introduction

The Hydro-Shield™ Advance leads a new generation of hydrodynamic separator for stormwater treatment that utilize lamella technology for optimal settling performance. It efficiently removes total suspended solids (TSS), trash and hydrocarbons from stormwater runoff without washing out previously captured pollutants while providing an internal peak flow bypass. The Hydro-Shield™ Advance is available in multiple model configurations to accommodate a wide range of pipe sizes, peak flows and depth constraints.

Operation

The Hydro-Shield™ Advance operates on simple fluid hydraulics combined with a lamella treatment module for increased efficiency. It is self-activating, has no moving parts, no external power requirement and is fabricated with durable non-corrosive components. No manual procedures are required to operate the unit and maintenance is limited to monitoring accumulations of stored pollutants and periodic clean-outs. The Hydro-Shield™ Advance has been designed to allow for easy and safe access for inspection, monitoring and clean-out procedures. Neither entry into the unit nor removal of the internal components is necessary for maintenance, thus safety concerns related to confined-space-entry are avoided.

Pollutant Capture and Retention

The internal components of the Hydro-Shield™ Advance have been designed to optimize pollutant capture. Sediment is captured and retained in the base of the unit (Fig.1).

The pollutant storage volumes are isolated from the built-in bypass chamber to prevent washout during high-flow storm events. The sump of the Hydro-Shield™ Advance retains a standing water level between storm events. This ensures a quiescent flow regime at the onset of a storm, preventing resuspension and washout of pollutants captured during previous events.

Applications

- Stormwater treatment at the point of entry into the drainage line
- Sites constrained by space, topography or drainage profiles with limited slope and depth of cover
- Retrofit installations where stormwater treatment is placed on or tied into an existing storm drain line
- Pretreatment for filters, infiltration and storage

Advantages

- Integral bypass conveys large peak flows without the need for “offline” arrangements using separate junction manholes
- Advanced Treatment module for effective sediment capture
- Easy installation and maintenance
- Accommodates large pipe diameters

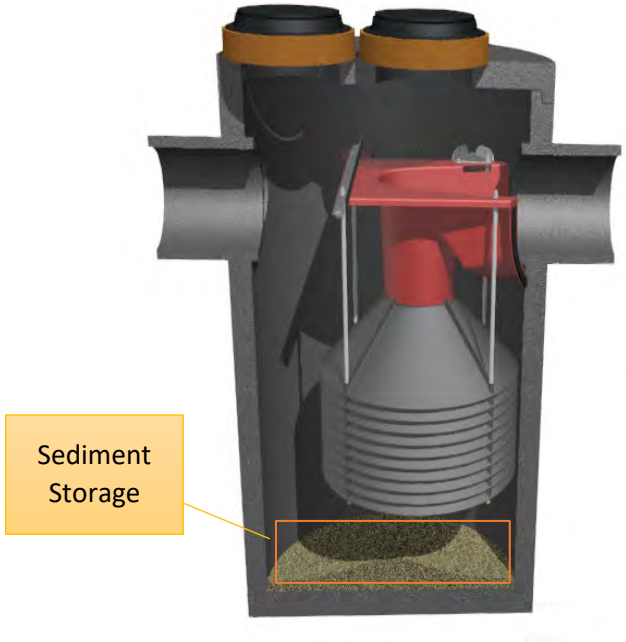


Figure 1: Pollutant storage volume in the Hydro-Shield™ Advance

II. Model Sizes & Configurations

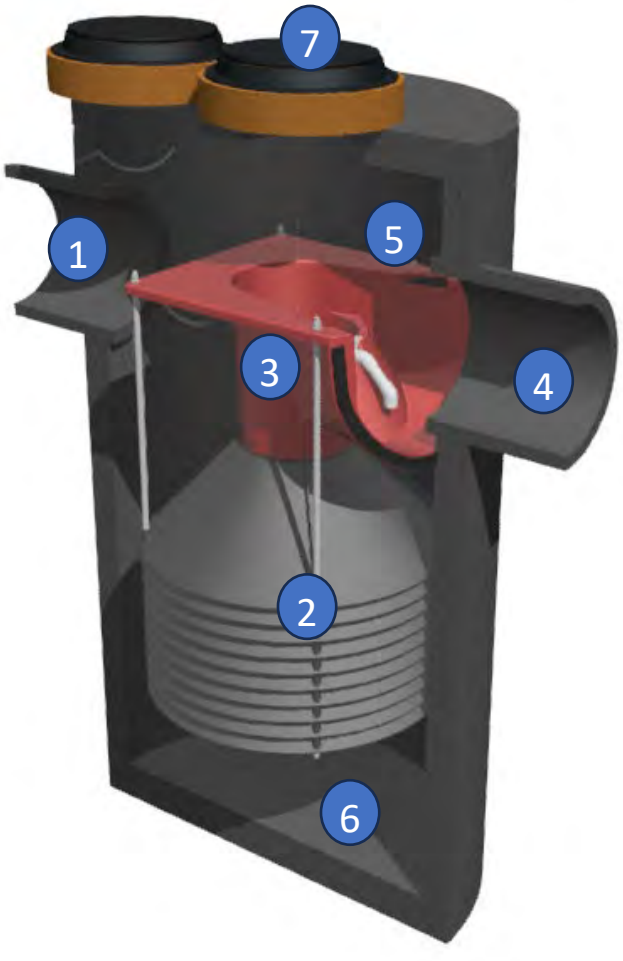
The Hydro-Shield™ Advance inlet and internal bypass arrangements are available in several model sizes and configurations. All Hydro-Shield™ Advance models include the internal components that are designed to remove and retain total suspended solids (TSS), (Fig.2). Hydro-Shield™ Advance model sizes (diameter) are shown in Table 1.

III. Maintenance

Hydro-Shield™ Advance Model Sizes (MH Dia.)
HSA-4ft
HSA-6ft
HSA-8ft

Hydro-Shield™ Advance Components

1. **Inlet Pipe**
2. **Treatment Module**
3. **Outlet Module**
4. **Outlet Pipe**
5. **Internal Bypass**
6. **Sediment Storage**
7. **Cover(s)**



Overview

The Hydro-Shield™ Advance protects the environment by removing a wide range of pollutants from stormwater runoff. Periodic removal of these captured pollutants is essential to the continuous, long-term functioning of the Hydro-Shield™ Advance. The unit will efficiently capture and retain sediment until the stated sediment storage capacity has been reached. The Hydro-Shield™ Advance will continue to operate afterwards but prolonged operation will reduce removal efficiency and may cause damage to the equipment.

The Hydro-Shield™ Advance allows for easy and safe inspection, monitoring and clean-out procedures. A commercially or municipally owned sump-vac is used to remove the captured sediment. Access ports are located in the top of the manhole. Maintenance events may include inspection, floatables removal, or sediment removal. Maintenance events do not require entry into the manhole, nor do they require the internal components of the Hydro-Shield™ Advance to be removed. In the case of inspection and floatables removal, a vactor truck is not required. However, a vactor truck is required if the maintenance event is to include sediment removal.

Maintenance Equipment Considerations

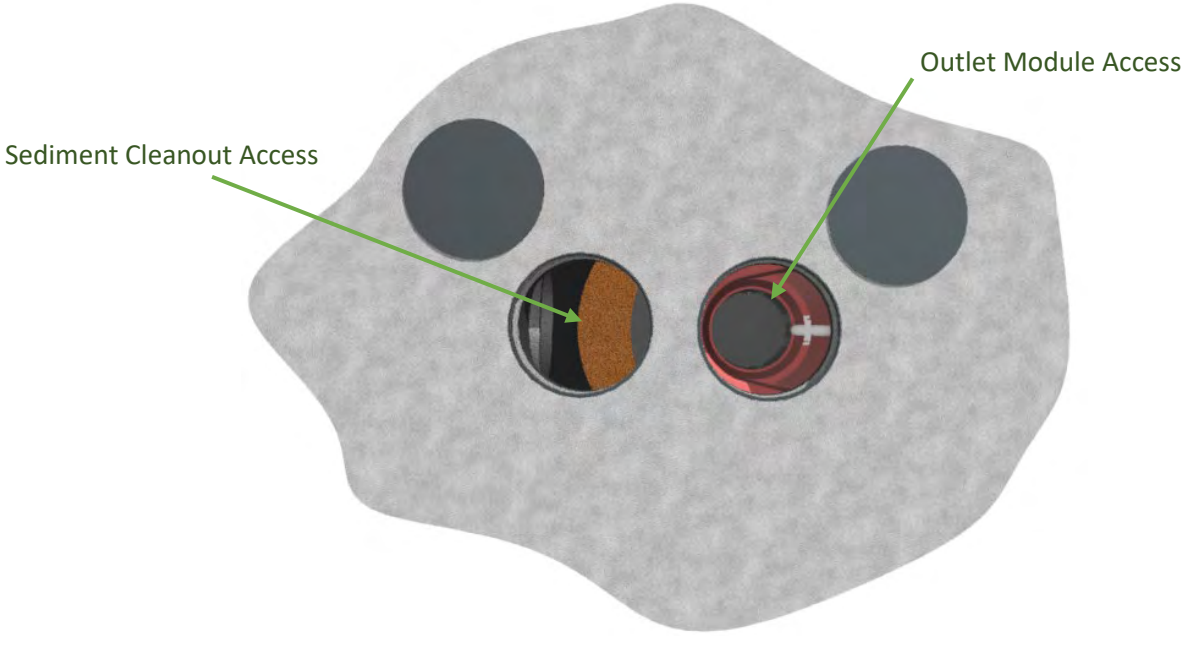
The internal components of the Hydro-Shield™ Advance have a dedicated area on the perimeter through which the sediment storage sump can be accessed with a sump vac hose. Access to the Outlet Module is also provided. (Fig.3). On 4ft units, access is via a shared manhole cover. Larger units are provided with 2 separate covers.

Determining Your Maintenance Schedule

The frequency of clean-out is determined in the field after installation. During the first year of operation, the unit should be inspected every six months to determine the rate of sediment and floatables accumulation. A simple probe such as a Sludge-Judge® can be used to determine the level of accumulated solids stored in the sump. This information can be recorded in the maintenance log (see page 9) to establish a routine maintenance schedule.

The vactor procedure, including both sediment and floatables removal, for Hydro-Shield™ Advance typically takes less than 30 minutes

Fig.3 Hydro-Shield™ Advance maintenance access.



Inspection Procedures

1. Set up any necessary safety equipment around the access port or grate of the Hydro-Shield™ Advance as stipulated by local ordinances. Safety equipment should notify passing pedestrian and road traffic that work is being done.
2. Remove the manhole lid(s).
3. Without entering the vessel, look down into the chamber to inspect the inside. Make note of any irregularities. Fig.4 shows the standing water level that should be observed.
4. Without entering the vessel, use the pole with the skimmer net to remove floatables and loose debris from the components and water surface.
5. Using a sediment probe such as a Sludge Judge®, measure the depth of sediment that has collected in the sump of the vessel.
6. On the Maintenance Log (see page 9), record the date, unit location, estimated volume of floatables and gross debris removed, and the depth of sediment measured. Also note any apparent irregularities such as damaged components or blockages.
7. Securely replace the grate or lid.
8. Take down safety equipment.
9. Notify Hydro International of any irregularities noted during inspection

Floatables and Sediment Clean Out

Floatables clean out is typically done in conjunction with sediment removal.
A commercially or municipally owned sump-vac is used to remove captured sediment
and floatables (Fig.4).
Floatables and loose debris can also be netted with a skimmer and pole.
The access port located at the top of the manhole provides unobstructed access
for a vactor hose to be lowered to the base of the sump.

Scheduling

- Floatables and sump clean out are typically conducted once a year during any season.
- Floatables and sump clean out should occur as soon as possible following a spill in the contributing drainage area.

Recommended Equipment

- Safety Equipment (traffic cones, etc)
- Crow bar or other tool to remove grate or lid
- Pole with skimmer or net (if only floatables are being removed)
- Sediment probe (such as a Sludge Judge®)
- Vactor truck (flexible hose recommended)
    - Spray hose or wand and clean water
- Hydro-Shield™ Advance Maintenance Log

Fig.4 Floatables are removed with a vactor hose

Procedures Floatables and Sediment Clean Out Procedures

1. Set up any necessary safety equipment around the access port or grate of the Hydro-Shield™ Advance as stipulated by local ordinances. Safety equipment should notify passing pedestrian and road traffic that work is being done.
2. Remove the lid(s) to the manhole.
3. Without entering the vessel, look down into the chamber to inspect the inside. Make note of any irregularities.
4. Remove floatables on the surface of the water with the vactor hose or with the skimmer or net
5. Using a sediment probe such as a Sludge Judge®, measure the depth of sediment that has collected in the sump of the vessel and record it in the Maintenance Log (page 9).
6. Once all floatables have been removed, drop the vactor hose to the base of the sump. Vactor out the sediment and gross debris off the sump floor
7. Once the water level is below the Treatment Module, visually inspect the Outlet Module and inside of the Treatment Module
8. If necessary, use a spray hose or wand to dislodge any debris or silt and flush them into the sump.
9. Retract the vactor hose from the vessel.

10. On the Maintenance Log provided by Hydro International, record the date, unit location, estimated volume of floatables and gross debris removed, and the depth of sediment measured. Also note any apparent irregularities such as damaged components, blockages, or irregularly high or low water levels.
11. Securely replace the lid(s).

Maintenance at a Glance

- Regularly during first year of installation
- Every 6 months after the first year of installation
- Once per year, with sediment removal
- Following a spill in the drainage area
- Once per year or as needed
- Following a spill in the drainage area

Inspection
Floatables Removal
Sediment Removal

NOTE: For most clean outs the entire volume of liquid does not need to be removed from the manhole. Only remove the first few inches of oils and floatables from the water surface to reduce the total volume of liquid removed during a clean out

Hydro-Shield™ Advance Installation Log

HYDRO INTERNATIONAL REFERENCE NUMBER:	
SITE NAME:	
SITE LOCATION:	
OWNER:	CONTRACTOR:
CONTACT NAME:	CONTACT NAME:
COMPANY NAME:	COMPANY NAME:
ADDRESS:	ADDRESS:
TELEPHONE:	TELEPHONE:
FAX:	FAX:

INSTALLATION DATE: / /

MODEL SIZE (CIRCLE ONE):

INLET :

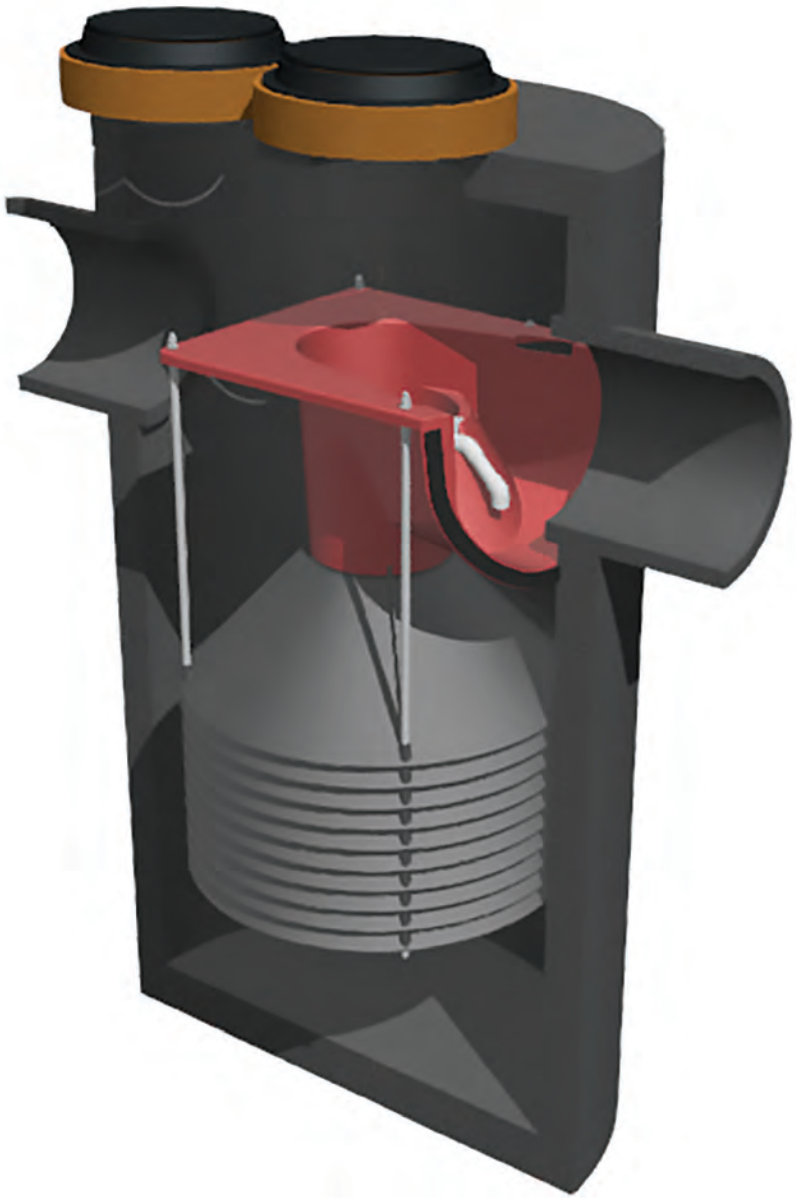
Hydro-Shield™ Advance Inspection and Maintenance Log

Date	Initials	Depth of Floatables and Oils	Sediment Depth Measured	Volume of Sediment Removed	Site Activity and Comments

Hydro-Shield™ Advance

Hydrodynamic Separator for Stormwater Treatment

Operations and Maintenance Manual



Oldcastle Infrastructure™
A CRH COMPANY

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- Pollutant Capture and Retention

4 Model Sizes and Configuration

- Hydro-Shield™ Advance Components

4 Maintenance

- Overview
- Maintenance Equipment Considerations
- Determining Your Maintenance Schedule

6 Maintenance Procedures

- Inspection
- Floatables and Sediment Clean Out

8 Hydro-Shield™ Advance Installation Log

9 Hydro-Shield™ Advance Inspection and Maintenance Log

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1. Hydro-Shield™ Advance by Hydro International

Introduction

The Hydro-Shield™ Advance leads a new generation of hydrodynamic separator for stormwater treatment that utilize lamella technology for optimal settling performance. It efficiently removes total suspended solids (TSS), trash and hydrocarbons from stormwater runoff without washing out previously captured pollutants while providing an internal peak flow bypass. The Hydro-Shield™ Advance is available in multiple model configurations to accommodate a wide range of pipe sizes, peak flows and depth constraints.

Operation

The Hydro-Shield™ Advance operates on simple fluid hydraulics combined with a lamella treatment module for increased efficiency. It is self-activating, has no moving parts, no external power requirement and is fabricated with durable non-corrosive components. No manual procedures are required to operate the unit and maintenance is limited to monitoring accumulations of stored pollutants and periodic clean-outs. The Hydro-Shield™ Advance has been designed to allow for easy and safe access for inspection, monitoring and clean-out procedures. Neither entry into the unit nor removal of the internal components is necessary for maintenance, thus safety concerns related to confined-space-entry are avoided.

Pollutant Capture and Retention

The internal components of the Hydro-Shield™ Advance have been designed to optimize pollutant capture. Sediment is captured and retained in the base of the unit (Fig.1).

The pollutant storage volumes are isolated from the built-in bypass chamber to prevent washout during high-flow storm events. The sump of the Hydro-Shield™ Advance retains a standing water level between storm events. This ensures a quiescent flow regime at the onset of a storm, preventing resuspension and washout of pollutants captured during previous events.

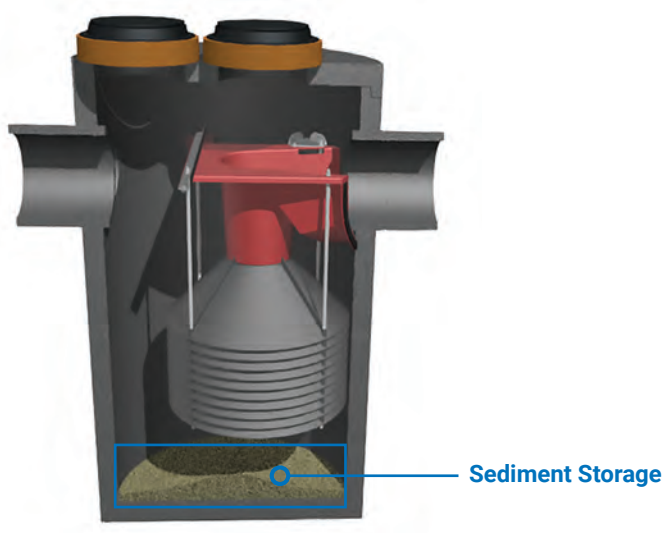

Figure 1: Pollutant storage volume in the Hydro-Shield™ Advance

Applications

- Stormwater treatment at the point of entry into the drainage line
- Sites constrained by space, topography or drainage profiles with limited slope and depth of cover
- Retrofit installations where stormwater treatment is placed on or tied into an existing storm drain line
- Pretreatment for filters, infiltration and storage

Advantages

- Integral bypass conveys large peak flows without the need for “offline” arrangements using separate junction manholes
- Advanced Treatment module for effective sediment capture
- Easy installation and maintenance
- Accommodates large pipe diameters

2. Model Sizes & Configurations

The Hydro-Shield™ Advance inlet and internal bypass arrangements are available in several model sizes and configurations. All Hydro-Shield™ Advance models include the internal components that are designed to remove and retain total suspended solids (TSS), (Fig.2). Hydro-Shield™ Advance model sizes (diameter) are shown in Table 1.

Hydro-Shield™ Advance Model Sizes (MH Dia.)
HSA-4FT
HSA-6FT
HSA-8FT

3. Maintenance

Hydro-Shield™ Advance Components

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2. Treatment Module
3. Outlet Module
4. Outlet Pipe
5. Internal Bypass
6. Sediment Storage
7. Cover(s)

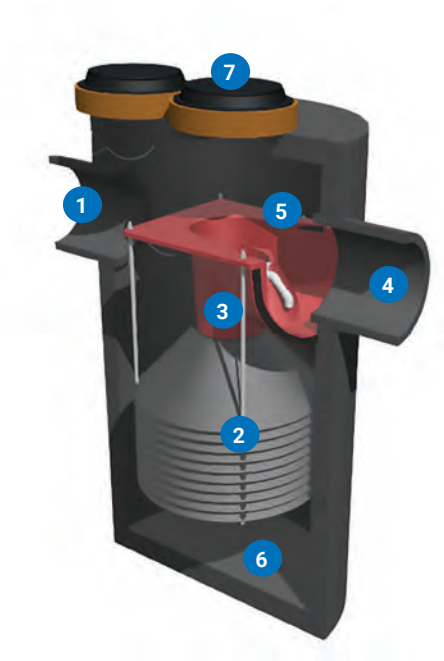

Figure 2

Overview

The Hydro-Shield™ Advance protects the environment by removing a wide range of pollutants from stormwater runoff. Periodic removal of these captured pollutants is essential to the continuous, long-term functioning of the Hydro-Shield™ Advance. The unit will efficiently capture and retain sediment until the stated sediment storage capacity has been reached. The Hydro-Shield™ Advance will continue to operate afterwards but prolonged operation will reduce removal efficiency and may cause damage to the equipment.

The Hydro-Shield™ Advance allows for easy and safe inspection, monitoring and clean-out procedures. A commercially or municipally owned sump-vac is used to remove the captured sediment. Access ports are located in the top of the manhole. Maintenance events may include inspection, floatables removal, or sediment removal. Maintenance events do not require entry into the manhole, nor do they require the internal components of the Hydro-Shield™ Advance to be removed. In the case of inspection and floatables removal, a vactor truck is not required. However, a vactor truck is required if the maintenance event is to include sediment removal.

Maintenance Equipment Considerations

The internal components of the Hydro-Shield™ Advance have a dedicated area on the perimeter through which the sediment storage sump can be accessed with a sump vac hose. Access to the Outlet Module is also provided. (Fig.3). On 4ft units, access is via a shared manhole cover. Larger units are provided with 2 separate covers.

Determining Your Maintenance Schedule

The frequency of clean-out is determined in the field after installation. During the first year of operation, the unit should be inspected every six months to determine the rate of sediment and floatables accumulation. A simple probe such as a Sludge-Judge® can be used to determine the level of accumulated solids stored in the sump. This information can be recorded in the maintenance log (see page 9) to establish a routine maintenance schedule.

The vactor procedure, including both sediment and floatables removal, for Hydro-Shield™ Advance typically takes less than 30 minutes.

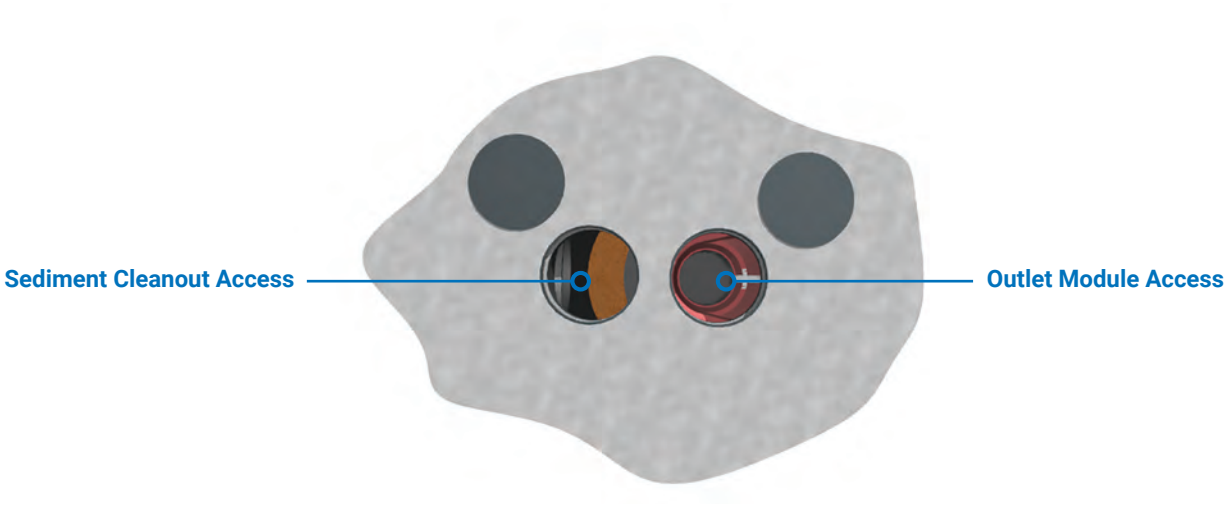

Fig.3 Hydro-Shield™ Advance maintenance access.

4. Maintenance Procedures

Inspection Procedures

1. Set up any necessary safety equipment around the access port or grate of the Hydro-Shield™ Advance as stipulated by local ordinances. Safety equipment should notify passing pedestrian and road traffic that work is being done.
2. Remove the manhole lid(s).
3. Without entering the vessel, look down into the chamber to inspect the inside. Make note of any irregularities. Fig.4 shows the standing water level that should be observed.
4. Without entering the vessel, use the pole with the skimmer net to remove floatables and loose debris from the components and water surface.
5. Using a sediment probe such as a Sludge Judge®, measure the depth of sediment that has collected in the sump of the vessel.
6. On the Maintenance Log (see page 9), record the date, unit location, estimated volume of floatables and gross debris removed, and the depth of sediment measured. Also note any apparent irregularities such as damaged components or blockages.
7. Securely replace the grate or lid.
8. Take down safety equipment.
9. Notify Hydro International of any irregularities noted during inspection.

Fig.4 Floatables are removed with a vactor hose .

Floatables and Sediment Clean Out

Floatables clean out is typically done in conjunction with sediment removal.

A commercially or municipally owned sump-vac is used to remove captured sediment and floatables (Fig.4). Floatables and loose debris can also be netted with a skimmer and pole.

The access port located at the top of the manhole provides unobstructed access for a vactor hose to be lowered to the base of the sump.

Scheduling

- Floatables and sump clean out are typically conducted once a year during any season.
- Floatables and sump clean out should occur as soon as possible following a spill in the contributing drainage area.

Recommended Equipment

- Safety Equipment (traffic cones, etc).
- Crow bar or other tool to remove grate or lid.
- Pole with skimmer or net (if only floatables are being removed.)
- Sediment probe (such as a Sludge Judge®).
- Vactor truck (flexible hose recommended).
  - Spray hose or wand and clean water .
- Hydro-Shield™ Advance Maintenance Log .

Procedures Floatables and Sediment Clean Out Procedures

1. Set up any necessary safety equipment around the access port or grate of the Hydro-Shield™ Advance as stipulated by local ordinances. Safety equipment should notify passing pedestrian and road traffic that work is being done.
2. Remove the lid(s) to the manhole.
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4. Remove floatables on the surface of the water with the vactor hose or with the skimmer or net
5. Using a sediment probe such as a Sludge Judge®, measure the depth of sediment that has collected in the sump of the vessel and record it in the Maintenance Log (page 9).
6. 6. Once all floatables have been removed, drop the vactor hose to the base of the sump. Vactor out the sediment and gross debris off the sump floor
7. 7. Once the water level is below the Treatment Module, visually inspect the Outlet Module and inside of the Treatment Module
8. If necessary, use a spray hose or wand to dislodge any debris or silt and flush them into the sump.
9. Retract the vactor hose from the vessel.
10. On the Maintenance Log provided by Hydro International, record the date, unit location, estimated volume of floatables and gross debris removed, and the depth of sediment measured. Also note any apparent irregularities such as damaged components, blockages, or irregularly high or low water levels.
11. Securely replace the lid(s).

Maintenance at a Glance

- Regularly during first year of installation.
- Every 6 months after the first year of installation .
- Once per year, with sediment removal .
- Following a spill in the drainage area.
- Once per year or as needed.
- Following a spill in the drainage area.

Inspection
Floatables Removal
Sediment Removal

NOTE: For most clean outs the entire volume of liquid does not need to be removed from the manhole. Only remove the first few inches of oils and floatables from the water surface to reduce the total volume of liquid removed during a clean out.

Hydro-Shield™ Advance Installation Log	
Hydro International Reference Number:	
Site Name:	
Site Location:	
Owner:	**Contractor**
Contact Name:	**Contact Name:**
Company Name:	**Company Name:**
Address:	**Address:**
Telephone:	**Telephone:**
Fax:	**Fax**

INSTALLATION DATE:

MODEL SIZE (CIRCLE ONE):

INLET :

Hydro-Shield™ Advance Inspection and Maintenance Log					
Date	Initials	Depth of Floatables and Oils	Sediment Depth Measured	Volume of Sediment Removed	Site Activity and Comments

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A CRH COMPANY

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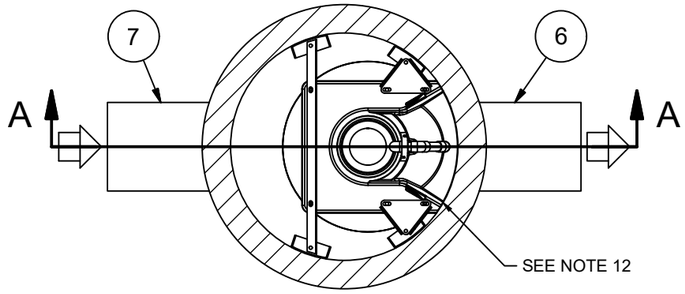
Trusted partnerships.
Full scale solutions.

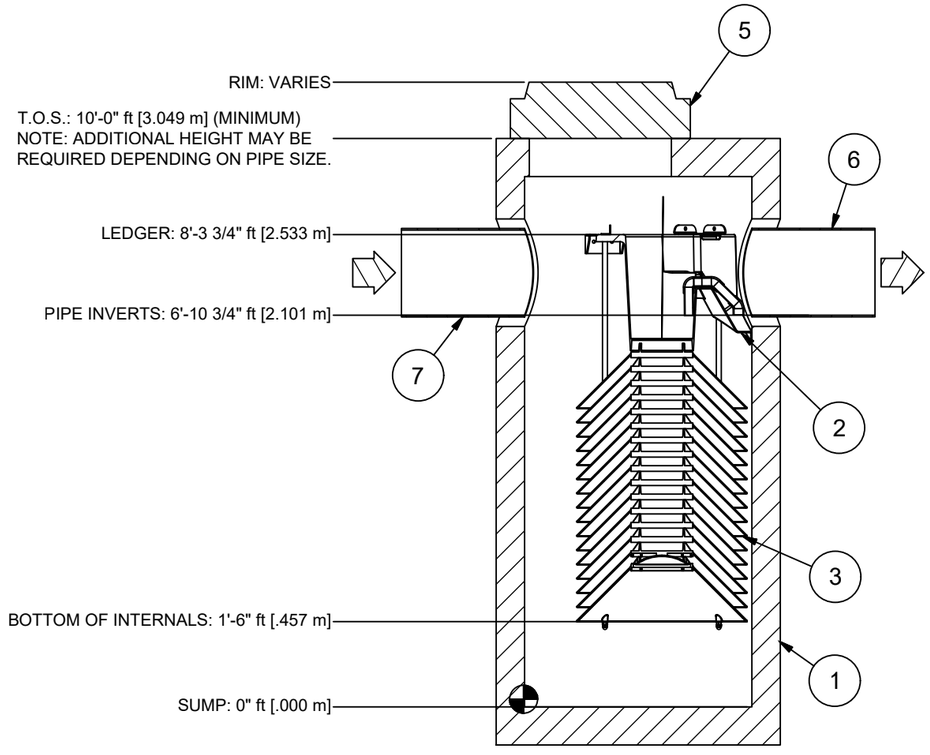
STRUCTURE PROPERTIES	
STRUCTURE ID	-
MODEL SIZE	HSA-4P
TREATMENT FLOW RATE (cfs)	1.49
PEAK FLOW RATE (cfs)	7.4
SEDIMENT STORAGE (cu. yd.)	0.7

NOTES:

1. LIVE LOADING CRITERIA:
   A. AASHTO HS-20-44 (WITH IMPACT)
   B. LATERAL LIVE LOAD SURCHARGE: 80 PSF (TO 8.00 FT DEPTH)
   C. NO LATERAL SURCHARGE FROM ANY ADJACENT BUILDINGS, WALLS, FOUNDATIONS, OR ANY ADDITIONAL SITE ELEMENTS.
2. SOIL LOADING CRITERIA:
   A. SOIL COVER DEPTH: 0.50 FT (MIN.) - 5.00 FT (MAX.)
   B. SOIL UNIT WEIGHT: 120 PCF
   C. ASSUMED WATER TABLE ELEVATION: BELOW BOTTOM OF PRECAST
   D. REQUIRED ALLOWABLE BEARING PRESSURE: 2,500 PSF
   E. EQUIVALENT LATERAL FLUID PRESSURE: 45 PCF (ACTIVE)
   F. SEISMIC LATERAL EARTH PRESSURES: NOT APPLICABLE
3. CONCRETE (NORMALWEIGHT):
   A. MIN. 28-DAY COMPRESSIVE STRENGTH: 6,000 PSI
   B. CEMENT: ASTM C150
4. STEEL REINFORCEMENT: ASTM A615 / A706 (GRADE 60)
5. REFERENCE STANDARDS: ASTM C890& C913, ACI 318-14
6. THIS STRUCTURE IS DESIGNED TO THE PARAMETERS NOTED HEREIN. ENGINEER-OF-RECORD SHALL VERIFY FY THAT NOTED PARAMETERS MEET OR EXCEED PROJECT REQUIREMENTS. IF DESIGN PARAMETERS ARE INCORRECT, REVIEWING ENGINEER/AUTHORITY SHALL NOTIFY OLDCASTLE INFRASTRUCTURE UPON REVIEW OF THIS SUBMITTAL.
7. OVERSIZED HOLES TO ACCOMMODATE SPECIFIC PIPE TYPE MUST BE CONCENTRIC TO PIPE ID. AFTER PIPES ARE INSTALLED, ALL ANNULAR SPACES SHALL BE FILLED WITH A MINIMUM OF 3,000 PSI CONCRETE FOR FULL THICKNESS OF PRECAST WALLS. PIPES ARE TO BE FLUSH WITH THE INSIDE SURFACE OF THE CONCRETE STRUCTURE.
8. CONTRACTOR RESPONSIBLE TO VERIFY ALL SIZES, LOCATIONS, AND ELEVATIONS OF OPENINGS.
9. CONTRACTOR RESPONSIBLE TO ENSURE ADEQUATE BEARING SURFACE IS PROVIDED (I.E. COMPACTED AND LEVEL PER PROJECT SPECIFICATIONS).
10. SECTION HEIGHTS, SLAB/WALL THICKNESSES, AND KEYWAYS ARE SUBJECT TO CHANGE AS REQUIRED FOR SITE REQUIREMENTS AND/OR DUE TO PRODUCT AVAILABILITY AND PRODUCTION FACILITY CONSTRAINTS.
11. MAXIMUM PICK WEIGHTS":
    A. TOP: # LBS
    B. BASE: # LBS*
       (* COMBINED WEIGHT OF BASE INCLUDES PRODUCT INTERNALS.)
12. THE CONTRACTOR IS RESPONSIBLE FOR SETTING AND SECURING THE HSA UNIT ASSEMBLY TO THE PRE-INSTALLED LEDGER ANGLE BRACKETS USING THE PROVIDED HARDWARE. ADDITIONALLY, THE CONTACTOR MUST ENSURE THE SUPPLIED GASKET IS APPLIED BETWEEN THE FACE OF THE OUTLET MODULE AND THE MANHOLE WALL TO ENSURE PROPER SEALING AND PREVENT LEAKAGE.



PLAN VIEW



SECTION A-A

BILL OF MATERIALS						
ITEM	DESCRIPTION	BY	INSTALL	QTY	UNIT	SIZE & TYPE
1	4FT PRECAST MANHOLE	OI	GC	1	EA	
2	OUTLET MODULE	OI	OI	1	EA	
3	TREATMENT MODULE	OI	OI	1	EA	
4	GRADE RING(S)	GC	GC	1	EA	
5	FRAME & COVER	OI	GC	1	EA	30"Ø/ NF-0320-110
6	OUTLET PIPE	GC	GC	1	EA	18"Ø MAX
7	INLET PIPE	GC	GC	1	EA	18"Ø MAX

PROJECT NAME: -

DRAWN: -
DATE: -
CHECKED: -
PROJECT #: -
MFG: -
SALES ORDER: -

REV	DESCRIPTION	DATE
-	-	-

HYDRO-SHIELD ADVANCE ™ HSA-4P

CUSTOMER: -

Oldcastle Infrastructure™ A CRH COMPANY
Ph: 888.965.3227 | www.oldcastleinfrastructure.com/stormwater

SPECIFIER DRAWING

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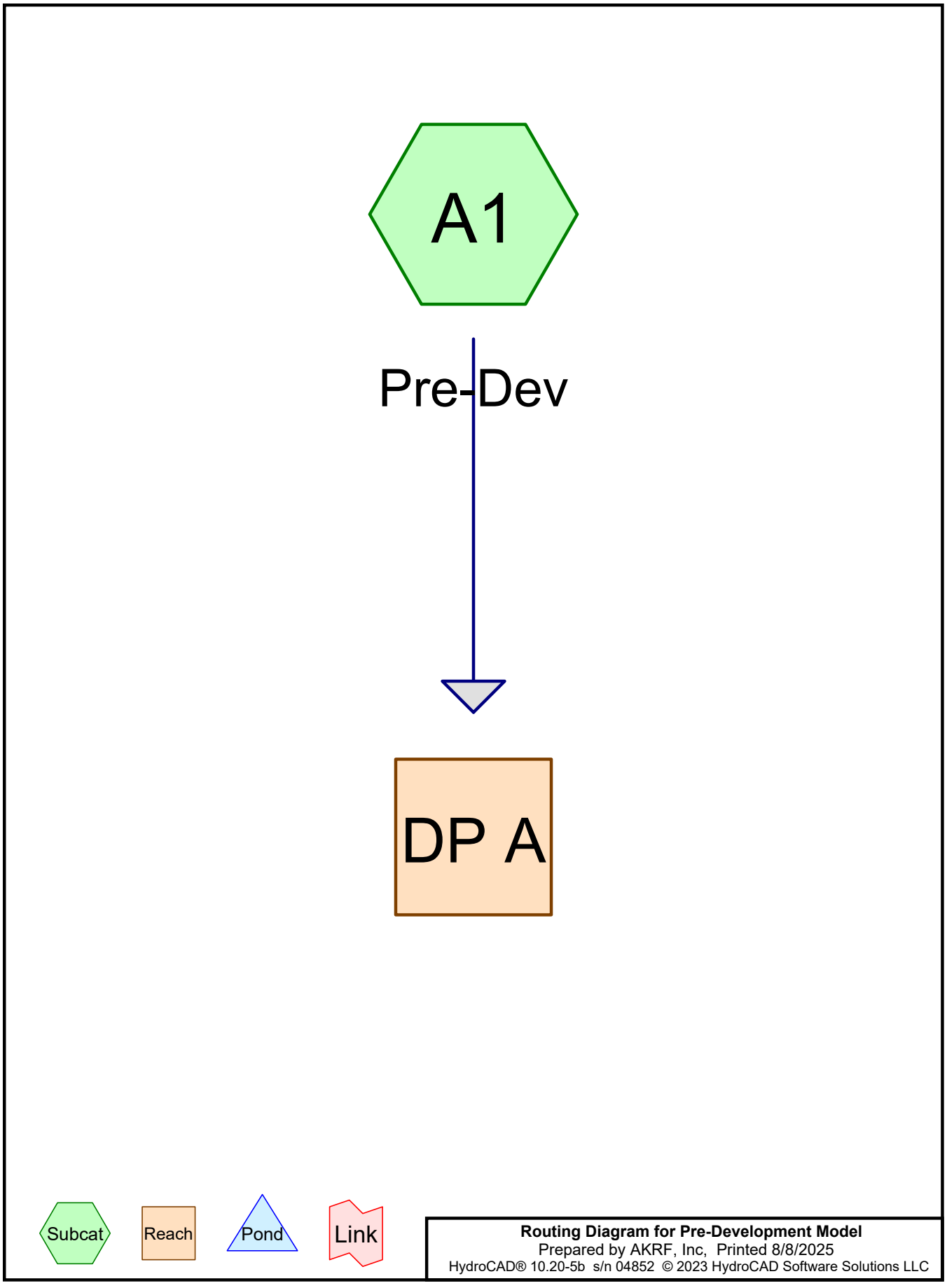
SHEET 1 OF 1

APPENDIX C

Pre-Development HydroCAD Report



Routing Diagram for Pre-Development Model
Prepared by AKRF, Inc, Printed 8/8/2025
HydroCAD® 10.20-5b s/n 04852 © 2023 HydroCAD Software Solutions LLC

Rainfall Events Listing (selected events)

Event#	Event Name	Storm Type	Curve	Mode	Duration (hours)	B/B	Depth (inches)	AMC
1	1-yr	NY-Mount Vernon 24-hr S1	1-yr	Default	24.00	1	2.84	2
2	10-yr	NY-Mount Vernon 24-hr S1	10-yr	Default	24.00	1	5.07	2
3	100-yr	NY-Mount Vernon 24-hr S1	100-yr	Default	24.00	1	8.92	2

Time span=5.00-20.00 hrs, dt=0.05 hrs, 301 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

SubcatchmentA1: Pre-Dev Runoff Area=0.500 ac 100.00% Impervious Runoff Depth>2.35"
Tc=6.0 min CN=98 Runoff=1.48 cfs 0.098 af

Reach DP A: Inflow=1.48 cfs 0.098 af
Outflow=1.48 cfs 0.098 af

Summary for Subcatchment A1: Pre-Dev

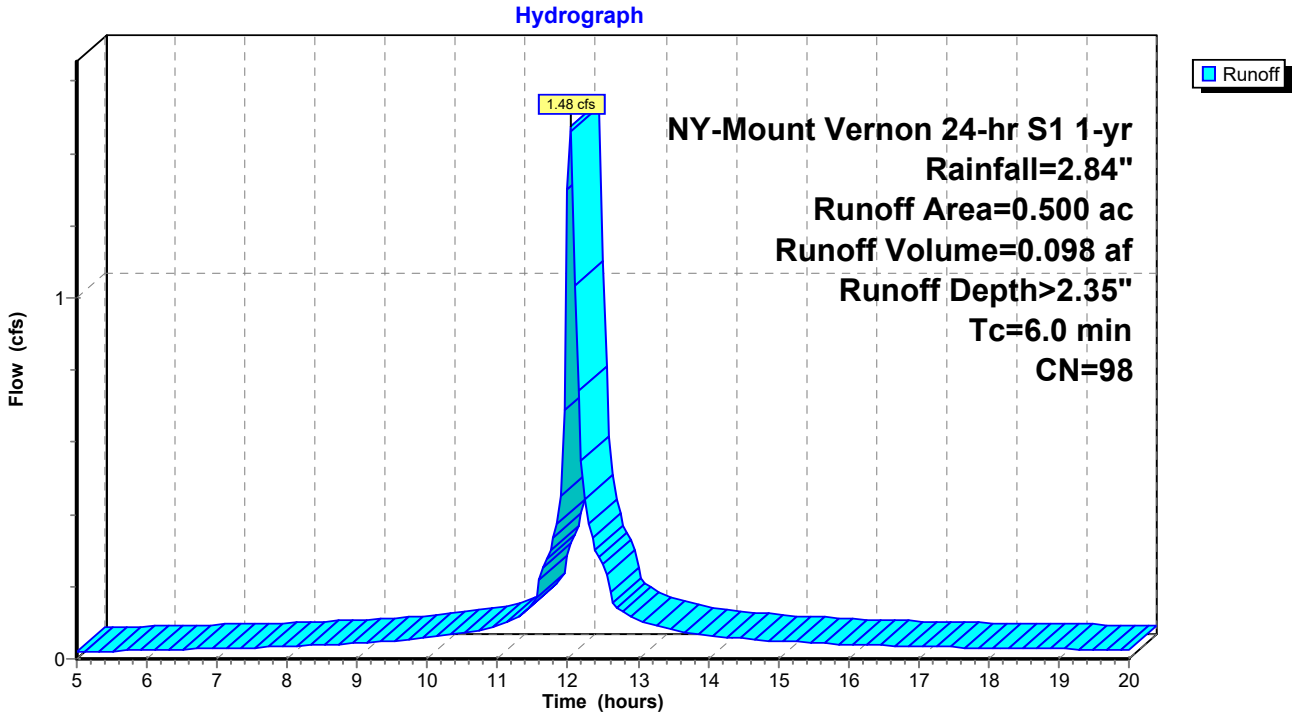
Runoff = 1.48 cfs @ 12.04 hrs, Volume= 0.098 af, Depth> 2.35"
Routed to Reach DP A :

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
NY-Mount Vernon 24-hr S1 1-yr Rainfall=2.84"

Area (ac)	CN	Description
0.500	98	Paved parking, HSG D
0.500		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Subcatchment A1: Pre-Dev

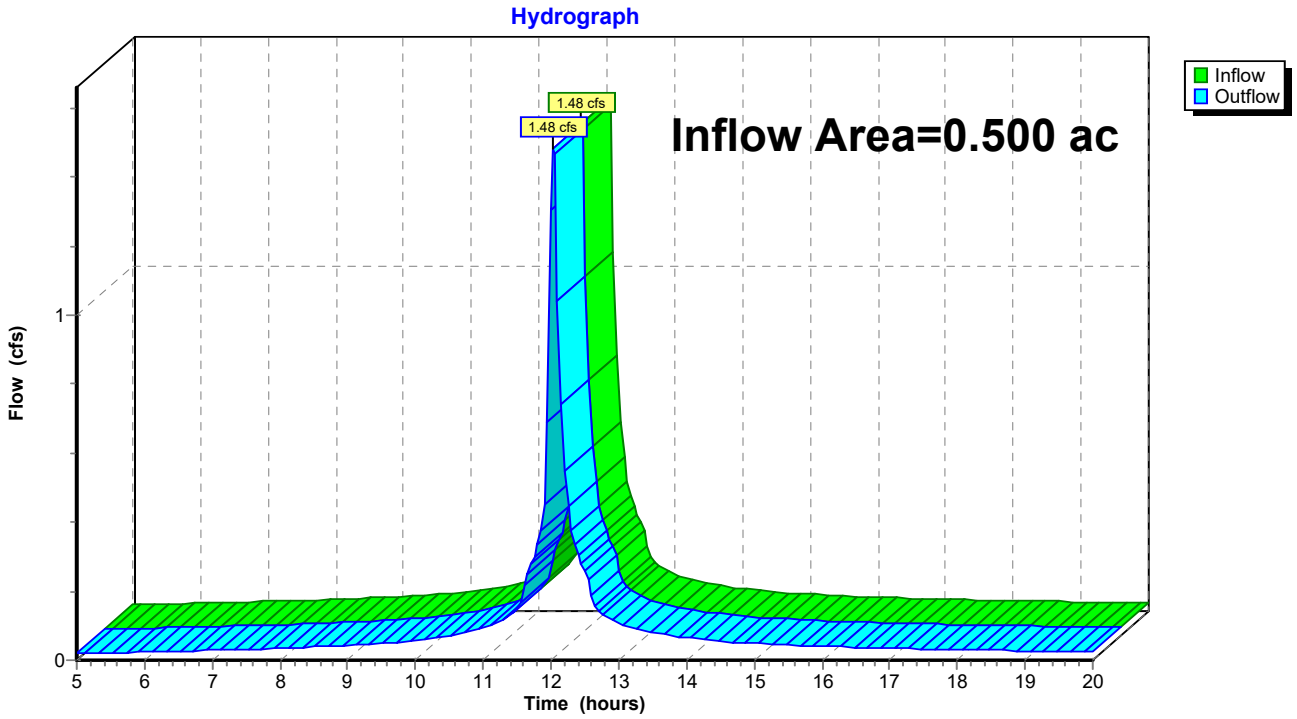


Summary for Reach DP A:

Inflow Area = 0.500 ac,100.00% Impervious, Inflow Depth > 2.35" for 1-yr event
Inflow = 1.48 cfs @ 12.04 hrs, Volume= 0.098 af
Outflow = 1.48 cfs @ 12.04 hrs, Volume= 0.098 af, Atten= 0%, Lag= 0.0 min

Routing by Stor-Ind+Trans method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

Reach DP A:



Time span=5.00-20.00 hrs, dt=0.05 hrs, 301 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

SubcatchmentA1: Pre-Dev Runoff Area=0.500 ac 100.00% Impervious Runoff Depth>4.30"
Tc=6.0 min CN=98 Runoff=2.49 cfs 0.179 af

Reach DP A: Inflow=2.49 cfs 0.179 af
Outflow=2.49 cfs 0.179 af

Summary for Subcatchment A1: Pre-Dev

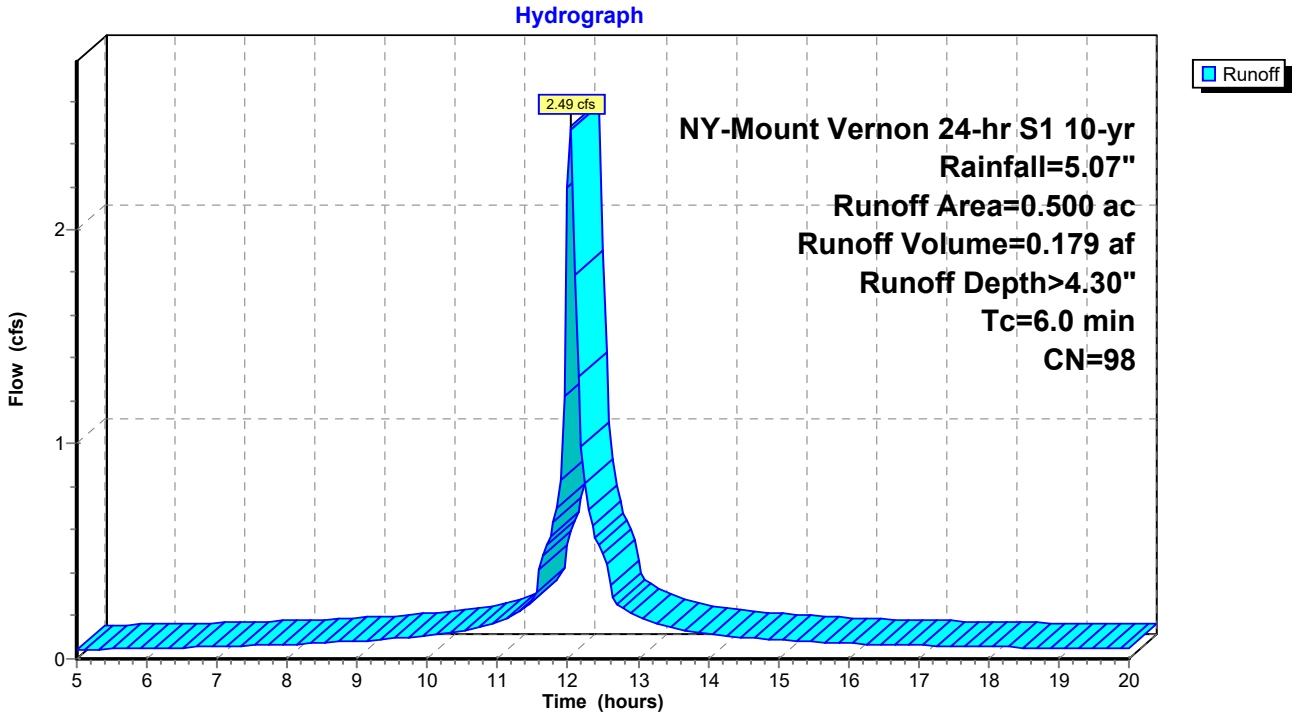
Runoff = 2.49 cfs @ 12.04 hrs, Volume= 0.179 af, Depth> 4.30"
Routed to Reach DP A :

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
NY-Mount Vernon 24-hr S1 10-yr Rainfall=5.07"

Area (ac)	CN	Description
0.500	98	Paved parking, HSG D
0.500		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Subcatchment A1: Pre-Dev

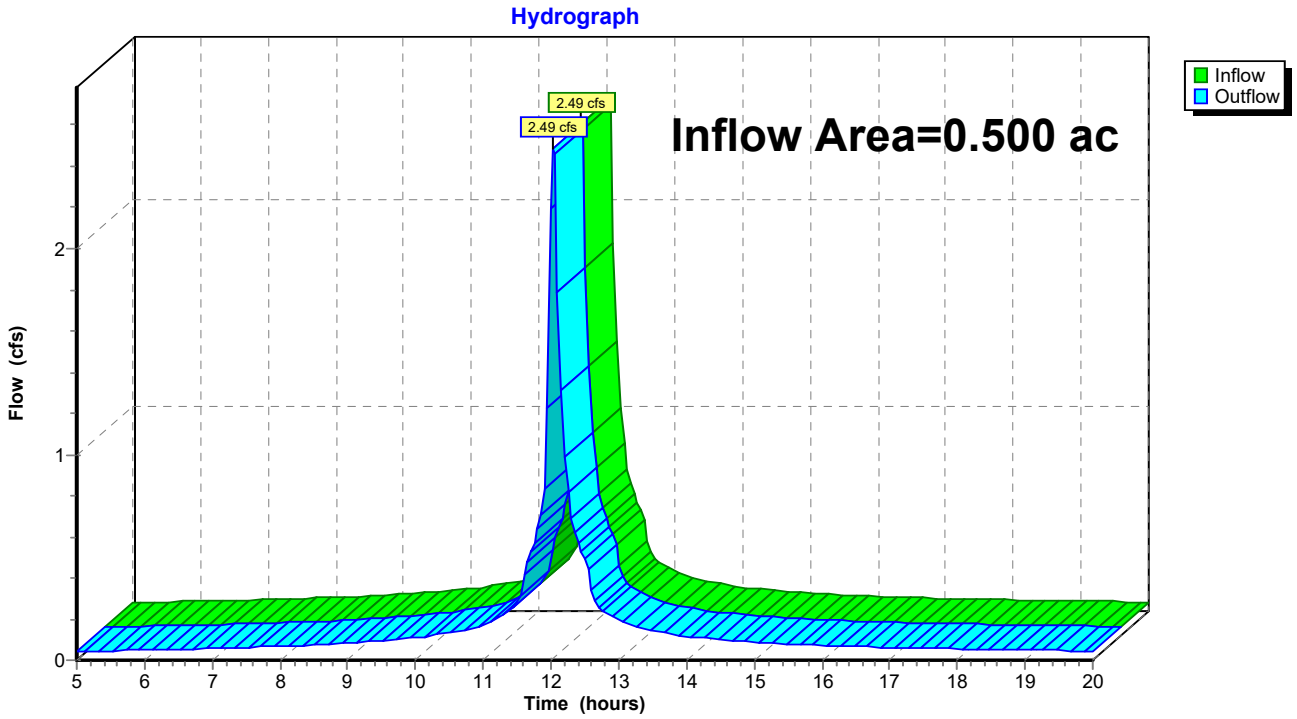


Summary for Reach DP A:

Inflow Area = 0.500 ac,100.00% Impervious, Inflow Depth > 4.30" for 10-yr event
Inflow = 2.49 cfs @ 12.04 hrs, Volume= 0.179 af
Outflow = 2.49 cfs @ 12.04 hrs, Volume= 0.179 af, Atten= 0%, Lag= 0.0 min

Routing by Stor-Ind+Trans method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

Reach DP A:



Time span=5.00-20.00 hrs, dt=0.05 hrs, 301 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

SubcatchmentA1: Pre-Dev Runoff Area=0.500 ac 100.00% Impervious Runoff Depth>7.61"
Tc=6.0 min CN=98 Runoff=3.95 cfs 0.317 af

Reach DP A: Inflow=3.95 cfs 0.317 af
Outflow=3.95 cfs 0.317 af

Summary for Subcatchment A1: Pre-Dev

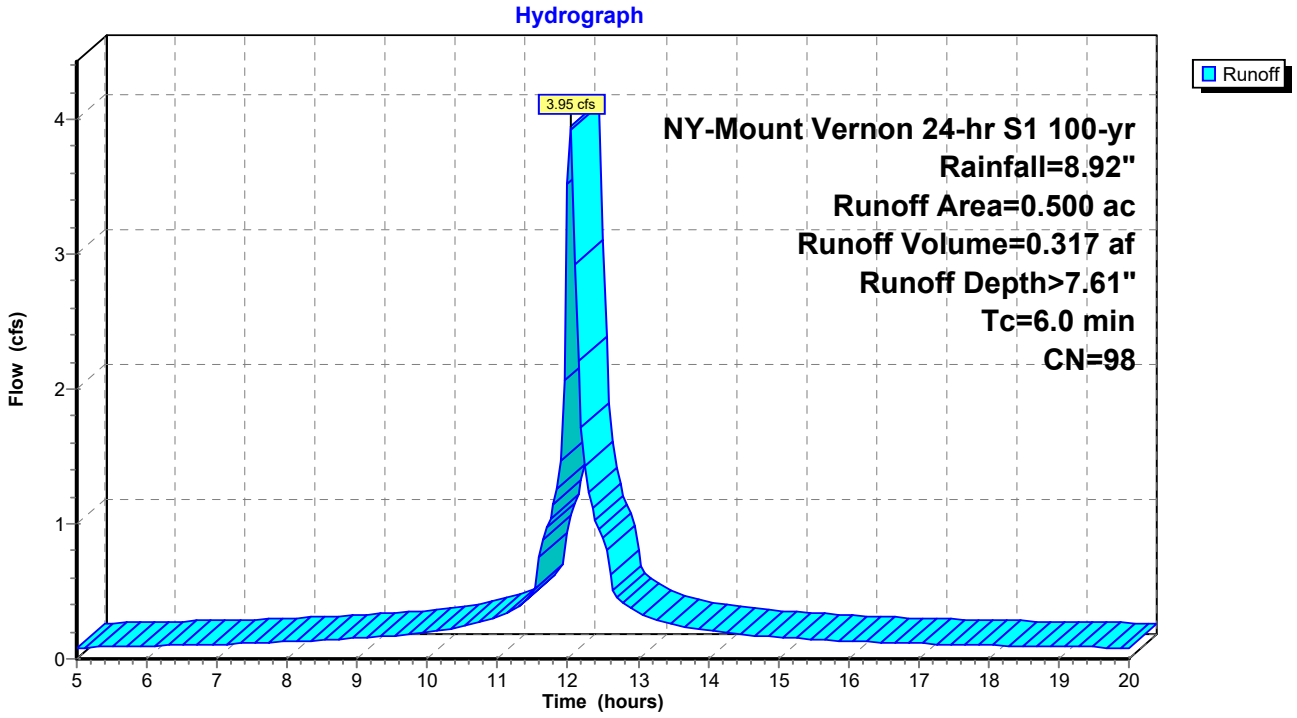
Runoff = 3.95 cfs @ 12.04 hrs, Volume= 0.317 af, Depth> 7.61"
Routed to Reach DP A :

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
NY-Mount Vernon 24-hr S1 100-yr Rainfall=8.92"

Area (ac)	CN	Description
0.500	98	Paved parking, HSG D
0.500		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Subcatchment A1: Pre-Dev

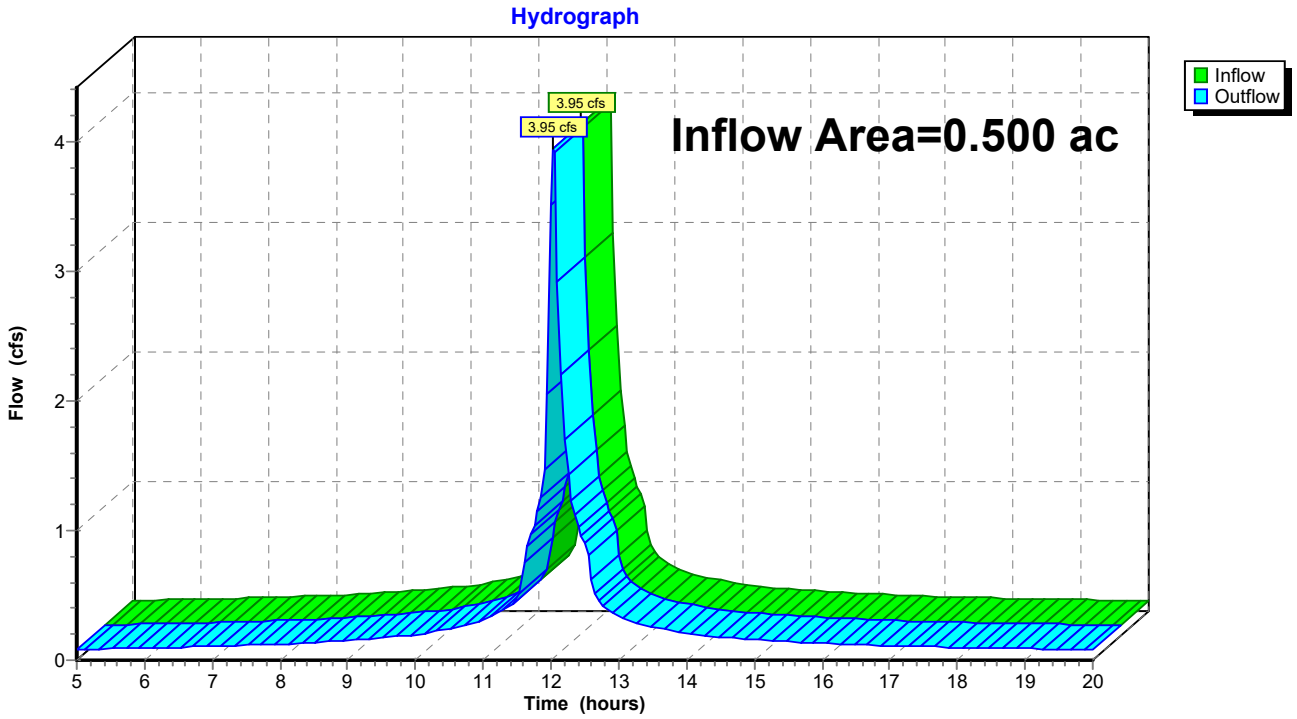


Summary for Reach DP A:

Inflow Area = 0.500 ac,100.00% Impervious, Inflow Depth > 7.61" for 100-yr event
Inflow = 3.95 cfs @ 12.04 hrs, Volume= 0.317 af
Outflow = 3.95 cfs @ 12.04 hrs, Volume= 0.317 af, Atten= 0%, Lag= 0.0 min

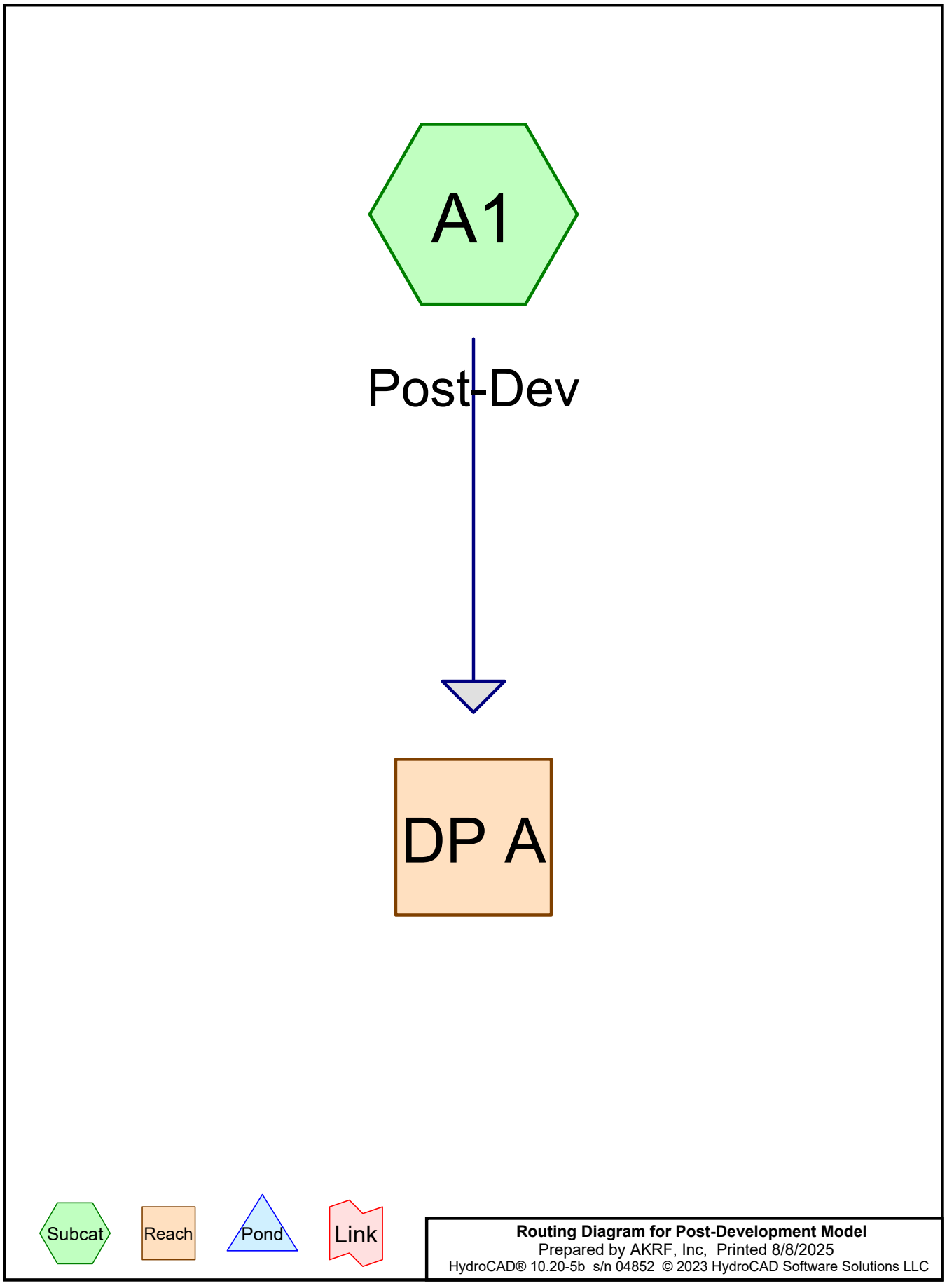
Routing by Stor-Ind+Trans method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

Reach DP A:



APPENDIX D

Post-Development HydroCAD Report


A1
Post-Dev
DP A
Subcat
Reach
Pond
Link
Routing Diagram for Post-Development Model
Prepared by AKRF, Inc, Printed 8/8/2025
HydroCAD® 10.20-5b s/n 04852 © 2023 HydroCAD Software Solutions LLC

Rainfall Events Listing (selected events)

Event#	Event Name	Storm Type	Curve	Mode	Duration (hours)	B/B	Depth (inches)	AMC
1	1-yr	NY-Mount Vernon 24-hr S1	1-yr	Default	24.00	1	2.84	2
2	10-yr	NY-Mount Vernon 24-hr S1	10-yr	Default	24.00	1	5.07	2
3	100-yr	NY-Mount Vernon 24-hr S1	100-yr	Default	24.00	1	8.92	2

Time span=5.00-20.00 hrs, dt=0.05 hrs, 301 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

SubcatchmentA1: Post-Dev Runoff Area=0.500 ac 100.00% Impervious Runoff Depth>2.35"
Tc=6.0 min CN=98 Runoff=1.48 cfs 0.098 af

Reach DP A: Inflow=1.48 cfs 0.098 af
Outflow=1.48 cfs 0.098 af

Summary for Subcatchment A1: Post-Dev

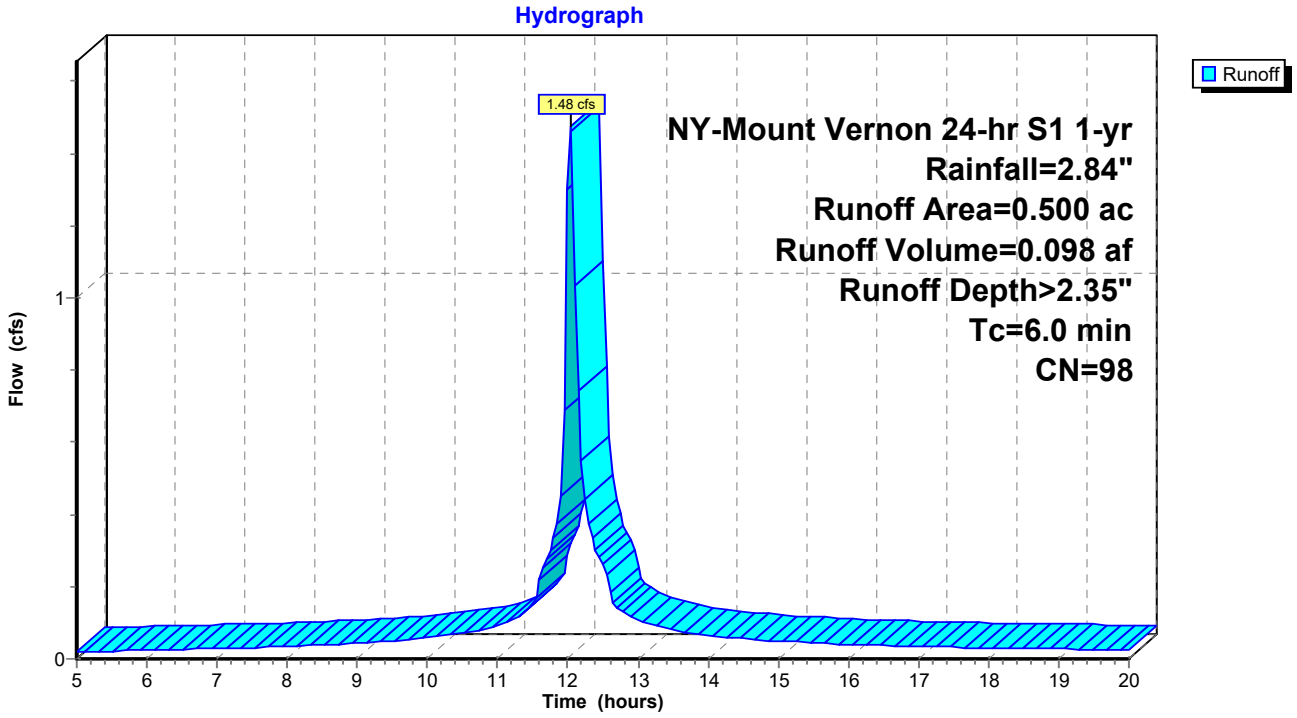
Runoff = 1.48 cfs @ 12.04 hrs, Volume= 0.098 af, Depth> 2.35"
Routed to Reach DP A :

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
NY-Mount Vernon 24-hr S1 1-yr Rainfall=2.84"

Area (ac)	CN	Description
0.500	98	Paved parking, HSG D
0.500		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Subcatchment A1: Post-Dev



Summary for Reach DP A:

Inflow Area = 0.500 ac,100.00% Impervious, Inflow Depth > 2.35" for 1-yr event
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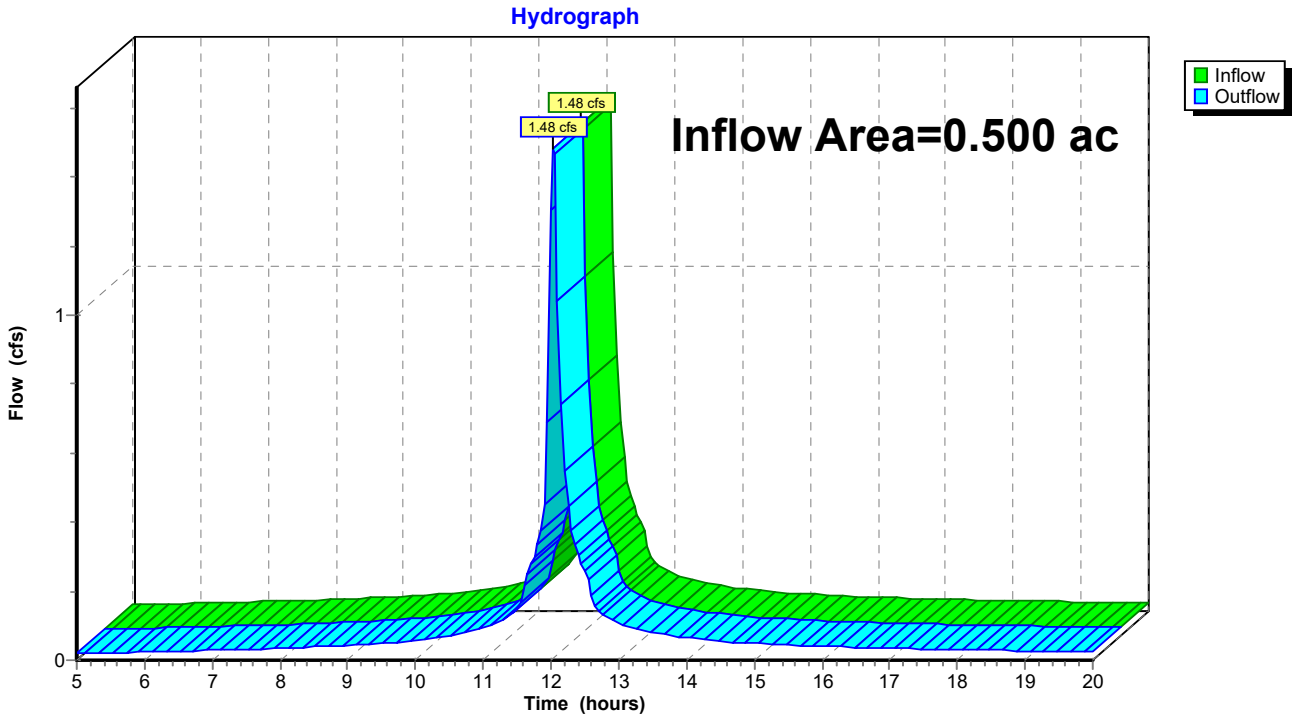
Outflow = 1.48 cfs @ 12.04 hrs, Volume= 0.098 af, Atten= 0%, Lag= 0.0 min

Routing by Stor-Ind+Trans method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

Reach DP A:



Time span=5.00-20.00 hrs, dt=0.05 hrs, 301 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

SubcatchmentA1: Post-Dev Runoff Area=0.500 ac 100.00% Impervious Runoff Depth>4.30"
Tc=6.0 min CN=98 Runoff=2.49 cfs 0.179 af

Reach DP A: Inflow=2.49 cfs 0.179 af
Outflow=2.49 cfs 0.179 af

Summary for Subcatchment A1: Post-Dev

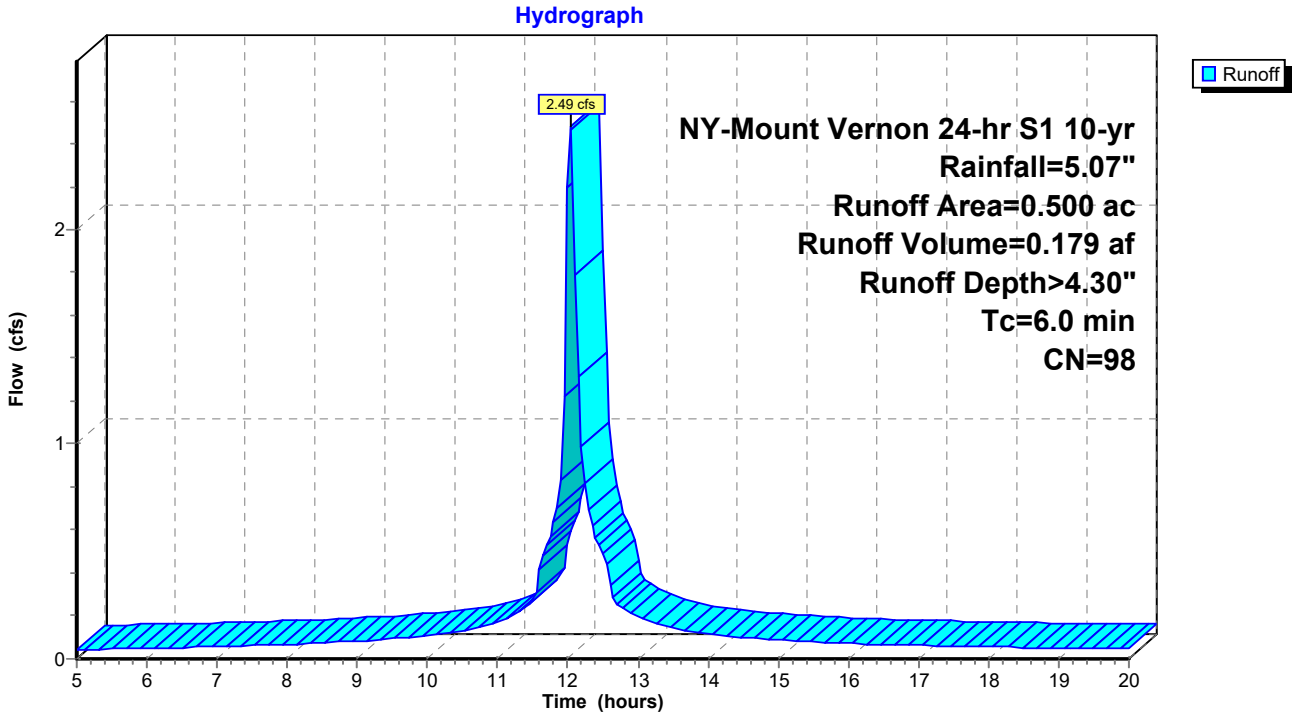
Runoff = 2.49 cfs @ 12.04 hrs, Volume= 0.179 af, Depth> 4.30"
Routed to Reach DP A :

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
NY-Mount Vernon 24-hr S1 10-yr Rainfall=5.07"

Area (ac)	CN	Description
0.500	98	Paved parking, HSG D
0.500		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Subcatchment A1: Post-Dev

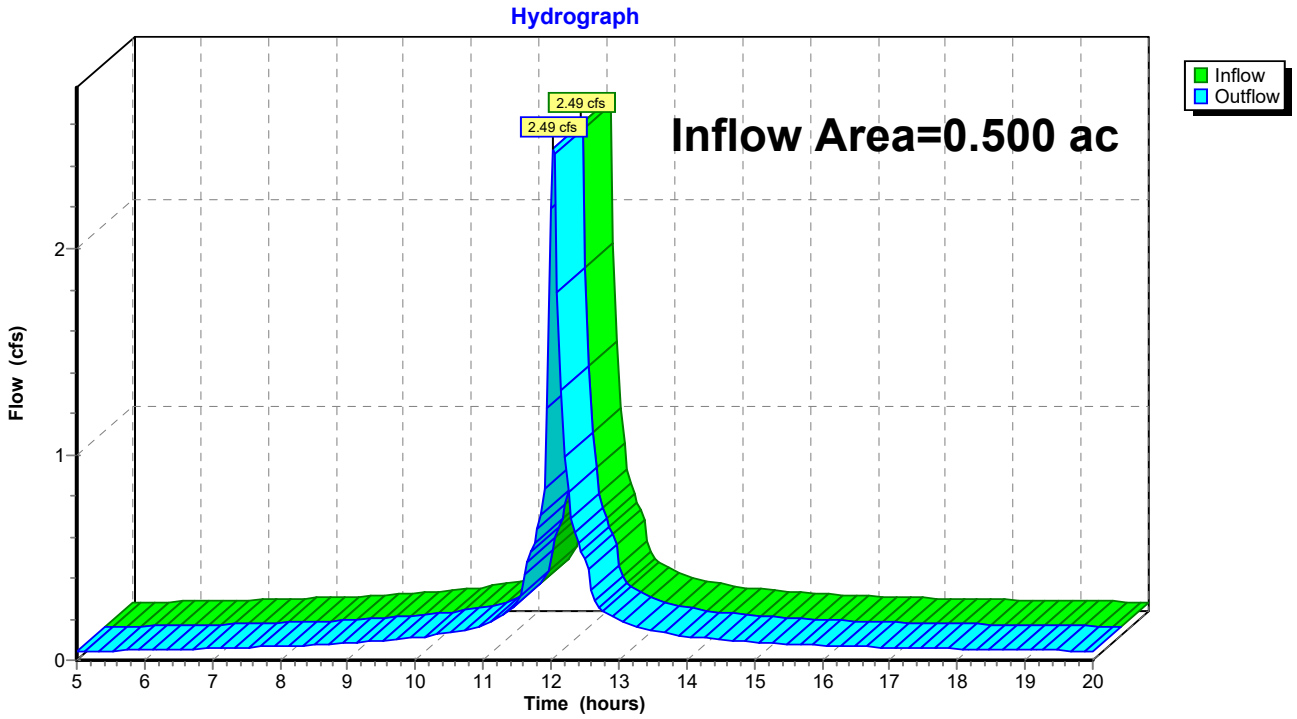


Summary for Reach DP A:

Inflow Area = 0.500 ac,100.00% Impervious, Inflow Depth > 4.30" for 10-yr event
Inflow = 2.49 cfs @ 12.04 hrs, Volume= 0.179 af
Outflow = 2.49 cfs @ 12.04 hrs, Volume= 0.179 af, Atten= 0%, Lag= 0.0 min

Routing by Stor-Ind+Trans method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

Reach DP A:



Time span=5.00-20.00 hrs, dt=0.05 hrs, 301 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

SubcatchmentA1: Post-Dev Runoff Area=0.500 ac 100.00% Impervious Runoff Depth>7.61"
Tc=6.0 min CN=98 Runoff=3.95 cfs 0.317 af

Reach DP A: Inflow=3.95 cfs 0.317 af
Outflow=3.95 cfs 0.317 af

Summary for Subcatchment A1: Post-Dev

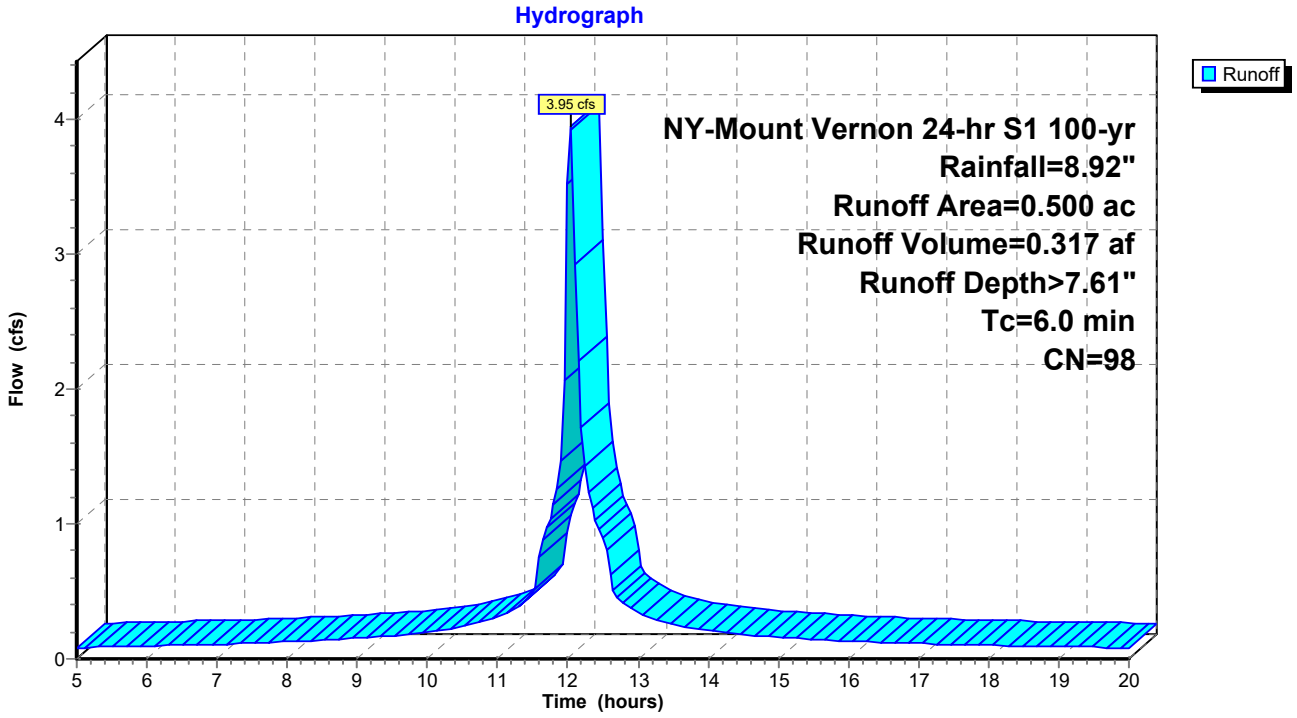
Runoff = 3.95 cfs @ 12.04 hrs, Volume= 0.317 af, Depth> 7.61"
Routed to Reach DP A :

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
NY-Mount Vernon 24-hr S1 100-yr Rainfall=8.92"

Area (ac)	CN	Description
0.500	98	Paved parking, HSG D
0.500		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Subcatchment A1: Post-Dev

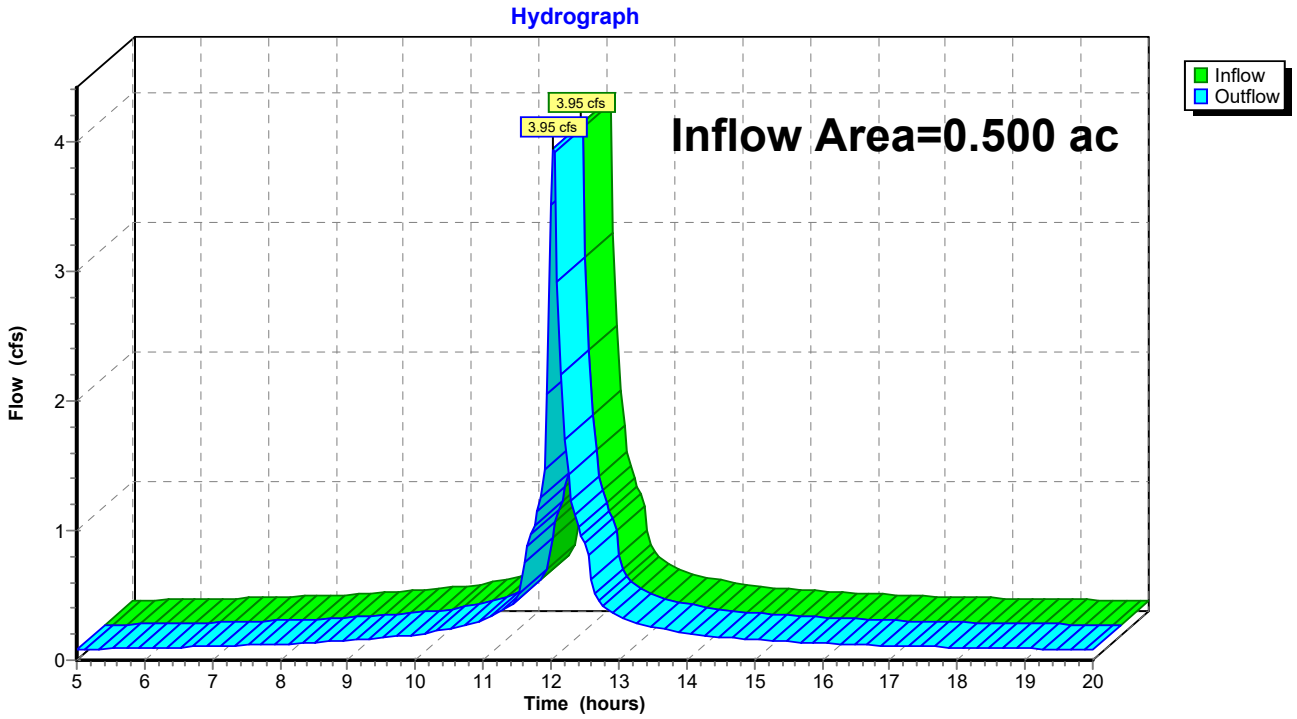


Summary for Reach DP A:

Inflow Area = 0.500 ac,100.00% Impervious, Inflow Depth > 7.61" for 100-yr event
Inflow = 3.95 cfs @ 12.04 hrs, Volume= 0.317 af
Outflow = 3.95 cfs @ 12.04 hrs, Volume= 0.317 af, Atten= 0%, Lag= 0.0 min

Routing by Stor-Ind+Trans method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

Reach DP A:

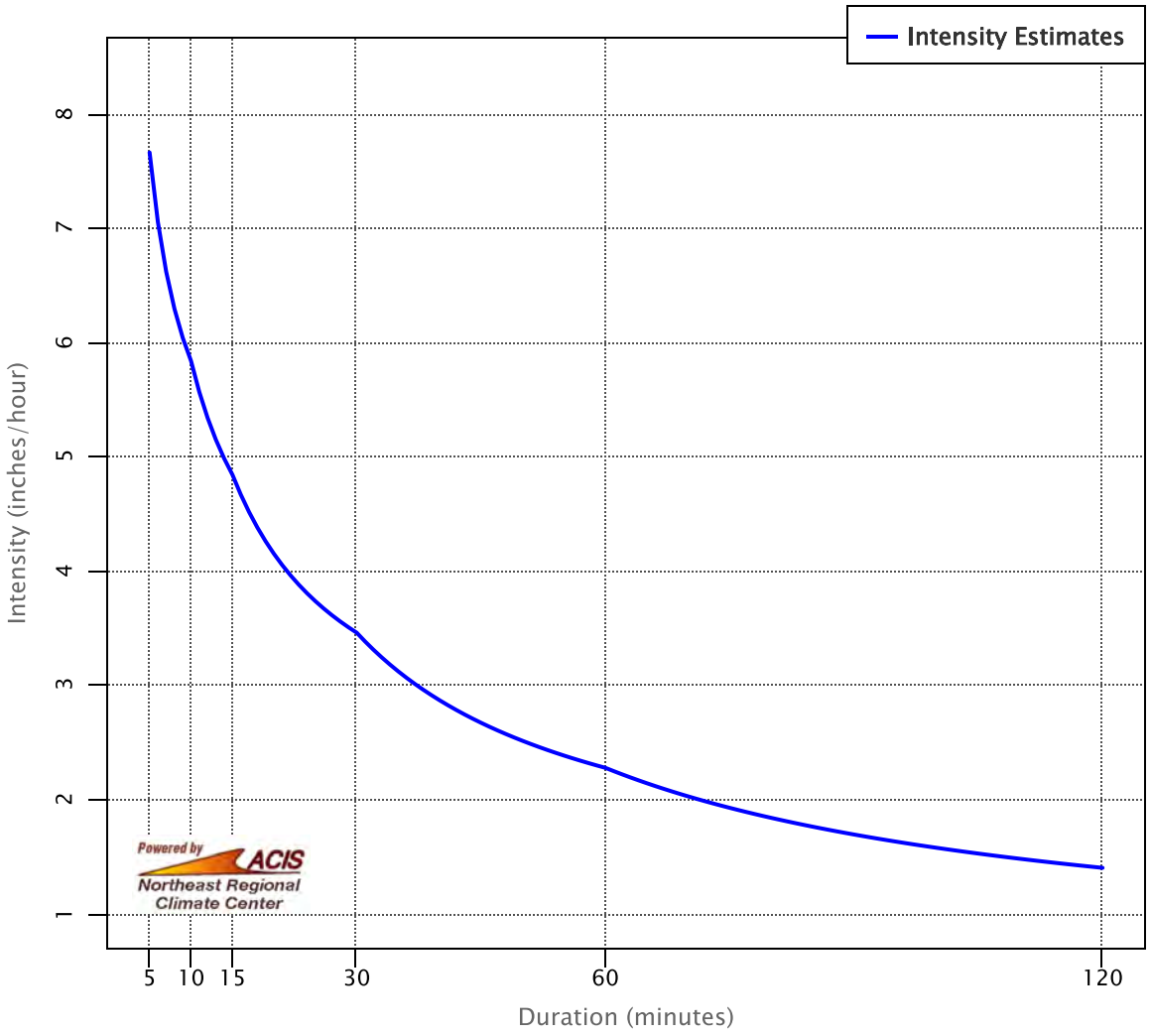


APPENDIX E

Pipe Capacity Calculations

Intensity Frequency Duration - 25yr

(40.913N, -73.850W)



Time (hours)	Intensity (in/hr)
5*	7.66
6	7.05
7*	6.61
8*	6.29
9*	6.04
10*	5.83
11*	5.56
12	5.33
13*	5.14
14*	4.98
15*	4.84
16*	4.66
17*	4.51
18*	4.38
19*	4.25
20*	4.15
21*	4.05
22*	3.96
23*	3.88
24	3.80
25*	3.73

akrf
34 SOUTH BROADWAY
SUITE 300
WHITE PLAINS, NY 10601
(914) 949-7336

PROJECT	Station Plaza		
LOCATION	Mount Vernon, NY		
PREPARED BY	JM	DATE	12/11/2025

FULL FLOW PIPE CAPACITY WORKSHEET

Pipe Location	WQU 102 to DMH 101	
Pipe Diameter, D	12	in
Pipe Radius, r	6	in
Full Pipe Cross Sectional Area, A_{FULL}	0.7854	sf
Pipe Material	HDPE	
Manning/s Roughness Coeff, n	0.013	
Wetted Perimeter, P	3.1416	ft
Hydraulic Radius, R = A/P	0.2500	ft
Slope. S	0.02	ft/ft

Flow Velocty, V =	**6.43**	**ft/s**
Flow Capacity, Q =	**5.05**	**cfs**

3,265,486	GPD
3.27	MGD

akrf
34 SOUTH BROADWAY
SUITE 300
WHITE PLAINS, NY 10601
(914) 949-7336

PROJECT	Station Plaza		
LOCATION	Mount Vernon, NY		
PREPARED BY	JM	DATE	12/11/2025

FULL FLOW PIPE CAPACITY WORKSHEET

Pipe Location	DMH 101 to EX DMH 100	
Pipe Diameter, D	12	in
Pipe Radius, r	6	in
Full Pipe Cross Sectional Area, A_{FULL}	0.7854	sf
Pipe Material	Clay	
Manning/s Roughness Coeff, n	0.013	
Wetted Perimeter, P	3.1416	ft
Hydraulic Radius, R = A/P	0.2500	ft
Slope. S	0.0225	ft/ft

Flow Velocty, V =	**6.82**	**ft/s**
Flow Capacity, Q =	**5.36**	**cfs**

3,463,571	GPD
3.46	MGD

akrf
34 SOUTH BROADWAY
SUITE 300
WHITE PLAINS, NY 10601
(914) 949-7336

PROJECT	Station Plaza		
LOCATION	Mount Vernon, NY		
PREPARED BY	JM	DATE	12/11/2025

FULL FLOW PIPE CAPACITY WORKSHEET

Pipe Location	CB 202 to DMH 201	
Pipe Diameter, D	12	in
Pipe Radius, r	6	in
Full Pipe Cross Sectional Area, A_{FULL}	0.7854	sf
Pipe Material	HDPE	
Manning/s Roughness Coeff, n	0.013	
Wetted Perimeter, P	3.1416	ft
Hydraulic Radius, R = A/P	0.2500	ft
Slope. S	0.0075	ft/ft

Flow Velocty, V =	**3.94**	**ft/s**
Flow Capacity, Q =	**3.09**	**cfs**

1,999,694	GPD
2.00	MGD

CITY OF MOUNT VERNON, N.Y.
Mayor Office

SHAWYN PATTERSON-HOWARD, MPA
Mayor

City Hall, One Roosevelt Square
Mount Vernon. NY. 10550
(914) 665-2362 – Fax: (914) 665-6173

MALCOLM CLARK
Chief of Staff

KHENDRA DAVID
Deputy Chief of Staff

May 8, 2026

The Honorable City Council
City of Mount Vernon
City Hall
1 Roosevelt Square
Mount Vernon, New York 10550

Re: Grove Street Playground Renovation and Revitalization Improvements

To the Honorable City Council,

This letter serves as formal notification that the Office of the Mayor has reviewed the proposed renovation and revitalization improvements for Grove Street Playground and is aware of and in agreement with advancing this initiative in partnership with Joseph Apicella of The MacQuesten Companies at the 20 South West development project.

Following coordination with our Recreation team, Grove Street Playground, located approximately two blocks from the referenced project area, has been identified as an appropriate site for community improvements and enhancements.

The proposed scope of work includes:

- Upgrades to the playground safety surface, including the removal of existing wood chips and installation of a modern safety surface (estimated at approximately $20,000);
- Replacement of damaged swings (estimated at approximately $3,434);
- Repairs and revitalization of the basketball court area (estimated at approximately $10,000).

Additional site improvements may also include minor fixture and amenity upgrades, such as fencing touch-ups, signage replacement, and repairs or replacement of damaged site elements, including benches and tables, as needed.

At this time, the estimated total project cost is anticipated to range between approximately $30,000 and $40,000, subject to final assessment and project conditions.

The Office of the Mayor supports these efforts as part of the City's ongoing commitment to enhancing neighborhood recreational spaces, improving quality of life for residents, and investing in community revitalization initiatives.

Thank you for your continued partnership and commitment to the advancement of the City of Mount

CITY OF MOUNT VERNON, N.Y.
Mayor Office

SHAWYN PATTERSON-HOWARD, MPA
Mayor

City Hall, One Roosevelt Square
Mount Vernon. NY. 10550
(914) 665-2362 – Fax: (914) 665-6173

MALCOLM CLARK
Chief of Staff

KHENDRA DAVID
Deputy Chief of Staff

Vernon. Should you have any questions or require additional information, please do not hesitate to contact our office.

Respectfully,

Shawyn Patterson- Howard
Mayor

CC:
Department of Recreation

Resolution ___

A RESOLUTION OF THE CITY OF MOUNT VERNON CITY COUNCIL DECLARING ITSELF AS LEAD AGENCY, ISSUING A DETERMINATION PURSUANT TO SEQRA, AND GRANTING APPROVAL OF THE APPLICATION OF MACQUESTEN STATION TAKEOVER, LLC FOR THE STATION PLAZA PROJECT

WHEREAS, Macquesten Station Takeover, LLC ("Applicant") seeks approval of the Applicant's Project, known as Station Plaza (as further defined herein), to be developed on the property known as 20 South West Street, designated on the City of Mount Vernon Tax Map as Section 164.67, Block 1057, Lot 16 ("Property"); and

WHEREAS, Applicant is the owner of the Property, which comprises approximately 21,970 square feet (±0.50 acres); and

WHEREAS, the Property is located in the MVW-H (Mount Vernon West Transit Oriented Development "Hub") District; and

WHEREAS, the Application seeks approval for the construction of a 13-story tower on podium mixed-use building, consisting of 100 affordable for-sale condominium units with various amenities, 73 associated structured parking spaces in a 48,810 square foot parking garage, and 2,635 square feet of ground floor retail space with 6 surface parking spaces ("Project," or "Proposed Action"); and

WHEREAS, following meetings with the Applicant and review of the Project supporting materials, the City's Expedited Review Committee ("ERC") determined that the Project qualifies for expedited review in accordance with Section 267-19(B)(10)(a)[1][b] of the City Zoning Code; and

WHEREAS, in its March 5, 2026 Memorandum recommending approval of the Project, the ERC also found, among other things, that the Project "is generally consistent with the Mount Vernon West TOD 267-19(5)(d) – Tower on Podium requirements"; and

WHEREAS, the ERC concluded that the Project requires: (i) review and approval from the City Council; and (ii) a Certificate of Appropriateness from the city Architectural Review Board ("ARB"); and

WHEREAS, on or about March 5, 2026, Applicant submitted to the City Council certain materials in support of the Application for the Project; and

WHEREAS, pursuant to the State Environmental Quality Review Act and its implementing regulations at 6 N.Y.C.R.R. Part 617 (collectively, "SEQRA"), Applicant submitted to the City Council with its March 5, 2026 Application materials a Full Environmental Assessment

Form Part 1, together with an Environmental Assessment Report, with Appendices, dated August 2025, revised December 2025 (collectively, "EAF"), for the Proposed Action; and

WHEREAS, the Proposed Action is an Unlisted action under SEQRA; and

WHEREAS, at a meeting of the City Council held March 11, 2026, the City Council declared its intent to act as Lead Agency for the review of the Project under SEQRA pursuant to 6 N.Y.C.R.R. Section 617.6(b)(1), and authorized the City Clerk to circulate its Notice of Intent to all Involved and Interested Agencies, together with the Application and EAF; and

WHEREAS, the City Council, at its March 11, 2026 meeting, also authorized the City Clerk to refer the Application and EAF to the Westchester County Planning Board pursuant to Section 239-m of the General Municipal Law; and

WHEREAS, at a meeting held on March 25, 2026, the ARB reviewed the Project and granted the Applicant a Certificate of Appropriateness, subject to the following conditions: (i) historic elements must be incorporated within the walkway area to tell a story about local history; (ii) Applicant must work with local artists and historians to incorporate public art into the publicly accessible spaces on the site; (iii) Applicant must ensure that bird-resistant glass is incorporated into the facade of the building; (iv) Applicant should work with the City to incorporate planters and street trees along the building frontage, wherever possible; and (v) exterior lighting shall be consistent with Passive House standards; and

WHEREAS, by letter dated April 14, 2026 the Westchester County Planning Board issued its recommendations with respect to the Project pursuant to Section 239-m of the General Municipal Law and Section 277.61 of the County Administrative Code; and

WHEREAS, the City Council, as the approval authority for the Application and the Project, after due deliberation, finds that the Proposed Action is generally consistent with the Mount Vernon West TOD requirements as set forth in Section 267-19 of the City Zoning Code; and

WHEREAS, the Applicant's affiliate, Macquesten Takeover Partners, LLC, previously received approval by Resolution dated April 2, 2018, for a residential/commercial building located at the adjacent property at 22 South West Street ("2018 Resolution"); and

WHEREAS, Section 2(a) of the 2018 Resolution requires the Applicant for this Project to provide approximately 3,000 sf of publicly accessible street-level pedestrian open space on the Property for this Project ("Open Space Requirement"); and

WHEREAS, the Applicant has requested that the City Council modify the Open Space Requirement to permit the Applicant to satisfy the Open Space Requirement by providing both on-site and off-site improvements; and

WHEREAS, the Applicant has discussed certain proposed off-site community open space and recreational improvements at the Grove Street Playground with the Office of the Mayor, as

described in a letter of support sent by the Mayor to the City Council dated May 8, 2026 ("Mayor's Letter"); and

WHEREAS, at a meeting of the City Council held May 11, 2026, the City Council and the Applicant discussed the Applicant installing improvements at the Grove Street Playground, as well as at Union Arms Park, in a total amount not to exceed $70,000.00 to satisfy the Open Space Requirement.

NOW, THEREFORE, BE IT RESOLVED, that the City Council hereby declares itself Lead Agency for the SEQRA review of the Proposed Action; and

BE IT FURTHER RESOLVED, that the City Council finds that the Project meets all of the thresholds of the Mount Vernon West Form-Based Code and that the Project will not result in any new potential significant adverse environmental impacts that were not previously studied during the SEQRA Generic EIS review of the MVW Rezoning; and

BE IT FURTHER RESOLVED, that the City Council as Lead Agency has taken the requisite hard look at the underlying SEQRA information, including the EAF, and finds that no additional or supplemental environmental review is required under SEQRA for the Project pursuant to 6 N.Y.C.R.R. Section 617.9(a)(7); and

BE IT FURTHER RESOLVED, that the City Council, as Lead Agency for the SEQRA review of the Project, hereby determines that procedural steps of SEQRA and its implementing regulations have been fully satisfied in connection with the Project; and

BE IT FURTHER RESOLVED, that the City Council hereby approves the Project as depicted on the set of drawings entitled "Site Plan Approval Drawing Set for Station Plaza," prepared by AKRF, dated August 28, 2025, last revised January 22, 2026 ("Approved Site Plan"), subject to the conditions set forth in the Certificate of Appropriateness; and

BE IT FURTHER RESOLVED, that the City Council hereby further approves the Applicant's request to modify the Open Space Requirement in the 2018 Resolution through a combination of on-site and off-site improvements; and

BE IT FURTHER RESOLVED, that the City Council finds that it is reasonable and appropriate for the Open Space Requirement in the 2018 Resolution to be fulfilled through: (i) the Applicant installing improvements on the Property in the form of (a) an outdoor public space/pocket park (approximately 309 sf), and (b) outdoor public space/access to Metro North train station (approximately 1,300 sf), both of which are shown on the Approved Site Plan; and (ii) the Applicant installing upgrades, repairs and other improvements off-site at the (a) Grove Street Playground in accordance with the proposed scope of work set forth in the Mayor's Letter, a copy of which is annexed hereto and made a part hereof, subject to ongoing consultation and finalizing the scope of work with the Office of the City Mayor (collectively, the "Grove Street Playground Work"), and (b) Union Arms Park, the details of which shall be coordinated and finalized with the Office of the City Mayor (the "Union Arms Park Work," together with the Grove Street Playground Work, the "Park Improvements"), *provided* that the cost to the Applicant to install the Park

Improvements shall not exceed a total of $70,000.00, and *provided further* that the Applicant shall return to the City Council for further public discussion and a Council determination about satisfying the Open Space Requirement in the 2018 Resolution in the event that either the Grove Street Playground Work is not implemented for any reason or the scope of such Work materially changes as compared to what is set forth in the Mayor's Letter, or the Union Arms Park Work is not implemented for any reason; and

BE IT FURTHER RESOLVED, that the City Council authorizes the City Clerk to circulate this Resolution to all Involved and Interested Agencies; and

BE IT FURTHER RESOLVED, that this Resolution shall take effect immediately.

Council Person

APPROVED AS TO FORM

THIS RESOLUTION

ADOPTED BY CITY COUNCIL

Assistant Corporation Counsel

President

Attest:

City Clerk

APPROVED

APPROVED

Date

Dept.

By

Mayor