February 6, 2020

Terracon

Wisconsin Department of Natural Resources
Northeast Region Office
2984 Shawano Avenue
Green Bay, Wisconsin 54313-6727

Attention: Denise Danleski

Re: **Notification For Hazardous Substance Discharge**
VPI Corporation
3123 South 9th Street
Sheboygan, Sheboygan County, Wisconsin
Terracon Project No. 58207000

Dear Ms. Danelski:

Terracon Consultants, Inc. (Terracon) was retained to complete a Limited Site Investigation (LSI) at the referenced site. The LSI was performed following the completion of a Phase I Environmental Site Assessment (ESA) by Terracon, which identified a controlled REC (CREC) due to residual contamination that was present when an associated environmental repair program (ERP) case (BRRTS #02-60-001045) was closed in 1997.

The site is located at 3123 South 9th Street, Sheboygan, Sheboygan County, Wisconsin, which is an approximately 10.28-acre parcel improved with an approximately 110,000-square-foot manufacturing facility and several outbuildings. The site is predominately occupied by the manufacturing facility. The easternmost portion of the site includes an elongated portion that extends north to Wilson Avenue that is an apparent drainage ditch.

The facility is occupied by Vinyl Products, Inc. (VPI). VPI manufactures vinyl floor tile and associated flooring products. Products generally include various size pre-cut floor tiles, roll flooring, and base cove. Additional improvements include four product storage silos, a scale house, and a tank building located on the south side of the site. A wood frame storage building is located on the east side of the property adjacent to the gravel parking lot.

The site was historically vacant agricultural land since before 1937 until the construction of a manufacturing facility by Great Lakes, Inc., a home building company, in 1960, with several expansions through 1963. The present-day occupant, VPI, took over the facility in approximately 1966 and has continually operated at the facility since that time.

The site was identified with a closed ERP case on the Wisconsin Department of Natural Resources' (WDNR's) Remediation and Redevelopment Sites Map (RR Sites Map). The closed ERP case is related to a 1974 release of bis(2-ethyl-hexyl) phthalate (a.k.a. di-2-ethylhexyl phthalate, diethylhexyl phthalate, DEHP, dioctyl phthalate, DOP). Approximately 7,300-gallons of

plasticizer containing DEHP was released from the VPI facility and entered the storm sewer, ultimately impacting Lake Michigan. At the time of the release, clean-up activities were focused on Lake Michigan, and the on-site release was not evaluated. Beginning in 1989, VPI began renovating the south lot of their facility for addition of a concrete slab and various grading activities allowing for better truck traffic access. Excavation activities identified DEHP-impacted soils on-site, and the material was stockpiled and ultimately received approval for landfilling. Reportedly, approximately 270,000 pounds (135 tons) of DEHP-impacted soil was landfilled. During a state hazardous waste inspection for the facility operations, the contaminated soil was noted, which resulted in the facility being treated as a RCRA Large Quantity Generator (LQG). The WDNR opened the ERP case file in 1993 related to the DEHP release. Investigation was performed between 1994 and 1996 that included soil and groundwater sampling. The area of investigation was generally confined to the southwest corner of the property between South 9th Street and the bulk plasticizer storage building where the spill was reported to have occurred. The soil samples were analyzed for DEHP, other phthalates, and volatile organic compounds (VOCs). It was determined that the DEHP contamination did not extend to depth and had not migrated beyond the initial release location. Groundwater samples were collected at the location of the highest DEHP concentrations in soil, to the east and down-gradient of the areas that were excavated. While DEHP was initially detected in groundwater, the concentrations decreased to non-detectable levels after several sampling events. It was concluded that the initial DEHP detections were the result of impacted soil particles suspended in the groundwater samples during sampling.

The ERP case was closed by John Feeney of the WDNR on June 24, 1997 with no further action required. The letter notes that "should construction work that disturbs or uncovers remaining contaminated soil occur in the future, any contaminated soils must be properly handled and disposed of, and the Department of Natural Resources must be informed." Terracon also noted that the highest DEHP concentration was 360 milligrams per kilogram (mg/kg), which was identified at a depth of 6-8 feet below ground surface (bgs) in the soil sample collected from soil boring GP-9. The current non-industrial, direct-contact residual cleanup level (RCL) for DEHP in soil is 38.8 mg/kg, and the RCL for protection of groundwater is 2.88 mg/kg. While the WDNR typically considers direct-contact RCLs applicable for soil in the upper 4 feet, shallower samples were not collected at this location.

Terracon recommended an LSI to include sampling the shallow soil for analysis of DEHP. The attached Figure 2 identifies the location of soil boring GP-9. Terracon advanced soil boring P-1 at the same general location as GP-9 and collected a soil sample from a depth of 3 feet bgs. The laboratory results are attached. The soil sample contained 16,400 mg/kg of DEHP.

Since the ERP case was previously investigated and remediated to the extent required by WDNR and the additional data is likely associated with residual impacts from the 1973 spill and not a subsequent release, Terracon contacted Ms. Roxanne Chronert on January 6, 2020, to discuss how to present the additional data. Ms. Chronert acknowledged that it may not be a subsequent

release, but she asked that WDNR form 4400-225 be provided with a letter and the data as it documents the parties that are currently involved with the site and the findings. The letter and WDNR form 4400-225 was submitted to the WDNR on January 14, 2020. We understand WDNR is considering the submittal.

In addition to the DEHP detection in soil, vinyl chloride was detected in a groundwater sample collected from a temporary groundwater monitoring well installed within soil boring P-1. Since the result was obtained from a temporary groundwater monitoring well that could not be developed in accordance with NR 141, WAC, the result was considered suspect. To obtain a more representative groundwater sample, a monitoring well was installed and developed in accordance with NR 141, WAC. The monitoring well (MW-1) was installed at the same approximate location as soil boring P-1. The groundwater sample collected from monitoring well MW-1 also contained vinyl chloride at a concentration of 0.67 micrograms per liter (ug/L); the result was "J" flagged by the laboratory. DEHP was also detected. Now that the presence of vinyl chloride has been verified, we have completed the attached WDNR form 4400-225 to document the findings.

We appreciate the opportunity to provide this information to you. Please contact us if you have questions regarding the information we have provided.

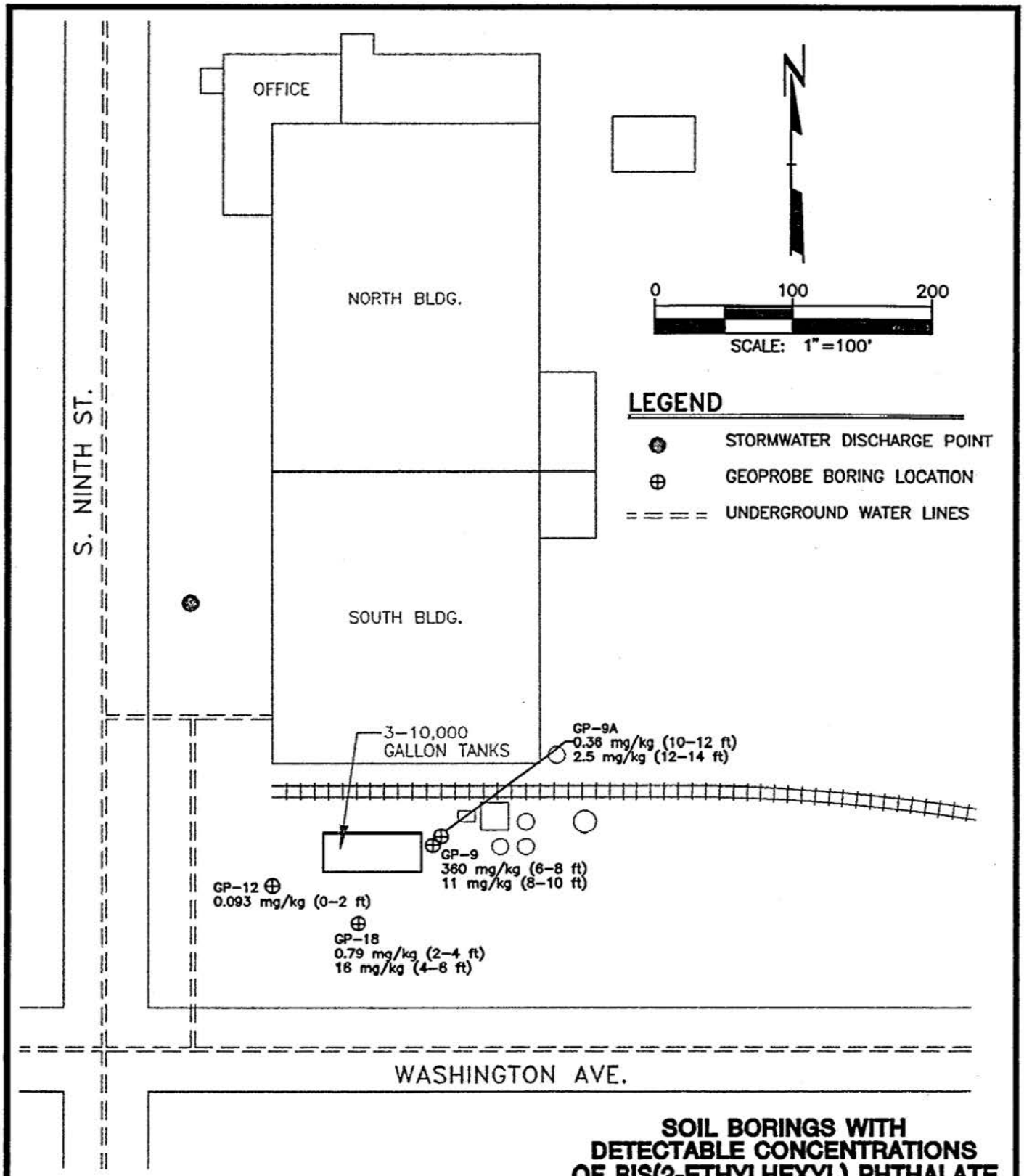
Sincerely,

Terracon

Blaine R. Schroyer, P.E.
Senior Principal/Office Manager

Attachments: Figure 2
Notification for Hazardous Substance Discharge (Non-Emergency) Form 4400-225
Laboratory Report

BRS/PAL:brs/N:\Projects\2020\58207000\PROJECT DOCUMENTS (Reports-Letters-Drafts to Clients)\4400_225 VPI Solvents Notification Letter.docx



SOIL BORINGS WITH DETECTABLE CONCENTRATIONS OF BIS(2-ETHYLHEXYL) PHTHALATE
VINYL PLASTICS, INC.
SHEBOYGAN, WISCONSIN

RMT INC.

DWN. BY:	TCP
APPROVED BY:	
DATE:	FEBRUARY 1997
PROJ. #	2990.03
FILE #	29900303

FIGURE 2

State of Wisconsin
Department of Natural Resources
PO Box 7921, Madison WI 53707-7921
dnr.wi.gov

Notification For Hazardous Substance Discharge (Non-Emergency Only)

Form 4400-225 (R 06/17)

Emergency Discharges / Spills should be reported via the 24-Hour Hotline: 1-800-943-0003

Notice: Hazardous substance discharges must be reported immediately according to s. 292.11 Wis. Stats. Non-emergency hazardous substance discharges may be reported by telefaxing or e-mailing a completed report to the Department, or calling or visiting a Department office in person. If you choose to notify the Department by telefax or by email, you should use this form to be sure that all necessary information is included. However, use of this form is not mandatory. Under s. 292.99, Wis. Stats., the penalty for violating the reporting requirements of ch. 292 Wis. Stats., shall be no less than $10 nor more than $5000 for each violation. Each day of continued violation is a separate offense. It is not the Department's intention to use any personally identifiable information from this form for any purpose other than program administration. However, information submitted on this form may also be made available to requesters under Wisconsin's Open Records Law (ss. 19.31 – 19.39, Wis. Stats.).

Confirmatory laboratory data should be included with this form, to assist the DNR in processing this Hazardous Substance Release Notification.

Complete this form. **TYPE or PRINT LEGIBLY.** NOTIFY appropriate DNR region (see next page) **IMMEDIATELY** upon discovery of a potential release from **(check one)**:

- ◯ Underground Petroleum Storage Tank System (additional information may be required for Item 6 below)
- ◯ Aboveground Petroleum Storage Tank System
- ◯ Dry Cleaner Facility
- ◉ Other - Describe: _____

ATTN DNR: **R & R Program Associate**

Date DNR Notified: 02/06/2020

1. Discharge Reported By

Name	Firm	Phone Number (include area code)
Blaine R. Schroyer, P.E.	Terracon Consultants, Inc.	(414) 423-0255

Mailing Address	Email
9856 South 57th Street, Franklin, Wisconsin 53132	Blaine.Schroyer@Terracon.com

2. Site Information

Name of site at which discharge occurred. Include local name of site/business, not responsible party name, unless a residence/vacant property.

VPI Corporation

Location: Include street address, not PO Box. If no street address, describe as precisely as possible, i.e., 1/4 mile NW of CTHs 60 & 123 on E side of CTH 60.

3123 South 9th Street

Municipality: (City, Village, Township) Specify municipality in which the site is located, not mailing address/city.

Sheboygan, Wisconsin

County	Legal Description:	WTM:
Sheboygan	NE ¼ of SW ¼ Section 35 , Town 15 N, Range 23 ◉ E ◯ W	X 704138 Y 363470

3. Responsible Party (RP) and/or RP Representative

Responsible Party Name: Business or owner name that is responsible for cleanup. If more than one, list all. Attach additional pages as necessary.

VPI Corporation

☐ A local governmental unit claiming an exemption from state Spill Law and Solid Waste Management responsibilities for the discharge being reported, per Wis. Stat. §§ 292.11(9)(e) and 292.23, should: 1) check this box; 2) review DNR publication RR-055; and 3) provide documentation to DNR that demonstrates compliance with the statutory requirements of the liability exemptions. Local governmental units may also request a fee-based liability clarification letter from DNR by using DNR Form 4400-237.

Contact Person Name (if different)	Phone Number	Email
Jeff Udovich	(920) 451-5814	JJUdovich@VPICorp.com

Mailing Address	City	State	ZIP Code
3123 South 9th Street	Sheboygan	WI	53082

Responsible Party Name: Business or owner name that is responsible for cleanup. If more than one, list all. Attach additional pages as necessary.

Contact Person Name (if different)	Phone Number	Email

Mailing Address	City	State	ZIP Code

(continued)

4. Hazardous Substance Information

Identify hazardous substance discharged (check all that apply):

- [x] VOCs
  - [ ] PCE
  - [ ] TCE
  - [x] Other Chlorinated
  - [ ] Diesel
  - [ ] Fuel Oil
  - [ ] Gasoline
  - [ ] Hydraulic Oil
  - [ ] Jet Fuel
- *(VOCs continued)*
  - [ ] Mineral Oil
  - [ ] Waste Oil
  - [ ] Petroleum-Unknown Type
- [ ] PAHs
- [ ] PCBs
- [ ] Cyanide
- [ ] Leachate
- [ ] Manure
- [ ] Metals
  - [ ] Arsenic
  - [ ] Chromium
  - [ ] Lead
  - [ ] Other: _____
- [ ] Pesticides: _____
- [ ] Fertilizer: _____
- [ ] RCRA Hazardous Waste: _____
- [ ] Other: _____
- [ ] Unknown

5. Impacts to the Environment Information

Enter "K" for known/confirmed or "P" for potential for all that apply.

- ___ Air Contamination
- ___ Co-mingled (Petroleum & Non-Petroleum)
- ___ Contamination in Fractured Bedrock
- ___ Contamination Within 1 Meter of Bedrock
- ___ Contaminated Private Well
- ___ Contaminated Public Well
- ___ Contamination in Right of Way
- ___ Fire Explosion Threat
- ___ Free Product
- K Groundwater Contamination
- ___ Off-Site Contamination
- ___ Sanitary Sewer Contamination
- ___ Storm Sewer Contamination
- ___ Sediment Contamination
- ___ Soil Contamination
- ___ Soil Gas Contamination
- ___ Sub-slab Vapor Contamination
- ___ Surface Water Contamination
- ___ Within 100 ft of Private Well
- ___ Within 1000 ft of Public Well

Other (specify): _____

Contamination was discovered as a result of:

- [ ] Tank closure assessment Date _____
- [x] Site assessment Date 01/17/2020
- [ ] Other - Describe: _____ Date _____

Lab results: [ ] Lab results will be faxed upon receipt [x] Lab results are attached

Additional Comments: Include a brief description of immediate actions taken to halt the release and contain or cleanup hazardous substances that have been discharged.
BRRTS #02-60-001045 was investigated/closed in the same area of the site. See attached cover letter.

6. Federal Energy Act Requirements (Section 9002(d) of the Solid Waste Disposal Act (SWDA))

For all confirmed releases from USTs occurring after 9/30/2007 please provide the following information:

[x] Does not apply.

Source

- [ ] Tank
- [ ] Piping
- [ ] Dispenser
- [ ] Submersible Turbine Pump
- [ ] Delivery Problem
- [ ] Other (specify): _____

Cause

- [ ] Spill
- [ ] Overfill
- [ ] Corrosion
- [ ] Physical or Mechanical Damage
- [ ] Installation Problem
- [ ] Other (does not fit any of above)
- [ ] Unknown

Contact information to report non-emergency releases in DNR's five regions are as follows:

Northeast Region (FAX: 920-662-5413); Attention -- R&R Program Associate: DNRRRNER@wisconsin.gov

Brown, Calumet, Door, Fond du Lac **(except City of Waupun - see South Central Region)**, Green Lake, Kewaunee, Manitowoc, Marinette, Marquette, Menominee, Oconto, Outagamie, Shawano, Sheboygan, Waupaca, Waushara, Winnebago counties

Northern Region (FAX: 715-623-6773); Attention -- R&R Program Associate: DNRRRNOR@wisconsin.gov

Ashland, Barron, Bayfield, Burnett, Douglas, Forest, Florence, Iron, Langlade, Lincoln, Oneida, Polk, Price, Rusk, Sawyer, Taylor, Vilas, Washburn counties

South Central Region (FAX: 608-273-5610); Attention -- R&R Program Associate: DNRRRSCR@wisconsin.gov

Columbia, Dane, Dodge, Fond du Lac **(City of Waupun only)**, Grant, Green, Iowa, Jefferson, Lafayette, Richland, Rock, Sauk, Walworth counties

Southeast Region (FAX: 414-263-8550); Attention -- R&R Program Associate: DNRRRSER@wisconsin.gov

Kenosha, Milwaukee, Ozaukee, Racine, Washington, Waukesha counties

West Central Region (FAX: 715-839-6076); Attention -- R&R Program Associate: DNRRRWCR@wisconsin.gov

Adams, Buffalo, Chippewa, Clark, Crawford, Dunn, Eau Claire, Jackson, Juneau, LaCrosse, Marathon, Monroe, Pepin, Pierce, Portage, St. Croix, Trempealeau, Vernon, Wood counties

Pace Analytical Services, LLC
1241 Bellevue Street - Suite 9
Green Bay, WI 54302
(920)469-2436

January 22, 2020

Paul Lenaker
Terracon, Inc. - Franklin
9856 S. 57th Street
Franklin, WI 53132

RE: Project: 58197238 VPI
Pace Project No.: 40202158

Dear Paul Lenaker:
Enclosed are the analytical results for sample(s) received by the laboratory on January 17, 2020. The results relate only to the samples included in this report. Results reported herein conform to the most current, applicable TNI/NELAC standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

Some analyses have been subcontracted outside of the Pace Network. The subcontracted laboratory report has been attached.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Dan Milewsky
dan.milewsky@pacelabs.com
(920)469-2436
Project Manager

Enclosures

cc: Lauren Babb, Terracon, Inc. - Franklin

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
1241 Bellevue Street - Suite 9
Green Bay, WI 54302
(920)469-2436

CERTIFICATIONS

Project: 58197238 VPI
Pace Project No.: 40202158

Pace Analytical Services Green Bay
1241 Bellevue Street, Green Bay, WI 54302
Florida/NELAP Certification #: E87948
Illinois Certification #: 200050
Kentucky UST Certification #: 82
Louisiana Certification #: 04168
Minnesota Certification #: 055-999-334
New York Certification #: 12064
North Dakota Certification #: R-150
Virginia VELAP ID: 460263
South Carolina Certification #: 83006001
Texas Certification #: T104704529-14-1
Wisconsin Certification #: 405132750
Wisconsin DATCP Certification #: 105-444
USDA Soil Permit #: P330-16-00157
Federal Fish & Wildlife Permit #: LE51774A-0

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
1241 Bellevue Street - Suite 9
Green Bay, WI 54302
(920)469-2436

SAMPLE SUMMARY

Project: 58197238 VPI
Pace Project No.: 40202158

Lab ID	Sample ID	Matrix	Date Collected	Date Received
40202158001	**MW-1**	Water	01/17/20 09:00	01/17/20 12:44
40202158002	**HCL TRIP**	Water	01/17/20 00:00	01/17/20 12:44

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Green Bay, WI 54302
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SAMPLE ANALYTE COUNT

Project: 58197238 VPI
Pace Project No.: 40202158

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
40202158001	**MW-1**	EPA 8270	RJN	70	PASI-G
		EPA 8260	HNW	64	PASI-G
40202158002	**HCL TRIP**	EPA 8260	HNW	64	PASI-G

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Green Bay, WI 54302
(920)469-2436

SUMMARY OF DETECTION

Project: 58197238 VPI
Pace Project No.: 40202158

Lab Sample ID / Method	Client Sample ID / Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
40202158001	**MW-1**					
EPA 8270	Butylbenzylphthalate	59.6	ug/L	5.1	01/21/20 14:24	
EPA 8270	bis(2-Ethylhexyl)phthalate	14.7	ug/L	9.8	01/21/20 14:24	
EPA 8260	cis-1,2-Dichloroethene	10.8	ug/L	1.0	01/21/20 11:20	
EPA 8260	Vinyl chloride	0.67J	ug/L	1.0	01/21/20 11:20	
40202158002	**HCL TRIP**					
EPA 8260	Chloromethane	2.2J	ug/L	7.3	01/21/20 09:05	

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PROJECT NARRATIVE

Project: 58197238 VPI
Pace Project No.: 40202158

Date: January 22, 2020

Sample MW-1 was evaluated for Diisonyl Phthalate (CAS 28553-12-0) by mass spectral library search. DINP was absent from this sample.

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(920)469-2436

PROJECT NARRATIVE

Project: 58197238 VPI
Pace Project No.: 40202158

Method: **EPA 8270**
Description: 8270 MSSV Semivolatile Organic
Client: Terracon, Inc. - Franklin
Date: January 22, 2020

General Information:
1 sample was analyzed for EPA 8270. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with EPA 3510 with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Internal Standards:
All internal standards were within QC limits with any exceptions noted below.

Surrogates:
All surrogates were within QC limits with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

QC Batch: 345820

R1: RPD value was outside control limits.
- LCSD (Lab ID: 2006604)
  - 4,6-Dinitro-2-methylphenol

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: 345820

A matrix spike/matrix spike duplicate was not performed due to insufficient sample volume.

Additional Comments:

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
1241 Bellevue Street - Suite 9
Green Bay, WI 54302
(920)469-2436

PROJECT NARRATIVE

Project: 58197238 VPI
Pace Project No.: 40202158

Method: **EPA 8260**
Description: 8260 MSV
Client: Terracon, Inc. - Franklin
Date: January 22, 2020

General Information:
2 samples were analyzed for EPA 8260. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Internal Standards:
All internal standards were within QC limits with any exceptions noted below.

Surrogates:
All surrogates were within QC limits with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

This data package has been reviewed for quality and completeness and is approved for release.

Pace Analytical Services, LLC
1241 Bellevue Street - Suite 9
Green Bay, WI 54302
(920)469-2436

ANALYTICAL RESULTS

Project: 58197238 VPI
Pace Project No.: 40202158

Sample: MW-1 **Lab ID: 40202158001** Collected: 01/17/20 09:00 Received: 01/17/20 12:44 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8270 MSSV Semivolatile Organic	Analytical Method: EPA 8270 Preparation Method: EPA 3510								
1,2,4-Trichlorobenzene	**<1.6**	ug/L	5.3	1.6	1	01/20/20 07:10	01/21/20 14:24	120-82-1	
1,2-Dichlorobenzene	**<1.5**	ug/L	5.1	1.5	1	01/20/20 07:10	01/21/20 14:24	95-50-1	
1,3-Dichlorobenzene	**<1.6**	ug/L	5.3	1.6	1	01/20/20 07:10	01/21/20 14:24	541-73-1	
1,4-Dichlorobenzene	**<1.5**	ug/L	5.1	1.5	1	01/20/20 07:10	01/21/20 14:24	106-46-7	
2,2'-Oxybis(1-chloropropane)	**<1.3**	ug/L	5.1	1.3	1	01/20/20 07:10	01/21/20 14:24	108-60-1	
2,4,5-Trichlorophenol	**<0.66**	ug/L	5.1	0.66	1	01/20/20 07:10	01/21/20 14:24	95-95-4	
2,4,6-Trichlorophenol	**<0.81**	ug/L	5.1	0.81	1	01/20/20 07:10	01/21/20 14:24	88-06-2	
2,4-Dichlorophenol	**<0.91**	ug/L	5.1	0.91	1	01/20/20 07:10	01/21/20 14:24	120-83-2	
2,4-Dimethylphenol	**<1.2**	ug/L	5.1	1.2	1	01/20/20 07:10	01/21/20 14:24	105-67-9	
2,4-Dinitrophenol	**<2.5**	ug/L	8.3	2.5	1	01/20/20 07:10	01/21/20 14:24	51-28-5	
2,4-Dinitrotoluene	**<1.1**	ug/L	5.1	1.1	1	01/20/20 07:10	01/21/20 14:24	121-14-2	
2,6-Dinitrotoluene	**<0.79**	ug/L	5.1	0.79	1	01/20/20 07:10	01/21/20 14:24	606-20-2	
2-Chloronaphthalene	**<0.85**	ug/L	5.1	0.85	1	01/20/20 07:10	01/21/20 14:24	91-58-7	
2-Chlorophenol	**<0.85**	ug/L	5.1	0.85	1	01/20/20 07:10	01/21/20 14:24	95-57-8	
2-Methylnaphthalene	**<1.2**	ug/L	5.1	1.2	1	01/20/20 07:10	01/21/20 14:24	91-57-6	
2-Methylphenol(o-Cresol)	**<0.95**	ug/L	5.1	0.95	1	01/20/20 07:10	01/21/20 14:24	95-48-7	
2-Nitroaniline	**<0.97**	ug/L	5.1	0.97	1	01/20/20 07:10	01/21/20 14:24	88-74-4	
2-Nitrophenol	**<0.84**	ug/L	5.1	0.84	1	01/20/20 07:10	01/21/20 14:24	88-75-5	
3&4-Methylphenol(m&p Cresol)	**<0.63**	ug/L	5.1	0.63	1	01/20/20 07:10	01/21/20 14:24		
3,3'-Dichlorobenzidine	**<1.4**	ug/L	5.1	1.4	1	01/20/20 07:10	01/21/20 14:24	91-94-1	
3-Nitroaniline	**<1.4**	ug/L	5.1	1.4	1	01/20/20 07:10	01/21/20 14:24	99-09-2	
4,6-Dinitro-2-methylphenol	**<3.2**	ug/L	10.6	3.2	1	01/20/20 07:10	01/21/20 14:24	534-52-1	
4-Bromophenylphenyl ether	**<0.98**	ug/L	5.1	0.98	1	01/20/20 07:10	01/21/20 14:24	101-55-3	
4-Chloro-3-methylphenol	**<0.70**	ug/L	5.1	0.70	1	01/20/20 07:10	01/21/20 14:24	59-50-7	
4-Chloroaniline	**<1.8**	ug/L	6.1	1.8	1	01/20/20 07:10	01/21/20 14:24	106-47-8	
4-Chlorophenylphenyl ether	**<0.85**	ug/L	5.1	0.85	1	01/20/20 07:10	01/21/20 14:24	7005-72-3	
4-Nitroaniline	**<3.1**	ug/L	10.2	3.1	1	01/20/20 07:10	01/21/20 14:24	100-01-6	
4-Nitrophenol	**<3.1**	ug/L	10.4	3.1	1	01/20/20 07:10	01/21/20 14:24	100-02-7	
Acenaphthene	**<0.78**	ug/L	5.1	0.78	1	01/20/20 07:10	01/21/20 14:24	83-32-9	
Acenaphthylene	**<0.74**	ug/L	5.1	0.74	1	01/20/20 07:10	01/21/20 14:24	208-96-8	
Anthracene	**<0.83**	ug/L	5.1	0.83	1	01/20/20 07:10	01/21/20 14:24	120-12-7	
Benzo(a)anthracene	**<0.86**	ug/L	5.1	0.86	1	01/20/20 07:10	01/21/20 14:24	56-55-3	
Benzo(a)pyrene	**<1.3**	ug/L	5.1	1.3	1	01/20/20 07:10	01/21/20 14:24	50-32-8	
Benzo(b)fluoranthene	**<1.1**	ug/L	5.1	1.1	1	01/20/20 07:10	01/21/20 14:24	205-99-2	
Benzo(g,h,i)perylene	**<1.4**	ug/L	5.1	1.4	1	01/20/20 07:10	01/21/20 14:24	191-24-2	
Benzo(k)fluoranthene	**<1.1**	ug/L	5.1	1.1	1	01/20/20 07:10	01/21/20 14:24	207-08-9	
Butylbenzylphthalate	**59.6**	ug/L	5.1	1.3	1	01/20/20 07:10	01/21/20 14:24	85-68-7	
Carbazole	**<0.93**	ug/L	5.1	0.93	1	01/20/20 07:10	01/21/20 14:24	86-74-8	
Chrysene	**<1.3**	ug/L	5.1	1.3	1	01/20/20 07:10	01/21/20 14:24	218-01-9	
Di-n-butylphthalate	**<1.3**	ug/L	5.1	1.3	1	01/20/20 07:10	01/21/20 14:24	84-74-2	
Di-n-octylphthalate	**<4.9**	ug/L	16.2	4.9	1	01/20/20 07:10	01/21/20 14:24	117-84-0	
Dibenz(a,h)anthracene	**<1.1**	ug/L	5.1	1.1	1	01/20/20 07:10	01/21/20 14:24	53-70-3	
Dibenzofuran	**<0.86**	ug/L	5.1	0.86	1	01/20/20 07:10	01/21/20 14:24	132-64-9	
Diethylphthalate	**<0.79**	ug/L	5.1	0.79	1	01/20/20 07:10	01/21/20 14:24	84-66-2	
Dimethylphthalate	**<0.73**	ug/L	5.1	0.73	1	01/20/20 07:10	01/21/20 14:24	131-11-3	
Fluoranthene	**<1.0**	ug/L	5.1	1.0	1	01/20/20 07:10	01/21/20 14:24	206-44-0	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
1241 Bellevue Street - Suite 9
Green Bay, WI 54302
(920)469-2436

ANALYTICAL RESULTS

Project: 58197238 VPI
Pace Project No.: 40202158

Sample: MW-1 **Lab ID: 40202158001** Collected: 01/17/20 09:00 Received: 01/17/20 12:44 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8270 MSSV Semivolatile Organic	Analytical Method: EPA 8270 Preparation Method: EPA 3510								
Fluorene	**<0.92**	ug/L	5.1	0.92	1	01/20/20 07:10	01/21/20 14:24	86-73-7	
Hexachloro-1,3-butadiene	**<1.2**	ug/L	5.6	1.2	1	01/20/20 07:10	01/21/20 14:24	87-68-3	
Hexachlorobenzene	**<1.7**	ug/L	5.1	1.7	1	01/20/20 07:10	01/21/20 14:24	118-74-1	
Hexachlorocyclopentadiene	**<1.0**	ug/L	5.1	1.0	1	01/20/20 07:10	01/21/20 14:24	77-47-4	
Hexachloroethane	**<1.4**	ug/L	5.1	1.4	1	01/20/20 07:10	01/21/20 14:24	67-72-1	
Indeno(1,2,3-cd)pyrene	**<1.2**	ug/L	5.1	1.2	1	01/20/20 07:10	01/21/20 14:24	193-39-5	
Isophorone	**<0.79**	ug/L	5.1	0.79	1	01/20/20 07:10	01/21/20 14:24	78-59-1	
N-Nitroso-di-n-propylamine	**<1.2**	ug/L	5.1	1.2	1	01/20/20 07:10	01/21/20 14:24	621-64-7	
N-Nitrosodiphenylamine	**<3.5**	ug/L	11.7	3.5	1	01/20/20 07:10	01/21/20 14:24	86-30-6	
Naphthalene	**<1.2**	ug/L	5.1	1.2	1	01/20/20 07:10	01/21/20 14:24	91-20-3	
Nitrobenzene	**<1.1**	ug/L	5.1	1.1	1	01/20/20 07:10	01/21/20 14:24	98-95-3	
Pentachlorophenol	**<4.6**	ug/L	15.5	4.6	1	01/20/20 07:10	01/21/20 14:24	87-86-5	
Phenanthrene	**<0.97**	ug/L	5.1	0.97	1	01/20/20 07:10	01/21/20 14:24	85-01-8	
Phenol	**<0.33**	ug/L	5.1	0.33	1	01/20/20 07:10	01/21/20 14:24	108-95-2	
Pyrene	**<1.2**	ug/L	5.1	1.2	1	01/20/20 07:10	01/21/20 14:24	129-00-0	
bis(2-Chloroethoxy)methane	**<1.3**	ug/L	5.1	1.3	1	01/20/20 07:10	01/21/20 14:24	111-91-1	
bis(2-Chloroethyl) ether	**<1.2**	ug/L	5.1	1.2	1	01/20/20 07:10	01/21/20 14:24	111-44-4	
bis(2-Ethylhexyl)phthalate	**14.7**	ug/L	9.8	2.9	1	01/20/20 07:10	01/21/20 14:24	117-81-7	
Surrogates									
Nitrobenzene-d5 (S)	91	%	51-108		1	01/20/20 07:10	01/21/20 14:24	4165-60-0	
2-Fluorobiphenyl (S)	84	%	47-105		1	01/20/20 07:10	01/21/20 14:24	321-60-8	
Terphenyl-d14 (S)	114	%	65-147		1	01/20/20 07:10	01/21/20 14:24	1718-51-0	
Phenol-d6 (S)	32	%	18-120		1	01/20/20 07:10	01/21/20 14:24	13127-88-3	
2-Fluorophenol (S)	53	%	32-120		1	01/20/20 07:10	01/21/20 14:24	367-12-4	
2,4,6-Tribromophenol (S)	123	%	57-131		1	01/20/20 07:10	01/21/20 14:24	118-79-6	
8260 MSV	Analytical Method: EPA 8260								
Benzene	**<0.25**	ug/L	1.0	0.25	1		01/21/20 11:20	71-43-2	
Bromobenzene	**<0.24**	ug/L	1.0	0.24	1		01/21/20 11:20	108-86-1	
Bromochloromethane	**<0.36**	ug/L	5.0	0.36	1		01/21/20 11:20	74-97-5	
Bromodichloromethane	**<0.36**	ug/L	1.2	0.36	1		01/21/20 11:20	75-27-4	
Bromoform	**<4.0**	ug/L	13.2	4.0	1		01/21/20 11:20	75-25-2	
Bromomethane	**<0.97**	ug/L	5.0	0.97	1		01/21/20 11:20	74-83-9	
n-Butylbenzene	**<0.71**	ug/L	2.4	0.71	1		01/21/20 11:20	104-51-8	
sec-Butylbenzene	**<0.85**	ug/L	5.0	0.85	1		01/21/20 11:20	135-98-8	
tert-Butylbenzene	**<0.30**	ug/L	1.0	0.30	1		01/21/20 11:20	98-06-6	
Carbon tetrachloride	**<0.17**	ug/L	1.0	0.17	1		01/21/20 11:20	56-23-5	
Chlorobenzene	**<0.71**	ug/L	2.4	0.71	1		01/21/20 11:20	108-90-7	
Chloroethane	**<1.3**	ug/L	5.0	1.3	1		01/21/20 11:20	75-00-3	
Chloroform	**<1.3**	ug/L	5.0	1.3	1		01/21/20 11:20	67-66-3	
Chloromethane	**<2.2**	ug/L	7.3	2.2	1		01/21/20 11:20	74-87-3	
2-Chlorotoluene	**<0.93**	ug/L	5.0	0.93	1		01/21/20 11:20	95-49-8	
4-Chlorotoluene	**<0.76**	ug/L	2.5	0.76	1		01/21/20 11:20	106-43-4	
1,2-Dibromo-3-chloropropane	**<1.8**	ug/L	5.9	1.8	1		01/21/20 11:20	96-12-8	
Dibromochloromethane	**<2.6**	ug/L	8.7	2.6	1		01/21/20 11:20	124-48-1	
1,2-Dibromoethane (EDB)	**<0.83**	ug/L	2.8	0.83	1		01/21/20 11:20	106-93-4	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
1241 Bellevue Street - Suite 9
Green Bay, WI 54302
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ANALYTICAL RESULTS

Project: 58197238 VPI
Pace Project No.: 40202158

Sample: MW-1 **Lab ID: 40202158001** Collected: 01/17/20 09:00 Received: 01/17/20 12:44 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 8260								
Dibromomethane	**<0.94**	ug/L	3.1	0.94	1		01/21/20 11:20	74-95-3	
1,2-Dichlorobenzene	**<0.71**	ug/L	2.4	0.71	1		01/21/20 11:20	95-50-1	
1,3-Dichlorobenzene	**<0.63**	ug/L	2.1	0.63	1		01/21/20 11:20	541-73-1	
1,4-Dichlorobenzene	**<0.94**	ug/L	3.1	0.94	1		01/21/20 11:20	106-46-7	
Dichlorodifluoromethane	**<0.50**	ug/L	5.0	0.50	1		01/21/20 11:20	75-71-8	
1,1-Dichloroethane	**<0.27**	ug/L	1.0	0.27	1		01/21/20 11:20	75-34-3	
1,2-Dichloroethane	**<0.28**	ug/L	1.0	0.28	1		01/21/20 11:20	107-06-2	
1,1-Dichloroethene	**<0.24**	ug/L	1.0	0.24	1		01/21/20 11:20	75-35-4	
cis-1,2-Dichloroethene	**10.8**	ug/L	1.0	0.27	1		01/21/20 11:20	156-59-2	
trans-1,2-Dichloroethene	**<1.1**	ug/L	3.6	1.1	1		01/21/20 11:20	156-60-5	
1,2-Dichloropropane	**<0.28**	ug/L	1.0	0.28	1		01/21/20 11:20	78-87-5	
1,3-Dichloropropane	**<0.83**	ug/L	2.8	0.83	1		01/21/20 11:20	142-28-9	
2,2-Dichloropropane	**<2.3**	ug/L	7.6	2.3	1		01/21/20 11:20	594-20-7	
1,1-Dichloropropene	**<0.54**	ug/L	1.8	0.54	1		01/21/20 11:20	563-58-6	
cis-1,3-Dichloropropene	**<3.6**	ug/L	12.1	3.6	1		01/21/20 11:20	10061-01-5	
trans-1,3-Dichloropropene	**<4.4**	ug/L	14.6	4.4	1		01/21/20 11:20	10061-02-6	
Diisopropyl ether	**<1.9**	ug/L	6.3	1.9	1		01/21/20 11:20	108-20-3	
Ethylbenzene	**<0.22**	ug/L	1.0	0.22	1		01/21/20 11:20	100-41-4	
Hexachloro-1,3-butadiene	**<1.2**	ug/L	5.0	1.2	1		01/21/20 11:20	87-68-3	
Isopropylbenzene (Cumene)	**<0.39**	ug/L	5.0	0.39	1		01/21/20 11:20	98-82-8	
p-Isopropyltoluene	**<0.80**	ug/L	2.7	0.80	1		01/21/20 11:20	99-87-6	
Methylene Chloride	**<0.58**	ug/L	5.0	0.58	1		01/21/20 11:20	75-09-2	
Methyl-tert-butyl ether	**<1.2**	ug/L	4.2	1.2	1		01/21/20 11:20	1634-04-4	
Naphthalene	**<1.2**	ug/L	5.0	1.2	1		01/21/20 11:20	91-20-3	
n-Propylbenzene	**<0.81**	ug/L	5.0	0.81	1		01/21/20 11:20	103-65-1	
Styrene	**<0.47**	ug/L	1.6	0.47	1		01/21/20 11:20	100-42-5	
1,1,1,2-Tetrachloroethane	**<0.27**	ug/L	1.0	0.27	1		01/21/20 11:20	630-20-6	
1,1,2,2-Tetrachloroethane	**<0.28**	ug/L	1.0	0.28	1		01/21/20 11:20	79-34-5	
Tetrachloroethene	**<0.33**	ug/L	1.1	0.33	1		01/21/20 11:20	127-18-4	
Toluene	**<0.17**	ug/L	5.0	0.17	1		01/21/20 11:20	108-88-3	
1,2,3-Trichlorobenzene	**<0.63**	ug/L	5.0	0.63	1		01/21/20 11:20	87-61-6	
1,2,4-Trichlorobenzene	**<0.95**	ug/L	5.0	0.95	1		01/21/20 11:20	120-82-1	
1,1,1-Trichloroethane	**<0.24**	ug/L	1.0	0.24	1		01/21/20 11:20	71-55-6	
1,1,2-Trichloroethane	**<0.55**	ug/L	5.0	0.55	1		01/21/20 11:20	79-00-5	
Trichloroethene	**<0.26**	ug/L	1.0	0.26	1		01/21/20 11:20	79-01-6	
Trichlorofluoromethane	**<0.21**	ug/L	1.0	0.21	1		01/21/20 11:20	75-69-4	
1,2,3-Trichloropropane	**<0.59**	ug/L	5.0	0.59	1		01/21/20 11:20	96-18-4	
1,2,4-Trimethylbenzene	**<0.84**	ug/L	2.8	0.84	1		01/21/20 11:20	95-63-6	
1,3,5-Trimethylbenzene	**<0.87**	ug/L	2.9	0.87	1		01/21/20 11:20	108-67-8	
Vinyl chloride	**0.67J**	ug/L	1.0	0.17	1		01/21/20 11:20	75-01-4	
m&p-Xylene	**<0.47**	ug/L	2.0	0.47	1		01/21/20 11:20	179601-23-1	
o-Xylene	**<0.26**	ug/L	1.0	0.26	1		01/21/20 11:20	95-47-6	
Surrogates									
4-Bromofluorobenzene (S)	100	%	70-130		1		01/21/20 11:20	460-00-4	
Dibromofluoromethane (S)	105	%	70-130		1		01/21/20 11:20	1868-53-7	
Toluene-d8 (S)	104	%	70-130		1		01/21/20 11:20	2037-26-5	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
1241 Bellevue Street - Suite 9
Green Bay, WI 54302
(920)469-2436

ANALYTICAL RESULTS

Project: 58197238 VPI
Pace Project No.: 40202158

Sample: HCL TRIP **Lab ID: 40202158002** Collected: 01/17/20 00:00 Received: 01/17/20 12:44 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 8260								
Benzene	**<0.25**	ug/L	1.0	0.25	1		01/21/20 09:05	71-43-2	
Bromobenzene	**<0.24**	ug/L	1.0	0.24	1		01/21/20 09:05	108-86-1	
Bromochloromethane	**<0.36**	ug/L	5.0	0.36	1		01/21/20 09:05	74-97-5	
Bromodichloromethane	**<0.36**	ug/L	1.2	0.36	1		01/21/20 09:05	75-27-4	
Bromoform	**<4.0**	ug/L	13.2	4.0	1		01/21/20 09:05	75-25-2	
Bromomethane	**<0.97**	ug/L	5.0	0.97	1		01/21/20 09:05	74-83-9	
n-Butylbenzene	**<0.71**	ug/L	2.4	0.71	1		01/21/20 09:05	104-51-8	
sec-Butylbenzene	**<0.85**	ug/L	5.0	0.85	1		01/21/20 09:05	135-98-8	
tert-Butylbenzene	**<0.30**	ug/L	1.0	0.30	1		01/21/20 09:05	98-06-6	
Carbon tetrachloride	**<0.17**	ug/L	1.0	0.17	1		01/21/20 09:05	56-23-5	
Chlorobenzene	**<0.71**	ug/L	2.4	0.71	1		01/21/20 09:05	108-90-7	
Chloroethane	**<1.3**	ug/L	5.0	1.3	1		01/21/20 09:05	75-00-3	
Chloroform	**<1.3**	ug/L	5.0	1.3	1		01/21/20 09:05	67-66-3	
Chloromethane	**2.2J**	ug/L	7.3	2.2	1		01/21/20 09:05	74-87-3	
2-Chlorotoluene	**<0.93**	ug/L	5.0	0.93	1		01/21/20 09:05	95-49-8	
4-Chlorotoluene	**<0.76**	ug/L	2.5	0.76	1		01/21/20 09:05	106-43-4	
1,2-Dibromo-3-chloropropane	**<1.8**	ug/L	5.9	1.8	1		01/21/20 09:05	96-12-8	
Dibromochloromethane	**<2.6**	ug/L	8.7	2.6	1		01/21/20 09:05	124-48-1	
1,2-Dibromoethane (EDB)	**<0.83**	ug/L	2.8	0.83	1		01/21/20 09:05	106-93-4	
Dibromomethane	**<0.94**	ug/L	3.1	0.94	1		01/21/20 09:05	74-95-3	
1,2-Dichlorobenzene	**<0.71**	ug/L	2.4	0.71	1		01/21/20 09:05	95-50-1	
1,3-Dichlorobenzene	**<0.63**	ug/L	2.1	0.63	1		01/21/20 09:05	541-73-1	
1,4-Dichlorobenzene	**<0.94**	ug/L	3.1	0.94	1		01/21/20 09:05	106-46-7	
Dichlorodifluoromethane	**<0.50**	ug/L	5.0	0.50	1		01/21/20 09:05	75-71-8	
1,1-Dichloroethane	**<0.27**	ug/L	1.0	0.27	1		01/21/20 09:05	75-34-3	
1,2-Dichloroethane	**<0.28**	ug/L	1.0	0.28	1		01/21/20 09:05	107-06-2	
1,1-Dichloroethene	**<0.24**	ug/L	1.0	0.24	1		01/21/20 09:05	75-35-4	
cis-1,2-Dichloroethene	**<0.27**	ug/L	1.0	0.27	1		01/21/20 09:05	156-59-2	
trans-1,2-Dichloroethene	**<1.1**	ug/L	3.6	1.1	1		01/21/20 09:05	156-60-5	
1,2-Dichloropropane	**<0.28**	ug/L	1.0	0.28	1		01/21/20 09:05	78-87-5	
1,3-Dichloropropane	**<0.83**	ug/L	2.8	0.83	1		01/21/20 09:05	142-28-9	
2,2-Dichloropropane	**<2.3**	ug/L	7.6	2.3	1		01/21/20 09:05	594-20-7	
1,1-Dichloropropene	**<0.54**	ug/L	1.8	0.54	1		01/21/20 09:05	563-58-6	
cis-1,3-Dichloropropene	**<3.6**	ug/L	12.1	3.6	1		01/21/20 09:05	10061-01-5	
trans-1,3-Dichloropropene	**<4.4**	ug/L	14.6	4.4	1		01/21/20 09:05	10061-02-6	
Diisopropyl ether	**<1.9**	ug/L	6.3	1.9	1		01/21/20 09:05	108-20-3	
Ethylbenzene	**<0.22**	ug/L	1.0	0.22	1		01/21/20 09:05	100-41-4	
Hexachloro-1,3-butadiene	**<1.2**	ug/L	5.0	1.2	1		01/21/20 09:05	87-68-3	
Isopropylbenzene (Cumene)	**<0.39**	ug/L	5.0	0.39	1		01/21/20 09:05	98-82-8	
p-Isopropyltoluene	**<0.80**	ug/L	2.7	0.80	1		01/21/20 09:05	99-87-6	
Methylene Chloride	**<0.58**	ug/L	5.0	0.58	1		01/21/20 09:05	75-09-2	
Methyl-tert-butyl ether	**<1.2**	ug/L	4.2	1.2	1		01/21/20 09:05	1634-04-4	
Naphthalene	**<1.2**	ug/L	5.0	1.2	1		01/21/20 09:05	91-20-3	
n-Propylbenzene	**<0.81**	ug/L	5.0	0.81	1		01/21/20 09:05	103-65-1	
Styrene	**<0.47**	ug/L	1.6	0.47	1		01/21/20 09:05	100-42-5	
1,1,1,2-Tetrachloroethane	**<0.27**	ug/L	1.0	0.27	1		01/21/20 09:05	630-20-6	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: 58197238 VPI
Pace Project No.: 40202158

Sample: HCL TRIP **Lab ID: 40202158002** Collected: 01/17/20 00:00 Received: 01/17/20 12:44 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 8260								
1,1,2,2-Tetrachloroethane	**<0.28**	ug/L	1.0	0.28	1		01/21/20 09:05	79-34-5	
Tetrachloroethene	**<0.33**	ug/L	1.1	0.33	1		01/21/20 09:05	127-18-4	
Toluene	**<0.17**	ug/L	5.0	0.17	1		01/21/20 09:05	108-88-3	
1,2,3-Trichlorobenzene	**<0.63**	ug/L	5.0	0.63	1		01/21/20 09:05	87-61-6	
1,2,4-Trichlorobenzene	**<0.95**	ug/L	5.0	0.95	1		01/21/20 09:05	120-82-1	
1,1,1-Trichloroethane	**<0.24**	ug/L	1.0	0.24	1		01/21/20 09:05	71-55-6	
1,1,2-Trichloroethane	**<0.55**	ug/L	5.0	0.55	1		01/21/20 09:05	79-00-5	
Trichloroethene	**<0.26**	ug/L	1.0	0.26	1		01/21/20 09:05	79-01-6	
Trichlorofluoromethane	**<0.21**	ug/L	1.0	0.21	1		01/21/20 09:05	75-69-4	
1,2,3-Trichloropropane	**<0.59**	ug/L	5.0	0.59	1		01/21/20 09:05	96-18-4	
1,2,4-Trimethylbenzene	**<0.84**	ug/L	2.8	0.84	1		01/21/20 09:05	95-63-6	
1,3,5-Trimethylbenzene	**<0.87**	ug/L	2.9	0.87	1		01/21/20 09:05	108-67-8	
Vinyl chloride	**<0.17**	ug/L	1.0	0.17	1		01/21/20 09:05	75-01-4	
m&p-Xylene	**<0.47**	ug/L	2.0	0.47	1		01/21/20 09:05	179601-23-1	
o-Xylene	**<0.26**	ug/L	1.0	0.26	1		01/21/20 09:05	95-47-6	
Surrogates									
4-Bromofluorobenzene (S)	100	%	70-130		1		01/21/20 09:05	460-00-4	
Dibromofluoromethane (S)	104	%	70-130		1		01/21/20 09:05	1868-53-7	
Toluene-d8 (S)	104	%	70-130		1		01/21/20 09:05	2037-26-5	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
1241 Bellevue Street - Suite 9
Green Bay, WI 54302
(920)469-2436

QUALITY CONTROL DATA

Project: 58197238 VPI
Pace Project No.: 40202158

QC Batch: 345828 Analysis Method: EPA 8260
QC Batch Method: EPA 8260 Analysis Description: 8260 MSV
Associated Lab Samples: 40202158001, 40202158002

METHOD BLANK: 2006634 Matrix: Water
Associated Lab Samples: 40202158001, 40202158002

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1,1,2-Tetrachloroethane	ug/L	<0.27	1.0	01/20/20 14:45	
1,1,1-Trichloroethane	ug/L	<0.24	1.0	01/20/20 14:45	
1,1,2,2-Tetrachloroethane	ug/L	<0.28	1.0	01/20/20 14:45	
1,1,2-Trichloroethane	ug/L	<0.55	5.0	01/20/20 14:45	
1,1-Dichloroethane	ug/L	<0.27	1.0	01/20/20 14:45	
1,1-Dichloroethene	ug/L	<0.24	1.0	01/20/20 14:45	
1,1-Dichloropropene	ug/L	<0.54	1.8	01/20/20 14:45	
1,2,3-Trichlorobenzene	ug/L	<0.63	5.0	01/20/20 14:45	
1,2,3-Trichloropropane	ug/L	<0.59	5.0	01/20/20 14:45	
1,2,4-Trichlorobenzene	ug/L	<0.95	5.0	01/20/20 14:45	
1,2,4-Trimethylbenzene	ug/L	<0.84	2.8	01/20/20 14:45	
1,2-Dibromo-3-chloropropane	ug/L	<1.8	5.9	01/20/20 14:45	
1,2-Dibromoethane (EDB)	ug/L	<0.83	2.8	01/20/20 14:45	
1,2-Dichlorobenzene	ug/L	<0.71	2.4	01/20/20 14:45	
1,2-Dichloroethane	ug/L	<0.28	1.0	01/20/20 14:45	
1,2-Dichloropropane	ug/L	<0.28	1.0	01/20/20 14:45	
1,3,5-Trimethylbenzene	ug/L	<0.87	2.9	01/20/20 14:45	
1,3-Dichlorobenzene	ug/L	<0.63	2.1	01/20/20 14:45	
1,3-Dichloropropane	ug/L	<0.83	2.8	01/20/20 14:45	
1,4-Dichlorobenzene	ug/L	<0.94	3.1	01/20/20 14:45	
2,2-Dichloropropane	ug/L	<2.3	7.6	01/20/20 14:45	
2-Chlorotoluene	ug/L	<0.93	5.0	01/20/20 14:45	
4-Chlorotoluene	ug/L	<0.76	2.5	01/20/20 14:45	
Benzene	ug/L	<0.25	1.0	01/20/20 14:45	
Bromobenzene	ug/L	<0.24	1.0	01/20/20 14:45	
Bromochloromethane	ug/L	<0.36	5.0	01/20/20 14:45	
Bromodichloromethane	ug/L	<0.36	1.2	01/20/20 14:45	
Bromoform	ug/L	<4.0	13.2	01/20/20 14:45	
Bromomethane	ug/L	<0.97	5.0	01/20/20 14:45	
Carbon tetrachloride	ug/L	<0.17	1.0	01/20/20 14:45	
Chlorobenzene	ug/L	<0.71	2.4	01/20/20 14:45	
Chloroethane	ug/L	<1.3	5.0	01/20/20 14:45	
Chloroform	ug/L	<1.3	5.0	01/20/20 14:45	
Chloromethane	ug/L	<2.2	7.3	01/20/20 14:45	
cis-1,2-Dichloroethene	ug/L	<0.27	1.0	01/20/20 14:45	
cis-1,3-Dichloropropene	ug/L	<3.6	12.1	01/20/20 14:45	
Dibromochloromethane	ug/L	<2.6	8.7	01/20/20 14:45	
Dibromomethane	ug/L	<0.94	3.1	01/20/20 14:45	
Dichlorodifluoromethane	ug/L	<0.50	5.0	01/20/20 14:45	
Diisopropyl ether	ug/L	<1.9	6.3	01/20/20 14:45	
Ethylbenzene	ug/L	<0.22	1.0	01/20/20 14:45	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
1241 Bellevue Street - Suite 9
Green Bay, WI 54302
(920)469-2436

QUALITY CONTROL DATA

Project: 58197238 VPI
Pace Project No.: 40202158

METHOD BLANK: 2006634 Matrix: Water
Associated Lab Samples: 40202158001, 40202158002

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Hexachloro-1,3-butadiene	ug/L	<1.2	5.0	01/20/20 14:45	
Isopropylbenzene (Cumene)	ug/L	<0.39	5.0	01/20/20 14:45	
m&p-Xylene	ug/L	<0.47	2.0	01/20/20 14:45	
Methyl-tert-butyl ether	ug/L	<1.2	4.2	01/20/20 14:45	
Methylene Chloride	ug/L	<0.58	5.0	01/20/20 14:45	
n-Butylbenzene	ug/L	<0.71	2.4	01/20/20 14:45	
n-Propylbenzene	ug/L	<0.81	5.0	01/20/20 14:45	
Naphthalene	ug/L	<1.2	5.0	01/20/20 14:45	
o-Xylene	ug/L	<0.26	1.0	01/20/20 14:45	
p-Isopropyltoluene	ug/L	<0.80	2.7	01/20/20 14:45	
sec-Butylbenzene	ug/L	<0.85	5.0	01/20/20 14:45	
Styrene	ug/L	<0.47	1.6	01/20/20 14:45	
tert-Butylbenzene	ug/L	<0.30	1.0	01/20/20 14:45	
Tetrachloroethene	ug/L	<0.33	1.1	01/20/20 14:45	
Toluene	ug/L	<0.17	5.0	01/20/20 14:45	
trans-1,2-Dichloroethene	ug/L	<1.1	3.6	01/20/20 14:45	
trans-1,3-Dichloropropene	ug/L	<4.4	14.6	01/20/20 14:45	
Trichloroethene	ug/L	<0.26	1.0	01/20/20 14:45	
Trichlorofluoromethane	ug/L	<0.21	1.0	01/20/20 14:45	
Vinyl chloride	ug/L	<0.17	1.0	01/20/20 14:45	
4-Bromofluorobenzene (S)	%	100	70-130	01/20/20 14:45	
Dibromofluoromethane (S)	%	103	70-130	01/20/20 14:45	
Toluene-d8 (S)	%	104	70-130	01/20/20 14:45	

LABORATORY CONTROL SAMPLE: 2006635

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1-Trichloroethane	ug/L	50	56.1	112	70-130	
1,1,2,2-Tetrachloroethane	ug/L	50	54.3	109	70-130	
1,1,2-Trichloroethane	ug/L	50	53.4	107	70-130	
1,1-Dichloroethane	ug/L	50	59.2	118	73-150	
1,1-Dichloroethene	ug/L	50	55.0	110	73-138	
1,2,4-Trichlorobenzene	ug/L	50	49.8	100	70-130	
1,2-Dibromo-3-chloropropane	ug/L	50	51.1	102	64-129	
1,2-Dibromoethane (EDB)	ug/L	50	50.7	101	70-130	
1,2-Dichlorobenzene	ug/L	50	51.0	102	70-130	
1,2-Dichloroethane	ug/L	50	57.4	115	75-140	
1,2-Dichloropropane	ug/L	50	55.5	111	73-135	
1,3-Dichlorobenzene	ug/L	50	51.1	102	70-130	
1,4-Dichlorobenzene	ug/L	50	50.4	101	70-130	
Benzene	ug/L	50	56.2	112	70-130	
Bromodichloromethane	ug/L	50	53.1	106	70-130	
Bromoform	ug/L	50	42.8	86	68-129	
Bromomethane	ug/L	50	42.8	86	18-159	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
1241 Bellevue Street - Suite 9
Green Bay, WI 54302
(920)469-2436

QUALITY CONTROL DATA

Project: 58197238 VPI
Pace Project No.: 40202158

LABORATORY CONTROL SAMPLE: 2006635

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Carbon tetrachloride	ug/L	50	55.5	111	70-130	
Chlorobenzene	ug/L	50	51.4	103	70-130	
Chloroethane	ug/L	50	48.9	98	53-147	
Chloroform	ug/L	50	55.0	110	74-136	
Chloromethane	ug/L	50	39.1	78	29-115	
cis-1,2-Dichloroethene	ug/L	50	54.7	109	70-130	
cis-1,3-Dichloropropene	ug/L	50	52.3	105	70-130	
Dibromochloromethane	ug/L	50	50.0	100	70-130	
Dichlorodifluoromethane	ug/L	50	28.2	56	10-130	
Ethylbenzene	ug/L	50	53.9	108	80-124	
Isopropylbenzene (Cumene)	ug/L	50	52.4	105	70-130	
m&p-Xylene	ug/L	100	105	105	70-130	
Methyl-tert-butyl ether	ug/L	50	55.4	111	54-137	
Methylene Chloride	ug/L	50	54.6	109	73-138	
o-Xylene	ug/L	50	52.0	104	70-130	
Styrene	ug/L	50	53.1	106	70-130	
Tetrachloroethene	ug/L	50	48.6	97	70-130	
Toluene	ug/L	50	52.8	106	80-126	
trans-1,2-Dichloroethene	ug/L	50	55.3	111	73-145	
trans-1,3-Dichloropropene	ug/L	50	51.6	103	70-130	
Trichloroethene	ug/L	50	54.0	108	70-130	
Trichlorofluoromethane	ug/L	50	55.9	112	76-147	
Vinyl chloride	ug/L	50	43.7	87	51-120	
4-Bromofluorobenzene (S)	%			102	70-130	
Dibromofluoromethane (S)	%			107	70-130	
Toluene-d8 (S)	%			102	70-130	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2006869 2006870

Parameter	Units	40202142002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
1,1,1-Trichloroethane	ug/L	<0.24	50	50	58.0	55.7	116	111	70-130	4	20	
1,1,2,2-Tetrachloroethane	ug/L	<0.28	50	50	55.7	53.6	111	107	70-130	4	20	
1,1,2-Trichloroethane	ug/L	<0.55	50	50	54.5	52.1	109	104	70-137	4	20	
1,1-Dichloroethane	ug/L	<0.27	50	50	61.8	59.7	124	119	73-153	3	20	
1,1-Dichloroethene	ug/L	<0.24	50	50	59.0	56.4	118	113	73-138	5	20	
1,2,4-Trichlorobenzene	ug/L	<0.95	50	50	51.4	48.4	103	97	70-130	6	20	
1,2-Dibromo-3-chloropropane	ug/L	<1.8	50	50	54.5	50.4	109	101	58-129	8	20	
1,2-Dibromoethane (EDB)	ug/L	<0.83	50	50	52.1	49.7	104	99	70-130	5	20	
1,2-Dichlorobenzene	ug/L	<0.71	50	50	52.5	49.9	105	100	70-130	5	20	
1,2-Dichloroethane	ug/L	<0.28	50	50	59.1	58.5	118	117	75-140	1	20	
1,2-Dichloropropane	ug/L	<0.28	50	50	55.6	55.0	111	110	71-138	1	20	
1,3-Dichlorobenzene	ug/L	<0.63	50	50	53.3	50.5	107	101	70-130	5	20	
1,4-Dichlorobenzene	ug/L	<0.94	50	50	53.0	49.9	106	100	70-130	6	20	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
1241 Bellevue Street - Suite 9
Green Bay, WI 54302
(920)469-2436

QUALITY CONTROL DATA

Project: 58197238 VPI
Pace Project No.: 40202158

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2006869 2006870

Parameter	Units	40202142002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Benzene	ug/L	<0.25	50	50	58.2	56.2	116	112	70-130	3	20	
Bromodichloromethane	ug/L	<0.36	50	50	54.2	52.4	108	105	70-130	3	20	
Bromoform	ug/L	<4.0	50	50	43.4	41.7	87	83	68-129	4	20	
Bromomethane	ug/L	<0.97	50	50	60.6	57.7	121	115	15-170	5	20	
Carbon tetrachloride	ug/L	<0.17	50	50	57.2	55.4	114	111	70-130	3	20	
Chlorobenzene	ug/L	<0.71	50	50	52.8	50.6	106	101	70-130	4	20	
Chloroethane	ug/L	<1.3	50	50	55.7	53.3	111	107	51-148	4	20	
Chloroform	ug/L	<1.3	50	50	56.6	54.5	113	109	74-136	4	20	
Chloromethane	ug/L	<2.2	50	50	50.5	50.1	101	100	23-115	1	20	
cis-1,2-Dichloroethene	ug/L	<0.27	50	50	56.2	54.6	112	109	70-131	3	20	
cis-1,3-Dichloropropene	ug/L	<3.6	50	50	53.7	52.0	107	104	70-130	3	20	
Dibromochloromethane	ug/L	<2.6	50	50	50.5	48.4	101	97	70-130	4	20	
Dichlorodifluoromethane	ug/L	<0.50	50	50	57.2	55.0	114	110	10-132	4	20	
Ethylbenzene	ug/L	<0.22	50	50	55.8	53.4	112	107	80-125	4	20	
Isopropylbenzene (Cumene)	ug/L	<0.39	50	50	54.5	52.0	109	104	70-130	5	20	
m&p-Xylene	ug/L	<0.47	100	100	109	105	109	105	70-130	4	20	
Methyl-tert-butyl ether	ug/L	<1.2	50	50	56.8	55.2	114	110	51-145	3	20	
Methylene Chloride	ug/L	<0.58	50	50	55.8	54.3	112	109	73-140	3	20	
o-Xylene	ug/L	<0.26	50	50	54.1	51.5	108	103	70-130	5	20	
Styrene	ug/L	<0.47	50	50	54.6	52.1	109	104	70-130	5	20	
Tetrachloroethene	ug/L	<0.33	50	50	51.3	49.2	103	98	70-130	4	20	
Toluene	ug/L	<0.17	50	50	54.7	52.4	109	105	80-131	4	20	
trans-1,2-Dichloroethene	ug/L	<1.1	50	50	58.5	55.0	117	110	73-148	6	20	
trans-1,3-Dichloropropene	ug/L	<4.4	50	50	53.7	50.5	107	101	70-130	6	20	
Trichloroethene	ug/L	<0.26	50	50	55.9	53.7	112	107	70-130	4	20	
Trichlorofluoromethane	ug/L	<0.21	50	50	63.0	61.2	126	122	74-147	3	20	
Vinyl chloride	ug/L	<0.17	50	50	55.3	53.1	111	106	41-129	4	20	
4-Bromofluorobenzene (S)	%						102	101	70-130			
Dibromofluoromethane (S)	%						109	108	70-130			
Toluene-d8 (S)	%						103	103	70-130			

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
1241 Bellevue Street - Suite 9
Green Bay, WI 54302
(920)469-2436

QUALITY CONTROL DATA

Project: 58197238 VPI
Pace Project No.: 40202158

QC Batch: 345820
QC Batch Method: EPA 3510
Analysis Method: EPA 8270
Analysis Description: 8270 Water MSSV
Associated Lab Samples: 40202158001

METHOD BLANK: 2006602
Matrix: Water
Associated Lab Samples: 40202158001

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,2,4-Trichlorobenzene	ug/L	<1.6	5.2	01/21/20 09:28	
1,2-Dichlorobenzene	ug/L	<1.4	5.0	01/21/20 09:28	
1,3-Dichlorobenzene	ug/L	<1.5	5.2	01/21/20 09:28	
1,4-Dichlorobenzene	ug/L	<1.4	5.0	01/21/20 09:28	
2,2'-Oxybis(1-chloropropane)	ug/L	<1.2	5.0	01/21/20 09:28	
2,4,5-Trichlorophenol	ug/L	<0.64	5.0	01/21/20 09:28	
2,4,6-Trichlorophenol	ug/L	<0.80	5.0	01/21/20 09:28	
2,4-Dichlorophenol	ug/L	<0.90	5.0	01/21/20 09:28	
2,4-Dimethylphenol	ug/L	<1.2	5.0	01/21/20 09:28	
2,4-Dinitrophenol	ug/L	<2.5	8.2	01/21/20 09:28	
2,4-Dinitrotoluene	ug/L	<1.1	5.0	01/21/20 09:28	
2,6-Dinitrotoluene	ug/L	<0.77	5.0	01/21/20 09:28	
2-Chloronaphthalene	ug/L	<0.83	5.0	01/21/20 09:28	
2-Chlorophenol	ug/L	<0.83	5.0	01/21/20 09:28	
2-Methylnaphthalene	ug/L	<1.2	5.0	01/21/20 09:28	
2-Methylphenol(o-Cresol)	ug/L	<0.93	5.0	01/21/20 09:28	
2-Nitroaniline	ug/L	<0.95	5.0	01/21/20 09:28	
2-Nitrophenol	ug/L	<0.83	5.0	01/21/20 09:28	
3&4-Methylphenol(m&p Cresol)	ug/L	<0.61	5.0	01/21/20 09:28	
3,3'-Dichlorobenzidine	ug/L	<1.3	5.0	01/21/20 09:28	
3-Nitroaniline	ug/L	<1.4	5.0	01/21/20 09:28	
4,6-Dinitro-2-methylphenol	ug/L	<3.1	10.4	01/21/20 09:28	
4-Bromophenylphenyl ether	ug/L	<0.96	5.0	01/21/20 09:28	
4-Chloro-3-methylphenol	ug/L	<0.68	5.0	01/21/20 09:28	
4-Chloroaniline	ug/L	<1.8	6.0	01/21/20 09:28	
4-Chlorophenylphenyl ether	ug/L	<0.83	5.0	01/21/20 09:28	
4-Nitroaniline	ug/L	<3.0	10	01/21/20 09:28	
4-Nitrophenol	ug/L	<3.1	10.2	01/21/20 09:28	
Acenaphthene	ug/L	<0.76	5.0	01/21/20 09:28	
Acenaphthylene	ug/L	<0.73	5.0	01/21/20 09:28	
Anthracene	ug/L	<0.81	5.0	01/21/20 09:28	
Benzo(a)anthracene	ug/L	<0.85	5.0	01/21/20 09:28	
Benzo(a)pyrene	ug/L	<1.3	5.0	01/21/20 09:28	
Benzo(b)fluoranthene	ug/L	<1.0	5.0	01/21/20 09:28	
Benzo(g,h,i)perylene	ug/L	<1.4	5.0	01/21/20 09:28	
Benzo(k)fluoranthene	ug/L	<1.1	5.0	01/21/20 09:28	
bis(2-Chloroethoxy)methane	ug/L	<1.3	5.0	01/21/20 09:28	
bis(2-Chloroethyl) ether	ug/L	<1.2	5.0	01/21/20 09:28	
bis(2-Ethylhexyl)phthalate	ug/L	<2.9	9.6	01/21/20 09:28	
Butylbenzylphthalate	ug/L	<1.3	5.0	01/21/20 09:28	
Carbazole	ug/L	<0.91	5.0	01/21/20 09:28	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
1241 Bellevue Street - Suite 9
Green Bay, WI 54302
(920)469-2436

QUALITY CONTROL DATA

Project: 58197238 VPI
Pace Project No.: 40202158

METHOD BLANK: 2006602 Matrix: Water
Associated Lab Samples: 40202158001

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Chrysene	ug/L	<1.3	5.0	01/21/20 09:28	
Di-n-butylphthalate	ug/L	<1.2	5.0	01/21/20 09:28	
Di-n-octylphthalate	ug/L	<4.8	15.9	01/21/20 09:28	
Dibenz(a,h)anthracene	ug/L	<1.1	5.0	01/21/20 09:28	
Dibenzofuran	ug/L	<0.85	5.0	01/21/20 09:28	
Diethylphthalate	ug/L	<0.78	5.0	01/21/20 09:28	
Dimethylphthalate	ug/L	<0.72	5.0	01/21/20 09:28	
Fluoranthene	ug/L	<0.99	5.0	01/21/20 09:28	
Fluorene	ug/L	<0.91	5.0	01/21/20 09:28	
Hexachloro-1,3-butadiene	ug/L	<1.1	5.5	01/21/20 09:28	
Hexachlorobenzene	ug/L	<1.7	5.0	01/21/20 09:28	
Hexachlorocyclopentadiene	ug/L	<1.0	5.0	01/21/20 09:28	
Hexachloroethane	ug/L	<1.4	5.0	01/21/20 09:28	
Indeno(1,2,3-cd)pyrene	ug/L	<1.2	5.0	01/21/20 09:28	
Isophorone	ug/L	<0.77	5.0	01/21/20 09:28	
N-Nitroso-di-n-propylamine	ug/L	<1.1	5.0	01/21/20 09:28	
N-Nitrosodiphenylamine	ug/L	<3.4	11.5	01/21/20 09:28	
Naphthalene	ug/L	<1.2	5.0	01/21/20 09:28	
Nitrobenzene	ug/L	<1.1	5.0	01/21/20 09:28	
Pentachlorophenol	ug/L	<4.6	15.2	01/21/20 09:28	
Phenanthrene	ug/L	<0.95	5.0	01/21/20 09:28	
Phenol	ug/L	<0.32	5.0	01/21/20 09:28	
Pyrene	ug/L	<1.2	5.0	01/21/20 09:28	
2,4,6-Tribromophenol (S)	%	105	57-131	01/21/20 09:28	
2-Fluorobiphenyl (S)	%	74	47-105	01/21/20 09:28	
2-Fluorophenol (S)	%	50	32-120	01/21/20 09:28	
Nitrobenzene-d5 (S)	%	93	51-108	01/21/20 09:28	
Phenol-d6 (S)	%	34	18-120	01/21/20 09:28	
Terphenyl-d14 (S)	%	110	65-147	01/21/20 09:28	

LABORATORY CONTROL SAMPLE & LCSD: 2006603 2006604

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limits	RPD	Max RPD	Qualifiers
1,2,4-Trichlorobenzene	ug/L	50	40.7	44.6	81	89	70-130	9	20	
1,2-Dichlorobenzene	ug/L	50	34.9	38.0	70	76	58-130	9	20	
1,3-Dichlorobenzene	ug/L	50	30.6	33.6	61	67	53-130	9	20	
1,4-Dichlorobenzene	ug/L	50	31.9	35.3	64	71	57-120	10	20	
2,2'-Oxybis(1-chloropropane)	ug/L	50	59.8	62.2	120	124	55-130	4	20	
2,4,5-Trichlorophenol	ug/L	50	49.1	52.9	98	106	59-124	7	26	
2,4,6-Trichlorophenol	ug/L	50	47.8	55.1	96	110	64-125	14	23	
2,4-Dichlorophenol	ug/L	50	43.9	52.9	88	106	61-113	18	28	
2,4-Dimethylphenol	ug/L	50	34.6	42.7	69	85	30-112	21	38	
2,4-Dinitrophenol	ug/L	50	28.3	36.1	57	72	33-136	24	34	
2,4-Dinitrotoluene	ug/L	50	60.2	63.9	120	128	70-132	6	20	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
1241 Bellevue Street - Suite 9
Green Bay, WI 54302
(920)469-2436

QUALITY CONTROL DATA

Project: 58197238 VPI
Pace Project No.: 40202158

LABORATORY CONTROL SAMPLE & LCSD: 2006603 2006604

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limits	RPD	Max RPD	Qualifiers
2,6-Dinitrotoluene	ug/L	50	58.3	62.4	117	125	70-126	7	20	
2-Chloronaphthalene	ug/L	50	50.2	52.8	100	106	70-130	5	20	
2-Chlorophenol	ug/L	50	37.1	45.2	74	90	55-130	20	26	
2-Methylnaphthalene	ug/L	50	49.6	52.0	99	104	70-130	5	20	
2-Methylphenol(o-Cresol)	ug/L	50	34.0	41.9	68	84	45-107	21	28	
2-Nitroaniline	ug/L	50	57.4	60.2	115	120	57-140	5	20	
2-Nitrophenol	ug/L	50	46.7	54.3	93	109	67-117	15	22	
3&4-Methylphenol(m&p Cresol)	ug/L	50	30.4	38.2	61	76	39-130	23	27	
3,3'-Dichlorobenzidine	ug/L	50	32.8	36.1	66	72	38-91	10	36	
3-Nitroaniline	ug/L	50	40.4	43.8	81	88	60-125	8	20	
4,6-Dinitro-2-methylphenol	ug/L	50	40.8	50.7	82	101	54-139	21	20	R1
4-Bromophenylphenyl ether	ug/L	50	47.7	54.8	95	110	70-130	14	20	
4-Chloro-3-methylphenol	ug/L	50	42.6	53.8	85	108	54-118	23	27	
4-Chloroaniline	ug/L	50	32.0	32.1	64	64	60-130	0	20	
4-Chlorophenylphenyl ether	ug/L	50	52.6	56.2	105	112	70-130	7	20	
4-Nitroaniline	ug/L	50	53.9	58.9	108	118	53-129	9	23	
4-Nitrophenol	ug/L	50	8.3J	20.2	17	40	10-130		29	
Acenaphthene	ug/L	50	48.7	52.1	97	104	69-119	7	20	
Acenaphthylene	ug/L	50	51.7	55.7	103	111	70-130	7	20	
Anthracene	ug/L	50	55.0	59.2	110	118	73-134	7	20	
Benzo(a)anthracene	ug/L	50	50.0	53.1	100	106	70-130	6	20	
Benzo(a)pyrene	ug/L	50	52.4	56.8	105	114	74-117	8	20	
Benzo(b)fluoranthene	ug/L	50	49.6	52.7	99	105	70-125	6	20	
Benzo(g,h,i)perylene	ug/L	50	47.3	52.8	95	106	67-130	11	20	
Benzo(k)fluoranthene	ug/L	50	49.9	53.4	100	107	70-130	7	20	
bis(2-Chloroethoxy)methane	ug/L	50	47.9	53.2	96	106	70-130	11	20	
bis(2-Chloroethyl) ether	ug/L	50	44.0	47.2	88	94	63-116	7	20	
bis(2-Ethylhexyl)phthalate	ug/L	50	53.6	57.9	107	116	70-130	8	20	
Butylbenzylphthalate	ug/L	50	58.3	59.3	117	119	73-133	2	20	
Carbazole	ug/L	50	56.9	61.0	114	122	70-130	7	20	
Chrysene	ug/L	50	53.7	56.1	107	112	70-130	4	20	
Di-n-butylphthalate	ug/L	50	55.8	60.2	112	120	71-131	8	20	
Di-n-octylphthalate	ug/L	50	52.7	55.5	105	111	65-118	5	20	
Dibenz(a,h)anthracene	ug/L	50	48.1	55.0	96	110	36-111	13	20	
Dibenzofuran	ug/L	50	53.1	56.8	106	114	70-130	7	20	
Diethylphthalate	ug/L	50	54.9	58.1	110	116	70-130	6	20	
Dimethylphthalate	ug/L	50	52.4	57.4	105	115	70-130	9	20	
Fluoranthene	ug/L	50	57.3	62.3	115	125	86-130	8	20	
Fluorene	ug/L	50	55.3	58.4	111	117	70-130	5	20	
Hexachloro-1,3-butadiene	ug/L	50	37.5	40.2	75	80	63-107	7	20	
Hexachlorobenzene	ug/L	50	45.9	50.7	92	101	70-124	10	20	
Hexachlorocyclopentadiene	ug/L	50	18.7	23.0	37	46	25-73	21	26	
Hexachloroethane	ug/L	50	28.4	31.1	57	62	50-130	9	20	
Indeno(1,2,3-cd)pyrene	ug/L	50	43.1	44.7	86	89	64-130	4	20	
Isophorone	ug/L	50	49.5	54.3	99	109	65-130	9	20	
N-Nitroso-di-n-propylamine	ug/L	50	47.7	50.8	95	102	67-130	6	20	
N-Nitrosodiphenylamine	ug/L	50	47.6	55.4	95	111	80-121	15	20	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
1241 Bellevue Street - Suite 9
Green Bay, WI 54302
(920)469-2436

QUALITY CONTROL DATA

Project: 58197238 VPI
Pace Project No.: 40202158

LABORATORY CONTROL SAMPLE & LCSD: 2006603 2006604

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limits	RPD	Max RPD	Qualifiers
Naphthalene	ug/L	50	45.9	49.5	92	99	70-130	7	20	
Nitrobenzene	ug/L	50	46.9	49.0	94	98	70-130	4	20	
Pentachlorophenol	ug/L	50	35.3	39.7	71	79	61-113	12	20	
Phenanthrene	ug/L	50	51.5	55.5	103	111	70-130	7	20	
Phenol	ug/L	50	21.5	21.3	43	43	25-120	1	20	
Pyrene	ug/L	50	54.1	54.1	108	108	70-130	0	20	
2,4,6-Tribromophenol (S)	%				110	119	57-131			
2-Fluorobiphenyl (S)	%				82	90	47-105			
2-Fluorophenol (S)	%				47	59	32-120			
Nitrobenzene-d5 (S)	%				91	102	51-108			
Phenol-d6 (S)	%				36	41	18-120			
Terphenyl-d14 (S)	%				103	106	65-147			

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
1241 Bellevue Street - Suite 9
Green Bay, WI 54302
(920)469-2436

QUALIFIERS

Project: 58197238 VPI
Pace Project No.: 40202158

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above LOD.

J - Estimated concentration at or above the LOD and below the LOQ.

LOD - Limit of Detection adjusted for dilution factor, percent moisture, initial weight and final volume.

LOQ - Limit of Quantitation adjusted for dilution factor, percent moisture, initial weight and final volume.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected at or above the adjusted LOD.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

LABORATORIES

PASI-G Pace Analytical Services - Green Bay

BATCH QUALIFIERS

Batch: 345875

[M5] A matrix spike/matrix spike duplicate was not performed for this batch due to insufficient sample volume.

ANALYTE QUALIFIERS

R1 RPD value was outside control limits.

Pace Analytical Services, LLC
1241 Bellevue Street - Suite 9
Green Bay, WI 54302
(920)469-2436

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: 58197238 VPI
Pace Project No.: 40202158

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
40202158001	**MW-1**	EPA 3510	345820	EPA 8270	345875
40202158001	**MW-1**	EPA 8260	345828		
40202158002	**HCL TRIP**	EPA 8260	345828		

Pace Analytical®
www.pacelabs.com

UPPER MIDWEST REGION
MN: 612-607-1700 WI: 920-469-2436

Page 1 of 1

40000158

CHAIN OF CUSTODY

*Preservation Codes
A=None B=HCL C=H2SO4 D=HNO3 E=DI Water F=Methanol G=NaOH
H=Sodium Bisulfate Solution I=Sodium Thiosulfate J=Other

(Please Print Clearly)	
Company Name:	Terracon
Branch/Location:	Franklin, WI
Project Contact:	Paul Lenaker
Phone:	414-423-0255
Project Number:	58197238
Project Name:	VBI
Project State:	WI
Sampled By (Print):	Lucas P. Chabela (LPC)
Sampled By (Sign):	
PO #:	Regulatory Program:

Quote #:	
Mail To Contact:	Paul Lenaker
Mail To Company:	Terracon
Mail To Address:	9856 S-57th St. Franklin, WI, 53132
Invoice To Contact:	Paul Lenaker
Invoice To Company:	Terracon
Invoice To Address:	
Invoice To Phone:	

Data Package Options (billable)
☐ EPA Level III
☐ EPA Level IV

MS/MSD
☐ On your sample (billable)
☐ NOT needed on your sample

Matrix Codes

A = Air	W = Water
B = Biota	DW = Drinking Water
C = Charcoal	GW = Ground Water
O = Oil	SW = Surface Water
S = Soil	WW = Waste Water
Sl = Sludge	WP = Wipe

PACE LAB #	CLIENT FIELD ID	COLLECTION DATE	COLLECTION TIME	MATRIX	Analyses Requested: FILTERED? (YES/NO) Y/N	PRESERVATION (CODE)* Pick Letter	VOCs B	SVOCs A						CLIENT COMMENTS	LAB COMMENTS (Lab Use Only)	Profile #
001	MW-1	1-17-2020	900	GW			3	2								
002	HCL TRIP	—	—	—			2									

Rush Turnaround Time Requested - Prelims
(Rush TAT subject to approval/surcharge)
Date Needed: ASAP - 1-2 DAY TAT

Transmit Prelim Rush Results by (complete what you want):

Email #1:	Paul.Lenaker@Terracon.com
Email #2:	
Telephone:	
Fax:	

Samples on HOLD are subject to special pricing and release of liability

Relinquished By:	Date/Time:	Received By:	Date/Time:
	1-17-2020 1244	Susan Kluge Pace	1-17-20 1244
Relinquished By:	Date/Time:	Received By:	Date/Time:
Relinquished By:	Date/Time:	Received By:	Date/Time:
Relinquished By:	Date/Time:	Received By:	Date/Time:

PACE Project No.
40000158

Receipt Temp = 1.0 °C

Sample Receipt pH
OK / Adjusted

Cooler Custody Seal
~~Present / Not Present~~
Intact / Not Intact

C019a(27Jun2006)

Version 6.0 06/14/06

ORIGINAL

Pace Analytical Services, LLC
1241 Bellevue Street, Suite 9
Green Bay, WI 54302

Sample Preservation Receipt Form

Client Name: Terracon Project # 40[illegible]

All containers needing preservation have been checked and noted below: ☐Yes ☐No ~~N/A~~ Initial when completed: Date/ Time:

Lab Lot# of pH paper: Lab Std #ID of preservation (if pH adjusted):

Pace Lab #	Glass							Plastic							Vials						Jars			General			VOA Vials (>6mm) *	H2SO4 pH ≤2	NaOH+Zn Act pH ≥9	NaOH pH ≥12	HNO3 pH ≤2	pH after adjusted	Volume (mL)
	AG1U	AG1H	AG4S	AG4U	AG5U	AG2S	BG3U	BP1U	BP2N	BP2Z	BP3U	BP3B	BP3N	BP3S	DG9A	DG9T	VG9U	VG9H	VG9M	VG9D	JGFU	WGFU	WPFU	SP5T	ZPLC	GN							
001	3																	3															2.5 / 5 / 10
002																		2															2.5 / 5 / 10
003																																	2.5 / 5 / 10
004																																	2.5 / 5 / 10
005																																	2.5 / 5 / 10
006																																	2.5 / 5 / 10
007																																	2.5 / 5 / 10
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016																																	2.5 / 5 / 10
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018																																	2.5 / 5 / 10
019																																	2.5 / 5 / 10
020																																	2.5 / 5 / 10

11/17/20 SAV

Exceptions to preservation check: VOA, Coliform, TOC, TOX, TOH, O&G, WI DRO, Phenolics, Other: _____ Headspace in VOA Vials (>6mm) : ☐Yes ☐No ☐N/A ***If yes look in headspace column**

AG1U	1 liter amber glass	BP1U	1 liter plastic unpres	DG9A	40 mL amber ascorbic	JGFU	4 oz amber jar unpres
AG1H	1 liter amber glass HCL	BP2N	500 mL plastic HNO3	DG9T	40 mL amber Na Thio	WGFU	4 oz clear jar unpres
AG4S	125 mL amber glass H2SO4	BP2Z	500 mL plastic NaOH, Znact	VG9U	40 mL clear vial unpres	WPFU	4 oz plastic jar unpres
AG4U	120 mL amber glass unpres	BP3U	250 mL plastic unpres	VG9H	40 mL clear vial HCL		
AG5U	100 mL amber glass unpres	BP3B	250 mL plastic NaOH	VG9M	40 mL clear vial MeOH	SP5T	120 mL plastic Na Thiosulfate
AG2S	500 mL amber glass H2SO4	BP3N	250 mL plastic HNO3	VG9D	40 mL clear vial DI	ZPLC	ziploc bag
BG3U	250 mL clear glass unpres	BP3S	250 mL plastic H2SO4			GN:	

Pace Analytical™ 1241 Bellevue Street, Green Bay, WI 54302	Document Name: Sample Condition Upon Receipt (SCUR)	Document Revised: 25Apr2018
	Document No.: F-GB-C-031-Rev.07	Issuing Authority: Pace Green Bay Quality Office

Sample Condition Upon Receipt Form (SCUR)

Project #:

WO# : 40202158

40202158

Client Name: Terracon

Courier: ☐ CS Logistics ☐ Fed Ex ☐ Speedee ☐ UPS ☐ Waltco
☒ Client ☐ Pace Other:

Tracking #:

Custody Seal on Cooler/Box Present: ☐ yes ☒ no Seals intact: ☐ yes ☐ no

Custody Seal on Samples Present: ☐ yes ☒ no Seals intact: ☐ yes ☐ no

Packing Material: ☒ Bubble Wrap ☒ Bubble Bags ☐ None ☐ Other

Thermometer Used SR - N/A **Type of Ice:** (Wet) Blue Dry None ☒ Samples on ice, cooling process has begun

Cooler Temperature Uncorr: ROI /Corr:

Temp Blank Present: ☐ yes ☒ no **Biological Tissue is Frozen:** ☐ yes ☐ no

Temp should be above freezing to 6°C.
Biota Samples may be received at ≤ 0°C.

Person examining contents:
Date: 1-17-20
Initials: SCD

Chain of Custody Present:	☒Yes ☐No ☐N/A	1.
Chain of Custody Filled Out:	☒Yes ☐No ☐N/A	2.
Chain of Custody Relinquished:	☒Yes ☐No ☐N/A	3.
Sampler Name & Signature on COC:	☒Yes ☐No ☐N/A	4.
Samples Arrived within Hold Time:	☒Yes ☐No	5.
- VOA Samples frozen upon receipt	☐Yes ☐No	Date/Time:
Short Hold Time Analysis (<72hr):	☐Yes ☒No	6.
Rush Turn Around Time Requested:	☒Yes ☐No	7.
Sufficient Volume: For Analysis: ☒Yes ☐No MS/MSD: ☐Yes ☒No ☐N/A		8.
Correct Containers Used:	☒Yes ☐No	9.
-Pace Containers Used:	☒Yes ☐No ☐N/A	
-Pace IR Containers Used:	☐Yes ☐No ☒N/A	
Containers Intact:	☒Yes ☐No	10.
Filtered volume received for Dissolved tests	☐Yes ☐No ☒N/A	11.
Sample Labels match COC: -Includes date/time/ID/Analysis Matrix: W	☒Yes ☐No ☐N/A	12.
Trip Blank Present:	☒Yes ☐No ☐N/A	13.
Trip Blank Custody Seals Present	☒Yes ☐No ☐N/A	
Pace Trip Blank Lot # (if purchased): 439		

Client Notification/ Resolution: If checked, see attached form for additional comments ☐

Person Contacted: Date/Time:

Comments/ Resolution:

Project Manager Review: MMR per DM **Date:** 1/17/20