

A Division of SET Environmental Inc.  
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December 8, 2017

Mr. Scott Wisniewski  
Vice President – Commercial Lending  
First Bank Financial Centre  
5555 North Port Washington Road  
Glendale, Wisconsin 53217

*Via Email: Scott.Wisniewski@fbfcwi.com*

Reference: *Phase II Environmental Site Assessment*  
9122-9130 West North Avenue  
Wauwatosa, Wisconsin

KEY ENGINEERING GROUP, LTD.  
File No. 1710-1972-0002

Dear Mr. Wisniewski:

This letter is to document the results of a *Phase II Environmental Site Assessment (ESA)* conducted at 9122-9130 West North Avenue in Wauwatosa, Wisconsin (subject site) by Key Engineering Group, Ltd. (KEY). A *Phase I ESA* was previously prepared for the subject site where a recognized environmental condition (REC) was identified:

- *There has been active dry cleaner located on the subject site for 9 years. The dry-cleaner uses the hazardous chemical Perchloroethylene(PCE), and this presents the potential for a hazardous release to the environment.*

Based on these findings, KEY completed a Phase II ESA at the subject site. The purpose of the Phase II ESA was to determine if, and to what potential degree, the subject site may be contaminated. The Phase II ESA was conducted in general accordance with KEY's *Phase II Environmental Site Assessment Proposal*.

#### **SITE DESCRIPTION**

This Phase II ESA was completed at 9122-9130 West North Avenue, Wauwatosa, Wisconsin. A site map depicting the geographic location is presented as Figure 1. The subject site is approximately 0.26 acres and consists of two buildings. The building associated with the address

9126-9130 West North Avenue is an approximately 5,200 square-foot (SF) two story concrete block and brick building. The building associated with the address 9122 West North Avenue is an approximately 1,900 square-foot (SF) single story concrete block building. A site detail map is presented as Figure 2.

## **INVESTIGATION LOCATIONS AND PROCEDURES**

Two soil probes (SB-1 and SB-2) and one temporary monitoring well were advanced using a direct push drill rig on November 29, 2017. The soil probe and temporary well locations are presented on Figure 2. The soil probes were advanced to depths of twelve feet below ground surface (bgs). Soil samples were collected by driving a steel sampling rod (sampler) with dedicated acetate liners to the desired sampling depth using the hydraulic ram and hammer on the direct push rig.

Soil samples were field screened for the presence of total ionizable volatile vapors using a calibrated photoionization detector (PID). A KEY hydrogeologist monitored the drilling activities and visually screened and described the soil qualities in accordance with the Unified Soil Classification System. Soil descriptions and field screening PID readings were recorded on Soil Boring Logs (WDNR Form 4400-122). The borings were abandoned with hydrated granular bentonite. Soil Boring Logs (WDNR Form 4400-122) and Borehole Filling and Sealing Forms (WDNR Form 3300-005) are included in Attachment 1.

Soil samples were submitted to a WDNR certified laboratory for analysis. Soil samples were analyzed for volatile organic compounds (VOCs) using Method 8260B. Soil samples were selected based on potential for contamination in proximity to the location where waste is stored outside (potential spill location), while the second probe was advanced near a dumpster. Soil samples for laboratory analysis were placed in laboratory supplied containers and transported to the laboratory under proper chain of custody protocols. Laboratory reports are included in Attachment 2.

One of the two soil probes was converted into a temporary well (SB-1/TW-1). The temporary well location is presented on Figure 2. The temporary well was installed using 1-inch diameter polyvinyl chloride (PVC), 0.010-slotted screen and screened from 7 to 12 feet bgs. Due to the slow recharge conditions of local soil, a groundwater sample was unable to be collected within the time constraints of the report. The temporary well was abandoned by removing the screen and filling the hole with bentonite. Borehole Filling and Sealing Forms (WDNR Form 3300-005) are included in Attachment 1.

## **INVESTIGATION RESULTS**

The temporary well and soil probe locations are presented on Figure 2. Soil analytical results are summarized in Table 1. Below is a summary of the soil investigation completed at the subject site.

### **SB-1/TW-1**

Soil probe SB-1 was advanced to 12 feet below ground surface (bgs). The soil probe was advanced to investigate soil near the outside storage of waste drycleaner fluid. Soils encountered at SB-1 consisted generally of brown silt with some clay with no gravel. PID readings ranged from 0.1 to 0.3 parts per million (ppm) in this boring. Two soil samples were collected from the soil column (0-2 feet bgs and 4-6 feet bgs)

and were analyzed for VOCs. Both samples had only one detection of tetrachloroethene of 0.14 mg/kg in the 0-2' sample and 0.8 mg/kg in the 4-6' sample. These concentrations exceed the protection of groundwater RCL.

A temporary monitoring well was installed within this boring. The temporary well was screened from 7 to 12 feet bgs. Due to the tight clay conditions, the well did not recharge in the amount of time given to produce this report. As such, a groundwater sample was unable to be collected.

#### **SB-2**

Soil probe SB-2 was advanced to 12 feet bgs. Soils encountered at SB-2 consisted generally of silty clay. PID readings ranged from 0.1 to 0.3 ppm. Two soil samples were collect and submitted (2-4 feet bgs and 6-8 feet bgs) and were analyzed for VOCs. Both of the soil samples had detections of methylene chloride and tetrachloroethene. Methylene Chloride is a laboratory contaminant. The tetrachloroethene exceeded protection of groundwater in both soil samples 0.59 mg/kg from 2-4 feet bgs and 0.43 mg/kg from 6-8 feet bgs.

### **CONCLUSIONS AND RECOMMENDATIONS**

Based upon the investigation data collected during the Phase II ESA studies, the following conclusions and recommendations can be made. There were no soil concentrations detected above any applicable direct contact standards. Methylene Chloride was detected in soil sample SB-2 (2-4) and SB-2 (6-8), this compound is commonly understood to be a laboratory artifact. Tetrachloroethene was detected in both SB-1 soil samples and SB-2 soil samples. All four of the concentrations were above protection of groundwater RCL.

There was no groundwater sample collected, since TW-1 did not recharge in the time frame of the report.

Based on the detections of tetrachloroethene within the soil and since tetrachloroethene is used in dry cleaning activities, it is our opinion that a release had occurred and should be reported to the WDNR in accordance with Wisconsin Spill Statute 292.11. Based upon the data collected during these studies, we suggest further investigation of the groundwater onsite.

KEY can assist in the preparation and submittal of the release notification and can conduct further investigation of the groundwater onsite.

### **QUALIFICATIONS**

This assessment was performed using the degree of care and skill ordinarily exercised under similar circumstances, by environmental consultants practicing in this or similar localities. No other warranty or guarantee, expressed or implied, is made as to the conclusions and recommendations included in this report. The findings of this assessment, to the best of knowledge, are valid as of the date of this assessment. However, changes in the conditions of a property can occur with the passage of time, whether due to natural processes or the works of man on this or adjacent properties. In addition, changes in applicable or

appropriate standards may occur, whether they result from legislation, from the broadening of knowledge or from other reasons. Accordingly, the findings of this assessment may be invalidated wholly or partially by changes outside our control.


Specified information contained in this report has been obtained from publicly available sources and other secondary sources of information produced by entities other than Key Engineering Group, Ltd. Although care has been taken by Key Engineering Group, Ltd., in compiling this information, Key Engineering Group, Ltd., disclaims any and all liability for any errors, omissions or inaccuracies of the third parties in such in disclaims formation and data.

Please feel free to call if you have any questions regarding this Phase II ESA report.

Sincerely,  
KEY ENGINEERING GROUP, LTD.



Chelsea L. Ames  
Project Manager



D'Arcy Gravelle, CPG, PG  
Principal Hydrogeologist

#### Attachments

Table 1	Soil Analytical Results
Figure 1	Site Location Map
Figure 2	Site Aerial Map
Attachment 1	Soil Boring Logs and Boring Abandonment Forms
Attachment 2	Soil Laboratory Analytical Reports

# Table

Non-Industrial Industrial Direct Protection of Background									
PARAMETERS	Direct Contact	Contact	Groundwater	RCL	Threshold	Sample Identification			
	RCL	RCL	RCL	Value		SB-1		SB-2	
Date Collected						11/29/2017		11/29/2017	
Depth (feet bgs)						0-2	4-6	2-4	6-8
Saturated(s)/Unsaturated(u)						u	u	u	u
Detected VOCs (mg/kg)									
Benzene	1.6	7.07	0.0051	---		<0.025	<0.025	<0.025	<0.025
Bromobenzene	342	679		---		<0.025	<0.025	<0.025	<0.025
Bromochloromethane	216	906		---		<0.025	<0.025	<0.025	<0.025
Bromodichloromethane	0.418	1.83	0.0003	---		<0.025	<0.025	<0.025	<0.025
Bromoform	25.4	113	0.0023	---		<0.025	<0.025	<0.025	<0.025
Bromomethane	9.6	43	0.0051	---		<0.070	<0.070	<0.070	<0.070
n-Butylbenzene	108	108		---		<0.025	<0.025	<0.025	<0.025
sec-Butylbenzene	145	145		---		<0.025	<0.025	<0.025	<0.025
tert-Butylbenzene	183	183		---		<0.025	<0.025	<0.025	<0.025
Carbon Tetrachloride	0.916	4.03	0.0039	---		<0.025	<0.025	<0.025	<0.025
Chlorobenzene	370	761		---		<0.025	<0.025	<0.025	<0.025
Chloroethane	---	---	0.2266	---		<0.067	<0.067	<0.067	<0.067
Chloroform	0.454	1.98	0.0033	---		<0.046	<0.046	<0.046	<0.046
Chloromethane	159	669	0.0155	---		<0.025	<0.025	<0.025	<0.025
2-Chlorotoluene	907	907		---		<0.025	<0.025	<0.025	<0.025
4-Chlorotoluene	253	253		---		<0.025	<0.025	<0.025	<0.025
1,2-Dibromo-3-chloropropane	0.008	0.092	0.0002	---		<0.091	<0.091	<0.091	<0.091
Dibromochloromethane	8.28	38.9	0.032	---		<0.025	<0.025	<0.025	<0.025
1,2-Dibromoethane (EDB)	0.05	0.221	0.0000282	---		<0.025	<0.025	<0.025	<0.025
Dibromomethane	34	143		---		<0.025	<0.025	<0.025	<0.025
1,2-Dichlorobenzene	376	376	1.168	---		<0.025	<0.025	<0.025	<0.025
1,3-Dichlorobenzene	297	297	1.1528	---		<0.025	<0.025	<0.025	<0.025
1,4-Dichlorobenzene	3.74	16.4	0.144	---		<0.025	<0.025	<0.025	<0.025
Dichlorodifluoromethane	126	530	3.0863	---		<0.025	<0.025	<0.025	<0.025
1,1-Dichloroethane	5.06	22.2	0.4834	---		<0.025	<0.025	<0.025	<0.025
1,2-Dichloroethane	0.652	2.87	0.0028	---		<0.025	<0.025	<0.025	<0.025
1,1-Dichloroethene	320	1190	0.005	---		<0.025	<0.025	<0.025	<0.025
cis-1,2-Dichloroethene	156	2340	0.0412	---		<0.025	<0.025	<0.025	<0.025
trans-1,2-Dichloroethene	1560	1850	0.0626	---		<0.025	<0.025	<0.025	<0.025
1,2-Dichloropropane	0.406	1.78	0.0033	---		<0.025	<0.025	<0.025	<0.025
1,3-Dichloropropane	1490	1490		---		<0.025	<0.025	<0.025	<0.025
2,2-Dichloropropane	191	191		---		<0.025	<0.025	<0.025	<0.025
1,1-Dichloropropene	---	---		---		<0.025	<0.025	<0.025	<0.025
cis-1,3-Dichloropropene	1210	1210	0.0003	---		<0.025	<0.025	<0.025	<0.025
trans-1,3-Dichloropropene	1510	1510	0.0003	---		<0.025	<0.025	<0.025	<0.025
Diisopropyl ether	2260	2260		---		<0.025	<0.025	<0.025	<0.025
Ethylbenzene	8.02	35.4	1.57	---		<0.025	<0.025	<0.025	<0.025
Hexachlorobutadiene	1.63	7.19		---		<0.025	<0.025	<0.025	<0.025
Isopropylbenzene	---	---		---		<0.025	<0.025	<0.025	<0.025
p-Isopropyltoluene	162	162		---		<0.025	<0.025	<0.025	<0.025
Methylene chloride	61.8	1150	0.0026	---		<0.025	<0.025	0.036J	0.028J
Methyl tert-butyl ether (MTBE)	63.8	282	0.027	---		<0.025	<0.025	<0.025	<0.025
Naphthalene	5.52	24.1	0.6582	---		<0.040	<0.040	<0.040	<0.040
n-Propylbenzene	264	264		---		<0.025	<0.025	<0.025	<0.025
Styrene	867	867	0.22	---		<0.025	<0.025	<0.025	<0.025
1,1,1,2-Tetrachloroethane	2.78	12.3	0.0534	---		<0.025	<0.025	<0.025	<0.025
1,1,2,2-Tetrachloroethane	0.81	3.6	0.0002	---		<0.025	<0.025	<0.025	<0.025
Tetrachloroethene	33	145	0.0045	---		0.14	0.8	0.59	0.43
Toluene	818	818	1.1072	---		<0.025	<0.025	<0.025	<0.025
1,2,3-Trichlorobenzene	62.6	934		---		<0.025	<0.025	<0.025	<0.025
1,2,4-Trichlorobenzene	24	113	0.408	---		<0.048	<0.048	<0.048	<0.048
1,1,1-Trichloroethane	640	640	0.1402	---		<0.025	<0.025	<0.025	<0.025
1,1,2-Trichloroethane	1.59	7.01	0.0032	---		<0.025	<0.025	<0.025	<0.025
Trichloroethene (TCE)	1.3	8.41	0.0036	---		<0.025	<0.025	<0.025	<0.025
Trichlorofluoromethane	1230	1230		---		<0.025	<0.025	<0.025	<0.025
1,2,3-Trichloropropane	0.005	0.109	0.0519	---		<0.025	<0.025	<0.025	<0.025
1,2,4-Trimethylbenzene	219	219		---		<0.025	<0.025	<0.025	<0.025
1,3,5-Trimethylbenzene	182	182		---		<0.025	<0.025	<0.025	<0.025
Trimethylbenzenes	---	---	1.3821	---		<0.050	<0.050	<0.050	<0.050
Vinyl Chloride	0.067	2.08	0.0001	---		<0.025	<0.025	<0.025	<0.025
m&p-Xylene	388/390	388/390		---		<0.050	<0.050	<0.050	<0.050
o-Xylene	434	434		---		<0.025	<0.025	<0.025	<0.025
Xylenes	260	260	3.96	---		<0.075	<0.075	<0.075	<0.075

Notes:

Bold values exceed the NR 720 RCL for protection of groundwater

Boxed values exceed the NR 720 RCL for non-industrial direct contact (applicable 0 to 4 feet bgs)

--- - no standard established

J - Results between laboratory limit of detection and limit of quantitation

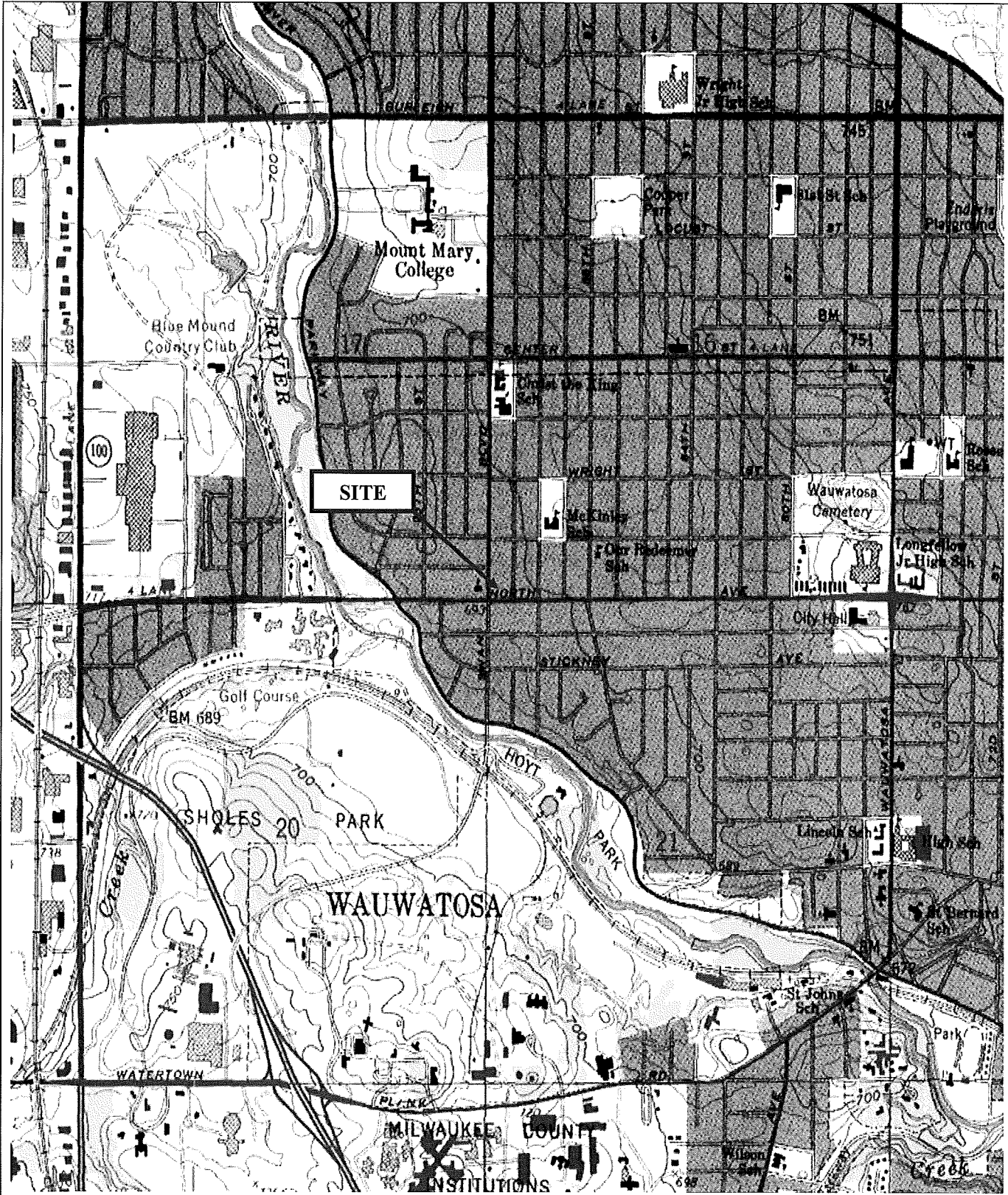
bgs - below ground surface

mg/kg - milligrams per kilogram

PAHs - polynuclear aromatic hydrocarbons

VOCs - volatile organic compounds

# Figures



Source: USGS	Quadrangle Map: Wauwatosa
Project: 1710-1972-0002	Date: 12/5/2017
	Scale: 1:24000
	Series: 7.5'

FIGURE 1  
 SITE LOCATION MAP  
 9122-9130 WEST NORTH AVENUE  
 WAUWATOSA, WISCONSIN

**KEY**  
 ENGINEERING  
 GROUP LTD.  
 A Division of SET Environmental Inc





FIGURE 2  
 SITE AERIAL MAP  
 9122-9130 WEST NORTH AVENUE  
 WAUWATOSA, WISCONSIN

Source: Google Earth
Project No: 1710-1972-0002
Date: December 5, 2017



# Attachment 1

Notice: Completion of this report is required by chs. 160, 281, 283, 289, 291-293, 295, and 299, Wis. Stats., and chs. NR 141 and 812, Wis. Adm. Code. In accordance with chs. 281, 289, 291-293, 295, and 299, Wis. Stats., failure to file this form may result in a forfeiture of between \$10-25,000, or imprisonment for up to one year, depending on the program and conduct involved. Personally identifiable information on this form is not intended to be used for any other purpose. Return form to the appropriate DNR office and bureau. See instructions on reverse for more information.

Verification Only of Fill and Seal

Route to DNR Bureau:

Drinking Water       Watershed/Wastewater       Remediation/Redevelopment

Waste Management       Other: \_\_\_\_\_

**1. Well Location Information**      **2. Facility / Owner Information**

County <u>Milwaukee</u>	WI Unique Well # of Removed Well	Hicap #	Facility Name <u>9122-9130 W. North Ave</u>
Latitude / Longitude (see instructions) _____ N _____ W	Format Code <input type="checkbox"/> DD <input type="checkbox"/> DDM	Method Code <input type="checkbox"/> GPS008 <input type="checkbox"/> SCR002 <input type="checkbox"/> OTH001	Facility ID (FID or PWS)
1/4 / 1/4 or Gov't Lot #	Section	Township <u>N</u>	License/Permit/Monitoring # <u>SB-1</u>
Well Street Address <u>9122-9130 W. North Ave</u>	Well ZIP Code	Original Well Owner	Present Well Owner
Well City/Village or Town <u>Wauwatosa</u>	Subdivision Name	City of Present Owner	State
Reason for Removal from Service	WI Unique Well # of Replacement Well	ZIP Code	

**3. Filled & Sealed Well / Drillhole / Borehole Information**

Monitoring Well      Original Construction Date (mm/dd/yyyy)  
11/29/2017

Water Well

Borehole / Drillhole      If a Well Construction Report is available, please attach.

Construction Type:

Drilled       Driven (Sandpoint)       Dug

Other (specify): Direct Push

Formation Type:

Unconsolidated Formation       Bedrock

Total Well Depth From Ground Surface (ft.)      Casing Diameter (in.)  
12      2

Lower Drillhole Diameter (in.)      Casing Depth (ft.)

Was well annular space grouted?       Yes       No       Unknown

If yes, to what depth (feet)?      Depth to Water (feet)

**4. Pump, Liner, Screen, Casing & Sealing Material**

Pump and piping removed?       Yes       No       N/A

Liner(s) removed?       Yes       No       N/A

Liner(s) perforated?       Yes       No       N/A

Screen removed?       Yes       No       N/A

Casing left in place?       Yes       No       N/A

Was casing cut off below surface?       Yes       No       N/A

Did sealing material rise to surface?       Yes       No       N/A

Did material settle after 24 hours?       Yes       No       N/A

If yes, was hole retopped?       Yes       No       N/A

If bentonite chips were used, were they hydrated with water from a known safe source?       Yes       No       N/A

Required Method of Placing Sealing Material

Conductor Pipe-Gravity       Conductor Pipe-Pumped

Screened & Poured (Bentonite Chips)       Other (Explain): Gravity

Sealing Materials

Neat Cement Grout       Concrete       Asphalt

Sand-Cement (Concrete) Grout       Bentonite Chips

For Monitoring Wells and Monitoring Well Boreholes Only:

Bentonite Chips       Bentonite - Cement Grout

Granular Bentonite       Bentonite - Sand Slurry

**5. Material Used to Fill Well / Drillhole**

From (ft.)	To (ft.)	No. Yards, Sacks; Sealant or Volume (circle one)	Mix Ratio or Mud Weight
Surface	12	0.5	

**6. Comments**

**7. Supervision of Work**

Name of Person or Firm Doing Filling & Sealing <u>KEY Engineering</u>	License #	Date of Filling & Sealing or Verification (mm/dd/yyyy) <u>11/29/2017</u>	DNR Use Only	
Street or Route <u>735 N. Water St. Suite 50</u>	State <u>WI</u>	Telephone Number <u>414 224 8300</u>	Date Received	Noted By
City <u>Milwaukee</u>	ZIP Code <u>53202</u>	Signature of Person Doing Work <u>[Signature]</u>	Comments	
			Date Signed <u>11/30/2017</u>	

**Notice:** Completion of this report is required by chs. 160, 281, 283, 289, 291-293, 295, and 299, Wis. Stats., and chs. NR 141 and 812, Wis. Adm. Code. In accordance with chs. 281, 289, 291-293, 295, and 299, Wis. Stats., failure to file this form may result in a forfeiture of between \$10-25,000, or imprisonment for up to one year, depending on the program and conduct involved. Personally identifiable information on this form is not intended to be used for any other purpose. Return form to the appropriate DNR office and bureau. See instructions on reverse for more information.

Verification Only of Fill and Seal

**Route to DNR Bureau:**

- Drinking Water       Watershed/Wastewater       Remediation/Redevelopment  
 Waste Management       Other: \_\_\_\_\_

**1. Well Location Information**

County <b>Milwaukee</b>	WI Unique Well # of Removed Well	Hicap #
Latitude / Longitude (see instructions) _____ N _____ W	Format Code <input type="checkbox"/> DD <input type="checkbox"/> DDM	Method Code <input type="checkbox"/> GPS008 <input type="checkbox"/> SCR002 <input type="checkbox"/> OTH001
1/4 / 1/4 or Gov't Lot #	Section	Township N
Well Street Address <b>9122-9130 N. NORTH AVE</b>	Range <input type="checkbox"/> E <input type="checkbox"/> W	Well ZIP Code
Well City, Village or Town <b>Wauwatosa</b>	Lot #	
Subdivision Name		

**2. Facility / Owner Information**

Facility Name <b>9122-9130 W. NORTH AVE</b>
Facility ID (FID or PWS)
License/Permit/Monitoring # <b>SB-2</b>
Original Well Owner
Present Well Owner
Mailing Address of Present Owner
City of Present Owner
State
ZIP Code

**3. Filled & Sealed Well / Drillhole / Borehole Information**

<input type="checkbox"/> Monitoring Well <input type="checkbox"/> Water Well <input checked="" type="checkbox"/> Borehole / Drillhole	Original Construction Date (mm/dd/yyyy) <b>11/29/2017</b> If a Well Construction Report is available, please attach.
Construction Type: <input type="checkbox"/> Drilled <input checked="" type="checkbox"/> Driven (Sandpoint) <input type="checkbox"/> Dug <input checked="" type="checkbox"/> Other (specify): <b>Direct Push</b>	
Formation Type: <input checked="" type="checkbox"/> Unconsolidated Formation <input type="checkbox"/> Bedrock	
Total Well Depth From Ground Surface (ft.) <b>12</b>	Casing Diameter (in.) <b>2</b>
Lower Drillhole Diameter (in.) —	Casing Depth (ft.) —
Was well annular space grouted? <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown	
If yes, to what depth (feet)?	Depth to Water (feet)

**4. Pump, Liner, Screen, Casing & Sealing Material**

Pump and piping removed?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A
Liner(s) removed?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A
Liner(s) perforated?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A
Screen removed?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A
Casing left in place?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A
Was casing cut off below surface?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A
Did sealing material rise to surface?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A
Did material settle after 24 hours?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A
If yes, was hole retopped?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A
If bentonite chips were used, were they hydrated with water from a known safe source?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A
Required Method of Placing Sealing Material	
<input type="checkbox"/> Conductor Pipe-Gravity <input type="checkbox"/> Conductor Pipe-Pumped <input type="checkbox"/> Screened & Poured (Bentonite Chips) <input checked="" type="checkbox"/> Other (Explain): <b>gravity</b>	
Sealing Materials	
<input type="checkbox"/> Neat Cement Grout <input type="checkbox"/> Concrete <input type="checkbox"/> Sand-Cement (Concrete) Grout <input checked="" type="checkbox"/> Bentonite Chips	<b>Asphalt</b>
For Monitoring Wells and Monitoring Well Boreholes Only:	
<input type="checkbox"/> Bentonite Chips <input type="checkbox"/> Bentonite - Cement Grout <input type="checkbox"/> Granular Bentonite <input type="checkbox"/> Bentonite - Sand Slurry	

**5. Material Used to Fill Well / Drillhole**

From (ft.)	To (ft.)	No. Yards, Sacks, Sealant or Volume (circle one)	Mix Ratio or Mud Weight
Surface	12	0.5	
<b>Bentonite</b>			

**6. Comments**

**7. Supervision of Work**

Name of Person or Firm Doing Filling & Sealing <b>RTX Engineering</b>	License #	Date of Filling & Sealing or Verification (mm/dd/yyyy) <b>11/29/2017</b>	<b>DNR Use Only</b>	
Street or Route <b>735 N. Water St. Suite 510</b>	Telephone Number <b>(414) 224 8300</b>	Comments	Date Received	Noted By
City <b>Milwaukee</b>	State <b>WI</b>	ZIP Code <b>53202</b>	Signature of Person Doing Work <i>[Signature]</i>	Date Signed <b>11/30/2017</b>

Route To: Watershed/Wastewater  Waste Management   
Remediation/Revelopment  Other

Page 1 of 1

Facility/Project Name 9122-9130 W. North Ave		License/Permit/Monitoring Number	Boring Number SB-1
Boring Drilled By: Name of crew chief (first, last) and Firm First Name: Adam Last Name: Sweet Firm: Horizon		Date Drilling Started 11.29.2017	Date Drilling Completed 11.29.2017
Drilling Method Diveel Push	WI Unique Well No.	DNR Well ID No.	Well Name
Final Static Water Level Feet MSL	Surface Elevation Feet MSL	Borehole Diameter 2 inches	
Local Grid Origin <input type="checkbox"/> (estimated: <input type="checkbox"/> ) or Boring Location <input checked="" type="checkbox"/> State Plane N, E		Local Grid Location <input type="checkbox"/> N <input type="checkbox"/> E <input type="checkbox"/> S <input type="checkbox"/> W	
1/4 of 1/4 of Section T N, R		Lat 0'	Long 0'
Facility ID	County Milwaukee	County Code 4	Civil Town/City or Village Wauwatosa

Sample Number and Type	Length Att. & Recovered (in)	Blow Counts	Depth in Feet (Below ground surface)	Soil/Rock Description And Geologic Origin For Each Major Unit	USCS	Graphic Log	Well Diagram	PID/FID	Soil Properties					RQD/Comments					
									Compressive Strength	Moisture Content	Liquid Limit	Plasticity Index	P 200						
42			4	1" asphalt 3" grading material 18" clay/silt, brown, loose, low plast. 20" silt, brown				0.1 2 0.1 4 0.3											
42			8	42" silt, brown trace fine gravel				0.0 0.1 8 0.1											
24			12	24" silt, brown trace fine gravel				0.1											

I hereby certify that the information on this form is true and correct to the best of my knowledge.  
Signature: *[Signature]* Firm: Key Engineering

This form is authorized by Chapters 281, 283, 289, 291, 292, 293, 295, and 299, Wis. Stats. Completion of this form is mandatory. Failure to file this form may result in forfeiture of between \$10 and \$25,000, or imprisonment for up to one year, depending on the program and conduct involved. Personally identifiable information on this form is not intended to be used for any other purpose. NOTE: See instructions for more information, including where the completed form should be sent.

Route To: Watershed/Wastewater  Waste Management   
Remediation/Revelopment  Other

Page 1 of 1

Facility/Project Name <u>9122-9130 W. NOAH AVE</u>		License/Permit/Monitoring Number	Boring Number <u>SB-2</u>
Boring Drilled By: Name of crew chief (first, last) and Firm First Name: <u>Adam</u> Last Name: <u>Sweet</u> Firm: <u>Horton</u>		Date Drilling Started <u>11/29/2017</u> m m d d y y y y	Date Drilling Completed <u>11/29/2017</u> m m d d y y y y
WI Unique Well No.	DNR Well ID No.	Well Name	Drilling Method <u>Direct Push</u>
Local Grid Origin <input type="checkbox"/> (estimated: <input type="checkbox"/> ) or Boring Location <input type="checkbox"/>		Final Static Water Level Feet MSL	Surface Elevation Feet MSL
State Plane _____ N, _____ E		Borehole Diameter <u>2</u> inches	
1/4 of _____ 1/4 of Section _____, T _____ N, R _____		Local Grid Location <input type="checkbox"/> N <input type="checkbox"/> E <input type="checkbox"/> S <input type="checkbox"/> W	
Facility ID _____		County <u>Milwaukee</u>	County Code <u>4</u>
		Civil Town/City or Village <u>Wauwatosa</u>	

Sample Number and Type	Length Air & Recovered (in)	Blow Counts	Depth in Feet (Below ground surface)	Soil/Rock Description And Geologic Origin For Each Major Unit	USCS	Graphic Log	Well Diagram	PID/FID	Soil Properties					RQD/Comments
									Compressive Strength	Moisture Content	Liquid Limit	Plasticity Index	P 200	
	<u>30</u>			<u>1" asphalt</u> <u>1" grading material</u> <u>3" crushed asphalt</u> <u>31" silt w/ fine sand, brown</u>				<u>0.1</u> <u>2</u> <u>0.1</u> <u>4</u>		<u>damp</u>				
	<u>12</u>		<u>9</u>	<u>12" silt w/ fine sand, brown</u>				<u>0.1</u> <u>4</u> <u>0.2</u> <u>8</u> <u>0.3</u> <u>10</u>		<u>damp</u>				
	<u>12</u>		<u>8</u>	<u>12" silt w/ fine sand, brown</u>				<u>0.0</u>		<u>wet</u>				

I hereby certify that the information on this form is true and correct to the best of my knowledge.

Signature Cam Firm KEY Engineering

This form is authorized by Chapters 281, 283, 289, 291, 292, 293, 295, and 299, Wis. Stats. Completion of this form is mandatory. Failure to file this form may result in forfeiture of between \$10 and \$25,000, or imprisonment for up to one year, depending on the program and conduct involved. Personally identifiable information on this form is not intended to be used for any other purpose. NOTE: See instructions for more information, including where the completed form should be sent.

# Attachment 2

December 05, 2017

Chelsea Ames  
Key Engineering  
735 North Water Street  
Suite 510  
Milwaukee, WI 53202

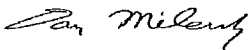
RE: Project: 1710-1972-0002 NORTH AVE  
Pace Project No.: 40161665

Dear Chelsea Ames:

Enclosed are the analytical results for sample(s) received by the laboratory on December 01, 2017. 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.

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: Valerie Collins, Key Engineering Group, LTD.  
Cassie Haupt, KEY ENGINEERING GROUP, LTD.  
Toni Schoen, KEY ENGINEERING GROUP, LTD.



## REPORT OF LABORATORY ANALYSIS

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## CERTIFICATIONS

Project: 1710-1972-0002 NORTH AVE  
Pace Project No.: 40161665

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### Green Bay Certification IDs

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

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## REPORT OF LABORATORY ANALYSIS

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### SAMPLE SUMMARY

Project: 1710-1972-0002 NORTH AVE  
Pace Project No.: 40161665

Lab ID	Sample ID	Matrix	Date Collected	Date Received
40161665001	SB-1 (0-2)	Solid	11/29/17 10:00	12/01/17 08:45
40161665002	SB-1 (4-6)	Solid	11/29/17 10:30	12/01/17 08:45
40161665003	SB-2 (2-4)	Solid	11/29/17 11:00	12/01/17 08:45
40161665004	SB-2 (6-8)	Solid	11/29/17 11:30	12/01/17 08:45
40161665005	TRIP BLANK	Water	11/29/17 00:00	12/01/17 08:45

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### SAMPLE ANALYTE COUNT

Project: 1710-1972-0002 NORTH AVE  
Pace Project No.: 40161665

Lab ID	Sample ID	Method	Analysts	Analytes Reported
40161665001	SB-1 (0-2)	EPA 8260	SMT	64
		ASTM D2974-87	KTS	1
40161665002	SB-1 (4-6)	EPA 8260	SMT	64
		ASTM D2974-87	KTS	1
40161665003	SB-2 (2-4)	EPA 8260	SMT	64
		ASTM D2974-87	KTS	1
40161665004	SB-2 (6-8)	EPA 8260	SMT	64
		ASTM D2974-87	KTS	1
40161665005	TRIP BLANK	EPA 8260	HNW	64

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### SUMMARY OF DETECTION

Project: 1710-1972-0002 NORTH AVE  
Pace Project No.: 40161665

Lab Sample ID Method	Client Sample ID Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
<b>40161665001</b>	<b>SB-1 (0-2)</b>					
EPA 8260	Tetrachloroethene	0.14	mg/kg	0.070	12/05/17 15:18	
ASTM D2974-87	Percent Moisture	14.8	%	0.10	12/01/17 17:06	
<b>40161665002</b>	<b>SB-1 (4-6)</b>					
EPA 8260	Tetrachloroethene	0.80	mg/kg	0.069	12/05/17 16:04	
ASTM D2974-87	Percent Moisture	13.6	%	0.10	12/01/17 17:06	
<b>40161665003</b>	<b>SB-2 (2-4)</b>					
EPA 8260	Methylene Chloride	0.036J	mg/kg	0.068	12/05/17 00:56	
EPA 8260	Tetrachloroethene	0.59	mg/kg	0.068	12/05/17 00:56	
ASTM D2974-87	Percent Moisture	11.8	%	0.10	12/01/17 17:06	
<b>40161665004</b>	<b>SB-2 (6-8)</b>					
EPA 8260	Methylene Chloride	0.028J	mg/kg	0.064	12/05/17 01:19	
EPA 8260	Tetrachloroethene	0.43	mg/kg	0.064	12/05/17 01:19	
ASTM D2974-87	Percent Moisture	5.6	%	0.10	12/01/17 17:06	

### REPORT OF LABORATORY ANALYSIS

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### ANALYTICAL RESULTS

Project: 1710-1972-0002 NORTH AVE  
Pace Project No.: 40161665

Sample: SB-1 (0-2) Lab ID: 40161665001 Collected: 11/29/17 10:00 Received: 12/01/17 08:45 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260 MSV Med Level Normal List</b>		Analytical Method: EPA 8260 Preparation Method: EPA 5035/5030B							
Benzene	<0.025	mg/kg	0.060	0.025	1	12/04/17 07:30	12/05/17 15:18	71-43-2	W
Bromobenzene	<0.025	mg/kg	0.060	0.025	1	12/04/17 07:30	12/05/17 15:18	108-86-1	W
Bromochloromethane	<0.025	mg/kg	0.060	0.025	1	12/04/17 07:30	12/05/17 15:18	74-97-5	W
Bromodichloromethane	<0.025	mg/kg	0.060	0.025	1	12/04/17 07:30	12/05/17 15:18	75-27-4	W
Bromoform	<0.025	mg/kg	0.060	0.025	1	12/04/17 07:30	12/05/17 15:18	75-25-2	W
Bromomethane	<0.070	mg/kg	0.25	0.070	1	12/04/17 07:30	12/05/17 15:18	74-83-9	W
n-Butylbenzene	<0.025	mg/kg	0.060	0.025	1	12/04/17 07:30	12/05/17 15:18	104-51-8	W
sec-Butylbenzene	<0.025	mg/kg	0.060	0.025	1	12/04/17 07:30	12/05/17 15:18	135-98-8	W
tert-Butylbenzene	<0.025	mg/kg	0.060	0.025	1	12/04/17 07:30	12/05/17 15:18	98-06-6	W
Carbon tetrachloride	<0.025	mg/kg	0.060	0.025	1	12/04/17 07:30	12/05/17 15:18	56-23-5	W
Chlorobenzene	<0.025	mg/kg	0.060	0.025	1	12/04/17 07:30	12/05/17 15:18	108-90-7	W
Chloroethane	<0.067	mg/kg	0.25	0.067	1	12/04/17 07:30	12/05/17 15:18	75-00-3	W
Chloroform	<0.046	mg/kg	0.25	0.046	1	12/04/17 07:30	12/05/17 15:18	67-66-3	W
Chloromethane	<0.025	mg/kg	0.060	0.025	1	12/04/17 07:30	12/05/17 15:18	74-87-3	W
2-Chlorotoluene	<0.025	mg/kg	0.060	0.025	1	12/04/17 07:30	12/05/17 15:18	95-49-8	W
4-Chlorotoluene	<0.025	mg/kg	0.060	0.025	1	12/04/17 07:30	12/05/17 15:18	106-43-4	W
1,2-Dibromo-3-chloropropane	<0.091	mg/kg	0.25	0.091	1	12/04/17 07:30	12/05/17 15:18	96-12-8	W
Dibromochloromethane	<0.025	mg/kg	0.060	0.025	1	12/04/17 07:30	12/05/17 15:18	124-48-1	W
1,2-Dibromoethane (EDB)	<0.025	mg/kg	0.060	0.025	1	12/04/17 07:30	12/05/17 15:18	106-93-4	W
Dibromomethane	<0.025	mg/kg	0.060	0.025	1	12/04/17 07:30	12/05/17 15:18	74-95-3	W
1,2-Dichlorobenzene	<0.025	mg/kg	0.060	0.025	1	12/04/17 07:30	12/05/17 15:18	95-50-1	W
1,3-Dichlorobenzene	<0.025	mg/kg	0.060	0.025	1	12/04/17 07:30	12/05/17 15:18	541-73-1	W
1,4-Dichlorobenzene	<0.025	mg/kg	0.060	0.025	1	12/04/17 07:30	12/05/17 15:18	106-46-7	W
Dichlorodifluoromethane	<0.025	mg/kg	0.060	0.025	1	12/04/17 07:30	12/05/17 15:18	75-71-8	W
1,1-Dichloroethane	<0.025	mg/kg	0.060	0.025	1	12/04/17 07:30	12/05/17 15:18	75-34-3	W
1,2-Dichloroethane	<0.025	mg/kg	0.060	0.025	1	12/04/17 07:30	12/05/17 15:18	107-06-2	W
1,1-Dichloroethene	<0.025	mg/kg	0.060	0.025	1	12/04/17 07:30	12/05/17 15:18	75-35-4	W
cis-1,2-Dichloroethene	<0.025	mg/kg	0.060	0.025	1	12/04/17 07:30	12/05/17 15:18	156-59-2	W
trans-1,2-Dichloroethene	<0.025	mg/kg	0.060	0.025	1	12/04/17 07:30	12/05/17 15:18	156-60-5	W
1,2-Dichloropropane	<0.025	mg/kg	0.060	0.025	1	12/04/17 07:30	12/05/17 15:18	78-87-5	W
1,3-Dichloropropane	<0.025	mg/kg	0.060	0.025	1	12/04/17 07:30	12/05/17 15:18	142-28-9	W
2,2-Dichloropropane	<0.025	mg/kg	0.060	0.025	1	12/04/17 07:30	12/05/17 15:18	594-20-7	W
1,1-Dichloropropene	<0.025	mg/kg	0.060	0.025	1	12/04/17 07:30	12/05/17 15:18	563-58-6	W
cis-1,3-Dichloropropene	<0.025	mg/kg	0.060	0.025	1	12/04/17 07:30	12/05/17 15:18	10061-01-5	W
trans-1,3-Dichloropropene	<0.025	mg/kg	0.060	0.025	1	12/04/17 07:30	12/05/17 15:18	10061-02-6	W
Diisopropyl ether	<0.025	mg/kg	0.060	0.025	1	12/04/17 07:30	12/05/17 15:18	108-20-3	W
Ethylbenzene	<0.025	mg/kg	0.060	0.025	1	12/04/17 07:30	12/05/17 15:18	100-41-4	W
Hexachloro-1,3-butadiene	<0.025	mg/kg	0.060	0.025	1	12/04/17 07:30	12/05/17 15:18	87-68-3	W
Isopropylbenzene (Cumene)	<0.025	mg/kg	0.060	0.025	1	12/04/17 07:30	12/05/17 15:18	98-82-8	W
p-Isopropyltoluene	<0.025	mg/kg	0.060	0.025	1	12/04/17 07:30	12/05/17 15:18	99-87-6	W
Methylene Chloride	<0.025	mg/kg	0.060	0.025	1	12/04/17 07:30	12/05/17 15:18	75-09-2	W
Methyl-tert-butyl ether	<0.025	mg/kg	0.060	0.025	1	12/04/17 07:30	12/05/17 15:18	1634-04-4	W
Naphthalene	<0.040	mg/kg	0.25	0.040	1	12/04/17 07:30	12/05/17 15:18	91-20-3	W
n-Propylbenzene	<0.025	mg/kg	0.060	0.025	1	12/04/17 07:30	12/05/17 15:18	103-65-1	W
Styrene	<0.025	mg/kg	0.060	0.025	1	12/04/17 07:30	12/05/17 15:18	100-42-5	W

### REPORT OF LABORATORY ANALYSIS

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### ANALYTICAL RESULTS

Project: 1710-1972-0002 NORTH AVE  
Pace Project No.: 40161665

Sample: SB-1 (0-2) Lab ID: 40161665001 Collected: 11/29/17 10:00 Received: 12/01/17 08:45 Matrix: Solid  
Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260 MSV Med Level Normal List</b>									
Analytical Method: EPA 8260 Preparation Method: EPA 5035/5030B									
1,1,1,2-Tetrachloroethane	<0.025	mg/kg	0.060	0.025	1	12/04/17 07:30	12/05/17 15:18	630-20-6	W
1,1,2,2-Tetrachloroethane	<0.025	mg/kg	0.060	0.025	1	12/04/17 07:30	12/05/17 15:18	79-34-5	W
Tetrachloroethene	0.14	mg/kg	0.070	0.029	1	12/04/17 07:30	12/05/17 15:18	127-18-4	
Toluene	<0.025	mg/kg	0.060	0.025	1	12/04/17 07:30	12/05/17 15:18	108-88-3	W
1,2,3-Trichlorobenzene	<0.025	mg/kg	0.060	0.025	1	12/04/17 07:30	12/05/17 15:18	87-61-6	W
1,2,4-Trichlorobenzene	<0.048	mg/kg	0.25	0.048	1	12/04/17 07:30	12/05/17 15:18	120-82-1	W
1,1,1-Trichloroethane	<0.025	mg/kg	0.060	0.025	1	12/04/17 07:30	12/05/17 15:18	71-55-6	W
1,1,2-Trichloroethane	<0.025	mg/kg	0.060	0.025	1	12/04/17 07:30	12/05/17 15:18	79-00-5	W
Trichloroethene	<0.025	mg/kg	0.060	0.025	1	12/04/17 07:30	12/05/17 15:18	79-01-6	W
Trichlorofluoromethane	<0.025	mg/kg	0.060	0.025	1	12/04/17 07:30	12/05/17 15:18	75-69-4	W
1,2,3-Trichloropropane	<0.025	mg/kg	0.060	0.025	1	12/04/17 07:30	12/05/17 15:18	96-18-4	W
1,2,4-Trimethylbenzene	<0.025	mg/kg	0.060	0.025	1	12/04/17 07:30	12/05/17 15:18	95-63-6	W
1,3,5-Trimethylbenzene	<0.025	mg/kg	0.060	0.025	1	12/04/17 07:30	12/05/17 15:18	108-67-8	W
Vinyl chloride	<0.025	mg/kg	0.060	0.025	1	12/04/17 07:30	12/05/17 15:18	75-01-4	W
m&p-Xylene	<0.050	mg/kg	0.12	0.050	1	12/04/17 07:30	12/05/17 15:18	179601-23-1	W
o-Xylene	<0.025	mg/kg	0.060	0.025	1	12/04/17 07:30	12/05/17 15:18	95-47-6	W
<b>Surrogates</b>									
Dibromofluoromethane (S)	102	%	68-130		1	12/04/17 07:30	12/05/17 15:18	1868-53-7	
Toluene-d8 (S)	112	%	68-149		1	12/04/17 07:30	12/05/17 15:18	2037-26-5	
4-Bromofluorobenzene (S)	105	%	58-141		1	12/04/17 07:30	12/05/17 15:18	460-00-4	
<b>Percent Moisture</b>									
Analytical Method: ASTM D2974-87									
Percent Moisture	14.8	%	0.10	0.10	1		12/01/17 17:06		

### REPORT OF LABORATORY ANALYSIS

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### ANALYTICAL RESULTS

Project: 1710-1972-0002 NORTH AVE  
Pace Project No.: 40161665

Sample: SB-1 (4-6) Lab ID: 40161665002 Collected: 11/29/17 10:30 Received: 12/01/17 08:45 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260 MSV Med Level Normal List</b>									
Analytical Method: EPA 8260 Preparation Method: EPA 5035/5030B									
Benzene	<0.025	mg/kg	0.060	0.025	1	12/04/17 07:30	12/05/17 16:04	71-43-2	W
Bromobenzene	<0.025	mg/kg	0.060	0.025	1	12/04/17 07:30	12/05/17 16:04	108-86-1	W
Bromochloromethane	<0.025	mg/kg	0.060	0.025	1	12/04/17 07:30	12/05/17 16:04	74-97-5	W
Bromodichloromethane	<0.025	mg/kg	0.060	0.025	1	12/04/17 07:30	12/05/17 16:04	75-27-4	W
Bromoform	<0.025	mg/kg	0.060	0.025	1	12/04/17 07:30	12/05/17 16:04	75-25-2	W
Bromomethane	<0.070	mg/kg	0.25	0.070	1	12/04/17 07:30	12/05/17 16:04	74-83-9	W
n-Butylbenzene	<0.025	mg/kg	0.060	0.025	1	12/04/17 07:30	12/05/17 16:04	104-51-8	W
sec-Butylbenzene	<0.025	mg/kg	0.060	0.025	1	12/04/17 07:30	12/05/17 16:04	135-98-8	W
tert-Butylbenzene	<0.025	mg/kg	0.060	0.025	1	12/04/17 07:30	12/05/17 16:04	98-06-6	W
Carbon tetrachloride	<0.025	mg/kg	0.060	0.025	1	12/04/17 07:30	12/05/17 16:04	56-23-5	W
Chlorobenzene	<0.025	mg/kg	0.060	0.025	1	12/04/17 07:30	12/05/17 16:04	108-90-7	W
Chloroethane	<0.067	mg/kg	0.25	0.067	1	12/04/17 07:30	12/05/17 16:04	75-00-3	W
Chloroform	<0.046	mg/kg	0.25	0.046	1	12/04/17 07:30	12/05/17 16:04	67-66-3	W
Chloromethane	<0.025	mg/kg	0.060	0.025	1	12/04/17 07:30	12/05/17 16:04	74-87-3	W
2-Chlorotoluene	<0.025	mg/kg	0.060	0.025	1	12/04/17 07:30	12/05/17 16:04	95-49-8	W
4-Chlorotoluene	<0.025	mg/kg	0.060	0.025	1	12/04/17 07:30	12/05/17 16:04	106-43-4	W
1,2-Dibromo-3-chloropropane	<0.091	mg/kg	0.25	0.091	1	12/04/17 07:30	12/05/17 16:04	96-12-8	W
Dibromochloromethane	<0.025	mg/kg	0.060	0.025	1	12/04/17 07:30	12/05/17 16:04	124-48-1	W
1,2-Dibromoethane (EDB)	<0.025	mg/kg	0.060	0.025	1	12/04/17 07:30	12/05/17 16:04	106-93-4	W
Dibromomethane	<0.025	mg/kg	0.060	0.025	1	12/04/17 07:30	12/05/17 16:04	74-95-3	W
1,2-Dichlorobenzene	<0.025	mg/kg	0.060	0.025	1	12/04/17 07:30	12/05/17 16:04	95-50-1	W
1,3-Dichlorobenzene	<0.025	mg/kg	0.060	0.025	1	12/04/17 07:30	12/05/17 16:04	541-73-1	W
1,4-Dichlorobenzene	<0.025	mg/kg	0.060	0.025	1	12/04/17 07:30	12/05/17 16:04	106-46-7	W
Dichlorodifluoromethane	<0.025	mg/kg	0.060	0.025	1	12/04/17 07:30	12/05/17 16:04	75-71-8	W
1,1-Dichloroethane	<0.025	mg/kg	0.060	0.025	1	12/04/17 07:30	12/05/17 16:04	75-34-3	W
1,2-Dichloroethane	<0.025	mg/kg	0.060	0.025	1	12/04/17 07:30	12/05/17 16:04	107-06-2	W
1,1-Dichloroethene	<0.025	mg/kg	0.060	0.025	1	12/04/17 07:30	12/05/17 16:04	75-35-4	W
cis-1,2-Dichloroethene	<0.025	mg/kg	0.060	0.025	1	12/04/17 07:30	12/05/17 16:04	156-59-2	W
trans-1,2-Dichloroethene	<0.025	mg/kg	0.060	0.025	1	12/04/17 07:30	12/05/17 16:04	156-60-5	W
1,2-Dichloropropane	<0.025	mg/kg	0.060	0.025	1	12/04/17 07:30	12/05/17 16:04	78-87-5	W
1,3-Dichloropropane	<0.025	mg/kg	0.060	0.025	1	12/04/17 07:30	12/05/17 16:04	142-28-9	W
2,2-Dichloropropane	<0.025	mg/kg	0.060	0.025	1	12/04/17 07:30	12/05/17 16:04	594-20-7	W
1,1-Dichloropropene	<0.025	mg/kg	0.060	0.025	1	12/04/17 07:30	12/05/17 16:04	563-58-6	W
cis-1,3-Dichloropropene	<0.025	mg/kg	0.060	0.025	1	12/04/17 07:30	12/05/17 16:04	10061-01-5	W
trans-1,3-Dichloropropene	<0.025	mg/kg	0.060	0.025	1	12/04/17 07:30	12/05/17 16:04	10061-02-6	W
Diisopropyl ether	<0.025	mg/kg	0.060	0.025	1	12/04/17 07:30	12/05/17 16:04	108-20-3	W
Ethylbenzene	<0.025	mg/kg	0.060	0.025	1	12/04/17 07:30	12/05/17 16:04	100-41-4	W
Hexachloro-1,3-butadiene	<0.025	mg/kg	0.060	0.025	1	12/04/17 07:30	12/05/17 16:04	87-68-3	W
Isopropylbenzene (Cumene)	<0.025	mg/kg	0.060	0.025	1	12/04/17 07:30	12/05/17 16:04	98-82-8	W
p-Isopropyltoluene	<0.025	mg/kg	0.060	0.025	1	12/04/17 07:30	12/05/17 16:04	99-87-6	W
Methylene Chloride	<0.025	mg/kg	0.060	0.025	1	12/04/17 07:30	12/05/17 16:04	75-09-2	W
Methyl-tert-butyl ether	<0.025	mg/kg	0.060	0.025	1	12/04/17 07:30	12/05/17 16:04	1634-04-4	W
Naphthalene	<0.040	mg/kg	0.25	0.040	1	12/04/17 07:30	12/05/17 16:04	91-20-3	W
n-Propylbenzene	<0.025	mg/kg	0.060	0.025	1	12/04/17 07:30	12/05/17 16:04	103-65-1	W
Styrene	<0.025	mg/kg	0.060	0.025	1	12/04/17 07:30	12/05/17 16:04	100-42-5	W

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### ANALYTICAL RESULTS

Project: 1710-1972-0002 NORTH AVE  
Pace Project No.: 40161665

Sample: SB-1 (4-6) Lab ID: 40161665002 Collected: 11/29/17 10:30 Received: 12/01/17 08:45 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260 MSV Med Level Normal List</b>									
Analytical Method: EPA 8260 Preparation Method: EPA 5035/5030B									
1,1,1,2-Tetrachloroethane	<0.025	mg/kg	0.060	0.025	1	12/04/17 07:30	12/05/17 16:04	630-20-6	W
1,1,2,2-Tetrachloroethane	<0.025	mg/kg	0.060	0.025	1	12/04/17 07:30	12/05/17 16:04	79-34-5	W
Tetrachloroethene	0.80	mg/kg	0.069	0.029	1	12/04/17 07:30	12/05/17 16:04	127-18-4	
Toluene	<0.025	mg/kg	0.060	0.025	1	12/04/17 07:30	12/05/17 16:04	108-88-3	W
1,2,3-Trichlorobenzene	<0.025	mg/kg	0.060	0.025	1	12/04/17 07:30	12/05/17 16:04	87-61-6	W
1,2,4-Trichlorobenzene	<0.048	mg/kg	0.25	0.048	1	12/04/17 07:30	12/05/17 16:04	120-82-1	W
1,1,1-Trichloroethane	<0.025	mg/kg	0.060	0.025	1	12/04/17 07:30	12/05/17 16:04	71-55-6	W
1,1,2-Trichloroethane	<0.025	mg/kg	0.060	0.025	1	12/04/17 07:30	12/05/17 16:04	79-00-5	W
Trichloroethene	<0.025	mg/kg	0.060	0.025	1	12/04/17 07:30	12/05/17 16:04	79-01-6	W
Trichlorofluoromethane	<0.025	mg/kg	0.060	0.025	1	12/04/17 07:30	12/05/17 16:04	75-69-4	W
1,2,3-Trichloropropane	<0.025	mg/kg	0.060	0.025	1	12/04/17 07:30	12/05/17 16:04	96-18-4	W
1,2,4-Trimethylbenzene	<0.025	mg/kg	0.060	0.025	1	12/04/17 07:30	12/05/17 16:04	95-63-6	W
1,3,5-Trimethylbenzene	<0.025	mg/kg	0.060	0.025	1	12/04/17 07:30	12/05/17 16:04	108-67-8	W
Vinyl chloride	<0.025	mg/kg	0.060	0.025	1	12/04/17 07:30	12/05/17 16:04	75-01-4	W
m&p-Xylene	<0.050	mg/kg	0.12	0.050	1	12/04/17 07:30	12/05/17 16:04	179601-23-1	W
o-Xylene	<0.025	mg/kg	0.060	0.025	1	12/04/17 07:30	12/05/17 16:04	95-47-6	W
<b>Surrogates</b>									
Dibromofluoromethane (S)	99	%	68-130		1	12/04/17 07:30	12/05/17 16:04	1868-53-7	
Toluene-d8 (S)	106	%	68-149		1	12/04/17 07:30	12/05/17 16:04	2037-26-5	
4-Bromofluorobenzene (S)	101	%	58-141		1	12/04/17 07:30	12/05/17 16:04	460-00-4	
<b>Percent Moisture</b>									
Analytical Method: ASTM D2974-87									
Percent Moisture	13.6	%	0.10	0.10	1		12/01/17 17:06		

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### ANALYTICAL RESULTS

Project: 1710-1972-0002 NORTH AVE  
Pace Project No.: 40161665

Sample: SB-2 (2-4) Lab ID: 40161665003 Collected: 11/29/17 11:00 Received: 12/01/17 08:45 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260 MSV Med Level Normal List</b>		Analytical Method: EPA 8260 Preparation Method: EPA 5035/5030B							
Benzene	<0.025	mg/kg	0.060	0.025	1	12/04/17 07:30	12/05/17 00:56	71-43-2	W
Bromobenzene	<0.025	mg/kg	0.060	0.025	1	12/04/17 07:30	12/05/17 00:56	108-86-1	W
Bromochloromethane	<0.025	mg/kg	0.060	0.025	1	12/04/17 07:30	12/05/17 00:56	74-97-5	W
Bromodichloromethane	<0.025	mg/kg	0.060	0.025	1	12/04/17 07:30	12/05/17 00:56	75-27-4	W
Bromoform	<0.025	mg/kg	0.060	0.025	1	12/04/17 07:30	12/05/17 00:56	75-25-2	W
Bromomethane	<0.070	mg/kg	0.25	0.070	1	12/04/17 07:30	12/05/17 00:56	74-83-9	W
n-Butylbenzene	<0.025	mg/kg	0.060	0.025	1	12/04/17 07:30	12/05/17 00:56	104-51-8	W
sec-Butylbenzene	<0.025	mg/kg	0.060	0.025	1	12/04/17 07:30	12/05/17 00:56	135-98-8	W
tert-Butylbenzene	<0.025	mg/kg	0.060	0.025	1	12/04/17 07:30	12/05/17 00:56	98-06-6	W
Carbon tetrachloride	<0.025	mg/kg	0.060	0.025	1	12/04/17 07:30	12/05/17 00:56	56-23-5	W
Chlorobenzene	<0.025	mg/kg	0.060	0.025	1	12/04/17 07:30	12/05/17 00:56	108-90-7	W
Chloroethane	<0.067	mg/kg	0.25	0.067	1	12/04/17 07:30	12/05/17 00:56	75-00-3	W
Chloroform	<0.046	mg/kg	0.25	0.046	1	12/04/17 07:30	12/05/17 00:56	67-66-3	W
Chloromethane	<0.025	mg/kg	0.060	0.025	1	12/04/17 07:30	12/05/17 00:56	74-87-3	W
2-Chlorotoluene	<0.025	mg/kg	0.060	0.025	1	12/04/17 07:30	12/05/17 00:56	95-49-8	W
4-Chlorotoluene	<0.025	mg/kg	0.060	0.025	1	12/04/17 07:30	12/05/17 00:56	106-43-4	W
1,2-Dibromo-3-chloropropane	<0.091	mg/kg	0.25	0.091	1	12/04/17 07:30	12/05/17 00:56	96-12-8	W
Dibromochloromethane	<0.025	mg/kg	0.060	0.025	1	12/04/17 07:30	12/05/17 00:56	124-48-1	W
1,2-Dibromoethane (EDB)	<0.025	mg/kg	0.060	0.025	1	12/04/17 07:30	12/05/17 00:56	106-93-4	W
Dibromomethane	<0.025	mg/kg	0.060	0.025	1	12/04/17 07:30	12/05/17 00:56	74-95-3	W
1,2-Dichlorobenzene	<0.025	mg/kg	0.060	0.025	1	12/04/17 07:30	12/05/17 00:56	95-50-1	W
1,3-Dichlorobenzene	<0.025	mg/kg	0.060	0.025	1	12/04/17 07:30	12/05/17 00:56	541-73-1	W
1,4-Dichlorobenzene	<0.025	mg/kg	0.060	0.025	1	12/04/17 07:30	12/05/17 00:56	106-46-7	W
Dichlorodifluoromethane	<0.025	mg/kg	0.060	0.025	1	12/04/17 07:30	12/05/17 00:56	75-71-8	W
1,1-Dichloroethane	<0.025	mg/kg	0.060	0.025	1	12/04/17 07:30	12/05/17 00:56	75-34-3	W
1,2-Dichloroethane	<0.025	mg/kg	0.060	0.025	1	12/04/17 07:30	12/05/17 00:56	107-06-2	W
1,1-Dichloroethene	<0.025	mg/kg	0.060	0.025	1	12/04/17 07:30	12/05/17 00:56	75-35-4	W
cis-1,2-Dichloroethene	<0.025	mg/kg	0.060	0.025	1	12/04/17 07:30	12/05/17 00:56	156-59-2	W
trans-1,2-Dichloroethene	<0.025	mg/kg	0.060	0.025	1	12/04/17 07:30	12/05/17 00:56	156-60-5	W
1,2-Dichloropropane	<0.025	mg/kg	0.060	0.025	1	12/04/17 07:30	12/05/17 00:56	78-87-5	W
1,3-Dichloropropane	<0.025	mg/kg	0.060	0.025	1	12/04/17 07:30	12/05/17 00:56	142-28-9	W
2,2-Dichloropropane	<0.025	mg/kg	0.060	0.025	1	12/04/17 07:30	12/05/17 00:56	594-20-7	W
1,1-Dichloropropene	<0.025	mg/kg	0.060	0.025	1	12/04/17 07:30	12/05/17 00:56	563-58-6	W
cis-1,3-Dichloropropene	<0.025	mg/kg	0.060	0.025	1	12/04/17 07:30	12/05/17 00:56	10061-01-5	W
trans-1,3-Dichloropropene	<0.025	mg/kg	0.060	0.025	1	12/04/17 07:30	12/05/17 00:56	10061-02-6	W
Diisopropyl ether	<0.025	mg/kg	0.060	0.025	1	12/04/17 07:30	12/05/17 00:56	108-20-3	W
Ethylbenzene	<0.025	mg/kg	0.060	0.025	1	12/04/17 07:30	12/05/17 00:56	100-41-4	W
Hexachloro-1,3-butadiene	<0.025	mg/kg	0.060	0.025	1	12/04/17 07:30	12/05/17 00:56	87-68-3	W
Isopropylbenzene (Cumene)	<0.025	mg/kg	0.060	0.025	1	12/04/17 07:30	12/05/17 00:56	98-82-8	W
p-Isopropyltoluene	<0.025	mg/kg	0.060	0.025	1	12/04/17 07:30	12/05/17 00:56	99-87-6	W
Methylene Chloride	0.036J	mg/kg	0.068	0.028	1	12/04/17 07:30	12/05/17 00:56	75-09-2	W
Methyl-tert-butyl ether	<0.025	mg/kg	0.060	0.025	1	12/04/17 07:30	12/05/17 00:56	1634-04-4	W
Naphthalene	<0.040	mg/kg	0.25	0.040	1	12/04/17 07:30	12/05/17 00:56	91-20-3	W
n-Propylbenzene	<0.025	mg/kg	0.060	0.025	1	12/04/17 07:30	12/05/17 00:56	103-65-1	W
Styrene	<0.025	mg/kg	0.060	0.025	1	12/04/17 07:30	12/05/17 00:56	100-42-5	W

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### ANALYTICAL RESULTS

Project: 1710-1972-0002 NORTH AVE  
Pace Project No.: 40161665

Sample: SB-2 (2-4) Lab ID: 40161665003 Collected: 11/29/17 11:00 Received: 12/01/17 08:45 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260 MSV Med Level Normal List</b>									
Analytical Method: EPA 8260 Preparation Method: EPA 5035/5030B									
1,1,1,2-Tetrachloroethane	<0.025	mg/kg	0.060	0.025	1	12/04/17 07:30	12/05/17 00:56	630-20-6	W
1,1,2,2-Tetrachloroethane	<0.025	mg/kg	0.060	0.025	1	12/04/17 07:30	12/05/17 00:56	79-34-5	W
Tetrachloroethene	0.59	mg/kg	0.068	0.028	1	12/04/17 07:30	12/05/17 00:56	127-18-4	
Toluene	<0.025	mg/kg	0.060	0.025	1	12/04/17 07:30	12/05/17 00:56	108-88-3	W
1,2,3-Trichlorobenzene	<0.025	mg/kg	0.060	0.025	1	12/04/17 07:30	12/05/17 00:56	87-61-6	W
1,2,4-Trichlorobenzene	<0.048	mg/kg	0.25	0.048	1	12/04/17 07:30	12/05/17 00:56	120-82-1	W
1,1,1-Trichloroethane	<0.025	mg/kg	0.060	0.025	1	12/04/17 07:30	12/05/17 00:56	71-55-6	W
1,1,2-Trichloroethane	<0.025	mg/kg	0.060	0.025	1	12/04/17 07:30	12/05/17 00:56	79-00-5	W
Trichloroethene	<0.025	mg/kg	0.060	0.025	1	12/04/17 07:30	12/05/17 00:56	79-01-6	W
Trichlorofluoromethane	<0.025	mg/kg	0.060	0.025	1	12/04/17 07:30	12/05/17 00:56	75-69-4	W
1,2,3-Trichloropropane	<0.025	mg/kg	0.060	0.025	1	12/04/17 07:30	12/05/17 00:56	96-18-4	W
1,2,4-Trimethylbenzene	<0.025	mg/kg	0.060	0.025	1	12/04/17 07:30	12/05/17 00:56	95-63-6	W
1,3,5-Trimethylbenzene	<0.025	mg/kg	0.060	0.025	1	12/04/17 07:30	12/05/17 00:56	108-67-8	W
Vinyl chloride	<0.025	mg/kg	0.060	0.025	1	12/04/17 07:30	12/05/17 00:56	75-01-4	W
m&p-Xylene	<0.050	mg/kg	0.12	0.050	1	12/04/17 07:30	12/05/17 00:56	179601-23-1	W
o-Xylene	<0.025	mg/kg	0.060	0.025	1	12/04/17 07:30	12/05/17 00:56	95-47-6	W
<b>Surrogates</b>									
Dibromofluoromethane (S)	102	%	68-130		1	12/04/17 07:30	12/05/17 00:56	1868-53-7	
Toluene-d8 (S)	108	%	68-149		1	12/04/17 07:30	12/05/17 00:56	2037-26-5	
4-Bromofluorobenzene (S)	84	%	58-141		1	12/04/17 07:30	12/05/17 00:56	460-00-4	
<b>Percent Moisture</b>									
Analytical Method: ASTM D2974-87									
Percent Moisture	11.8	%	0.10	0.10	1		12/01/17 17:06		

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### ANALYTICAL RESULTS

Project: 1710-1972-0002 NORTH AVE  
Pace Project No.: 40161665

Sample: SB-2 (6-8) Lab ID: 40161665004 Collected: 11/29/17 11:30 Received: 12/01/17 08:45 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260 MSV Med Level Normal List</b>									
Analytical Method: EPA 8260 Preparation Method: EPA 5035/5030B									
Benzene	<0.025	mg/kg	0.060	0.025	1	12/04/17 07:30	12/05/17 01:19	71-43-2	W
Bromobenzene	<0.025	mg/kg	0.060	0.025	1	12/04/17 07:30	12/05/17 01:19	108-86-1	W
Bromochloromethane	<0.025	mg/kg	0.060	0.025	1	12/04/17 07:30	12/05/17 01:19	74-97-5	W
Bromodichloromethane	<0.025	mg/kg	0.060	0.025	1	12/04/17 07:30	12/05/17 01:19	75-27-4	W
Bromoform	<0.025	mg/kg	0.060	0.025	1	12/04/17 07:30	12/05/17 01:19	75-25-2	W
Bromomethane	<0.070	mg/kg	0.25	0.070	1	12/04/17 07:30	12/05/17 01:19	74-83-9	W
n-Butylbenzene	<0.025	mg/kg	0.060	0.025	1	12/04/17 07:30	12/05/17 01:19	104-51-8	W
sec-Butylbenzene	<0.025	mg/kg	0.060	0.025	1	12/04/17 07:30	12/05/17 01:19	135-98-8	W
tert-Butylbenzene	<0.025	mg/kg	0.060	0.025	1	12/04/17 07:30	12/05/17 01:19	98-06-6	W
Carbon tetrachloride	<0.025	mg/kg	0.060	0.025	1	12/04/17 07:30	12/05/17 01:19	56-23-5	W
Chlorobenzene	<0.025	mg/kg	0.060	0.025	1	12/04/17 07:30	12/05/17 01:19	108-90-7	W
Chloroethane	<0.067	mg/kg	0.25	0.067	1	12/04/17 07:30	12/05/17 01:19	75-00-3	W
Chloroform	<0.046	mg/kg	0.25	0.046	1	12/04/17 07:30	12/05/17 01:19	67-66-3	W
Chloromethane	<0.025	mg/kg	0.060	0.025	1	12/04/17 07:30	12/05/17 01:19	74-87-3	W
2-Chlorotoluene	<0.025	mg/kg	0.060	0.025	1	12/04/17 07:30	12/05/17 01:19	95-49-8	W
4-Chlorotoluene	<0.025	mg/kg	0.060	0.025	1	12/04/17 07:30	12/05/17 01:19	106-43-4	W
1,2-Dibromo-3-chloropropane	<0.091	mg/kg	0.25	0.091	1	12/04/17 07:30	12/05/17 01:19	96-12-8	W
Dibromochloromethane	<0.025	mg/kg	0.060	0.025	1	12/04/17 07:30	12/05/17 01:19	124-48-1	W
1,2-Dibromoethane (EDB)	<0.025	mg/kg	0.060	0.025	1	12/04/17 07:30	12/05/17 01:19	106-93-4	W
Dibromomethane	<0.025	mg/kg	0.060	0.025	1	12/04/17 07:30	12/05/17 01:19	74-95-3	W
1,2-Dichlorobenzene	<0.025	mg/kg	0.060	0.025	1	12/04/17 07:30	12/05/17 01:19	95-50-1	W
1,3-Dichlorobenzene	<0.025	mg/kg	0.060	0.025	1	12/04/17 07:30	12/05/17 01:19	541-73-1	W
1,4-Dichlorobenzene	<0.025	mg/kg	0.060	0.025	1	12/04/17 07:30	12/05/17 01:19	106-46-7	W
Dichlorodifluoromethane	<0.025	mg/kg	0.060	0.025	1	12/04/17 07:30	12/05/17 01:19	75-71-8	W
1,1-Dichloroethane	<0.025	mg/kg	0.060	0.025	1	12/04/17 07:30	12/05/17 01:19	75-34-3	W
1,2-Dichloroethane	<0.025	mg/kg	0.060	0.025	1	12/04/17 07:30	12/05/17 01:19	107-06-2	W
1,1-Dichloroethene	<0.025	mg/kg	0.060	0.025	1	12/04/17 07:30	12/05/17 01:19	75-35-4	W
cis-1,2-Dichloroethene	<0.025	mg/kg	0.060	0.025	1	12/04/17 07:30	12/05/17 01:19	156-59-2	W
trans-1,2-Dichloroethene	<0.025	mg/kg	0.060	0.025	1	12/04/17 07:30	12/05/17 01:19	156-60-5	W
1,2-Dichloropropane	<0.025	mg/kg	0.060	0.025	1	12/04/17 07:30	12/05/17 01:19	78-87-5	W
1,3-Dichloropropane	<0.025	mg/kg	0.060	0.025	1	12/04/17 07:30	12/05/17 01:19	142-28-9	W
2,2-Dichloropropane	<0.025	mg/kg	0.060	0.025	1	12/04/17 07:30	12/05/17 01:19	594-20-7	W
1,1-Dichloropropene	<0.025	mg/kg	0.060	0.025	1	12/04/17 07:30	12/05/17 01:19	563-58-6	W
cis-1,3-Dichloropropene	<0.025	mg/kg	0.060	0.025	1	12/04/17 07:30	12/05/17 01:19	10061-01-5	W
trans-1,3-Dichloropropene	<0.025	mg/kg	0.060	0.025	1	12/04/17 07:30	12/05/17 01:19	10061-02-6	W
Diisopropyl ether	<0.025	mg/kg	0.060	0.025	1	12/04/17 07:30	12/05/17 01:19	108-20-3	W
Ethylbenzene	<0.025	mg/kg	0.060	0.025	1	12/04/17 07:30	12/05/17 01:19	100-41-4	W
Hexachloro-1,3-butadiene	<0.025	mg/kg	0.060	0.025	1	12/04/17 07:30	12/05/17 01:19	87-68-3	W
Isopropylbenzene (Cumene)	<0.025	mg/kg	0.060	0.025	1	12/04/17 07:30	12/05/17 01:19	98-82-8	W
p-Isopropyltoluene	<0.025	mg/kg	0.060	0.025	1	12/04/17 07:30	12/05/17 01:19	99-87-6	W
Methylene Chloride	0.028J	mg/kg	0.064	0.026	1	12/04/17 07:30	12/05/17 01:19	75-09-2	W
Methyl-tert-butyl ether	<0.025	mg/kg	0.060	0.025	1	12/04/17 07:30	12/05/17 01:19	1634-04-4	W
Naphthalene	<0.040	mg/kg	0.25	0.040	1	12/04/17 07:30	12/05/17 01:19	91-20-3	W
n-Propylbenzene	<0.025	mg/kg	0.060	0.025	1	12/04/17 07:30	12/05/17 01:19	103-65-1	W
Styrene	<0.025	mg/kg	0.060	0.025	1	12/04/17 07:30	12/05/17 01:19	100-42-5	W

### REPORT OF LABORATORY ANALYSIS

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### ANALYTICAL RESULTS

Project: 1710-1972-0002 NORTH AVE  
Pace Project No.: 40161665

**Sample: SB-2 (6-8)**      **Lab ID: 40161665004**      Collected: 11/29/17 11:30      Received: 12/01/17 08:45      Matrix: Solid  
*Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.*

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260 MSV Med Level Normal List</b> Analytical Method: EPA 8260      Preparation Method: EPA 5035/5030B									
1,1,1,2-Tetrachloroethane	<0.025	mg/kg	0.060	0.025	1	12/04/17 07:30	12/05/17 01:19	630-20-6	W
1,1,2,2-Tetrachloroethane	<0.025	mg/kg	0.060	0.025	1	12/04/17 07:30	12/05/17 01:19	79-34-5	W
Tetrachloroethene	0.43	mg/kg	0.064	0.026	1	12/04/17 07:30	12/05/17 01:19	127-18-4	
Toluene	<0.025	mg/kg	0.060	0.025	1	12/04/17 07:30	12/05/17 01:19	108-88-3	W
1,2,3-Trichlorobenzene	<0.025	mg/kg	0.060	0.025	1	12/04/17 07:30	12/05/17 01:19	87-61-6	W
1,2,4-Trichlorobenzene	<0.048	mg/kg	0.25	0.048	1	12/04/17 07:30	12/05/17 01:19	120-82-1	W
1,1,1-Trichloroethane	<0.025	mg/kg	0.060	0.025	1	12/04/17 07:30	12/05/17 01:19	71-55-6	W
1,1,2-Trichloroethane	<0.025	mg/kg	0.060	0.025	1	12/04/17 07:30	12/05/17 01:19	79-00-5	W
Trichloroethene	<0.025	mg/kg	0.060	0.025	1	12/04/17 07:30	12/05/17 01:19	79-01-6	W
Trichlorofluoromethane	<0.025	mg/kg	0.060	0.025	1	12/04/17 07:30	12/05/17 01:19	75-69-4	W
1,2,3-Trichloropropane	<0.025	mg/kg	0.060	0.025	1	12/04/17 07:30	12/05/17 01:19	96-18-4	W
1,2,4-Trimethylbenzene	<0.025	mg/kg	0.060	0.025	1	12/04/17 07:30	12/05/17 01:19	95-63-6	W
1,3,5-Trimethylbenzene	<0.025	mg/kg	0.060	0.025	1	12/04/17 07:30	12/05/17 01:19	108-67-8	W
Vinyl chloride	<0.025	mg/kg	0.060	0.025	1	12/04/17 07:30	12/05/17 01:19	75-01-4	W
m&p-Xylene	<0.050	mg/kg	0.12	0.050	1	12/04/17 07:30	12/05/17 01:19	179601-23-1	W
o-Xylene	<0.025	mg/kg	0.060	0.025	1	12/04/17 07:30	12/05/17 01:19	95-47-6	W
<b>Surrogates</b>									
Dibromofluoromethane (S)	95	%	68-130		1	12/04/17 07:30	12/05/17 01:19	1868-53-7	1q
Toluene-d8 (S)	101	%	68-149		1	12/04/17 07:30	12/05/17 01:19	2037-26-5	
4-Bromofluorobenzene (S)	80	%	58-141		1	12/04/17 07:30	12/05/17 01:19	460-00-4	
<b>Percent Moisture</b> Analytical Method: ASTM D2974-87									
Percent Moisture	5.6	%	0.10	0.10	1		12/01/17 17:06		

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### ANALYTICAL RESULTS

Project: 1710-1972-0002 NORTH AVE  
Pace Project No.: 40161665

Sample: TRIP BLANK Lab ID: 40161665005 Collected: 11/29/17 00:00 Received: 12/01/17 08:45 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260 MSV</b>		Analytical Method: EPA 8260							
Benzene	<0.50	ug/L	1.0	0.50	1		12/04/17 15:00	71-43-2	
Bromobenzene	<0.23	ug/L	1.0	0.23	1		12/04/17 15:00	108-86-1	
Bromochloromethane	<0.34	ug/L	1.0	0.34	1		12/04/17 15:00	74-97-5	
Bromodichloromethane	<0.50	ug/L	1.0	0.50	1		12/04/17 15:00	75-27-4	
Bromoform	<0.50	ug/L	1.0	0.50	1		12/04/17 15:00	75-25-2	
Bromomethane	<2.4	ug/L	5.0	2.4	1		12/04/17 15:00	74-83-9	
n-Butylbenzene	<0.50	ug/L	1.0	0.50	1		12/04/17 15:00	104-51-8	
sec-Butylbenzene	<2.2	ug/L	5.0	2.2	1		12/04/17 15:00	135-98-8	
tert-Butylbenzene	<0.18	ug/L	1.0	0.18	1		12/04/17 15:00	98-06-6	
Carbon tetrachloride	<0.50	ug/L	1.0	0.50	1		12/04/17 15:00	56-23-5	
Chlorobenzene	<0.50	ug/L	1.0	0.50	1		12/04/17 15:00	108-90-7	
Chloroethane	<0.37	ug/L	1.0	0.37	1		12/04/17 15:00	75-00-3	
Chloroform	<2.5	ug/L	5.0	2.5	1		12/04/17 15:00	67-66-3	
Chloromethane	<0.50	ug/L	1.0	0.50	1		12/04/17 15:00	74-87-3	
2-Chlorotoluene	<0.50	ug/L	1.0	0.50	1		12/04/17 15:00	95-49-8	
4-Chlorotoluene	<0.21	ug/L	1.0	0.21	1		12/04/17 15:00	106-43-4	
1,2-Dibromo-3-chloropropane	<2.2	ug/L	5.0	2.2	1		12/04/17 15:00	96-12-8	
Dibromochloromethane	<0.50	ug/L	1.0	0.50	1		12/04/17 15:00	124-48-1	
1,2-Dibromoethane (EDB)	<0.18	ug/L	1.0	0.18	1		12/04/17 15:00	106-93-4	
Dibromomethane	<0.43	ug/L	1.0	0.43	1		12/04/17 15:00	74-95-3	
1,2-Dichlorobenzene	<0.50	ug/L	1.0	0.50	1		12/04/17 15:00	95-50-1	
1,3-Dichlorobenzene	<0.50	ug/L	1.0	0.50	1		12/04/17 15:00	541-73-1	
1,4-Dichlorobenzene	<0.50	ug/L	1.0	0.50	1		12/04/17 15:00	106-46-7	
Dichlorodifluoromethane	<0.22	ug/L	1.0	0.22	1		12/04/17 15:00	75-71-8	
1,1-Dichloroethane	<0.24	ug/L	1.0	0.24	1		12/04/17 15:00	75-34-3	
1,2-Dichloroethane	<0.17	ug/L	1.0	0.17	1		12/04/17 15:00	107-06-2	
1,1-Dichloroethene	<0.41	ug/L	1.0	0.41	1		12/04/17 15:00	75-35-4	
cis-1,2-Dichloroethene	<0.26	ug/L	1.0	0.26	1		12/04/17 15:00	156-59-2	
trans-1,2-Dichloroethene	<0.26	ug/L	1.0	0.26	1		12/04/17 15:00	156-60-5	
1,2-Dichloropropane	<0.23	ug/L	1.0	0.23	1		12/04/17 15:00	78-87-5	
1,3-Dichloropropane	<0.50	ug/L	1.0	0.50	1		12/04/17 15:00	142-28-9	
2,2-Dichloropropane	<0.48	ug/L	1.0	0.48	1		12/04/17 15:00	594-20-7	
1,1-Dichloropropene	<0.44	ug/L	1.0	0.44	1		12/04/17 15:00	563-58-6	
cis-1,3-Dichloropropene	<0.50	ug/L	1.0	0.50	1		12/04/17 15:00	10061-01-5	
trans-1,3-Dichloropropene	<0.23	ug/L	1.0	0.23	1		12/04/17 15:00	10061-02-6	
Diisopropyl ether	<0.50	ug/L	1.0	0.50	1		12/04/17 15:00	108-20-3	
Ethylbenzene	<0.50	ug/L	1.0	0.50	1		12/04/17 15:00	100-41-4	
Hexachloro-1,3-butadiene	<2.1	ug/L	5.0	2.1	1		12/04/17 15:00	87-68-3	
Isopropylbenzene (Cumene)	<0.14	ug/L	1.0	0.14	1		12/04/17 15:00	98-82-8	
p-Isopropyltoluene	<0.50	ug/L	1.0	0.50	1		12/04/17 15:00	99-87-6	
Methylene Chloride	<0.23	ug/L	1.0	0.23	1		12/04/17 15:00	75-09-2	
Methyl-tert-butyl ether	<0.17	ug/L	1.0	0.17	1		12/04/17 15:00	1634-04-4	
Naphthalene	<2.5	ug/L	5.0	2.5	1		12/04/17 15:00	91-20-3	
n-Propylbenzene	<0.50	ug/L	1.0	0.50	1		12/04/17 15:00	103-65-1	
Styrene	<0.50	ug/L	1.0	0.50	1		12/04/17 15:00	100-42-5	
1,1,1,2-Tetrachloroethane	<0.18	ug/L	1.0	0.18	1		12/04/17 15:00	630-20-6	

### REPORT OF LABORATORY ANALYSIS

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### ANALYTICAL RESULTS

Project: 1710-1972-0002 NORTH AVE  
Pace Project No.: 40161665

**Sample: TRIP BLANK**      **Lab ID: 40161665005**      Collected: 11/29/17 00:00      Received: 12/01/17 08:45      Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260 MSV</b>		Analytical Method: EPA 8260							
1,1,2,2-Tetrachloroethane	<0.25	ug/L	1.0	0.25	1		12/04/17 15:00	79-34-5	
Tetrachloroethene	<0.50	ug/L	1.0	0.50	1		12/04/17 15:00	127-18-4	
Toluene	<0.50	ug/L	1.0	0.50	1		12/04/17 15:00	108-88-3	
1,2,3-Trichlorobenzene	<2.1	ug/L	5.0	2.1	1		12/04/17 15:00	87-61-6	
1,2,4-Trichlorobenzene	<2.2	ug/L	5.0	2.2	1		12/04/17 15:00	120-82-1	
1,1,1-Trichloroethane	<0.50	ug/L	1.0	0.50	1		12/04/17 15:00	71-55-6	
1,1,2-Trichloroethane	<0.20	ug/L	1.0	0.20	1		12/04/17 15:00	79-00-5	
Trichloroethene	<0.33	ug/L	1.0	0.33	1		12/04/17 15:00	79-01-6	
Trichlorofluoromethane	<0.18	ug/L	1.0	0.18	1		12/04/17 15:00	75-69-4	
1,2,3-Trichloropropane	<0.50	ug/L	1.0	0.50	1		12/04/17 15:00	96-18-4	
1,2,4-Trimethylbenzene	<0.50	ug/L	1.0	0.50	1		12/04/17 15:00	95-63-6	
1,3,5-Trimethylbenzene	<0.50	ug/L	1.0	0.50	1		12/04/17 15:00	108-67-8	
Vinyl chloride	<0.18	ug/L	1.0	0.18	1		12/04/17 15:00	75-01-4	
m&p-Xylene	<1.0	ug/L	2.0	1.0	1		12/04/17 15:00	179601-23-1	
o-Xylene	<0.50	ug/L	1.0	0.50	1		12/04/17 15:00	95-47-6	
<b>Surrogates</b>									
4-Bromofluorobenzene (S)	95	%	61-130		1		12/04/17 15:00	460-00-4	
Dibromofluoromethane (S)	105	%	67-130		1		12/04/17 15:00	1868-53-7	
Toluene-d8 (S)	95	%	70-130		1		12/04/17 15:00	2037-26-5	

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### QUALITY CONTROL DATA

Project: 1710-1972-0002 NORTH AVE  
Pace Project No.: 40161665

QC Batch: 276023 Analysis Method: EPA 8260  
QC Batch Method: EPA 5035/5030B Analysis Description: 8260 MSV Med Level Normal List  
Associated Lab Samples: 40161665001, 40161665002, 40161665003, 40161665004

METHOD BLANK: 1623823 Matrix: Solid  
Associated Lab Samples: 40161665001, 40161665002, 40161665003, 40161665004

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1,1,2-Tetrachloroethane	mg/kg	<0.014	0.050	12/04/17 07:48	
1,1,1-Trichloroethane	mg/kg	<0.014	0.050	12/04/17 07:48	
1,1,2,2-Tetrachloroethane	mg/kg	<0.018	0.050	12/04/17 07:48	
1,1,2-Trichloroethane	mg/kg	<0.020	0.050	12/04/17 07:48	
1,1-Dichloroethane	mg/kg	<0.018	0.050	12/04/17 07:48	
1,1-Dichloroethene	mg/kg	<0.018	0.050	12/04/17 07:48	
1,1-Dichloropropene	mg/kg	<0.014	0.050	12/04/17 07:48	
1,2,3-Trichlorobenzene	mg/kg	<0.017	0.050	12/04/17 07:48	
1,2,3-Trichloropropane	mg/kg	<0.022	0.050	12/04/17 07:48	
1,2,4-Trichlorobenzene	mg/kg	<0.048	0.25	12/04/17 07:48	
1,2,4-Trimethylbenzene	mg/kg	<0.012	0.050	12/04/17 07:48	
1,2-Dibromo-3-chloropropane	mg/kg	<0.091	0.25	12/04/17 07:48	
1,2-Dibromoethane (EDB)	mg/kg	<0.015	0.050	12/04/17 07:48	
1,2-Dichlorobenzene	mg/kg	<0.016	0.050	12/04/17 07:48	
1,2-Dichloroethane	mg/kg	<0.015	0.050	12/04/17 07:48	
1,2-Dichloropropane	mg/kg	<0.017	0.050	12/04/17 07:48	
1,3,5-Trimethylbenzene	mg/kg	<0.014	0.050	12/04/17 07:48	
1,3-Dichlorobenzene	mg/kg	<0.013	0.050	12/04/17 07:48	
1,3-Dichloropropane	mg/kg	<0.012	0.050	12/04/17 07:48	
1,4-Dichlorobenzene	mg/kg	<0.016	0.050	12/04/17 07:48	
2,2-Dichloropropane	mg/kg	<0.013	0.050	12/04/17 07:48	
2-Chlorotoluene	mg/kg	<0.016	0.050	12/04/17 07:48	
4-Chlorotoluene	mg/kg	<0.013	0.050	12/04/17 07:48	
Benzene	mg/kg	<0.0092	0.020	12/04/17 07:48	
Bromobenzene	mg/kg	<0.021	0.050	12/04/17 07:48	
Bromochloromethane	mg/kg	<0.021	0.050	12/04/17 07:48	
Bromodichloromethane	mg/kg	<0.0098	0.050	12/04/17 07:48	
Bromoform	mg/kg	<0.020	0.050	12/04/17 07:48	
Bromomethane	mg/kg	<0.070	0.25	12/04/17 07:48	
Carbon tetrachloride	mg/kg	<0.012	0.050	12/04/17 07:48	
Chlorobenzene	mg/kg	<0.015	0.050	12/04/17 07:48	
Chloroethane	mg/kg	<0.067	0.25	12/04/17 07:48	
Chloroform	mg/kg	<0.046	0.25	12/04/17 07:48	
Chloromethane	mg/kg	<0.020	0.050	12/04/17 07:48	
cis-1,2-Dichloroethene	mg/kg	<0.017	0.050	12/04/17 07:48	
cis-1,3-Dichloropropene	mg/kg	<0.017	0.050	12/04/17 07:48	
Dibromochloromethane	mg/kg	<0.018	0.050	12/04/17 07:48	
Dibromomethane	mg/kg	<0.019	0.050	12/04/17 07:48	
Dichlorodifluoromethane	mg/kg	<0.012	0.050	12/04/17 07:48	
Diisopropyl ether	mg/kg	<0.018	0.050	12/04/17 07:48	
Ethylbenzene	mg/kg	<0.012	0.050	12/04/17 07:48	

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.

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### QUALITY CONTROL DATA

Project: 1710-1972-0002 NORTH AVE  
Pace Project No.: 40161665

METHOD BLANK: 1623823 Matrix: Solid  
Associated Lab Samples: 40161665001, 40161665002, 40161665003, 40161665004

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Hexachloro-1,3-butadiene	mg/kg	<0.024	0.050	12/04/17 07:48	
Isopropylbenzene (Cumene)	mg/kg	<0.013	0.050	12/04/17 07:48	
m&p-Xylene	mg/kg	<0.034	0.10	12/04/17 07:48	
Methyl-tert-butyl ether	mg/kg	<0.013	0.050	12/04/17 07:48	
Methylene Chloride	mg/kg	0.022J	0.050	12/04/17 07:48	
n-Butylbenzene	mg/kg	<0.011	0.050	12/04/17 07:48	
n-Propylbenzene	mg/kg	<0.012	0.050	12/04/17 07:48	
Naphthalene	mg/kg	<0.040	0.25	12/04/17 07:48	
o-Xylene	mg/kg	<0.014	0.050	12/04/17 07:48	
p-Isopropyltoluene	mg/kg	<0.012	0.050	12/04/17 07:48	
sec-Butylbenzene	mg/kg	<0.012	0.050	12/04/17 07:48	
Styrene	mg/kg	<0.0090	0.050	12/04/17 07:48	
tert-Butylbenzene	mg/kg	<0.0095	0.050	12/04/17 07:48	
Tetrachloroethene	mg/kg	<0.013	0.050	12/04/17 07:48	
Toluene	mg/kg	<0.011	0.050	12/04/17 07:48	
trans-1,2-Dichloroethene	mg/kg	<0.016	0.050	12/04/17 07:48	
trans-1,3-Dichloropropene	mg/kg	<0.014	0.050	12/04/17 07:48	
Trichloroethene	mg/kg	<0.024	0.050	12/04/17 07:48	
Trichlorofluoromethane	mg/kg	<0.025	0.050	12/04/17 07:48	
Vinyl chloride	mg/kg	<0.021	0.050	12/04/17 07:48	
4-Bromofluorobenzene (S)	%	83	58-141	12/04/17 07:48	
Dibromofluoromethane (S)	%	90	68-130	12/04/17 07:48	
Toluene-d8 (S)	%	96	68-149	12/04/17 07:48	

LABORATORY CONTROL SAMPLE: 1623824

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1-Trichloroethane	mg/kg	2.5	2.2	87	61-122	
1,1,2,2-Tetrachloroethane	mg/kg	2.5	2.6	106	73-130	
1,1,2-Trichloroethane	mg/kg	2.5	2.7	108	70-130	
1,1-Dichloroethane	mg/kg	2.5	2.7	108	63-124	
1,1-Dichloroethene	mg/kg	2.5	2.4	95	53-117	
1,2,4-Trichlorobenzene	mg/kg	2.5	2.6	104	78-130	
1,2-Dibromo-3-chloropropane	mg/kg	2.5	2.5	99	49-140	
1,2-Dibromoethane (EDB)	mg/kg	2.5	2.7	108	70-130	
1,2-Dichlorobenzene	mg/kg	2.5	2.6	103	70-130	
1,2-Dichloroethane	mg/kg	2.5	2.4	96	56-135	
1,2-Dichloropropane	mg/kg	2.5	2.6	105	77-122	
1,3-Dichlorobenzene	mg/kg	2.5	2.6	102	70-130	
1,4-Dichlorobenzene	mg/kg	2.5	2.5	99	70-130	
Benzene	mg/kg	2.5	2.5	100	66-130	
Bromodichloromethane	mg/kg	2.5	2.3	91	62-135	
Bromoform	mg/kg	2.5	2.2	88	68-130	
Bromomethane	mg/kg	2.5	2.4	95	29-137	

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### REPORT OF LABORATORY ANALYSIS

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### QUALITY CONTROL DATA

Project: 1710-1972-0002 NORTH AVE  
Pace Project No.: 40161665

LABORATORY CONTROL SAMPLE: 1623824

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Carbon tetrachloride	mg/kg	2.5	2.2	87	57-130	
Chlorobenzene	mg/kg	2.5	2.6	102	70-130	
Chloroethane	mg/kg	2.5	2.5	101	36-144	
Chloroform	mg/kg	2.5	2.4	95	69-115	
Chloromethane	mg/kg	2.5	1.4	57	32-126	
cis-1,2-Dichloroethene	mg/kg	2.5	2.3	92	65-130	
cis-1,3-Dichloropropene	mg/kg	2.5	2.5	99	70-130	
Dibromochloromethane	mg/kg	2.5	2.5	100	70-130	
Dichlorodifluoromethane	mg/kg	2.5	1.1	42	10-99	
Ethylbenzene	mg/kg	2.5	2.6	104	82-122	
Isopropylbenzene (Cumene)	mg/kg	2.5	2.7	108	70-130	
m&p-Xylene	mg/kg	5	5.3	106	70-130	
Methyl-tert-butyl ether	mg/kg	2.5	2.8	111	63-134	
Methylene Chloride	mg/kg	2.5	2.5	101	56-123	
o-Xylene	mg/kg	2.5	2.6	106	70-130	
Styrene	mg/kg	2.5	2.7	109	70-130	
Tetrachloroethene	mg/kg	2.5	2.6	103	70-131	
Toluene	mg/kg	2.5	2.5	100	80-120	
trans-1,2-Dichloroethene	mg/kg	2.5	2.5	102	66-130	
trans-1,3-Dichloropropene	mg/kg	2.5	2.4	97	68-130	
Trichloroethene	mg/kg	2.5	2.4	98	70-130	
Trichlorofluoromethane	mg/kg	2.5	2.6	104	37-149	
Vinyl chloride	mg/kg	2.5	1.8	72	43-128	
4-Bromofluorobenzene (S)	%			92	58-141	
Dibromofluoromethane (S)	%			97	68-130	
Toluene-d8 (S)	%			100	68-149	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1623825 1623826

Parameter	Units	40161665004		1623825		1623826		% Rec	% Rec	% Rec Limits	Max RPD	Qual
		MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS Result	MSD Result					
1,1,1-Trichloroethane	mg/kg	<0.025	1.3	1.3	1.1	1.1	85	86	57-123	1	20	
1,1,2,2-Tetrachloroethane	mg/kg	<0.025	1.3	1.3	1.4	1.4	108	106	73-135	1	20	
1,1,2-Trichloroethane	mg/kg	<0.025	1.3	1.3	1.4	1.4	106	106	70-130	1	20	
1,1-Dichloroethane	mg/kg	<0.025	1.3	1.3	1.5	1.4	113	109	63-124	3	20	
1,1-Dichloroethene	mg/kg	<0.025	1.3	1.3	1.4	1.3	102	101	48-117	1	23	
1,2,4-Trichlorobenzene	mg/kg	<0.048	1.3	1.3	1.4	1.4	107	106	78-145	1	20	
1,2-Dibromo-3-chloropropane	mg/kg	<0.091	1.3	1.3	1.2	1.2	91	88	38-168	3	22	
1,2-Dibromoethane (EDB)	mg/kg	<0.025	1.3	1.3	1.4	1.3	106	102	70-130	4	20	
1,2-Dichlorobenzene	mg/kg	<0.025	1.3	1.3	1.4	1.4	105	107	70-130	2	20	
1,2-Dichloroethane	mg/kg	<0.025	1.3	1.3	1.2	1.3	93	95	56-145	2	20	
1,2-Dichloropropane	mg/kg	<0.025	1.3	1.3	1.3	1.4	102	103	77-123	1	20	
1,3-Dichlorobenzene	mg/kg	<0.025	1.3	1.3	1.4	1.4	108	104	70-130	3	20	
1,4-Dichlorobenzene	mg/kg	<0.025	1.3	1.3	1.4	1.4	105	107	70-130	2	20	

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### QUALITY CONTROL DATA

Project: 1710-1972-0002 NORTH AVE  
Pace Project No.: 40161665

Parameter	Units	MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1623825		1623826		MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	Max RPD	RPD	Qual
		40161665004 Result	MS Spike Conc.	MSD Spike Conc.									
Benzene	mg/kg	<0.025	1.3	1.3	1.4	1.3	104	102	65-130	2	20		
Bromodichloromethane	mg/kg	<0.025	1.3	1.3	1.2	1.2	91	89	59-141	2	20		
Bromoform	mg/kg	<0.025	1.3	1.3	1.1	1.1	86	86	59-141	1	20		
Bromomethane	mg/kg	<0.070	1.3	1.3	1.4	1.4	108	109	28-139	1	20		
Carbon tetrachloride	mg/kg	<0.025	1.3	1.3	1.1	1.1	84	84	50-130	1	20		
Chlorobenzene	mg/kg	<0.025	1.3	1.3	1.4	1.4	106	106	70-130	0	20		
Chloroethane	mg/kg	<0.067	1.3	1.3	1.4	1.5	102	112	36-144	9	20		
Chloroform	mg/kg	<0.046	1.3	1.3	1.3	1.3	97	96	68-122	2	20		
Chloromethane	mg/kg	<0.025	1.3	1.3	0.83	0.80	63	60	30-126	4	20		
cis-1,2-Dichloroethene	mg/kg	<0.025	1.3	1.3	1.2	1.2	90	91	63-130	0	20		
cis-1,3-Dichloropropene	mg/kg	<0.025	1.3	1.3	1.3	1.2	95	93	70-130	2	20		
Dibromochloromethane	mg/kg	<0.025	1.3	1.3	1.2	1.2	88	87	66-136	1	20		
Dichlorodifluoromethane	mg/kg	<0.025	1.3	1.3	0.57	0.57	43	43	10-99	1	33		
Ethylbenzene	mg/kg	<0.025	1.3	1.3	1.4	1.3	105	102	80-122	3	20		
Isopropylbenzene (Cumene)	mg/kg	<0.025	1.3	1.3	1.4	1.4	105	106	70-130	1	20		
m&p-Xylene	mg/kg	<0.050	2.6	2.6	2.8	2.8	104	104	70-130	0	20		
Methyl-tert-butyl ether	mg/kg	<0.025	1.3	1.3	1.5	1.5	112	115	63-134	3	20		
Methylene Chloride	mg/kg	0.028J	1.3	1.3	1.5	1.4	109	107	56-127	2	20		
o-Xylene	mg/kg	<0.025	1.3	1.3	1.4	1.3	105	101	70-130	3	20		
Styrene	mg/kg	<0.025	1.3	1.3	1.4	1.4	106	104	70-130	2	20		
Tetrachloroethene	mg/kg	0.43	1.3	1.3	1.8	1.8	102	104	70-131	2	20		
Toluene	mg/kg	<0.025	1.3	1.3	1.3	1.3	100	99	80-120	1	20		
trans-1,2-Dichloroethene	mg/kg	<0.025	1.3	1.3	1.4	1.4	105	103	60-130	2	20		
trans-1,3-Dichloropropene	mg/kg	<0.025	1.3	1.3	1.2	1.2	90	92	68-130	2	20		
Trichloroethene	mg/kg	<0.025	1.3	1.3	1.3	1.3	99	102	70-130	3	20		
Trichlorofluoromethane	mg/kg	<0.025	1.3	1.3	1.5	1.5	113	116	37-149	3	24		
Vinyl chloride	mg/kg	<0.025	1.3	1.3	1.0	0.99	78	75	39-128	4	20		
4-Bromofluorobenzene (S)	%						89	86	58-141				
Dibromofluoromethane (S)	%						96	94	68-130				
Toluene-d8 (S)	%						98	97	68-149				

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### REPORT OF LABORATORY ANALYSIS

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**QUALITY CONTROL DATA**

Project: 1710-1972-0002 NORTH AVE  
Pace Project No.: 40161665

QC Batch: 275880 Analysis Method: EPA 8260  
QC Batch Method: EPA 8260 Analysis Description: 8260 MSV  
Associated Lab Samples: 40161665005

METHOD BLANK: 1622691 Matrix: Water  
Associated Lab Samples: 40161665005

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1,1,2-Tetrachloroethane	ug/L	<0.18	1.0	12/04/17 08:06	
1,1,1-Trichloroethane	ug/L	<0.50	1.0	12/04/17 08:06	
1,1,2,2-Tetrachloroethane	ug/L	<0.25	1.0	12/04/17 08:06	
1,1,2-Trichloroethane	ug/L	<0.20	1.0	12/04/17 08:06	
1,1-Dichloroethane	ug/L	<0.24	1.0	12/04/17 08:06	
1,1-Dichloroethene	ug/L	<0.41	1.0	12/04/17 08:06	
1,1-Dichloropropene	ug/L	<0.44	1.0	12/04/17 08:06	
1,2,3-Trichlorobenzene	ug/L	<2.1	5.0	12/04/17 08:06	
1,2,3-Trichloropropane	ug/L	<0.50	1.0	12/04/17 08:06	
1,2,4-Trichlorobenzene	ug/L	<2.2	5.0	12/04/17 08:06	
1,2,4-Trimethylbenzene	ug/L	<0.50	1.0	12/04/17 08:06	
1,2-Dibromo-3-chloropropane	ug/L	<2.2	5.0	12/04/17 08:06	
1,2-Dibromoethane (EDB)	ug/L	<0.18	1.0	12/04/17 08:06	
1,2-Dichlorobenzene	ug/L	<0.50	1.0	12/04/17 08:06	
1,2-Dichloroethane	ug/L	<0.17	1.0	12/04/17 08:06	
1,2-Dichloropropane	ug/L	<0.23	1.0	12/04/17 08:06	
1,3,5-Trimethylbenzene	ug/L	<0.50	1.0	12/04/17 08:06	
1,3-Dichlorobenzene	ug/L	<0.50	1.0	12/04/17 08:06	
1,3-Dichloropropane	ug/L	<0.50	1.0	12/04/17 08:06	
1,4-Dichlorobenzene	ug/L	<0.50	1.0	12/04/17 08:06	
2,2-Dichloropropane	ug/L	<0.48	1.0	12/04/17 08:06	
2-Chlorotoluene	ug/L	<0.50	1.0	12/04/17 08:06	
4-Chlorotoluene	ug/L	<0.21	1.0	12/04/17 08:06	
Benzene	ug/L	<0.50	1.0	12/04/17 08:06	
Bromobenzene	ug/L	<0.23	1.0	12/04/17 08:06	
Bromochloromethane	ug/L	<0.34	1.0	12/04/17 08:06	
Bromodichloromethane	ug/L	<0.50	1.0	12/04/17 08:06	
Bromoform	ug/L	<0.50	1.0	12/04/17 08:06	
Bromomethane	ug/L	<2.4	5.0	12/04/17 08:06	
Carbon tetrachloride	ug/L	<0.50	1.0	12/04/17 08:06	
Chlorobenzene	ug/L	<0.50	1.0	12/04/17 08:06	
Chloroethane	ug/L	<0.37	1.0	12/04/17 08:06	
Chloroform	ug/L	<2.5	5.0	12/04/17 08:06	
Chloromethane	ug/L	<0.50	1.0	12/04/17 08:06	
cis-1,2-Dichloroethene	ug/L	<0.26	1.0	12/04/17 08:06	
cis-1,3-Dichloropropene	ug/L	<0.50	1.0	12/04/17 08:06	
Dibromochloromethane	ug/L	<0.50	1.0	12/04/17 08:06	
Dibromomethane	ug/L	<0.43	1.0	12/04/17 08:06	
Dichlorodifluoromethane	ug/L	<0.22	1.0	12/04/17 08:06	
Diisopropyl ether	ug/L	<0.50	1.0	12/04/17 08:06	
Ethylbenzene	ug/L	<0.50	1.0	12/04/17 08:06	

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### QUALITY CONTROL DATA

Project: 1710-1972-0002 NORTH AVE  
Pace Project No.: 40161665

METHOD BLANK: 1622691 Matrix: Water  
Associated Lab Samples: 40161665005

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Hexachloro-1,3-butadiene	ug/L	<2.1	5.0	12/04/17 08:06	
Isopropylbenzene (Cumene)	ug/L	<0.14	1.0	12/04/17 08:06	
m&p-Xylene	ug/L	<1.0	2.0	12/04/17 08:06	
Methyl-tert-butyl ether	ug/L	<0.17	1.0	12/04/17 08:06	
Methylene Chloride	ug/L	<0.23	1.0	12/04/17 08:06	
n-Butylbenzene	ug/L	<0.50	1.0	12/04/17 08:06	
n-Propylbenzene	ug/L	<0.50	1.0	12/04/17 08:06	
Naphthalene	ug/L	<2.5	5.0	12/04/17 08:06	
o-Xylene	ug/L	<0.50	1.0	12/04/17 08:06	
p-Isopropyltoluene	ug/L	<0.50	1.0	12/04/17 08:06	
sec-Butylbenzene	ug/L	<2.2	5.0	12/04/17 08:06	
Styrene	ug/L	<0.50	1.0	12/04/17 08:06	
tert-Butylbenzene	ug/L	<0.18	1.0	12/04/17 08:06	
Tetrachloroethene	ug/L	<0.50	1.0	12/04/17 08:06	
Toluene	ug/L	<0.50	1.0	12/04/17 08:06	
trans-1,2-Dichloroethene	ug/L	<0.26	1.0	12/04/17 08:06	
trans-1,3-Dichloropropene	ug/L	<0.23	1.0	12/04/17 08:06	
Trichloroethene	ug/L	<0.33	1.0	12/04/17 08:06	
Trichlorofluoromethane	ug/L	<0.18	1.0	12/04/17 08:06	
Vinyl chloride	ug/L	<0.18	1.0	12/04/17 08:06	
4-Bromofluorobenzene (S)	%	99	61-130	12/04/17 08:06	
Dibromofluoromethane (S)	%	97	67-130	12/04/17 08:06	
Toluene-d8 (S)	%	96	70-130	12/04/17 08:06	

LABORATORY CONTROL SAMPLE: 1622692

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1-Trichloroethane	ug/L	50	49.8	100	70-130	
1,1,2,2-Tetrachloroethane	ug/L	50	46.6	93	70-130	
1,1,2-Trichloroethane	ug/L	50	45.8	92	70-130	
1,1-Dichloroethane	ug/L	50	50.1	100	71-132	
1,1-Dichloroethene	ug/L	50	47.0	94	75-130	
1,2,4-Trichlorobenzene	ug/L	50	45.7	91	70-130	
1,2-Dibromo-3-chloropropane	ug/L	50	41.4	83	63-123	
1,2-Dibromoethane (EDB)	ug/L	50	48.4	97	70-130	
1,2-Dichlorobenzene	ug/L	50	47.0	94	70-130	
1,2-Dichloroethane	ug/L	50	49.7	99	70-131	
1,2-Dichloropropane	ug/L	50	47.9	96	80-120	
1,3-Dichlorobenzene	ug/L	50	46.7	93	70-130	
1,4-Dichlorobenzene	ug/L	50	46.4	93	70-130	
Benzene	ug/L	50	50.1	100	73-145	
Bromodichloromethane	ug/L	50	45.7	91	70-130	
Bromoform	ug/L	50	43.2	86	67-130	
Bromomethane	ug/L	50	30.6	61	26-128	

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### QUALITY CONTROL DATA

Project: 1710-1972-0002 NORTH AVE  
Pace Project No.: 40161665

LABORATORY CONTROL SAMPLE: 1622692

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Carbon tetrachloride	ug/L	50	47.3	95	70-133	
Chlorobenzene	ug/L	50	48.1	96	70-130	
Chloroethane	ug/L	50	40.3	81	58-120	
Chloroform	ug/L	50	49.3	99	80-121	
Chloromethane	ug/L	50	34.2	68	40-127	
cis-1,2-Dichloroethene	ug/L	50	47.0	94	70-130	
cis-1,3-Dichloropropene	ug/L	50	44.0	88	70-130	
Dibromochloromethane	ug/L	50	44.2	88	70-130	
Dichlorodifluoromethane	ug/L	50	25.3	51	20-135	
Ethylbenzene	ug/L	50	49.4	99	87-129	
Isopropylbenzene (Cumene)	ug/L	50	51.6	103	70-130	
m&p-Xylene	ug/L	100	100	100	70-130	
Methyl-tert-butyl ether	ug/L	50	49.0	98	66-143	
Methylene Chloride	ug/L	50	46.4	93	70-130	
o-Xylene	ug/L	50	49.3	99	70-130	
Styrene	ug/L	50	50.6	101	70-130	
Tetrachloroethene	ug/L	50	45.4	91	70-130	
Toluene	ug/L	50	47.6	95	82-130	
trans-1,2-Dichloroethene	ug/L	50	50.0	100	75-132	
trans-1,3-Dichloropropene	ug/L	50	42.3	85	70-130	
Trichloroethene	ug/L	50	49.5	99	70-130	
Trichlorofluoromethane	ug/L	50	43.3	87	76-133	
Vinyl chloride	ug/L	50	40.1	80	57-136	
4-Bromofluorobenzene (S)	%			102	61-130	
Dibromofluoromethane (S)	%			98	67-130	
Toluene-d8 (S)	%			95	70-130	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1622693 1622694

Parameter	Units	MS		MSD		MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	Max RPD	Qual
		40161649002	Spike Conc.	Spike Conc.	Result							
1,1,1-Trichloroethane	ug/L	<0.50	50	50	46.5	51.1	93	102	70-134	9	20	
1,1,2,2-Tetrachloroethane	ug/L	<0.25	50	50	44.7	47.3	89	95	70-130	6	20	
1,1,2-Trichloroethane	ug/L	<0.20	50	50	43.6	47.5	87	95	70-130	9	20	
1,1-Dichloroethane	ug/L	<0.24	50	50	45.3	50.8	91	102	71-133	11	20	
1,1-Dichloroethene	ug/L	<0.41	50	50	43.1	47.2	86	94	75-136	9	20	
1,2,4-Trichlorobenzene	ug/L	<2.2	50	50	46.6	49.4	92	98	70-130	6	20	
1,2-Dibromo-3-chloropropane	ug/L	<2.2	50	50	40.4	42.9	81	86	63-123	6	20	
1,2-Dibromoethane (EDB)	ug/L	<0.18	50	50	44.1	49.1	88	98	70-130	11	20	
1,2-Dichlorobenzene	ug/L	<0.50	50	50	45.1	47.9	90	95	70-130	6	20	
1,2-Dichloroethane	ug/L	<0.17	50	50	46.2	50.8	92	102	70-131	9	20	
1,2-Dichloropropane	ug/L	<0.23	50	50	42.5	48.7	85	97	80-120	14	20	
1,3-Dichlorobenzene	ug/L	<0.50	50	50	44.7	46.5	89	93	70-130	4	20	
1,4-Dichlorobenzene	ug/L	<0.50	50	50	44.4	46.4	88	92	70-130	4	20	

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### REPORT OF LABORATORY ANALYSIS

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### QUALITY CONTROL DATA

Project: 1710-1972-0002 NORTH AVE  
Pace Project No.: 40161665

Parameter	Units	MATRIX SPIKE & MATRIX SPIKE DUPLICATE:		1622693		1622694		MS % Rec	MSD % Rec	% Rec Limits	Max RPD	Qual
		40161649002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result						
Benzene	ug/L	12.0	50	50	54.3	60.3	85	97	73-145	10	20	
Bromodichloromethane	ug/L	<0.50	50	50	41.2	46.2	82	92	70-130	11	20	
Bromoform	ug/L	<0.50	50	50	41.8	44.2	84	88	67-130	6	20	
Bromomethane	ug/L	<2.4	50	50	30.9	31.8	62	64	26-129	3	20	
Carbon tetrachloride	ug/L	<0.50	50	50	44.5	49.2	89	98	70-134	10	20	
Chlorobenzene	ug/L	<0.50	50	50	44.1	48.1	88	96	70-130	9	20	
Chloroethane	ug/L	<0.37	50	50	43.9	41.7	88	83	58-120	5	20	
Chloroform	ug/L	<2.5	50	50	46.0	50.2	92	100	80-121	9	20	
Chloromethane	ug/L	<0.50	50	50	32.9	33.7	66	67	40-128	2	20	
cis-1,2-Dichloroethene	ug/L	<0.26	50	50	43.4	48.2	87	96	70-130	10	20	
cis-1,3-Dichloropropene	ug/L	<0.50	50	50	39.6	44.1	79	88	70-130	11	20	
Dibromochloromethane	ug/L	<0.50	50	50	41.8	45.1	84	90	70-130	8	20	
Dichlorodifluoromethane	ug/L	<0.22	50	50	22.4	24.7	45	49	20-146	10	20	
Ethylbenzene	ug/L	<0.50	50	50	44.7	49.3	89	99	87-129	10	20	
Isopropylbenzene (Cumene)	ug/L	0.23J	50	50	47.3	52.0	94	104	70-130	9	20	
m&p-Xylene	ug/L	<1.0	100	100	90.8	99.2	91	99	70-130	9	20	
Methyl-tert-butyl ether	ug/L	<0.17	50	50	44.1	49.8	88	100	66-143	12	20	
Methylene Chloride	ug/L	<0.23	50	50	43.7	48.8	87	98	70-130	11	20	
o-Xylene	ug/L	<0.50	50	50	45.8	49.8	92	100	70-130	8	20	
Styrene	ug/L	<0.50	50	50	46.6	50.0	93	100	70-130	7	20	
Tetrachloroethene	ug/L	<0.50	50	50	43.3	46.6	87	93	70-130	7	20	
Toluene	ug/L	<0.50	50	50	44.3	48.4	89	97	82-131	9	20	
trans-1,2-Dichloroethene	ug/L	<0.26	50	50	45.4	50.7	91	101	75-135	11	20	
trans-1,3-Dichloropropene	ug/L	<0.23	50	50	40.1	43.1	80	86	70-130	7	20	
Trichloroethene	ug/L	<0.33	50	50	43.8	50.9	88	102	70-130	15	20	
Trichlorofluoromethane	ug/L	<0.18	50	50	45.2	46.5	90	93	76-150	3	20	
Vinyl chloride	ug/L	<0.18	50	50	38.1	39.8	76	80	56-143	4	20	
4-Bromofluorobenzene (S)	%						104	101	61-130			
Dibromofluoromethane (S)	%						103	102	67-130			
Toluene-d8 (S)	%						97	96	70-130			

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### REPORT OF LABORATORY ANALYSIS

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## QUALIFIERS

Project: 1710-1972-0002 NORTH AVE  
Pace Project No.: 40161665

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### 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 and percent moisture.

LOQ - Limit of Quantitation adjusted for dilution factor and percent moisture.

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.

### ANALYTE QUALIFIERS

- 1q MeOH leakage had occurred in shipment. Sample aliquot was taken from a glass jar with head space and MeOH preserved in the laboratory.
- W Non-detect results are reported on a wet weight basis.

## REPORT OF LABORATORY ANALYSIS

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**QUALITY CONTROL DATA CROSS REFERENCE TABLE**

Project: 1710-1972-0002 NORTH AVE  
Pace Project No.: 40161665

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
40161665001	SB-1 (0-2)	EPA 5035/5030B	276023	EPA 8260	276025
40161665002	SB-1 (4-6)	EPA 5035/5030B	276023	EPA 8260	276025
40161665003	SB-2 (2-4)	EPA 5035/5030B	276023	EPA 8260	276025
40161665004	SB-2 (6-8)	EPA 5035/5030B	276023	EPA 8260	276025
40161665005	TRIP BLANK	EPA 8260	275880		
40161665001	SB-1 (0-2)	ASTM D2974-87	275918		
40161665002	SB-1 (4-6)	ASTM D2974-87	275918		
40161665003	SB-2 (2-4)	ASTM D2974-87	275918		
40161665004	SB-2 (6-8)	ASTM D2974-87	275918		

**REPORT OF LABORATORY ANALYSIS**

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(Please Print Clearly)

Company Name: **KE Engineering**  
 Branch/Location: **WILMAR**  
 Project Contact: **Chelsea Ames**  
 Phone: **414 224 8300**  
 Project Number: **1710-1972-0002**  
 Project Name: **NORTH AVE**  
 Project State: **WI**  
 Sampled By (Print): **Chelsea Ames**  
 Sampled By (Sign): *CA*  
 PO #:  
 Regulatory Program:



### 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

FLTERED?  
 (YES/NO)  
 PRESERVATION  
 (CODE)\*

V/I/N	Pick Letter	ANALYSES REQUESTED
N	E	VOCs
N	B	VOCs

PAGE LAB #	CLIENT FIELD ID	DATE	TIME	MATRIX
001	SB-10-2	11/29	1000	S
002	SB-14-6	11/29	1030	S
003	SB-22-4	11/29	1100	S
004	SB-22-8	11/29	1130	S
005	TRP blank	11/29		BW

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

Page 1 of 1

Quote #: **4016165**

Mail To Contact:  
 Mail To Company:  
 Mail To Address:  
 Invoice To Contact:  
 Invoice To Company:  
 Invoice To Address:  
 Invoice To Phone:  
 CLIENT COMMENTS  
 LAB COMMENTS (Lab Use Only)  
 Profile #

Received By: *Me* Date/Time: **11/30/17 0800**  
 Received By: *Log's* Date/Time: **12/1/17 0845**  
 Received By: *Med* Date/Time: **12/1/17 0845**

PACE Project No. **4016165**  
 Receipt Temp = **6.5** °C  
 Sample Receipt pH **OK / Adjusted**  
 Cooler Custody Seal Present / Not Present **Intact / Not Intact**



# Sample Condition Upon Receipt

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

Client Name: Key Engineering

Project #: \_\_\_\_\_

WO#: **40161665**

Courier:  Fed Ex  UPS  Client  Pace Other: CS Logistics

Tracking #: 605-113017



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 water only

Thermometer Used SR-4 Type of Ice: Wet Blue Dry None  Samples on ice, cooling process has begun

Cooler Temperature Uncorr: 6 / Corr: 6.5 Biological Tissue Is Frozen:  yes

Temp Blank Present:  yes  no  no

Person examining contents:  
Date: 12/1/17  
Initials: SSM

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

### Comments:

Chain of Custody Present:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	1.
Chain of Custody Filled Out:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	2.
Chain of Custody Relinquished:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	3.
Sampler Name & Signature on COC:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	4.
Samples Arrived within Hold Time:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	5.
- VOA Samples frozen upon receipt	<input type="checkbox"/> Yes <input type="checkbox"/> No	Date/Time:
Short Hold Time Analysis (<72hr):	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	6.
Rush Turn Around Time Requested:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	7. <u>12/0/17 TAT</u>
Sufficient Volume:	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	8. <u>No MS/MSD vol.</u>
Correct Containers Used:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	9.
-Pace Containers Used:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
-Pace IR Containers Used:	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	
Containers Intact:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	10.
Filtered volume received for Dissolved tests	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	11.
Sample Labels match COC:	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	12. <u>No collect times</u>
-Includes date/time/ID/Analysis Matrix: <u>S/W</u>		<u>SSM 12/1/17</u>
All containers needing preservation have been checked. (Non-Compliance noted in 13.)	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	13. <input type="checkbox"/> HNO3 <input type="checkbox"/> H2SO4 <input type="checkbox"/> NaOH <input type="checkbox"/> NaOH + ZnAct
All containers needing preservation are found to be in compliance with EPA recommendation. (HNO3, H2SO4 ≤2; NaOH+ZnAct ≥9, NaOH ≥12)	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	
exceptions: VOA, coliform, TOC, TOX, TOH, O&G, WIDROW, Phenolics, OTHER:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Initial when completed
		Lab Std #ID of preservative
		Date/Time:
Headspace in VOA Vials (>6mm):	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	14.
Trip Blank Present:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	15.
Trip Blank Custody Seals Present	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
Pace Trip Blank Lot # (if purchased): <u>387</u>		

Client Notification/ Resolution: \_\_\_\_\_  
Person Contacted: \_\_\_\_\_ Date/Time: \_\_\_\_\_  
Comments/ Resolution: \_\_\_\_\_  
If checked, see attached form for additional comments

Project Manager Review: RMR for DM Date: 12/1/17