

# Phase II Subsurface Investigation

at

222 North Oneida Street  
Outagamie County Tax Parcel 312038400  
City of Appleton, Outagamie County, WI

for

City of Appleton  
100 N. Appleton St.  
Appleton, WI 54911

November 22, 2017

N2214G17

ENGINEERING • ARCHITECTURE • ENVIRONMENTAL



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## EXECUTIVE SUMMARY

OMNNI Associates has completed a Phase II subsurface investigation at the property located at 222 N. Oneida Street in the City of Appleton, Outagamie County, WI. The project was intended to determine whether a former automotive service station, vehicle fueling, or underground storage tanks at the property may have impacted the environment. The building had historical use as an auto-related business dating back to 1930, including an auto lube center, a tire shop, a service station, and a vehicle rental operation. The site was most recently used as a law office, but is currently vacant.

The following environmental conditions were investigated:

1. At least 11 underground storage tanks were located on the north parcel at various times. No records were found regarding the removal of any of the tanks, their precise location, the condition of subsurface soils, groundwater, or the former waste oil handling practices on the subject property. OMNNI conducted a field investigation which consisted of soil borings, soil sampling, and groundwater sampling. The site exhibited fill material across most of the northern parcel, and had detections of metals, volatile organic compounds, and polycyclic aromatic hydrocarbons some of which were in exceedance of DNR residual contaminant levels and/or groundwater standards. OMNNI recommends that the release be reported to the DNR.
2. The building on the south parcel of the subject property was built in 1929 and expanded in 1966. Uses have included a doctor's office with attached residence, a hair salon, and a law office. The City of Appleton issued a permit in 1957 to install a fuel oil tank. The permit did not record the tank's size, or whether the tank was an aboveground or underground tank. Piping found in the basement wall during the site inspection indicates that the tank was probably formerly installed aboveground in the basement's boiler room. No staining of the concrete floor was observed in the area. This area was further visually evaluated during the Phase II subsurface investigation and no new evidence was ascertained. OMNNI recommends no further investigation in the area.

## INTRODUCTION/BACKGROUND

The subject property is located at 222 N. Oneida St. in the City of Appleton, Outagamie County, Wisconsin. (See Site Location Map, and Site Detail Map, Appendix 1.) The property consists of tax parcel 312038400. The 0.21-acre property is located in the NE  $\frac{1}{4}$  of the SW  $\frac{1}{4}$  and the NW  $\frac{1}{4}$  of the SE  $\frac{1}{4}$  of section 26, T21N, R17E, Outagamie County. The property is owned by Valley Premier Property LLC, c/o John A. Schwittay, 3420 Nikodem Lane, Abrams, WI 54101, and is zoned CBD – central business district.

A Phase I environmental site assessment performed in October 2017 identified that the property dates back to the late 1800's, where it was initially a residential home on the southern portion of the property. It was then used for short stints as a college fraternity house, and as a mortuary. The structure was razed and replaced with a doctor's office and attached residence, which operated from 1930 – 1951. A hair salon operated from the building from 1955 – 1965. A law office made renovations and additions to the building, operating at the site from 1966 – 2013. The building is presently vacant.

The northern portion of the subject property, where there is presently a parking lot and main area of concern, was also occupied by a residence until the mid-1920's. The residence was used as a parsonage in the early years, and then in the late 1920's as a funeral home. The structure was razed and replaced with a structure used variously as an auto lube center from 1930 – 1940, a

tire shop from 1941 – 1945, a service station from 1947 – 1960, and a vehicle rental operation from 1964 – 1970.

The property has been owned since 2013 by Valley Premier Property LLC.

The following recognized environmental conditions were identified, which required further investigation:

1. At least 11 underground storage tanks were located on the north parcel at various times. No records were found regarding the removal of any of the tanks, the condition of subsurface soils or groundwater, or the former waste oil handling practices on the subject property.
2. The City of Appleton issued a permit in 1957 to install a fuel oil tank. The permit did not record the tank's size, or whether the tank was an aboveground or underground tank. Piping found in the basement wall during the site inspection indicates that the tank was probably formerly installed aboveground in the basement's boiler room. No staining of the concrete floor was observed in the area.

### **Project Contacts:**

Client: City of Appleton, 100 N. Appleton St., Appleton, WI 54911; (920) 832-6463.  
Contact: Matt Rehbein.

Consultant: OMNNI Associates, One Systems Drive, Appleton, WI 54914; (920) 735-6900.  
Contact: Christopher Rogers.

Driller: Geiss Soil and Samples, LLC, W4490 Pope Road, Merrill, WI; (715) 539-3928.

Laboratory: Synergy Environmental Lab, 1990 Prospect Ct., Appleton, WI 54914; (920) 830-2455.

## **GEOLOGY AND HYDROGEOLOGY**

The geology and hydrogeology of the area were determined by studying existing geologic, topographic, hydrogeologic, and soil maps, and reports.

Based on maps and information included in Water Resources of Wisconsin, Fox-Wolf River Basin by P.G. Olcott (1968), the surface soils in the area were originally composed of glacial lake deposits, consisting mainly of silt and clay. The surface in the area has been disturbed by urban development. (See Soil Map, Appendix 1.) The bedrock consists of dolomite, and is expected to be over 50 feet below the surface.

Topography at the site is flat, with a site elevation of approximately 784 feet above mean sea level. (See Topographic Map, Appendix 1.)

The depth to groundwater at the site is expected to be approximately eight feet below the ground surface. The shallow groundwater flow direction is expected to be toward the south to Fox River ravine systems.

## **FIELD ACTIVITIES**

### **Ground Penetrating Radar**

On November 3, 2017, OMNNI coordinated the on-site survey of subsurface materials using ground penetrating radar (GPR) in an effort to locate any former underground storage tanks on

the property. This also assisted in determining boring placement on-site and identification of disturbed soils. The ground penetrating radar focused heavily on the parking lot area of the property and was able to obtain readings to approximately five feet below the ground surface.

## **Soil Borings**

On November 3, 2017, OMNNI coordinated the installation of ten geoprobe soil borings (SB-01 – SB-10) on the subject property. (See Site Detail Map, and Geoprobe Locations, Appendix 1.) The borings were based on the locations depicted on the 1951 and 1970 Sanborn maps of the gas tanks, the service center, and rental car facility. Borings SB-01-SB-04, SB-09, and SB-10 were placed in the northern portion of the parking lot to determine potential impacts of underground storage tanks along the north property line. Borings SB-05, SB-7, and SB-08 were installed to characterize conditions associated with tanks formerly located in the western portion of the parking lot area. Boring B06 was placed in the southeast portion of the parking lot where there was a former service bay. An additional boring was proposed on the west side of the building; however, due to utility conflicts, the area was not investigated further.

Borings SB-6, SB-09, and SB-10 were installed to a depth of 15 feet, while the remainder of the borings were installed at depths from 0.8 feet to 8.0 feet. (See Borehole Filling and Sealing Report, Appendix 3.) Groundwater was encountered on-site ranging from 5 – 12 feet below the ground surface.

Soil samples were obtained continuously from the borings for field screening with a photoionization detector (PID). At each sampling interval, a representative portion of the soil was also collected for possible laboratory analysis. (See Handbook of Field Procedures, Appendix 4.)

Soil analytical samples were taken from borings SB-01 and SB-6 - SB-10 from unsaturated areas which exhibited the highest likelihood of impacted material below the surface. All soil samples sent to the laboratory were analyzed for volatile organic compounds (VOCs), polycyclic aromatic hydrocarbons (PAHs), lead, and cadmium.

## **Groundwater Wells**

Temporary groundwater monitoring wells (TW-06, TW-8, TW-09, and TW-10) were installed in their respective boring locations. Groundwater samples were collected from the wells on the date of installation with the exception of TW-09 and TW-10, which did not produce water on the date of installation. All groundwater from the installed temporary wells were analyzed for VOCs, PAHs, lead, and cadmium.

Boreholes SB-01 - SB-05, SB-7, and SB-08 were properly abandoned. (See Borehole Filling and Sealing Report, Appendix 3.) Borings SB-6, SB-09, and SB-10 (TW-06, TW-09, and TW-10) have not been abandoned pending potential future use.

## **FIELD AND ANALYTICAL RESULTS**

### **Ground Penetrating Radar Results**

The GPR survey traced multiple utility lines to include communication, storm sewer line, and gas. The survey scanned the parking lot using a grid-like pattern and identified no evidence of remaining underground storage tanks. The survey did identify a large amount of subsurface disturbance on-site which is an indicator of fill soil or building basements, foundations, or debris.

Additionally, the ground penetrating radar contractor investigated the area on the western side of the southern portion of the property. A significant amount of utilities were identified in the location

of the former fill port for the former fuel oil tank in the basement. The utilities appear to have been installed more recently than the use of the fuel oil tank. This portion of the site exhibited soil disturbance likely related to the installation of the utility lines.

## **Soil Boring Results**

The soil in the borings consisted of asphaltic pavement on the surface, underlain by sand and gravel. Underneath the sand and gravel the borings typically exhibited fill, consisting of silty clays with rock, and concrete.

### **Borings SB-01 Through SB-04**

In boring locations SB-01 - SB-04, placed in the northern portion of the parking lot, there were shallow obstructions which inhibited penetration past three feet below ground surface. (See Soil Boring Logs, Appendix 3.) There were no visual results indicative of petroleum contamination within borings SB-01 through SB-04, nor were there elevated photo-ionization detector (PID) instrument results associated with those locations. Boring results do indicate potential buried concrete slabs, footings, or other fill material.

Laboratory analysis revealed soil contamination in boring SB-01. (See Tables 1 and 2, Soil Results, Appendix 2, and Laboratory Analysis Results and Chain of Custody Documentation, Appendix 5.) In boring SB-01, lead was found in exceedance of the groundwater pathway residual contaminant level (RCL) as well as the background threshold value (BTV). No other soil RCLs were exceeded in boring SB-01. Borings SB-02 through SB-04 were not sampled due to their shallow depth.

### **Boring SB-05**

Likewise, in boring SB-05, placed to address subsurface conditions in the western portion of the site, a sample was not obtained due to shallow refusal. There were no visual results indicative of petroleum contamination within boring SB-05, nor were there elevated photo-ionization detector (PID) instrument results associated with that location. Field evidence indicated potential buried concrete slabs, footings, or other fill material, just as in borings SB-01 - SB-04.

### **Soil Boring SB-6**

Boring SB-6 was placed in the area of the former service bay depicted on the 1951 Sanborn Map. The boring in this location exhibited dark staining from 7.8 to 8.0 feet below ground surface. There was a slight PID elevation at 1-1.6 feet where the soil sample was taken. No field evidence of contamination was identified in the tank backfill or underlying native soil.

Laboratory analysis revealed soil contamination in boring SB-6. (See Tables 1 and 2, Soil Results, Appendix 2, and Laboratory Analysis Results and Chain of Custody Documentation, Appendix 5.) In boring SB-6, chrysene was found in exceedance of the groundwater pathway RCL as well as a non-industrial direct contact exceedance for benzo(a)pyrene. No other soil RCLs were exceeded in boring SB-6.

### **Soil Borings SB-7 and SB-08**

In borings SB-7 and SB-08, placed downgradient of former tanks in the western portion of the site, there were obstructions at six feet below ground surface. There was a PID elevation of 27 ppm in boring SB-7 at five feet where the soil sample was taken. The boring also exhibited a moderate petroleum odor as well as dark staining in the soil. Boring SB-08 exhibited no staining

or elevated PID readings. Boring results do indicate potential buried concrete slabs, footings, or other fill material.

Laboratory analysis revealed soil contamination in boring SB-7 and SB-08. (See Tables 1 and 2, Soil Results, Appendix 2, and Laboratory Analysis Results and Chain of Custody Documentation, Appendix 5.) In boring SB-7 and SB-08, lead was found in exceedance of the groundwater pathway RCL and BTV. Additionally, SB-7 exhibited a non-industrial direct contact exceedance for benzo(a)pyrene and a soil to groundwater pathway RCL exceedance for chrysene. No other soil RCLs were exceeded in boring SB-01. Borings SB-02 through SB-04 were not sampled due to their shallow depth.

### **Soil Borings SB-09 and SB-10**

In boring locations SB-01 through SB-04, placed in the northern portion of the parking lot depicted four separate fuel tanks, were able to attain the full 15-foot proposed depth. There was a slight PID elevation in boring SB-09 at two feet where the soil sample was taken. Boring SB-09 also exhibited a slight petroleum odor from two to 3.5 feet below ground surface. Boring SB-10 shown no visual results indicative of petroleum contamination, nor were there elevated PID results.

Laboratory analysis revealed soil contamination in boring SB-7 and SB-08. (See Tables 1 and 2, Soil Results, Appendix 2, and Laboratory Analysis Results and Chain of Custody Documentation, Appendix 5.) In boring SB-09 and SB-10, lead was found in exceedance of the groundwater pathway RCL and BTV. Additionally, SB-09 exhibited a soil to groundwater Pathway RCL exceedance for chrysene. No other soil RCLs were exceeded in borings SB-09 and SB-010.

### **Groundwater Results**

Due to the shallow borings and lack of groundwater, only four temporary groundwater wells were installed, including TW-06, TW-8, TW-09, and TW-10. Groundwater contamination was found in all of the temporary wells installed in the parking lot.

Temporary well TW-06, exhibited a preventive action limit (PAL) exceedance for benzo(b)fluoranthene. No other compounds were detected above the PAL. (See Tables 3 and 4, Groundwater Results, Appendix 2, and Laboratory Analysis Results and Chain of Custody Documentation, Appendix 5.)

Temporary well TW-8, exhibited a PAL exceedance for lead. No other compounds were detected above the PAL. (See Tables 3 and 4, Groundwater Results, Appendix 2, and Laboratory Analysis Results and Chain of Custody Documentation, Appendix 5.)

Temporary well TW-09, exhibited an enforcement standard (ES) exceedance for 1,2-Dichloroethane. The well also exhibited a PAL exceedance for benzo(b)fluoranthene. No other compounds were detected above the ES or PAL. (See Tables 3 and 4, Groundwater Results, Appendix 2, and Laboratory Analysis Results and Chain of Custody Documentation, Appendix 5.)

Temporary well TW-10, exhibited a PAL exceedance for 1,2-Dichloroethane and benzo(b)fluoranthene. No other compounds were detected above the PAL. (See Tables 3 and 4, Groundwater Results, Appendix 2, and Laboratory Analysis Results and Chain of Custody Documentation, Appendix 5.)

## **CONCLUSIONS AND RECOMMENDATIONS**

This Phase II environmental site investigation was intended to determine whether underground storage tanks remained on site and if there was any contamination associated with them at the property, which may have impacted the environment.



The following environmental conditions were investigated:

1. At least 11 underground storage tanks were located on the north parcel at various times. No records were found regarding the removal of any of the tanks, their precise location, the condition of subsurface soils or groundwater, or the former waste oil handling practices on the subject property.
  - a. Field evidence identified a petroleum odor and/or dark staining in the upper six-foot interval, as well as elevated headspace readings in borings SB-6, SB-7 and SB-09. Laboratory analysis revealed low levels of soil contamination near the surface in all borings sampled (SB-01 and SB-6 - SB-10). The following soil RCLs were exceeded:
    - i. Soil to groundwater pathway and BTV exceedance for lead in SB-01, SB-7, SB-08, SB-09, and SB-10
    - ii. Soil to groundwater pathway exceedance for chrysene in SB-6, SB-7, and SB-09.
    - iii. Non-industrial direct contact RCL exceedance for benzo(a)pyrene in SB-6 and SB-7.
  - b. Laboratory analysis of four groundwater samples revealed both preventive action limit and enforcement standard exceedances. All wells sampled shown low level contaminant detections. The following wells had contaminant concentrations in excess of NR 140 standards:
    - i. Preventive action limit exceedance for benzo(a)pyrene in TW-09
    - ii. Preventive action limit exceedance for benzo(b)fluoranthene in TW-06, TW-09, and TW-10.
    - iii. Preventive action limit exceedance for chrysene in TW-09
    - iv. Preventive action limit exceedance for lead in TW-08
    - v. Preventive action limit exceedance for 1,2-Dichloroethane in TW-10.
    - vi. Enforcement Standard exceedance for 1,2-Dichloroethane in TW-09.

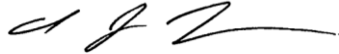
The findings in both the soil and groundwater indicate a previous release that has attenuated over time which is likely a result of the historical auto-related business use. OMNNI recommends that the release be reported to the DNR, and that the area be further investigated to determine the extent of the contamination.

2. The building on the south parcel of the subject property was built in 1929 and expanded in 1966. Uses have included a doctor's office with attached residence, a hair salon, and a law office. The City of Appleton issued a permit in 1957 to install a fuel oil tank. The permit did not record the tank's size, or whether the tank was an aboveground or underground tank. Piping found in the basement wall during the site inspection indicates that the tank was probably formerly installed aboveground in the basement's boiler room. No staining of the concrete floor was observed in the area.

This area was investigated with the ground penetrating radar contractor and utility locations were identified. There is a significant amount of utilities in the location of the former fill port for the former fuel oil tank, which appear to have been installed more recently than the use of the fuel oil tank. Additionally, any soils that were excavated for the utility installation would have been observed by the City of Appleton and or their environmental consultant at that time, and would have noted any areas of impacted soil. OMNNI recommends no further investigation in the area.

## STANDARD OF CARE

The conclusions presented in this investigation were arrived at using generally accepted hydrogeologic and engineering practices. The conclusions presented herein represent our professional opinions, based on the data collected at the time of the investigation, at the specific boring and sampling locations discussed in this report. Conditions at other locations on the property may be different than described in this investigation. The scope of this report is limited to the specific project and location described herein.



**Prepared By:**

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Christopher J. Rogers  
*Scientist / Hydrogeology*



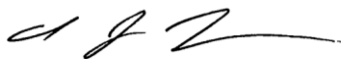
**Reviewed By:**

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Don Brittnacher, P.G., P.E.,  
*Hydrogeologist, Engineer*

## PROFESSIONAL CERTIFICATION

I, Christopher J. Rogers, hereby certify that I am a scientist as that term is defined in s. [NR 712.03 \(3\)](#), Wis. Adm. Code, and that, to the best of my knowledge, all of the information contained in this document is correct and the document was prepared in compliance with all applicable requirements in chs. [NR 700](#) to [726](#), Wis. Adm. Code.



Christopher J. Rogers  
(Project Scientist / Hydrogeology)

"I, Don Brittnacher, hereby certify that I am a hydrogeologist as that term is defined in s. [NR 712.03 \(1\)](#), Wis. Adm. Code, am registered in accordance with the requirements of ch. [GHSS 2](#), Wis. Adm. Code, or licensed in accordance with the requirements of ch. [GHSS 3](#), Wis. Adm. Code, and that, to the best of my knowledge, all of the information contained in this document is correct and the document was prepared in compliance with all applicable

requirements in chs. [NR 700](#) to [726](#), Wis. Adm. Code."



(Professional Geologist)

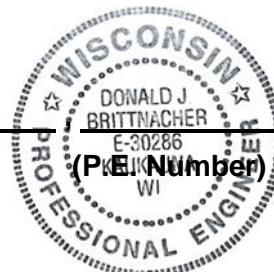


(P.G. Number)

I, Don Brittnacher, certify that I am a registered professional engineer in the State of Wisconsin, registered in accordance with requirements of ch. A-E 4, Wis. Adm. Code; that this document has been prepared in accordance with the Rules of Professional Conduct in ch. A-E 8, Wis. Adm. Code; and that, to the best of my knowledge, all information contained in this document is correct and the document was prepared in compliance with all applicable requirements in chs. NR 700 to 726, Wis. Adm. Code."



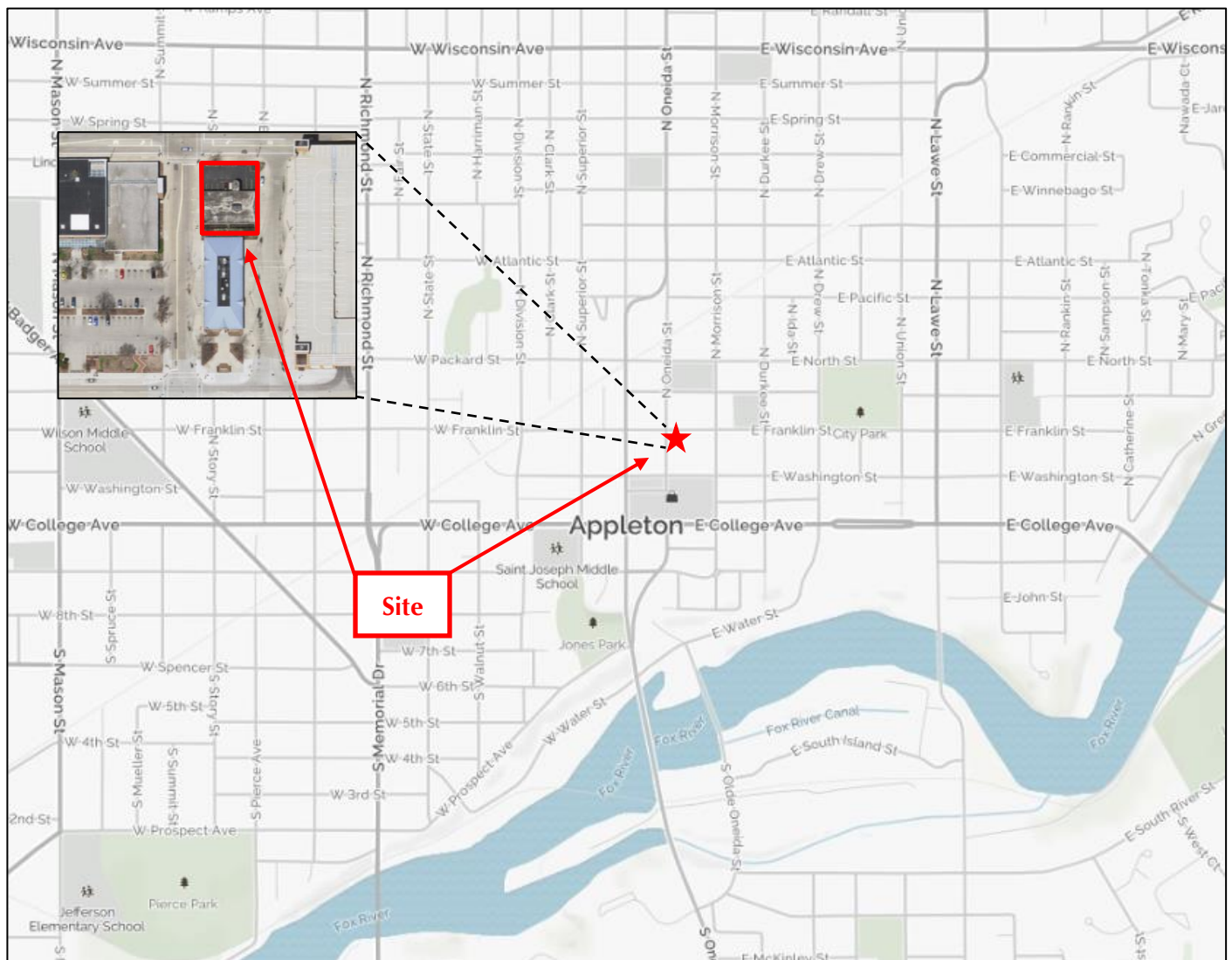
(Professional Engineer)



(P.E. Number)

## **APPENDIX 1**

### **FIGURES**



Source: Mapquest, reviewed 10/3/2017.



Site Location Map	
222 N. Oneida St. Appleton, WI	
	Project Number: N2214G17
	Date: November 21, 2017
One Systems Drive, Appleton, Wisconsin 54914-1654 Phone: (920) 735-6900 Fax: (920) 830-6100	

## Site Detail Map



- a) Four underground storage tank locations listed in 1951
- b) Former location of automotive service bay
- c) Two underground storage tank locations listed in 1951
- d) Fill port location for former fuel oil tank in basement

E FRANKLIN ST

Approximate Property  
Boundary



N ONEIDA ST

SB-01 SB-02  
SB-03  
SB-09/TW-09 SB-10/TW-10  
SB-05 SB-04  
SB-7 SB-08/TW-8  
SB-6/TW-06

0 15 30  
Feet



ONE SYSTEMS DRIVE PHONE (920) 735-6900  
APPLETON, WI 54914 FAX (920) 830-6100



## 222 N. ONEIDA STREET PHASE II GEOPROBE LOCATIONS

222 N. ONEIDA STREET  
CITY OF APPLETON, OUTAGAMIE COUNTY, WISCONSIN

Project Manager:  
Project Engineer:  
Drawn By: JCW  
Checked By:

Date: 11/6/2017

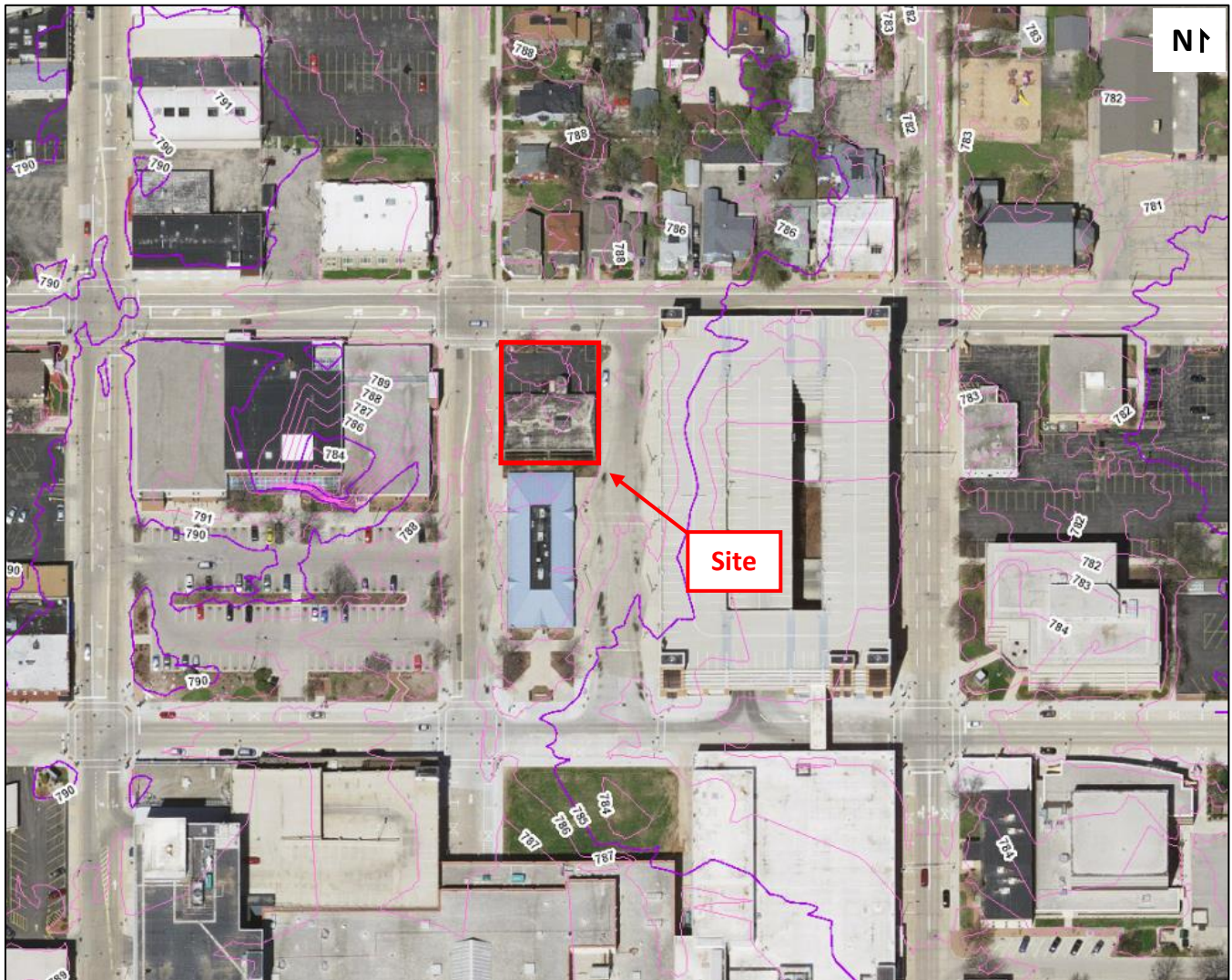
SCALE:  
1" = 15'

PROJECT NO.  
**N2214G17**

FIGURE NO.  
**A-1**



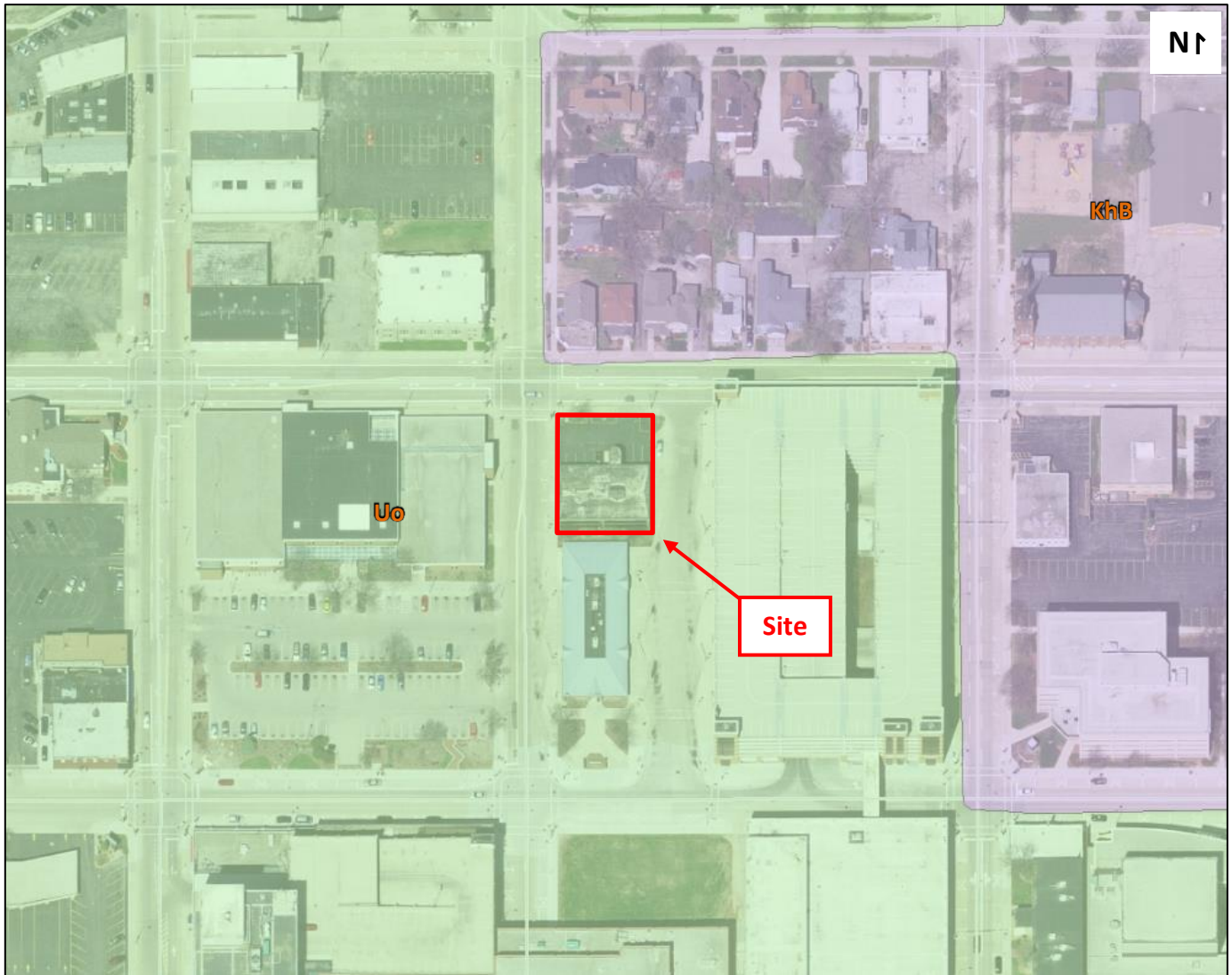
## Topographic Map



Contour interval is one foot.



## Soil Map



Udorthents (Uo) – somewhat excessively drained disturbed fill lands

Kewaunee silt loam, 2 – 6% slopes (KhB) – well drained

## **APPENDIX 2**

### **TABLES**

Table 1 - Soil Results - VOCs, Lead, and Cadmium  
222 North Oneida St. Phase II Investigation

Table 1 - Soil Results - VOCs, Lead, and Cadmium 222 North Oneida St. Phase II Investigation						Detected Volatile Organic Compounds (VOCs) (mg/kg)					
						n-Butylbenzene	Ethylbenzene	Toluene	1,2,4-Trimethylbenzen	1,3,5-Trimethylbenzen	m&p-Xylene
Sample ID	Saturated/Unsaturated	Sample Date	Depth (ft)	Lead (mg/kg)	Cadmium (mg/kg)						
Background Threshold Value (mg/kg)				52	1	-	-	-	-	-	-
Groundwater Pathway RCL (mg/kg)				27	0.752	-	1.57	1.1072	1.3821 (combined)		3.96 (Combined)
Industrial RCL (mg/kg)				800	985	108	35.4	818	219	182	260 (Combined)
Non-Industrial RCL (mg/kg)				400	71.1	108	8.02	818	219	182	260 (Combined)
SB-01	U	11/3/17	2.0-2.8	108	<0.08	<0.04	0.041 "J"	0.072 "J"	0.10	<0.032	0.132 "J" 0.048 "J"
SB-6	U	11/3/17	1.0-1.6	6	<0.08	<0.04	<0.035	<0.032	<0.025	<0.032	<0.072 <0.044
SB-7	U	11/3/17	5-6	281	0.14 "J"	<0.04	<0.035	<0.032	0.098	<0.032	<0.072 <0.044
SB-08	U	11/3/17	3-4	114	0.010 "J"	<0.04	<0.035	<0.032	<0.025	<0.032	<0.072 <0.044
SB-09	U	11/3/17	2-2.5	397	0.36	0.054 "J"	<0.035	<0.032	<0.025	<0.032	<0.072 <0.044
SB-10	U	11/3/17	3-4	54	<0.08	<0.04	<0.035	<0.032	<0.025	<0.032	<0.072 <0.044

RCL = residual contaminant level  
S = saturated; U = unsaturated  
**BOLD** entries indicate that concentration detected above RCL.  
J = Analyte detected between the limit of detection and limit of quantitation.  
NA = not analyzed

All Soil RCLs are based on the March 2017 Update

Table 2 - Soil Results - PAHs  
222 North Oneida St. Phase II Investigation

RCL = Residual contaminant level S = saturated; U = unsaturated <b>BOLD</b> entries indicate that concentration detected above RCL. J = Analyte detected between the limit of detection and limit of quantitation.				Detected Polycyclic Aromatic Hydrocarbons (PAHs) (mg/kg)																
				Acenaphthene	Anthracene	Benzo(a)anthracene	Benzo(a)pyrene	Benzo(b)fluoranthene	Benzo(g,h,i)perylene	Benzo(k)fluoranthene	Chrysene	Dibenzo(a,h)anthracene	Fluoranthene	Fluorene	Indeno(1,2,3-cd)pyrene	1-Methylnaphthalene	2-Methylnaphthalene	Naphthalene	Phenanthrene	Pyrene
Sample ID	Saturated/Unsaturated	Sample Date	Depth (ft)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
Background Threshold Value (mg/kg)				-	196.949	-	0.47	0.4793	-	-	0.1446	-	88.8778	14.8299	-	-	0.6582	-	54.5455	
Groundwater Pathway RCL (mg/kg)				-	100,000	20.8	2.11	21.1	-	211	2,110	2.11	30,100	30,100	21.1	72.7	3,010	24.1	-	22,600
Industrial RCL (mg/kg)				-	17,900	1.14	0.115	1.15	-	11.5	115	0.115	2,390	2,390	1.15	17.6	239	5.52	-	1,790
Non-Industrial RCL (mg/kg)																				
SB-01	U	11/3/17	2.0-2.8	< 0.0151	< 0.0109	0.0163 "J"	0.0158 "J"	0.0297 "J"	0.0297 "J"	0.0177 "J"	0.0231 "J"	< 0.0078	0.026 "J"	< 0.0179	< 0.0114	0.036 "J"	0.052	0.0303 "J"	0.0219 "J"	0.0242 "J"
SB-6	U	11/3/17	1.0-1.6	0.041 "J"	0.089	0.288	<b>0.278</b>	0.42	0.247	0.159	<b>0.34</b>	0.0125 "J"	0.76	0.0197 "J"	0.2	< 0.0203	< 0.0113	< 0.0153	0.234	0.66
SB-7	U	11/3/17	5-6	0.044 "J"	0.079	0.137	<b>0.118</b>	0.216	0.139	0.106	<b>0.211</b>	0.0242 "J"	0.65	0.042 "J"	0.111	0.0253 "J"	< 0.0113	0.0194 "J"	0.45	0.47
SB-08	U	11/3/17	3-4	< 0.0151	0.04	0.096	0.101	0.176	0.138	0.087	0.143	< 0.0078	0.314	< 0.0179	0.101	< 0.0203	< 0.0113	< 0.0153	0.15	0.246
SB-09	U	11/3/17	2-2.5	< 0.0151	0.032 "J"	0.062	0.056	0.086	0.1	0.033 "J"	<b>0.162</b>	0.0197 "J"	0.197	0.0277 "J"	0.047	0.0239 "J"	0.0197 "J"	0.0239 "J"	0.139	0.246
SB-10	U	11/3/17	3-4	< 0.0151	0.016 "J"	0.039	0.037	0.0283 "J"	0.045	0.0283 "J"	0.058	< 0.0078	0.121	< 0.0179	0.034 "J"	< 0.0203	< 0.0113	< 0.0153	0.062	0.095

RCL = residual contaminant level  
S = saturated; U = unsaturated  
**BOLD** entries indicate that concentration detected above RCL.  
J = Analyte detected between the limit of detection and limit of quantitation.  
NA = not analyzed

All Soil RCLs are based on the March 2017 Update

Table 3 - Groundwater Results - VOCs, Lead, and Cadmium  
222 North Oneida St. Phase II Investigation

		Detected Metals (ug/L)		Detected VOCs (ug/L)
		Lead, Dissolved (ug/L)	Cadmium, Dissolved (ug/L)	1,2-Dichloroethane
Well	Sample Date			
TW-06 TW-8 TW-09 TW-10	ES	15	5	5
	PAL	1.5	0.5	0.5
	11/3/17	< 0.9	0.6 "J"	<0.45
	11/3/17	<i>10</i>	0.6 "J"	<0.45
	11/6/17	1.0 "J"	0.7 "J"	<b>31.4</b>
	11/6/17	<0.9	0.5 "J"	4.3
		LOD	0.4*	
		LOQ	1.3*	

ES = enforcement standard

PAL = preventive action limit

BOLD = detected above ES

*Italics* = detected above PAL

"J" = detected between the limit of detection (LOD) and limit of quantitation (LOQ)

\* for all samples

No PAL exceedance for cadmium, since the PAL is between the limit of detection and the limit of quantitation, and the concentration is less than the limit of quantitation.

PAL limits based on February 2017 NR 140.05 Standards

ES Limits based on May 2017 NR 140 Public Health Standards

Table 4 - Groundwater Results - PAHs  
222 North Oneida St. Phase II Investigation

Well		Sample Date	Detected PAHs (ug/L)																
			Acenaphthene	Acenaphthylene	Anthracene	Benzo(a)anthracene	Benzo(a)pyrene	Benzo(b)fluoranthene	Benzo(g,h,i)perylene	Benzo(k)fluoranthene	Chrysene	Fluoranthene	Fluorene	Indeno(1,2,3-cd)pyrene	1-Methylnaphthalene	2-Methylnaphthalene	Naphthalene	Phenanthrene	Pyrene
ES		-	-	3,000	-	0.2	0.2	-	-	0.2	400	400		-	-	100	-	250	
PAL		-	-	600	-	0.02	0.02	-	-	0.02	80	80		-	-	10	-	50	
TW-06	11/3/17	0.05 "J"	< 0.019	0.072	0.054 "J"	0.048 "J"	0.08	0.046 "J"	0.0293 "J"	0.063 "J"	0.184	0.049 "J"	0.037 "J"	< 0.024	< 0.024	0.0302 "J"	0.304	0.132	
TW-8	11/3/17	0.056	< 0.019	0.062 "J"	0.0268 "J"	< 0.02	0.0238 "J"	<0.025	<0.016	< 0.02	0.094	0.0305 "J"	<0.023	0.063 "J"	0.097	0.098	0.245	0.059 "J"	
TW-09	11/6/17	0.063	< 0.019	0.065	0.063	0.089	0.15	0.065 "J"	0.046 "J"	0.118	0.292	0.056 "J"	0.063 "J"	0.144	0.081	0.213	0.33	0.211	
TW-10	11/6/17	0.077	< 0.019	0.038 "J"	0.0314 "J"	0.037 "J"	0.068	0.032 "J"	0.0275 "J"	0.056 "J"	0.176	0.044 "J"	0.0313 "J"	0.032 "J"	0.047 "J"	0.052 "J"	0.255	0.117	

ES = enforcement standard  
PAL = preventive action limit  
BOLD = detected above ES  
*Italics* = detected above PAL  
"J" = detected between the limit of detection and limit of quantitation  
LOD = laboratory limit of detection  
LOQ = laboratory limit of quantitation

No PAL exceedance for "J" items, since the PAL is between the limit of detection and the limit of quantitation, and the concentration is less than the limit of quantitation.

PAL limits based on February 2017 NR 140.05 Standards  
ES Limits based on May 2017 NR 140 Public Health Standards

## **APPENDIX 3**





### **DNR FORMS**

Route To: Watershed/Wastewater ☐ Waste Management ☐  
Remediation/Redevelopment ☒ Other ☐

Page 1 of 1

Facility/Project Name <b>222 N. Oneida</b>			License/Permit/Monitoring Number		Boring Number <b>SB-01</b>	
Boring Drilled By: Name of crew chief (first, last) and Firm <b>Geiss Soil and Sample</b>			Date Drilling Started <b>11/3/2017</b>		Date Drilling Completed <b>11/3/2017</b>	
					Drilling Method <b>Direct Push/Geoprobe</b>	
WI Unique Well No.	DNR Well ID No.	Common Well Name	Final Static Water Level <b>Feet MSL</b>		Surface Elevation <b>Feet MSL</b>	
					Borehole Diameter <b>2.0 inches</b>	
Local Grid Origin <input type="checkbox"/> (estimated: <input type="checkbox"/> ) or Boring Location <input type="checkbox"/> State Plane <b>N, E S/C/N</b>			Lat <b>44° 15' 50.1"</b>		County Coordinates	
1/4 of <b>T N, R</b>			Long <b>88° 24' 20.5"</b>		<b>X: 82770529 Feet Y: 56299850 Feet</b>	

Facility ID	County <b>Outagamie</b>	County Code <b>45</b>	Civil Town/City/ or Village <b>Appleton</b>
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Sample		Blow Counts	Depth In Feet	Soil/Rock Description And Geologic Origin For Each Major Unit	U S C S	Graphic Log	Well Diagram	PID/FID	Soil Properties					RQD/ Comments
Number and Type	Length Att. & Recovered (in)								Compressive Strength (tsf)	Moisture Content (%)	Liquid Limit	Plasticity Index	P 200	
SB-01	36			<b>PAVEMENT</b>				0						Sample from 2.0-2.8 feet
	36			Asphalt										
			0.5	SAND AND GRAVEL, Fill, brown, dry, (GP)										
			1.0	SILTY CLAY, Fill, brown, dry										
			1.5											
		2.0												
			2.5											
			3.0	Concrete										
				Refusal at 3.0 feet. Bottom of borehole at 3.0 feet.										

Sample from  
2.0-2.8 feet

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

Signature	Firm <b>OMNNI Associates, Inc.</b> Tel: 920-735-6900 1 N Systems Drive Appleton, WI 54914 Fax: 920-830-6100
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Page 1 of 1

Facility ID	County Outagamie	County Code 45	Civil Town/City/ or Village Appleton
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Sample			Blow Counts	Depth In Feet	Soil/Rock Description And Geologic Origin For Each Major Unit	U S C S	Graphic Log	Well Diagram	PID/FID	Soil Properties					RQD/ Comments
Number and Type	Length Att. & Recovered (in)	Compressive Strength (tsf)								Moisture Content (%)	Liquid Limit	Plasticity Index	P 200		
	12 12			<div>PAVEMENT</div> <div>Asphalt</div> <div>SAND AND GRAVEL, fill, gray, dry</div> <div>0.5</div> <div>1.0</div> <div>Large rock or concrete obstruction, no recovery</div> <div>Refusal at 1.0 feet. Bottom of borehole at 1.0 feet.</div>										No water observed  No sample taken	

Signature	Firm OMNNI Associates, Inc. Tel: 920-735-6900 1 N Systems Drive Appleton, WI 54914Fax: 920-830-6100
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

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Route To: Watershed/Wastewater ☐ Waste Management ☐  
Remediation/Redevelopment ☒ Other ☐

Page 1 of 1

Facility/Project Name <b>222 N. Oneida</b>			License/Permit/Monitoring Number		Boring Number <b>SB-03</b>	
Boring Drilled By: Name of crew chief (first, last) and Firm <b>Geiss Soil and Sample</b>			Date Drilling Started <b>11/3/2017</b>		Date Drilling Completed <b>11/3/2017</b>	
					Drilling Method <b>Direct Push/Geoprobe</b>	
WI Unique Well No.	DNR Well ID No.	Common Well Name	Final Static Water Level <b>Feet MSL</b>		Surface Elevation <b>Feet MSL</b>	
					Borehole Diameter <b>2.0 inches</b>	
Local Grid Origin <input type="checkbox"/> (estimated: <input type="checkbox"/> ) or Boring Location <input type="checkbox"/> State Plane <b>N, E S/C/N</b>			Lat <b>44° 15' 30.0"</b>		County Coordinates	
1/4 of <b>T N, R</b>			Long <b>88° 24' 20.5"</b>		<b>X: 82770970 Feet Y: 56299610 Feet</b>	

Facility ID	County <b>Outagamie</b>	County Code <b>45</b>	Civil Town/City/ or Village <b>Appleton</b>
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Sample		Blow Counts	Depth In Feet	Soil/Rock Description And Geologic Origin For Each Major Unit	U S C S	Graphic Log	Well Diagram	PID/FID	Soil Properties						RQD/ Comments
Number and Type	Length Att. & Recovered (in)								Compressive Strength (tsf)	Moisture Content (%)	Liquid Limit	Plasticity Index	P 200		
	12 11		0.5	<b>PAVEMENT</b> Asphalt										No sample taken	
				<b>BASE COURSE</b> SAND AND GRAVEL, fill, gray											
				Rock or concrete obstruction, no recovery  Refusal at 0.9 feet. Bottom of borehole at 0.9 feet.											

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




Signature	Firm <b>OMNNI Associates, Inc.</b> Tel: 920-735-6900 1 N Systems Drive Appleton, WI 54914 Fax: 920-830-6100
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Route To: Watershed/Wastewater ☐ Waste Management ☐  
Remediation/Redevelopment ☒ Other ☐

Page 1 of 1

Facility/Project Name <b>222 N. Oneida</b>			License/Permit/Monitoring Number		Boring Number <b>SB-04</b>	
Boring Drilled By: Name of crew chief (first, last) and Firm <b>Geiss Soil and Sample</b>			Date Drilling Started <b>11/3/2017</b>		Date Drilling Completed <b>11/3/2017</b>	
					Drilling Method <b>Direct Push/Geoprobe</b>	
WI Unique Well No.	DNR Well ID No.	Common Well Name	Final Static Water Level <b>Feet MSL</b>		Surface Elevation <b>Feet MSL</b>	
					Borehole Diameter <b>2.0 inches</b>	
Local Grid Origin <input type="checkbox"/> (estimated: <input type="checkbox"/> ) or Boring Location <input type="checkbox"/> State Plane <b>N, E S/C/N</b>			Lat <b>44° 15' 50.0"</b>		County Coordinates	
1/4 of <b>T N, R</b>			Long <b>88° 24' 20.4"</b>		<b>X: 82771030 Feet Y: 56299183 Feet</b>	

Facility ID	County <b>Outagamie</b>	County Code <b>45</b>	Civil Town/City/ or Village <b>Appleton</b>
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Sample			Blow Counts	Depth In Feet	Soil/Rock Description And Geologic Origin For Each Major Unit	U S C S	Graphic Log	Well Diagram	PID/FID	Soil Properties						RQD/ Comments
Number and Type	Length Att. & Recovered (in)	Compressive Strength (tsf)								Moisture Content (%)	Liquid Limit	Plasticity Index	P 200			
	36 36				<b>PAVEMENT</b>				0.2						No sample taken	
			0.5	Asphalt												
			1.0	SAND AND GRAVEL, fill, grayish brown, dry												
			1.5	SILTY CLAY, fill, grayish brown, dry, stiff												
			2.0												No water observed	
			2.5													
			3.0		Refusal at 3.0 feet. Bottom of borehole at 3.0 feet.											

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


Signature	Firm <b>OMNNI Associates, Inc.</b> Tel: 920-735-6900 1 N Systems Drive Appleton, WI 54914 Fax: 920-830-6100
-----------	--

Route To: Watershed/Wastewater ☐ Waste Management ☐  
Remediation/Redevelopment ☒ Other ☐

Page 1 of 1

Facility/Project Name <b>222 N. Oneida</b>			License/Permit/Monitoring Number		Boring Number <b>SB-05</b>	
Boring Drilled By: Name of crew chief (first, last) and Firm <b>Geiss Soil and Sample</b>			Date Drilling Started <b>11/3/2017</b>		Date Drilling Completed <b>11/3/2017</b>	
					Drilling Method <b>Direct Push/Geoprobe</b>	
WI Unique Well No.	DNR Well ID No.	Common Well Name	Final Static Water Level <b>Feet MSL</b>		Surface Elevation <b>Feet MSL</b>	
					Borehole Diameter <b>2.0 inches</b>	
Local Grid Origin <input type="checkbox"/> (estimated: <input type="checkbox"/> ) or Boring Location <input type="checkbox"/> State Plane <b>N, E S/C/N</b>			Lat <b>44° 15' 50.0"</b>		County Coordinates	
1/4 of <b>T N, R</b>			Long <b>88° 24' 20.6"</b>		<b>X: 82769690 Feet Y: 56299125 Feet</b>	

Facility ID	County <b>Outagamie</b>	County Code <b>45</b>	Civil Town/City/ or Village <b>Appleton</b>
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Sample		Blow Counts	Depth In Feet	Soil/Rock Description And Geologic Origin For Each Major Unit	U S C S	Graphic Log	Well Diagram	PID/FID	Soil Properties					RQD/ Comments
Number and Type	Length Att. & Recovered (in)								Compressive Strength (tsf)	Moisture Content (%)	Liquid Limit	Plasticity Index	P 200	
	10 10		0.5	<b>PAVEMENT</b> Asphalt SAND AND GRAVEL, brown, fill										No sample taken
				Refusal at 0.8 feet. Bottom of borehole at 0.8 feet.										

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

Signature	Firm <b>OMNNI Associates, Inc.</b> Tel: 920-735-6900 1 N Systems Drive Appleton, WI 54914 Fax: 920-830-6100
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

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Route To: Watershed/Wastewater ☐ Waste Management ☐  
Remediation/Redevelopment ☒ Other ☐

Page 1 of 1

Facility/Project Name <b>222 N. Oneida</b>			License/Permit/Monitoring Number		Boring Number <b>SB-6/TW-06</b>	
Boring Drilled By: Name of crew chief (first, last) and Firm <b>Geiss Soil and Sample</b>			Date Drilling Started <b>11/3/2017</b>		Date Drilling Completed <b>11/3/2017</b>	
					Drilling Method <b>Direct Push/Geoprobe</b>	
WI Unique Well No.	DNR Well ID No.	Common Well Name	Final Static Water Level <b>Feet MSL</b>		Surface Elevation <b>Feet MSL</b>	
					Borehole Diameter <b>2.0 inches</b>	
Local Grid Origin <input type="checkbox"/> (estimated: <input type="checkbox"/> ) or Boring Location <input type="checkbox"/> State Plane <b>N, E S/C/N</b>			Lat <b>44° 15' 49.8"</b>		County Coordinates	
1/4 of <b>T N, R</b>			Long <b>88° 24' 19.9"</b>		X: 82775272 Feet Y: 56296936 Feet	

Facility ID	County <b>Outagamie</b>	County Code <b>45</b>	Civil Town/City/ or Village <b>Appleton</b>
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Sample		Blow Counts	Depth In Feet	Soil/Rock Description And Geologic Origin For Each Major Unit	U S C S	Graphic Log	Well Diagram	PID/FID	Soil Properties					RQD/ Comments
Number and Type	Length Att. & Recovered (in)								Compressive Strength (tsf)	Moisture Content (%)	Liquid Limit	Plasticity Index	P 200	
SB-06	48 48		1	PAVEMENT Asphalt				0						Sample from 1-1.6'
			2	SAND WITH GRAVEL, Fill				0.2						
				SILTY CLAY WITH SAND, Fill, dark gray				0						
			3	SILTY CLAY, Fill, reddish brown, moist										Water observed at 11'
	48 48		4											
			5											
			6											
			7											
	48 48		8	SILTY CLAY, Dark staining, reddish brown, moist				0						
			9	SILTY CLAY, reddish brown, moist										
			10					0						
			11	SAND WITH CLAY, brown, wet										
	36 36		12	SILTY SAND, brownish red, wet				0						
			13											
			14	SILTY CLAY, reddish brown, moist										
			15	Bottom of borehole at 15.0 feet.										

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

Signature	Firm <b>OMNNI Associates, Inc.</b> Tel: 920-735-6900 1 N Systems Drive Appleton, WI 54914 Fax: 920-830-6100
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Route To: Watershed/Wastewater ☐ Waste Management ☐  
Remediation/Redevelopment ☒ Other ☐

Page 1 of 1

Facility/Project Name <b>222 N. Oneida</b>			License/Permit/Monitoring Number		Boring Number <b>SB-7</b>	
Boring Drilled By: Name of crew chief (first, last) and Firm <b>Geiss Soil and Sample</b>			Date Drilling Started <b>11/3/2017</b>		Date Drilling Completed <b>11/3/2017</b>	
					Drilling Method <b>Direct Push/Geoprobe</b>	
WI Unique Well No.	DNR Well ID No.	Common Well Name	Final Static Water Level <b>Feet MSL</b>		Surface Elevation <b>Feet MSL</b>	
					Borehole Diameter <b>2.0 inches</b>	
Local Grid Origin <input type="checkbox"/> (estimated: <input type="checkbox"/> ) or Boring Location <input type="checkbox"/> State Plane <b>N, E S/C/N</b>			Lat <b>44° 15' 49.8"</b>		County Coordinates	
1/4 of <b>T N, R</b>			Long <b>88° 24' 20.5"</b>		X: 82770472 Feet Y: 56297202 Feet	

Facility ID	County <b>Outagamie</b>	County Code <b>45</b>	Civil Town/City/ or Village <b>Appleton</b>
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Sample		Blow Counts	Depth In Feet	Soil/Rock Description And Geologic Origin For Each Major Unit	U S C S	Graphic Log	Well Diagram	PID/FID	Soil Properties					RQD/ Comments
Number and Type	Length Att. & Recovered (in)								Compressive Strength (tsf)	Moisture Content (%)	Liquid Limit	Plasticity Index	P 200	
SB-07	48 24		0.5	PAVEMENT Asphalt										
	24 24		1.0	SAND AND GRAVEL, gray SAND, and Clay, moderate hydrocarbon odor, moderate dark staining, fill, reddish brown to dark brown, moist				0						
			6.0	Refusal at 6.0 feet. Bottom of borehole at 6.0 feet.				27						Sample from 5'-6'  No water observed

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

Signature	Firm <b>OMNNI Associates, Inc.</b> Tel: 920-735-6900 1 N Systems Drive Appleton, WI 54914 Fax: 920-830-6100
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Route To: Watershed/Wastewater ☐ Waste Management ☐  
Remediation/Redevelopment ☒ Other ☐

Page 1 of 1

Facility/Project Name <b>222 N. Oneida</b>			License/Permit/Monitoring Number		Boring Number <b>SB-08/TW-8</b>	
Boring Drilled By: Name of crew chief (first, last) and Firm <b>Geiss Soil and Sample</b>			Date Drilling Started <b>11/3/2017</b>		Date Drilling Completed <b>11/3/2017</b>	
					Drilling Method <b>Direct Push/Geoprobe</b>	
WI Unique Well No.	DNR Well ID No.	Common Well Name	Final Static Water Level <b>Feet MSL</b>		Surface Elevation <b>Feet MSL</b>	
					Borehole Diameter <b>2.0 inches</b>	
Local Grid Origin <input type="checkbox"/> (estimated: <input type="checkbox"/> ) or Boring Location <input type="checkbox"/> State Plane <b>N, E S/C/N</b>			Lat <b>44° 15' 49.8"</b>		County Coordinates	
1/4 of <b>T N, R</b>			Long <b>88° 24' 20.4"</b>		<b>X: 82771290 Feet Y: 56297254 Feet</b>	

Facility ID	County <b>Outagamie</b>	County Code <b>45</b>	Civil Town/City/ or Village <b>Appleton</b>
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Sample Number and Type	Length Att. & Recovered (in)	Blow Counts	Depth In Feet	Soil/Rock Description And Geologic Origin For Each Major Unit	U S C S	Graphic Log	Well Diagram	PID/FID	Soil Properties					RQD/ Comments
									Compressive Strength (tsf)	Moisture Content (%)	Liquid Limit	Plasticity Index	P 200	
SB-08	48 48		0.5	PAVEMENT Asphalt				0						
			1.0	SAND WITH GRAVEL, brown										
			1.5	GRAVEL, with Concrete, some Red brick										
			2.0											
			2.5					0						
			3.0											
			3.5					0						
			4.0											Sample from 3'-4'
	24 24		4.5											
			5.0											
			5.5											Water observed @ 5ft BGS
			6.0	Refusal at 6.0 feet. Bottom of borehole at 6.0 feet.										

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

Signature	Firm <b>OMNNI Associates, Inc.</b> Tel: 920-735-6900 1 N Systems Drive Appleton, WI 54914 Fax: 920-830-6100
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Page 1 of 1

Facility ID	County Outagamie	County Code 45	Civil Town/City/ or Village Appleton
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SB-09

Signature	Firm OMNNI Associates, Inc. Tel: 920-735-6900 1 N Systems Drive Appleton, WI 54914Fax: 920-830-6100
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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.



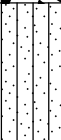




Route To: Watershed/Wastewater ☐ Waste Management ☐  
Remediation/Redevelopment ☒ Other ☐

Page 1 of 1

Facility/Project Name <b>222 N. Oneida</b>			License/Permit/Monitoring Number		Boring Number <b>SB-10/TW-10</b>	
Boring Drilled By: Name of crew chief (first, last) and Firm <b>Geiss Soil and Sample</b>			Date Drilling Started <b>11/3/2017</b>		Date Drilling Completed <b>11/3/2017</b>	
					Drilling Method <b>Direct Push/Geoprobe</b>	
WI Unique Well No.	DNR Well ID No.	Common Well Name	Final Static Water Level <b>Feet MSL</b>		Surface Elevation <b>Feet MSL</b>	
					Borehole Diameter <b>2.0 inches</b>	
Local Grid Origin <input type="checkbox"/> (estimated: <input type="checkbox"/> ) or Boring Location <input type="checkbox"/> State Plane <b>N, E S/C/N</b>			Lat <b>44° 15' 50.1"</b>		County Coordinates	
1/4 of <b>T N, R</b>			Long <b>88° 24' 19.9"</b>		<b>X: 82775050 Feet Y: 56299818 Feet</b>	

Facility ID	County <b>Outagamie</b>	County Code <b>45</b>	Civil Town/City/ or Village <b>Appleton</b>
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Sample		Blow Counts	Depth In Feet	Soil/Rock Description And Geologic Origin For Each Major Unit	U S C S	Graphic Log	Well Diagram	PID/FID	Soil Properties					RQD/ Comments	
Number and Type	Length Att. & Recovered (in)								Compressive Strength (tsf)	Moisture Content (%)	Liquid Limit	Plasticity Index	P 200		
SB-10	48 30		1	PAVEMENT - Asphalt Asphalt											Sample from 3-4'  Pushed Gravel/rock at 4.6-4.8
			2	SAND AND GRAVEL, fill, gray "SILTY SAND WITH GRAVEL", some Clay, some Wood, fill, brown to reddish brown				0							
			3	SANDY SILT, reddish brown, soft											
	48 48		4					0							
			5												
			6	SILTY CLAY, reddish brown, dry, dense to hard											
			7					0							
	48 48		8												
			9					0							
			10												
			11					0							
			12												
	36 36		13	SILTY CLAY, reddish brown, moist, soft				0							
			14												
			15	Bottom of borehole at 15.0 feet.											

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

Signature	Firm <b>OMNNI Associates, Inc.</b> Tel: 920-735-6900 1 N Systems Drive Appleton, WI 54914 Fax: 920-830-6100
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# Well / Drillhole / Borehole Filling & Sealing Report

Form 3300-005 (R 4/2015)

**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 Outagamie	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 222 North Oneida Street	Well ZIP Code 54911	
Well City, Village or Town City of Appleton	Well ZIP Code 54911	
Subdivision Name	Lot #	

## 2. Facility / Owner Information

Facility Name 222 North Oneida Street	Facility ID (FID or PWS) SB-01
License/Permit/Monitoring #	
Original Well Owner Valley Premier Property, LLC	Present Well Owner Valley Premier Property, LLC
Mailing Address of Present Owner 3420 Nikodem Lane	City of Present Owner Abrams
State WI	ZIP Code 54101

Reason for Removal from Service  
Assessment Complete

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

<input type="checkbox"/> Monitoring Well <input type="checkbox"/> Water Well <input checked="" type="checkbox"/> Borehole / Drillhole	WI Unique Well # of Replacement Well ____
Original Construction Date (mm/dd/yyyy) 11/03/2017	If a Well Construction Report is available, please attach.
Construction Type: <input type="checkbox"/> Drilled <input type="checkbox"/> Driven (Sandpoint) <input type="checkbox"/> Dug <input checked="" type="checkbox"/> Other (specify): Geoprobe	
Formation Type: <input checked="" type="checkbox"/> Unconsolidated Formation <input type="checkbox"/> Bedrock	
Total Well Depth From Ground Surface (ft.) 3.0'	Casing Diameter (in.) 2" Borehole
Lower Drillhole Diameter (in.) 2" Borehole	Casing Depth (ft.) ____
Was well annularspace grouted? <input type="checkbox"/> Yes <input checked="" 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 checked="" type="checkbox"/> No <input 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 checked="" type="checkbox"/> No <input checked="" 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): Gravity	
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	
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
Asphalt Patch	Surface	0.2	.1 Cubic Foot	
Bentonite Chips	0.2	3.0	.25 bag	

## 6. Comments

## 7. Supervision of Work

Supervision of Work			DNR Use Only	
Name of Person or Firm Doing Filling & Sealing Geiss Soil and Samples	License #	Date of Filling & Sealing or Verification (mm/dd/yyyy) 11/03/2017	Date Received	Noted By
Street or Route W4490 Pope Road	Telephone Number ( 715 ) 539-3928	Comments		
City Merrill	State WI	ZIP Code 54452	Signature of Person Doing Work Christopher Rogers / OMNNI Associates	Date Signed 11/03/2017

# Well / Drillhole / Borehole Filling & Sealing Report

Form 3300-005 (R 4/2015)

**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.

<input type="checkbox"/> <b>Verification Only of Fill and Seal</b>	<b>Route to DNR Bureau:</b>		
	<input type="checkbox"/> Drinking Water	<input type="checkbox"/> Watershed/Wastewater	<input checked="" type="checkbox"/> Remediation/Redevelopment
	<input type="checkbox"/> Waste Management	<input type="checkbox"/> Other: _____	

1. Well Location Information				2. Facility / Owner Information			
County Outagamie		WI Unique Well # of Removed Well		Hicap #		Facility Name 222 North Oneida Street	
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) <span style="color:blue">SB-02</span>	
1/4 / 1/4 or Gov't Lot #		Section		Township N		Range <input type="checkbox"/> E <input type="checkbox"/> W	
Well Street Address 222 North Oneida Street				Original Well Owner Valley Premier Property, LLC			
Well City, Village or Town City of Appleton				Present Well Owner Valley Premier Property, LLC			
Well ZIP Code 54911				Mailing Address of Present Owner 3420 Nikodem Lane			
Subdivision Name				Lot #		City of Present Owner Abrams	
				State WI		ZIP Code 54101	

Reason for Removal from Service Assessment Complete	WI Unique Well # of Replacement Well _____
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3. Filled & Sealed Well / Drillhole / Borehole Information		4. Pump, Liner, Screen, Casing & Sealing Material	
<input type="checkbox"/> Monitoring Well	Original Construction Date (mm/dd/yyyy) 11/03/2017	Pump and piping removed?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A
<input type="checkbox"/> Water Well	If a Well Construction Report is available, please attach.	Liner(s) removed?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A
<input checked="" type="checkbox"/> Borehole / Drillhole		Liner(s) perforated?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A
Construction Type:		Screen removed?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A
<input type="checkbox"/> Drilled <input type="checkbox"/> Driven (Sandpoint) <input type="checkbox"/> Dug		Casing left in place?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A
<input checked="" type="checkbox"/> Other (specify): <u>Geoprobe</u>		Was casing cut off below surface?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A
Formation Type:		Did sealing material rise to surface?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A <span style="color:blue">CP</span>
<input checked="" type="checkbox"/> Unconsolidated Formation <input type="checkbox"/> Bedrock		Did material settle after 24 hours?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A
Total Well Depth From Ground Surface (ft.) <span style="color:blue">1.0'</span>		If yes, was hole retopped?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A
Casing Diameter (in.) 2" Borehole		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
Lower Drillhole Diameter (in.) 2" Borehole		Required Method of Placing Sealing Material	
Casing Depth (ft.) <span style="color:blue">_____</span>		<input type="checkbox"/> Conductor Pipe-Gravity <input type="checkbox"/> Conductor Pipe-Pumped	
Was well annularspace grouted? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Unknown		<input type="checkbox"/> Screened & Poured (Bentonite Chips) <input checked="" type="checkbox"/> Other (Explain): <u>Gravity</u>	
If yes, to what depth (feet)? <span style="color:blue">_____</span>		Sealing Materials	
Depth to Water (feet) <span style="color:blue">_____</span>		<input type="checkbox"/> Neat Cement Grout <input type="checkbox"/> Concrete	
		<input type="checkbox"/> Sand-Cement (Concrete) Grout <input checked="" type="checkbox"/> Bentonite Chips	

5. Material Used to Fill Well / Drillhole			
Asphalt Patch	From (ft.) Surface	To (ft.) 0.2	No. Yards, Sacks Sealant or Volume (circle one) .1 Cubic Foot
Bentonite Chips	0.2	<span style="color:blue">1.0'</span>	<span style="color:blue">.1 bag</span>

6. Comments	

7. Supervision of Work				DNR Use Only	
Name of Person or Firm Doing Filling & Sealing Geiss Soil and Samples		License #	Date of Filling & Sealing or Verification (mm/dd/yyyy) 11/03/2017	Date Received	Noted By
Street or Route W4490 Pope Road		Telephone Number ( 715 ) 539-3928		Comments	
City Merrill	State WI	ZIP Code 54452	Signature of Person Doing Work Christopher Rogers / OMNNI Associates	Date Signed 11/03/2017	



# Well / Drillhole / Borehole Filling & Sealing Report

Form 3300-005 (R 4/2015)

**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.

## Route to DNR Bureau:

☐ Verification Only of Fill and Seal

☐ Drinking Water

☐ Watershed/Wastewater

☒ Remediation/Redevelopment

☐ Waste Management

☐ Other: \_\_\_\_\_

## 1. Well Location Information

County: Outagamie  
WI Unique Well # of Removed Well: \_\_\_\_\_  
Hicap #: \_\_\_\_\_

Latitude / Longitude (see instructions): \_\_\_\_\_ N \_\_\_\_\_ W  
Format Code: ☐ DD ☐ DDM  
Method Code: ☐ GPS008 ☐ SCR002 ☐ OTH001

1/4 / 1/4: \_\_\_\_\_  
or Gov't Lot #: \_\_\_\_\_  
Section: \_\_\_\_\_ Township: \_\_\_\_\_ Range: ☐ E ☐ W

Well Street Address: 222 North Oneida Street

Well City, Village or Town: City of Appleton  
Well ZIP Code: 54911

Subdivision Name: \_\_\_\_\_ Lot #: \_\_\_\_\_

## 2. Facility / Owner Information

Facility Name: 222 North Oneida Street **SB-03**

Facility ID (FID or PWS): \_\_\_\_\_

License/Permit/Monitoring #: \_\_\_\_\_

Original Well Owner: \_\_\_\_\_

Present Well Owner: Valley Premier Property, LLC

Valley Premier Property, LLC

Mailing Address of Present Owner: 3420 Nikodem Lane

City of Present Owner: Abrams

State: WI

ZIP Code: 54101

Reason for Removal from Service: Assessment Complete  
WI Unique Well # of Replacement Well: \_\_\_\_\_

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

☐ Monitoring Well  
☐ Water Well  
☒ Borehole / Drillhole  
Original Construction Date (mm/dd/yyyy): 11/03/2017  
If a Well Construction Report is available, please attach: \_\_\_\_\_

Construction Type:  
☒ Drilled ☐ Driven (Sandpoint) ☐ Dug  
☒ Other (specify): Geoprobe

Formation Type:  
☒ Unconsolidated Formation ☐ Bedrock

Total Well Depth from Ground Surface (ft.): 0.9'

Casing Diameter (in.): 2" Borehole

Lower Drillhole Diameter (in.): 2" Borehole

Was well annularspace 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 ☒ Other (Explain): Gravity

Sealing Materials

☐ Neat Cement Grout ☐ Concrete

☐ 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

Material	From (ft.)	To (ft.)	No. Yards, Sacks Sealant or Volume (circle one)	Mix Ratio or Mud Weight
Asphalt Patch	Surface	0.2	.1 Cubic Foot	
Bentonite Chips	0.2	0.9'	.1 bag	

## 6. Comments

## 7. Supervision of Work

Name of Person or Firm Doing Filling & Sealing	License #	Date of Filling & Sealing or Verification (mm/dd/yyyy)	Date Received	Noted By
Geiss Soil and Samples		11/03/2017		

Street or Route	Telephone Number	Comments
W4490 Pope Road	( 715 ) 539-3928	

City	State	ZIP Code	Signature of Person Doing Work	Date Signed
Merrill	WI	54452	Christopher Rogers / OMNNI Associates	11/03/2017

# Well / Drillhole / Borehole Filling & Sealing Report

Form 3300-005 (R 4/2015)

**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 Outagamie	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 222 North Oneida Street	Well ZIP Code 54911	
Well City, Village or Town City of Appleton	Well ZIP Code 54911	
Subdivision Name	Lot #	

## 2. Facility / Owner Information

Facility Name 222 North Oneida Street	SB-04
Facility ID (FID or PWS)	
License/Permit/Monitoring #	
Original Well Owner Valley Premier Property, LLC	
Present Well Owner Valley Premier Property, LLC	
Mailing Address of Present Owner 3420 Nikodem Lane	
City of Present Owner Abrams	State WI
	ZIP Code 54101

Reason for Removal from Service  
Assessment Complete

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

<input type="checkbox"/> Monitoring Well	WI Unique Well # of Replacement Well
<input type="checkbox"/> Water Well	Original Construction Date (mm/dd/yyyy) 11/03/2017
<input checked="" type="checkbox"/> Borehole / Drillhole	If a Well Construction Report is available, please attach.
Construction Type: <input type="checkbox"/> Drilled <input type="checkbox"/> Driven (Sandpoint) <input type="checkbox"/> Dug <input checked="" type="checkbox"/> Other (specify): Geoprobe	
Formation Type: <input type="checkbox"/> Unconsolidated Formation <input type="checkbox"/> Bedrock	
Total Well Depth From Ground Surface (ft.) 3.0'	Casing Diameter (in.) 2" Borehole
Lower Drillhole Diameter (in.) 2" Borehole	Casing Depth (ft.) —
Was well annularspace grouted? <input type="checkbox"/> Yes <input checked="" 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 checked="" type="checkbox"/> No <input 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): Gravity	
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	
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
Asphalt Patch	Surface	0.2	.1 Cubic Foot	
Bentonite Chips	0.2	3.0'	.25 bag	

## 6. Comments

## 7. Supervision of Work

Supervision of Work			DNR Use Only	
Name of Person or Firm Doing Filling & Sealing Geiss Soil and Samples	License #	Date of Filling & Sealing or Verification (mm/dd/yyyy) 11/03/2017	Date Received	Noted By
Street or Route W4490 Pope Road	Telephone Number ( 715 ) 539-3928	Comments		
City Merrill	State WI	ZIP Code 54452	Signature of Person Doing Work Christopher Rogers / OMNNI Associates	Date Signed 11/03/2017

# Well / Drillhole / Borehole Filling & Sealing Report

Form 3300-005 (R 4/2015)

**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.

<input type="checkbox"/> <b>Verification Only of Fill and Seal</b>	<b>Route to DNR Bureau:</b>		
	<input type="checkbox"/> Drinking Water	<input type="checkbox"/> Watershed/Wastewater	<input checked="" type="checkbox"/> Remediation/Redevelopment
	<input type="checkbox"/> Waste Management	<input type="checkbox"/> Other: _____	

1. Well Location Information				2. Facility / Owner Information			
County Outagamie		WI Unique Well # of Removed Well		Facility Name 222 North Oneida Street		Facility ID (FID or PWS) <i>SB-05</i>	
Latitude / Longitude (see instructions)		Format Code <input type="checkbox"/> DD <input type="checkbox"/> DDM	Method Code <input type="checkbox"/> GPS008 <input type="checkbox"/> SCR002 <input type="checkbox"/> OTH001	License/Permit/Monitoring #			
1/4 / 1/4	1/4	Section	Township N	Range <input type="checkbox"/> E <input type="checkbox"/> W	Original Well Owner Valley Premier Property, LLC		
or Gov't Lot #				Present Well Owner Valley Premier Property, LLC			
Well Street Address 222 North Oneida Street				Mailing Address of Present Owner 3420 Nikodem Lane			
Well City, Village or Town City of Appleton				City of Present Owner Abrams			
Subdivision Name				State WI	ZIP Code 54101		
Reason for Removal from Service Assessment Complete		WI Unique Well # of Replacement Well		4. Pump, Liner, Screen, Casing & Sealing Material			

3. Filled & Sealed Well / Drillhole / Borehole Information			
<input type="checkbox"/> Monitoring Well		Original Construction Date (mm/dd/yyyy) 11/03/2017	
<input type="checkbox"/> Water Well		If a Well Construction Report is available, please attach.	
<input checked="" type="checkbox"/> Borehole / Drillhole			
Construction Type:			
<input type="checkbox"/> Drilled <input type="checkbox"/> Driven (Sandpoint) <input type="checkbox"/> Dug <input checked="" type="checkbox"/> Other (specify): <u>Geoprobe</u>			
Formation Type:			
<input checked="" type="checkbox"/> Unconsolidated Formation <input type="checkbox"/> Bedrock			
Total Well Depth From Ground Surface (ft.) <i>0.8</i>		Casing Diameter (in.) 2" Borehole	
Lower Drillhole Diameter (in.) 2" Borehole		Casing Depth (ft.) <i>—</i>	
Was well annularspace grouted? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Unknown			
If yes, to what depth (feet)? <i>—</i>		Depth to Water (feet) <i>—</i>	

5. Material Used to Fill Well / Drillhole			
	From (ft.)	To (ft.)	No. Yards, Sacks Sealant or Volume (circle one)
Asphalt Patch	Surface	0.2	.1 Cubic Foot
Bentonite Chips	0.2	<i>0.8</i>	<i>.1 bag</i>

6. Comments
-------------

7. Supervision of Work				DNR Use Only	
Name of Person or Firm Doing Filling & Sealing Geiss Soil and Samples		License #	Date of Filling & Sealing or Verification (mm/dd/yyyy) 11/03/2017	Date Received	Noted By
Street or Route W4490 Pope Road			Telephone Number ( 715 ) 539-3928	Comments	
City Merrill	State WI	ZIP Code 54452	Signature of Person Doing Work Christopher Rogers / OMNNI Associates	Date Signed 11/03/2017	



# Well / Drillhole / Borehole Filling & Sealing Report

Form 3300-005 (R 4/2015)

**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 Outagamie	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 222 North Oneida Street	Well City, Village or Town City of Appleton	Well ZIP Code 54911
Subdivision Name	Lot #	

## 2. Facility / Owner Information

Facility Name 222 North Oneida Street	Facility ID (FID or PWS) SB-7
License/Permit/Monitoring #	
Original Well Owner Valley Premier Property, LLC	Present Well Owner Valley Premier Property, LLC
Mailing Address of Present Owner 3420 Nikodem Lane	City of Present Owner Abrams
State WI	ZIP Code 54101

Reason for Removal from Service  
Assessment Complete

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

<input type="checkbox"/> Monitoring Well <input type="checkbox"/> Water Well <input checked="" type="checkbox"/> Borehole / Drillhole	WI Unique Well # of Replacement Well _____ Original Construction Date (mm/dd/yyyy) 11/03/2017 If a Well Construction Report is available, please attach.
Construction Type: <input type="checkbox"/> Drilled <input type="checkbox"/> Driven (Sandpoint) <input type="checkbox"/> Dug <input checked="" type="checkbox"/> Other (specify): Geoprobe	Formation Type: <input checked="" type="checkbox"/> Unconsolidated Formation <input type="checkbox"/> Bedrock
Total Well Depth From Ground Surface (ft.) 6.0'	Casing Diameter (in.) 2" Borehole
Lower Drillhole Diameter (in.) 2" Borehole	Casing Depth (ft.) ____
Was well annularspace grouted? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Unknown	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 checked="" type="checkbox"/> No <input 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): Gravity	
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	
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
Asphalt Patch	Surface	0.2	.1 Cubic Foot	
Bentonite Chips	0.2	6.0'	.25 bag	

## 6. Comments

## 7. Supervision of Work

Name of Person or Firm Doing Filling & Sealing Geiss Soil and Samples	License #	Date of Filling & Sealing or Verification (mm/dd/yyyy) 11/03/2017	DNR Use Only	
Street or Route W4490 Pope Road	Telephone Number ( 715 ) 539-3928	Comments	Date Received	Noted By
City Merrill	State WI	ZIP Code 54452	Signature of Person Doing Work Christopher Rogers / OMNNI Associates	Date Signed 11/03/2017

# Well / Drillhole / Borehole Filling & Sealing Report

Form 3300-005 (R 4/2015)

**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	WI Unique Well # of Removed Well	Hicap #
Outagamie		
Latitude / Longitude (see instructions)	Format Code	Method Code
_____ N	<input type="checkbox"/> DD	<input type="checkbox"/> GPS008
_____ W	<input type="checkbox"/> DDM	<input type="checkbox"/> SCR002
_____ 1/4		<input type="checkbox"/> OTH001
or Gov't Lot #	Section	Township
		N
Well Street Address	Well ZIP Code	
222 North Oneida Street	54911	
Well City, Village or Town	Well ZIP Code	
City of Appleton	54911	
Subdivision Name	Lot #	

## 2. Facility / Owner Information

Facility Name	222 North Oneida Street
Facility ID (FID or PWS)	SB-08/TW8
License/Permit/Monitoring #	
Original Well Owner	
Present Well Owner	Valley Premier Property, LLC
Mailing Address of Present Owner	3420 Nikodem Lane
City of Present Owner	Abrams
State	WI
ZIP Code	54101

Reason for Removal from Service  
Assessment Complete

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

<input checked="" type="checkbox"/> Monitoring Well	WI Unique Well # of Replacement Well
<input type="checkbox"/> Water Well	Original Construction Date (mm/dd/yyyy)
<input checked="" type="checkbox"/> Borehole / Drillhole	11/03/2017
Construction Type:	If a Well Construction Report is available, please attach.
<input type="checkbox"/> Drilled	
<input type="checkbox"/> Driven (Sandpoint)	
<input type="checkbox"/> Dug	
<input checked="" type="checkbox"/> Other (specify): Geoprobe	
Formation Type:	
<input checked="" type="checkbox"/> Unconsolidated Formation	<input type="checkbox"/> Bedrock
Total Well Depth From Ground Surface (ft.)	Casing Diameter (in.)
6.0'	2" Borehole
Lower Drillhole Diameter (in.)	Casing Depth (ft.)
2" Borehole	6'
Was well annularspace grouted?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Unknown
If yes, to what depth (feet)?	Depth to Water (feet)
	5'

## 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 checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A
Casing left in place?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A
Was casing cut off below surface?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input 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): Gravity

## 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
For Monitoring Wells and Monitoring Well Boreholes Only:	
<input checked="" 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
Asphalt Patch	Surface	0.2	.1 Cubic Foot	
Bentonite Chips	0.2	6.0'	.25 bag	

## 6. Comments

## 7. Supervision of Work

Name of Person or Firm Doing Filling & Sealing Geiss Soil and Samples	License #	Date of Filling & Sealing or Verification (mm/dd/yyyy) 11/03/2017	DNR Use Only	
			Date Received	Noted By
Street or Route W4490 Pope Road			Comments	
City Merrill			Signature of Person Doing Work Christopher Rogers / OMNNI Associates	
State WI			Date Signed 11/03/2017	
ZIP Code 54452				



**APPENDIX 4**

**HANDBOOK OF FIELD PROCEDURES**

# **HANDBOOK OF FIELD PROCEDURES**

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## PERSONNEL QUALIFICATIONS

Brian D. Wayner:	<p>Completed 40-hour hazardous waste training.</p> <p>Bachelors Degree in Electrical Engineering from University of Wisconsin-Milwaukee.</p> <p>Masters Degree in Environmental Engineering from University of New Haven.</p> <p>PECFA Consultant Registration #47551.</p> <p>Licensed Professional Engineer (no. 35304), State of Wisconsin</p>
Don Brittnacher:	<p>Completed 40-hour hazardous waste training.</p> <p>Bachelors Degree in Geology from University of Notre Dame.</p> <p>Masters Degree in Environmental Health Engineering from University of Notre Dame.</p> <p>Licensed Professional Geologist (no. 462), State of Wisconsin</p> <p>Licensed Professional Engineer (no. 30286), State of Wisconsin</p> <p>PECFA Consultant Registration/Certified Site Assessor-42127.</p>
Jason C. Weis:	<p>Completed 40-hour hazardous waste training.</p> <p>Bachelors Degree in Civil Engineering from University of Wisconsin-Platteville.</p> <p>Masters Degree in Environmental Engineering from University of Wyoming.</p> <p>Licensed Professional Engineer (no. 36681), State of Wisconsin</p>
Kimberly Kennedy:	<p>Completed 40-hour hazardous waste training.</p> <p>Associate Degree in Natural Resources, Fox Valley Technical College.</p>
Christopher J. Rogers:	<p>Completed 40-hour hazardous waste training.</p> <p>Completed OSHA Site Supervisor and OSHA 10 training.</p> <p>Bachelors Degree in Geology (hydro-geology emphasis) from University of Wisconsin-Oshkosh</p>

## SOIL BORING INSTALLATION PROCEDURES

A number of different drilling and Geoprobe® firms are used for environmental investigations. Borings intended to be converted to monitoring wells are advanced using 7 5/8" outside diameter (O.D.) x 4.5" inside diameter (I.D.) hollow stem augers or 6.25" O.D. solid stem augers powered by a truck-mounted drill rig. If bedrock drilling is required, borings are advanced using either air or mud-rotary drilling techniques. Soil borings not intended for monitoring wells are typically advanced using 4" O.D. solid stem augers. The Geoprobe® typically advances a 2" diameter hole. All soil borings that are not converted to permanent or temporary groundwater monitoring wells are properly abandoned per chapter NR 141, Wisconsin Administrative Code.

Samples are typically obtained from each boring at 2.5' intervals by split-spoon sampling according to American Society for Testing and Materials (ASTM) Standard D 1586. A portion of each sample is screened with a photoionization detector (PID). At each sampling interval, a representative portion of the soil is also collected for possible laboratory analysis. Soil samples are chosen from each boring for laboratory analysis based on headspace screening data, and visual and olfactory observations. In general, the sample from each boring that exhibits the highest PID reading is chosen for analysis. See the Soil Sampling Procedures below for further information pertaining to field headspace analysis and sample collection procedures.

## SOIL SAMPLING PROCEDURES

All soil sampling is performed in accordance with the Wisconsin Department of Natural Resources (WDNR) publication PUBL-SW-127, Soil Sampling Requirements for LUST Site Investigations and Excavations and chapter COMM 10, Flammable and Combustible Liquids, Wis. Adm. Code. The soil samples are collected and analyzed in accordance with methods described in Table C-3 in Appendix C of WDNR PUBL-RR-614, Interim Guidance On Natural Attenuation For Petroleum Releases, 1999. Our standard instruments and sample collection procedures are as follows:

1. Soil samples are collected from a split-spoon sampler or a polyethylene tube during environmental drilling.
2. Sample collector wears new latex exam gloves when collecting samples to decrease the risk of personal exposure and cross contamination.
3. A portion of the sample is collected in a sampling syringe and placed in an appropriate container (see Table 1), immediately placed on ice, and later delivered to a WDNR-certified laboratory for analysis. This procedure is discussed in more detail later in this report.

4. The remaining portion of the sample is placed in a clean 4 oz. jar (approx. half-filled), and sealed with aluminum foil and a teflon-lined lid. The headspace sample is then agitated for a minimum of 30 seconds and allowed to equilibrate. Minimum equilibration time will correspond to the following specifications:

#### **Minimum Sample Headspace Equilibration Time**

Ambient Outside Air Temperature at the Time of Sample Collection:	Minimum Amount of Time Sample Must equilibrate at 70° F or Greater Temperature:
< 40 °F	40 minutes
41 – 55 °F	20 minutes
56 – 69 °F	10 minutes
> 70 °F	5 minutes

#### **Instrument Specifications**

When the sample has completed equilibration, it is promptly field analyzed with a portable PID. OMNNI uses either a Photovac Inc. Microtip HL-200 or ML-1000 or a Thermo Environmental Instruments Model 580A organic vapor monitor (OVM), both equipped with an 11.2 ev lamp. A background reading is first taken. The PID probe is then inserted into the jar through a single hole in the aluminum foil. The instrument reading is measured at one-half the distance between the foil seal and the sample surface. The measured reading is then recorded.

Isobutylene at a concentration of 100 ppm is used for field calibration gas. The PID meter is field calibrated at the following times:

- At the beginning of each day
- After any significant change in temperature or humidity
- Every three hours
- After any repairs to the instrument are performed

All samples are returned to the laboratory as soon as possible, usually the day the sample was collected. All samples are returned to the laboratory under chain-of-custody protocol, using form #4400-151. Time of sample collection and sample PID reading are listed. Care is taken to ensure that the chain-of-custody form is properly and fully completed before submitting to the laboratory. The samples are sent to a laboratory certified by the WDNR.

Table 2 on page 9 outlines the required WDNR laboratory analysis for specific contaminants. Soil analyses, other than those in Table 2, will be conducted in accordance with methods approved by the WDNR.

## **MONITORING WELL INSTALLATION AND DEVELOPMENT PROCEDURES**

The permanent monitoring wells are typically constructed of two-inch, schedule 40, flush-thread polyvinyl chloride (PVC) casings and slotted well screens. Temporary wells are constructed of one-inch diameter, schedule 40 PVC casings and slotted screens. Prior to use, well parts are individually wrapped in plastic.

Permanent wells are installed and developed according to chapter NR 141, Wis. Adm. Code. The monitoring wells are installed with five to fifteen-foot screens which are placed in the borings to intersect the water table. Piezometers are installed with five-foot screens sealed beneath the water table. Filter pack and annular space seal material are installed by gravity as the augers are withdrawn from the hole. Wells are cut to the required height using a PVC pipe cutter.

An as-constructed well and boring survey is performed by OMNNI once field work is complete. Elevations are either based on a local datum of 100 feet, or a United States Geological Survey (USGS) elevation, assigned to a mark on a reference point located at the site. Ground elevation is surveyed to the nearest 0.1 foot, and the top of the well casing to the nearest 0.01 foot.

A horizontal grid system is established at the site with the origin of the grid set on the reference point. Wells and borings are located with respect to this grid system.

To properly develop each permanent monitoring well, water is removed until a consistent water quality is obtained. This is done by removing 10 times the water volume in the well and filter pack, removing water until it is free of sediment, or removing the water until the well is purged dry. Water is removed from the wells by bailing the water with as little agitation as possible. If the water level is unaffected by bailing and large amounts of water are to be removed, the well is developed by using the surge and purge method with a centrifugal pump. No water is added to the well during development. Temporary wells may be developed by allowing the peristaltic pump to run until the water is as clear as possible.

The development water is drummed, pending the results of analytical testing. If the well is suspected to be clean and small volumes of water are to be removed, the water may be spread on pavement to volatilize any possible contaminants. If the water is contaminated, it is properly disposed.

## GROUNDWATER SAMPLING PROCEDURES AND VOLATILE ORGANIC COMPOUND (VOC) SAMPLING NOTES

- A. Devices used to measure water elevation, purge wells and retrieve samples:
1. Groundwater levels are measured with a fiberglass reel tape with a weighted stainless steel "sounder" at the end.
  2. In wells that have free product on top of the water surface, depth to water and depth to product are measured with a fiberglass reel tape with an interface probe at the end.
  3. Wells are purged and samples are collected by one of the following methods:
    - a) Wells are purged with a disposable bailer.
    - b) Alternate purging and sampling equipment consisting of a peristaltic groundwater sampling pump.
- B. Procedures for calculating purge volumes, purging wells and sampling:
1. Wells are normally sampled starting from the upgradient area and progressing toward the downgradient area of the site. When the degree of contamination is known, least contaminated wells are sampled first, the more contaminated wells sampled last.
  2. All the wells are opened before the depth to groundwater is determined to allow groundwater to equilibrate.
  3. Wells are purged with a bailer by removing four water volumes within a casing or all the water until the well runs dry. When using a peristaltic pump, water is removed for 10 to 20 minutes.
  4. Once all the wells have been purged, the samples are drawn using equipment mentioned above. (See Table 3 - Water Sample Preparation Guide)
  5. Sample odor, turbidity, temperature, conductivity, dissolved oxygen (DO) and pH are determined on the unfiltered portions of the sample and recorded on the well specific field sheet.
  6. When the sample requires filtering, the sample is filtered with a hand pump or an in-line pump (as soon after collection as possible).
  7. Quality Assurance/Quality Control Samples



- a) Trip and field blanks each consist of three new 40 milliliter (ml) vials filled with deionized water. These are sent to the laboratory for petroleum volatile organic compound (PVOC) or VOC analysis.
  - b) One field blank should be analyzed for every 10 samples collected. At least one trip blank is taken per site visit. Trip blanks are poured, labeled, and sealed, then taken out in the field. Field blanks are poured, labeled, and sealed at the site. Trip blanks are kept with all samples collected until reaching the field. If there is a possibility for field cross-contamination of samples, field blanks may be taken at the sample collector's discretion.
  - c) One temperature blank may be collected per batch of samples.
  - d) One duplicate sample may be collected with every 10 samples.
8. Samples are refrigerated, then transported to a WDNR-certified laboratory for testing as soon as possible.
9. A chain-of-custody form is filled out, listing all samples collected, requested laboratory analysis, date and time of collection, and the name of the sample collector. This document remains with the samples at all times and bears the names of all persons handling the samples until they are received at the laboratory.
- C. Procedures for cleaning equipment:
- 1. In the field, sampling equipment is rinsed with a 10% methanol solution and then flushed three times with deionized water between each well sampled.
  - 2. Equipment that is still contaminated after field cleaning will be rinsed with tap water, washed off with detergent, rinsed with a 10% methanol solution, and flushed three times with deionized water.
- D. Transporting samples to laboratory:
- 1. Filtered, preserved, labeled, and sealed samples are placed on ice and transported to the laboratory for analysis as soon as possible.
  - 2. The laboratory will be notified by the sample collector when courier service is required.
- E. The above procedures constitute normal groundwater sampling procedures for permanent groundwater monitoring wells. Modifications to each of the outlined items may be applicable for site specific conditions or special volatile organic sampling considerations. Methods used are consistent with WDNR's Groundwater

## **DECONTAMINATION PROCEDURES**

Decontamination is the process of removing and/or neutralizing contaminants that may have accumulated on personnel protective equipment (PPE) and equipment. Proper decontamination is a critical element in the control of hazards which helps ensure the health and safety of workers. Proper decontamination also contains the contamination to the site, thus preventing further environmental problems.

### **Drilling**

The following decontamination procedures should be used when completing borings, installing monitoring wells, and/or installing remediation systems.

- A. Between samples, the split spoon will be cleaned in a multiple rinse, surfactant solution (soap and water or Alconox solution.)
- B. The sample will be collected while wearing new latex exam gloves.
- C. The surface upon which the sample is collected is cleaned between samples.
- D. The latex exam gloves are changed between samples.
- E. Soil which has accumulated around the boring will either be stockpiled or drummed. If the soil is stockpiled, it will be placed on and covered with plastic. The stockpiled or drummed soil will later be disposed in compliance with the WDNR regulations.
- F. Upon completion of the boring, the augers will be decontaminated by drilling contractors before they are used again. The following procedures will be followed when decontaminating drilling equipment:
  - 1. A decontamination basin lined with plastic is set up near the work area.
  - 2. All contaminated equipment is placed in the decontamination basin.
  - 3. A pressurized steam cleaner is used to clean all contaminated equipment.
  - 4. Following steam cleaning, the auger is removed from the decontamination basin.
  - 5. Upon completion of the job, the accumulated water in the decontamination basin is pumped out and placed in a drum. Wash water used for cleaning the split spoons is also added to the drum. The drum will be disposed in

compliance with all regulatory agencies. The plastic used in the decontamination basin is disposed in compliance with all regulatory agencies.

**TABLE 1 – SOIL SAMPLE PREPARATION GUIDE\***

TEST	CONTAINER SIZE**	SAMPLE SIZE	PRESERVATIVE	HOLDING TIME
<b>GRO</b> Gasoline Range Organics	2 oz. wide mouth glass jar or 40 ml vial (2 per sample)	25 g – jar 13 g – vial	25 ml Methanol (purge & trap grade) – jar none required – vial	4 days
<b>DRO</b> Diesel Range Organics	2 oz. wide mouth glass jar or 40 ml vial (2 per sample)	25 g – jar 13 g – vial	None	4 days
<b>Total Lead/ or all RCRA Metals</b>	4 oz. wide mouth plastic jar (2 per sample)	4 oz.	None	6 months
<b>VOC / PVOC</b> Volatile Organic Compounds	2 oz. wide mouth glass jar or 40 ml vial (2 per sample)	25 g – jar 13 g – vial	25 ml Methanol (purge & trap grade) – jar none required – vial	4 days preserved , 48 hours non-preserved
<b>PCB</b> Polychlorinated Biphenyls	4 oz. wide mouth glass jar (2 per sample)	4 oz.	None	14 days
<b>PAH</b> Polynuclear Aromatic Hydrocarbons	4 oz. wide mouth glass jar (2 per sample)	4 oz.	None	14 days

\* All samples will be sealed, labeled, and placed on ice immediately after collection.

\*\* To ensure a proper seal between the sample container and the cap, no soil shall remain on the jar or cap threads. When samples are collected with the syringe, a 40 ml vial is used and the sample is preserved by the laboratory.

**TABLE 2 – SOIL SAMPLE ANALYSIS GUIDE FOR PETROLEUM CONTAMINATION**

PETROLEUM SUBSTANCE	CLOSURE ASSESSMENT	SOLID WASTE PRO./LANDFILLS	SITE INVESTIGATIONS
Gasoline Aviation Fuel	GRO	Free Liquids GRO Benzene Haz. Waste Det.	GRO PVOC/VOC Pb
Diesel Jet Fuel No.'s 1, 2, 4 Fuel Oil	DRO	Free Liquids GRO Benzene Haz. Waste Det.	DRO PVOC PAH
Crude Oil Lubricat. Oil No. 6 Fuel Oil	DRO	Free Liquids DRO Haz. Waste Det.	DRO PAH
Unknown Petroleum	GRO and DRO	Free Liquids GRO and DRO Pb, Cd, CN, S Haz Waste Det.	GRO and DRO VOC/PVOC PAH Pb, Cd
Waste Oil	DRO	Free Liquids DRO VOC Pb, Cd, CN, S Haz. Waste Det.	DRO VOC/PVOC PAH PCB Pb, Cd

**TABLE 3 – GROUNDWATER SAMPLE PREPARATION GUIDE\***

TEST	SAMPLE SIZE / CONTAINER	PRESERVATIVE	HOLDING TIME
<b>VOC / PVOC</b> Volatile Organic Compounds	3 - 40 ml vials filled with no headspace	0.5 ml of 1:1 HCl	14 days
<b>DRO</b> Diesel Range Organics	1 - 1 liter amber glass bottles	5 ml of 1:1 HCl	7 days
<b>GRO</b> Gasoline Range Organics	3 - 40 ml vials filled with no headspace	0.5 ml of 1:1 HCl	14 days
<b>PAH</b> Polynuclear Aromatic Hydrocarbons	1 - 1 liter amber glass bottles	None	7 days
<b>PCB</b> Polychlorinated Biphenyls	1 - 1 liter amber glass bottle	None	7 days
<b>LEAD / RCRA</b> metals **	1 - 250 ml plastic bottle	2 ml of HNO <sub>3</sub> or to a pH of < 2	6 months

\* All samples will be sealed, labeled, and placed on ice immediately after collection.

\*\* When testing for dissolved metals, the sample will be field filtered before preservation.

## **APPENDIX 5**

### **LABORATORY ANALYSIS RESULTS AND CHAIN OF CUSTODY DOCUMENTATION**

# Synergy Environmental Lab, INC.

1990 Prospect Ct., Appleton, WI 54914 \*P 920-830-2455 \* F 920-733-0631

CHRIS ROGERS  
OMNNI ASSOCIATES INC  
ONE SYSTEMS DRIVE  
APPLETON WI 54914-1654

Report Date 15-Nov-17

Project Name 222 N. ONEIDA  
Project # N2214G17

Invoice # E33843

Lab Code 5033843A  
Sample ID TRIP BLANK  
Sample Matrix Water  
Sample Date 10/31/2017

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
Organic										
VOC's										
Benzene	< 0.17	ug/l	0.17	0.55	1	8260B		11/9/2017	CJR	1
Bromobenzene	< 0.43	ug/l	0.43	1.37	1	8260B		11/9/2017	CJR	1
Bromodichloromethane	< 0.31	ug/l	0.31	1	1	8260B		11/9/2017	CJR	1
Bromoform	< 0.49	ug/l	0.49	1.56	1	8260B		11/9/2017	CJR	1
tert-Butylbenzene	< 0.39	ug/l	0.39	1.23	1	8260B		11/9/2017	CJR	1
sec-Butylbenzene	< 0.24	ug/l	0.24	0.76	1	8260B		11/9/2017	CJR	1
n-Butylbenzene	< 0.34	ug/l	0.34	1.08	1	8260B		11/9/2017	CJR	1
Carbon Tetrachloride	< 0.21	ug/l	0.21	0.68	1	8260B		11/9/2017	CJR	1
Chlorobenzene	< 0.27	ug/l	0.27	0.86	1	8260B		11/9/2017	CJR	1
Chloroethane	< 0.5	ug/l	0.5	1.6	1	8260B		11/9/2017	CJR	1
Chloroform	< 0.96	ug/l	0.96	3.04	1	8260B		11/9/2017	CJR	1
Chloromethane	< 1.3	ug/l	1.3	4.15	1	8260B		11/9/2017	CJR	1
2-Chlorotoluene	< 0.36	ug/l	0.36	1.15	1	8260B		11/9/2017	CJR	1
4-Chlorotoluene	< 0.35	ug/l	0.35	1.11	1	8260B		11/9/2017	CJR	1
1,2-Dibromo-3-chloropropane	< 1.88	ug/l	1.88	5.98	1	8260B		11/9/2017	CJR	1
Dibromochloromethane	< 0.45	ug/l	0.45	1.44	1	8260B		11/9/2017	CJR	1
1,4-Dichlorobenzene	< 0.42	ug/l	0.42	1.34	1	8260B		11/9/2017	CJR	1
1,3-Dichlorobenzene	< 0.45	ug/l	0.45	1.43	1	8260B		11/9/2017	CJR	1
1,2-Dichlorobenzene	< 0.34	ug/l	0.34	1.09	1	8260B		11/9/2017	CJR	1
Dichlorodifluoromethane	< 0.38	ug/l	0.38	1.2	1	8260B		11/9/2017	CJR	1
1,2-Dichloroethane	< 0.45	ug/l	0.45	1.43	1	8260B		11/9/2017	CJR	1
1,1-Dichloroethane	< 0.42	ug/l	0.42	1.34	1	8260B		11/9/2017	CJR	1
1,1-Dichloroethene	< 0.46	ug/l	0.46	1.47	1	8260B		11/9/2017	CJR	1
cis-1,2-Dichloroethene	< 0.41	ug/l	0.41	1.29	1	8260B		11/9/2017	CJR	1
trans-1,2-Dichloroethene	< 0.35	ug/l	0.35	1.12	1	8260B		11/9/2017	CJR	1
1,2-Dichloropropane	< 0.39	ug/l	0.39	1.24	1	8260B		11/9/2017	CJR	1
1,3-Dichloropropane	< 0.49	ug/l	0.49	1.55	1	8260B		11/9/2017	CJR	1
trans-1,3-Dichloropropene	< 0.42	ug/l	0.42	1.33	1	8260B		11/9/2017	CJR	1
cis-1,3-Dichloropropene	< 0.21	ug/l	0.21	0.65	1	8260B		11/9/2017	CJR	1



**Project Name** 222 N. ONEIDA  
**Project #** N2214G17

**Invoice #** E33843

**Lab Code** 5033843A  
**Sample ID** TRIP BLANK  
**Sample Matrix** Water  
**Sample Date** 10/31/2017

	<b>Result</b>	<b>Unit</b>	<b>LOD</b>	<b>LOQ</b>	<b>Dil</b>	<b>Method</b>	<b>Ext Date</b>	<b>Run Date</b>	<b>Analyst</b>	<b>Code</b>
Di-isopropyl ether	< 0.26	ug/l	0.26	0.83	1	8260B		11/9/2017	CJR	1
EDB (1,2-Dibromoethane)	< 0.34	ug/l	0.34	1.09	1	8260B		11/9/2017	CJR	1
Ethylbenzene	< 0.2	ug/l	0.2	0.63	1	8260B		11/9/2017	CJR	1
Hexachlorobutadiene	< 1.47	ug/l	1.47	4.68	1	8260B		11/9/2017	CJR	1
Isopropylbenzene	< 0.29	ug/l	0.29	0.93	1	8260B		11/9/2017	CJR	1
p-Isopropyltoluene	< 0.28	ug/l	0.28	0.91	1	8260B		11/9/2017	CJR	1
Methylene chloride	< 0.94	ug/l	0.94	2.98	1	8260B		11/9/2017	CJR	1
Methyl tert-butyl ether (MTBE)	< 0.82	ug/l	0.82	2.6	1	8260B		11/9/2017	CJR	1
Naphthalene	< 2.17	ug/l	2.17	6.9	1	8260B		11/9/2017	CJR	1
n-Propylbenzene	< 0.19	ug/l	0.19	0.62	1	8260B		11/9/2017	CJR	1
1,1,2,2-Tetrachloroethane	< 0.69	ug/l	0.69	2.21	1	8260B		11/9/2017	CJR	1
1,1,1,2-Tetrachloroethane	< 0.47	ug/l	0.47	1.48	1	8260B		11/9/2017	CJR	1
Tetrachloroethene	< 0.48	ug/l	0.48	1.52	1	8260B		11/9/2017	CJR	1
Toluene	< 0.67	ug/l	0.67	2.13	1	8260B		11/9/2017	CJR	1
1,2,4-Trichlorobenzene	< 1.29	ug/l	1.29	4.1	1	8260B		11/9/2017	CJR	1
1,2,3-Trichlorobenzene	< 0.83	ug/l	0.83	2.63	1	8260B		11/9/2017	CJR	1
1,1,1-Trichloroethane	< 0.35	ug/l	0.35	1.11	1	8260B		11/9/2017	CJR	1
1,1,2-Trichloroethane	< 0.65	ug/l	0.65	2.06	1	8260B		11/9/2017	CJR	1
Trichloroethene (TCE)	< 0.45	ug/l	0.45	1.43	1	8260B		11/9/2017	CJR	1
Trichlorofluoromethane	< 0.64	ug/l	0.64	2.04	1	8260B		11/9/2017	CJR	1
1,2,4-Trimethylbenzene	< 1.14	ug/l	1.14	3.63	1	8260B		11/9/2017	CJR	1
1,3,5-Trimethylbenzene	< 0.91	ug/l	0.91	2.9	1	8260B		11/9/2017	CJR	1
Vinyl Chloride	< 0.19	ug/l	0.19	0.62	1	8260B		11/9/2017	CJR	1
m&p-Xylene	< 1.56	ug/l	1.56	4.95	1	8260B		11/9/2017	CJR	1
o-Xylene	< 0.39	ug/l	0.39	1.25	1	8260B		11/9/2017	CJR	1
SUR - Dibromofluoromethane	95	REC %			1	8260B		11/9/2017	CJR	1
SUR - Toluene-d8	91	REC %			1	8260B		11/9/2017	CJR	1
SUR - 4-Bromofluorobenzene	93	REC %			1	8260B		11/9/2017	CJR	1
SUR - 1,2-Dichloroethane-d4	96	REC %			1	8260B		11/9/2017	CJR	1

**Project Name** 222 N. ONEIDA  
**Project #** N2214G17

**Invoice #** E33843

**Lab Code** 5033843B  
**Sample ID** SB-01  
**Sample Matrix** Soil  
**Sample Date** 11/3/2017

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
General										
General										
Solids Percent	87.6	%			1	5021		11/6/2017	NJC	1
Inorganic										
Metals										
Cadmium, Total	< 0.08	mg/Kg	0.08	0.25	1	6010B		11/10/2017	CWT	1
Lead, Total	108	mg/Kg	0.17	0.58	1	6010B		11/10/2017	CWT	1
Organic										
PAH SIM										
Acenaphthene	< 0.0151	mg/kg	0.0151	0.0481	1	M8270C	11/6/2017	11/13/2017	NJC	1
Acenaphthylene	< 0.0159	mg/kg	0.0159	0.0508	1	M8270C	11/6/2017	11/13/2017	NJC	1
Anthracene	< 0.0109	mg/kg	0.0109	0.0345	1	M8270C	11/6/2017	11/13/2017	NJC	1
Benzo(a)anthracene	0.0163 "J"	mg/kg	0.0116	0.037	1	M8270C	11/6/2017	11/13/2017	NJC	1
Benzo(a)pyrene	0.0158 "J"	mg/kg	0.0113	0.0359	1	M8270C	11/6/2017	11/13/2017	NJC	1
Benzo(b)fluoranthene	0.0297 "J"	mg/kg	0.013	0.041	1	M8270C	11/6/2017	11/13/2017	NJC	1
Benzo(g,h,i)perylene	0.0268 "J"	mg/kg	0.0114	0.036	1	M8270C	11/6/2017	11/13/2017	NJC	3
Benzo(k)fluoranthene	0.0177 "J"	mg/kg	0.0147	0.0469	1	M8270C	11/6/2017	11/13/2017	NJC	1
Chrysene	0.0231 "J"	mg/kg	0.0121	0.0383	1	M8270C	11/6/2017	11/13/2017	NJC	1
Dibenzo(a,h)anthracene	< 0.0078	mg/kg	0.0078	0.0251	1	M8270C	11/6/2017	11/13/2017	NJC	1
Fluoranthene	0.026 "J"	mg/kg	0.0147	0.0469	1	M8270C	11/6/2017	11/13/2017	NJC	2
Fluorene	< 0.0179	mg/kg	0.0179	0.057	1	M8270C	11/6/2017	11/13/2017	NJC	1
Indeno(1,2,3-cd)pyrene	< 0.0114	mg/kg	0.0114	0.0362	1	M8270C	11/6/2017	11/13/2017	NJC	1
1-Methyl naphthalene	0.036 "J"	mg/kg	0.0203	0.0645	1	M8270C	11/6/2017	11/13/2017	NJC	1
2-Methyl naphthalene	0.052	mg/kg	0.0113	0.0358	1	M8270C	11/6/2017	11/13/2017	NJC	1
Naphthalene	0.0303 "J"	mg/kg	0.0153	0.0486	1	M8270C	11/6/2017	11/13/2017	NJC	1
Phenanthrene	0.0219 "J"	mg/kg	0.0111	0.0352	1	M8270C	11/6/2017	11/13/2017	NJC	1
Pyrene	0.0242 "J"	mg/kg	0.0153	0.0487	1	M8270C	11/6/2017	11/13/2017	NJC	1
VOC's										
Benzene	< 0.03	mg/kg	0.03	0.096	1	8260B		11/8/2017	CJR	1
Bromobenzene	< 0.025	mg/kg	0.025	0.081	1	8260B		11/8/2017	CJR	1
Bromodichloromethane	< 0.074	mg/kg	0.074	0.24	1	8260B		11/8/2017	CJR	1
Bromoform	< 0.029	mg/kg	0.029	0.092	1	8260B		11/8/2017	CJR	1
tert-Butylbenzene	< 0.026	mg/kg	0.026	0.084	1	8260B		11/8/2017	CJR	1
sec-Butylbenzene	< 0.033	mg/kg	0.033	0.1	1	8260B		11/8/2017	CJR	1
n-Butylbenzene	< 0.04	mg/kg	0.04	0.13	1	8260B		11/8/2017	CJR	1
Carbon Tetrachloride	< 0.016	mg/kg	0.016	0.053	1	8260B		11/8/2017	CJR	1
Chlorobenzene	< 0.013	mg/kg	0.013	0.04	1	8260B		11/8/2017	CJR	1
Chloroethane	< 0.091	mg/kg	0.091	0.29	1	8260B		11/8/2017	CJR	1
Chloroform	< 0.035	mg/kg	0.035	0.11	1	8260B		11/8/2017	CJR	1
Chloromethane	< 0.076	mg/kg	0.076	0.24	1	8260B		11/8/2017	CJR	1
2-Chlorotoluene	< 0.015	mg/kg	0.015	0.047	1	8260B		11/8/2017	CJR	1
4-Chlorotoluene	< 0.018	mg/kg	0.018	0.057	1	8260B		11/8/2017	CJR	1
1,2-Dibromo-3-chloropropane	< 0.058	mg/kg	0.058	0.18	1	8260B		11/8/2017	CJR	1
Dibromochloromethane	< 0.025	mg/kg	0.025	0.079	1	8260B		11/8/2017	CJR	1
1,4-Dichlorobenzene	< 0.037	mg/kg	0.037	0.12	1	8260B		11/8/2017	CJR	1
1,3-Dichlorobenzene	< 0.037	mg/kg	0.037	0.12	1	8260B		11/8/2017	CJR	1
1,2-Dichlorobenzene	< 0.028	mg/kg	0.028	0.088	1	8260B		11/8/2017	CJR	1
Dichlorodifluoromethane	< 0.048	mg/kg	0.048	0.15	1	8260B		11/8/2017	CJR	1
1,2-Dichloroethane	< 0.038	mg/kg	0.038	0.12	1	8260B		11/8/2017	CJR	1
1,1-Dichloroethane	< 0.034	mg/kg	0.034	0.11	1	8260B		11/8/2017	CJR	1
1,1-Dichloroethene	< 0.022	mg/kg	0.022	0.069	1	8260B		11/8/2017	CJR	1

**Project Name** 222 N. ONEIDA  
**Project #** N2214G17

**Invoice #** E33843

**Lab Code** 5033843B  
**Sample ID** SB-01  
**Sample Matrix** Soil  
**Sample Date** 11/3/2017

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
cis-1,2-Dichloroethene	< 0.032	mg/kg	0.032	0.1	1	8260B		11/8/2017	CJR	1
trans-1,2-Dichloroethene	< 0.028	mg/kg	0.028	0.09	1	8260B		11/8/2017	CJR	1
1,2-Dichloropropane	< 0.035	mg/kg	0.035	0.11	1	8260B		11/8/2017	CJR	1
1,3-Dichloropropane	< 0.025	mg/kg	0.025	0.079	1	8260B		11/8/2017	CJR	1
trans-1,3-Dichloropropene	< 0.022	mg/kg	0.022	0.068	1	8260B		11/8/2017	CJR	1
cis-1,3-Dichloropropene	< 0.039	mg/kg	0.039	0.12	1	8260B		11/8/2017	CJR	1
Di-isopropyl ether	< 0.01	mg/kg	0.01	0.032	1	8260B		11/8/2017	CJR	1
EDB (1,2-Dibromoethane)	< 0.023	mg/kg	0.023	0.072	1	8260B		11/8/2017	CJR	1
Ethylbenzene	0.041 "J"	mg/kg	0.035	0.11	1	8260B		11/8/2017	CJR	1
Hexachlorobutadiene	< 0.085	mg/kg	0.085	0.27	1	8260B		11/8/2017	CJR	1
Isopropylbenzene	< 0.034	mg/kg	0.034	0.11	1	8260B		11/8/2017	CJR	1
p-Isopropyltoluene	< 0.029	mg/kg	0.029	0.093	1	8260B		11/8/2017	CJR	1
Methylene chloride	< 0.15	mg/kg	0.15	0.46	1	8260B		11/8/2017	CJR	1
Methyl tert-butyl ether (MTBE)	< 0.05	mg/kg	0.05	0.16	1	8260B		11/8/2017	CJR	1
Naphthalene	< 0.094	mg/kg	0.094	0.3	1	8260B		11/8/2017	CJR	1
n-Propylbenzene	< 0.033	mg/kg	0.033	0.1	1	8260B		11/8/2017	CJR	1
1,1,2,2-Tetrachloroethane	< 0.028	mg/kg	0.028	0.88	1	8260B		11/8/2017	CJR	1
1,1,1,2-Tetrachloroethane	< 0.028	mg/kg	0.028	0.09	1	8260B		11/8/2017	CJR	1
Tetrachloroethene	< 0.032	mg/kg	0.032	0.1	1	8260B		11/8/2017	CJR	1
Toluene	0.072 "J"	mg/kg	0.032	0.1	1	8260B		11/8/2017	CJR	1
1,2,4-Trichlorobenzene	< 0.064	mg/kg	0.064	0.2	1	8260B		11/8/2017	CJR	1
1,2,3-Trichlorobenzene	< 0.066	mg/kg	0.066	0.21	1	8260B		11/8/2017	CJR	1
1,1,1-Trichloroethane	< 0.03	mg/kg	0.03	0.96	1	8260B		11/8/2017	CJR	1
1,1,2-Trichloroethane	< 0.033	mg/kg	0.033	0.11	1	8260B		11/8/2017	CJR	1
Trichloroethene (TCE)	< 0.041	mg/kg	0.041	0.13	1	8260B		11/8/2017	CJR	1
Trichlorofluoromethane	< 0.041	mg/kg	0.041	0.13	1	8260B		11/8/2017	CJR	1
1,2,4-Trimethylbenzene	0.10	mg/kg	0.025	0.08	1	8260B		11/8/2017	CJR	1
1,3,5-Trimethylbenzene	< 0.032	mg/kg	0.032	0.1	1	8260B		11/8/2017	CJR	1
Vinyl Chloride	< 0.019	mg/kg	0.019	0.062	1	8260B		11/8/2017	CJR	1
m&p-Xylene	0.132 "J"	mg/kg	0.072	0.23	1	8260B		11/8/2017	CJR	1
o-Xylene	0.048 "J"	mg/kg	0.044	0.14	1	8260B		11/8/2017	CJR	1
SUR - 1,2-Dichloroethane-d4	97	Rec %			1	8260B		11/8/2017	CJR	1
SUR - 4-Bromofluorobenzene	98	Rec %			1	8260B		11/8/2017	CJR	1
SUR - Dibromofluoromethane	97	Rec %			1	8260B		11/8/2017	CJR	1
SUR - Toluene-d8	99	Rec %			1	8260B		11/8/2017	CJR	1

Project Name 222 N. ONEIDA  
Project # N2214G17

Invoice # E33843

Lab Code 5033843C  
Sample ID SB-6  
Sample Matrix Soil  
Sample Date 11/3/2017

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
General										
General										
Solids Percent	85.6	%			1	5021		11/6/2017	NJC	1
Inorganic										
Metals										
Cadmium, Total	< 0.08	mg/Kg	0.08	0.25	1	6010B		11/10/2017	CWT	1
Lead, Total	16	mg/Kg	0.17	0.58	1	6010B		11/10/2017	CWT	1
Organic										
PAH SIM										
Acenaphthene	0.041 "J"	mg/kg	0.0151	0.0481	1	M8270C	11/6/2017	11/13/2017	NJC	1
Acenaphthylene	< 0.0159	mg/kg	0.0159	0.0508	1	M8270C	11/6/2017	11/13/2017	NJC	1
Anthracene	0.089	mg/kg	0.0109	0.0345	1	M8270C	11/6/2017	11/13/2017	NJC	1
Benzo(a)anthracene	0.288	mg/kg	0.0116	0.037	1	M8270C	11/6/2017	11/13/2017	NJC	1
Benzo(a)pyrene	0.278	mg/kg	0.0113	0.0359	1	M8270C	11/6/2017	11/13/2017	NJC	1
Benzo(b)fluoranthene	0.42	mg/kg	0.013	0.041	1	M8270C	11/6/2017	11/13/2017	NJC	1
Benzo(g,h,i)perylene	0.247	mg/kg	0.0114	0.036	1	M8270C	11/6/2017	11/13/2017	NJC	1
Benzo(k)fluoranthene	0.159	mg/kg	0.0147	0.0469	1	M8270C	11/6/2017	11/13/2017	NJC	1
Chrysene	0.34	mg/kg	0.0121	0.0383	1	M8270C	11/6/2017	11/13/2017	NJC	1
Dibenzo(a,h)anthracene	0.0125 "J"	mg/kg	0.0078	0.0251	1	M8270C	11/6/2017	11/13/2017	NJC	1
Fluoranthene	0.76	mg/kg	0.0147	0.0469	1	M8270C	11/6/2017	11/13/2017	NJC	1
Fluorene	0.0197 "J"	mg/kg	0.0179	0.057	1	M8270C	11/6/2017	11/13/2017	NJC	1
Indeno(1,2,3-cd)pyrene	0.20	mg/kg	0.0114	0.0362	1	M8270C	11/6/2017	11/13/2017	NJC	1
1-Methyl naphthalene	< 0.0203	mg/kg	0.0203	0.0645	1	M8270C	11/6/2017	11/13/2017	NJC	1
2-Methyl naphthalene	< 0.0113	mg/kg	0.0113	0.0358	1	M8270C	11/6/2017	11/13/2017	NJC	1
Naphthalene	< 0.0153	mg/kg	0.0153	0.0486	1	M8270C	11/6/2017	11/13/2017	NJC	1
Phenanthrene	0.234	mg/kg	0.0111	0.0352	1	M8270C	11/6/2017	11/13/2017	NJC	1
Pyrene	0.66	mg/kg	0.0153	0.0487	1	M8270C	11/6/2017	11/13/2017	NJC	1
VOC's										
Benzene	< 0.03	mg/kg	0.03	0.096	1	8260B		11/8/2017	CJR	1
Bromobenzene	< 0.025	mg/kg	0.025	0.081	1	8260B		11/8/2017	CJR	1
Bromodichloromethane	< 0.074	mg/kg	0.074	0.24	1	8260B		11/8/2017	CJR	1
Bromoform	< 0.029	mg/kg	0.029	0.092	1	8260B		11/8/2017	CJR	1
tert-Butylbenzene	< 0.026	mg/kg	0.026	0.084	1	8260B		11/8/2017	CJR	1
sec-Butylbenzene	< 0.033	mg/kg	0.033	0.1	1	8260B		11/8/2017	CJR	1
n-Butylbenzene	< 0.04	mg/kg	0.04	0.13	1	8260B		11/8/2017	CJR	1
Carbon Tetrachloride	< 0.016	mg/kg	0.016	0.053	1	8260B		11/8/2017	CJR	1
Chlorobenzene	< 0.013	mg/kg	0.013	0.04	1	8260B		11/8/2017	CJR	1
Chloroethane	< 0.091	mg/kg	0.091	0.29	1	8260B		11/8/2017	CJR	1
Chloroform	< 0.035	mg/kg	0.035	0.11	1	8260B		11/8/2017	CJR	1
Chloromethane	< 0.076	mg/kg	0.076	0.24	1	8260B		11/8/2017	CJR	1
2-Chlorotoluene	< 0.015	mg/kg	0.015	0.047	1	8260B		11/8/2017	CJR	1
4-Chlorotoluene	< 0.018	mg/kg	0.018	0.057	1	8260B		11/8/2017	CJR	1
1,2-Dibromo-3-chloropropane	< 0.058	mg/kg	0.058	0.18	1	8260B		11/8/2017	CJR	1
Dibromochloromethane	< 0.025	mg/kg	0.025	0.079	1	8260B		11/8/2017	CJR	1
1,4-Dichlorobenzene	< 0.037	mg/kg	0.037	0.12	1	8260B		11/8/2017	CJR	1
1,3-Dichlorobenzene	< 0.037	mg/kg	0.037	0.12	1	8260B		11/8/2017	CJR	1
1,2-Dichlorobenzene	< 0.028	mg/kg	0.028	0.088	1	8260B		11/8/2017	CJR	1
Dichlorodifluoromethane	< 0.048	mg/kg	0.048	0.15	1	8260B		11/8/2017	CJR	1
1,2-Dichloroethane	< 0.038	mg/kg	0.038	0.12	1	8260B		11/8/2017	CJR	1
1,1-Dichloroethane	< 0.034	mg/kg	0.034	0.11	1	8260B		11/8/2017	CJR	1
1,1-Dichloroethene	< 0.022	mg/kg	0.022	0.069	1	8260B		11/8/2017	CJR	1

**Project Name** 222 N. ONEIDA  
**Project #** N2214G17

**Invoice #** E33843

**Lab Code** 5033843C  
**Sample ID** SB-6  
**Sample Matrix** Soil  
**Sample Date** 11/3/2017

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
cis-1,2-Dichloroethene	< 0.032	mg/kg	0.032	0.1	1	8260B		11/8/2017	CJR	1
trans-1,2-Dichloroethene	< 0.028	mg/kg	0.028	0.09	1	8260B		11/8/2017	CJR	1
1,2-Dichloropropane	< 0.035	mg/kg	0.035	0.11	1	8260B		11/8/2017	CJR	1
1,3-Dichloropropane	< 0.025	mg/kg	0.025	0.079	1	8260B		11/8/2017	CJR	1
trans-1,3-Dichloropropene	< 0.022	mg/kg	0.022	0.068	1	8260B		11/8/2017	CJR	1
cis-1,3-Dichloropropene	< 0.039	mg/kg	0.039	0.12	1	8260B		11/8/2017	CJR	1
Di-isopropyl ether	< 0.01	mg/kg	0.01	0.032	1	8260B		11/8/2017	CJR	1
EDB (1,2-Dibromoethane)	< 0.023	mg/kg	0.023	0.072	1	8260B		11/8/2017	CJR	1
Ethylbenzene	< 0.035	mg/kg	0.035	0.11	1	8260B		11/8/2017	CJR	1
Hexachlorobutadiene	< 0.085	mg/kg	0.085	0.27	1	8260B		11/8/2017	CJR	1
Isopropylbenzene	< 0.034	mg/kg	0.034	0.11	1	8260B		11/8/2017	CJR	1
p-Isopropyltoluene	< 0.029	mg/kg	0.029	0.093	1	8260B		11/8/2017	CJR	1
Methylene chloride	< 0.15	mg/kg	0.15	0.46	1	8260B		11/8/2017	CJR	1
Methyl tert-butyl ether (MTBE)	< 0.05	mg/kg	0.05	0.16	1	8260B		11/8/2017	CJR	1
Naphthalene	< 0.094	mg/kg	0.094	0.3	1	8260B		11/8/2017	CJR	1
n-Propylbenzene	< 0.033	mg/kg	0.033	0.1	1	8260B		11/8/2017	CJR	1
1,1,2,2-Tetrachloroethane	< 0.028	mg/kg	0.028	0.88	1	8260B		11/8/2017	CJR	1
1,1,1,2-Tetrachloroethane	< 0.028	mg/kg	0.028	0.09	1	8260B		11/8/2017	CJR	1
Tetrachloroethene	< 0.032	mg/kg	0.032	0.1	1	8260B		11/8/2017	CJR	1
Toluene	< 0.032	mg/kg	0.032	0.1	1	8260B		11/8/2017	CJR	1
1,2,4-Trichlorobenzene	< 0.064	mg/kg	0.064	0.2	1	8260B		11/8/2017	CJR	1
1,2,3-Trichlorobenzene	< 0.066	mg/kg	0.066	0.21	1	8260B		11/8/2017	CJR	1
1,1,1-Trichloroethane	< 0.03	mg/kg	0.03	0.96	1	8260B		11/8/2017	CJR	1
1,1,2-Trichloroethane	< 0.033	mg/kg	0.033	0.11	1	8260B		11/8/2017	CJR	1
Trichloroethene (TCE)	< 0.041	mg/kg	0.041	0.13	1	8260B		11/8/2017	CJR	1
Trichlorofluoromethane	< 0.041	mg/kg	0.041	0.13	1	8260B		11/8/2017	CJR	1
1,2,4-Trimethylbenzene	< 0.025	mg/kg	0.025	0.08	1	8260B		11/8/2017	CJR	1
1,3,5-Trimethylbenzene	< 0.032	mg/kg	0.032	0.1	1	8260B		11/8/2017	CJR	1
Vinyl Chloride	< 0.019	mg/kg	0.019	0.062	1	8260B		11/8/2017	CJR	1
m&p-Xylene	< 0.072	mg/kg	0.072	0.23	1	8260B		11/8/2017	CJR	1
o-Xylene	< 0.044	mg/kg	0.044	0.14	1	8260B		11/8/2017	CJR	1
SUR - Dibromofluoromethane	99	Rec %			1	8260B		11/8/2017	CJR	1
SUR - Toluene-d8	98	Rec %			1	8260B		11/8/2017	CJR	1
SUR - 4-Bromofluorobenzene	101	Rec %			1	8260B		11/8/2017	CJR	1
SUR - 1,2-Dichloroethane-d4	98	Rec %			1	8260B		11/8/2017	CJR	1

Project Name 222 N. ONEIDA  
Project # N2214G17

Invoice # E33843

Lab Code 5033843D  
Sample ID SB-7  
Sample Matrix Soil  
Sample Date 11/3/2017

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
General										
General										
Solids Percent	83.6	%			1	5021		11/6/2017	NJC	1
Inorganic										
Metals										
Cadmium, Total	0.14 "J"	mg/Kg	0.08	0.25	1	6010B		11/10/2017	CWT	1
Lead, Total	281	mg/Kg	0.17	0.58	1	6010B		11/10/2017	CWT	1
Organic										
PAH SIM										
Acenaphthene	0.044 "J"	mg/kg	0.0151	0.0481	1	M8270C	11/6/2017	11/13/2017	NJC	1
Acenaphthylene	< 0.0159	mg/kg	0.0159	0.0508	1	M8270C	11/6/2017	11/13/2017	NJC	1
Anthracene	0.079	mg/kg	0.0109	0.0345	1	M8270C	11/6/2017	11/13/2017	NJC	1
Benzo(a)anthracene	0.137	mg/kg	0.0116	0.037	1	M8270C	11/6/2017	11/13/2017	NJC	1
Benzo(a)pyrene	0.118	mg/kg	0.0113	0.0359	1	M8270C	11/6/2017	11/13/2017	NJC	1
Benzo(b)fluoranthene	0.216	mg/kg	0.013	0.041	1	M8270C	11/6/2017	11/13/2017	NJC	1
Benzo(g,h,i)perylene	0.139	mg/kg	0.0114	0.036	1	M8270C	11/6/2017	11/13/2017	NJC	1
Benzo(k)fluoranthene	0.106	mg/kg	0.0147	0.0469	1	M8270C	11/6/2017	11/13/2017	NJC	1
Chrysene	0.211	mg/kg	0.0121	0.0383	1	M8270C	11/6/2017	11/13/2017	NJC	1
Dibenzo(a,h)anthracene	0.0242 "J"	mg/kg	0.0078	0.0251	1	M8270C	11/6/2017	11/13/2017	NJC	1
Fluoranthene	0.65	mg/kg	0.0147	0.0469	1	M8270C	11/6/2017	11/13/2017	NJC	1
Fluorene	0.042 "J"	mg/kg	0.0179	0.057	1	M8270C	11/6/2017	11/13/2017	NJC	1
Indeno(1,2,3-cd)pyrene	0.111	mg/kg	0.0114	0.0362	1	M8270C	11/6/2017	11/13/2017	NJC	1
1-Methyl naphthalene	0.0253 "J"	mg/kg	0.0203	0.0645	1	M8270C	11/6/2017	11/13/2017	NJC	1
2-Methyl naphthalene	< 0.0113	mg/kg	0.0113	0.0358	1	M8270C	11/6/2017	11/13/2017	NJC	1
Naphthalene	0.0194 "J"	mg/kg	0.0153	0.0486	1	M8270C	11/6/2017	11/13/2017	NJC	1
Phenanthrene	0.45	mg/kg	0.0111	0.0352	1	M8270C	11/6/2017	11/13/2017	NJC	1
Pyrene	0.47	mg/kg	0.0153	0.0487	1	M8270C	11/6/2017	11/13/2017	NJC	1
VOC's										
Benzene	< 0.03	mg/kg	0.03	0.096	1	8260B		11/8/2017	CJR	1
Bromobenzene	< 0.025	mg/kg	0.025	0.081	1	8260B		11/8/2017	CJR	1
Bromodichloromethane	< 0.074	mg/kg	0.074	0.24	1	8260B		11/8/2017	CJR	1
Bromoform	< 0.029	mg/kg	0.029	0.092	1	8260B		11/8/2017	CJR	1
tert-Butylbenzene	< 0.026	mg/kg	0.026	0.084	1	8260B		11/8/2017	CJR	1
sec-Butylbenzene	< 0.033	mg/kg	0.033	0.1	1	8260B		11/8/2017	CJR	1
n-Butylbenzene	< 0.04	mg/kg	0.04	0.13	1	8260B		11/8/2017	CJR	1
Carbon Tetrachloride	< 0.016	mg/kg	0.016	0.053	1	8260B		11/8/2017	CJR	1
Chlorobenzene	< 0.013	mg/kg	0.013	0.04	1	8260B		11/8/2017	CJR	1
Chloroethane	< 0.091	mg/kg	0.091	0.29	1	8260B		11/8/2017	CJR	1
Chloroform	< 0.035	mg/kg	0.035	0.11	1	8260B		11/8/2017	CJR	1
Chloromethane	< 0.076	mg/kg	0.076	0.24	1	8260B		11/8/2017	CJR	1
2-Chlorotoluene	< 0.015	mg/kg	0.015	0.047	1	8260B		11/8/2017	CJR	1
4-Chlorotoluene	< 0.018	mg/kg	0.018	0.057	1	8260B		11/8/2017	CJR	1
1,2-Dibromo-3-chloropropane	< 0.058	mg/kg	0.058	0.18	1	8260B		11/8/2017	CJR	1
Dibromochloromethane	< 0.025	mg/kg	0.025	0.079	1	8260B		11/8/2017	CJR	1
1,4-Dichlorobenzene	< 0.037	mg/kg	0.037	0.12	1	8260B		11/8/2017	CJR	1
1,3-Dichlorobenzene	< 0.037	mg/kg	0.037	0.12	1	8260B		11/8/2017	CJR	1
1,2-Dichlorobenzene	< 0.028	mg/kg	0.028	0.088	1	8260B		11/8/2017	CJR	1
Dichlorodifluoromethane	< 0.048	mg/kg	0.048	0.15	1	8260B		11/8/2017	CJR	1
1,2-Dichloroethane	< 0.038	mg/kg	0.038	0.12	1	8260B		11/8/2017	CJR	1
1,1-Dichloroethane	< 0.034	mg/kg	0.034	0.11	1	8260B		11/8/2017	CJR	1
1,1-Dichloroethene	< 0.022	mg/kg	0.022	0.069	1	8260B		11/8/2017	CJR	1

**Project Name** 222 N. ONEIDA  
**Project #** N2214G17

**Invoice #** E33843

**Lab Code** 5033843D  
**Sample ID** SB-7  
**Sample Matrix** Soil  
**Sample Date** 11/3/2017

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
cis-1,2-Dichloroethene	< 0.032	mg/kg	0.032	0.1	1	8260B		11/8/2017	CJR	1
trans-1,2-Dichloroethene	< 0.028	mg/kg	0.028	0.09	1	8260B		11/8/2017	CJR	1
1,2-Dichloropropane	< 0.035	mg/kg	0.035	0.11	1	8260B		11/8/2017	CJR	1
1,3-Dichloropropane	< 0.025	mg/kg	0.025	0.079	1	8260B		11/8/2017	CJR	1
trans-1,3-Dichloropropene	< 0.022	mg/kg	0.022	0.068	1	8260B		11/8/2017	CJR	1
cis-1,3-Dichloropropene	< 0.039	mg/kg	0.039	0.12	1	8260B		11/8/2017	CJR	1
Di-isopropyl ether	< 0.01	mg/kg	0.01	0.032	1	8260B		11/8/2017	CJR	1
EDB (1,2-Dibromoethane)	< 0.023	mg/kg	0.023	0.072	1	8260B		11/8/2017	CJR	1
Ethylbenzene	< 0.035	mg/kg	0.035	0.11	1	8260B		11/8/2017	CJR	1
Hexachlorobutadiene	< 0.085	mg/kg	0.085	0.27	1	8260B		11/8/2017	CJR	1
Isopropylbenzene	< 0.034	mg/kg	0.034	0.11	1	8260B		11/8/2017	CJR	1
p-Isopropyltoluene	< 0.029	mg/kg	0.029	0.093	1	8260B		11/8/2017	CJR	1
Methylene chloride	< 0.15	mg/kg	0.15	0.46	1	8260B		11/8/2017	CJR	1
Methyl tert-butyl ether (MTBE)	< 0.05	mg/kg	0.05	0.16	1	8260B		11/8/2017	CJR	1
Naphthalene	< 0.094	mg/kg	0.094	0.3	1	8260B		11/8/2017	CJR	1
n-Propylbenzene	< 0.033	mg/kg	0.033	0.1	1	8260B		11/8/2017	CJR	1
1,1,2,2-Tetrachloroethane	< 0.028	mg/kg	0.028	0.88	1	8260B		11/8/2017	CJR	1
1,1,1,2-Tetrachloroethane	< 0.028	mg/kg	0.028	0.09	1	8260B		11/8/2017	CJR	1
Tetrachloroethene	< 0.032	mg/kg	0.032	0.1	1	8260B		11/8/2017	CJR	1
Toluene	< 0.032	mg/kg	0.032	0.1	1	8260B		11/8/2017	CJR	1
1,2,4-Trichlorobenzene	< 0.064	mg/kg	0.064	0.2	1	8260B		11/8/2017	CJR	1
1,2,3-Trichlorobenzene	< 0.066	mg/kg	0.066	0.21	1	8260B		11/8/2017	CJR	1
1,1,1-Trichloroethane	< 0.03	mg/kg	0.03	0.96	1	8260B		11/8/2017	CJR	1
1,1,2-Trichloroethane	< 0.033	mg/kg	0.033	0.11	1	8260B		11/8/2017	CJR	1
Trichloroethene (TCE)	< 0.041	mg/kg	0.041	0.13	1	8260B		11/8/2017	CJR	1
Trichlorofluoromethane	< 0.041	mg/kg	0.041	0.13	1	8260B		11/8/2017	CJR	1
1,2,4-Trimethylbenzene	0.098	mg/kg	0.025	0.08	1	8260B		11/8/2017	CJR	1
1,3,5-Trimethylbenzene	< 0.032	mg/kg	0.032	0.1	1	8260B		11/8/2017	CJR	1
Vinyl Chloride	< 0.019	mg/kg	0.019	0.062	1	8260B		11/8/2017	CJR	1
m&p-Xylene	< 0.072	mg/kg	0.072	0.23	1	8260B		11/8/2017	CJR	1
o-Xylene	< 0.044	mg/kg	0.044	0.14	1	8260B		11/8/2017	CJR	1
SUR - Toluene-d8	103	Rec %			1	8260B		11/8/2017	CJR	1
SUR - Dibromofluoromethane	93	Rec %			1	8260B		11/8/2017	CJR	1
SUR - 4-Bromofluorobenzene	97	Rec %			1	8260B		11/8/2017	CJR	1
SUR - 1,2-Dichloroethane-d4	99	Rec %			1	8260B		11/8/2017	CJR	1

Project Name 222 N. ONEIDA  
Project # N2214G17

Invoice # E33843

Lab Code 5033843E  
Sample ID SB-08  
Sample Matrix Soil  
Sample Date 11/3/2017

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
General										
General										
Solids Percent	89.6	%			1	5021		11/6/2017	NJC	1
Inorganic										
Metals										
Cadmium, Total	0.010 "J"	mg/Kg	0.08	0.25	1	6010B		11/10/2017	CWT	1
Lead, Total	114	mg/Kg	0.17	0.58	1	6010B		11/10/2017	CWT	1
Organic										
PAH SIM										
Acenaphthene	< 0.0151	mg/kg	0.0151	0.0481	1	M8270C	11/6/2017	11/13/2017	NJC	1
Acenaphthylene	< 0.0159	mg/kg	0.0159	0.0508	1	M8270C	11/6/2017	11/13/2017	NJC	1
Anthracene	0.04	mg/kg	0.0109	0.0345	1	M8270C	11/6/2017	11/13/2017	NJC	1
Benzo(a)anthracene	0.096	mg/kg	0.0116	0.037	1	M8270C	11/6/2017	11/13/2017	NJC	1
Benzo(a)pyrene	0.101	mg/kg	0.0113	0.0359	1	M8270C	11/6/2017	11/13/2017	NJC	1
Benzo(b)fluoranthene	0.176	mg/kg	0.013	0.041	1	M8270C	11/6/2017	11/13/2017	NJC	1
Benzo(g,h,i)perylene	0.138	mg/kg	0.0114	0.036	1	M8270C	11/6/2017	11/13/2017	NJC	1
Benzo(k)fluoranthene	0.087	mg/kg	0.0147	0.0469	1	M8270C	11/6/2017	11/13/2017	NJC	1
Chrysene	0.143	mg/kg	0.0121	0.0383	1	M8270C	11/6/2017	11/13/2017	NJC	1
Dibenzo(a,h)anthracene	< 0.0078	mg/kg	0.0078	0.0251	1	M8270C	11/6/2017	11/13/2017	NJC	1
Fluoranthene	0.314	mg/kg	0.0147	0.0469	1	M8270C	11/6/2017	11/13/2017	NJC	1
Fluorene	< 0.0179	mg/kg	0.0179	0.057	1	M8270C	11/6/2017	11/13/2017	NJC	1
Indeno(1,2,3-cd)pyrene	0.101	mg/kg	0.0114	0.0362	1	M8270C	11/6/2017	11/13/2017	NJC	1
1-Methyl naphthalene	< 0.0203	mg/kg	0.0203	0.0645	1	M8270C	11/6/2017	11/13/2017	NJC	1
2-Methyl naphthalene	< 0.0113	mg/kg	0.0113	0.0358	1	M8270C	11/6/2017	11/13/2017	NJC	1
Naphthalene	< 0.0153	mg/kg	0.0153	0.0486	1	M8270C	11/6/2017	11/13/2017	NJC	1
Phenanthrene	0.15	mg/kg	0.0111	0.0352	1	M8270C	11/6/2017	11/13/2017	NJC	1
Pyrene	0.246	mg/kg	0.0153	0.0487	1	M8270C	11/6/2017	11/13/2017	NJC	1
VOC's										
Benzene	< 0.03	mg/kg	0.03	0.096	1	8260B		11/8/2017	CJR	1
Bromobenzene	< 0.025	mg/kg	0.025	0.081	1	8260B		11/8/2017	CJR	1
Bromodichloromethane	< 0.074	mg/kg	0.074	0.24	1	8260B		11/8/2017	CJR	1
Bromoform	< 0.029	mg/kg	0.029	0.092	1	8260B		11/8/2017	CJR	1
tert-Butylbenzene	< 0.026	mg/kg	0.026	0.084	1	8260B		11/8/2017	CJR	1
sec-Butylbenzene	< 0.033	mg/kg	0.033	0.1	1	8260B		11/8/2017	CJR	1
n-Butylbenzene	< 0.04	mg/kg	0.04	0.13	1	8260B		11/8/2017	CJR	1
Carbon Tetrachloride	< 0.016	mg/kg	0.016	0.053	1	8260B		11/8/2017	CJR	1
Chlorobenzene	< 0.013	mg/kg	0.013	0.04	1	8260B		11/8/2017	CJR	1
Chloroethane	< 0.091	mg/kg	0.091	0.29	1	8260B		11/8/2017	CJR	1
Chloroform	< 0.035	mg/kg	0.035	0.11	1	8260B		11/8/2017	CJR	1
Chloromethane	< 0.076	mg/kg	0.076	0.24	1	8260B		11/8/2017	CJR	1
2-Chlorotoluene	< 0.015	mg/kg	0.015	0.047	1	8260B		11/8/2017	CJR	1
4-Chlorotoluene	< 0.018	mg/kg	0.018	0.057	1	8260B		11/8/2017	CJR	1
1,2-Dibromo-3-chloropropane	< 0.058	mg/kg	0.058	0.18	1	8260B		11/8/2017	CJR	1
Dibromochloromethane	< 0.025	mg/kg	0.025	0.079	1	8260B		11/8/2017	CJR	1
1,4-Dichlorobenzene	< 0.037	mg/kg	0.037	0.12	1	8260B		11/8/2017	CJR	1
1,3-Dichlorobenzene	< 0.037	mg/kg	0.037	0.12	1	8260B		11/8/2017	CJR	1
1,2-Dichlorobenzene	< 0.028	mg/kg	0.028	0.088	1	8260B		11/8/2017	CJR	1
Dichlorodifluoromethane	< 0.048	mg/kg	0.048	0.15	1	8260B		11/8/2017	CJR	1
1,2-Dichloroethane	< 0.038	mg/kg	0.038	0.12	1	8260B		11/8/2017	CJR	1
1,1-Dichloroethane	< 0.034	mg/kg	0.034	0.11	1	8260B		11/8/2017	CJR	1
1,1-Dichloroethene	< 0.022	mg/kg	0.022	0.069	1	8260B		11/8/2017	CJR	1



**Project Name** 222 N. ONEIDA  
**Project #** N2214G17

**Invoice #** E33843

**Lab Code** 5033843E  
**Sample ID** SB-08  
**Sample Matrix** Soil  
**Sample Date** 11/3/2017

	<b>Result</b>	<b>Unit</b>	<b>LOD</b>	<b>LOQ</b>	<b>Dil</b>	<b>Method</b>	<b>Ext Date</b>	<b>Run Date</b>	<b>Analyst</b>	<b>Code</b>
cis-1,2-Dichloroethene	< 0.032	mg/kg	0.032	0.1	1	8260B		11/8/2017	CJR	1
trans-1,2-Dichloroethene	< 0.028	mg/kg	0.028	0.09	1	8260B		11/8/2017	CJR	1
1,2-Dichloropropane	< 0.035	mg/kg	0.035	0.11	1	8260B		11/8/2017	CJR	1
1,3-Dichloropropane	< 0.025	mg/kg	0.025	0.079	1	8260B		11/8/2017	CJR	1
trans-1,3-Dichloropropene	< 0.022	mg/kg	0.022	0.068	1	8260B		11/8/2017	CJR	1
cis-1,3-Dichloropropene	< 0.039	mg/kg	0.039	0.12	1	8260B		11/8/2017	CJR	1
Di-isopropyl ether	< 0.01	mg/kg	0.01	0.032	1	8260B		11/8/2017	CJR	1
EDB (1,2-Dibromoethane)	< 0.023	mg/kg	0.023	0.072	1	8260B		11/8/2017	CJR	1
Ethylbenzene	< 0.035	mg/kg	0.035	0.11	1	8260B		11/8/2017	CJR	1
Hexachlorobutadiene	< 0.085	mg/kg	0.085	0.27	1	8260B		11/8/2017	CJR	1
Isopropylbenzene	< 0.034	mg/kg	0.034	0.11	1	8260B		11/8/2017	CJR	1
p-Isopropyltoluene	< 0.029	mg/kg	0.029	0.093	1	8260B		11/8/2017	CJR	1
Methylene chloride	< 0.15	mg/kg	0.15	0.46	1	8260B		11/8/2017	CJR	1
Methyl tert-butyl ether (MTBE)	< 0.05	mg/kg	0.05	0.16	1	8260B		11/8/2017	CJR	1
Naphthalene	< 0.094	mg/kg	0.094	0.3	1	8260B		11/8/2017	CJR	1
n-Propylbenzene	< 0.033	mg/kg	0.033	0.1	1	8260B		11/8/2017	CJR	1
1,1,2,2-Tetrachloroethane	< 0.028	mg/kg	0.028	0.88	1	8260B		11/8/2017	CJR	1
1,1,1,2-Tetrachloroethane	< 0.028	mg/kg	0.028	0.09	1	8260B		11/8/2017	CJR	1
Tetrachloroethene	< 0.032	mg/kg	0.032	0.1	1	8260B		11/8/2017	CJR	1
Toluene	< 0.032	mg/kg	0.032	0.1	1	8260B		11/8/2017	CJR	1
1,2,4-Trichlorobenzene	< 0.064	mg/kg	0.064	0.2	1	8260B		11/8/2017	CJR	1
1,2,3-Trichlorobenzene	< 0.066	mg/kg	0.066	0.21	1	8260B		11/8/2017	CJR	1
1,1,1-Trichloroethane	< 0.03	mg/kg	0.03	0.96	1	8260B		11/8/2017	CJR	1
1,1,2-Trichloroethane	< 0.033	mg/kg	0.033	0.11	1	8260B		11/8/2017	CJR	1
Trichloroethene (TCE)	< 0.041	mg/kg	0.041	0.13	1	8260B		11/8/2017	CJR	1
Trichlorofluoromethane	< 0.041	mg/kg	0.041	0.13	1	8260B		11/8/2017	CJR	1
1,2,4-Trimethylbenzene	< 0.025	mg/kg	0.025	0.08	1	8260B		11/8/2017	CJR	1
1,3,5-Trimethylbenzene	< 0.032	mg/kg	0.032	0.1	1	8260B		11/8/2017	CJR	1
Vinyl Chloride	< 0.019	mg/kg	0.019	0.062	1	8260B		11/8/2017	CJR	1
m&p-Xylene	< 0.072	mg/kg	0.072	0.23	1	8260B		11/8/2017	CJR	1
o-Xylene	< 0.044	mg/kg	0.044	0.14	1	8260B		11/8/2017	CJR	1
SUR - Toluene-d8	101	Rec %			1	8260B		11/8/2017	CJR	1
SUR - 1,2-Dichloroethane-d4	99	Rec %			1	8260B		11/8/2017	CJR	1
SUR - 4-Bromofluorobenzene	99	Rec %			1	8260B		11/8/2017	CJR	1
SUR - Dibromofluoromethane	93	Rec %			1	8260B		11/8/2017	CJR	1

**Project Name** 222 N. ONEIDA  
**Project #** N2214G17

**Invoice #** E33843

**Lab Code** 5033843F  
**Sample ID** SB-09  
**Sample Matrix** Soil  
**Sample Date** 11/3/2017

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
General										
General										
Solids Percent	82.6	%			1	5021		11/6/2017	NJC	1
Inorganic										
Metals										
Cadmium, Total	0.36	mg/Kg	0.08	0.25	1	6010B		11/10/2017	CWT	1
Lead, Total	397	mg/Kg	0.17	0.58	1	6010B		11/10/2017	CWT	1
Organic										
PAH SIM										
Acenaphthene	< 0.0151	mg/kg	0.0151	0.0481	1	M8270C	11/6/2017	11/13/2017	NJC	1
Acenaphthylene	0.0163 "J"	mg/kg	0.0159	0.0508	1	M8270C	11/6/2017	11/13/2017	NJC	1
Anthracene	0.032 "J"	mg/kg	0.0109	0.0345	1	M8270C	11/6/2017	11/13/2017	NJC	1
Benzo(a)anthracene	0.062	mg/kg	0.0116	0.037	1	M8270C	11/6/2017	11/13/2017	NJC	1
Benzo(a)pyrene	0.056	mg/kg	0.0113	0.0359	1	M8270C	11/6/2017	11/13/2017	NJC	1
Benzo(b)fluoranthene	0.086	mg/kg	0.013	0.041	1	M8270C	11/6/2017	11/13/2017	NJC	1
Benzo(g,h,i)perylene	0.10	mg/kg	0.0114	0.036	1	M8270C	11/6/2017	11/13/2017	NJC	1
Benzo(k)fluoranthene	0.033 "J"	mg/kg	0.0147	0.0469	1	M8270C	11/6/2017	11/13/2017	NJC	1
Chrysene	0.162	mg/kg	0.0121	0.0383	1	M8270C	11/6/2017	11/13/2017	NJC	1
Dibenzo(a,h)anthracene	0.0197 "J"	mg/kg	0.0078	0.0251	1	M8270C	11/6/2017	11/13/2017	NJC	1
Fluoranthene	0.197	mg/kg	0.0147	0.0469	1	M8270C	11/6/2017	11/13/2017	NJC	1
Fluorene	0.0277 "J"	mg/kg	0.0179	0.057	1	M8270C	11/6/2017	11/13/2017	NJC	1
Indeno(1,2,3-cd)pyrene	0.047	mg/kg	0.0114	0.0362	1	M8270C	11/6/2017	11/13/2017	NJC	1
1-Methyl naphthalene	0.0239 "J"	mg/kg	0.0203	0.0645	1	M8270C	11/6/2017	11/13/2017	NJC	1
2-Methyl naphthalene	0.0197 "J"	mg/kg	0.0113	0.0358	1	M8270C	11/6/2017	11/13/2017	NJC	1
Naphthalene	0.0239 "J"	mg/kg	0.0153	0.0486	1	M8270C	11/6/2017	11/13/2017	NJC	1
Phenanthrene	0.139	mg/kg	0.0111	0.0352	1	M8270C	11/6/2017	11/13/2017	NJC	1
Pyrene	0.246	mg/kg	0.0153	0.0487	1	M8270C	11/6/2017	11/13/2017	NJC	1
VOC's										
Benzene	< 0.03	mg/kg	0.03	0.096	1	8260B		11/8/2017	CJR	1
Bromobenzene	< 0.025	mg/kg	0.025	0.081	1	8260B		11/8/2017	CJR	1
Bromodichloromethane	< 0.074	mg/kg	0.074	0.24	1	8260B		11/8/2017	CJR	1
Bromoform	< 0.029	mg/kg	0.029	0.092	1	8260B		11/8/2017	CJR	1
tert-Butylbenzene	< 0.026	mg/kg	0.026	0.084	1	8260B		11/8/2017	CJR	1
sec-Butylbenzene	< 0.033	mg/kg	0.033	0.1	1	8260B		11/8/2017	CJR	1
n-Butylbenzene	0.054 "J"	mg/kg	0.04	0.13	1	8260B		11/8/2017	CJR	1
Carbon Tetrachloride	< 0.016	mg/kg	0.016	0.053	1	8260B		11/8/2017	CJR	1
Chlorobenzene	< 0.013	mg/kg	0.013	0.04	1	8260B		11/8/2017	CJR	1
Chloroethane	< 0.091	mg/kg	0.091	0.29	1	8260B		11/8/2017	CJR	1
Chloroform	< 0.035	mg/kg	0.035	0.11	1	8260B		11/8/2017	CJR	1
Chloromethane	< 0.076	mg/kg	0.076	0.24	1	8260B		11/8/2017	CJR	1
2-Chlorotoluene	< 0.015	mg/kg	0.015	0.047	1	8260B		11/8/2017	CJR	1
4-Chlorotoluene	< 0.018	mg/kg	0.018	0.057	1	8260B		11/8/2017	CJR	1
1,2-Dibromo-3-chloropropane	< 0.058	mg/kg	0.058	0.18	1	8260B		11/8/2017	CJR	1
Dibromochloromethane	< 0.025	mg/kg	0.025	0.079	1	8260B		11/8/2017	CJR	1
1,4-Dichlorobenzene	< 0.037	mg/kg	0.037	0.12	1	8260B		11/8/2017	CJR	1
1,3-Dichlorobenzene	< 0.037	mg/kg	0.037	0.12	1	8260B		11/8/2017	CJR	1
1,2-Dichlorobenzene	< 0.028	mg/kg	0.028	0.088	1	8260B		11/8/2017	CJR	1
Dichlorodifluoromethane	< 0.048	mg/kg	0.048	0.15	1	8260B		11/8/2017	CJR	1
1,2-Dichloroethane	< 0.038	mg/kg	0.038	0.12	1	8260B		11/8/2017	CJR	1
1,1-Dichloroethane	< 0.034	mg/kg	0.034	0.11	1	8260B		11/8/2017	CJR	1
1,1-Dichloroethene	< 0.022	mg/kg	0.022	0.069	1	8260B		11/8/2017	CJR	1

**Project Name** 222 N. ONEIDA  
**Project #** N2214G17

**Invoice #** E33843

**Lab Code** 5033843F  
**Sample ID** SB-09  
**Sample Matrix** Soil  
**Sample Date** 11/3/2017

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
cis-1,2-Dichloroethene	< 0.032	mg/kg	0.032	0.1	1	8260B		11/8/2017	CJR	1
trans-1,2-Dichloroethene	< 0.028	mg/kg	0.028	0.09	1	8260B		11/8/2017	CJR	1
1,2-Dichloropropane	< 0.035	mg/kg	0.035	0.11	1	8260B		11/8/2017	CJR	1
1,3-Dichloropropane	< 0.025	mg/kg	0.025	0.079	1	8260B		11/8/2017	CJR	1
trans-1,3-Dichloropropene	< 0.022	mg/kg	0.022	0.068	1	8260B		11/8/2017	CJR	1
cis-1,3-Dichloropropene	< 0.039	mg/kg	0.039	0.12	1	8260B		11/8/2017	CJR	1
Di-isopropyl ether	< 0.01	mg/kg	0.01	0.032	1	8260B		11/8/2017	CJR	1
EDB (1,2-Dibromoethane)	< 0.023	mg/kg	0.023	0.072	1	8260B		11/8/2017	CJR	1
Ethylbenzene	< 0.035	mg/kg	0.035	0.11	1	8260B		11/8/2017	CJR	1
Hexachlorobutadiene	< 0.085	mg/kg	0.085	0.27	1	8260B		11/8/2017	CJR	1
Isopropylbenzene	< 0.034	mg/kg	0.034	0.11	1	8260B		11/8/2017	CJR	1
p-Isopropyltoluene	< 0.029	mg/kg	0.029	0.093	1	8260B		11/8/2017	CJR	1
Methylene chloride	< 0.15	mg/kg	0.15	0.46	1	8260B		11/8/2017	CJR	1
Methyl tert-butyl ether (MTBE)	< 0.05	mg/kg	0.05	0.16	1	8260B		11/8/2017	CJR	1
Naphthalene	< 0.094	mg/kg	0.094	0.3	1	8260B		11/8/2017	CJR	1
n-Propylbenzene	< 0.033	mg/kg	0.033	0.1	1	8260B		11/8/2017	CJR	1
1,1,2,2-Tetrachloroethane	< 0.028	mg/kg	0.028	0.88	1	8260B		11/8/2017	CJR	1
1,1,1,2-Tetrachloroethane	< 0.028	mg/kg	0.028	0.09	1	8260B		11/8/2017	CJR	1
Tetrachloroethene	< 0.032	mg/kg	0.032	0.1	1	8260B		11/8/2017	CJR	1
Toluene	< 0.032	mg/kg	0.032	0.1	1	8260B		11/8/2017	CJR	1
1,2,4-Trichlorobenzene	< 0.064	mg/kg	0.064	0.2	1	8260B		11/8/2017	CJR	1
1,2,3-Trichlorobenzene	< 0.066	mg/kg	0.066	0.21	1	8260B		11/8/2017	CJR	1
1,1,1-Trichloroethane	< 0.03	mg/kg	0.03	0.96	1	8260B		11/8/2017	CJR	1
1,1,2-Trichloroethane	< 0.033	mg/kg	0.033	0.11	1	8260B		11/8/2017	CJR	1
Trichloroethene (TCE)	< 0.041	mg/kg	0.041	0.13	1	8260B		11/8/2017	CJR	1
Trichlorofluoromethane	< 0.041	mg/kg	0.041	0.13	1	8260B		11/8/2017	CJR	1
1,2,4-Trimethylbenzene	< 0.025	mg/kg	0.025	0.08	1	8260B		11/8/2017	CJR	1
1,3,5-Trimethylbenzene	< 0.032	mg/kg	0.032	0.1	1	8260B		11/8/2017	CJR	1
Vinyl Chloride	< 0.019	mg/kg	0.019	0.062	1	8260B		11/8/2017	CJR	1
m&p-Xylene	< 0.072	mg/kg	0.072	0.23	1	8260B		11/8/2017	CJR	1
o-Xylene	< 0.044	mg/kg	0.044	0.14	1	8260B		11/8/2017	CJR	1
SUR - 1,2-Dichloroethane-d4	103	Rec %			1	8260B		11/8/2017	CJR	1
SUR - 4-Bromofluorobenzene	98	Rec %			1	8260B		11/8/2017	CJR	1
SUR - Dibromofluoromethane	99	Rec %			1	8260B		11/8/2017	CJR	1
SUR - Toluene-d8	96	Rec %			1	8260B		11/8/2017	CJR	1

Project Name 222 N. ONEIDA  
Project # N2214G17

Invoice # E33843

Lab Code 5033843G  
Sample ID SB-10  
Sample Matrix Soil  
Sample Date 11/3/2017

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
General										
General										
Solids Percent	87.7	%			1	5021		11/6/2017	NJC	1
Inorganic										
Metals										
Cadmium, Total	< 0.08	mg/Kg	0.08	0.25	1	6010B		11/10/2017	CWT	1
Lead, Total	54	mg/Kg	0.17	0.58	1	6010B		11/10/2017	CWT	1
Organic										
PAH SIM										
Acenaphthene	< 0.0151	mg/kg	0.0151	0.0481	1	M8270C	11/6/2017	11/13/2017	NJC	1
Acenaphthylene	< 0.0159	mg/kg	0.0159	0.0508	1	M8270C	11/6/2017	11/13/2017	NJC	1
Anthracene	0.016 "J"	mg/kg	0.0109	0.0345	1	M8270C	11/6/2017	11/13/2017	NJC	1
Benzo(a)anthracene	0.039	mg/kg	0.0116	0.037	1	M8270C	11/6/2017	11/13/2017	NJC	1
Benzo(a)pyrene	0.037	mg/kg	0.0113	0.0359	1	M8270C	11/6/2017	11/13/2017	NJC	1
Benzo(b)fluoranthene	0.068	mg/kg	0.013	0.041	1	M8270C	11/6/2017	11/13/2017	NJC	1
Benzo(g,h,i)perylene	0.045	mg/kg	0.0114	0.036	1	M8270C	11/6/2017	11/13/2017	NJC	1
Benzo(k)fluoranthene	0.0283 "J"	mg/kg	0.0147	0.0469	1	M8270C	11/6/2017	11/13/2017	NJC	1
Chrysene	0.058	mg/kg	0.0121	0.0383	1	M8270C	11/6/2017	11/13/2017	NJC	1
Dibenzo(a,h)anthracene	< 0.0078	mg/kg	0.0078	0.0251	1	M8270C	11/6/2017	11/13/2017	NJC	1
Fluoranthene	0.121	mg/kg	0.0147	0.0469	1	M8270C	11/6/2017	11/13/2017	NJC	1
Fluorene	< 0.0179	mg/kg	0.0179	0.057	1	M8270C	11/6/2017	11/13/2017	NJC	1
Indeno(1,2,3-cd)pyrene	0.034 "J"	mg/kg	0.0114	0.0362	1	M8270C	11/6/2017	11/13/2017	NJC	1
1-Methyl naphthalene	< 0.0203	mg/kg	0.0203	0.0645	1	M8270C	11/6/2017	11/13/2017	NJC	1
2-Methyl naphthalene	< 0.0113	mg/kg	0.0113	0.0358	1	M8270C	11/6/2017	11/13/2017	NJC	1
Naphthalene	< 0.0153	mg/kg	0.0153	0.0486	1	M8270C	11/6/2017	11/13/2017	NJC	1
Phenanthrene	0.062	mg/kg	0.0111	0.0352	1	M8270C	11/6/2017	11/13/2017	NJC	1
Pyrene	0.095	mg/kg	0.0153	0.0487	1	M8270C	11/6/2017	11/13/2017	NJC	1
VOC's										
Benzene	< 0.03	mg/kg	0.03	0.096	1	8260B		11/8/2017	CJR	1
Bromobenzene	< 0.025	mg/kg	0.025	0.081	1	8260B		11/8/2017	CJR	1
Bromodichloromethane	< 0.074	mg/kg	0.074	0.24	1	8260B		11/8/2017	CJR	1
Bromoform	< 0.029	mg/kg	0.029	0.092	1	8260B		11/8/2017	CJR	1
tert-Butylbenzene	< 0.026	mg/kg	0.026	0.084	1	8260B		11/8/2017	CJR	1
sec-Butylbenzene	< 0.033	mg/kg	0.033	0.1	1	8260B		11/8/2017	CJR	1
n-Butylbenzene	< 0.04	mg/kg	0.04	0.13	1	8260B		11/8/2017	CJR	1
Carbon Tetrachloride	< 0.016	mg/kg	0.016	0.053	1	8260B		11/8/2017	CJR	1
Chlorobenzene	< 0.013	mg/kg	0.013	0.04	1	8260B		11/8/2017	CJR	1
Chloroethane	< 0.091	mg/kg	0.091	0.29	1	8260B		11/8/2017	CJR	1
Chloroform	< 0.035	mg/kg	0.035	0.11	1	8260B		11/8/2017	CJR	1
Chloromethane	< 0.076	mg/kg	0.076	0.24	1	8260B		11/8/2017	CJR	1
2-Chlorotoluene	< 0.015	mg/kg	0.015	0.047	1	8260B		11/8/2017	CJR	1
4-Chlorotoluene	< 0.018	mg/kg	0.018	0.057	1	8260B		11/8/2017	CJR	1
1,2-Dibromo-3-chloropropane	< 0.058	mg/kg	0.058	0.18	1	8260B		11/8/2017	CJR	1
Dibromochloromethane	< 0.025	mg/kg	0.025	0.079	1	8260B		11/8/2017	CJR	1
1,4-Dichlorobenzene	< 0.037	mg/kg	0.037	0.12	1	8260B		11/8/2017	CJR	1
1,3-Dichlorobenzene	< 0.037	mg/kg	0.037	0.12	1	8260B		11/8/2017	CJR	1
1,2-Dichlorobenzene	< 0.028	mg/kg	0.028	0.088	1	8260B		11/8/2017	CJR	1
Dichlorodifluoromethane	< 0.048	mg/kg	0.048	0.15	1	8260B		11/8/2017	CJR	1
1,2-Dichloroethane	< 0.038	mg/kg	0.038	0.12	1	8260B		11/8/2017	CJR	1
1,1-Dichloroethane	< 0.034	mg/kg	0.034	0.11	1	8260B		11/8/2017	CJR	1
1,1-Dichloroethene	< 0.022	mg/kg	0.022	0.069	1	8260B		11/8/2017	CJR	1

**Project Name** 222 N. ONEIDA  
**Project #** N2214G17

**Invoice #** E33843

**Lab Code** 5033843G  
**Sample ID** SB-10  
**Sample Matrix** Soil  
**Sample Date** 11/3/2017

	<b>Result</b>	<b>Unit</b>	<b>LOD</b>	<b>LOQ</b>	<b>Dil</b>	<b>Method</b>	<b>Ext Date</b>	<b>Run Date</b>	<b>Analyst</b>	<b>Code</b>
cis-1,2-Dichloroethene	< 0.032	mg/kg	0.032	0.1	1	8260B		11/8/2017	CJR	1
trans-1,2-Dichloroethene	< 0.028	mg/kg	0.028	0.09	1	8260B		11/8/2017	CJR	1
1,2-Dichloropropane	< 0.035	mg/kg	0.035	0.11	1	8260B		11/8/2017	CJR	1
1,3-Dichloropropane	< 0.025	mg/kg	0.025	0.079	1	8260B		11/8/2017	CJR	1
trans-1,3-Dichloropropene	< 0.022	mg/kg	0.022	0.068	1	8260B		11/8/2017	CJR	1
cis-1,3-Dichloropropene	< 0.039	mg/kg	0.039	0.12	1	8260B		11/8/2017	CJR	1
Di-isopropyl ether	< 0.01	mg/kg	0.01	0.032	1	8260B		11/8/2017	CJR	1
EDB (1,2-Dibromoethane)	< 0.023	mg/kg	0.023	0.072	1	8260B		11/8/2017	CJR	1
Ethylbenzene	< 0.035	mg/kg	0.035	0.11	1	8260B		11/8/2017	CJR	1
Hexachlorobutadiene	< 0.085	mg/kg	0.085	0.27	1	8260B		11/8/2017	CJR	1
Isopropylbenzene	< 0.034	mg/kg	0.034	0.11	1	8260B		11/8/2017	CJR	1
p-Isopropyltoluene	< 0.029	mg/kg	0.029	0.093	1	8260B		11/8/2017	CJR	1
Methylene chloride	< 0.15	mg/kg	0.15	0.46	1	8260B		11/8/2017	CJR	1
Methyl tert-butyl ether (MTBE)	< 0.05	mg/kg	0.05	0.16	1	8260B		11/8/2017	CJR	1
Naphthalene	< 0.094	mg/kg	0.094	0.3	1	8260B		11/8/2017	CJR	1
n-Propylbenzene	< 0.033	mg/kg	0.033	0.1	1	8260B		11/8/2017	CJR	1
1,1,2,2-Tetrachloroethane	< 0.028	mg/kg	0.028	0.88	1	8260B		11/8/2017	CJR	1
1,1,1,2-Tetrachloroethane	< 0.028	mg/kg	0.028	0.09	1	8260B		11/8/2017	CJR	1
Tetrachloroethene	< 0.032	mg/kg	0.032	0.1	1	8260B		11/8/2017	CJR	1
Toluene	< 0.032	mg/kg	0.032	0.1	1	8260B		11/8/2017	CJR	1
1,2,4-Trichlorobenzene	< 0.064	mg/kg	0.064	0.2	1	8260B		11/8/2017	CJR	1
1,2,3-Trichlorobenzene	< 0.066	mg/kg	0.066	0.21	1	8260B		11/8/2017	CJR	1
1,1,1-Trichloroethane	< 0.03	mg/kg	0.03	0.96	1	8260B		11/8/2017	CJR	1
1,1,2-Trichloroethane	< 0.033	mg/kg	0.033	0.11	1	8260B		11/8/2017	CJR	1
Trichloroethene (TCE)	< 0.041	mg/kg	0.041	0.13	1	8260B		11/8/2017	CJR	1
Trichlorofluoromethane	< 0.041	mg/kg	0.041	0.13	1	8260B		11/8/2017	CJR	1
1,2,4-Trimethylbenzene	< 0.025	mg/kg	0.025	0.08	1	8260B		11/8/2017	CJR	1
1,3,5-Trimethylbenzene	< 0.032	mg/kg	0.032	0.1	1	8260B		11/8/2017	CJR	1
Vinyl Chloride	< 0.019	mg/kg	0.019	0.062	1	8260B		11/8/2017	CJR	1
m&p-Xylene	< 0.072	mg/kg	0.072	0.23	1	8260B		11/8/2017	CJR	1
o-Xylene	< 0.044	mg/kg	0.044	0.14	1	8260B		11/8/2017	CJR	1
SUR - 1,2-Dichloroethane-d4	119	Rec %			1	8260B		11/8/2017	CJR	1
SUR - 4-Bromofluorobenzene	97	Rec %			1	8260B		11/8/2017	CJR	1
SUR - Dibromofluoromethane	100	Rec %			1	8260B		11/8/2017	CJR	1
SUR - Toluene-d8	93	Rec %			1	8260B		11/8/2017	CJR	1

Project Name 222 N. ONEIDA  
Project # N2214G17

Invoice # E33843

Lab Code 5033843H  
Sample ID TW-8  
Sample Matrix Water  
Sample Date 11/3/2017

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
Inorganic										
Metals										
Cadmium, Dissolved	0.6 "J"	ug/L	0.4	1.3	1	200.7		11/8/2017	CWT	1
Lead, Dissolved	10.0	ug/L	0.9	3	1	7421		11/7/2017	CWT	1
Organic										
PAH SIM										
Acenaphthene	0.056	ug/l	0.016	0.05	1	M8270C	11/7/2017	11/8/2017	NJC	1
Acenaphthylene	< 0.019	ug/l	0.019	0.061	1	M8270C	11/7/2017	11/8/2017	NJC	1
Anthracene	0.062 "J"	ug/l	0.019	0.062	1	M8270C	11/7/2017	11/8/2017	NJC	1
Benzo(a)anthracene	0.0268 "J"	ug/l	0.017	0.054	1	M8270C	11/7/2017	11/8/2017	NJC	5
Benzo(a)pyrene	< 0.02	ug/l	0.02	0.065	1	M8270C	11/7/2017	11/8/2017	NJC	1
Benzo(b)fluoranthene	0.0238 "J"	ug/l	0.018	0.058	1	M8270C	11/7/2017	11/8/2017	NJC	1
Benzo(g,h,i)perylene	< 0.025	ug/l	0.025	0.081	1	M8270C	11/7/2017	11/8/2017	NJC	1
Benzo(k)fluoranthene	< 0.016	ug/l	0.016	0.05	1	M8270C	11/7/2017	11/8/2017	NJC	1
Chrysene	< 0.02	ug/l	0.02	0.065	1	M8270C	11/7/2017	11/8/2017	NJC	1
Dibenzo(a,h)anthracene	< 0.025	ug/l	0.025	0.078	1	M8270C	11/7/2017	11/8/2017	NJC	1
Fluoranthene	0.094	ug/l	0.017	0.053	1	M8270C	11/7/2017	11/8/2017	NJC	1
Fluorene	0.0305 "J"	ug/l	0.021	0.066	1	M8270C	11/7/2017	11/8/2017	NJC	1
Indeno(1,2,3-cd)pyrene	< 0.023	ug/l	0.023	0.074	1	M8270C	11/7/2017	11/8/2017	NJC	1
1-Methyl naphthalene	0.063 "J"	ug/l	0.024	0.076	1	M8270C	11/7/2017	11/8/2017	NJC	1
2-Methyl naphthalene	0.097	ug/l	0.024	0.075	1	M8270C	11/7/2017	11/8/2017	NJC	1
Naphthalene	0.098	ug/l	0.025	0.081	1	M8270C	11/7/2017	11/8/2017	NJC	1
Phenanthrene	0.245	ug/l	0.025	0.081	1	M8270C	11/7/2017	11/8/2017	NJC	1
Pyrene	0.059 "J"	ug/l	0.02	0.063	1	M8270C	11/7/2017	11/8/2017	NJC	1
VOC's										
Benzene	< 0.17	ug/l	0.17	0.55	1	8260B		11/9/2017	CJR	1
Bromobenzene	< 0.43	ug/l	0.43	1.37	1	8260B		11/9/2017	CJR	1
Bromodichloromethane	< 0.31	ug/l	0.31	1	1	8260B		11/9/2017	CJR	1
Bromoform	< 0.49	ug/l	0.49	1.56	1	8260B		11/9/2017	CJR	1
tert-Butylbenzene	< 0.39	ug/l	0.39	1.23	1	8260B		11/9/2017	CJR	1
sec-Butylbenzene	< 0.24	ug/l	0.24	0.76	1	8260B		11/9/2017	CJR	1
n-Butylbenzene	< 0.34	ug/l	0.34	1.08	1	8260B		11/9/2017	CJR	1
Carbon Tetrachloride	< 0.21	ug/l	0.21	0.68	1	8260B		11/9/2017	CJR	1
Chlorobenzene	< 0.27	ug/l	0.27	0.86	1	8260B		11/9/2017	CJR	1
Chloroethane	< 0.5	ug/l	0.5	1.6	1	8260B		11/9/2017	CJR	1
Chloroform	< 0.96	ug/l	0.96	3.04	1	8260B		11/9/2017	CJR	1
Chloromethane	< 1.3	ug/l	1.3	4.15	1	8260B		11/9/2017	CJR	1
2-Chlorotoluene	< 0.36	ug/l	0.36	1.15	1	8260B		11/9/2017	CJR	1
4-Chlorotoluene	< 0.35	ug/l	0.35	1.11	1	8260B		11/9/2017	CJR	1
1,2-Dibromo-3-chloropropane	< 1.88	ug/l	1.88	5.98	1	8260B		11/9/2017	CJR	1
Dibromochloromethane	< 0.45	ug/l	0.45	1.44	1	8260B		11/9/2017	CJR	1
1,4-Dichlorobenzene	< 0.42	ug/l	0.42	1.34	1	8260B		11/9/2017	CJR	1
1,3-Dichlorobenzene	< 0.45	ug/l	0.45	1.43	1	8260B		11/9/2017	CJR	1
1,2-Dichlorobenzene	< 0.34	ug/l	0.34	1.09	1	8260B		11/9/2017	CJR	1
Dichlorodifluoromethane	< 0.38	ug/l	0.38	1.2	1	8260B		11/9/2017	CJR	1
1,2-Dichloroethane	< 0.45	ug/l	0.45	1.43	1	8260B		11/9/2017	CJR	1
1,1-Dichloroethane	< 0.42	ug/l	0.42	1.34	1	8260B		11/9/2017	CJR	1
1,1-Dichloroethene	< 0.46	ug/l	0.46	1.47	1	8260B		11/9/2017	CJR	1
cis-1,2-Dichloroethene	< 0.41	ug/l	0.41	1.29	1	8260B		11/9/2017	CJR	1
trans-1,2-Dichloroethene	< 0.35	ug/l	0.35	1.12	1	8260B		11/9/2017	CJR	1
1,2-Dichloropropane	< 0.39	ug/l	0.39	1.24	1	8260B		11/9/2017	CJR	1

**Project Name** 222 N. ONEIDA  
**Project #** N2214G17

**Invoice #** E33843

**Lab Code** 5033843H  
**Sample ID** TW-8  
**Sample Matrix** Water  
**Sample Date** 11/3/2017

	<b>Result</b>	<b>Unit</b>	<b>LOD</b>	<b>LOQ</b>	<b>Dil</b>	<b>Method</b>	<b>Ext Date</b>	<b>Run Date</b>	<b>Analyst</b>	<b>Code</b>
1,3-Dichloropropane	< 0.49	ug/l	0.49	1.55	1	8260B		11/9/2017	CJR	1
trans-1,3-Dichloropropene	< 0.42	ug/l	0.42	1.33	1	8260B		11/9/2017	CJR	1
cis-1,3-Dichloropropene	< 0.21	ug/l	0.21	0.65	1	8260B		11/9/2017	CJR	1
Di-isopropyl ether	< 0.26	ug/l	0.26	0.83	1	8260B		11/9/2017	CJR	1
EDB (1,2-Dibromoethane)	< 0.34	ug/l	0.34	1.09	1	8260B		11/9/2017	CJR	1
Ethylbenzene	< 0.2	ug/l	0.2	0.63	1	8260B		11/9/2017	CJR	1
Hexachlorobutadiene	< 1.47	ug/l	1.47	4.68	1	8260B		11/9/2017	CJR	1
Isopropylbenzene	< 0.29	ug/l	0.29	0.93	1	8260B		11/9/2017	CJR	1
p-Isopropyltoluene	< 0.28	ug/l	0.28	0.91	1	8260B		11/9/2017	CJR	1
Methylene chloride	< 0.94	ug/l	0.94	2.98	1	8260B		11/9/2017	CJR	1
Methyl tert-butyl ether (MTBE)	< 0.82	ug/l	0.82	2.6	1	8260B		11/9/2017	CJR	1
Naphthalene	< 2.17	ug/l	2.17	6.9	1	8260B		11/9/2017	CJR	1
n-Propylbenzene	< 0.19	ug/l	0.19	0.62	1	8260B		11/9/2017	CJR	1
1,1,2,2-Tetrachloroethane	< 0.69	ug/l	0.69	2.21	1	8260B		11/9/2017	CJR	1
1,1,1,2-Tetrachloroethane	< 0.47	ug/l	0.47	1.48	1	8260B		11/9/2017	CJR	1
Tetrachloroethene	< 0.48	ug/l	0.48	1.52	1	8260B		11/9/2017	CJR	1
Toluene	< 0.67	ug/l	0.67	2.13	1	8260B		11/9/2017	CJR	1
1,2,4-Trichlorobenzene	< 1.29	ug/l	1.29	4.1	1	8260B		11/9/2017	CJR	1
1,2,3-Trichlorobenzene	< 0.83	ug/l	0.83	2.63	1	8260B		11/9/2017	CJR	1
1,1,1-Trichloroethane	< 0.35	ug/l	0.35	1.11	1	8260B		11/9/2017	CJR	1
1,1,2-Trichloroethane	< 0.65	ug/l	0.65	2.06	1	8260B		11/9/2017	CJR	1
Trichloroethene (TCE)	< 0.45	ug/l	0.45	1.43	1	8260B		11/9/2017	CJR	1
Trichlorofluoromethane	< 0.64	ug/l	0.64	2.04	1	8260B		11/9/2017	CJR	1
1,2,4-Trimethylbenzene	< 1.14	ug/l	1.14	3.63	1	8260B		11/9/2017	CJR	1
1,3,5-Trimethylbenzene	< 0.91	ug/l	0.91	2.9	1	8260B		11/9/2017	CJR	1
Vinyl Chloride	< 0.19	ug/l	0.19	0.62	1	8260B		11/9/2017	CJR	1
m&p-Xylene	< 1.56	ug/l	1.56	4.95	1	8260B		11/9/2017	CJR	1
o-Xylene	< 0.39	ug/l	0.39	1.25	1	8260B		11/9/2017	CJR	1
SUR - 1,2-Dichloroethane-d4	97	REC %			1	8260B		11/9/2017	CJR	1
SUR - 4-Bromofluorobenzene	94	REC %			1	8260B		11/9/2017	CJR	1
SUR - Dibromofluoromethane	98	REC %			1	8260B		11/9/2017	CJR	1
SUR - Toluene-d8	97	REC %			1	8260B		11/9/2017	CJR	1

**Project Name** 222 N. ONEIDA  
**Project #** N2214G17

**Invoice #** E33843

**Lab Code** 5033843I  
**Sample ID** TW-06  
**Sample Matrix** Water  
**Sample Date** 11/3/2017

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
<b>Inorganic</b>										
Metals										
Cadmium, Dissolved	0.6 "J"	ug/L	0.4	1.3	1	200.7		11/8/2017	CWT	1
Lead, Dissolved	< 0.9	ug/L	0.9	3	1	7421		11/7/2017	CWT	1
<b>Organic</b>										
PAH SIM										
Acenaphthene	0.05 "J"	ug/l	0.016	0.05	1	M8270C	11/7/2017	11/8/2017	NJC	1
Acenaphthylene	< 0.019	ug/l	0.019	0.061	1	M8270C	11/7/2017	11/8/2017	NJC	1
Anthracene	0.072	ug/l	0.019	0.062	1	M8270C	11/7/2017	11/8/2017	NJC	1
Benzo(a)anthracene	0.054 "J"	ug/l	0.017	0.054	1	M8270C	11/7/2017	11/8/2017	NJC	5
Benzo(a)pyrene	0.048 "J"	ug/l	0.02	0.065	1	M8270C	11/7/2017	11/8/2017	NJC	1
Benzo(b)fluoranthene	0.08	ug/l	0.018	0.058	1	M8270C	11/7/2017	11/8/2017	NJC	1
Benzo(g,h,i)perylene	0.046 "J"	ug/l	0.025	0.081	1	M8270C	11/7/2017	11/8/2017	NJC	1
Benzo(k)fluoranthene	0.0293 "J"	ug/l	0.016	0.05	1	M8270C	11/7/2017	11/8/2017	NJC	1
Chrysene	0.063 "J"	ug/l	0.02	0.065	1	M8270C	11/7/2017	11/8/2017	NJC	1
Dibenzo(a,h)anthracene	< 0.025	ug/l	0.025	0.078	1	M8270C	11/7/2017	11/8/2017	NJC	1
Fluoranthene	0.184	ug/l	0.017	0.053	1	M8270C	11/7/2017	11/8/2017	NJC	1
Fluorene	0.049 "J"	ug/l	0.021	0.066	1	M8270C	11/7/2017	11/8/2017	NJC	1
Indeno(1,2,3-cd)pyrene	0.037 "J"	ug/l	0.023	0.074	1	M8270C	11/7/2017	11/8/2017	NJC	1
1-Methyl naphthalene	< 0.024	ug/l	0.024	0.076	1	M8270C	11/7/2017	11/8/2017	NJC	1
2-Methyl naphthalene	< 0.024	ug/l	0.024	0.075	1	M8270C	11/7/2017	11/8/2017	NJC	1
Naphthalene	0.0302 "J"	ug/l	0.025	0.081	1	M8270C	11/7/2017	11/8/2017	NJC	1
Phenanthrene	0.304	ug/l	0.025	0.081	1	M8270C	11/7/2017	11/8/2017	NJC	1
Pyrene	0.132	ug/l	0.02	0.063	1	M8270C	11/7/2017	11/8/2017	NJC	1
VOC's										
Benzene	< 0.17	ug/l	0.17	0.55	1	8260B		11/9/2017	CJR	1
Bromobenzene	< 0.43	ug/l	0.43	1.37	1	8260B		11/9/2017	CJR	1
Bromodichloromethane	< 0.31	ug/l	0.31	1	1	8260B		11/9/2017	CJR	1
Bromoform	< 0.49	ug/l	0.49	1.56	1	8260B		11/9/2017	CJR	1
tert-Butylbenzene	< 0.39	ug/l	0.39	1.23	1	8260B		11/9/2017	CJR	1
sec-Butylbenzene	< 0.24	ug/l	0.24	0.76	1	8260B		11/9/2017	CJR	1
n-Butylbenzene	< 0.34	ug/l	0.34	1.08	1	8260B		11/9/2017	CJR	1
Carbon Tetrachloride	< 0.21	ug/l	0.21	0.68	1	8260B		11/9/2017	CJR	1
Chlorobenzene	< 0.27	ug/l	0.27	0.86	1	8260B		11/9/2017	CJR	1
Chloroethane	< 0.5	ug/l	0.5	1.6	1	8260B		11/9/2017	CJR	1
Chloroform	< 0.96	ug/l	0.96	3.04	1	8260B		11/9/2017	CJR	1
Chloromethane	< 1.3	ug/l	1.3	4.15	1	8260B		11/9/2017	CJR	1
2-Chlorotoluene	< 0.36	ug/l	0.36	1.15	1	8260B		11/9/2017	CJR	1
4-Chlorotoluene	< 0.35	ug/l	0.35	1.11	1	8260B		11/9/2017	CJR	1
1,2-Dibromo-3-chloropropane	< 1.88	ug/l	1.88	5.98	1	8260B		11/9/2017	CJR	1
Dibromochloromethane	< 0.45	ug/l	0.45	1.44	1	8260B		11/9/2017	CJR	1
1,4-Dichlorobenzene	< 0.42	ug/l	0.42	1.34	1	8260B		11/9/2017	CJR	1
1,3-Dichlorobenzene	< 0.45	ug/l	0.45	1.43	1	8260B		11/9/2017	CJR	1
1,2-Dichlorobenzene	< 0.34	ug/l	0.34	1.09	1	8260B		11/9/2017	CJR	1
Dichlorodifluoromethane	< 0.38	ug/l	0.38	1.2	1	8260B		11/9/2017	CJR	1
1,2-Dichloroethane	< 0.45	ug/l	0.45	1.43	1	8260B		11/9/2017	CJR	1
1,1-Dichloroethane	< 0.42	ug/l	0.42	1.34	1	8260B		11/9/2017	CJR	1
1,1-Dichloroethene	< 0.46	ug/l	0.46	1.47	1	8260B		11/9/2017	CJR	1
cis-1,2-Dichloroethene	< 0.41	ug/l	0.41	1.29	1	8260B		11/9/2017	CJR	1
trans-1,2-Dichloroethene	< 0.35	ug/l	0.35	1.12	1	8260B		11/9/2017	CJR	1
1,2-Dichloropropane	< 0.39	ug/l	0.39	1.24	1	8260B		11/9/2017	CJR	1



Project Name 222 N. ONEIDA  
Project # N2214G17

Invoice # E33843

Lab Code 5033843I  
Sample ID TW-06  
Sample Matrix Water  
Sample Date 11/3/2017

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
1,3-Dichloropropane	< 0.49	ug/l	0.49	1.55	1	8260B		11/9/2017	CJR	1
trans-1,3-Dichloropropene	< 0.42	ug/l	0.42	1.33	1	8260B		11/9/2017	CJR	1
cis-1,3-Dichloropropene	< 0.21	ug/l	0.21	0.65	1	8260B		11/9/2017	CJR	1
Di-isopropyl ether	< 0.26	ug/l	0.26	0.83	1	8260B		11/9/2017	CJR	1
EDB (1,2-Dibromoethane)	< 0.34	ug/l	0.34	1.09	1	8260B		11/9/2017	CJR	1
Ethylbenzene	< 0.2	ug/l	0.2	0.63	1	8260B		11/9/2017	CJR	1
Hexachlorobutadiene	< 1.47	ug/l	1.47	4.68	1	8260B		11/9/2017	CJR	1
Isopropylbenzene	< 0.29	ug/l	0.29	0.93	1	8260B		11/9/2017	CJR	1
p-Isopropyltoluene	< 0.28	ug/l	0.28	0.91	1	8260B		11/9/2017	CJR	1
Methylene chloride	< 0.94	ug/l	0.94	2.98	1	8260B		11/9/2017	CJR	1
Methyl tert-butyl ether (MTBE)	< 0.82	ug/l	0.82	2.6	1	8260B		11/9/2017	CJR	1
Naphthalene	< 2.17	ug/l	2.17	6.9	1	8260B		11/9/2017	CJR	1
n-Propylbenzene	< 0.19	ug/l	0.19	0.62	1	8260B		11/9/2017	CJR	1
1,1,2,2-Tetrachloroethane	< 0.69	ug/l	0.69	2.21	1	8260B		11/9/2017	CJR	1
1,1,1,2-Tetrachloroethane	< 0.47	ug/l	0.47	1.48	1	8260B		11/9/2017	CJR	1
Tetrachloroethene	< 0.48	ug/l	0.48	1.52	1	8260B		11/9/2017	CJR	1
Toluene	< 0.67	ug/l	0.67	2.13	1	8260B		11/9/2017	CJR	1
1,2,4-Trichlorobenzene	< 1.29	ug/l	1.29	4.1	1	8260B		11/9/2017	CJR	1
1,2,3-Trichlorobenzene	< 0.83	ug/l	0.83	2.63	1	8260B		11/9/2017	CJR	1
1,1,1-Trichloroethane	< 0.35	ug/l	0.35	1.11	1	8260B		11/9/2017	CJR	1
1,1,2-Trichloroethane	< 0.65	ug/l	0.65	2.06	1	8260B		11/9/2017	CJR	1
Trichloroethene (TCE)	< 0.45	ug/l	0.45	1.43	1	8260B		11/9/2017	CJR	1
Trichlorofluoromethane	< 0.64	ug/l	0.64	2.04	1	8260B		11/9/2017	CJR	1
1,2,4-Trimethylbenzene	< 1.14	ug/l	1.14	3.63	1	8260B		11/9/2017	CJR	1
1,3,5-Trimethylbenzene	< 0.91	ug/l	0.91	2.9	1	8260B		11/9/2017	CJR	1
Vinyl Chloride	< 0.19	ug/l	0.19	0.62	1	8260B		11/9/2017	CJR	1
m&p-Xylene	< 1.56	ug/l	1.56	4.95	1	8260B		11/9/2017	CJR	1
o-Xylene	< 0.39	ug/l	0.39	1.25	1	8260B		11/9/2017	CJR	1
SUR - Toluene-d8	98	REC %			1	8260B		11/9/2017	CJR	1
SUR - 1,2-Dichloroethane-d4	104	REC %			1	8260B		11/9/2017	CJR	1
SUR - 4-Bromofluorobenzene	96	REC %			1	8260B		11/9/2017	CJR	1
SUR - Dibromofluoromethane	98	REC %			1	8260B		11/9/2017	CJR	1

"J" Flag: Analyte detected between LOD and LOQ

LOD Limit of Detection

LOQ Limit of Quantitation

**Code** **Comment**

- 1 Laboratory QC within limits.
- 2 Relative percent difference failed for laboratory spiked samples.
- 3 The matrix spike not within established limits.
- 5 The QC blank not within established limits.

CWT denotes sub contract lab - Certification #445126660

All solid sample results reported on a dry weight basis unless otherwise indicated. All LOD's and LOQ's are adjusted for dilutions but not dry weight. Subcontracted results are denoted by SUB in the analyst field.

Authorized Signature



Lab I.D. #	Account No.:	Quote No.:
Project #:	N2214617	
Sampler: (signature)	C912	

## Environmental Lab, Inc.

1990 Prospect Ct. • Appleton, WI 54914  
920-830-2455 • FAX 920-733-0631

## Sample Handling Request

Rush Analysis Date Required  
(Rushes accepted only with prior authorization)  
Normal Turn Around

Project (Name / Location): 222. N. Oneida

Reports To: Chris Rogers

Company: OUNNI

Address: One N. Systems Dr.

City State Zip: Appleton WI

Phone: 920-830-6331

FAX:

Invoice To:

Company:

Address:

City State Zip:

Phone:

FAX:

## Analysis Requested

## Other Analysis

Lab I.D.	Sample I.D.	Collection Date Time	Comp	Grab	Filtered Y/N	No. of Containers	Sample Type (Matrix)*	Preservation	DRO (Mod DRO Sep 95)	GRO (Mod GRO Sep 95)	LEAD	NITRATE/NITRITE	OIL & GREASE	PAH (EPA 8270)	PCB	PVOC (EPA 8021)	PVOC + NAPHTHALENE	SULFATE	TOTAL SUSPENDED SOLIDS	VOC DW (EPA 524.2)	VOC (EPA 8260)	8-RCA METALS	Metals (Pb + Cd)	PID/ FID
5033843A	7-10-06	11/11/06																						
B	SB-01	11/10/06	X	X	N	4	S	VOL-MeOH						X							X	X	X	
C	SB-6	1000	X	X	N	4	S	"						X							X	X	X	
D	SB-7	1050	X	X	N	4	S	"						X							X	X	X	
E	SB-08	1110	X	X	N	4	S	"						X							X	X	X	
F	SB-09	1120	X	X	N	4	S	"						X							X	X	X	
G	SB-10	1150	X	X	N	4	S	"						X							X	X	X	
H	TCW-8	1240	X	X	N	5	GW	VOC/HCL/HNO3						X							X	X	X	
I	TCW-06	1305	X	X	N	5	GW	"						X							X	X	X	

Comments/Special Instructions ("Specify groundwater "GW", Drinking Water "DW", Waste Water "WW", Soil "S", Air "A", Oil, Sludge etc.)

GW samples - VOC preserved w/HCL

Soil - VOC preserved in MeOH.

Sample Integrity - To be completed by receiving lab.

Method of Shipment: Client

Temp. of Temp. Blank: °C On Ice: ✓

Cooler seal intact upon receipt: Yes No

Relinquished By: (sign)

Time

Date

Received By: (sign)

Time

Date

Received in Laboratory By: Scott

Time

Date

Time

Date

# Synergy Environmental Lab, INC.

1990 Prospect Ct., Appleton, WI 54914 \*P 920-830-2455 \* F 920-733-0631

CHRIS ROGERS  
OMNNI ASSOCIATES INC  
ONE SYSTEMS DRIVE  
APPLETON WI 54914-1654

Report Date 16-Nov-17

Project Name 222 N. ONEIDA  
Project # N2214G17

Invoice # E33853

Lab Code 5033853A  
Sample ID TW-09  
Sample Matrix Water  
Sample Date 11/6/2017

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
Inorganic										
Metals										
Cadmium, Dissolved	0.7 "J"	ug/L	0.4	1.3	1	200.7		11/8/2017	CWT	1
Lead, Dissolved	1.0 "J"	ug/L	0.9	3	1	7421		11/7/2017	CWT	1
Organic										
PAH SIM										
Acenaphthene	0.063	ug/l	0.016	0.05	1	M8270C	11/7/2017	11/8/2017	NJC	1
Acenaphthylene	< 0.019	ug/l	0.019	0.061	1	M8270C	11/7/2017	11/8/2017	NJC	1
Anthracene	0.065	ug/l	0.019	0.062	1	M8270C	11/7/2017	11/8/2017	NJC	1
Benzo(a)anthracene	0.063	ug/l	0.017	0.054	1	M8270C	11/7/2017	11/8/2017	NJC	5
Benzo(a)pyrene	0.089	ug/l	0.02	0.065	1	M8270C	11/7/2017	11/8/2017	NJC	1
Benzo(b)fluoranthene	0.15	ug/l	0.018	0.058	1	M8270C	11/7/2017	11/8/2017	NJC	1
Benzo(g,h,i)perylene	0.065 "J"	ug/l	0.025	0.081	1	M8270C	11/7/2017	11/8/2017	NJC	1
Benzo(k)fluoranthene	0.046 "J"	ug/l	0.016	0.05	1	M8270C	11/7/2017	11/8/2017	NJC	1
Chrysene	0.118	ug/l	0.02	0.065	1	M8270C	11/7/2017	11/8/2017	NJC	1
Dibenzo(a,h)anthracene	< 0.025	ug/l	0.025	0.078	1	M8270C	11/7/2017	11/8/2017	NJC	1
Fluoranthene	0.292	ug/l	0.017	0.053	1	M8270C	11/7/2017	11/8/2017	NJC	1
Fluorene	0.056 "J"	ug/l	0.021	0.066	1	M8270C	11/7/2017	11/8/2017	NJC	1
Indeno(1,2,3-cd)pyrene	0.063 "J"	ug/l	0.023	0.074	1	M8270C	11/7/2017	11/8/2017	NJC	1
1-Methyl naphthalene	0.144	ug/l	0.024	0.076	1	M8270C	11/7/2017	11/8/2017	NJC	1
2-Methyl naphthalene	0.081	ug/l	0.024	0.075	1	M8270C	11/7/2017	11/8/2017	NJC	1
Naphthalene	0.213	ug/l	0.025	0.081	1	M8270C	11/7/2017	11/8/2017	NJC	1
Phenanthrene	0.33	ug/l	0.025	0.081	1	M8270C	11/7/2017	11/8/2017	NJC	1
Pyrene	0.211	ug/l	0.02	0.063	1	M8270C	11/7/2017	11/8/2017	NJC	1
VOC's										
Benzene	< 0.17	ug/l	0.17	0.55	1	8260B		11/10/2017	CJR	1
Bromobenzene	< 0.43	ug/l	0.43	1.37	1	8260B		11/10/2017	CJR	1
Bromodichloromethane	< 0.31	ug/l	0.31	1	1	8260B		11/10/2017	CJR	1
Bromoform	< 0.49	ug/l	0.49	1.56	1	8260B		11/10/2017	CJR	1
tert-Butylbenzene	< 0.39	ug/l	0.39	1.23	1	8260B		11/10/2017	CJR	1

**Project Name** 222 N. ONEIDA  
**Project #** N2214G17

**Invoice #** E33853

**Lab Code** 5033853A  
**Sample ID** TW-09  
**Sample Matrix** Water  
**Sample Date** 11/6/2017

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
sec-Butylbenzene	< 0.24	ug/l	0.24	0.76	1	8260B		11/10/2017	CJR	1
n-Butylbenzene	< 0.34	ug/l	0.34	1.08	1	8260B		11/10/2017	CJR	1
Carbon Tetrachloride	< 0.21	ug/l	0.21	0.68	1	8260B		11/10/2017	CJR	1
Chlorobenzene	< 0.27	ug/l	0.27	0.86	1	8260B		11/10/2017	CJR	1
Chloroethane	< 0.5	ug/l	0.5	1.6	1	8260B		11/10/2017	CJR	1
Chloroform	< 0.96	ug/l	0.96	3.04	1	8260B		11/10/2017	CJR	1
Chloromethane	< 1.3	ug/l	1.3	4.15	1	8260B		11/10/2017	CJR	1
2-Chlorotoluene	< 0.36	ug/l	0.36	1.15	1	8260B		11/10/2017	CJR	1
4-Chlorotoluene	< 0.35	ug/l	0.35	1.11	1	8260B		11/10/2017	CJR	1
1,2-Dibromo-3-chloropropane	< 1.88	ug/l	1.88	5.98	1	8260B		11/10/2017	CJR	1
Dibromochloromethane	< 0.45	ug/l	0.45	1.44	1	8260B		11/10/2017	CJR	1
1,4-Dichlorobenzene	< 0.42	ug/l	0.42	1.34	1	8260B		11/10/2017	CJR	1
1,3-Dichlorobenzene	< 0.45	ug/l	0.45	1.43	1	8260B		11/10/2017	CJR	1
1,2-Dichlorobenzene	< 0.34	ug/l	0.34	1.09	1	8260B		11/10/2017	CJR	1
Dichlorodifluoromethane	< 0.38	ug/l	0.38	1.2	1	8260B		11/10/2017	CJR	1
1,2-Dichloroethane	31.4	ug/l	0.45	1.43	1	8260B		11/10/2017	CJR	1
1,1-Dichloroethane	< 0.42	ug/l	0.42	1.34	1	8260B		11/10/2017	CJR	1
1,1-Dichloroethene	< 0.46	ug/l	0.46	1.47	1	8260B		11/10/2017	CJR	1
cis-1,2-Dichloroethene	< 0.41	ug/l	0.41	1.29	1	8260B		11/10/2017	CJR	1
trans-1,2-Dichloroethene	< 0.35	ug/l	0.35	1.12	1	8260B		11/10/2017	CJR	1
1,2-Dichloropropane	< 0.39	ug/l	0.39	1.24	1	8260B		11/10/2017	CJR	1
1,3-Dichloropropane	< 0.49	ug/l	0.49	1.55	1	8260B		11/10/2017	CJR	1
trans-1,3-Dichloropropene	< 0.42	ug/l	0.42	1.33	1	8260B		11/10/2017	CJR	1
cis-1,3-Dichloropropene	< 0.21	ug/l	0.21	0.65	1	8260B		11/10/2017	CJR	1
Di-isopropyl ether	< 0.26	ug/l	0.26	0.83	1	8260B		11/10/2017	CJR	1
EDB (1,2-Dibromoethane)	< 0.34	ug/l	0.34	1.09	1	8260B		11/10/2017	CJR	1
Ethylbenzene	< 0.2	ug/l	0.2	0.63	1	8260B		11/10/2017	CJR	1
Hexachlorobutadiene	< 1.47	ug/l	1.47	4.68	1	8260B		11/10/2017	CJR	1
Isopropylbenzene	< 0.29	ug/l	0.29	0.93	1	8260B		11/10/2017	CJR	1
p-Isopropyltoluene	< 0.28	ug/l	0.28	0.91	1	8260B		11/10/2017	CJR	1
Methylene chloride	< 0.94	ug/l	0.94	2.98	1	8260B		11/10/2017	CJR	1
Methyl tert-butyl ether (MTBE)	< 0.82	ug/l	0.82	2.6	1	8260B		11/10/2017	CJR	1
Naphthalene	< 2.17	ug/l	2.17	6.9	1	8260B		11/10/2017	CJR	1
n-Propylbenzene	< 0.19	ug/l	0.19	0.62	1	8260B		11/10/2017	CJR	1
1,1,2,2-Tetrachloroethane	< 0.69	ug/l	0.69	2.21	1	8260B		11/10/2017	CJR	1
1,1,1,2-Tetrachloroethane	< 0.47	ug/l	0.47	1.48	1	8260B		11/10/2017	CJR	1
Tetrachloroethene	< 0.48	ug/l	0.48	1.52	1	8260B		11/10/2017	CJR	1
Toluene	< 0.67	ug/l	0.67	2.13	1	8260B		11/10/2017	CJR	1
1,2,4-Trichlorobenzene	< 1.29	ug/l	1.29	4.1	1	8260B		11/10/2017	CJR	1
1,2,3-Trichlorobenzene	< 0.83	ug/l	0.83	2.63	1	8260B		11/10/2017	CJR	1
1,1,1-Trichloroethane	< 0.35	ug/l	0.35	1.11	1	8260B		11/10/2017	CJR	1
1,1,2-Trichloroethane	< 0.65	ug/l	0.65	2.06	1	8260B		11/10/2017	CJR	1
Trichloroethene (TCE)	< 0.45	ug/l	0.45	1.43	1	8260B		11/10/2017	CJR	1
Trichlorofluoromethane	< 0.64	ug/l	0.64	2.04	1	8260B		11/10/2017	CJR	1
1,2,4-Trimethylbenzene	< 1.14	ug/l	1.14	3.63	1	8260B		11/10/2017	CJR	1
1,3,5-Trimethylbenzene	< 0.91	ug/l	0.91	2.9	1	8260B		11/10/2017	CJR	1
Vinyl Chloride	< 0.19	ug/l	0.19	0.62	1	8260B		11/10/2017	CJR	1
m&p-Xylene	< 1.56	ug/l	1.56	4.95	1	8260B		11/10/2017	CJR	1
o-Xylene	< 0.39	ug/l	0.39	1.25	1	8260B		11/10/2017	CJR	1
SUR - 4-Bromofluorobenzene	102	REC %			1	8260B		11/10/2017	CJR	1
SUR - Dibromofluoromethane	97	REC %			1	8260B		11/10/2017	CJR	1
SUR - Toluene-d8	98	REC %			1	8260B		11/10/2017	CJR	1

**Project Name** 222 N. ONEIDA  
**Project #** N2214G17

**Invoice #** E33853

**Lab Code** 5033853A  
**Sample ID** TW-09  
**Sample Matrix** Water  
**Sample Date** 11/6/2017

	<b>Result</b>	<b>Unit</b>	<b>LOD</b>	<b>LOQ</b>	<b>Dil</b>	<b>Method</b>	<b>Ext Date</b>	<b>Run Date</b>	<b>Analyst</b>	<b>Code</b>
SUR - 1,2-Dichloroethane-d4	97	REC %			1	8260B		11/10/2017	CJR	1

**Project Name** 222 N. ONEIDA  
**Project #** N2214G17

**Invoice #** E33853

**Lab Code** 5033853B  
**Sample ID** TW-10  
**Sample Matrix** Water  
**Sample Date** 11/6/2017

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
<b>Inorganic</b>										
Metals										
Cadmium, Dissolved	0.5 "J"	ug/L	0.4	1.3	1	200.7		11/8/2017	CWT	1
Lead, Dissolved	< 0.9	ug/L	0.9	3	1	7421		11/7/2017	CWT	1
<b>Organic</b>										
PAH SIM										
Acenaphthene	0.077	ug/l	0.016	0.05	1	M8270C	11/7/2017	11/8/2017	NJC	1
Acenaphthylene	< 0.019	ug/l	0.019	0.061	1	M8270C	11/7/2017	11/8/2017	NJC	1
Anthracene	0.038 "J"	ug/l	0.019	0.062	1	M8270C	11/7/2017	11/8/2017	NJC	1
Benzo(a)anthracene	0.0314 "J"	ug/l	0.017	0.054	1	M8270C	11/7/2017	11/8/2017	NJC	5
Benzo(a)pyrene	0.037 "J"	ug/l	0.02	0.065	1	M8270C	11/7/2017	11/8/2017	NJC	1
Benzo(b)fluoranthene	0.068	ug/l	0.018	0.058	1	M8270C	11/7/2017	11/8/2017	NJC	1
Benzo(g,h,i)perylene	0.032 "J"	ug/l	0.025	0.081	1	M8270C	11/7/2017	11/8/2017	NJC	1
Benzo(k)fluoranthene	0.0275 "J"	ug/l	0.016	0.05	1	M8270C	11/7/2017	11/8/2017	NJC	1
Chrysene	0.056 "J"	ug/l	0.02	0.065	1	M8270C	11/7/2017	11/8/2017	NJC	1
Dibenzo(a,h)anthracene	< 0.025	ug/l	0.025	0.078	1	M8270C	11/7/2017	11/8/2017	NJC	1
Fluoranthene	0.176	ug/l	0.017	0.053	1	M8270C	11/7/2017	11/8/2017	NJC	1
Fluorene	0.044 "J"	ug/l	0.021	0.066	1	M8270C	11/7/2017	11/8/2017	NJC	1
Indeno(1,2,3-cd)pyrene	0.0313 "J"	ug/l	0.023	0.074	1	M8270C	11/7/2017	11/8/2017	NJC	1
1-Methyl naphthalene	0.032 "J"	ug/l	0.024	0.076	1	M8270C	11/7/2017	11/8/2017	NJC	1
2-Methyl naphthalene	0.047 "J"	ug/l	0.024	0.075	1	M8270C	11/7/2017	11/8/2017	NJC	1
Naphthalene	0.052 "J"	ug/l	0.025	0.081	1	M8270C	11/7/2017	11/8/2017	NJC	1
Phenanthrene	0.255	ug/l	0.025	0.081	1	M8270C	11/7/2017	11/8/2017	NJC	1
Pyrene	0.117	ug/l	0.02	0.063	1	M8270C	11/7/2017	11/8/2017	NJC	1
VOC's										
Benzene	< 0.17	ug/l	0.17	0.55	1	8260B		11/10/2017	CJR	1
Bromobenzene	< 0.43	ug/l	0.43	1.37	1	8260B		11/10/2017	CJR	1
Bromodichloromethane	< 0.31	ug/l	0.31	1	1	8260B		11/10/2017	CJR	1
Bromoform	< 0.49	ug/l	0.49	1.56	1	8260B		11/10/2017	CJR	1
tert-Butylbenzene	< 0.39	ug/l	0.39	1.23	1	8260B		11/10/2017	CJR	1
sec-Butylbenzene	< 0.24	ug/l	0.24	0.76	1	8260B		11/10/2017	CJR	1
n-Butylbenzene	< 0.34	ug/l	0.34	1.08	1	8260B		11/10/2017	CJR	1
Carbon Tetrachloride	< 0.21	ug/l	0.21	0.68	1	8260B		11/10/2017	CJR	1
Chlorobenzene	< 0.27	ug/l	0.27	0.86	1	8260B		11/10/2017	CJR	1
Chloroethane	< 0.5	ug/l	0.5	1.6	1	8260B		11/10/2017	CJR	1
Chloroform	< 0.96	ug/l	0.96	3.04	1	8260B		11/10/2017	CJR	1
Chloromethane	< 1.3	ug/l	1.3	4.15	1	8260B		11/10/2017	CJR	1
2-Chlorotoluene	< 0.36	ug/l	0.36	1.15	1	8260B		11/10/2017	CJR	1
4-Chlorotoluene	< 0.35	ug/l	0.35	1.11	1	8260B		11/10/2017	CJR	1
1,2-Dibromo-3-chloropropane	< 1.88	ug/l	1.88	5.98	1	8260B		11/10/2017	CJR	1
Dibromochloromethane	< 0.45	ug/l	0.45	1.44	1	8260B		11/10/2017	CJR	1
1,4-Dichlorobenzene	< 0.42	ug/l	0.42	1.34	1	8260B		11/10/2017	CJR	1
1,3-Dichlorobenzene	< 0.45	ug/l	0.45	1.43	1	8260B		11/10/2017	CJR	1
1,2-Dichlorobenzene	< 0.34	ug/l	0.34	1.09	1	8260B		11/10/2017	CJR	1
Dichlorodifluoromethane	< 0.38	ug/l	0.38	1.2	1	8260B		11/10/2017	CJR	1
1,2-Dichloroethane	4.3	ug/l	0.45	1.43	1	8260B		11/10/2017	CJR	1
1,1-Dichloroethane	< 0.42	ug/l	0.42	1.34	1	8260B		11/10/2017	CJR	1
1,1-Dichloroethene	< 0.46	ug/l	0.46	1.47	1	8260B		11/10/2017	CJR	1
cis-1,2-Dichloroethene	< 0.41	ug/l	0.41	1.29	1	8260B		11/10/2017	CJR	1
trans-1,2-Dichloroethene	< 0.35	ug/l	0.35	1.12	1	8260B		11/10/2017	CJR	1
1,2-Dichloropropane	< 0.39	ug/l	0.39	1.24	1	8260B		11/10/2017	CJR	1



**Project Name** 222 N. ONEIDA  
**Project #** N2214G17

**Invoice #** E33853

**Lab Code** 5033853B  
**Sample ID** TW-10  
**Sample Matrix** Water  
**Sample Date** 11/6/2017

	<b>Result</b>	<b>Unit</b>	<b>LOD</b>	<b>LOQ</b>	<b>Dil</b>	<b>Method</b>	<b>Ext Date</b>	<b>Run Date</b>	<b>Analyst</b>	<b>Code</b>
1,3-Dichloropropane	< 0.49	ug/l	0.49	1.55	1	8260B		11/10/2017	CJR	1
trans-1,3-Dichloropropene	< 0.42	ug/l	0.42	1.33	1	8260B		11/10/2017	CJR	1
cis-1,3-Dichloropropene	< 0.21	ug/l	0.21	0.65	1	8260B		11/10/2017	CJR	1
Di-isopropyl ether	< 0.26	ug/l	0.26	0.83	1	8260B		11/10/2017	CJR	1
EDB (1,2-Dibromoethane)	< 0.34	ug/l	0.34	1.09	1	8260B		11/10/2017	CJR	1
Ethylbenzene	< 0.2	ug/l	0.2	0.63	1	8260B		11/10/2017	CJR	1
Hexachlorobutadiene	< 1.47	ug/l	1.47	4.68	1	8260B		11/10/2017	CJR	1
Isopropylbenzene	< 0.29	ug/l	0.29	0.93	1	8260B		11/10/2017	CJR	1
p-Isopropyltoluene	< 0.28	ug/l	0.28	0.91	1	8260B		11/10/2017	CJR	1
Methylene chloride	< 0.94	ug/l	0.94	2.98	1	8260B		11/10/2017	CJR	1
Methyl tert-butyl ether (MTBE)	< 0.82	ug/l	0.82	2.6	1	8260B		11/10/2017	CJR	1
Naphthalene	< 2.17	ug/l	2.17	6.9	1	8260B		11/10/2017	CJR	1
n-Propylbenzene	< 0.19	ug/l	0.19	0.62	1	8260B		11/10/2017	CJR	1
1,1,2,2-Tetrachloroethane	< 0.69	ug/l	0.69	2.21	1	8260B		11/10/2017	CJR	1
1,1,1,2-Tetrachloroethane	< 0.47	ug/l	0.47	1.48	1	8260B		11/10/2017	CJR	1
Tetrachloroethene	< 0.48	ug/l	0.48	1.52	1	8260B		11/10/2017	CJR	1
Toluene	< 0.67	ug/l	0.67	2.13	1	8260B		11/10/2017	CJR	1
1,2,4-Trichlorobenzene	< 1.29	ug/l	1.29	4.1	1	8260B		11/10/2017	CJR	1
1,2,3-Trichlorobenzene	< 0.83	ug/l	0.83	2.63	1	8260B		11/10/2017	CJR	1
1,1,1-Trichloroethane	< 0.35	ug/l	0.35	1.11	1	8260B		11/10/2017	CJR	1
1,1,2-Trichloroethane	< 0.65	ug/l	0.65	2.06	1	8260B		11/10/2017	CJR	1
Trichloroethene (TCE)	< 0.45	ug/l	0.45	1.43	1	8260B		11/10/2017	CJR	1
Trichlorofluoromethane	< 0.64	ug/l	0.64	2.04	1	8260B		11/10/2017	CJR	1
1,2,4-Trimethylbenzene	< 1.14	ug/l	1.14	3.63	1	8260B		11/10/2017	CJR	1
1,3,5-Trimethylbenzene	< 0.91	ug/l	0.91	2.9	1	8260B		11/10/2017	CJR	1
Vinyl Chloride	< 0.19	ug/l	0.19	0.62	1	8260B		11/10/2017	CJR	1
m&p-Xylene	< 1.56	ug/l	1.56	4.95	1	8260B		11/10/2017	CJR	1
o-Xylene	< 0.39	ug/l	0.39	1.25	1	8260B		11/10/2017	CJR	1
SUR - 4-Bromofluorobenzene	100	REC %			1	8260B		11/10/2017	CJR	1
SUR - Dibromofluoromethane	98	REC %			1	8260B		11/10/2017	CJR	1
SUR - Toluene-d8	101	REC %			1	8260B		11/10/2017	CJR	1
SUR - 1,2-Dichloroethane-d4	98	REC %			1	8260B		11/10/2017	CJR	1

Project Name 222 N. ONEIDA  
Project # N2214G17

Invoice # E33853

Lab Code 5033853C  
Sample ID TRIP BLANK  
Sample Matrix Water  
Sample Date 11/6/2017

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
Organic										
VOC's										
Benzene	< 0.17	ug/l	0.17	0.55	1	8260B		11/10/2017	CJR	1
Bromobenzene	< 0.43	ug/l	0.43	1.37	1	8260B		11/10/2017	CJR	1
Bromodichloromethane	< 0.31	ug/l	0.31	1	1	8260B		11/10/2017	CJR	1
Bromoform	< 0.49	ug/l	0.49	1.56	1	8260B		11/10/2017	CJR	1
tert-Butylbenzene	< 0.39	ug/l	0.39	1.23	1	8260B		11/10/2017	CJR	1
sec-Butylbenzene	< 0.24	ug/l	0.24	0.76	1	8260B		11/10/2017	CJR	1
n-Butylbenzene	< 0.34	ug/l	0.34	1.08	1	8260B		11/10/2017	CJR	1
Carbon Tetrachloride	< 0.21	ug/l	0.21	0.68	1	8260B		11/10/2017	CJR	1
Chlorobenzene	< 0.27	ug/l	0.27	0.86	1	8260B		11/10/2017	CJR	1
Chloroethane	< 0.5	ug/l	0.5	1.6	1	8260B		11/10/2017	CJR	1
Chloroform	< 0.96	ug/l	0.96	3.04	1	8260B		11/10/2017	CJR	1
Chloromethane	< 1.3	ug/l	1.3	4.15	1	8260B		11/10/2017	CJR	1
2-Chlorotoluene	< 0.36	ug/l	0.36	1.15	1	8260B		11/10/2017	CJR	1
4-Chlorotoluene	< 0.35	ug/l	0.35	1.11	1	8260B		11/10/2017	CJR	1
1,2-Dibromo-3-chloropropane	< 1.88	ug/l	1.88	5.98	1	8260B		11/10/2017	CJR	1
Dibromochloromethane	< 0.45	ug/l	0.45	1.44	1	8260B		11/10/2017	CJR	1
1,4-Dichlorobenzene	< 0.42	ug/l	0.42	1.34	1	8260B		11/10/2017	CJR	1
1,3-Dichlorobenzene	< 0.45	ug/l	0.45	1.43	1	8260B		11/10/2017	CJR	1
1,2-Dichlorobenzene	< 0.34	ug/l	0.34	1.09	1	8260B		11/10/2017	CJR	1
Dichlorodifluoromethane	< 0.38	ug/l	0.38	1.2	1	8260B		11/10/2017	CJR	1
1,2-Dichloroethane	< 0.45	ug/l	0.45	1.43	1	8260B		11/10/2017	CJR	1
1,1-Dichloroethane	< 0.42	ug/l	0.42	1.34	1	8260B		11/10/2017	CJR	1
1,1-Dichloroethene	< 0.46	ug/l	0.46	1.47	1	8260B		11/10/2017	CJR	1
cis-1,2-Dichloroethene	< 0.41	ug/l	0.41	1.29	1	8260B		11/10/2017	CJR	1
trans-1,2-Dichloroethene	< 0.35	ug/l	0.35	1.12	1	8260B		11/10/2017	CJR	1
1,2-Dichloropropane	< 0.39	ug/l	0.39	1.24	1	8260B		11/10/2017	CJR	1
1,3-Dichloropropane	< 0.49	ug/l	0.49	1.55	1	8260B		11/10/2017	CJR	1
trans-1,3-Dichloropropene	< 0.42	ug/l	0.42	1.33	1	8260B		11/10/2017	CJR	1
cis-1,3-Dichloropropene	< 0.21	ug/l	0.21	0.65	1	8260B		11/10/2017	CJR	1
Di-isopropyl ether	< 0.26	ug/l	0.26	0.83	1	8260B		11/10/2017	CJR	1
EDB (1,2-Dibromoethane)	< 0.34	ug/l	0.34	1.09	1	8260B		11/10/2017	CJR	1
Ethylbenzene	< 0.2	ug/l	0.2	0.63	1	8260B		11/10/2017	CJR	1
Hexachlorobutadiene	< 1.47	ug/l	1.47	4.68	1	8260B		11/10/2017	CJR	1
Isopropylbenzene	< 0.29	ug/l	0.29	0.93	1	8260B		11/10/2017	CJR	1
p-Isopropyltoluene	< 0.28	ug/l	0.28	0.91	1	8260B		11/10/2017	CJR	1
Methylene chloride	< 0.94	ug/l	0.94	2.98	1	8260B		11/10/2017	CJR	1
Methyl tert-butyl ether (MTBE)	< 0.82	ug/l	0.82	2.6	1	8260B		11/10/2017	CJR	1
Naphthalene	< 2.17	ug/l	2.17	6.9	1	8260B		11/10/2017	CJR	1
n-Propylbenzene	< 0.19	ug/l	0.19	0.62	1	8260B		11/10/2017	CJR	1
1,1,2,2-Tetrachloroethane	< 0.69	ug/l	0.69	2.21	1	8260B		11/10/2017	CJR	1
1,1,1,2-Tetrachloroethane	< 0.47	ug/l	0.47	1.48	1	8260B		11/10/2017	CJR	1
Tetrachloroethene	< 0.48	ug/l	0.48	1.52	1	8260B		11/10/2017	CJR	1
Toluene	< 0.67	ug/l	0.67	2.13	1	8260B		11/10/2017	CJR	1
1,2,4-Trichlorobenzene	< 1.29	ug/l	1.29	4.1	1	8260B		11/10/2017	CJR	1
1,2,3-Trichlorobenzene	< 0.83	ug/l	0.83	2.63	1	8260B		11/10/2017	CJR	1
1,1,1-Trichloroethane	< 0.35	ug/l	0.35	1.11	1	8260B		11/10/2017	CJR	1
1,1,2-Trichloroethane	< 0.65	ug/l	0.65	2.06	1	8260B		11/10/2017	CJR	1
Trichloroethene (TCE)	< 0.45	ug/l	0.45	1.43	1	8260B		11/10/2017	CJR	1
Trichlorofluoromethane	< 0.64	ug/l	0.64	2.04	1	8260B		11/10/2017	CJR	1
1,2,4-Trimethylbenzene	< 1.14	ug/l	1.14	3.63	1	8260B		11/10/2017	CJR	1



Project Name 222 N. ONEIDA  
Project # N2214G17

Invoice # E33853

Lab Code 5033853C  
Sample ID TRIP BLANK  
Sample Matrix Water  
Sample Date 11/6/2017

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
1,3,5-Trimethylbenzene	< 0.91	ug/l	0.91	2.9	1	8260B		11/10/2017	CJR	1
Vinyl Chloride	< 0.19	ug/l	0.19	0.62	1	8260B		11/10/2017	CJR	1
m&p-Xylene	< 1.56	ug/l	1.56	4.95	1	8260B		11/10/2017	CJR	1
o-Xylene	< 0.39	ug/l	0.39	1.25	1	8260B		11/10/2017	CJR	1
SUR - Toluene-d8	102	REC %			1	8260B		11/10/2017	CJR	1
SUR - 1,2-Dichloroethane-d4	96	REC %			1	8260B		11/10/2017	CJR	1
SUR - 4-Bromofluorobenzene	100	REC %			1	8260B		11/10/2017	CJR	1
SUR - Dibromofluoromethane	97	REC %			1	8260B		11/10/2017	CJR	1

"J" Flag: Analyte detected between LOD and LOQ

LOD Limit of Detection

LOQ Limit of Quantitation

**Code**      **Comment**

1      Laboratory QC within limits.

5      The QC blank not within established limits.

CWT denotes sub contract lab - Certification #445126660

All solid sample results reported on a dry weight basis unless otherwise indicated. All LOD's and LOQ's are adjusted for dilutions but not dry weight. Subcontracted results are denoted by SUB in the analyst field.

Authorized Signature



Lab I.D. #	Account No. :	Quote No. :
Project #:	N2214 G17	
Sampler (signature)	ccy	

Sample Handling Request
Rush Analysis Date Required _____
(Rushes accepted only with prior authorization)
Normal Turn Around _____

Project (Name / Location): 222 N. Oneida

Reports To: Chris Rogers	Invoice To: SAME
Company: OMNI	Company:
Address: One N. Systems Dr.	Address:
City State Zip: Appleton WI	City State Zip: City of Appleton Project
Phone: 920 830-6331	Phone:
FAX:	FAX:

Lab I.D.	Sample I.D.	Collection Date	Time	Comp	Grab	Filtered Y/N	No. of Containers	Sample Type (Matrix)*	Preservation	DRO (Mod DRO Sep 95)	GRO (Mod GRO Sep 95)	LEAD	NITRATE/NITRITE	OIL & GREASE	PAH (EPA 8270)	PCB	PVOC (EPA 8021)	PVOC + NAPHTHALENE	SULFATE	TOTAL SUSPENDED SOLIDS	VOC DW (EPA 524.2)	VOC (EPA 8260)	8-RCRA METALS	X X Metals (Pb + Cd)	PID/ FID
5033855A	TW-09	4/8	1015	2	2	Metals	5	GW	VOC +						X							X			
B TW-10		4/8	1030	2	2	only	5	GW	Metals						X							X			
C Trip Blank		4/8	1015			TRIP	13	Blank	preserved																

Comments/Special Instructions (\*Specify groundwater "GW", Drinking Water "DW", Waste Water "WW", Soil "S", Air "A", Oil, Sludge etc.)

Metals are preserved w/ HNO<sub>3</sub> and filtered PAH's are w/ filtered

VOC's are preserved w/ HCl and w/ filtered

Sample Integrity - To be completed by receiving lab.
Method of Shipment: Client
Temp. of Temp. Blank: °C On Ice: <input checked="" type="checkbox"/>
Cooler seal intact upon receipt: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No

Relinquished By: (sign)	Time	Date	Received By: (sign)	Time	Date
ccy	1603	11/08/17			
Received in Laboratory By: Gmm	Time: 4:03	Date: 11/16/17			