

# Phase II Environmental Site Assessment

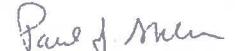
917-923 Derby Lane and 1324 South Webster Avenue,  
Village of Allouez, Wisconsin

Wisconsin Department of Natural Resources

Project number: 60615481

March 13, 2020

## Quality information

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This Phase II ESA was conducted by personnel with the appropriate qualifications required by NR 712.02 (1), NR 712.05 and NR 712.07. AECOM provides the following certification as required by NR712.09:

I, Lanette Altenbach, 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, 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.

  
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March 13, 2020  
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## Executive Summary

AECOM Technical Services, Inc. (AECOM) conducted a Phase II Environmental Site Assessment (ESA) at 917-923 Derby Lane and 1324 South Webster Avenue, Village of Allouez, Wisconsin under the Wisconsin Assessment Monies (WAM) Contractor Services program. The purpose of the Phase II ESA was to evaluate recognized environmental conditions (RECs) identified in a Phase I ESA conducted by AECOM in July 2019. The subject property consists of three parcels totaling approximately 1.05 acres.

In 2019 AECOM Technical Services (AECOM) conducted a Phase I ESA on the three parcels combined as a single subject property. The Phase I ESA identified the following RECs on the property as related to historical uses or environmental impact identified on adjacent properties on the east side of Webster Avenue and south of Derby Lane. The RECs were:

- The historical use of the property as a gasoline and automotive service station;
- The unknown quality of fill soil placed on the subject property;
- The presence of groundwater contamination from 1401 South Webster Avenue;
- A former dry cleaner located approximately 200 feet north of the subject property at 1304 South Webster Avenue; and
- A documented groundwater contaminant plume associated with 1404 South Webster Avenue (a former gasoline station which was later converted to a dry cleaner) that is located immediately adjacent to the subject property on the south side of Derby Lane.

Soil probe borings were completed at 14 locations and 35 soil samples were collected and analyzed for volatile organic compounds (VOCs), polycyclic aromatic hydrocarbons (PAHs) and eight RCRA metals. Five soil probe boring locations were completed as temporary wells; SP-105, SP-109, SP-111, SP-112 and SP-114. One groundwater sample was collected from each location and analyzed for VOCs. Groundwater samples were also collected from three existing NR141-compliant monitoring wells and analyzed for VOCs.

The soil encountered at the site included fill soil composed mostly of clay, sandy silt overlying sand, fill overlying clay and interbedded silts and sand or silts and clay. The fill thickness ranged from two to 15 feet. The sand, where encountered seemed to get coarser with depth. The color was generally tan to brown turning to grey below the water table. The water table was encountered from 14 to 20 feet bgs.

The Phase II ESA conclusions are:

- Fill soils were identified in 12 of the 15 locations with thicknesses of two to 15 feet.
- PCE and lead were identified in the soil samples above groundwater pathway residual contaminant levels (RCLs). No exceedances of the direct contact RCLs were identified.
- PAHs were detected in each soil sample tested but none of the detected analytes exceeded RCLs.
- Metals were identified in each sample tested; only lead and arsenic were detected above RCLs. The detected concentration for arsenic in each sample tested was below the background threshold value (BTM) for the State of Wisconsin, but the arsenic concentrations exceeded the non-industrial direct contact pathway, the industrial direct contact pathway and the groundwater pathway RCLs. Lead was detected only above the RCL for the groundwater pathway.
- A release associated with the identified historic site uses was not identified by direct evidence from the observations of the soil or laboratory analysis of the soil and groundwater samples.
- The groundwater contaminant plumes from the closed petroleum case and the open dry cleaner site persist under the subject property. These plumes could be a source for vapor intrusion in any redeveloped building on the subject property.

# 1. Introduction

AECOM Technical Services, Inc. (AECOM) conducted a Phase II Environmental Site Assessment (ESA) at 917-923 Derby Lane and 1324 South Webster Avenue, Village of Allouez, Wisconsin under the Wisconsin Assessment Monies (WAM) Contractor Services program. The purpose of the Phase II ESA was to evaluate recognized environmental conditions (RECs) identified in a Phase I ESA conducted by AECOM in July 2019.

## 1.1 Site Location

The subject property is located at 917-923 Derby Lane and 1324 South Webster Avenue, Village of Allouez, Brown County, Wisconsin (Figure 1); and is described as being located in part of the Northwest ¼ of the Southeast ¼ of Section 2, Township 23 North, Range 20 East. The subject property consists of three parcels totaling approximately 1.05 acres. Figure 2 depicts the site layout and locations of the off-site RECs. Figure 3 depicts the sampling locations.

Residential and commercial properties are located to the north, South Webster Avenue borders the property to the east, Derby Lane borders the property to the south, and residential dwellings are located to the west. The property is situated ¼ mile to the east of the Fox River which flows into the bay of Green Bay approximately 3.25 miles north of the subject property. The property is also located on a topographic divide with the land area to the east, sloping eastward toward, the East River. The area is urban with mixed residential and commercial properties surrounding the site.

## 1.2 Contact Information

The following parties are associated with this site assessment.

**Property Owner**

Wisconsin Medical Credit Union  
2221 South Webster Avenue  
Green Bay, Wisconsin  
Contact: Kurt Minten  
920-660-6695

**WAM Applicant**

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Sun Prairie, WI 53590  
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**Owner of Existing NR 141 Monitoring Wells**

Lee Amundson  
6426 Nero Lane  
Sobieski, Wisconsin 54171

## 2. Site Background

The subject property consists of three parcels. The largest parcel is a 0.77-acre former commercial property; the property has previously been a retail gasoline station/auto repair and later a medical facility. Two smaller parcels, totaling 0.28 acres, lie adjacent to the west of the larger parcel; the smaller parcels are former residential properties.

In 2019 AECOM Technical Services (AECOM) conducted a Phase I ESA on the three parcels combined as a single subject property. The Phase I ESA identified the following recognized environmental conditions (RECs) on the property as related to historical uses or environmental impact identified on adjacent properties on the east side of Webster Avenue and south of Derby Lane. The RECs were:

- The historical use of the property as a gasoline and automotive service station;
- The unknown quality of fill soil placed on the subject property;
- The presence of groundwater contamination from 1401 South Webster Avenue;
- A former dry cleaner located approximately 200 feet north of the subject property at 1304 South Webster Avenue; and
- A documented groundwater contaminant plume associated with 1404 South Webster Avenue (a former gasoline station which was later converted to a dry cleaner) that is located immediately adjacent to the subject property on the south side of Derby Lane.

### 2.1 Purpose and Scope of Work

The purpose of the Phase II ESA was to evaluate the RECs identified above to determine if the RECs had or are causing environmental impacts that present a hazard to human health or the environment.

The scope of work was developed to evaluate the RECs by sampling and analyzing soil and groundwater samples. Fourteen soil probe borings were advanced and five of the soil probe borings were completed as temporary groundwater monitoring wells. Thirty-five soil and five groundwater samples were collected and analyzed in October 2019. Groundwater samples from three existing groundwater monitoring wells were also analyzed in October 2019 as part of the Phase II ESA. Groundwater samples were collected during a second sampling event from both the temporary wells and the three existing monitoring wells.

Soil and groundwater samples were collected in the southeast corner of the subject property on the location of the former gasoline and automotive service station to determine if this prior use resulted in a petroleum release. Soil borings were advanced to evaluate if migration of chlorinated solvents and petroleum products had occurred from adjacent properties (1401 South Webster Avenue and 1404 South Webster Avenue) in the soil or groundwater. The soil samples from these borings were also used to evaluate the quality of the fill placed on the subject property. Additional soil borings were advanced on the southwestern portion of the property to assess the soil quality within the direct contact zone (zero to four feet below ground surface [bgs]). Lastly, the groundwater samples collected from the three existing wells on the property were used to further evaluate the chlorinated VOCs migrating from 1404 S Webster Avenue.

## 3. Methods of Assessment

### Utility Clearance

AECOM contacted Digger's Hotline for the location of public utilities on the three parcels prior to commencing work.

## Soil Probe Borings

Soil probe borings were completed at 14 locations, as shown on Figure 3, designated SP-101 through SP-115. The borings were advanced to 20 feet below ground surface (bgs) except for the locations completed as temporary wells which were advanced to 30 feet bgs. At the location for SP-107, the soil was too soft for rig access. Several attempts were made to move to firmer ground, but the boring would have been too close to either SP-106 or SP-109, so boring SP-107 was omitted. Soil probe borings were advanced with a hydraulic push-probe using a two-inch diameter drive rod to collect continuous soil samples inside of a polyethylene sheath inserted into the end of the drive rod. The soil samples were described in the field with respect to the soil type, grain size distribution, and color (or discoloration), odor, and moisture content. Soil samples were screened in the field with a photo-ionization detector (PID) equipped with a 10.6 electron volt (eV) lamp. The PID was calibrated in the field according to manufacturer's instructions, using 100 parts per million (ppm) isobutylene span gas and air (zero gas). Field observations from the borings were recorded on soil boring log forms (WDNR Form 4400-122) for each sample location and are included as Appendix A. Borehole abandonment forms (WDNR Form 3300-005) are also included in Appendix A.

## Temporary Wells

Five locations were completed as temporary wells; SP-105, SP-109, SP-111, SP-112 and SP-114. The temporary monitoring wells were constructed using 1-inch diameter PVC well screen and riser for groundwater access. A 10-foot slotted section with solid riser was placed from 20 to 30 feet bgs so the screened interval straddled the water table. Temporary well construction is depicted on the boring logs. The temporary monitoring wells were purged using a bailer because the transmissivity of the soil was slow and the wells were purged until the boring was dry. Groundwater samples were collected in October 2019 and January 2020 from each temporary monitoring well using a disposable bailer after the well had been purged dry one time.

## Existing Groundwater Monitoring Well Sampling

AECOM collected groundwater samples at the three existing monitoring wells MW-4, MW-5, and MW-6, located on the subject property or in the right-of-way adjacent to the subject property, in October 2019 and January 2020. The depth to groundwater was measured, the monitoring wells were purged until dry, the water levels were permitted to recover, and groundwater samples were collected using a bailer. Field parameters were not measured because of the low volume of water available when sampling.

Groundwater samples were placed in pre-cleaned, laboratory-supplied sample jars. Sample labels were completed with the sample identification number, date and time of collection, analysis to be conducted, preservative, and the sampler's initials.

## Laboratory Analytical Methods

A chain-of-custody (COC) form was completed after sample collection and the samples were placed in a cooler and delivered to the laboratory under standard COC procedures. Thirty-five soil samples were analyzed for the following analytes:

- Volatile Organic Compounds (VOCs) by SW-846 method 8260,
- Polycyclic Aromatic Hydrocarbons (PAHs) by SW-846 8270 SIM, and
- Resource Conservation and Recovery Act (RCRA) Metals by SW-846 6010 (ICP) and 7471 for mercury.

Eight groundwater samples were analyzed twice for VOCs using SW-846 method 8260

## Investigative Waste Management

Soil probe borings did not generate soil cuttings as an investigation-derived waste. Similarly, little water was generated by the temporary and NR141-compliant monitoring wells because of the low transmissivity.

## 4. Results

The soil laboratory analytical data were validated with reference to the USEPA National Functional Guidelines and the soil data validation memo is attached to this report. The data were considered acceptable for use and appropriate qualifications were added to the results tables. The soil duplicate results were compared, and the results were qualified as biased low where the relative percent difference was greater than 50%. However, analyte concentration variations may be due to the normal heterogeneity of soil and not necessarily indicative of analytical bias. The groundwater data was similarly validated and the results of validation are provided in the groundwater validation memo. The data were considered acceptable for use and appropriate qualifications were added to the results table.

Soil analytical results are compared to the generic Residual Contaminant Levels (RCLs) per WAC Ch. NR 720 and Background Threshold Values (BTVs) where established. Generic RCLs were those calculated by WDNR (December 2018) using the USEPA Regional Screening Level Web Calculator in accordance with WDNR Draft PUB-RR-890. The soil laboratory analytical results are presented in Table 1 which includes detected VOCs, PAHs and the eight RCRA metals. Only two analytes, tetrachloroethene (PCE) in 11 of 35 samples and lead in 3 of 30 samples, exceeded only the groundwater pathway RCL. Arsenic exceeded each of the RCLs, but the detected concentrations at each location were below the background threshold value. Therefore, arsenic is not considered a contaminant of concern. The results for the two detected analytes above RCLs are depicted in Figure 4. A copy of the laboratory analytical report is appended.

Groundwater analytical results are compared to Wisconsin Groundwater Quality standards in WAC Ch. NR 140.10. Wisconsin has two levels of groundwater quality standards. The first level, the Preventive Action Limit (PAL), is a concentration that is 10% (for carcinogenic, mutagenic or teratogenic compounds) to 20% (non-carcinogenic) of the Enforcement Standards (ES). The PAL has been established as the concentration at which notification to the WDNR is required. Remedial action is not always required if a PAL is exceeded. The ES is a health-risk based concentration and exceedances of ESs usually result in further subsurface investigation, remedial action requirements, or monitoring. The laboratory analytical results for the temporary wells are provided in Table 2. A summary table of new and historical results for the three NR141-compliant monitoring wells is provided as Table 3. PAL and/or ES exceedances were identified at each groundwater sampling location during the two groundwater sampling events and include:

Temporary wells	PAL Exceedance	ES Exceedance
Benzene	None	SP-105 (both events)
Cis-1,2-dichloroethene	SP-105 (both events)	None
Tetrachloroethene	SP-111 (both events)	SP-105 (both events) SP-109 (October 2019 only) SP-112 (both events) SP-114 (both events)
Trichloroethene	SP-111 (October 2019 only) SP-114 (both events)	SP-105 (both events)

Existing Monitoring Wells	PAL	ES
Benzene	MW-5 (both events)	MW-6 (both events)
Cis-1,2-dichloroethene	MW-6 (both events)	MW-5 (both events)

Existing Monitoring Wells	PAL	ES
Trans-1,2-dichloroethene	MW-6 (January 2020 only)	MW-6 (October 2019 only)
Naphthalene	MW-5 (both events)	None
	MW-6 (October 2019 only)	
Tetrachloroethene	MW-5 (both events)	MW-4 (both events)
		MW-6 (both events)
Trichloroethene	MW-4 (both events)	MW-6 (both events)
Total Trimethylbenzenes	None	MW-5 (both events)
Total Xylenes	MW-5 (October 2019 only)	None

The exceedances are depicted in Figure 5. Copies of the laboratory analytical reports are appended.

The soil and groundwater results are discussed below by REC.

## 4.1 Hydrogeologic Setting

Published geologic and hydrogeologic information was reviewed to assess soil and bedrock types in the area, regional groundwater flow direction, and groundwater sources. The 7.5-minute topographic maps of the De Pere, Wisconsin quadrangle (USGS, 2013) shows the area topography and surface water features in and around the property (Figure 1). The area around the property is relatively flat with an approximate elevation of approximately 636 feet above mean sea level (MSL).

The USDA Soil Conservation Service Web Soil Survey of Marinette County, Wisconsin, has mapped the area of the subject property as Kewaunee silty loam.

The soil encountered at the site included fill soil composed mostly of clay, sandy silt overlying sand, fill overlying clay and interbedded silts and sand or silts and clay. The fill thickness ranged from two to 15 feet. The sand, where encountered seemed to get coarser with depth. The color was generally tan to brown turning to grey below the water table. The water table was encountered from 14 to 20 feet bgs. An odor was noted in SP-105 in the 20-22 foot soil interval and stained soil with an odor were observed at 27.5 feet bgs at location SP-113.

## 4.2 Data Evaluation by REC

### The historical use of the property as a gasoline and automotive service station

Sample locations SP-101, SP-102, SP-103, and SP-115 were used to evaluate the historical gasoline station use of the southeast corner of the property. Petroleum impacts to the soil were not identified by lab analysis in these borings, but dark stained soil with an odor was identified below the apparent water table at 27.5 bgs. PCE was detected in the shallow (0.5-1.5-foot bgs) sample at SP-102. In SP-101, SP-103 and SP-115 PCE was detected in one or both of the deeper samples at each location. The PCE is indicative of impact associated with a dry cleaner and is not a compound generally associated with a gasoline or automotive service station.

The groundwater samples from the three NR141-compliant groundwater monitoring well are within the vicinity of the former gasoline/automotive service station. PCE and trichloroethene (TCE), both associated with dry cleaning fluids, were present above the ES and PAL (respectively) in the groundwater sample from MW-4. Petroleum VOCs (benzene, naphthalene, trimethylbenzenes and xylenes) were identified in the groundwater samples from MW-5 and MW-6 and are likely associated with the plume from the previously closed gas station off-site. The concentration trend for total trimethylbenzenes in

MW-5 appear to be increasing. PCE and breakdown compounds were also identified in the groundwater samples from MW-5 and MW-6. The PCE concentrations in both wells appear to have decreasing trends.

### The unknown quality of fill soil placed on the subject property

Sample locations SP-104 through SP-114 were used to evaluate the quality of the fill soils or soil remaining after the prior buildings were razed. None of the tested analytes were detected at concentrations above the direct contact RCLs (either non-industrial or industrial). Only lead and PCE were detected in some of the samples above the groundwater pathway RCL as depicted on Figure 4. PAHs and other metals were detected, but the detected concentrations did not exceed RCLs. The quality of the fill is generally acceptable for redevelopment.

### The presence of groundwater contamination from 1401 South Webster Avenue

The evaluation of the dry cleaner sites and the groundwater plume from 1404 S Webster was evaluated with the collection of groundwater samples at the three existing wells (MW-4, MW-5, and MW-6) and the temporary wells identified as SP-105, SP-109, SP-111, SP-112, and SP-114. Petroleum VOCs (benzene, naphthalene, trimethylbenzenes, and xylenes) were identified in the groundwater samples from MW-5 and MW-6 and are likely associated with the plume from the previously closed gas station off-site. The concentration trend for total trimethylbenzenes in MW-5 appear to be increasing. Benzene was identified in the groundwater sample from SP-105. The detected concentrations exceed either the PAL or the ES. The contaminant plume is present under the eastern portion of the subject property.

### A former dry cleaner located approximately 200 feet north of the subject property at 1304 South Webster Avenue

Although PCE was detected in deeper soil samples at SP-105 and SP-106, the distance to this former dry cleaner is approximately 200 feet and the impact does not appear to be related.

### A documented groundwater contaminant plume associated with 1404 South Webster Avenue

PCE and associated lesser-chlorinated breakdown compounds were identified in the three NR141-compliant groundwater monitoring wells above the PAL and/or ES. Table 3 includes 2017 and 2018 groundwater data for the compounds detected during this sample event and the current concentrations are consistent with prior data which depicts a somewhat stable contaminant plume, except for PCE in MW-4 which appears to have a slight increasing trend. Additionally, PCE was identified above the ES in the groundwater samples from each of the temporary wells (in both sample events except for SP-111 where the concentration only exceeded the PAL in just the October 2019 event).

## 5. Conclusions

The Phase II ESA conclusions are:

- Fill soils were identified in 12 of the 15 locations with thicknesses of two to 15 feet.
- PCE and lead were identified in the soil samples above groundwater pathway RCLs. No exceedances of the direct contact RCLs were identified.
- PAHs were detected in each soil sample tested but none of the detected analytes exceeded RCLs.
- Metals were identified in each sample tested; only lead and arsenic were detected above RCLs. The detected concentration for arsenic in each sample tested was below the BTV for the State of Wisconsin, but the arsenic concentrations exceeded the non-industrial direct contact pathway, the industrial direct contact pathway and the groundwater pathway RCLs. Lead was detected only above the RCL for the groundwater pathway.
- A release associated with the identified historic site uses was not identified by direct evidence from the observations of the soil or laboratory analysis of the soil and groundwater samples.

- The groundwater contaminant plumes from the closed petroleum case and the open dry cleaner site persist under the subject property. These plumes could be a source for vapor intrusion in any redeveloped building on the subject property.

## 6. General Qualifications

The purpose of this environmental assessment is to investigate possible soil and/or groundwater impacts, and related liabilities, associated with past and current property uses. The extent of the investigation is limited to the area and location described in this report.

AECOM has prepared this report at the request of its client. AECOM assumes responsibility for the accuracy of the report's content, subject to what is stated elsewhere in this section. AECOM recommends the report be used only for the purpose intended by the client and AECOM, as stated in the report. AECOM disclaims responsibility for the application or interpretation of the results by anyone other than the client. Reliance on the contents of this report by anyone other than the client, without the prior expressed written consent of AECOM, is done at the sole risk of the user.

The results, conclusions, and recommendations presented in this report are based on the data obtained from a limited number of soil boring locations and at the soil sample and groundwater sample locations as indicated in this report. Variations in conditions can occur between these boring, soil sample, and groundwater sample locations. In addition, seasonal and annual fluctuations of the groundwater table, which may influence the distribution of contaminants, can occur. Actual groundwater flow rates may vary from those estimated in this report based on soil conditions.

This report has been prepared in conformance with the care and skill ordinarily exercised by reputable members of the professional engineering community practicing under similar conditions at the same time in the same or similar locality. No other warranty of any kind, expressed or implied, at common law or created by statute, is extended, made, or intended.

## TABLES

**Table 1**  
**Analytes Detected in Soil Samples**  
**Allouez Phase II**

Parameters	Generic RCLs			SP-101			SP-102			SP-103		
	Direct Contact Pathway		Groundwater Pathway	0.5 - 1.5 ft	8 - 10 ft	18 - 20 ft	0.5 - 1.5 ft	19 - 20 ft	19 - 20 ft	0.5 - 1.5 ft	12 - 14 ft	18 - 20 ft
	Non-Industrial	Industrial		SP-101-0.5-1.5 10/25/2019	SP-101-8-10 10/25/2019	SP-101-18-20 10/25/2019	SP-102-0.5-1.5 10/25/2019	SP-102-19-20 10/25/2019	SP-102-19-20D 10/25/2019	SP-103-0.5-1.5 10/25/2019	SP-103-12-14 10/25/2019	SP-103-18-20 10/25/2019
<b>Detected VOCs (µg/kg)</b>												
1,2,4-Trimethylbenzene	219000	219000	--	< 25.0	< 25.0	< 25.0	< 25.0	< 25.0	< 25.0	< 25.0	< 25.0	< 25.0
1,3,5-Trimethylbenzene	182000	182000	--	< 25.0	< 25.0	< 25.0	< 25.0	< 25.0	< 25.0	< 25.0	< 25.0	< 25.0
Ethylbenzene	8020	35400	1570	< 25.0	< 25.0	< 25.0	< 25.0	< 25.0	< 25.0	< 25.0	< 25.0	< 25.0
Isopropylbenzene (Cumene)	268000	268000	--	< 25.0	< 25.0	< 25.0	< 25.0	< 25.0	< 25.0	< 25.0	< 25.0	< 25.0
m,p-Xylenes	--	--	--	< 50.0	< 50.0	< 50.0	< 50.0	< 50.0	< 50.0	< 50.0	< 50.0	< 50.0
Naphthalene	5520	24100	658.2	< 40.0	< 40.0	< 40.0	< 40.0	< 40.0	< 40.0	< 40.0	< 40.0	< 40.0
n-Butylbenzene	108000	108000	--	< 25.0	< 25.0	< 25.0	< 25.0	< 25.0	< 25.0	< 25.0	< 25.0	< 25.0
n-Propylbenzene	264000	264000	--	< 25.0	< 25.0	< 25.0	< 25.0	< 25.0	< 25.0	< 25.0	< 25.0	< 25.0
Tetrachloroethene	33000	145000	4.5	< 25.0	57.0 <sup>J C</sup>	32.6 <sup>J C</sup>	59.5 <sup>J C</sup>	< 25.0	< 25.0	< 25.0	< 25.0	277 <sup>C</sup>
Xylene (Total)	260000	260000	3960	< 75.0	< 75.0	< 75.0	< 75.0	< 75.0	< 75.0	< 75.0	< 75.0	< 75.0
<b>PAHs (µg/kg)</b>												
1-Methylnaphthalene	17600	72700	--	< 3.0	< 2.9	nt	6.7 <sup>J</sup>	< 2.7	< 2.7	< 2.9	< 2.8	nt
2-Methylnaphthalene	239000	3010000	--	< 3.0	< 2.9	nt	8.5 <sup>J</sup>	< 2.7	< 2.7	< 2.9	< 2.8	nt
Acenaphthene	3590000	45200000	--	3.0 <sup>J</sup>	< 2.5	nt	< 2.7	< 2.4	< 2.4	< 2.6	< 2.5	nt
Acenaphthylene	--	--	--	< 2.6	< 2.5	nt	7.7 <sup>J</sup>	< 2.4	< 2.4	< 2.5	< 2.4	nt
Anthracene	17900000	100000000	196949.2	9.8 <sup>J</sup>	< 2.4	nt	6.6 <sup>J</sup>	< 2.3	< 2.3	< 2.5	< 2.4	nt
Benzo(a)anthracene	1140	20800	--	40	< 2.5	nt	17.3 <sup>J</sup>	2.6 <sup>J</sup>	< 2.4	4.3 <sup>J</sup>	< 2.5	nt
Benzo(a)pyrene	115	2110	470	64.8	< 2.2	nt	23.3	< 2.1	< 2.1	3.4 <sup>J</sup>	< 2.2	nt
Benzo(b)fluoranthene	1150	21100	478.1	64.5	< 2.7	nt	43.0	< 2.6	< 2.6	5.0 <sup>J</sup>	< 2.6	nt
Benzo(g,h,i)perylene	--	--	--	44.3	< 3.4	nt	23.1	< 3.3	< 3.3	3.7 <sup>J</sup>	< 3.3	nt
Benzo(k)fluoranthene	11500	211000	--	29.2	< 2.5	nt	14.3 <sup>J</sup>	< 2.4	< 2.4	2.8 <sup>J</sup>	< 2.4	nt
Chrysene	115000	2110000	144.2	48.1	< 3.7	nt	27.5	< 3.5	< 3.5	4.5 <sup>J</sup>	< 3.6	nt
Dibenzo(a,h)anthracene	115	2110	--	9.6 <sup>J</sup>	< 2.7	nt	6.2 <sup>J</sup>	< 2.6	< 2.6	< 2.8	< 2.6	nt
Fluoranthene	2390000	30100000	88877.8	112	< 2.3	nt	33.5	< 2.2	< 2.2	5.9 <sup>J</sup>	< 2.3	nt
Fluorene	2390000	30100000	14829.9	2.6 <sup>J</sup>	< 2.3	nt	< 2.5	< 2.2	< 2.2	< 2.4	< 2.3	nt
Indeno(1,2,3-cd)pyrene	1150	21100	--	34.8	< 4.1	nt	19.3 <sup>J</sup>	< 3.9	< 3.9	< 4.2	< 4.0	nt
Naphthalene	5520	24100	658.2	3.2 <sup>J</sup>	< 1.9	nt	10 <sup>J</sup>	2.0 <sup>J</sup>	2.2 <sup>J</sup>	< 2.0	< 1.9	nt
Phenanthrene	--	--	--	51.8	< 2.2	nt	16.9 <sup>J</sup>	< 2.1	< 2.1	< 2.3	< 2.2	nt
Pyrene	1790000	22600000	54545.5	78	< 2.9	nt	26.6	< 2.8	< 2.7	4.2 <sup>J</sup>	< 2.8	nt

**Table 1**  
**Analytes Detected in Soil Samples**  
**Allouez Phase II**

Parameters	Generic RCLs			SP-101			SP-102			SP-103		
	Direct Contact Pathway		Groundwater Pathway	0.5 - 1.5 ft	8 - 10 ft	18 - 20 ft	0.5 - 1.5 ft	19 - 20 ft	19 - 20 ft	0.5 - 1.5 ft	12 - 14 ft	18 - 20 ft
	Non-Industrial	Industrial		SP-101-0.5-1.5 10/25/2019	SP-101-8-10 10/25/2019	SP-101-18-20 10/25/2019	SP-102-0.5-1.5 10/25/2019	SP-102-19-20 10/25/2019	SP-102-19-20D 10/25/2019	SP-103-0.5-1.5 10/25/2019	SP-103-12-14 10/25/2019	SP-103-18-20 10/25/2019
<b>Metals (mg/kg)</b>												
Arsenic	0.677	3	0.584	<b>3.3<sup>J</sup> ABC</b>	<b>2.2<sup>J</sup> AC</b>	nt	<b>2.9<sup>J</sup> AC</b>	<b>2.0<sup>J</sup> AC</b>	<b>1.6<sup>J</sup> AC</b>	<b>2.1<sup>J</sup> AC</b>	<b>3.9<sup>J</sup> ABC</b>	nt
Barium	15300	100000	164.8	50.5	36.6	nt	111	6.8	6.8	73.3	55.3	nt
Cadmium	71.1	985	0.752	0.36 <sup>J</sup>	< 0.15	nt	0.20 <sup>J</sup>	< 0.14	< 0.14	0.17 <sup>J</sup>	< 0.15	nt
Chromium	--	--	360000	15.4	14.5	nt	33.3	5.0	4.3	27.8	21.0	nt
Lead	400	800	27	<b>39.1<sup>C</sup></b>	3.7	nt	11.2	1.3 <sup>J</sup>	1.0 <sup>J</sup>	23.3	4.1	nt
Mercury	3.13	3.13	0.208	0.039 <sup>J</sup>	< 0.011	nt	0.018 <sup>J</sup>	< 0.011	< 0.011	0.015 <sup>J</sup>	< 0.012	nt
Silver	391	5840	0.8491	< 0.36	< 0.35	nt	< 0.72	< 0.32	< 0.32	< 0.71	< 0.70	nt

Notes:

PAHs = Polynuclear Aromatic Hydrocarbons

VOCs = Volatile Organic Compounds

ug/kg = Micrograms per kilogram.

mg/kg = Micrograms per kilogram.

<sup>J</sup> = Estimated value (+/- indicate bias).

<sup>A</sup> = Parameter exceeds Generic RCL for Non-Industrial Direct Contact.

<sup>B</sup> = Parameter exceeds Generic RCL for Industrial Direct Contact (none).

<sup>C</sup> = Parameter exceeds Generic RCL for Groundwater Pathway.

Generic RCLs Dec 2018 per WDNR PUB-RR-890.

-- = No generic RCL established.

nt = not tested

non-detect VOC results were reported on a wet weight basis.

**Table 1**  
**Analytes Detected in Soil Samples**  
**Allouez Phase II**

Parameters	Generic RCLs			SP-104		SP-105			SP-106		
	Direct Contact Pathway		Groundwater Pathway	0.5 - 1.5 ft	18 - 19 ft	0.5 - 1.5 ft	20 - 21 ft	26 - 27 ft	0.5 - 1.5 ft	10 - 12 ft	18 - 19 ft
	Non-Industrial	Industrial		SP-104-0.5-1.5 10/25/2019	SP-104-18-19 10/25/2019	SP-105-0.5-1.5 10/25/2019	SP-105-20-21 10/25/2019	SP-105-26-27 10/25/2019	SP-106-0.5-1.5 10/25/2019	SP-106-10-12 10/25/2019	SP-106-18-19 10/25/2019
<b>Detected VOCs (µg/kg)</b>											
1,2,4-Trimethylbenzene	219000	219000	--	< 25.0	< 25.0	< 25.0	< 25.0	< 25.0	< 25.0	< 25.0	< 25.0
1,3,5-Trimethylbenzene	182000	182000	--	< 25.0	< 25.0	< 25.0	< 25.0	< 25.0	< 25.0	< 25.0	< 25.0
Ethylbenzene	8020	35400	1570	< 25.0	< 25.0	< 25.0	< 25.0	< 25.0	< 25.0	< 25.0	< 25.0
Isopropylbenzene (Cumene)	268000	268000	--	< 25.0	< 25.0	< 25.0	< 25.0	< 25.0	< 25.0	< 25.0	< 25.0
m,p-Xylenes	--	--	--	< 50.0	< 50.0	< 50.0	< 50.0	< 50.0	< 50.0	< 50.0	< 50.0
Naphthalene	5520	24100	658.2	< 40.0	< 40.0	< 40.0	< 40.0	< 40.0	< 40.0	< 40.0	< 40.0
n-Butylbenzene	108000	108000	--	< 25.0	< 25.0	< 25.0	< 25.0	< 25.0	< 25.0	< 25.0	< 25.0
n-Propylbenzene	264000	264000	--	< 25.0	< 25.0	< 25.0	< 25.0	< 25.0	< 25.0	< 25.0	< 25.0
Tetrachloroethene	33000	145000	4.5	<b>30.1<sup>J C</sup></b>	<b>63.7<sup>C</sup></b>	< 25.0	< 25.0	<b>69.5<sup>J C</sup></b>	< 25.0	<b>64.9<sup>C</sup></b>	<b>59.4<sup>J C</sup></b>
Xylene (Total)	260000	260000	3960	< 75.0	< 75.0	< 75.0	< 75.0	< 75.0	< 75.0	< 75.0	< 75.0
<b>PAHs (µg/kg)</b>											
1-Methylnaphthalene	17600	72700	--	< 2.9	< 2.5	< 2.9	< 2.9	nt	< 2.9	< 2.5	nt
2-Methylnaphthalene	239000	3010000	--	< 2.9	< 2.5	< 2.9	< 2.9	nt	< 2.9	< 2.5	nt
Acenaphthene	3590000	45200000	--	< 2.6	< 2.3	< 2.6	< 2.6	nt	< 2.6	< 2.2	nt
Acenaphthylene	--	--	--	< 2.5	< 2.2	< 2.5	< 2.5	nt	< 2.5	< 2.1	nt
Anthracene	17900000	100000000	196949.2	< 2.5	< 2.2	< 2.5	< 2.5	nt	< 2.5	< 2.1	nt
Benzo(a)anthracene	1140	20800	--	<b>6.9<sup>J</sup></b>	< 2.2	< 2.6	< 2.6	nt	< 2.6	< 2.2	nt
Benzo(a)pyrene	115	2110	470	<b>15.2<sup>J</sup></b>	< 2.0	< 2.3	< 2.3	nt	< 2.3	< 1.9	nt
Benzo(b)fluoranthene	1150	21100	478.1	<b>12.3<sup>J</sup></b>	< 2.4	< 2.8	< 2.8	nt	< 2.8	< 2.4	nt
Benzo(g,h,i)perylene	--	--	--	<b>12.0<sup>J</sup></b>	< 3.0	< 3.5	< 3.5	nt	< 3.5	< 3.0	nt
Benzo(k)fluoranthene	11500	211000	--	<b>5.4<sup>J</sup></b>	< 2.2	< 2.6	< 2.5	nt	< 2.5	< 2.2	nt
Chrysene	115000	2110000	144.2	<b>9.4<sup>J</sup></b>	< 3.3	< 3.8	< 3.8	nt	< 3.7	< 3.2	nt
Dibenzo(a,h)anthracene	115	2110	--	<b>4.2<sup>J</sup></b>	< 2.4	< 2.8	< 2.8	nt	< 2.7	< 2.4	nt
Fluoranthene	2390000	30100000	88877.8	<b>6.6<sup>J</sup></b>	< 2.1	< 2.4	< 2.4	nt	< 2.3	< 2.0	nt
Fluorene	2390000	30100000	14829.9	< 2.4	< 2.1	< 2.4	< 2.4	nt	< 2.4	< 2.0	nt
Indeno(1,2,3-cd)pyrene	1150	21100	--	<b>6.8<sup>J</sup></b>	< 3.6	< 4.2	< 4.1	nt	< 4.1	< 3.5	nt
Naphthalene	5520	24100	658.2	< 1.9	< 1.7	< 2.0	< 1.9	nt	<b>2.1<sup>J</sup></b>	< 1.7	nt
Phenanthrene	--	--	--	< 2.3	< 2.0	< 2.3	< 2.3	nt	< 2.3	< 1.9	nt
Pyrene	1790000	22600000	54545.5	<b>8.3<sup>J</sup></b>	< 2.6	< 2.9	< 2.9	nt	< 2.9	< 2.5	nt

**Table 1**  
**Analytes Detected in Soil Samples**  
**Allouez Phase II**

Parameters	Generic RCLs			SP-104		SP-105			SP-106		
	Direct Contact Pathway		Groundwater Pathway	0.5 - 1.5 ft	18 - 19 ft	0.5 - 1.5 ft	20 - 21 ft	26 - 27 ft	0.5 - 1.5 ft	10 - 12 ft	18 - 19 ft
	Non-Industrial	Industrial		SP-104-0.5-1.5 10/25/2019	SP-104-18-19 10/25/2019	SP-105-0.5-1.5 10/25/2019	SP-105-20-21 10/25/2019	SP-105-26-27 10/25/2019	SP-106-0.5-1.5 10/25/2019	SP-106-10-12 10/25/2019	SP-106-18-19 10/25/2019
<b>Metals (mg/kg)</b>											
Arsenic	0.677	3	0.584	<b>3.2<sup>J ABC</sup></b>	< 2.9	<b>2.1<sup>J AC</sup></b>	<b>3.4<sup>J ABC</sup></b>	nt	<b>2.7<sup>J AC</sup></b>	< 7.1	nt
Barium	15300	100000	164.8	63.7	6.4	110	6.2	nt	47.8	5.9	nt
Cadmium	71.1	985	0.752	< 0.16	< 0.13	0.17 <sup>J</sup>	< 0.15	nt	< 0.15	< 0.13	nt
Chromium	--	--	360000	20.4	4.8	35.9	3.5	nt	18.4	5.2	nt
Lead	400	800	27	5.0	1.0 <sup>J</sup>	9.1	0.72 <sup>J</sup>	nt	8.6	0.99 <sup>J</sup>	nt
Mercury	3.13	3.13	0.208	0.013 <sup>J</sup>	< 0.011	0.022 <sup>J</sup>	< 0.011	nt	0.015 <sup>J</sup>	0.012 <sup>J</sup>	nt
Silver	391	5840	0.8491	< 0.73	< 0.30	< 0.74	< 0.36	nt	< 0.35	< 0.30	nt

Notes:

PAHs = Polynuclear Aromatic Hydrocarbons

VOCs = Volatile Organic Compounds

ug/kg = Micrograms per kilogram.

mg/kg = Micrograms per kilogram.

<sup>J</sup> = Estimated value (+/- indicate bias).

<sup>A</sup> = Parameter exceeds Generic RCL for Non-Industrial Direct Contact.

<sup>B</sup> = Parameter exceeds Generic RCL for Industrial Direct Contact (none).

<sup>C</sup> = Parameter exceeds Generic RCL for Groundwater Pathway.

Generic RCLs Dec 2018 per WDNR PUB-RR-890.

-- = No generic RCL established.

nt = not tested

non-detect VOC results were reported on a wet weight basis.

**Table 1**  
**Analytes Detected in Soil Samples**  
**Allouez Phase II**

Parameters	Generic RCLs			SP-108			SP-109		SP-110		SP-111	
	Direct Contact Pathway		Groundwater Pathway	0.5 - 1.5 ft	19 - 20 ft	19 - 20 ft	0.5 - 1.5 ft	18 - 19 ft	0.5 - 1.5 ft	18 - 19 ft	0.5 - 1.5 ft	21 - 22 ft
	Non-Industrial	Industrial		SP-108-0.5-1.5 10/25/2019	SP-108-19-20 10/25/2019	SP-108-19-20D 10/25/2019	SP-109-0.5-1.5 10/25/2019	SP-109-18-19 10/25/2019	SP-110-0.5-1.5 10/25/2019	SP-110-18-19 10/25/2019	SP-111-0.5-1.5 10/25/2019	SP-111-21-22 10/25/2019
<b>Detected VOCs (µg/kg)</b>												
1,2,4-Trimethylbenzene	219000	219000	--	< 25.0	< 25.0	< 25.0	< 25.0	< 25.0	< 25.0	< 25.0	< 25.0	
1,3,5-Trimethylbenzene	182000	182000	--	< 25.0	< 25.0	< 25.0	< 25.0	< 25.0	< 25.0	< 25.0	< 25.0	
Ethylbenzene	8020	35400	1570	< 25.0	< 25.0	< 25.0	< 25.0	< 25.0	< 25.0	< 25.0	< 25.0	
Isopropylbenzene (Cumene)	268000	268000	--	< 25.0	< 25.0	< 25.0	< 25.0	< 25.0	< 25.0	< 25.0	< 25.0	
m,p-Xylenes	--	--	--	< 50.0	< 50.0	< 50.0	< 50.0	< 50.0	< 50.0	< 50.0	< 50.0	
Naphthalene	5520	24100	658.2	< 40.0	< 40.0	< 40.0	< 40.0	< 40.0	< 40.0	< 40.0	< 40.0	
n-Butylbenzene	108000	108000	--	< 25.0	< 25.0	< 25.0	< 25.0	< 25.0	< 25.0	< 25.0	< 25.0	
n-Propylbenzene	264000	264000	--	< 25.0	< 25.0	< 25.0	< 25.0	< 25.0	< 25.0	< 25.0	< 25.0	
Tetrachloroethene	33000	145000	4.5	< 25.0	< 25.0	< 25.0	< 25.0	< 25.0	< 25.0	< 25.0	< 25.0	
Xylene (Total)	260000	260000	3960	< 75.0	< 75.0	< 75.0	< 75.0	< 75.0	< 75.0	< 75.0	< 75.0	
<b>PAHs (µg/kg)</b>												
1-Methylnaphthalene	17600	72700	--	11.4 <sup>J</sup>	< 2.9	< 2.9	< 2.8	< 2.9	< 2.9	< 2.9	< 2.8	4.5 <sup>J</sup>
2-Methylnaphthalene	239000	3010000	--	14.6 <sup>J</sup>	< 3.0	< 2.9	4.1 <sup>J</sup>	< 2.9	< 2.9	< 2.9	< 2.8	8.0 <sup>J</sup>
Acenaphthene	3590000	45200000	--	< 2.6	< 2.6	< 2.6	< 2.5	< 2.6	< 2.6	< 2.6	< 2.5	< 2.6
Acenaphthylene	--	--	--	< 2.5	< 2.5	< 2.5	< 2.4	< 2.5	< 2.5	< 2.5	< 2.4	< 2.5
Anthracene	17900000	100000000	196949.2	3.2 <sup>J</sup>	< 2.5	< 2.5	< 2.4	< 2.5	< 2.5	< 2.5	< 2.4	< 2.4
Benzo(a)anthracene	1140	20800	--	7.8 <sup>J</sup>	< 2.6	< 2.6	4.0 <sup>J</sup>	< 2.6	2.7 <sup>J</sup>	< 2.6	2.9 <sup>J</sup>	< 2.5
Benzo(a)pyrene	115	2110	470	7.9 <sup>J</sup>	< 2.3	< 2.3	3.0 <sup>J</sup>	< 2.3	< 2.3	< 2.3	< 2.2	< 2.2
Benzo(b)fluoranthene	1150	21100	478.1	12.8 <sup>J</sup>	< 2.8	< 2.8	5.6 <sup>J</sup>	< 2.8	< 2.8	< 2.8	< 2.6	< 2.7
Benzo(g,h,i)perylene	--	--	--	6.9 <sup>J</sup>	< 3.5	< 3.5	< 3.4	< 3.5	< 3.5	< 3.5	< 3.3	< 3.5
Benzo(k)fluoranthene	11500	211000	--	4.7 <sup>J</sup>	< 2.6	< 2.6	< 2.5	< 2.6	< 2.6	< 2.6	< 2.4	< 2.5
Chrysene	115000	2110000	144.2	10.4 <sup>J</sup>	< 3.8	< 3.8	5.1 <sup>J</sup>	< 3.8	< 3.8	< 3.8	< 3.6	< 3.7
Dibenzo(a,h)anthracene	115	2110	--	< 2.8	< 2.8	< 2.8	< 2.7	< 2.8	< 2.8	< 2.8	< 2.6	< 2.7
Fluoranthene	2390000	30100000	88877.8	14.7 <sup>J</sup>	< 2.4	< 2.4	5.2 <sup>J</sup>	< 2.4	2.4 <sup>J</sup>	< 2.4	2.4 <sup>J</sup>	< 2.3
Fluorene	2390000	30100000	14829.9	< 2.4	< 2.4	< 2.4	< 2.3	< 2.4	< 2.4	< 2.4	< 2.3	< 2.4
Indeno(1,2,3-cd)pyrene	1150	21100	--	5.1 <sup>J</sup>	< 4.2	< 4.2	< 4.0	< 4.2	< 4.2	< 4.2	< 4.0	< 4.1
Naphthalene	5520	24100	658.2	8.3 <sup>J</sup>	< 2.0	2.9 <sup>J</sup>	3.9 <sup>J</sup>	< 1.9	< 2.0	< 2.0	< 1.8	6.1 <sup>J</sup>
Phenanthrene	--	--	--	10.9 <sup>J</sup>	< 2.3	< 2.3	5.0 <sup>J</sup>	< 2.3	< 2.3	< 2.3	< 2.2	< 2.3
Pyrene	1790000	22600000	54545.5	11.1 <sup>J</sup>	< 3.0	< 2.9	4.3 <sup>J</sup>	< 2.9	< 3.0	< 3.0	< 2.8	< 2.9

**Table 1**  
**Analytes Detected in Soil Samples**  
**Allouez Phase II**

Parameters	Generic RCLs			SP-108			SP-109		SP-110		SP-111	
	Direct Contact Pathway		Groundwater Pathway	0.5 - 1.5 ft	19 - 20 ft	19 - 20 ft	0.5 - 1.5 ft	18 - 19 ft	0.5 - 1.5 ft	18 - 19 ft	0.5 - 1.5 ft	21 - 22 ft
	Non-Industrial	Industrial		SP-108-0.5-1.5 10/25/2019	SP-108-19-20 10/25/2019	SP-108-19-20D 10/25/2019	SP-109-0.5-1.5 10/25/2019	SP-109-18-19 10/25/2019	SP-110-0.5-1.5 10/25/2019	SP-110-18-19 10/25/2019	SP-111-0.5-1.5 10/25/2019	SP-111-21-22 10/25/2019
<b>Metals (mg/kg)</b>												
Arsenic	0.677	3	0.584	< 3.4	<b>4.7<sup>J ABC</sup></b>	<b>3.3<sup>J ABC</sup></b>	< 3.4	<b>3.3<sup>J ABC</sup></b>	< 3.3	<b>3.3<sup>J ABC</sup></b>	<b>4.1<sup>J ABC</sup></b>	<b>1.9<sup>J AC</sup></b>
Barium	15300	100000	164.8	93.2	15.6	22.8	67.7	6.7	97.1	38.5	61.6	7.5
Cadmium	71.1	985	0.752	< 0.31	< 0.16	< 0.15	< 0.31	< 0.15	< 0.30	0.16 <sup>J</sup>	0.24 <sup>J</sup>	< 0.15
Chromium	--	--	360000	29.2	6.7	10.7	31.8	3.9	30.5	26.5	17.8	4.6
Lead	400	800	27	<b>78.9<sup>C</sup></b>	1.9 <sup>J</sup>	1.9 <sup>J</sup>	6.3	0.85 <sup>J</sup>	8.4	3.4	<b>183<sup>C</sup></b>	1.5 <sup>J</sup>
Mercury	3.13	3.13	0.208	0.035 <sup>J</sup>	0.020 <sup>J</sup>	0.018 <sup>J</sup>	0.048	< 0.011	0.040	0.020 <sup>J</sup>	0.028 <sup>J</sup>	< 0.012
Silver	391	5840	0.8491	< 0.71	< 0.36	< 0.34	0.77 <sup>J</sup>	< 0.34	< 0.69	< 0.37	0.75 <sup>J</sup>	< 0.35

Notes:

PAHs = Polynuclear Aromatic Hydrocarbons

VOCs = Volatile Organic Compounds

ug/kg = Micrograms per kilogram.

mg/kg = Micrograms per kilogram.

<sup>J</sup> = Estimated value (+/- indicate bias).

<sup>A</sup> = Parameter exceeds Generic RCL for Non-Industrial Direct Contact.

<sup>B</sup> = Parameter exceeds Generic RCL for Industrial Direct Contact (none).

<sup>C</sup> = Parameter exceeds Generic RCL for Groundwater Pathway.

Generic RCLs Dec 2018 per WDNR PUB-RR-890.

-- = No generic RCL established.

nt = not tested

non-detect VOC results were reported on a wet weight basis.

**Table 1**  
**Analytes Detected in Soil Samples**  
**Allouez Phase II**

Parameters	Generic RCLs			SP-112		SP-113		SP-114		SP-115		
	Direct Contact Pathway		Groundwater Pathway	0.5 - 1.5 ft	21 - 22 ft	0.5 - 1.5 ft	22 - 23 ft	0.5 - 1.5 ft	21 - 22 ft	0.5 - 1.5 ft	10 - 12 ft	18 - 20 ft
	Non-Industrial	Industrial		SP-112-0.5-1.5 10/25/2019	SP-112-21-22 10/25/2019	SP-113-0.5-1.5 10/25/2019	SP-113-22-23 10/25/2019	SP-114-0.5-1.5 10/25/2019	SP-114-21-22 10/25/2019	SP-115-0.5-1.5 10/24/2019	SP-115-10-12 10/24/2019	SP-115-18-20 10/24/2019
<b>Detected VOCs (µg/kg)</b>												
1,2,4-Trimethylbenzene	219000	219000	--	< 25.0	< 25.0	< 25.0	630	< 25.0	< 25.0	< 25.0	< 25.5	< 25.0
1,3,5-Trimethylbenzene	182000	182000	--	< 25.0	< 25.0	< 25.0	48.4 <sup>J</sup>	< 25.0	< 25.0	< 25.0	< 25.5	< 25.0
Ethylbenzene	8020	35400	1570	< 25.0	< 25.0	< 25.0	44.4 <sup>J</sup>	< 25.0	< 25.0	< 25.0	< 25.5	< 25.0
Isopropylbenzene (Cumene)	268000	268000	--	< 25.0	< 25.0	< 25.0	32.9 <sup>J</sup>	< 25.0	< 25.0	< 25.0	< 25.5	< 25.0
m,p-Xylenes	--	--	--	< 50.0	< 50.0	< 50.0	111 <sup>J</sup>	< 50.0	< 50.0	< 50.0	< 51.0	< 50.0
Naphthalene	5520	24100	658.2	< 40.0	< 40.0	< 40.0	106 <sup>J</sup>	< 40.0	< 40.0	< 40.0	< 40.9	< 40.0
n-Butylbenzene	108000	108000	--	< 25.0	< 25.0	< 25.0	49.9 <sup>J</sup>	< 25.0	< 25.0	< 25.0	< 25.5	< 25.0
n-Propylbenzene	264000	264000	--	< 25.0	< 25.0	< 25.0	96.1	< 25.0	< 25.0	< 25.0	< 25.5	< 25.0
Tetrachloroethene	33000	145000	4.5	< 25.0	77.4 <sup>C</sup>	< 25.0	< 25.0	< 25.0	< 25.0	< 25.0	169 <sup>C</sup>	368 <sup>C</sup>
Xylene (Total)	260000	260000	3960	< 75.0	< 75.0	< 75.0	124 <sup>J</sup>	< 75.0	< 75.0	< 75.0	< 76.5	< 75.0
<b>PAHs (µg/kg)</b>												
1-Methylnaphthalene	17600	72700	--	232	< 2.8	< 2.8	21.9	< 3.1	< 2.9	< 2.9	< 2.6	nt
2-Methylnaphthalene	239000	3010000	--	339	< 2.8	< 2.8	7.0 <sup>J</sup>	< 3.1	< 2.9	< 2.9	< 2.6	nt
Acenaphthene	3590000	45200000	--	4.4 <sup>J</sup>	< 2.5	< 2.5	< 2.4	< 2.8	< 2.6	3.4 <sup>J</sup>	< 2.3	nt
Acenaphthylene	--	--	--	3.2 <sup>J</sup>	< 2.4	< 2.4	< 2.4	< 2.7	< 2.5	< 2.5	< 2.2	nt
Anthracene	17900000	100000000	196949.2	7.9 <sup>J</sup>	< 2.4	< 2.4	< 2.3	< 2.6	< 2.4	10.3 <sup>J</sup>	< 2.2	nt
Benzo(a)anthracene	1140	20800	--	14.0 <sup>J</sup>	< 2.5	< 2.5	< 2.4	< 2.7	< 2.6	61.4	< 2.3	nt
Benzo(a)pyrene	115	2110	470	9.0 <sup>J</sup>	< 2.2	< 2.2	< 2.1	< 2.4	< 2.2	92.7	< 2.0	nt
Benzo(b)fluoranthene	1150	21100	478.1	14.7 <sup>J</sup>	< 2.7	< 2.7	< 2.6	< 2.9	< 2.7	142	< 2.4	nt
Benzo(g,h,i)perylene	--	--	--	12.3 <sup>J</sup>	< 3.4	< 3.4	< 3.3	< 3.7	< 3.5	88.8	< 3.1	nt
Benzo(k)fluoranthene	11500	211000	--	3.6 <sup>J</sup>	< 2.5	< 2.5	< 2.4	< 2.7	< 2.5	54.6	< 2.2	nt
Chrysene	115000	2110000	144.2	19.3 <sup>J</sup>	< 3.6	< 3.7	< 3.6	< 4.0	< 3.7	103	< 3.3	nt
Dibenzo(a,h)anthracene	115	2110	--	< 2.8	< 2.7	< 2.7	< 2.6	< 2.9	< 2.7	19.8 <sup>J</sup>	< 2.4	nt
Fluoranthene	2390000	30100000	88877.8	14.5 <sup>J</sup>	< 2.3	< 2.3	< 2.2	< 2.5	< 2.3	206	< 2.1	nt
Fluorene	2390000	30100000	14829.9	8.2 <sup>J</sup>	< 2.3	< 2.3	< 2.3	< 2.5	< 2.4	3.7 <sup>J</sup>	< 2.1	nt
Indeno(1,2,3-cd)pyrene	1150	21100	--	4.8 <sup>J</sup>	< 4.0	< 4.0	< 3.9	< 4.4	< 4.1	69.6	< 3.6	nt
Naphthalene	5520	24100	658.2	334	< 1.9	< 1.9	37.6	< 2.1	< 1.9	2.7 <sup>J</sup>	< 1.7	nt
Phenanthrene	--	--	--	120	< 2.2	< 2.2	< 2.2	< 2.4	< 2.3	81.5	< 2.0	nt
Pyrene	1790000	22600000	54545.5	14.9 <sup>J</sup>	< 2.8	< 2.8	< 2.8	< 3.1	< 2.9	140	< 2.6	nt

**Table 1**  
**Analytes Detected in Soil Samples**  
**Allouez Phase II**

Parameters	Generic RCLs			SP-112		SP-113		SP-114		SP-115		
	Direct Contact Pathway		Groundwater Pathway	0.5 - 1.5 ft	21 - 22 ft	0.5 - 1.5 ft	22 - 23 ft	0.5 - 1.5 ft	21 - 22 ft	0.5 - 1.5 ft	10 - 12 ft	18 - 20 ft
	Non-Industrial	Industrial		SP-112-0.5-1.5 10/25/2019	SP-112-21-22 10/25/2019	SP-113-0.5-1.5 10/25/2019	SP-113-22-23 10/25/2019	SP-114-0.5-1.5 10/25/2019	SP-114-21-22 10/25/2019	SP-115-0.5-1.5 10/24/2019	SP-115-10-12 10/24/2019	SP-115-18-20 10/24/2019
<b>Metals (mg/kg)</b>												
Arsenic	0.677	3	0.584	< 1.7	<b>1.7<sup>J AAC</sup></b>	<b>1.8<sup>J AC</sup></b>	< 7.7	<b>2.5<sup>J AC</sup></b>	<b>1.9<sup>J AC</sup></b>	<b>1.9<sup>J AC</sup></b>	<b>2.4<sup>J AC</sup></b>	nt
Barium	15300	100000	164.8	85.2	11.0	83.7	10.2	77.9	5.9	43.6	7.3	nt
Cadmium	71.1	985	0.752	< 0.15	< 0.15	0.16 <sup>J</sup>	< 0.14	< 0.17	< 0.15	< 0.15	< 0.13	nt
Chromium	--	--	360000	38.9	5.9	27.8	8.3	29.7	4.0	18.1	5.2	nt
Lead	400	800	27	10.3	1.0 <sup>J</sup>	6.2	1.6 <sup>J</sup>	7.4	0.88 <sup>J</sup>	11.6	2.3	nt
Mercury	3.13	3.13	0.208	0.033 <sup>J</sup>	< 0.012	< 0.011	< 0.012	0.014 <sup>J</sup>	< 0.011	0.013 <sup>J</sup>	< 0.010	nt
Silver	391	5840	0.8491	< 0.70	< 0.34	< 0.67	< 0.32	< 0.39	< 0.35	< 0.68	< 0.31	nt

Notes:

PAHs = Polynuclear Aromatic Hydrocarbons

VOCs = Volatile Organic Compounds

ug/kg = Micrograms per kilogram.

mg/kg = Micrograms per kilogram.

<sup>J</sup> = Estimated value (+/- indicate bias).

<sup>A</sup> = Parameter exceeds Generic RCL for Non-Industrial Direct Contact.

<sup>B</sup> = Parameter exceeds Generic RCL for Industrial Direct Contact (none).

<sup>C</sup> = Parameter exceeds Generic RCL for Groundwater Pathway.

Generic RCLs Dec 2018 per WDNR PUB-RR-890.

-- = No generic RCL established.

nt = not tested

non-detect VOC results were reported on a wet weight basis.

**Table 2**  
**Detected Volatile Organic Compounds in Groundwater Samples**  
**Allouez Phase II ESA**

Well Location	Sample Date	Benzene (ug/L)	Bromo dichloro methane (ug/L)	cis-1,2-Dichloro ethene (ug/L)	trans-1,2-Dichloro ethene (ug/L)	Ethyl benzene (ug/L)	Isopropyl benzene (ug/L)	Naphthalene (ug/L)	n-Propyl benzene (ug/L)	Tetrachloro ethene (ug/L)	Toluene (ug/L)	Trichloro ethene (ug/L)	1,2,4-Trimethyl benzene <sup>1</sup> (ug/L)	1,3,5-Trimethyl benzene <sup>1</sup> (ug/L)	m,p-Xylenes <sup>2</sup> (ug/L)	o-Xylenes <sup>2</sup> (ug/L)	Xylene Totals (ug/L)
SP-105	10/31/19	<b>16.1</b>	<0.36	<u>25.8</u>	12.9	10.5	1.9 <sup>J</sup>	1.8 <sup>J</sup>	0.95 <sup>J</sup>	<b>87.3</b>	19.7	<b>9</b>	15.3	2.0 <sup>J</sup>	55.3	5.9	61.3
	1/30/20	<b>30.1</b>	<0.36	<u>26.8</u>	13.9	2.6	15.2	<1.2	4.9 <sup>J</sup>	<b>92.6</b>	18.3	<b>10.5</b>	<0.84	<0.87	0.97 <sup>J</sup>	10.5	11.5
SP-109	10/31/2019	<0.25	<0.36	<0.27	<1.1	<0.22	<0.39	<1.2	<0.81	<b>5</b>	0.42 <sup>J</sup>	<0.26	<0.84	<0.87	<0.47	<0.26	<1.5
	1/30/20	<0.25	<0.36	<0.27	<1.1	<0.22	<0.39	<1.2	<0.81	<0.33	<0.17	<0.26	<0.84	<0.87	<0.47	<0.26	<1.5
SP-111	10/31/2019	0.36 <sup>J</sup>	<0.36	<0.27	<1.1	<0.22	<0.39	<1.2	<0.81	<u>2.9</u>	0.92 <sup>J</sup>	<u>0.73</u> <sup>J</sup>	<0.84	<0.87	<0.47	<0.26	<1.5
	1/30/20	<0.25	<0.36	<0.27	<1.1	<0.22	<0.39	<1.2	<0.81	<u>3.2</u>	0.31 <sup>J</sup>	<0.26	<0.84	<0.87	<0.47	<0.26	<1.5
SP-112	10/31/19	<0.25	<0.36	<0.27	<1.1	<0.22	<0.39	<1.2	<0.81	<b>33.3</b>	<0.17	<0.26	<0.84	<0.87	<0.47	<0.26	<1.5
	1/30/20	<0.25	<0.36	<0.27	<1.1	<0.22	<0.39	<1.2	<0.81	<b>39.9</b>	<0.17	<0.26	<0.84	<0.87	<0.47	<0.26	<1.5
DUP SP-112	10/31/2019	<0.25	<0.36	<0.27	<1.1	<0.22	<0.39	<1.2	<0.81	<b>43.6</b>	0.28 <sup>J</sup>	<0.26	<0.84	<0.87	<0.47	<0.26	<1.5
SP-114	10/31/19	0.28 <sup>J</sup>	<u>0.41</u> <sup>J</sup>	1.7	<1.1	<0.22	<0.39	<1.2	<0.81	<b>25</b>	<0.17	<u>2.8</u>	<0.84	<0.87	<0.47	<0.26	<1.5
	1/30/20	0.57 <sup>J</sup>	<0.36	1.4	<1.1	<0.22	<0.39	<1.2	<0.81	<b>27.2</b>	<0.17	<b>3</b>	<0.84	<0.87	<0.47	<0.26	<1.5
PAL <sup>A</sup>		0.5	0.06	7	20	140	NE	10	NE	0.5	160	0.5	96	96	400	400	400
ES <sup>B</sup>		5	0.6	70	100	700	NE	<b>100</b>	NE	5	800	5	480	480	2,000	2,000	2,000

Notes:

ug/L = micrograms per liter

NE= Not Established

PAL - Preventive Action Limit, Wisconsin Administrative Code NR 140.10 Table 1, February 2017 exceedances are underlined italics.

ES - Enforcement Standard, Wisconsin Administrative Code NR 140.10 Table 1, February 2017, exceedances are **bold**.

<sup>1</sup> - PAL and ES are for total trimethylbenzenes (the sum of 1,2,4-trimethylbenzene and 1,3,5-trimethylbenzene)

<sup>2</sup> - PAL and ES are for total xylenes (the sum of o-Xylene and m,p-Xylene)

<sup>J</sup> - Estimated concentration between reporting limit and method detection limit

**Table 3**  
**Summary of Detected Volatile Organic Compounds in Groundwater Samples from NR141-Compliant Monitoring Wells**  
**Allouez Phase II ESA**

Well Location	Sample Date	Benzene (ug/L)	n-Butyl benzene (ug/L)	Chlorofor m (ug/L)	cis-1,2-Dichloro ethene (ug/L)	trans-1,2-Dichloro ethene (ug/L)	Ethyl benzene (ug/L)	Isopropyl benzene (ug/L)	Naph thalene (ug/L)	n-Propyl benzene (ug/L)	Tetra chloro ethene (ug/L)	Toluene (ug/L)	Tri chloro ethene (ug/L)	Total Trimethyl benzenes (ug/L)	Total Xylenes (ug/L)
MW-4	1/31/2017	<0.17	NPR	NPR	<0.41	<0.35	<0.2	NPR	<2.17	NPR	<b>31.1</b>	<0.67	<0.45	<2.05	<1.95
	4/20/2017	<0.17	NPR	NPR	<0.41	<0.35	<0.2	NPR	<2.17	NPR	<b>45</b>	<0.67	<0.45	<2.05	<1.95
	5/30/2017	<0.22	NPR	NPR	1.07	1.02	<0.26	NPR	<2.1	NPR	<b>93</b>	<0.19	<u>0.76</u>	<1.43	<0.72
	11/26/2018	0.28	NPR	NPR	1.59	1.97	<0.26	NPR	<2.1	NPR	<b>96</b>	<0.19	<u>1.91</u>	<1.43	<0.72
	10/31/2019	< 0.25	< 0.71	<1.3	1.5	1.7 <sup>J</sup>	< 0.22	< 0.39	< 1.2	< 0.81	<b>85.5</b>	< 0.17	<u>2.2</u>	<1.71	< 1.5
	1/30/2020	< 0.25	< 0.71	<1.3	1.3	<1.1	< 0.22	< 0.39	< 1.2	< 0.81	<b>65.7</b>	< 0.17	<u>1.8</u>	<1.71	< 1.5
MW-5	1/31/2017	<b>5.5</b>	NPR	NPR	<u>26</u>	<u>54</u>	94	NPR	<u>82</u>	NPR	<b>16.4</b>	10.7	<b>16.4</b>	<u>418</u>	<u>404</u>
	4/20/2017	<u>2.2</u>	NPR	NPR	<u>24.4</u>	<u>62</u>	94	NPR	<u>76</u>	NPR	<b>13.4</b>	9.2	<b>9.2</b>	<u>256</u>	211
	5/30/2017	<2.2	NPR	NPR	<b>82</b>	4.1	86	NPR	<u>75</u>	NPR	<3.8	11.9	<3	<u>428</u>	298
	11/26/2018	<u>1.55</u>	NPR	NPR	<b>76</b>	5	104	NPR	<u>80</u>	NPR	<u>3.8</u>	10.9	<1.5	<b>709</b>	<u>556</u>
	10/31/2019	<u>1.6<sup>J</sup></u>	5.8 <sup>J</sup>	< 6.4	<b>79.7</b>	10.6 <sup>J</sup>	92.7	27.4	<u>89.6</u>	54.9	<u>4.2<sup>J</sup></u>	6.2 <sup>J</sup>	< 1.3	<b>672.8</b>	<u>531</u>
	1/30/2020	<u>1.3<sup>J</sup></u>	<3.5	<6.4	<b>85.5</b>	8.3 <sup>J</sup>	74.1	17.4 <sup>J</sup>	<u>95.5</u>	28.4	<u>1.9<sup>J</sup></u>	4.7 <sup>J</sup>	<1.3	<b>569</b>	228
MW-6	1/31/2017	<u>1.86</u>	NPR	NPR	<u>35</u>	<u>66</u>	0.38	NPR	<2.17	NPR	<b>122</b>	<0.67	<b>78</b>	<2.05	<1.95
	4/20/2017	<b>14.7</b>	NPR	NPR	<u>41</u>	<u>73</u>	57	NPR	<2.17	NPR	<b>126</b>	58	<b>79</b>	23.01	106.4
	5/30/2017	<b>6.6</b>	NPR	NPR	<u>57</u>	<u>127</u>	58	NPR	8.9	NPR	<b>115</b>	41	<b>132</b>	61	176.8
	11/26/2018	<b>26.7</b>	NPR	NPR	<u>45</u>	<u>89</u>	17B	NPR	<u>65</u>	NPR	<b>55</b>	<u>195</u>	<b>93</b>	<u>238</u>	<u>521</u>
	10/31/2019	<b>21.7</b>	< 2.8	<u>5.9 J</u>	<u>48.4</u>	<b>100</b>	64.6	5.9 <sup>J</sup>	<u>16.6 J</u>	8.2 <sup>J</sup>	<b>101</b>	85.4	<b>212</b>	92.7	200
	1/30/2020	<b>12</b>	<2.8	<5.1	<u>48.5</u>	<u>90</u>	30.5	2.3 <sup>J</sup>	6.8 <sup>J</sup>	5.1 <sup>J</sup>	<b>113</b>	21	<b>251</b>	37.6	56.4
PAL <sup>A</sup>		0.5	NE	0.6	7	20	140	NE	10	NE	0.5	160	0.5	96	400
ES <sup>B</sup>		5	NE	6	70	100	700	NE	<b>100</b>	NE	5	800	5	480	2,000

Notes:

Data before October 2019 taken from reports WDNR-provided file.

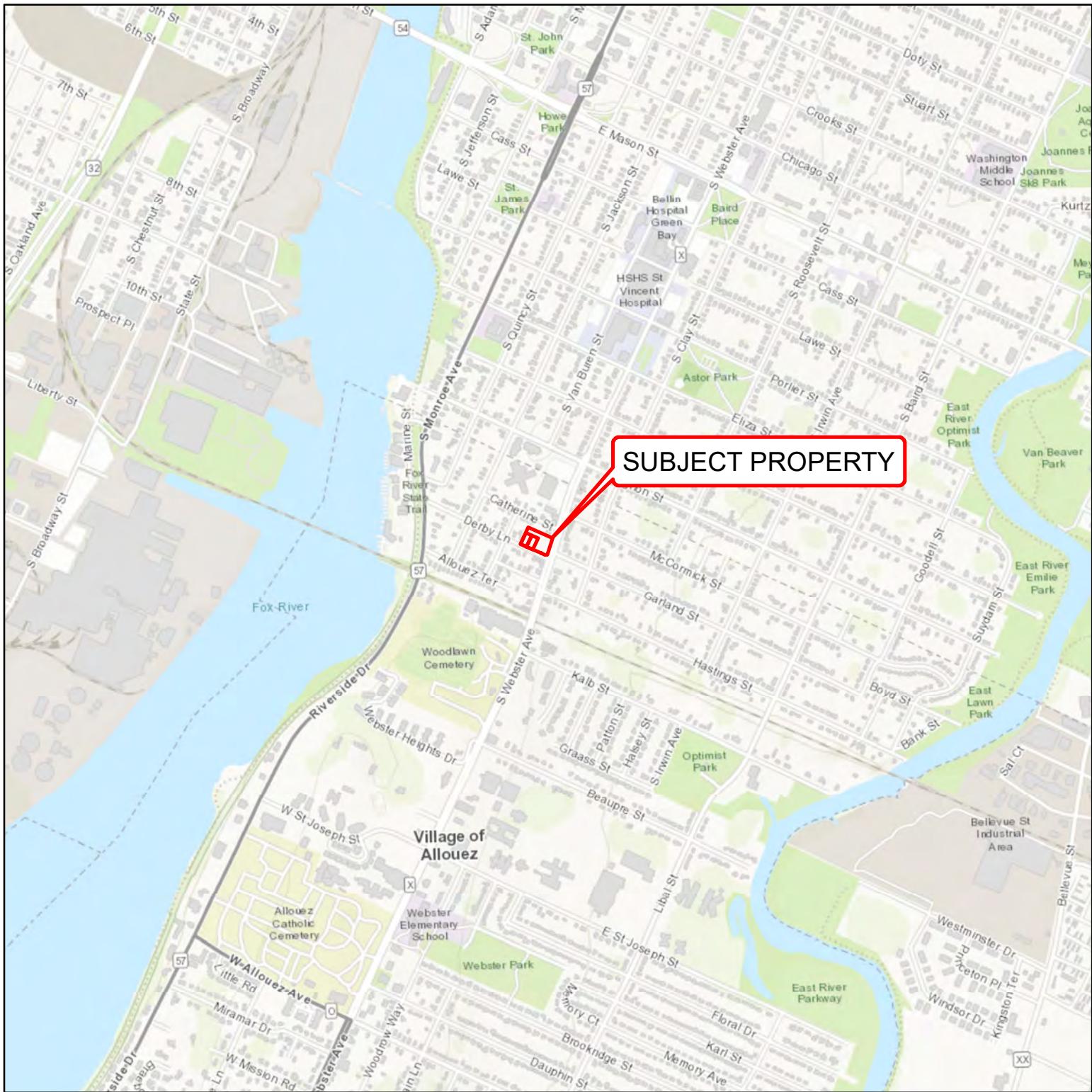
ug/L = micrograms per liter      NPR - Not previously reported

<sup>J</sup> - Estimated concentration between reporting limit and method detection limit.

ES = Wisconsin Administrative Code, Chapter NR 140 Enforcement Standard, February 2017, Exceedances are **Bold**.

PAL = Wisconsin Administrative Code, Chapter NR 140 Preventive Action Limit, February 2017, Exceedances are Underlined Italics.

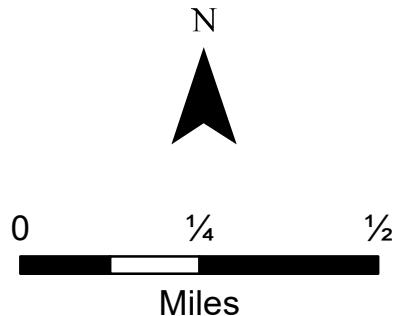
## FIGURES



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**FIGURE 1  
SITE LOCATION**

Phase II Environmental Site Assessment  
1324 S. Webster Ave & 917-923 Derby Ln  
Village of Allouez, Wisconsin 54301  
AECOM Project Number: 60615481  
August 2019



Phase II Environmental Site Assessment  
917-923 Derby Lane & 1324 South Webster Avenue  
Village of Allouez, Wisconsin 54301  
AECOM Project Number: 60615481  
November 2019

## Figure 2 - Site Layout & Surrounding Properties

Service Layer Credits: Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community  
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**Legend:**

- Property Boundary for Phase II ESA
- Soil Probe Boring - Installed
- Location of Former Underground Storage Tank
- Existing Monitoring Well
- △ Temporary Well
- Soil Probe Boring Proposed, but not completed

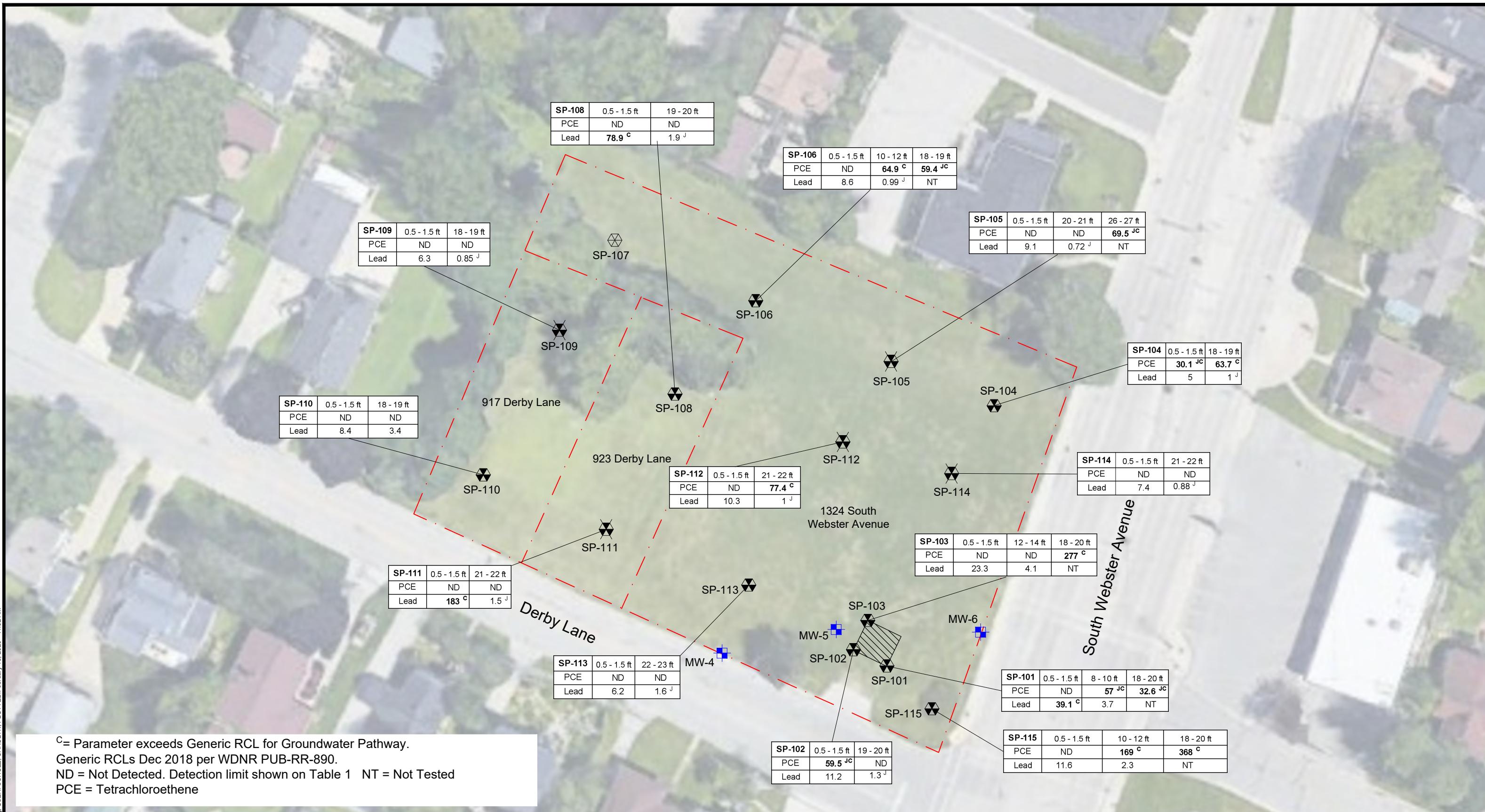
0' 20' 40' 80'  
SCALE

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414.944.6080

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Phase II Environmental Site Assessment  
917-923 Derby Land & 1324 S Webster Ave  
Village of Allouez, WI 54301

Site Layout and Sample Locations  
Project Number: 60615481 Drawn By: CAS Date: 11/19/2019 Figure No. 3



<sup>c</sup>= Parameter exceeds Generic RCL for Groundwater Pathway

Generic RCLs Dec 2018 per WDNR PUB-RR-89

ND = Not Detected. Detection limit shown on Table 1 NT = Not Tested

PCE = Tetrachloroethene

## Legend:

- Property Boundary for Phase II ES



### Location of Former Underground Storage Tank



## Existing Monitoring Wel



 Soil Probe Boring - Installed, but not completed



A horizontal scale bar with tick marks at 0', 20', 40', and 8'. The segments between the first three tick marks are labeled with their respective values: '0'' above the first segment, '20'' above the second, and '40'' above the third. The segment from the 40' mark to the end is labeled '8' at its right end. Below the scale bar, the word "SCALE" is centered.

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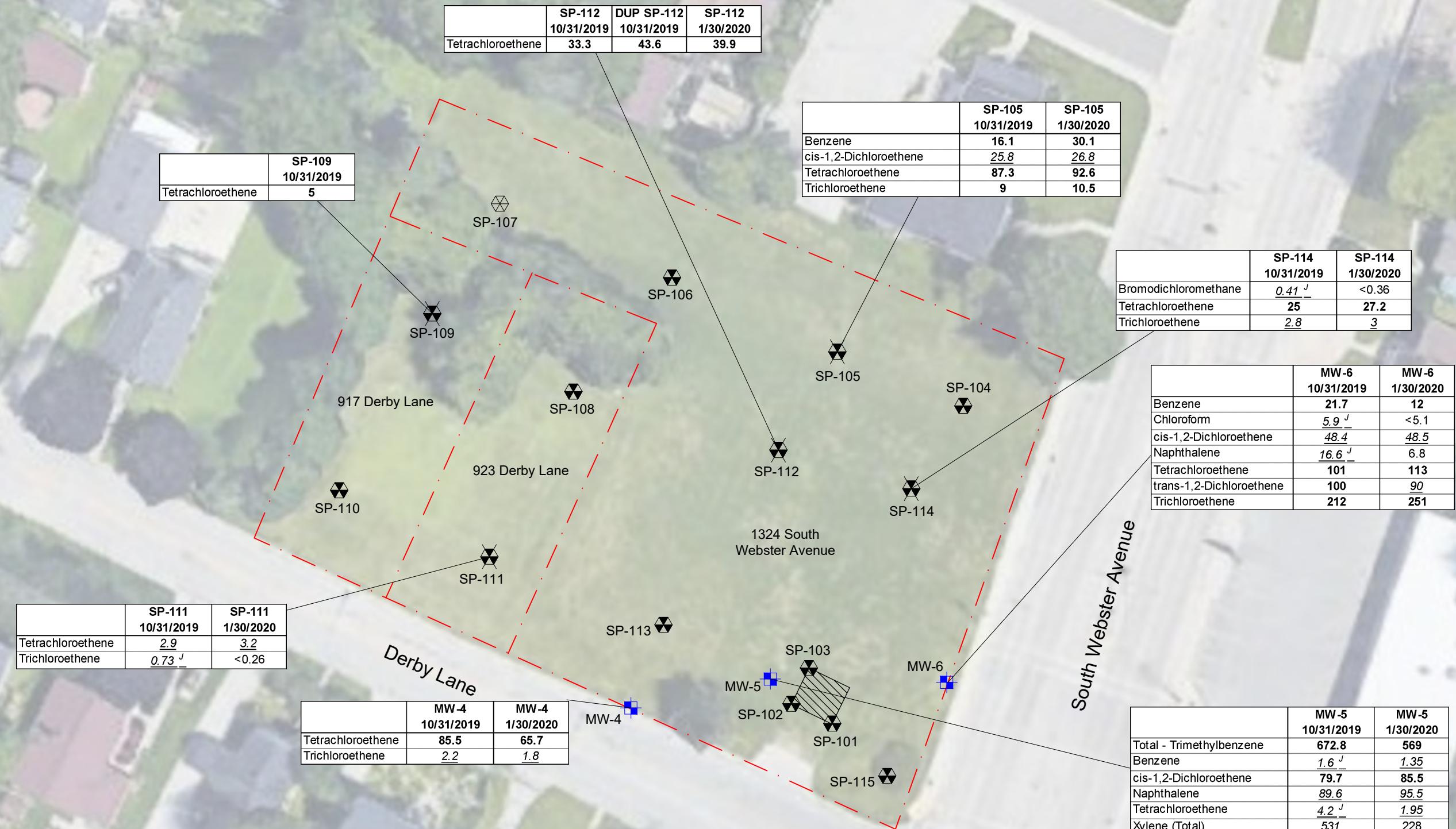
## Soil Laboratory Analytical Results with RCL Exceedances

AECOM

Object Number: 615481 Drawn By: CAS

Date:  
2/18/2020

**Figure No. 4**



Notes:  
 µg/L = micrograms per liter      <sup>J</sup> - Estimated concentration between reporting limit and method detection limit.  
 ES = Wisconsin Administrative Code, Chapter NR 140 Enforcement Standard, February 2017, Exceedances are **Bold**.  
 PAL = Wisconsin Administrative Code, Chapter NR 140 Preventive Action Limit, February 2017, Exceedances are Underlined Italics.

**Legend:**

- Property Boundary for Phase II ESA
- Location of Former Underground Storage Tank
- Existing Monitoring Well
- Temporary Well
- Soil Probe Boring - Installed, but not completed



0' 20' 40' 60' 80'  
SCALE

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Phase II Environmental Site Assessment  
917-923 Derby Land & 1324 S Webster Ave  
Village of Allouez, WI 54301

Groundwater Laboratory Analytical Results  
PAL or ES Exceedances

AECOM

Project Number: 60615481  
Drawn By: CAS  
Date: 2/18/2020

Figure No. 5

## **Appendix A Boring Logs and Borehole Abandonment Forms (WDNR Form 3300-005)**

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

Page 1 of 1

Facility/Project Name <b>Allouez Phase II</b>			License/Permit/Monitoring Number			Boring Number <b>SP-101</b>							
Boring Drilled By: Name of crew chief (first, last) and Firm <b>Keith Weisman Geiss Drilling</b>			Date Drilling Started <b>10/24/2019</b>	Date Drilling Completed <b>10/24/2019</b>	Drilling Method <b>geoprobe</b>								
WI Unique Well No.	DNR Well ID No.	Common Well Name	Final Static Water Level Feet MSL		Surface Elevation Feet MSL	Borehole Diameter							
Local Grid Origin <input type="checkbox"/> (estimated: <input type="checkbox"/> ) or Boring Location <input type="checkbox"/> State Plane N, E S/C/N 1/4 of 1/4 of Section , T N, R			Lat _____ ° _____ ' _____ "	Long _____ ° _____ ' _____ "	Local Grid Location N <input type="checkbox"/> S <input type="checkbox"/> E <input type="checkbox"/> W <input type="checkbox"/>								
Facility ID		County <b>Brown</b>	County Code <b>5</b>	Civil Town/City/ or Village <b>Village of Allouez</b>									
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	Soil Properties				RQD/ Comments
				PID/FID	Compressive Strength				Moisture Content	Liquid Limit	Plasticity Index	P 200	
1	48 22		2.5	Sandy silt topsoil with fill (asphalt and cinders), moist	SM				0.0				
2	48 12		5.0	Fine to medium sand, tan, moist	SP				0.1				
3	48 40		7.5	Silt, tan, moist	SM				0.1				
3	48 42		10.0	Fine to medium sand, tan, moist	SP				0.2				
			12.5	Silt, tan, moist	SM				0.1				
			15.0	Fine to medium sand, tan, moist Soil density increases with depth	SP				0.0				
5	48 48		17.5						0.0				
			20.0	End of boring at 20 feet bgs					0.3				
									0.0				

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

Signature <i>Mike Pawlak</i>	Firm AECOM	Tel: Fax:
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Route To: Watershed/Wastewater  Waste Management   
Remediation/Redevelopment  Other

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Facility/Project Name <b>Allouez Phase II</b>			License/Permit/Monitoring Number			Boring Number <b>SP-102</b>			
Boring Drilled By: Name of crew chief (first, last) and Firm <b>Keith Weisman Geiss Drilling</b>			Date Drilling Started <b>10/24/2019</b>	Date Drilling Completed <b>10/24/2019</b>	Drilling Method <b>geoprobe</b>				
WI Unique Well No.	DNR Well ID No.	Common Well Name	Final Static Water Level Feet MSL		Surface Elevation Feet MSL	Borehole Diameter			
Local Grid Origin <input type="checkbox"/> (estimated: <input type="checkbox"/> ) or Boring Location <input type="checkbox"/> State Plane N, E S/C/N 1/4 of 1/4 of Section , T N, R			Lat _____ ° _____ ' _____ "	Long _____ ° _____ ' _____ "	Local Grid Location N <input type="checkbox"/> S <input type="checkbox"/> E <input type="checkbox"/> W <input type="checkbox"/>				
Facility ID		County <b>Brown</b>	County Code <b>5</b>	Civil Town/City/ or Village <b>Village of Allouez</b>					
Number and Type and Recovered (in)	Length Att. & Recovered (in)	Blow Counts	Depth In Feet	Soil/Rock Description And Geologic Origin For Each Major Unit		Soil Properties		RQD/ Comments	
				U S C S	Graphic Log	Well Diagram	PID/FID		Compressive Strength
1	48 24		2.5	Sandy silt topsoil, brown, moist	SM		0.0		
2	48 36		5.0				0.0		
3	48 36		7.5	Fine to medium sand, brown, moist Grain size increases to medium coarse with depth Brown color grades to tan with depth	SP		0.4		
4	48 42		10.0				0.0		
5	48 44		12.5				0.0		
			15.0				0.1		
			17.5				0.1		
			20.0	End of boring at 20 feet bgs			0.2		

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

Signature <i>Mike Pawlak</i>	Firm AECOM	Tel: Fax:
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Route To: Watershed/Wastewater  Waste Management   
Remediation/Redevelopment  Other

Page 1 of 1

Facility/Project Name <b>Allouez Phase II</b>			License/Permit/Monitoring Number			Boring Number <b>SP-103</b>							
Boring Drilled By: Name of crew chief (first, last) and Firm <b>Keith Weisman Geiss Drilling</b>			Date Drilling Started <b>10/24/2019</b>	Date Drilling Completed <b>10/24/2019</b>	Drilling Method <b>geoprobe</b>								
WI Unique Well No.	DNR Well ID No.	Common Well Name	Final Static Water Level Feet MSL		Surface Elevation Feet MSL	Borehole Diameter							
Local Grid Origin <input type="checkbox"/> (estimated: <input type="checkbox"/> ) or Boring Location <input type="checkbox"/> State Plane N, E S/C/N 1/4 of 1/4 of Section , T N, R			Lat _____ ° _____ ' _____ "	Long _____ ° _____ ' _____ "	Local Grid Location N <input type="checkbox"/> S <input type="checkbox"/> E <input type="checkbox"/> W <input type="checkbox"/>								
Facility ID		County <b>Brown</b>	County Code <b>5</b>	Civil Town/City/ or Village <b>Village of Allouez</b>									
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	Soil Properties				RQD/ Comments
				PID/FID	Compressive Strength				Moisture Content	Liquid Limit	Plasticity Index	P 200	
1	48 36		2.5	FILL: Sandy silt topsoil, brown	Fill				0.0				
2	48 48		5.0	FILL: Clay, trace black mottling, moist, stiff	Fill				0.1				
3	48 48		7.5	Silt with some sand, brown, dense Moisture increases with depth					0.0				
4	48 48		10.0		SM				0.2				
5	48 48		12.5						0.1				
			15.0	Becomes wet at 15.5 feet					0.0				
			17.5	Medium coarse sand, tan, wet	SP				0.0				
			20.0	End of boring at 20 feet bgs					0.0				

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

Signature <i>Mike Pawlak</i>	Firm AECOM	Tel: Fax:
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Route To: Watershed/Wastewater  Waste Management   
Remediation/Redevelopment  Other

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Facility/Project Name <b>Allouez Phase II</b>			License/Permit/Monitoring Number			Boring Number <b>SP-104</b>							
Boring Drilled By: Name of crew chief (first, last) and Firm <b>Keith Weisman Geiss Drilling</b>			Date Drilling Started <b>10/25/2019</b>	Date Drilling Completed <b>10/25/2019</b>	Drilling Method <b>geoprobe</b>								
WI Unique Well No.	DNR Well ID No.	Common Well Name	Final Static Water Level Feet MSL		Surface Elevation Feet MSL	Borehole Diameter							
Local Grid Origin <input type="checkbox"/> (estimated: <input type="checkbox"/> ) or Boring Location <input type="checkbox"/> State Plane N, E S/C/N 1/4 of 1/4 of Section , T N, R			Lat _____ ° _____ ' _____ "	Long _____ ° _____ ' _____ "	Local Grid Location N <input type="checkbox"/> S <input type="checkbox"/> E <input type="checkbox"/> W <input type="checkbox"/>								
Facility ID		County <b>Brown</b>	County Code <b>5</b>	Civil Town/City/ or Village <b>Village of Allouez</b>									
Number and Type and Recovered (in)	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	Soil Properties				RQD/ Comments
				PID/FID	Compressive Strength				Moisture Content	Liquid Limit	Plasticity Index	P 200	
1	48 14		2.5	FILL: Sandy silt topsoil, brown, moist		Fill			0.0				
2	48 46		5.0	FILL: Clay with some sand, trace fill (asphalt and coal), tan, moist, hard		Fill			0.1				
3	48 42		7.5						0.0				
4	48 34		10.0	Fine sand with trace gravel, moist, loose Grain size and density of sand increases with depth		SP			0.1				
5	48 38		12.5						0.2				
			15.0						0.0				
			17.5	Coarse sand with trace gravel, tan		SP			0.0				
			20.0	End of boring at 20 feet bgs					0.0				

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

Signature <i>Mike Pawlak</i>	Firm AECOM	Tel: Fax:
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Route To: Watershed/Wastewater  Waste Management   
Remediation/Redevelopment  Other

Page 1 of 1

Facility/Project Name <b>Allouez Phase II</b>			License/Permit/Monitoring Number			Boring Number <b>SP-105</b>						
Boring Drilled By: Name of crew chief (first, last) and Firm <b>Keith Weisman Geiss Drilling</b>			Date Drilling Started <b>10/25/2019</b>	Date Drilling Completed <b>10/25/2019</b>	Drilling Method <b>geoprobe</b>							
WI Unique Well No.	DNR Well ID No.	Common Well Name	Final Static Water Level Feet MSL		Surface Elevation Feet MSL	Borehole Diameter						
Local Grid Origin <input type="checkbox"/> (estimated: <input type="checkbox"/> ) or Boring Location <input type="checkbox"/> State Plane N, E S/C/N 1/4 of 1/4 of Section , T N, R			Lat _____ ° _____ ' _____ "	Long _____ ° _____ ' _____ "	Local Grid Location N <input type="checkbox"/> S <input type="checkbox"/> E <input type="checkbox"/> W <input type="checkbox"/>							
Facility ID		County <b>Brown</b>	County Code <b>5</b>	Civil Town/City/ or Village <b>Village of Allouez</b>								
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	Soil Properties				RQD/ Comments
			PID/FID	Compressive Strength				Moisture Content	Liquid Limit	Plasticity Index	P 200	
1 48 34		2.5	FILL: Sandy silt topsoil, brown, moist		Fill			0.1				
2 48 44		5.0	Silty clay, brown, moist, firm		Fill			0.1				
3 48 46		7.5	Fine to medium sand, tan, moist, dense Decrease in grain size with depth		SP			0.0	0.1			
4 48 40		10.0			SP			0.2	0.1			
5 48 43		12.5	Grain size becomes fine at 11.5 feet Increase in gravel content with depth		SP			0.1	0.0	0.1		
6 48 36		15.0			SP			0.0	0.0	0.0		
7 48 16		17.5	Fine sand with gravel, tan, moist, dense		SP			0.0	0.1			
8 48 2		20.0	Becomes wet at 19 feet		SP			0.1	0.1			
		22.5	Fine to medium sand, saturated brown Note: Solvent odor present		SP			4.3				
		25.0			SP			0.3				
		27.5	End of boring at 29 feet bgs					0.2				

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

Signature <i>Mike Pawlak</i>	Firm AECOM	Tel: Fax:
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Route To: Watershed/Wastewater  Waste Management   
Remediation/Redevelopment  Other

Page 1 of 1

Facility/Project Name <b>Allouez Phase II</b>			License/Permit/Monitoring Number			Boring Number <b>SP-106</b>							
Boring Drilled By: Name of crew chief (first, last) and Firm <b>Keith Weisman Geiss Drilling</b>			Date Drilling Started <b>10/25/2019</b>	Date Drilling Completed <b>10/25/2019</b>	Drilling Method <b>geoprobe</b>								
WI Unique Well No.	DNR Well ID No.	Common Well Name	Final Static Water Level Feet MSL		Surface Elevation Feet MSL	Borehole Diameter							
Local Grid Origin <input type="checkbox"/> (estimated: <input type="checkbox"/> ) or Boring Location <input type="checkbox"/> State Plane N, E S/C/N 1/4 of 1/4 of Section , T N, R			Lat _____ ° _____ ' _____ "	Long _____ ° _____ ' _____ "	Local Grid Location <input type="checkbox"/> N <input type="checkbox"/> E <input type="checkbox"/> S <input type="checkbox"/> W Feet								
Facility ID		County <b>Brown</b>	County Code <b>5</b>	Civil Town/City/ or Village <b>Village of Allouez</b>									
Number and Type and Recovered (in)	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	Soil Properties				RQD/ Comments
				PID/FID	Compressive Strength				Moisture Content	Liquid Limit	Plasticity Index	P 200	
1	48 30		2.5	FILL; Silty clay topsoil with some roots, dark brown, moist, hard	Fill				0.0				
2	48 48		5.0	FILL: Silt with some sand, tan, moist, firm Moisture increases with depth	Fill				0.0				
3	48 48		7.5		Fill				0.1				
4	48 48		10.0		Fill				0.1				
4	48 48		12.5	FILL: Sand and gravel, white, likely fill material	Fill				0.0				
5	48 34		15.0	Silty clay with some gravel, tan, firm	CL				0.3				
			17.5	Silty clay or gravel, brown, wet, firm	CL				0.0				
			20.0	End of boring at 20 feet bgs					0.0				

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

Signature <i>Mike Pawlak</i>	Firm AECOM	Tel: Fax:
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Route To: Watershed/Wastewater  Waste Management   
Remediation/Redevelopment  Other

Page 1 of 1

Facility/Project Name <b>Allouez Phase II</b>			License/Permit/Monitoring Number			Boring Number <b>SP-108</b>									
Boring Drilled By: Name of crew chief (first, last) and Firm <b>Keith Weisman Geiss Drilling</b>			Date Drilling Started <b>10/24/2019</b>	Date Drilling Completed <b>10/24/2019</b>	Drilling Method <b>geoprobe</b>										
WI Unique Well No.	DNR Well ID No.	Common Well Name	Final Static Water Level Feet MSL		Surface Elevation Feet MSL	Borehole Diameter									
Local Grid Origin <input type="checkbox"/> (estimated: <input type="checkbox"/> ) or Boring Location <input type="checkbox"/> State Plane N, E S/C/N 1/4 of 1/4 of Section , T N, R			Lat _____ ° _____ ' _____ "	Long _____ ° _____ ' _____ "	Local Grid Location N <input type="checkbox"/> S <input type="checkbox"/> E <input type="checkbox"/> W <input type="checkbox"/>										
Facility ID		County <b>Brown</b>	County Code <b>5</b>	Civil Town/City/ or Village <b>Village of Allouez</b>											
Number and Type and Recovered (in)	Length Att. & Recovered (in)	Blow Counts	Depth In Feet	Soil/Rock Description And Geologic Origin For Each Major Unit		Soil Properties		RQD/ Comments							
				U S C S	Graphic Log	Well Diagram	PID/FID		Compressive Strength	Moisture Content	Liquid Limit	Plasticity Index	P 200		
1	48 32		2.5	FILL: Silty clay topsoil, brown, moist	Fill			0.0							
2	48 41		5.0	FILL: Clay, brown, moist, firm Silt content increases with depth	Fill			0.2							
3	48 42		7.5	Silty clay, brown, moist, soft	CL			0.1							
4	48 21		10.0	Silt, light tan, moist	CL			0.0							
5	48 42		12.5	Silty clay, tan, moist, soft Moisture increases with depth				0.1							
			15.0	Becomes wet at 14 feet	CL			0.0							
			17.5					0.2							
			20.0	End of boring at 20 feet bgs				0.1							

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

Signature <i>Mike Pawlak</i>	Firm AECOM	Tel: Fax:
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Route To: Watershed/Wastewater  Waste Management   
Remediation/Redevelopment  Other

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Facility/Project Name <b>Allouez Phase II</b>			License/Permit/Monitoring Number			Boring Number <b>SP-109</b>								
Boring Drilled By: Name of crew chief (first, last) and Firm <b>Keith Weisman Geiss Drilling</b>			Date Drilling Started <b>10/24/2019</b>	Date Drilling Completed <b>10/24/2019</b>	Drilling Method <b>geoprobe</b>									
WI Unique Well No.	DNR Well ID No.	Common Well Name	Final Static Water Level Feet MSL		Surface Elevation Feet MSL	Borehole Diameter								
Local Grid Origin <input type="checkbox"/> (estimated: <input type="checkbox"/> ) or Boring Location <input type="checkbox"/> State Plane N, E S/C/N 1/4 of 1/4 of Section , T N, R			Lat _____ ° _____ ' _____ "	Long _____ ° _____ ' _____ "	Local Grid Location N <input type="checkbox"/> S <input type="checkbox"/> E <input type="checkbox"/> W <input type="checkbox"/>									
Facility ID		County <b>Brown</b>	County Code <b>5</b>	Civil Town/City/ or Village <b>Village of Allouez</b>										
Sample Number and Type Recovered (in)	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
				Fill	Fill					SM	SP	Compressive Strength	Moisture Content	
1	48 39		2.5	FILL: Sandy silt topsoil, brown, moist		Fill				0.0				
			5.0	FILL: Silty clay with trace gravel, brown with trace black mottling, moist, medium plasticity		Fill				0.0				
2	48 48		7.5							0.0				
3	48 41		10.0	Silt, tan, moist, dense		SM				0.0				
4	48 44		12.5	Fine to medium sand with some silt, tan, moist Grain size increases with depth						0.0				
5	48 41		15.0	Grain size grades to coarse		SP				0.0				
6	48 43		20.0							0.0				
7	48 44		22.5	Sand and gravel, gray, wet, dense		SP				0.1				
8	48 22		25.0							0.0				
			27.5							0.0				
			30.0	End of boring at 30 feet bgs						0.0				

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

Signature <i>Mike Pawlak</i>	Firm AECOM	Tel: Fax:
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Route To: Watershed/Wastewater  Waste Management   
Remediation/Redevelopment  Other

Page 1 of 1

Facility/Project Name <b>Allouez Phase II</b>			License/Permit/Monitoring Number			Boring Number <b>SP-110</b>							
Boring Drilled By: Name of crew chief (first, last) and Firm <b>Keith Weisman Geiss Drilling</b>			Date Drilling Started <b>10/24/2019</b>	Date Drilling Completed <b>10/24/2019</b>	Drilling Method <b>geoprobe</b>								
WI Unique Well No.	DNR Well ID No.	Common Well Name	Final Static Water Level Feet MSL		Surface Elevation Feet MSL	Borehole Diameter							
Local Grid Origin <input type="checkbox"/> (estimated: <input type="checkbox"/> ) or Boring Location <input type="checkbox"/> State Plane N, E S/C/N 1/4 of 1/4 of Section , T N, R			Lat _____ ° _____ ' _____ "	Long _____ ° _____ ' _____ "	Local Grid Location N <input type="checkbox"/> S <input type="checkbox"/> E <input type="checkbox"/> W <input type="checkbox"/>								
Facility ID		County <b>Brown</b>	County Code <b>5</b>	Civil Town/City/ or Village <b>Village of Allouez</b>									
Number and Type and Recovered (in)	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	Soil Properties				RQD/ Comments
				PID/FID	Compressive Strength				Moisture Content	Liquid Limit	Plasticity Index	P 200	
1	48 27		2.5	FILL: Sandy silt topsoil, trace roots, brown, moist	Fill				0.0				
2	48 48		5.0	Silty clay with trace sand, brown, moist	CL				0.0				
3	48 48		7.5						0.1				
4	48 24		10.0	Sandy silt, tan, moist	SM				0.1				
5	48 40		12.5						0.0				
			15.0	Fine to medium sand, tan, moist Moisture increases with depth	SP				0.2				
			17.5	Becomes wet at 17.5 feet					0.3				
			20.0	End of boring at 20 feet bgs					0.0				

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

Signature <i>Mike Pawlak</i>	Firm AECOM	Tel: Fax:
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Route To: Watershed/Wastewater  Waste Management   
Remediation/Redevelopment  Other

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Facility/Project Name <b>Allouez Phase II</b>			License/Permit/Monitoring Number			Boring Number <b>SP-111</b>								
Boring Drilled By: Name of crew chief (first, last) and Firm <b>Keith Weisman Geiss Drilling</b>			Date Drilling Started <b>10/24/2019</b>	Date Drilling Completed <b>10/24/2019</b>	Drilling Method <b>geoprobe</b>									
WI Unique Well No.	DNR Well ID No.	Common Well Name	Final Static Water Level Feet MSL		Surface Elevation Feet MSL	Borehole Diameter								
Local Grid Origin <input type="checkbox"/> (estimated: <input type="checkbox"/> ) or Boring Location <input type="checkbox"/> State Plane N, E S/C/N 1/4 of 1/4 of Section , T N, R			Lat _____ ° _____ ' _____ "	Long _____ ° _____ ' _____ "	Local Grid Location N <input type="checkbox"/> S <input type="checkbox"/> E <input type="checkbox"/> W <input type="checkbox"/>									
Facility ID		County <b>Brown</b>	County Code <b>5</b>	Civil Town/City/ or Village <b>Village of Allouez</b>										
Number and Type and Recovered (in)	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
				Sample	Compressive Strength					Moisture Content	Liquid Limit	Plasticity Index	P 200	
1	48 34		2.5	Sandy silt topsoil, brown, moist Sandy silt, brown, moist, dense	SM				0.0					
2	48 48		5.0	Silt, light brown, moist	SM				0.0					
3	48 48		7.5		SM				0.0					
4	48 44		10.0		CL				0.1					
5	48 34		12.5	Silty clay, tan, moist, firm	CL				0.0					
6	48 38		15.0		SP				0.1					
			17.5	Fine to medium sand, tan, moist	SP				0.2					
			20.0	Clay with trace sand, tan, wet	CL				0.3					
			22.5		CL				0.0					
			25.0	Sandy clay with gravel, gray, wet	CL				0.1					
			27.5	Coarse sand with some gravel, dense	SP				0.2					
				End of boring at 29 feet bgs					0.1					
									0.3					

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

Signature <i>Mike Pawlak</i>	Firm AECOM	Tel: Fax:
---------------------------------	------------	--------------

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>Allouez Phase II</b>			License/Permit/Monitoring Number			Boring Number <b>SP-112</b>									
Boring Drilled By: Name of crew chief (first, last) and Firm <b>Keith Weisman Geiss Drilling</b>			Date Drilling Started <b>10/24/2019</b>	Date Drilling Completed <b>10/24/2019</b>	Drilling Method <b>geoprobe</b>										
WI Unique Well No.	DNR Well ID No.	Common Well Name	Final Static Water Level Feet MSL		Surface Elevation Feet MSL	Borehole Diameter									
Local Grid Origin <input type="checkbox"/> (estimated: <input type="checkbox"/> ) or Boring Location <input type="checkbox"/> State Plane N, E S/C/N 1/4 of 1/4 of Section , T N, R			Lat _____ ° _____ ' _____ "	Long _____ ° _____ ' _____ "	Local Grid Location N <input type="checkbox"/> S <input type="checkbox"/> E <input type="checkbox"/> W <input type="checkbox"/>										
Facility ID		County <b>Brown</b>	County Code <b>5</b>	Civil Town/City/ or Village <b>Village of Allouez</b>											
Number and Type and Recovered (in)	Length Att. & Recovered (in)	Blow Counts	Depth In Feet	Soil/Rock Description And Geologic Origin For Each Major Unit		Soil Properties		RQD/ Comments							
				U S C S	Graphic Log	Well Diagram	PID/FID		Compressive Strength	Moisture Content	Liquid Limit	Plasticity Index	P 200		
1	48 24		2.5	FILL: Sandy silt topsoil with fill (coal and concrete), moist		Fill		0.2							
2	48 41		5.0	FILL: Clay, brown, moist, medium plasticity, firm		Fill		0.0							
3	48 11		7.5	FILL: Silt with trace gravel, tan, moist, dense		Fill		0.1							
				Refusal at 9 feet bgs Offset north 10 feet				0.1 0.0							

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

Signature <i>Mike Pawlak</i>	Firm AECOM	Tel: Fax:
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Route To: Watershed/Wastewater  Waste Management   
Remediation/Redevelopment  Other

Page 1 of 1

Facility/Project Name <b>Allouez Phase II</b>			License/Permit/Monitoring Number			Boring Number <b>SP-112 Offset</b>								
Boring Drilled By: Name of crew chief (first, last) and Firm <b>Keith Weisman Geiss Drilling</b>			Date Drilling Started <b>10/24/2019</b>	Date Drilling Completed <b>10/24/2019</b>	Drilling Method <b>geoprobe</b>									
WI Unique Well No.	DNR Well ID No.	Common Well Name	Final Static Water Level Feet MSL		Surface Elevation Feet MSL	Borehole Diameter								
Local Grid Origin <input type="checkbox"/> (estimated: <input type="checkbox"/> ) or Boring Location <input type="checkbox"/> State Plane N, E S/C/N 1/4 of 1/4 of Section , T N, R			Lat _____ ° _____ ' _____ "	Long _____ ° _____ ' _____ "	Local Grid Location N <input type="checkbox"/> S <input type="checkbox"/> E <input type="checkbox"/> W <input type="checkbox"/>									
Facility ID		County <b>Brown</b>	County Code <b>5</b>	Civil Town/City/ or Village <b>Village of Allouez</b>										
Number and Type of Sample	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	P/D/FID	Soil Properties				RQD/ Comments
				2.5	5.0					7.5	10.0	12.5	15.0	
1	48 37			Blind drill to 9 feet bgs See boring log SP-112 for strata.						0.2				
2	48 42			Fine to medium sand, tan, moist, dense Grain size increases to coarse with depth						0.7				
3	48 42			Grain size becomes coarse at 15 feet		SP				0.5				
4	48 41			Becomes we at 8 feet						0.6				
5	48 44			Coarse sand, tan, wet		SP				0.3				
				End of boring at 30 feet bgs						0.1				
										1.7				
										22.7				
										19.1				

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

Signature <b>Mike Pawlak</b>	Firm <b>AECOM</b>	Tel: Fax:
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Route To: Watershed/Wastewater  Waste Management   
Remediation/Redevelopment  Other

Page 1 of 1

Facility/Project Name <b>Allouez Phase II</b>			License/Permit/Monitoring Number			Boring Number <b>SP-113</b>							
Boring Drilled By: Name of crew chief (first, last) and Firm <b>Keith Weisman Geiss Drilling</b>			Date Drilling Started <b>10/24/2019</b>	Date Drilling Completed <b>10/24/2019</b>	Drilling Method <b>geoprobe</b>								
WI Unique Well No.	DNR Well ID No.	Common Well Name	Final Static Water Level Feet MSL		Surface Elevation Feet MSL	Borehole Diameter							
Local Grid Origin <input type="checkbox"/> (estimated: <input type="checkbox"/> ) or Boring Location <input type="checkbox"/> State Plane N, E S/C/N 1/4 of 1/4 of Section , T N, R			Lat _____ ° _____ ' _____ "	Long _____ ° _____ ' _____ "	Local Grid Location N <input type="checkbox"/> S <input type="checkbox"/> E <input type="checkbox"/> W <input type="checkbox"/>								
Facility ID		County <b>Brown</b>	County Code <b>5</b>	Civil Town/City/ or Village <b>Village of Allouez</b>									
Number and Type and Recovered (in)	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	Soil Properties				RQD/ Comments
				PID/FID	Compressive Strength				Moisture Content	Liquid Limit	Plasticity Index	P 200	
1	24			FILL: Sandy silt topsoil with fill (concrete), gray	Fill				0.1				
	13												
2	48		2.5	Silt, tan to brown, moist	ML				0.2				
	48			Sandy silt, tan, moist	SM				0.8				
3	48		5.0						0.4				
	48								0.3				
4	48		7.5	Fine to medium sand, brown, moist					0.3				
	48								1.2				
5	48		10.0						1.1				
	48								1.0				
6	48		12.5						1.4				
	46								14.5				
7	48		15.0						8.1				
	48								8.9				
8	48		17.5						122.9				
	42			Becomes wet at 19 feet					102.7				
			20.0						87.6				
			22.5										
			25.0										
			27.5	Solvent odor at 27 feet									
			30.0	Gravel with some clay, black stained soil with petrol odor	GC								
				End of boring at 30 feet bgs									

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

Signature <i>Mike Pawlak</i>	Firm AECOM	Tel: Fax:
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Route To: Watershed/Wastewater  Waste Management   
Remediation/Redevelopment  Other

Page 1 of 1

Facility/Project Name <b>Allouez Phase II</b>			License/Permit/Monitoring Number			Boring Number <b>SP-114</b>								
Boring Drilled By: Name of crew chief (first, last) and Firm <b>Keith Weisman Geiss Drilling</b>			Date Drilling Started <b>10/24/2019</b>	Date Drilling Completed <b>10/24/2019</b>	Drilling Method <b>geoprobe</b>									
WI Unique Well No.	DNR Well ID No.	Common Well Name	Final Static Water Level Feet MSL		Surface Elevation Feet MSL	Borehole Diameter								
Local Grid Origin <input type="checkbox"/> (estimated: <input type="checkbox"/> ) or Boring Location <input type="checkbox"/> State Plane N, E S/C/N 1/4 of 1/4 of Section , T N, R			Lat _____ ° _____ ' _____ "	Long _____ ° _____ ' _____ "	Local Grid Location N <input type="checkbox"/> S <input type="checkbox"/> E <input type="checkbox"/> W <input type="checkbox"/>									
Facility ID		County <b>Brown</b>	County Code <b>5</b>	Civil Town/City/ or Village <b>Village of Allouez</b>										
Number and Type of Sample	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
				Fill	Fill					SP	SP	PID/FID	Compressive Strength	
1	48 36		2.5	FILL: Sandy silt topsoil, moist	Fill				0.1					
2	48 44		5.0	FILL: Clay, brown, moist, stiff	Fill				0.0					
3	48 39		7.5		Fill				0.0					
4	48 28		10.0		Fill				0.0					
5	48 24		12.5	FILL: Gravel and concrete	Fill				0.1					
6	48 44		15.0	Fine to medium sand, light brown, moist Grain size increases with depth	SP				2.0					
			17.5	Medium sand, brown, wet	SP				0.0					
			20.0		SP				0.1					
			22.5		SP				0.2					
			25.0	Silty clay with sand, gray, saturated, firm	CL				0.0					
			27.5	Clay, hard, medium plasticity	CL				0.3					
			30.0	End of boring at 30 feet bgs					0.1					

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

Signature <i>Mike Pawlak</i>	Firm AECOM	Tel: Fax:
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Route To: Watershed/Wastewater  Waste Management   
Remediation/Redevelopment  Other

Page 1 of 1

Facility/Project Name <b>Allouez Phase II</b>			License/Permit/Monitoring Number			Boring Number <b>SP-115</b>									
Boring Drilled By: Name of crew chief (first, last) and Firm <b>Keith Weisman Geiss Drilling</b>			Date Drilling Started <b>10/24/2019</b>	Date Drilling Completed <b>10/24/2019</b>	Drilling Method <b>geoprobe</b>										
WI Unique Well No.	DNR Well ID No.	Common Well Name	Final Static Water Level Feet MSL		Surface Elevation Feet MSL	Borehole Diameter									
Local Grid Origin <input type="checkbox"/> (estimated: <input type="checkbox"/> ) or Boring Location <input type="checkbox"/> State Plane N, E S/C/N 1/4 of 1/4 of Section , T N, R			Lat _____ ° _____ ' _____ "	Long _____ ° _____ ' _____ "	Local Grid Location N <input type="checkbox"/> S <input type="checkbox"/> E <input type="checkbox"/> W <input type="checkbox"/>										
Facility ID		County <b>Brown</b>	County Code <b>5</b>	Civil Town/City/ or Village <b>Village of Allouez</b>											
Number and Type and Recovered (in)	Length Att. & Recovered (in)	Blow Counts	Depth In Feet	Soil/Rock Description And Geologic Origin For Each Major Unit		Soil Properties		RQD/ Comments							
				U S C S	Graphic Log	Well Diagram	PID/FID		Compressive Strength	Moisture Content	Liquid Limit	Plasticity Index	P 200		
1	48 12		2.5	Sandy silt topsoil with trace gravel, brown, moist	SP			0.0							
2	48 18		5.0	Silty sand, brown, moist	SP			0.1							
3	48 44		7.5	Fine to medium sand, tan, moist	SP			0.0							
4	48 48		10.0		SP			0.0							
5	48 46		12.5		SP			0.1							
			15.0					0.1							
			17.5					0.1							
			20.0	End of boring at 20 feet bgs				0.2							

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

Signature <i>Mike Pawlak</i>	Firm AECOM	Tel: Fax:
---------------------------------	------------	--------------

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Verification Only of Fill and Seal

Route to:

- |   |   |   |
|---|---|---|
| <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**

County  Brown	WI Unique Well # of Removed Well	Hicap #	Facility Name Allouez Phase II
Latitude / Longitude (Degrees and Minutes)		Method Code (see instructions)	Facility ID (FID or PWS) SP 101
° ' " ' W ° ' " ' N			License/Permit/Monitoring #
1/4 1/4 or Gov't Lot #	1/4 Section	Township	Range <input type="checkbox"/> E <input type="checkbox"/> W
Well Street Address			
Well City, Village or Town Village of Allouez		Well ZIP Code	Original Well Owner
Subdivision Name		Lot #	
Reason For Removal From Service	WI Unique Well # of Replacement Well		

**3. Well / Drillhole / Borehole Information**

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

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

- |  |   |                             |   |
|--|---|-----------------------------|---|
| Pump and piping removed?   | <input type="checkbox"/> Yes            | <input type="checkbox"/> No | <input checked="" type="checkbox"/> N/A |
| Liner(s) removed?  | <input type="checkbox"/> Yes            | <input type="checkbox"/> No | <input checked="" type="checkbox"/> N/A |
| Screen removed?  | <input type="checkbox"/> Yes            | <input type="checkbox"/> No | <input checked="" type="checkbox"/> N/A |
| Casing left in place?  | <input type="checkbox"/> Yes            | <input type="checkbox"/> No | <input 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 type="checkbox"/> No | <input checked="" 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 type="checkbox"/> N/A            |

Required Method of Placing Sealing Material

- |  |  |
|--|--|
| <input checked="" type="checkbox"/> Conductor Pipe-Gravity | <input type="checkbox"/> Conductor Pipe-Pumped |
| <input type="checkbox"/> Screened & Poured                 | <input type="checkbox"/> Other (Explain)       |
| (Bentonite Chips)  |  |

Sealing Materials

- |   |   |
|---|---|
| <input type="checkbox"/> Neat Cement Grout            | <input type="checkbox"/> Clay-Sand Slurry (11 lb./gal. wt.) |
| <input type="checkbox"/> Sand-Cement (Concrete) Grout | <input type="checkbox"/> Bentonite-Sand Slurry "            |
| <input type="checkbox"/> Concrete                     | <input type="checkbox"/> Bentonite Chips                    |

For Monitoring Wells and Monitoring Well Boreholes Only:

- |  |   |
|--|---|
| <input type="checkbox"/> Bentonite Chips               | <input type="checkbox"/> Bentonite - Cement Grout |
| <input checked="" type="checkbox"/> Granular Bentonite | <input type="checkbox"/> Bentonite - Sand Slurry  |

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

From (ft.)	To (ft.)	No. Yards, Sacks Sealant or Volume (circle one)	Mix Ratio or Mud Weight
Surface	20.0		

**6. Comments**

<b>7. Supervision of Work</b>				<b>DNR Use Only</b>	
Name of Person or Firm Doing Filling & Sealing AECOM		License #	Date of Filling & Sealing (mm/dd/yyyy) 10/24/2019	Date Received	Noted By
Street or Route			Telephone Number	Comments	
City		State	ZIP Code	Signature of Person Doing Work Mike Pawlak	Date Signed 10-24-2019

Notice: Completion of this report is required by chs. 160, 281, 283, 289, 291-293, 295, and 299, Wis. Stats., and ch. NR 141, 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 this form to the appropriate DNR office and bureau. See instructions on reverse for more information.

Verification Only of Fill and Seal

Route to:

- |   |   |   |
|---|---|---|
| <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**

County  Brown	WI Unique Well # of Removed Well	Hicap #	Facility Name Allouez Phase II
Latitude / Longitude (Degrees and Minutes)		Method Code (see instructions)	
° ' " ' W			
° ' " ' N			
1/4 1/4 or Gov't Lot #	1/4 Section	Township	Range <input type="checkbox"/> E <input type="checkbox"/> W
Well Street Address			
Well City, Village or Town Village of Allouez		Well ZIP Code	
Subdivision Name		Lot #	

Reason For Removal From Service      WI Unique Well # of Replacement Well

**3. Well / Drillhole / Borehole Information**

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

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

- |  |   |                             |   |
|--|---|-----------------------------|---|
| Pump and piping removed?   | <input type="checkbox"/> Yes            | <input type="checkbox"/> No | <input checked="" type="checkbox"/> N/A |
| Liner(s) removed?  | <input type="checkbox"/> Yes            | <input type="checkbox"/> No | <input checked="" type="checkbox"/> N/A |
| Screen removed?  | <input type="checkbox"/> Yes            | <input type="checkbox"/> No | <input checked="" type="checkbox"/> N/A |
| Casing left in place?  | <input type="checkbox"/> Yes            | <input type="checkbox"/> No | <input 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 type="checkbox"/> No | <input checked="" 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 type="checkbox"/> N/A            |

Required Method of Placing Sealing Material

- |  |  |
|--|--|
| <input checked="" type="checkbox"/> Conductor Pipe-Gravity | <input type="checkbox"/> Conductor Pipe-Pumped |
| <input type="checkbox"/> Screened & Poured                 | <input type="checkbox"/> Other (Explain)       |
| (Bentonite Chips)  |  |

Sealing Materials

- |   |   |
|---|---|
| <input type="checkbox"/> Neat Cement Grout            | <input type="checkbox"/> Clay-Sand Slurry (11 lb./gal. wt.) |
| <input type="checkbox"/> Sand-Cement (Concrete) Grout | <input type="checkbox"/> Bentonite-Sand Slurry "            |
| <input type="checkbox"/> Concrete                     | <input type="checkbox"/> Bentonite Chips                    |

For Monitoring Wells and Monitoring Well Boreholes Only:

- |  |   |
|--|---|
| <input type="checkbox"/> Bentonite Chips               | <input type="checkbox"/> Bentonite - Cement Grout |
| <input checked="" type="checkbox"/> Granular Bentonite | <input type="checkbox"/> Bentonite - Sand Slurry  |

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

From (ft.)	To (ft.)	No. Yards, Sacks Sealant or Volume (circle one)	Mix Ratio or Mud Weight
Surface	20.0		

**6. Comments**

<b>7. Supervision of Work</b>				<b>DNR Use Only</b>	
Name of Person or Firm Doing Filling & Sealing AECOM		License #		Date of Filling & Sealing (mm/dd/yyyy) 10/24/2019	Date Received      Noted By
Street or Route			Telephone Number		Comments
City		State	ZIP Code	Signature of Person Doing Work <i>Mike Pawlak</i>	
				Date Signed 10-24-2019	

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Verification Only of Fill and Seal

Route to:

- |   |   |   |
|---|---|---|
| <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  Brown	WI Unique Well # of Removed Well	Hicap #	Facility Name  Allouez Phase II
Latitude / Longitude (Degrees and Minutes)		Method Code (see instructions)	
° ' " ' W			
° ' " ' N			
1/4 / 1/4 or Gov't Lot #	1/4 Section	Township	Range <input type="checkbox"/> E <input type="checkbox"/> W
Well Street Address			
Well City, Village or Town  Village of Allouez		Well ZIP Code	
Subdivision Name		Lot #	
Reason For Removal From Service	WI Unique Well # of Replacement Well		

**3. Well / Drillhole / Borehole Information**

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

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

Pump and piping removed?	<input type="checkbox"/>	Yes	<input type="checkbox"/>	No	<input checked="" type="checkbox"/> N/A
Liner(s) removed?	<input type="checkbox"/>	Yes	<input type="checkbox"/>	No	<input checked="" type="checkbox"/> N/A
Screen removed?	<input type="checkbox"/>	Yes	<input type="checkbox"/>	No	<input checked="" type="checkbox"/> N/A
Casing left in place?	<input type="checkbox"/>	Yes	<input type="checkbox"/>	No	<input 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 type="checkbox"/>	No	<input checked="" 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 type="checkbox"/> N/A

Required Method of Placing Sealing Material

- |  |  |
|--|--|
| <input checked="" type="checkbox"/> Conductor Pipe-Gravity | <input type="checkbox"/> Conductor Pipe-Pumped |
| <input type="checkbox"/> Screened & Poured                 | <input type="checkbox"/> Other (Explain)       |
| (Bentonite Chips)  |  |

Sealing Materials

- |   |   |
|---|---|
| <input type="checkbox"/> Neat Cement Grout            | <input type="checkbox"/> Clay-Sand Slurry (11 lb./gal. wt.) |
| <input type="checkbox"/> Sand-Cement (Concrete) Grout | <input type="checkbox"/> Bentonite-Sand Slurry "            |
| <input type="checkbox"/> Concrete                     | <input type="checkbox"/> Bentonite Chips                    |

For Monitoring Wells and Monitoring Well Boreholes Only:

- |  |   |
|--|---|
| <input type="checkbox"/> Bentonite Chips               | <input type="checkbox"/> Bentonite - Cement Grout |
| <input checked="" 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
------------	----------	---	-------------------------

Granular Bentonite

Surface 20.0

**6. Comments**

<b>7. Supervision of Work</b>				<b>DNR Use Only</b>	
Name of Person or Firm Doing Filling & Sealing  AECOM	License #	Date of Filling & Sealing (mm/dd/yyyy) 10/24/2019	Date Received	Noted By	
Street or Route	Telephone Number		Comments		
City	State	ZIP Code	Signature of Person Doing Work <i>Mike Pawlak</i>		Date Signed 10-24-2019

Notice: Completion of this report is required by chs. 160, 281, 283, 289, 291-293, 295, and 299, Wis. Stats., and ch. NR 141, 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 this form to the appropriate DNR office and bureau. See instructions on reverse for more information.

Verification Only of Fill and Seal

Route to:

- |   |   |   |
|---|---|---|
| <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**

County  Brown	WI Unique Well # of Removed Well	Hicap #	Facility Name Allouez Phase II
Latitude / Longitude (Degrees and Minutes)		Method Code (see instructions)	
° ' " ' W			
° ' " ' N			
1/4 / 1/4 or Gov't Lot #	1/4 Section	Township	Range <input type="checkbox"/> E <input type="checkbox"/> W
Well Street Address			
Well City, Village or Town Village of Allouez		Well ZIP Code	
Subdivision Name		Lot #	

Reason For Removal From Service	WI Unique Well # of Replacement Well
---------------------------------	--------------------------------------

**3. Well / Drillhole / Borehole Information**

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

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

- |  |   |  |   |
|--|---|--|---|
| Pump and piping removed?   | <input type="checkbox"/> Yes            | <input type="checkbox"/> No            | <input checked="" type="checkbox"/> N/A |
| Liner(s) removed?  | <input type="checkbox"/> Yes            | <input type="checkbox"/> No            | <input checked="" type="checkbox"/> N/A |
| Screen removed?  | <input type="checkbox"/> Yes            | <input type="checkbox"/> No            | <input checked="" type="checkbox"/> N/A |
| Casing left in place?  | <input type="checkbox"/> Yes            | <input type="checkbox"/> No            | <input 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 type="checkbox"/> N/A            |
| Did material settle after 24 hours?  | <input type="checkbox"/> Yes            | <input type="checkbox"/> No            | <input checked="" 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 type="checkbox"/> N/A            |

Required Method of Placing Sealing Material

- |  |  |
|--|--|
| <input checked="" type="checkbox"/> Conductor Pipe-Gravity | <input type="checkbox"/> Conductor Pipe-Pumped |
| <input type="checkbox"/> Screened & Poured                 | <input type="checkbox"/> Other (Explain)       |
| (Bentonite Chips)  |  |

Sealing Materials

- |   |   |
|---|---|
| <input type="checkbox"/> Neat Cement Grout            | <input type="checkbox"/> Clay-Sand Slurry (11 lb./gal. wt.) |
| <input type="checkbox"/> Sand-Cement (Concrete) Grout | <input type="checkbox"/> Bentonite-Sand Slurry "            |
| <input type="checkbox"/> Concrete                     | <input type="checkbox"/> Bentonite Chips                    |

For Monitoring Wells and Monitoring Well Boreholes Only:

- |  |   |
|--|---|
| <input type="checkbox"/> Bentonite Chips               | <input type="checkbox"/> Bentonite - Cement Grout |
| <input checked="" type="checkbox"/> Granular Bentonite | <input type="checkbox"/> Bentonite - Sand Slurry  |

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

From (ft.)	To (ft.)	No. Yards, Sacks Sealant or Volume (circle one)	Mix Ratio or Mud Weight
Surface	20.0		

**6. Comments**

<b>7. Supervision of Work</b>				<b>DNR Use Only</b>	
Name of Person or Firm Doing Filling & Sealing AECOM		License #		Date of Filling & Sealing (mm/dd/yyyy) 10/25/2019	Date Received      Noted By
Street or Route			Telephone Number		Comments
City		State	ZIP Code	Signature of Person Doing Work Mike Pawlak	
				Date Signed 10-24-2019	

**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:**

- |   |   |   |
|---|---|---|
| <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**

County <b>Brown</b>	WI Unique Well # of Removed Well _____	Hicap # _____				
Latitude / Longitude (see instructions) N W		Format Code <input type="checkbox"/> DD <input type="checkbox"/> DDM	Method Code <input type="checkbox"/> GPS008 <input type="checkbox"/> SCR002 <input type="checkbox"/> OTH001			
1/4 / 1/4 or Gov't Lot #	Section N	Township N	Range <input type="checkbox"/> E <input type="checkbox"/> W			
Well Street Address <b>917 Derby Ln; 923 Derby Ln; 1324 Webster Ave</b>						
Well City, Village or Town <b>Village of Allouez</b>			Well ZIP Code <b>54301</b>			
Subdivision Name			Lot #	City of Present Owner <b>Village of Allouez</b>	State <b>WI</b>	ZIP Code <b>54301</b>

Reason for Removal from Service      WI Unique Well # of Replacement Well

**Temp Well Removal**

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

<input type="checkbox"/> Monitoring Well	Original Construction Date (mm/dd/yyyy) <b>10-24-2019</b>
<input type="checkbox"/> Water Well	If a Well Construction Report is available, please attach.
<input checked="" type="checkbox"/> Borehole / Drillhole	

Construction Type:

- |   |   |                              |
|---|---|------------------------------|
| <input checked="" type="checkbox"/> Drilled     | <input type="checkbox"/> Driven (Sandpoint) | <input type="checkbox"/> Dug |
| <input type="checkbox"/> Other (specify): _____ |   |                              |

Formation Type:

- |  |                                  |
|--|----------------------------------|
| <input checked="" type="checkbox"/> Unconsolidated Formation | <input type="checkbox"/> Bedrock |
|--|----------------------------------|

Total Well Depth From Ground Surface (ft.)      Casing Diameter (in.)  
**10**    **2**

Lower Drillhole Diameter (in.)      Casing Depth (ft.)  
**N/A**    **N/A**

Was well annular space grouted?       Yes       No       Unknown

If yes, to what depth (feet)?      Depth to Water (feet)  
    **N/A**

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

**Bentonite**

**2. Facility / Owner Information**

Facility Name <b>Wisconsin Medical Credit Union</b>	Facility ID (FID or PWS)
License/Permit/Monitoring # <b>SP-105</b>	
Original Well Owner <b>Village of Allouez</b>	Present Well Owner <b>Village of Allouez</b>
Mailing Address of Present Owner	
City of Present Owner <b>Village of Allouez</b>	State <b>WI</b>
	ZIP Code <b>54301</b>

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

- |   |                              |                             |   |
|---|------------------------------|-----------------------------|---|
| Pump and piping removed?  | <input type="checkbox"/> Yes | <input type="checkbox"/> No | <input checked="" type="checkbox"/> N/A |
| Liner(s) removed?   | <input type="checkbox"/> Yes | <input type="checkbox"/> No | <input checked="" type="checkbox"/> N/A |
| Liner(s) perforated?  | <input type="checkbox"/> Yes | <input type="checkbox"/> No | <input checked="" type="checkbox"/> N/A |
| Screen removed?   | <input type="checkbox"/> Yes | <input type="checkbox"/> No | <input checked="" type="checkbox"/> N/A |
| Casing left in place?   | <input type="checkbox"/> Yes | <input type="checkbox"/> No | <input checked="" type="checkbox"/> N/A |
| Was casing cut off below surface?   | <input type="checkbox"/> Yes | <input type="checkbox"/> No | <input checked="" type="checkbox"/> N/A |
| Did sealing material rise to surface?   | <input type="checkbox"/> Yes | <input type="checkbox"/> No | <input checked="" type="checkbox"/> N/A |
| Did material settle after 24 hours?<br>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 checked="" type="checkbox"/> Screened & Poured (Bentonite Chips) | <input type="checkbox"/> Other (Explain): _____ |

Sealing Materials

- |   |  |
|---|--|
| <input type="checkbox"/> Neat Cement Grout            | <input checked="" type="checkbox"/> Concrete |
| <input type="checkbox"/> Sand-Cement (Concrete) Grout | <input 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  |

From (ft.)	To (ft.)	No. Yards, Sacks Sealant or Volume (circle one)	Mix Ratio or Mud Weight
<b>Surface</b>	<b>10</b>	<b>1 Bag</b>	

**6. Comments**

**7. Supervision of Work**

Name of Person or Firm Doing Filling & Sealing <b>Mike Pawlak</b>	License #	Date of Filling & Sealing or Verification (mm/dd/yyyy) <b>01/30/2020</b>	Date Received	Noted By
Street or Route <b>558 North Main Street</b>	Telephone Number <b>(920) 236-6728</b>	Comments		
City <b>Oshkosh</b>	State <b>WI</b>	ZIP Code <b>54901</b>	Signature of Person Doing Work <i>Mike Pawlak</i>	Date Signed <b>01-30-2020</b>

Notice: Completion of this report is required by chs. 160, 281, 283, 289, 291-293, 295, and 299, Wis. Stats., and ch. NR 141, 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 this form to the appropriate DNR office and bureau. See instructions on reverse for more information.

Verification Only of Fill and Seal

Route to:

- |   |   |   |
|---|---|---|
| <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**

County  Brown	WI Unique Well # of Removed Well	Hicap #	Facility Name  Allouez Phase II
Latitude / Longitude (Degrees and Minutes)		Method Code (see instructions)	Facility ID (FID or PWS)  SP-106
°   '   "   ' W °   '   "   ' N			License/Permit/Monitoring #
1/4 / 1/4 or Gov't Lot #	1/4 Section	Township	Range <input type="checkbox"/> E <input type="checkbox"/> W
Well Street Address			
Well City, Village or Town  Village of Allouez		Well ZIP Code	Original Well Owner
Subdivision Name		Lot #	Present Well Owner
Reason For Removal From Service		WI Unique Well # of Replacement Well	

**3. Well / Drillhole / Borehole Information**

<input type="checkbox"/> Monitoring Well	Original Construction Date	Pump and piping removed?  <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A
<input type="checkbox"/> Water Well		<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A
<input checked="" type="checkbox"/> Drillhole / Borehole	If a Well Construction Report is available, please attach.	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A
Construction Type:  <input checked="" type="checkbox"/> Drilled <input type="checkbox"/> Driven (Sandpoint) <input type="checkbox"/> Dug		<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A
<input type="checkbox"/> Other (Specify)		<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A
Formation Type:  <input checked="" type="checkbox"/> Unconsolidated Formation <input type="checkbox"/> Bedrock		<input type="checkbox"/> Conductor Pipe-Gravity <input type="checkbox"/> Conductor Pipe-Pumped
Total Well Depth From Ground Surface (ft.)	Casing Diameter (in.)	<input type="checkbox"/> Screened & Poured <input type="checkbox"/> Other (Explain)
Lower Drillhole Diameter (in.)	Casing Depth (ft.)	(Bentonite Chips)
Was well annular space grouted?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown	<input type="checkbox"/> Neat Cement Grout <input type="checkbox"/> Clay-Sand Slurry (11 lb./gal. wt.)
If yes, to what depth (feet)?	Depth to Water (feet)	<input type="checkbox"/> Sand-Cement (Concrete) Grout <input type="checkbox"/> Bentonite-Sand Slurry "
		<input type="checkbox"/> Concrete <input type="checkbox"/> Bentonite Chips
For Monitoring Wells and Monitoring Well Boreholes Only:		
		<input type="checkbox"/> Bentonite Chips <input type="checkbox"/> Bentonite - Cement Grout
		<input checked="" 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
Granular Bentonite	Surface	20.0	

**6. Comments**

<b>7. Supervision of Work</b>				<b>DNR Use Only</b>	
Name of Person or Firm Doing Filling & Sealing  AECOM		License #	Date of Filling & Sealing (mm/dd/yyyy) 10/25/2019	Date Received	Noted By
Street or Route			Telephone Number	Comments	
City		State	ZIP Code	Signature of Person Doing Work <i>Mike Pawlak</i>	
				Date Signed 10-24-19	

Notice: Completion of this report is required by chs. 160, 281, 283, 289, 291-293, 295, and 299, Wis. Stats., and ch. NR 141, 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 this form to the appropriate DNR office and bureau. See instructions on reverse for more information.

Verification Only of Fill and Seal

Route to:

- |   |   |   |
|---|---|---|
| <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**

County  Brown	WI Unique Well # of Removed Well	Hicap #	Facility Name Allouez Phase II
Latitude / Longitude (Degrees and Minutes)		Method Code (see instructions)	Facility ID (FID or PWS) SP-108
° ' " ' W			License/Permit/Monitoring #
° ' " ' N			
1/4 / 1/4 or Gov't Lot #	1/4 Section	Township	Range <input type="checkbox"/> E <input type="checkbox"/> W
Well Street Address			
Well City, Village or Town Village of Allouez		Well ZIP Code	Original Well Owner
Subdivision Name		Lot #	Present Well Owner
Reason For Removal From Service		WI Unique Well # of Replacement Well	

**3. Well / Drillhole / Borehole Information**

<input type="checkbox"/> Monitoring Well	Original Construction Date	Pump and piping removed? <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A
<input type="checkbox"/> Water Well		<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A
<input checked="" type="checkbox"/> Drillhole / Borehole	If a Well Construction Report is available, please attach.	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A
Construction Type: <input checked="" type="checkbox"/> Drilled <input type="checkbox"/> Driven (Sandpoint) <input type="checkbox"/> Dug		<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A
<input type="checkbox"/> Other (Specify)		<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A
Formation Type: <input checked="" type="checkbox"/> Unconsolidated Formation <input type="checkbox"/> Bedrock		<input type="checkbox"/> Conductor Pipe-Gravity <input type="checkbox"/> Conductor Pipe-Pumped
Total Well Depth From Ground Surface (ft.)	Casing Diameter (in.)	<input type="checkbox"/> Screened & Poured <input type="checkbox"/> Other (Explain)
Lower Drillhole Diameter (in.)	Casing Depth (ft.)	(Bentonite Chips)
Was well annular space grouted? <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown		<input type="checkbox"/> Neat Cement Grout <input type="checkbox"/> Clay-Sand Slurry (11 lb./gal. wt.)
If yes, to what depth (feet)?	Depth to Water (feet)	<input type="checkbox"/> Sand-Cement (Concrete) Grout <input type="checkbox"/> Bentonite-Sand Slurry "
		<input type="checkbox"/> Concrete <input type="checkbox"/> Bentonite Chips
For Monitoring Wells and Monitoring Well Boreholes Only:		
		<input type="checkbox"/> Bentonite Chips <input type="checkbox"/> Bentonite - Cement Grout
		<input checked="" 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
Granular Bentonite	Surface	20.0	

**6. Comments**

<b>7. Supervision of Work</b>				<b>DNR Use Only</b>	
Name of Person or Firm Doing Filling & Sealing AECOM		License #	Date of Filling & Sealing (mm/dd/yyyy) 10/24/2019	Date Received	Noted By
Street or Route			Telephone Number	Comments	
City		State	ZIP Code	Signature of Person Doing Work <i>Mike Pawlak</i>	
				Date Signed 10-24-19	

**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:**

- |   |   |   |
|---|---|---|
| <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**

County <b>Brown</b>	WI Unique Well # of Removed Well _____	Hicap # _____				
Latitude / Longitude (see instructions) N W		Format Code <input type="checkbox"/> DD <input type="checkbox"/> DDM	Method Code <input type="checkbox"/> GPS008 <input type="checkbox"/> SCR002 <input type="checkbox"/> OTH001			
1/4 / 1/4 or Gov't Lot #	Section N	Township N	Range <input type="checkbox"/> E <input type="checkbox"/> W			
Well Street Address <b>917 Derby Ln; 923 Derby Ln; 1324 Webster Ave</b>						
Well City, Village or Town <b>Village of Allouez</b>		Well ZIP Code <b>54301</b>				
Subdivision Name		Lot #				

Reason for Removal from Service

**Temp Well Removal**

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

<input type="checkbox"/> Monitoring Well	Original Construction Date (mm/dd/yyyy) <b>10-24-2019</b>
<input type="checkbox"/> Water Well	If a Well Construction Report is available, please attach.
<input checked="" type="checkbox"/> Borehole / Drillhole	
Construction Type: <input checked="" type="checkbox"/> Drilled <input type="checkbox"/> Driven (Sandpoint) <input type="checkbox"/> Dug	
<input type="checkbox"/> Other (specify): _____	
Formation Type: <input checked="" type="checkbox"/> Unconsolidated Formation <input type="checkbox"/> Bedrock	
Total Well Depth From Ground Surface (ft.) <b>10</b>	Casing Diameter (in.) <b>2</b>
Lower Drillhole Diameter (in.) <b>N/A</b>	Casing Depth (ft.) <b>N/A</b>
Was well annular space grouted? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Unknown	
If yes, to what depth (feet)?	Depth to Water (feet) <b>N/A</b>

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

Bentonite	From (ft.) Surface	To (ft.) 10	No. Yards, Sacks Sealant or Volume (circle one) <b>1 Bag</b>	Mix Ratio or Mud Weight

**6. Comments**

**7. Supervision of Work**

<b>DNR Use Only</b>				
Name of Person or Firm Doing Filling & Sealing <b>Mike Pawlak</b>	License #	Date of Filling & Sealing or Verification (mm/dd/yyyy) <b>01/30/2020</b>	Date Received	Noted By
Street or Route <b>558 North Main Street</b>	Telephone Number <b>(920) 236-6728</b>	Comments		
City <b>Oshkosh</b>	State <b>WI</b>	ZIP Code <b>54901</b>	Signature of Person Doing Work <b>Mike Pawlak</b>	Date Signed <b>01-30-2020</b>

Notice: Completion of this report is required by chs. 160, 281, 283, 289, 291-293, 295, and 299, Wis. Stats., and ch. NR 141, 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 this form to the appropriate DNR office and bureau. See instructions on reverse for more information.

Verification Only of Fill and Seal

Route to:

- |   |   |   |
|---|---|---|
| <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**

County  Brown	WI Unique Well # of Removed Well	Hicap #	Facility Name Allouez Phase II
Latitude / Longitude (Degrees and Minutes)		Method Code (see instructions)	Facility ID (FID or PWS) SP-110
° ' " ' W		License/Permit/Monitoring #	
° ' " ' N			
1/4 1/4 or Gov't Lot #	1/4 Section	Township	Range <input type="checkbox"/> E <input type="checkbox"/> W
Well Street Address			
Well City, Village or Town Village of Allouez		Well ZIP Code	
Subdivision Name		Lot #	

Reason For Removal From Service	WI Unique Well # of Replacement Well
---------------------------------	--------------------------------------

**3. Well / Drillhole / Borehole Information**

<input type="checkbox"/> Monitoring Well	Original Construction Date	Pump and piping removed? <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A																				
<input type="checkbox"/> Water Well		<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A																				
<input checked="" type="checkbox"/> Drillhole / Borehole	If a Well Construction Report is available, please attach.	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A																				
Construction Type: <input checked="" type="checkbox"/> Drilled <input type="checkbox"/> Driven (Sandpoint) <input type="checkbox"/> Dug		<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A																				
<input type="checkbox"/> Other (Specify)		<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A																				
Formation Type: <input checked="" type="checkbox"/> Unconsolidated Formation <input type="checkbox"/> Bedrock		<input type="checkbox"/> Conductor Pipe-Gravity <input type="checkbox"/> Conductor Pipe-Pumped																				
Total Well Depth From Ground Surface (ft.)	Casing Diameter (in.)	Lower Drillhole Diameter (in.)	Casing Depth (ft.)	<input type="checkbox"/> Screened & Poured <input type="checkbox"/> Other (Explain) (Bentonite Chips)	Was well annular space grouted? <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown		<input type="checkbox"/> Neat Cement Grout <input type="checkbox"/> Clay-Sand Slurry (11 lb./gal. wt.)	If yes, to what depth (feet)?	Depth to Water (feet)	<input type="checkbox"/> Sand-Cement (Concrete) Grout <input type="checkbox"/> Bentonite-Sand Slurry "			<input type="checkbox"/> Concrete <input type="checkbox"/> Bentonite Chips	For Monitoring Wells and Monitoring Well Boreholes Only:					<input type="checkbox"/> Bentonite Chips <input type="checkbox"/> Bentonite - Cement Grout			<input checked="" type="checkbox"/> Granular Bentonite <input type="checkbox"/> Bentonite - Sand Slurry
Lower Drillhole Diameter (in.)	Casing Depth (ft.)	<input type="checkbox"/> Screened & Poured <input type="checkbox"/> Other (Explain) (Bentonite Chips)																				
Was well annular space grouted? <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown		<input type="checkbox"/> Neat Cement Grout <input type="checkbox"/> Clay-Sand Slurry (11 lb./gal. wt.)																				
If yes, to what depth (feet)?	Depth to Water (feet)	<input type="checkbox"/> Sand-Cement (Concrete) Grout <input type="checkbox"/> Bentonite-Sand Slurry "																				
		<input type="checkbox"/> Concrete <input type="checkbox"/> Bentonite Chips																				
For Monitoring Wells and Monitoring Well Boreholes Only:																						
		<input type="checkbox"/> Bentonite Chips <input type="checkbox"/> Bentonite - Cement Grout																				
		<input checked="" type="checkbox"/> Granular Bentonite <input type="checkbox"/> Bentonite - Sand Slurry																				

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

From (ft.)	To (ft.)	No. Yards, Sacks Sealant or Volume (circle one)	Mix Ratio or Mud Weight
Surface	20.0		

**6. Comments**

<b>7. Supervision of Work</b>				<b>DNR Use Only</b>	
Name of Person or Firm Doing Filling & Sealing AECOM		License #	Date of Filling & Sealing (mm/dd/yyyy) 10/24/2019	Date Received	Noted By
Street or Route			Telephone Number	Comments	
City		State	ZIP Code	Signature of Person Doing Work <i>Mike Pawlak</i>	
				Date Signed 10-24-19	

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**Route to DNR Bureau:**

- |   |   |   |
|---|---|---|
| <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: _____         |   |

**Verification Only of Fill and Seal**

**1. Well Location Information**

County <b>Brown</b>	WI Unique Well # of Removed Well _____	Hicap # _____				
Latitude / Longitude (see instructions) N W		Format Code <input type="checkbox"/> DD <input type="checkbox"/> DDM	Method Code <input type="checkbox"/> GPS008 <input type="checkbox"/> SCR002 <input type="checkbox"/> OTH001			
1/4 / 1/4 or Gov't Lot #	Section N	Township N	Range <input type="checkbox"/> E <input type="checkbox"/> W			
Well Street Address <b>917 Derby Ln; 923 Derby Ln; 1324 Webster Ave</b>						
Well City, Village or Town <b>Village of Allouez</b>			Well ZIP Code <b>54301</b>			
Subdivision Name			Lot #			

Reason for Removal from Service      WI Unique Well # of Replacement Well

**Temp Well Removal**

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

<input type="checkbox"/> Monitoring Well	Original Construction Date (mm/dd/yyyy) <b>10-24-2019</b>
<input type="checkbox"/> Water Well	If a Well Construction Report is available, please attach.
<input checked="" type="checkbox"/> Borehole / Drillhole	
Construction Type: <input checked="" type="checkbox"/> Drilled <input type="checkbox"/> Driven (Sandpoint) <input type="checkbox"/> Dug	
<input type="checkbox"/> Other (specify): _____	

Formation Type:

Unconsolidated Formation     Bedrock

Total Well Depth From Ground Surface (ft.)      Casing Diameter (in.)  
**10**                                  **2**

Lower Drillhole Diameter (in.)      Casing Depth (ft.)  
**N/A**                                  **N/A**

Was well annular space grouted?     Yes     No     Unknown

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

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

**Bentonite**

**6. Comments**

**7. Supervision of Work**

<b>DNR Use Only</b>				
Name of Person or Firm Doing Filling & Sealing <b>Mike Pawlak</b>	License #	Date of Filling & Sealing or Verification (mm/dd/yyyy) <b>01/30/2020</b>	Date Received	Noted By
Street or Route <b>558 North Main Street</b>	Telephone Number <b>(920) 236-6728</b>	Comments		
City <b>Oshkosh</b>	State <b>WI</b>	ZIP Code <b>54901</b>	Signature of Person Doing Work <b>Mike Pawlak</b>	Date Signed <b>01-30-2020</b>

**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:**

- |   |   |   |
|---|---|---|
| <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**

County <b>Brown</b>	WI Unique Well # of Removed Well _____	Hicap # _____				
Latitude / Longitude (see instructions) N W		Format Code <input type="checkbox"/> DD <input type="checkbox"/> DDM	Method Code <input type="checkbox"/> GPS008 <input type="checkbox"/> SCR002 <input type="checkbox"/> OTH001			
1/4 / 1/4 or Gov't Lot #	Section N	Township N	Range <input type="checkbox"/> E <input type="checkbox"/> W			

Well Street Address

**917 Derby Ln; 923 Derby Ln; 1324 Webster Ave**

Well City, Village or Town  
**Village of Allouez**

Subdivision Name

Lot #

Reason for Removal from Service

**Temp Well Removal**

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

<input type="checkbox"/> Monitoring Well	Original Construction Date (mm/dd/yyyy) <b>10-24-2019</b>
<input type="checkbox"/> Water Well	If a Well Construction Report is available, please attach.
<input checked="" type="checkbox"/> Borehole / Drillhole	

Construction Type:

- Drilled     Driven (Sandpoint)     Dug  
 Other (specify): \_\_\_\_\_

Formation Type:

- Unconsolidated Formation     Bedrock

Total Well Depth From Ground Surface (ft.)

**10**

Casing Diameter (in.)

**2**

Lower Drillhole Diameter (in.)

**N/A**

Was well annular space grouted?

- Yes     No     Unknown

If yes, to what depth (feet)?

Depth to Water (feet)

**N/A**

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

**Bentonite**

**2. Facility / Owner Information**

Facility Name <b>Wisconsin Medical Credit Union</b>	Facility ID (FID or PWS) <b>SP-112</b>
License/Permit/Monitoring #	
Original Well Owner <b>Village of Allouez</b>	Present Well Owner <b>Village of Allouez</b>
Mailing Address of Present Owner	
City of Present Owner <b>Village of Allouez</b>	State <b>WI</b>
	ZIP Code <b>54301</b>

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

Pump and piping removed?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A
Liner(s) removed?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A
Liner(s) perforated?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A
Screen removed?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A
Casing left in place?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A
Was casing cut off below surface?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A
Did sealing material rise to surface?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A
Did material settle after 24 hours? 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 checked="" type="checkbox"/> Screened & Poured (Bentonite Chips) | <input type="checkbox"/> Other (Explain): _____ |

Sealing Materials

- |   |  |
|---|--|
| <input type="checkbox"/> Neat Cement Grout            | <input checked="" type="checkbox"/> Concrete |
| <input type="checkbox"/> Sand-Cement (Concrete) Grout | <input 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  |

From (ft.)	To (ft.)	No. Yards, Sacks Sealant or Volume (circle one)	Mix Ratio or Mud Weight
Surface	<b>10</b>	<b>1 Bag</b>	

**6. Comments**

**7. Supervision of Work**

Name of Person or Firm Doing Filling & Sealing <b>Mike Pawlak</b>	License #	Date of Filling & Sealing or Verification (mm/dd/yyyy) <b>01/30/2020</b>	Date Received	Noted By
Street or Route <b>558 North Main Street</b>	Telephone Number <b>(920) 236-6728</b>	Comments		
City <b>Oshkosh</b>	State <b>WI</b>	ZIP Code <b>54901</b>	Signature of Person Doing Work <b>Mike Pawlak</b>	Date Signed <b>1-30-2020</b>

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Verification Only of Fill and Seal

Route to:

- |   |   |   |
|---|---|---|
| <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**

County  Brown	WI Unique Well # of Removed Well	Hicap #	Facility Name Allouez Phase II
Latitude / Longitude (Degrees and Minutes)		Method Code (see instructions)	Facility ID (FID or PWS) SP-113
°   '   "   ' W °   '   "   ' N			License/Permit/Monitoring #
1/4 / 1/4 or Gov't Lot #	1/4 Section	Township	Range <input type="checkbox"/> E <input type="checkbox"/> W
Well Street Address			
Well City, Village or Town Village of Allouez		Well ZIP Code	Original Well Owner
Subdivision Name		Lot #	
Reason For Removal From Service	WI Unique Well # of Replacement Well		

**3. Well / Drillhole / Borehole Information**

<input type="checkbox"/> Monitoring Well	Original Construction Date 10-24-19	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.	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A
<input checked="" type="checkbox"/> Drillhole / Borehole		<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A
Construction Type: <input checked="" type="checkbox"/> Drilled <input type="checkbox"/> Driven (Sandpoint) <input type="checkbox"/> Dug		<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A
<input type="checkbox"/> Other (Specify)		<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A
Formation Type: <input checked="" type="checkbox"/> Unconsolidated Formation <input type="checkbox"/> Bedrock		<input checked="" type="checkbox"/> Conductor Pipe-Gravity <input type="checkbox"/> Conductor Pipe-Pumped
Total Well Depth From Ground Surface (ft.)	Casing Diameter (in.)	<input type="checkbox"/> Screened & Poured <input type="checkbox"/> Other (Explain)
Lower Drillhole Diameter (in.)	Casing Depth (ft.)	(Bentonite Chips)
Was well annular space grouted? <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown		<input type="checkbox"/> Neat Cement Grout <input type="checkbox"/> Clay-Sand Slurry (11 lb./gal. wt.)
If yes, to what depth (feet)?	Depth to Water (feet)	<input type="checkbox"/> Sand-Cement (Concrete) Grout <input type="checkbox"/> Bentonite-Sand Slurry "
		<input type="checkbox"/> Concrete <input type="checkbox"/> Bentonite Chips
For Monitoring Wells and Monitoring Well Boreholes Only:		
		<input type="checkbox"/> Bentonite Chips <input type="checkbox"/> Bentonite - Cement Grout
		<input checked="" 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
Granular Bentonite	Surface	30.0	

**6. Comments**

<b>7. Supervision of Work</b>				<b>DNR Use Only</b>	
Name of Person or Firm Doing Filling & Sealing AECOM		License #	Date of Filling & Sealing (mm/dd/yyyy) 10/24/2019	Date Received	Noted By
Street or Route			Telephone Number	Comments	
City		State	ZIP Code	Signature of Person Doing Work Mike Pawlak	Date Signed 10-24-2019

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**Verification Only of Fill and Seal**

**Route to DNR Bureau:**

- |   |   |   |
|---|---|---|
| <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**

County <b>Brown</b>	WI Unique Well # of Removed Well _____	Hicap # _____				
Latitude / Longitude (see instructions) N W		Format Code <input type="checkbox"/> DD <input type="checkbox"/> DDM	Method Code <input type="checkbox"/> GPS008 <input type="checkbox"/> SCR002 <input type="checkbox"/> OTH001			
1/4 / 1/4 or Gov't Lot #	Section N	Township N	Range <input type="checkbox"/> E <input type="checkbox"/> W			
Well Street Address <b>917 Derby Ln; 923 Derby Ln; 1324 Webster Ave</b>						
Well City, Village or Town <b>Village of Allouez</b>			Well ZIP Code <b>54301</b>			
Subdivision Name			Lot #			

Reason for Removal from Service

**Temp Well Removal**

WI Unique Well # of Replacement Well  
\_\_\_\_\_

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

<input type="checkbox"/> Monitoring Well	Original Construction Date (mm/dd/yyyy) <b>10-24-2019</b>
<input type="checkbox"/> Water Well	If a Well Construction Report is available, please attach.
<input checked="" type="checkbox"/> Borehole / Drillhole	
Construction Type: <input checked="" type="checkbox"/> Drilled <input type="checkbox"/> Driven (Sandpoint) <input type="checkbox"/> Dug	
<input type="checkbox"/> Other (specify): _____	
Formation Type: <input checked="" type="checkbox"/> Unconsolidated Formation <input type="checkbox"/> Bedrock	
Total Well Depth From Ground Surface (ft.) <b>10</b>	Casing Diameter (in.) <b>2</b>
Lower Drillhole Diameter (in.) <b>N/A</b>	Casing Depth (ft.) <b>N/A</b>
Was well annular space grouted?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Unknown
If yes, to what depth (feet)?	Depth to Water (feet) <b>N/A</b>

<b>4. Pump, Liner, Screen, Casing &amp; Sealing Material</b>																																						
<table border="0"> <tr> <td>Pump and piping removed?</td> <td><input type="checkbox"/> Yes</td> <td><input type="checkbox"/> No</td> <td><input checked="" type="checkbox"/> N/A</td> </tr> <tr> <td>Liner(s) removed?</td> <td><input type="checkbox"/> Yes</td> <td><input type="checkbox"/> No</td> <td><input checked="" type="checkbox"/> N/A</td> </tr> <tr> <td>Liner(s) perforated?</td> <td><input type="checkbox"/> Yes</td> <td><input type="checkbox"/> No</td> <td><input checked="" type="checkbox"/> N/A</td> </tr> <tr> <td>Screen removed?</td> <td><input type="checkbox"/> Yes</td> <td><input type="checkbox"/> No</td> <td><input checked="" type="checkbox"/> N/A</td> </tr> <tr> <td>Casing left in place?</td> <td><input type="checkbox"/> Yes</td> <td><input type="checkbox"/> No</td> <td><input checked="" type="checkbox"/> N/A</td> </tr> <tr> <td>Was casing cut off below surface?</td> <td><input type="checkbox"/> Yes</td> <td><input type="checkbox"/> No</td> <td><input checked="" type="checkbox"/> N/A</td> </tr> <tr> <td>Did sealing material rise to surface?</td> <td><input type="checkbox"/> Yes</td> <td><input type="checkbox"/> No</td> <td><input checked="" type="checkbox"/> N/A</td> </tr> <tr> <td>Did material settle after 24 hours? If yes, was hole retopped?</td> <td><input type="checkbox"/> Yes</td> <td><input type="checkbox"/> No</td> <td><input checked="" type="checkbox"/> N/A</td> </tr> <tr> <td>If bentonite chips were used, were they hydrated with water from a known safe source?</td> <td><input type="checkbox"/> Yes</td> <td><input type="checkbox"/> No</td> <td><input checked="" type="checkbox"/> N/A</td> </tr> </table>			Pump and piping removed?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input checked="" type="checkbox"/> N/A	Liner(s) removed?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input checked="" type="checkbox"/> N/A	Liner(s) perforated?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input checked="" type="checkbox"/> N/A	Screen removed?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input checked="" type="checkbox"/> N/A	Casing left in place?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input checked="" type="checkbox"/> N/A	Was casing cut off below surface?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input checked="" type="checkbox"/> N/A	Did sealing material rise to surface?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input checked="" type="checkbox"/> N/A	Did material settle after 24 hours? 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
Pump and piping removed?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input checked="" type="checkbox"/> N/A																																			
Liner(s) removed?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input checked="" type="checkbox"/> N/A																																			
Liner(s) perforated?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input checked="" type="checkbox"/> N/A																																			
Screen removed?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input checked="" type="checkbox"/> N/A																																			
Casing left in place?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input checked="" type="checkbox"/> N/A																																			
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Did sealing material rise to surface?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input checked="" type="checkbox"/> N/A																																			
Did material settle after 24 hours? 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																																						
<table border="0"> <tr> <td><input type="checkbox"/> Conductor Pipe-Gravity</td> <td><input type="checkbox"/> Conductor Pipe-Pumped</td> </tr> <tr> <td><input checked="" type="checkbox"/> Screened &amp; Poured (Bentonite Chips)</td> <td><input type="checkbox"/> Other (Explain): _____</td> </tr> </table>			<input type="checkbox"/> Conductor Pipe-Gravity	<input type="checkbox"/> Conductor Pipe-Pumped	<input checked="" type="checkbox"/> Screened & Poured (Bentonite Chips)	<input type="checkbox"/> Other (Explain): _____																																
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<input checked="" type="checkbox"/> Screened & Poured (Bentonite Chips)	<input type="checkbox"/> Other (Explain): _____																																					
Sealing Materials																																						
<table border="0"> <tr> <td><input type="checkbox"/> Neat Cement Grout</td> <td><input checked="" type="checkbox"/> Concrete</td> </tr> <tr> <td><input type="checkbox"/> Sand-Cement (Concrete) Grout</td> <td><input type="checkbox"/> Bentonite Chips</td> </tr> </table>			<input type="checkbox"/> Neat Cement Grout	<input checked="" type="checkbox"/> Concrete	<input type="checkbox"/> Sand-Cement (Concrete) Grout	<input type="checkbox"/> Bentonite Chips																																
<input type="checkbox"/> Neat Cement Grout	<input checked="" type="checkbox"/> Concrete																																					
<input type="checkbox"/> Sand-Cement (Concrete) Grout	<input type="checkbox"/> Bentonite Chips																																					
For Monitoring Wells and Monitoring Well Boreholes Only:																																						
<table border="0"> <tr> <td><input checked="" type="checkbox"/> Bentonite Chips</td> <td><input type="checkbox"/> Bentonite - Cement Grout</td> </tr> <tr> <td><input type="checkbox"/> Granular Bentonite</td> <td><input type="checkbox"/> Bentonite - Sand Slurry</td> </tr> </table>			<input checked="" type="checkbox"/> Bentonite Chips	<input type="checkbox"/> Bentonite - Cement Grout	<input type="checkbox"/> Granular Bentonite	<input type="checkbox"/> Bentonite - Sand Slurry																																
<input checked="" type="checkbox"/> Bentonite Chips	<input type="checkbox"/> Bentonite - Cement Grout																																					
<input type="checkbox"/> Granular Bentonite	<input type="checkbox"/> Bentonite - Sand Slurry																																					
From (ft.)	To (ft.)	No. Yards, Sacks Sealant or Volume (circle one)																																				
Surface	<b>10</b>	<b>1 Bag</b>																																				

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

Bentonite			
-----------	--	--	--

**6. Comments**

<b>7. Supervision of Work</b>			<b>DNR Use Only</b>	
Name of Person or Firm Doing Filling & Sealing <b>Mike Pawlak</b>	License #	Date of Filling & Sealing or Verification (mm/dd/yyyy) <b>01/30/2020</b>	Date Received	Noted By
Street or Route <b>558 North Main Street</b>	Telephone Number <b>(920) 236-6728</b>	Comments		
City <b>Oshkosh</b>	State <b>WI</b>	ZIP Code <b>54901</b>	Signature of Person Doing Work <b>Mike Pawlak</b>	Date Signed <b>01-30-2020</b>

Notice: Completion of this report is required by chs. 160, 281, 283, 289, 291-293, 295, and 299, Wis. Stats., and ch. NR 141, 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 this form to the appropriate DNR office and bureau. See instructions on reverse for more information.

Verification Only of Fill and Seal

Route to:

- |   |   |   |
|---|---|---|
| <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**

County  Brown	WI Unique Well # of Removed Well	Hicap #	Facility Name  Allouez Phase II
Latitude / Longitude (Degrees and Minutes)		Method Code (see instructions)	Facility ID (FID or PWS)  SP-115
° ' " ' W		License/Permit/Monitoring #	
° ' " ' N			
1/4 / 1/4 or Gov't Lot #	1/4 Section	Township	Range <input type="checkbox"/> E <input type="checkbox"/> W
Well Street Address			
Well City, Village or Town  Village of Allouez		Well ZIP Code	
Subdivision Name		Lot #	

Reason For Removal From Service      WI Unique Well # of Replacement Well

**3. Well / Drillhole / Borehole Information**

<input type="checkbox"/> Monitoring Well	Original Construction Date	Pump and piping removed?  <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A
<input type="checkbox"/> Water Well		<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A
<input checked="" type="checkbox"/> Drillhole / Borehole	If a Well Construction Report is available, please attach.	Screen removed?  <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A
Construction Type:  <input checked="" type="checkbox"/> Drilled <input type="checkbox"/> Driven (Sandpoint) <input type="checkbox"/> Dug		Casing left in place?  <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A
<input type="checkbox"/> Other (Specify)		Was casing cut off below surface?  <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A
Formation Type:  <input checked="" type="checkbox"/> Unconsolidated Formation <input type="checkbox"/> Bedrock		Did sealing material rise to surface?  <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A
Total Well Depth From Ground Surface (ft.)		Did material settle after 24 hours?  <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A
Lower Drillhole Diameter (in.)		If yes, was hole retopped?  <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A
Was well annular space grouted? <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown		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
If yes, to what depth (feet)?		Required Method of Placing Sealing Material  <input checked="" type="checkbox"/> Conductor Pipe-Gravity <input type="checkbox"/> Conductor Pipe-Pumped <input type="checkbox"/> Screened & Poured <input type="checkbox"/> Other (Explain) (Bentonite Chips)
Casing Depth (ft.)		Sealing Materials  <input type="checkbox"/> Neat Cement Grout <input type="checkbox"/> Clay-Sand Slurry (11 lb./gal. wt.) <input type="checkbox"/> Sand-Cement (Concrete) Grout <input type="checkbox"/> Bentonite-Sand Slurry " <input type="checkbox"/> Concrete <input type="checkbox"/> Bentonite Chips
Depth to Water (feet)		For Monitoring Wells and Monitoring Well Boreholes Only:  <input type="checkbox"/> Bentonite Chips <input type="checkbox"/> Bentonite - Cement Grout <input checked="" 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
Granular Bentonite	Surface	20.0	

**6. Comments**

<b>7. Supervision of Work</b>				<b>DNR Use Only</b>	
Name of Person or Firm Doing Filling & Sealing AECOM		License #		Date of Filling & Sealing (mm/dd/yyyy) 10/24/2019	Date Received      Noted By
Street or Route			Telephone Number		Comments
City		State	ZIP Code	Signature of Person Doing Work Mike Pawlak	
				Date Signed 10-24-19	

## Appendix B Laboratory Data Validation Memos

## Memorandum

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Date: November 11, 2019  
To: Lanette Altenbach, Project Manager (PG)  
From: Lisa Smith, Environmental Chemist (CEAC)  
Subject: Data Validation - Analytical Results for Soil Samples  
Limited Site Investigation  
Allouez Phase II ESA

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### SUMMARY

Data validation was performed on the analytical results of the soil samples collected at the Allouez site on October 24 and 25, 2019 and submitted to Pace Analytical, Green Bay for analysis. Pace processed the samples and reported the results under sample delivery group (SDG) 40198063.

The analytical data were evaluated with reference to the United States Environmental Protection Agency (USEPA) National Functional Guidelines for Superfund Organic Methods Data Review (January 2017) and the National Functional Guidelines for Inorganic Superfund Methods Data Review (January 2017). The National Functional Guidelines were modified to accommodate the non-CLP methodology. Laboratory control limits and/or method criteria were used as appropriate as the basis for validation actions.

Based on the results of the validation, the data are valid as reported and may be used for decision making purpose. Results were acceptable without qualification. Results reported below the limit of quantitation (LOQ) were qualified as estimated (J) by the laboratory; qualifications of these results were accepted by the validator.

### METHODS

The samples were analyzed by the methods listed below.

Analyte Group	Method	Number of Samples
VOCs	SW-846 8260	33 soil samples (plus 2 field duplicates and one trip blank)
PAHs	SW-846 8270 SIM	28 soil samples (plus 2 field duplicates)
Metals	SW-846 6010 and 7471	28 soil samples (plus 2 field duplicates)

## REVIEW ELEMENTS

A limited data validation was performed on the samples. Quality control (QC) parameters listed below were reviewed, if applicable to the methodology.

### Limited Validation

Holding Time  
Method Blanks  
Trip Blanks  
Surrogate Recoveries  
Laboratory Control Samples  
Matrix Spikes/Matrix Spike Duplicates  
Field Duplicates  
Quantitation Limits

## DISCUSSION

### Sample Receipt

Samples were received at the laboratory intact, properly preserved and in good condition, except for minor labeling issues as noted below. The samples were received on ice.

- The sample ID on the labels for PAH and metals for SP-106-18-19 was incomplete.
- A few of the vials were identified by depth and time as the labels bled.
- Sample SP-102-19-20D was missing the "D" on the sample labels.

### Holding Times

Samples were extracted and analyzed within the hold times.

### Method Blanks

Laboratory blanks are analyzed to assess contamination from laboratory procedures. Method blanks were analyzed at the correct frequency. Analytes were not detected in the associated method blanks, except as listed below.

Batches	Analysis Date	Analyte	Qualifications
339468	11/4/2019	1,2,3-Trichlorobenzene	None. Associated results are nondetect.
		Hexachloro-1,3-butadiene	
		n-Butylbenzene	
339573	11/4/2019	1,2,3-Trichlorobenzene	None. Associated results are nondetect.
		Hexachloro-1,3-butadiene	
		n-Butylbenzene	

### Trip Blanks

Trip blanks are used to assess contamination from sample shipping. The trip blank results were nondetect.

### Surrogate Recoveries

Surrogates are spiked into all field samples, field QC samples, and method QC samples and are used to evaluate accuracy. The surrogates are organic compounds similar to the target compounds in chemical composition and behavior in the analytical process, but are not usually found in environmental samples. Surrogates recoveries were within the laboratory specified QC limits.

### Laboratory Control Samples (LCSs)

LCSs are analyzed to monitor the accuracy of the analytical method independent of matrix effects. LCS recoveries were within the laboratory specified QC limits.

### Matrix Spike/Matrix Spike Duplicates (MS/MSDs)

MS/MSDs are analyzed to determine the effects of sample matrix on the measurement methodology. Samples listed below were analyzed as MS/MSDs:

- SP-102-19-20D: PAHs
- SP-104-18-19: Mercury
- SP-109-18-19: PAHs
- SP-111-21-22: VOCs
- SP-112-0.5-1.5: VOCs
- SP-114-0.5-1.5: VOC and Metals

MS/MSD recoveries and relative percent differences (RPDs) were within acceptable limits. Non-project MS/MSDs provided from batch analyses are not applicable and were not evaluated.

### Quantitation

Some of the metals analytes were reported from 2 and 5 times dilutions and were reported as nondetects. The laboratory indicated the dilutions were due to high levels of non-target analytes or matrix interference.

Nondetect VOC soil results were reported on a wet weight basis.

### Field Duplicates

Field duplicates are collected to assess the overall precision of field sampling and laboratory analysis. Two soil field duplicate samples were collected, and field precision is summarized below. RPDs for the field duplicate pair were within the 50 percent limit for soil samples, and were acceptable.

Sample & Compound(s)	Units	LOQ	Sample Concentration	Field Duplicate Concentration	RPD (%)
<b>SP-102-19-20/SP-102-19-20D:</b>					
Benzo(a)anthracene	ug/kg	2.4	2.6 J	2.4 U	8
Naphthalene	ug/kg	1.8	2 J	2.2 J	9.5
Arsenic	mg/kg	1.5	2 J	1.6 J	22.2
Barium	mg/kg	0.16	6.8	6.8	0
Chromium	mg/kg	0.29	5	4.3	15.1
Lead	mg/kg	0.63	1.3 J	1 J	26.1
<b>SP-108-19-20/SP-108-19-20D:</b>					
Naphthalene	ug/kg	2	2 U	2.9 J	--
Arsenic	mg/kg	1.7	4.7 J	3.3 J	35

AECOM Environment  
1555 N. RiverCenter Drive, Suite 214, Milwaukee, WI 53212  
T 414.944.6080 F 414.944.6081 [www.aecom.com](http://www.aecom.com)



Sample & Compound(s)	Units	LOQ	Sample Concentration	Field Duplicate Concentration	RPD (%)
Barium	mg/kg	0.18	15.6	22.8	37.5
Chromium	mg/kg	0.33	6.7	10.7	46
Lead	mg/kg	0.7	1.9 J	1.9 J	0
Mercury	mg/kg	0.012	0.02 J	0.018 J	10.5

## Memorandum

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Date: November 6, 2019

To: Lanette Altenbach, Project Manager (PG)

From: Lisa Smith, Environmental Chemist (CEAC)

Subject: Data Validation - Analytical Results for Groundwater Samples  
Limited Site Investigation  
Allouez Phase II ESA

---

### SUMMARY

Data validation was performed on the analytical results of the groundwater samples collected at the Allouez site on October 31, 2019 and submitted to Pace Analytical, Green Bay for analysis. Pace processed the samples and reported the results under sample delivery group (SDG) 40198330.

The analytical data were evaluated with reference to the United States Environmental Protection Agency (USEPA) National Functional Guidelines for Superfund Organic Methods Data Review (January 2017). The National Functional Guidelines were modified to accommodate the non-CLP methodology. Laboratory control limits and/or method criteria were used as appropriate as the basis for validation actions.

Based on the results of the validation, the data are valid as reported and may be used for decision making purpose. Some data required qualifications as discussed below and summarized in Table 1. Data validation qualifiers override any assigned laboratory data flags. Results reported below the limit of quantitation (LOQ) were qualified as estimated (J) by the laboratory; qualifications of these results were accepted by the validator, but are not shown in Table 1.

### METHODS

The samples were analyzed by the methods listed below.

Analyte Group	Method	Number of Samples
VOCs	SW-846 8260	8 groundwater samples (plus 1 field duplicate and one trip blank)

## REVIEW ELEMENTS

A limited data validation was performed on the samples. Quality control (QC) parameters listed below were reviewed, if applicable to the methodology.

### Limited Validation

Holding Time  
Method Blanks  
Trip Blanks  
Surrogate Recoveries  
Laboratory Control Samples  
Matrix Spikes/Matrix Spike Duplicates  
Field Duplicates  
Quantitation Limits

## DISCUSSION

### Sample Receipt

Samples were received at the laboratory intact, properly preserved and in good condition, except as noted below. The samples were received on ice.

- Samples SP-105 and SP-109 had an elevated pH at the time of analysis indicating inadequate sample preservation or high groundwater pH.
- Both of the trip blank vials had headspace greater than 6 mm. The trip blank results were nondetect and qualified as estimated (UJ).

In addition, the laboratory noted that samples SP-105, SP-109 and SP-111 had heavy sediment in the samples.

### Holding Times

Preserved VOC samples were analyzed within the 14-day hold times.

Samples SP-105 and SP-109 were evaluated using the 7-day holding time for unpreserved VOCs and were analyzed within this criterion.

### Method Blanks

Laboratory blanks are analyzed to assess contamination from laboratory procedures. Method blanks were analyzed at the correct frequency. Analytes were not detected in the associated method blanks.

### Trip Blanks

Trip blanks are used to assess contamination from sample shipping. The trip blank results were nondetect; however, were qualified as estimated (UJ) due to headspace.

### Surrogate Recoveries

Surrogates are spiked into all field samples, field QC samples, and method QC samples and are used to evaluate accuracy. The surrogates are organic compounds similar to the target compounds in chemical composition and behavior in the analytical process, but are not usually found in environmental samples. Surrogates recoveries were within the laboratory specified QC limits.

#### Laboratory Control Samples (LCSs)

LCSs are analyzed to monitor the accuracy of the analytical method independent of matrix effects. LCS recoveries were within the laboratory specified QC limits.

#### Matrix Spike/Matrix Spike Duplicates (MS/MSDs)

MS/MSDs are analyzed to determine the effects of sample matrix on the measurement methodology. Extra sample volume was submitted for MS/MSD analysis for sample SP-109, and MS/MSD recoveries and relative percent differences (RPDs) were within acceptable limits.

#### Quantitation

Dilution was required during analysis of sample MW-5 due to high sample concentrations. The dilution was necessary to bring the sample concentrations within the calibration range of the instrument.

#### Field Duplicates

Field duplicates are collected to assess the overall precision of field sampling and laboratory analysis. One groundwater field duplicate sample was collected, and field precision is summarized below. RPDs for the field duplicate pair were within the 30 percent limit for groundwater, and were acceptable.

Sample & Compound(s)	Units	LOQ (max)	Sample Concentration	Field Duplicate Concentration	RPD (%)
<b>SP-112/DUP SP-112:</b>					
Tetrachloroethene	ug/L	1.1	33.3	43.6	26.8
Toluene	ug/L	5.0	0.17 U	0.28 J	--

#### **Validation Flags**

**Table 1 – Data Validation Summary of Qualified Data**

Sample ID	Analyte	Units	Validation Qualifier <sup>1</sup>	Reason Code <sup>2</sup>
<b>Groundwater Samples:</b>				
Trip Blank	All VOCs	µg/L	UJ	hd

(1): Data Validation Qualifiers:

UJ: The analyte was analyzed for, but was not detected. The reported quantitation limit is approximated and may be inaccurate or imprecise.

(2): Reason Codes:

hd      Headspace

## Appendix C Laboratory Analytical Reports

November 07, 2019

Lanette Altenbach  
AECOM, Inc.  
1555 N River Center Drive  
Suite 214  
Milwaukee, WI 53212

RE: Project: 60615481 ALLOUEZ PHASE II ESA  
Pace Project No.: 40198063

Dear Lanette Altenbach:

Enclosed are the analytical results for sample(s) received by the laboratory on October 25, 2019. The results relate only to the samples included in this report. Results reported herein conform to the most current, applicable TNI/NELAC standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

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

Sincerely,



Christopher Hyska  
christopher.hyska@pacelabs.com  
(920)469-2436  
Project Manager

Enclosures



## REPORT OF LABORATORY ANALYSIS

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## CERTIFICATIONS

Project: 60615481 ALLOUEZ PHASE II ESA  
Pace Project No.: 40198063

---

### Green Bay Certification IDs

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

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## REPORT OF LABORATORY ANALYSIS

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## SAMPLE SUMMARY

Project: 60615481 ALLOUEZ PHASE II ESA  
Pace Project No.: 40198063

Lab ID	Sample ID	Matrix	Date Collected	Date Received
40198063001	<b>SP-115-0.5-1.5</b>	Solid	10/24/19 10:35	10/25/19 17:47
40198063002	<b>SP-115-18-20</b>	Solid	10/24/19 10:51	10/25/19 17:47
40198063003	<b>SP-115-10-12</b>	Solid	10/24/19 10:46	10/25/19 17:47
40198063004	<b>SP-105-26-27</b>	Solid	10/25/19 14:06	10/25/19 17:47
40198063005	<b>TRIP BLANK</b>	Solid	10/25/19 17:11	10/25/19 17:47
40198063006	<b>SP-111-0.5-1.5</b>	Solid	10/25/19 16:17	10/25/19 17:47
40198063007	<b>SP-111-21-22</b>	Solid	10/25/19 16:22	10/25/19 17:47
40198063008	<b>SP-112-0.5-1.5</b>	Solid	10/25/19 16:25	10/25/19 17:47
40198063009	<b>SP-112-21-22</b>	Solid	10/25/19 16:31	10/25/19 17:47
40198063010	<b>SP-113-0.5-1.5</b>	Solid	10/25/19 16:45	10/25/19 17:47
40198063011	<b>SP-113-22-23</b>	Solid	10/25/19 16:50	10/25/19 17:47
40198063012	<b>SP-114-0.5-1.5</b>	Solid	10/25/19 14:39	10/25/19 17:47
40198063013	<b>SP-114-21-22</b>	Solid	10/25/19 17:05	10/25/19 17:47
40198063014	<b>SP-101-18-20</b>	Solid	10/25/19 05:57	10/25/19 17:47
40198063015	<b>SP-101-8-10</b>	Solid	10/25/19 05:52	10/25/19 17:47
40198063016	<b>SP-101-0.5-1.5</b>	Solid	10/25/19 05:47	10/25/19 17:47
40198063017	<b>SP-102-0.5-1.5</b>	Solid	10/25/19 15:00	10/25/19 17:47
40198063018	<b>SP-102-19-20</b>	Solid	10/25/19 15:12	10/25/19 17:47
40198063019	<b>SP-102-19-20D</b>	Solid	10/25/19 15:12	10/25/19 17:47
40198063020	<b>SP-103-18-20</b>	Solid	10/25/19 05:18	10/25/19 17:47
40198063021	<b>SP-103-0.5-1.5</b>	Solid	10/25/19 05:15	10/25/19 17:47
40198063022	<b>SP-103-12-14</b>	Solid	10/25/19 05:10	10/25/19 17:47
40198063023	<b>SP-104-0.5-1.5</b>	Solid	10/25/19 14:15	10/25/19 17:47
40198063024	<b>SP-104-18-19</b>	Solid	10/25/19 14:22	10/25/19 17:47
40198063025	<b>SP-105-0.5-1.5</b>	Solid	10/25/19 11:15	10/25/19 17:47
40198063026	<b>SP-105-20-21</b>	Solid	10/25/19 13:57	10/25/19 17:47
40198063027	<b>SP-106-0.5-1.5</b>	Solid	10/25/19 13:23	10/25/19 17:47
40198063028	<b>SP-106-10-12</b>	Solid	10/25/19 13:35	10/25/19 17:47
40198063029	<b>SP-106-18-19</b>	Solid	10/25/19 13:44	10/25/19 17:47
40198063030	<b>SP-108-0.5-1.5</b>	Solid	10/25/19 15:27	10/25/19 17:47
40198063031	<b>SP-108-19-20</b>	Solid	10/25/19 15:35	10/25/19 17:47
40198063032	<b>SP-108-19-20D</b>	Solid	10/25/19 15:35	10/25/19 17:47
40198063033	<b>SP-109-0.5-1.5</b>	Solid	10/25/19 15:50	10/25/19 17:47
40198063034	<b>SP-109-18-19</b>	Solid	10/25/19 15:59	10/25/19 17:47
40198063035	<b>SP-110-0.5-1.5</b>	Solid	10/25/19 16:02	10/25/19 17:47
40198063036	<b>SP-110-18-19</b>	Solid	10/25/19 16:07	10/25/19 17:47

## REPORT OF LABORATORY ANALYSIS

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## SAMPLE ANALYTE COUNT

Project: 60615481 ALLOUEZ PHASE II ESA  
Pace Project No.: 40198063

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
40198063001	SP-115-0.5-1.5	EPA 6010	TXW	7	PASI-G
		EPA 7471	AJT	1	PASI-G
		EPA 8270 by SIM	ARO	20	PASI-G
		EPA 8260	ALD	65	PASI-G
		ASTM D2974-87	JMW	1	PASI-G
40198063002	SP-115-18-20	EPA 8260	ALD	65	PASI-G
		ASTM D2974-87	JMW	1	PASI-G
40198063003	SP-115-10-12	EPA 6010	TXW	7	PASI-G
		EPA 7471	AJT	1	PASI-G
		EPA 8270 by SIM	ARO	20	PASI-G
		EPA 8260	ALD	65	PASI-G
		ASTM D2974-87	JMW	1	PASI-G
40198063004	SP-105-26-27	EPA 8260	ALD	65	PASI-G
		ASTM D2974-87	JMW	1	PASI-G
40198063005	TRIP BLANK	EPA 8260	ALD	65	PASI-G
40198063006	SP-111-0.5-1.5	EPA 6010	TXW	7	PASI-G
		EPA 7471	AJT	1	PASI-G
		EPA 8270 by SIM	ARO	20	PASI-G
		EPA 8260	ALD	65	PASI-G
		ASTM D2974-87	JMW	1	PASI-G
40198063007	SP-111-21-22	EPA 6010	TXW	7	PASI-G
		EPA 7471	AJT	1	PASI-G
		EPA 8270 by SIM	ARO	20	PASI-G
		EPA 8260	ALD	65	PASI-G
		ASTM D2974-87	JMW	1	PASI-G
40198063008	SP-112-0.5-1.5	EPA 6010	TXW	7	PASI-G
		EPA 7471	AJT	1	PASI-G
		EPA 8270 by SIM	ARO	20	PASI-G
		EPA 8260	ALD	65	PASI-G
		ASTM D2974-87	JMW	1	PASI-G
40198063009	SP-112-21-22	EPA 6010	TXW	7	PASI-G
		EPA 7471	AJT	1	PASI-G
		EPA 8270 by SIM	ARO	20	PASI-G
		EPA 8260	MDS	65	PASI-G
		ASTM D2974-87	SKW	1	PASI-G
40198063010	SP-113-0.5-1.5	EPA 6010	TXW	7	PASI-G
		EPA 7471	AJT	1	PASI-G

## REPORT OF LABORATORY ANALYSIS

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## SAMPLE ANALYTE COUNT

Project: 60615481 ALLOUEZ PHASE II ESA  
Pace Project No.: 40198063

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
40198063011	SP-113-22-23	EPA 8270 by SIM	ARO	20	PASI-G
		EPA 8260	MDS	65	PASI-G
		ASTM D2974-87	JMW	1	PASI-G
		EPA 6010	TXW	7	PASI-G
		EPA 7471	AJT	1	PASI-G
		EPA 8270 by SIM	ARO	20	PASI-G
40198063012	SP-114-0.5-1.5	EPA 8260	MDS	65	PASI-G
		ASTM D2974-87	JMW	1	PASI-G
		EPA 6010	TXW	7	PASI-G
		EPA 7471	AJT	1	PASI-G
		EPA 8270 by SIM	ARO	20	PASI-G
		EPA 8260	MDS	65	PASI-G
40198063013	SP-114-21-22	ASTM D2974-87	JMW	1	PASI-G
		EPA 6010	TXW	7	PASI-G
		EPA 7471	AJT	1	PASI-G
		EPA 8270 by SIM	ARO	20	PASI-G
		EPA 8260	MDS	65	PASI-G
		ASTM D2974-87	SKW	1	PASI-G
40198063014	SP-101-18-20	EPA 8260	MDS	65	PASI-G
		ASTM D2974-87	JMW	1	PASI-G
		EPA 6010	TXW	7	PASI-G
		EPA 7471	AJT	1	PASI-G
		EPA 8270 by SIM	ARO	20	PASI-G
		EPA 8260	MDS	65	PASI-G
40198063015	SP-101-8-10	ASTM D2974-87	JMW	1	PASI-G
		EPA 6010	TXW	7	PASI-G
		EPA 7471	AJT	1	PASI-G
		EPA 8270 by SIM	ARO	20	PASI-G
		EPA 8260	MDS	65	PASI-G
		ASTM D2974-87	SKW	1	PASI-G
40198063016	SP-101-0.5-1.5	EPA 6010	TXW	7	PASI-G
		EPA 7471	AJT	1	PASI-G
		EPA 8270 by SIM	ARO	20	PASI-G
		EPA 8260	MDS	65	PASI-G
		ASTM D2974-87	SKW	1	PASI-G
		EPA 6010	TXW	7	PASI-G
40198063017	SP-102-0.5-1.5	EPA 7471	AJT	1	PASI-G
		EPA 8270 by SIM	ARO	20	PASI-G
		EPA 8260	MDS	65	PASI-G
		ASTM D2974-87	SKW	1	PASI-G
		EPA 6010	TXW	7	PASI-G
		EPA 7471	AJT	1	PASI-G
40198063018	SP-102-19-20	EPA 8270 by SIM	ARO	20	PASI-G
		EPA 8260	MDS	65	PASI-G
		ASTM D2974-87	SKW	1	PASI-G
		EPA 6010	TXW	7	PASI-G
		EPA 7471	AJT	1	PASI-G

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## SAMPLE ANALYTE COUNT

Project: 60615481 ALLOUEZ PHASE II ESA  
Pace Project No.: 40198063

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
40198063019	SP-102-19-20D	EPA 8270 by SIM	ARO	20	PASI-G
		EPA 8260	MDS	65	PASI-G
		ASTM D2974-87	SKW	1	PASI-G
		EPA 6010	TXW	7	PASI-G
		EPA 7471	AJT	1	PASI-G
		EPA 8270 by SIM	ARO	20	PASI-G
40198063020	SP-103-18-20	EPA 8260	MDS	65	PASI-G
		ASTM D2974-87	K1S	1	PASI-G
		EPA 8260	MDS	65	PASI-G
40198063021	SP-103-0.5-1.5	ASTM D2974-87	K1S	1	PASI-G
		EPA 6010	TXW	7	PASI-G
		EPA 7471	AJT	1	PASI-G
40198063022	SP-103-12-14	EPA 8270 by SIM	ARO	20	PASI-G
		EPA 8260	MDS	65	PASI-G
		ASTM D2974-87	K1S	1	PASI-G
		EPA 6010	TXW	7	PASI-G
		EPA 7471	AJT	1	PASI-G
		EPA 8270 by SIM	ARO	20	PASI-G
40198063023	SP-104-0.5-1.5	EPA 8260	MDS	65	PASI-G
		ASTM D2974-87	K1S	1	PASI-G
		EPA 6010	TXW	7	PASI-G
		EPA 7471	AJT	1	PASI-G
		EPA 8270 by SIM	ARO	20	PASI-G
		EPA 8260	MDS	65	PASI-G
40198063024	SP-104-18-19	ASTM D2974-87	K1S	1	PASI-G
		EPA 6010	TXW	7	PASI-G
		EPA 7471	AJT	1	PASI-G
		EPA 8270 by SIM	ARO	20	PASI-G
		EPA 8260	MDS	65	PASI-G
		ASTM D2974-87	K1S	1	PASI-G
40198063025	SP-105-0.5-1.5	EPA 6010	TXW	7	PASI-G
		EPA 7471	AJT	1	PASI-G
		EPA 8270 by SIM	ARO	20	PASI-G
		EPA 8260	MDS	65	PASI-G
		ASTM D2974-87	K1S	1	PASI-G
		EPA 6010	TXW	7	PASI-G
40198063026	SP-105-20-21	EPA 7471	AJT	1	PASI-G
		EPA 6010	TXW	7	PASI-G

## REPORT OF LABORATORY ANALYSIS

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## SAMPLE ANALYTE COUNT

Project: 60615481 ALLOUEZ PHASE II ESA  
Pace Project No.: 40198063

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
40198063027	SP-106-0.5-1.5	EPA 8270 by SIM	ARO	20	PASI-G
		EPA 8260	MDS	65	PASI-G
		ASTM D2974-87	K1S	1	PASI-G
		EPA 6010	TXW	7	PASI-G
		EPA 7471	AJT	1	PASI-G
		EPA 8270 by SIM	ARO	20	PASI-G
40198063028	SP-106-10-12	EPA 8260	MDS	65	PASI-G
		ASTM D2974-87	K1S	1	PASI-G
		EPA 6010	TXW	7	PASI-G
		EPA 7471	AJT	1	PASI-G
		EPA 8270 by SIM	ARO	20	PASI-G
		EPA 8260	MDS	65	PASI-G
40198063029	SP-106-18-19	ASTM D2974-87	K1S	1	PASI-G
		EPA 8260	ALD	65	PASI-G
		EPA 6010	TXW	7	PASI-G
40198063030	SP-108-0.5-1.5	EPA 7471	AJT	1	PASI-G
		EPA 8270 by SIM	ARO	20	PASI-G
		EPA 8260	ALD	65	PASI-G
		ASTM D2974-87	K1S	1	PASI-G
		EPA 6010	TXW	7	PASI-G
		EPA 7471	AJT	1	PASI-G
40198063031	SP-108-19-20	EPA 8270 by SIM	ARO	20	PASI-G
		EPA 8260	ALD	65	PASI-G
		ASTM D2974-87	K1S	1	PASI-G
		EPA 6010	TXW	7	PASI-G
		EPA 7471	AJT	1	PASI-G
		EPA 8270 by SIM	ARO	20	PASI-G
40198063032	SP-108-19-20D	EPA 8260	ALD	65	PASI-G
		ASTM D2974-87	K1S	1	PASI-G
		EPA 6010	TXW	7	PASI-G
		EPA 7471	AJT	1	PASI-G
		EPA 8270 by SIM	ARO	20	PASI-G
		EPA 8260	ALD	65	PASI-G
40198063033	SP-109-0.5-1.5	ASTM D2974-87	K1S	1	PASI-G
		EPA 6010	TXW	7	PASI-G
		EPA 7471	AJT	1	PASI-G
		EPA 8270 by SIM	ARO	20	PASI-G
		EPA 8260	ALD	65	PASI-G
		ASTM D2974-87	K1S	1	PASI-G
40198063034	SP-109-18-19	EPA 6010	TXW	7	PASI-G
		EPA 7471	AJT	1	PASI-G
		EPA 8270 by SIM	ARO	20	PASI-G
		EPA 8260	ALD	65	PASI-G
		ASTM D2974-87	K1S	1	PASI-G
		EPA 6010	TXW	7	PASI-G

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## SAMPLE ANALYTE COUNT

Project: 60615481 ALLOUEZ PHASE II ESA  
 Pace Project No.: 40198063

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
40198063035	SP-110-0.5-1.5	EPA 8260	ALD	65	PASI-G
		ASTM D2974-87	K1S	1	PASI-G
		EPA 6010	TXW	7	PASI-G
		EPA 7471	AJT	1	PASI-G
		EPA 8270 by SIM	ARO	20	PASI-G
		EPA 8260	ALD	65	PASI-G
40198063036	SP-110-18-19	ASTM D2974-87	K1S	1	PASI-G
		EPA 6010	TXW	7	PASI-G
		EPA 7471	AJT	1	PASI-G
		EPA 8270 by SIM	ARO	20	PASI-G
		EPA 8260	ALD	65	PASI-G
		ASTM D2974-87	K1S	1	PASI-G

## REPORT OF LABORATORY ANALYSIS

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## SUMMARY OF DETECTION

Project: 60615481 ALLOUEZ PHASE II ESA  
Pace Project No.: 40198063

Lab Sample ID	Client Sample ID						
Method	Parameters	Result	Units	Report Limit	Analyzed	Qualifiers	
<b>40198063001</b>	<b>SP-115-0.5-1.5</b>						
EPA 6010	Arsenic	1.9J	mg/kg	5.4	11/02/19 23:09		
EPA 6010	Barium	43.6	mg/kg	0.55	11/02/19 23:09		
EPA 6010	Chromium	18.1	mg/kg	1.1	11/02/19 23:09		
EPA 6010	Lead	11.6	mg/kg	2.2	11/02/19 23:09		
EPA 7471	Mercury	0.013J	mg/kg	0.038	11/06/19 12:34		
EPA 8270 by SIM	Acenaphthene	3.4J	ug/kg	19.9	10/30/19 15:18		
EPA 8270 by SIM	Anthracene	10.3J	ug/kg	19.9	10/30/19 15:18		
EPA 8270 by SIM	Benzo(a)anthracene	61.4	ug/kg	19.9	10/30/19 15:18		
EPA 8270 by SIM	Benzo(a)pyrene	92.7	ug/kg	19.9	10/30/19 15:18		
EPA 8270 by SIM	Benzo(b)fluoranthene	142	ug/kg	19.9	10/30/19 15:18		
EPA 8270 by SIM	Benzo(g,h,i)perylene	88.8	ug/kg	19.9	10/30/19 15:18		
EPA 8270 by SIM	Benzo(k)fluoranthene	54.6	ug/kg	19.9	10/30/19 15:18		
EPA 8270 by SIM	Chrysene	103	ug/kg	19.9	10/30/19 15:18		
EPA 8270 by SIM	Dibenz(a,h)anthracene	19.8J	ug/kg	19.9	10/30/19 15:18		
EPA 8270 by SIM	Fluoranthene	206	ug/kg	19.9	10/30/19 15:18		
EPA 8270 by SIM	Fluorene	3.7J	ug/kg	19.9	10/30/19 15:18		
EPA 8270 by SIM	Indeno(1,2,3-cd)pyrene	69.6	ug/kg	19.9	10/30/19 15:18		
EPA 8270 by SIM	Naphthalene	2.7J	ug/kg	19.9	10/30/19 15:18		
EPA 8270 by SIM	Phenanthrene	81.5	ug/kg	19.9	10/30/19 15:18		
EPA 8270 by SIM	Pyrene	140	ug/kg	19.9	10/30/19 15:18		
ASTM D2974-87	Percent Moisture	15.8	%	0.10	11/05/19 15:21		
<b>40198063002</b>	<b>SP-115-18-20</b>						
EPA 8260	Tetrachloroethene	368	ug/kg	61.9	11/04/19 11:50		
ASTM D2974-87	Percent Moisture	3.1	%	0.10	11/05/19 15:21		
<b>40198063003</b>	<b>SP-115-10-12</b>						
EPA 6010	Arsenic	2.4J	mg/kg	4.9	11/02/19 23:11		
EPA 6010	Barium	7.3	mg/kg	0.50	11/02/19 23:11		
EPA 6010	Chromium	5.2	mg/kg	1.0	11/02/19 23:11		
EPA 6010	Lead	2.3	mg/kg	2.0	11/02/19 23:11		
EPA 8260	Tetrachloroethene	169	ug/kg	64.1	11/04/19 12:13		
ASTM D2974-87	Percent Moisture	4.5	%	0.10	11/05/19 15:21		
<b>40198063004</b>	<b>SP-105-26-27</b>						
EPA 8260	Tetrachloroethene	69.5J	ug/kg	73.3	11/04/19 12:35		
ASTM D2974-87	Percent Moisture	18.1	%	0.10	11/05/19 18:29		
<b>40198063006</b>	<b>SP-111-0.5-1.5</b>						
EPA 6010	Arsenic	4.1J	mg/kg	5.3	11/02/19 23:14		
EPA 6010	Barium	61.6	mg/kg	0.54	11/02/19 23:14		
EPA 6010	Cadmium	0.24J	mg/kg	0.54	11/02/19 23:14		
EPA 6010	Chromium	17.8	mg/kg	1.1	11/02/19 23:14		
EPA 6010	Lead	183	mg/kg	2.2	11/02/19 23:14		
EPA 6010	Silver	0.75J	mg/kg	2.2	11/05/19 12:45	D3	
EPA 7471	Mercury	0.028J	mg/kg	0.038	11/06/19 12:38		
EPA 8270 by SIM	Benzo(a)anthracene	2.9J	ug/kg	19.0	10/30/19 15:52		
EPA 8270 by SIM	Fluoranthene	2.4J	ug/kg	19.0	10/30/19 15:52		
ASTM D2974-87	Percent Moisture	11.9	%	0.10	11/05/19 15:21		

## REPORT OF LABORATORY ANALYSIS

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## SUMMARY OF DETECTION

Project: 60615481 ALLOUEZ PHASE II ESA  
Pace Project No.: 40198063

Lab Sample ID	Client Sample ID						
Method	Parameters	Result	Units	Report Limit	Analyzed	Qualifiers	
<b>40198063007</b>	<b>SP-111-21-22</b>						
EPA 6010	Arsenic	1.9J	mg/kg	5.5	11/02/19 23:16		
EPA 6010	Barium	7.5	mg/kg	0.57	11/02/19 23:16		
EPA 6010	Chromium	4.6	mg/kg	1.1	11/02/19 23:16		
EPA 6010	Lead	1.5J	mg/kg	2.3	11/02/19 23:16		
EPA 8270 by SIM	1-Methylnaphthalene	4.5J	ug/kg	19.7	10/30/19 16:09		
EPA 8270 by SIM	2-Methylnaphthalene	8.0J	ug/kg	19.7	10/30/19 16:09		
EPA 8270 by SIM	Naphthalene	6.1J	ug/kg	19.7	10/30/19 16:09		
ASTM D2974-87	Percent Moisture	15.0	%	0.10	11/05/19 15:22		
<b>40198063008</b>	<b>SP-112-0.5-1.5</b>						
EPA 6010	Barium	85.2	mg/kg	0.57	11/02/19 23:19		
EPA 6010	Chromium	38.9	mg/kg	1.1	11/02/19 23:19		
EPA 6010	Lead	10.3	mg/kg	2.3	11/02/19 23:19		
EPA 7471	Mercury	0.033J	mg/kg	0.038	11/06/19 12:43		
EPA 8270 by SIM	Acenaphthene	4.4J	ug/kg	20.5	10/30/19 16:26		
EPA 8270 by SIM	Acenaphthylene	3.2J	ug/kg	20.5	10/30/19 16:26		
EPA 8270 by SIM	Anthracene	7.9J	ug/kg	20.5	10/30/19 16:26		
EPA 8270 by SIM	Benzo(a)anthracene	14.0J	ug/kg	20.5	10/30/19 16:26		
EPA 8270 by SIM	Benzo(a)pyrene	9.0J	ug/kg	20.5	10/30/19 16:26		
EPA 8270 by SIM	Benzo(b)fluoranthene	14.7J	ug/kg	20.5	10/30/19 16:26		
EPA 8270 by SIM	Benzo(g,h,i)perylene	12.3J	ug/kg	20.5	10/30/19 16:26		
EPA 8270 by SIM	Benzo(k)fluoranthene	3.6J	ug/kg	20.5	10/30/19 16:26		
EPA 8270 by SIM	Chrysene	19.3J	ug/kg	20.5	10/30/19 16:26		
EPA 8270 by SIM	Fluoranthene	14.5J	ug/kg	20.5	10/30/19 16:26		
EPA 8270 by SIM	Fluorene	8.2J	ug/kg	20.5	10/30/19 16:26		
EPA 8270 by SIM	Indeno(1,2,3-cd)pyrene	4.8J	ug/kg	20.5	10/30/19 16:26		
EPA 8270 by SIM	1-Methylnaphthalene	232	ug/kg	20.5	10/30/19 16:26		
EPA 8270 by SIM	2-Methylnaphthalene	339	ug/kg	20.5	10/30/19 16:26		
EPA 8270 by SIM	Naphthalene	334	ug/kg	20.5	10/30/19 16:26		
EPA 8270 by SIM	Phenanthrene	120	ug/kg	20.5	10/30/19 16:26		
EPA 8270 by SIM	Pyrene	14.9J	ug/kg	20.5	10/30/19 16:26		
ASTM D2974-87	Percent Moisture	18.2	%	0.10	11/05/19 15:22		
<b>40198063009</b>	<b>SP-112-21-22</b>						
EPA 6010	Arsenic	1.7J	mg/kg	5.3	11/02/19 23:21		
EPA 6010	Barium	11.0	mg/kg	0.55	11/02/19 23:21		
EPA 6010	Chromium	5.9	mg/kg	1.1	11/02/19 23:21		
EPA 6010	Lead	1.0J	mg/kg	2.2	11/02/19 23:21		
EPA 8260	Tetrachloroethene	77.4	ug/kg	69.5	11/04/19 16:11		
ASTM D2974-87	Percent Moisture	13.6	%	0.10	11/04/19 13:19		
<b>40198063010</b>	<b>SP-113-0.5-1.5</b>						
EPA 6010	Arsenic	1.8J	mg/kg	5.3	11/02/19 23:28		
EPA 6010	Barium	83.7	mg/kg	0.54	11/02/19 23:28		
EPA 6010	Cadmium	0.16J	mg/kg	0.54	11/02/19 23:28		
EPA 6010	Chromium	27.8	mg/kg	1.1	11/02/19 23:28		
EPA 6010	Lead	6.2	mg/kg	2.2	11/02/19 23:28		
ASTM D2974-87	Percent Moisture	13.8	%	0.10	11/05/19 15:22		

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## SUMMARY OF DETECTION

Project: 60615481 ALLOUEZ PHASE II ESA

Pace Project No.: 40198063

Lab Sample ID	Client Sample ID						
Method	Parameters	Result	Units	Report Limit	Analyzed	Qualifiers	
<b>40198063011</b>	<b>SP-113-22-23</b>						
EPA 6010	Barium	10.2	mg/kg	0.53	11/02/19 23:31		
EPA 6010	Chromium	8.3	mg/kg	1.1	11/02/19 23:31		
EPA 6010	Lead	1.6J	mg/kg	2.1	11/02/19 23:31		
EPA 8270 by SIM	1-Methylnaphthalene	21.9	ug/kg	18.9	10/31/19 10:23		
EPA 8270 by SIM	2-Methylnaphthalene	7.0J	ug/kg	18.9	10/31/19 10:23		
EPA 8270 by SIM	Naphthalene	37.6	ug/kg	18.9	10/31/19 10:23		
EPA 8260	n-Butylbenzene	49.9J	ug/kg	67.9	11/04/19 15:24		
EPA 8260	Ethylbenzene	44.4J	ug/kg	67.9	11/04/19 15:24		
EPA 8260	Isopropylbenzene (Cumene)	32.9J	ug/kg	67.9	11/04/19 15:24		
EPA 8260	Naphthalene	106J	ug/kg	283	11/04/19 15:24		
EPA 8260	n-Propylbenzene	96.1	ug/kg	67.9	11/04/19 15:24		
EPA 8260	1,2,4-Trimethylbenzene	630	ug/kg	67.9	11/04/19 15:24		
EPA 8260	1,3,5-Trimethylbenzene	48.4J	ug/kg	67.9	11/04/19 15:24		
EPA 8260	Xylene (Total)	124J	ug/kg	204	11/04/19 15:24		
EPA 8260	m&p-Xylene	111J	ug/kg	136	11/04/19 15:24		
ASTM D2974-87	Percent Moisture	11.7	%	0.10	11/05/19 15:22		
<b>40198063012</b>	<b>SP-114-0.5-1.5</b>						
EPA 6010	Arsenic	2.5J	mg/kg	6.2	11/02/19 23:02		
EPA 6010	Barium	77.9	mg/kg	0.63	11/02/19 23:02		
EPA 6010	Chromium	29.7	mg/kg	1.3	11/02/19 23:02		
EPA 6010	Lead	7.4	mg/kg	2.5	11/02/19 23:02		
EPA 7471	Mercury	0.014J	mg/kg	0.044	11/06/19 12:27		
ASTM D2974-87	Percent Moisture	21.4	%	0.10	11/05/19 15:22		
<b>40198063013</b>	<b>SP-114-21-22</b>						
EPA 6010	Arsenic	1.9J	mg/kg	5.6	11/02/19 23:33		
EPA 6010	Barium	5.9	mg/kg	0.57	11/02/19 23:33		
EPA 6010	Chromium	4.0	mg/kg	1.1	11/02/19 23:33		
EPA 6010	Lead	0.88J	mg/kg	2.3	11/02/19 23:33		
ASTM D2974-87	Percent Moisture	15.3	%	0.10	11/04/19 14:13		
<b>40198063014</b>	<b>SP-101-18-20</b>						
EPA 8260	Tetrachloroethene	32.6J	ug/kg	62.8	11/04/19 19:03		
ASTM D2974-87	Percent Moisture	4.4	%	0.10	11/05/19 15:22		
<b>40198063015</b>	<b>SP-101-8-10</b>						
EPA 6010	Arsenic	2.2J	mg/kg	5.5	11/02/19 23:36		
EPA 6010	Barium	36.6	mg/kg	0.57	11/02/19 23:36		
EPA 6010	Chromium	14.5	mg/kg	1.1	11/02/19 23:36		
EPA 6010	Lead	3.7	mg/kg	2.3	11/02/19 23:36		
EPA 8260	Tetrachloroethene	57.0J	ug/kg	70.2	11/04/19 19:26		
ASTM D2974-87	Percent Moisture	14.6	%	0.10	11/05/19 15:22		
<b>40198063016</b>	<b>SP-101-0.5-1.5</b>						
EPA 6010	Arsenic	3.3J	mg/kg	5.7	11/02/19 23:38		
EPA 6010	Barium	50.5	mg/kg	0.58	11/02/19 23:38		
EPA 6010	Cadmium	0.36J	mg/kg	0.58	11/02/19 23:38		
EPA 6010	Chromium	15.4	mg/kg	1.2	11/02/19 23:38		

## REPORT OF LABORATORY ANALYSIS

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## SUMMARY OF DETECTION

Project: 60615481 ALLOUEZ PHASE II ESA  
Pace Project No.: 40198063

Lab Sample ID	Client Sample ID						
Method	Parameters	Result	Units	Report Limit	Analyzed	Qualifiers	
<b>40198063016</b>	<b>SP-101-0.5-1.5</b>						
EPA 6010	Lead	39.1	mg/kg	2.3	11/02/19 23:38		
EPA 7471	Mercury	0.039J	mg/kg	0.041	11/06/19 13:01		
EPA 8270 by SIM	Acenaphthene	3.0J	ug/kg	20.3	11/01/19 12:53		
EPA 8270 by SIM	Anthracene	9.8J	ug/kg	20.3	11/01/19 12:53		
EPA 8270 by SIM	Benzo(a)anthracene	40.0	ug/kg	20.3	11/01/19 12:53		
EPA 8270 by SIM	Benzo(a)pyrene	64.8	ug/kg	20.3	11/01/19 12:53		
EPA 8270 by SIM	Benzo(b)fluoranthene	64.5	ug/kg	20.3	11/01/19 12:53		
EPA 8270 by SIM	Benzo(g,h,i)perylene	44.3	ug/kg	20.3	11/01/19 12:53		
EPA 8270 by SIM	Benzo(k)fluoranthene	29.2	ug/kg	20.3	11/01/19 12:53		
EPA 8270 by SIM	Chrysene	48.1	ug/kg	20.3	11/01/19 12:53		
EPA 8270 by SIM	Dibenz(a,h)anthracene	9.6J	ug/kg	20.3	11/01/19 12:53		
EPA 8270 by SIM	Fluoranthene	112	ug/kg	20.3	11/01/19 12:53		
EPA 8270 by SIM	Fluorene	2.6J	ug/kg	20.3	11/01/19 12:53		
EPA 8270 by SIM	Indeno(1,2,3-cd)pyrene	34.8	ug/kg	20.3	11/01/19 12:53		
EPA 8270 by SIM	Naphthalene	3.2J	ug/kg	20.3	11/01/19 12:53		
EPA 8270 by SIM	Phenanthrene	51.8	ug/kg	20.3	11/01/19 12:53		
EPA 8270 by SIM	Pyrene	78.0	ug/kg	20.3	11/01/19 12:53		
ASTM D2974-87	Percent Moisture	17.7	%	0.10	11/04/19 16:19		
<b>40198063017</b>	<b>SP-102-0.5-1.5</b>						
EPA 6010	Arsenic	2.9J	mg/kg	5.7	11/02/19 23:41		
EPA 6010	Barium	111	mg/kg	0.59	11/02/19 23:41		
EPA 6010	Cadmium	0.20J	mg/kg	0.59	11/02/19 23:41		
EPA 6010	Chromium	33.3	mg/kg	1.2	11/02/19 23:41		
EPA 6010	Lead	11.2	mg/kg	2.4	11/02/19 23:41		
EPA 7471	Mercury	0.018J	mg/kg	0.040	11/06/19 13:04		
EPA 8270 by SIM	Acenaphthylene	7.7J	ug/kg	20.5	11/01/19 14:38		
EPA 8270 by SIM	Anthracene	6.6J	ug/kg	20.5	11/01/19 14:38		
EPA 8270 by SIM	Benzo(a)anthracene	17.3J	ug/kg	20.5	11/01/19 14:38		
EPA 8270 by SIM	Benzo(a)pyrene	23.3	ug/kg	20.5	11/01/19 14:38		
EPA 8270 by SIM	Benzo(b)fluoranthene	43.0	ug/kg	20.5	11/01/19 14:38		
EPA 8270 by SIM	Benzo(g,h,i)perylene	23.1	ug/kg	20.5	11/01/19 14:38		
EPA 8270 by SIM	Benzo(k)fluoranthene	14.3J	ug/kg	20.5	11/01/19 14:38		
EPA 8270 by SIM	Chrysene	27.5	ug/kg	20.5	11/01/19 14:38		
EPA 8270 by SIM	Dibenz(a,h)anthracene	6.2J	ug/kg	20.5	11/01/19 14:38		
EPA 8270 by SIM	Fluoranthene	33.5	ug/kg	20.5	11/01/19 14:38		
EPA 8270 by SIM	Indeno(1,2,3-cd)pyrene	19.3J	ug/kg	20.5	11/01/19 14:38		
EPA 8270 by SIM	1-Methylnaphthalene	6.7J	ug/kg	20.5	11/01/19 14:38		
EPA 8270 by SIM	2-Methylnaphthalene	8.5J	ug/kg	20.5	11/01/19 14:38		
EPA 8270 by SIM	Naphthalene	10J	ug/kg	20.5	11/01/19 14:38	C4	
EPA 8270 by SIM	Phenanthrene	16.9J	ug/kg	20.5	11/01/19 14:38		
EPA 8270 by SIM	Pyrene	26.6	ug/kg	20.5	11/01/19 14:38		
EPA 8260	Tetrachloroethene	59.5J	ug/kg	73.6	11/04/19 20:12		
ASTM D2974-87	Percent Moisture	18.4	%	0.10	11/04/19 16:19		
<b>40198063018</b>	<b>SP-102-19-20</b>						
EPA 6010	Arsenic	2.0J	mg/kg	5.1	11/02/19 23:43		
EPA 6010	Barium	6.8	mg/kg	0.53	11/02/19 23:43		

## REPORT OF LABORATORY ANALYSIS

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## SUMMARY OF DETECTION

Project: 60615481 ALLOUEZ PHASE II ESA  
Pace Project No.: 40198063

Lab Sample ID	Client Sample ID					
Method	Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
<b>40198063018</b>	<b>SP-102-19-20</b>					
EPA 6010	Chromium	5.0	mg/kg	1.1	11/02/19 23:43	
EPA 6010	Lead	1.3J	mg/kg	2.1	11/02/19 23:43	
EPA 8270 by SIM	Benzo(a)anthracene	2.6J	ug/kg	18.7	10/31/19 16:43	
EPA 8270 by SIM	Naphthalene	2.0J	ug/kg	18.7	10/31/19 16:43	
ASTM D2974-87	Percent Moisture	10.8	%	0.10	11/04/19 13:43	
<b>40198063019</b>	<b>SP-102-19-20D</b>					
EPA 6010	Arsenic	1.6J	mg/kg	5.1	11/02/19 23:46	
EPA 6010	Barium	6.8	mg/kg	0.52	11/02/19 23:46	
EPA 6010	Chromium	4.3	mg/kg	1.0	11/02/19 23:46	
EPA 6010	Lead	1.0J	mg/kg	2.1	11/02/19 23:46	
EPA 8270 by SIM	Naphthalene	2.2J	ug/kg	18.7	10/31/19 12:41	
ASTM D2974-87	Percent Moisture	10.6	%	0.10	11/04/19 18:00	
<b>40198063020</b>	<b>SP-103-18-20</b>					
EPA 8260	Tetrachloroethene	277	ug/kg	68.2	11/04/19 21:21	
ASTM D2974-87	Percent Moisture	12.0	%	0.10	11/04/19 18:00	
<b>40198063021</b>	<b>SP-103-0.5-1.5</b>					
EPA 6010	Arsenic	2.1J	mg/kg	5.6	11/02/19 23:48	
EPA 6010	Barium	73.3	mg/kg	0.57	11/02/19 23:48	
EPA 6010	Cadmium	0.17J	mg/kg	0.57	11/02/19 23:48	
EPA 6010	Chromium	27.8	mg/kg	1.1	11/02/19 23:48	
EPA 6010	Lead	23.3	mg/kg	2.3	11/02/19 23:48	
EPA 7471	Mercury	0.015J	mg/kg	0.040	11/06/19 13:11	
EPA 8270 by SIM	Benzo(a)anthracene	4.3J	ug/kg	20.2	10/31/19 17:00	
EPA 8270 by SIM	Benzo(a)pyrene	3.4J	ug/kg	20.2	10/31/19 17:00	
EPA 8270 by SIM	Benzo(b)fluoranthene	5.0J	ug/kg	20.2	10/31/19 17:00	
EPA 8270 by SIM	Benzo(g,h,i)perylene	3.7J	ug/kg	20.2	10/31/19 17:00	
EPA 8270 by SIM	Benzo(k)fluoranthene	2.8J	ug/kg	20.2	10/31/19 17:00	
EPA 8270 by SIM	Chrysene	4.5J	ug/kg	20.2	10/31/19 17:00	
EPA 8270 by SIM	Fluoranthene	5.9J	ug/kg	20.2	10/31/19 17:00	
EPA 8270 by SIM	Pyrene	4.2J	ug/kg	20.2	10/31/19 17:00	
ASTM D2974-87	Percent Moisture	17.3	%	0.10	11/04/19 18:00	
<b>40198063022</b>	<b>SP-103-12-14</b>					
EPA 6010	Arsenic	3.9J	mg/kg	5.5	11/02/19 23:50	
EPA 6010	Barium	55.3	mg/kg	0.57	11/02/19 23:50	
EPA 6010	Chromium	21.0	mg/kg	1.1	11/02/19 23:50	
EPA 6010	Lead	4.1	mg/kg	2.3	11/02/19 23:50	
ASTM D2974-87	Percent Moisture	12.4	%	0.10	11/04/19 18:00	
<b>40198063023</b>	<b>SP-104-0.5-1.5</b>					
EPA 6010	Arsenic	3.2J	mg/kg	5.8	11/02/19 23:58	
EPA 6010	Barium	63.7	mg/kg	0.59	11/02/19 23:58	
EPA 6010	Chromium	20.4	mg/kg	1.2	11/02/19 23:58	
EPA 6010	Lead	5.0	mg/kg	2.4	11/02/19 23:58	
EPA 7471	Mercury	0.013J	mg/kg	0.040	11/06/19 13:20	
EPA 8270 by SIM	Benzo(a)anthracene	6.9J	ug/kg	19.9	11/01/19 13:11	

## REPORT OF LABORATORY ANALYSIS

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## SUMMARY OF DETECTION

Project: 60615481 ALLOUEZ PHASE II ESA  
Pace Project No.: 40198063

Lab Sample ID	Client Sample ID						
Method	Parameters	Result	Units	Report Limit	Analyzed	Qualifiers	
<b>40198063023</b>	<b>SP-104-0.5-1.5</b>						
EPA 8270 by SIM	Benzo(a)pyrene	15.2J	ug/kg	19.9	11/01/19 13:11		
EPA 8270 by SIM	Benzo(b)fluoranthene	12.3J	ug/kg	19.9	11/01/19 13:11		
EPA 8270 by SIM	Benzo(g,h,i)perylene	12.0J	ug/kg	19.9	11/01/19 13:11		
EPA 8270 by SIM	Benzo(k)fluoranthene	5.4J	ug/kg	19.9	11/01/19 13:11		
EPA 8270 by SIM	Chrysene	9.4J	ug/kg	19.9	11/01/19 13:11		
EPA 8270 by SIM	Dibenz(a,h)anthracene	4.2J	ug/kg	19.9	11/01/19 13:11		
EPA 8270 by SIM	Fluoranthene	6.6J	ug/kg	19.9	11/01/19 13:11		
EPA 8270 by SIM	Indeno(1,2,3-cd)pyrene	6.8J	ug/kg	19.9	11/01/19 13:11		
EPA 8270 by SIM	Pyrene	8.3J	ug/kg	19.9	11/01/19 13:11		
EPA 8260	Tetrachloroethene	30.1J	ug/kg	71.6	11/04/19 22:31		
ASTM D2974-87	Percent Moisture	16.2	%	0.10	11/04/19 18:01		
<b>40198063024</b>	<b>SP-104-18-19</b>						
EPA 6010	Barium	6.4	mg/kg	0.50	11/03/19 00:00		
EPA 6010	Chromium	4.8	mg/kg	0.99	11/03/19 00:00		
EPA 6010	Lead	1.0J	mg/kg	2.0	11/03/19 00:00		
EPA 8260	Tetrachloroethene	63.7	ug/kg	62.4	11/04/19 22:54		
ASTM D2974-87	Percent Moisture	3.8	%	0.10	11/04/19 18:01		
<b>40198063025</b>	<b>SP-105-0.5-1.5</b>						
EPA 6010	Arsenic	2.1J	mg/kg	5.9	11/03/19 00:03		
EPA 6010	Barium	110	mg/kg	0.60	11/03/19 00:03		
EPA 6010	Cadmium	0.17J	mg/kg	0.60	11/03/19 00:03		
EPA 6010	Chromium	35.9	mg/kg	1.2	11/03/19 00:03		
EPA 6010	Lead	9.1	mg/kg	2.4	11/03/19 00:03		
EPA 7471	Mercury	0.022J	mg/kg	0.037	11/06/19 13:38		
ASTM D2974-87	Percent Moisture	16.7	%	0.10	11/04/19 18:01		
<b>40198063026</b>	<b>SP-105-20-21</b>						
EPA 6010	Arsenic	3.4J	mg/kg	5.7	11/01/19 16:36		
EPA 6010	Barium	6.2	mg/kg	0.58	11/01/19 16:36		
EPA 6010	Chromium	3.5	mg/kg	1.2	11/01/19 16:36		
EPA 6010	Lead	0.72J	mg/kg	2.3	11/01/19 16:36		
ASTM D2974-87	Percent Moisture	16.1	%	0.10	11/04/19 19:02		
<b>40198063027</b>	<b>SP-106-0.5-1.5</b>						
EPA 6010	Arsenic	2.7J	mg/kg	5.5	11/01/19 16:38		
EPA 6010	Barium	47.8	mg/kg	0.56	11/01/19 16:38		
EPA 6010	Chromium	18.4	mg/kg	1.1	11/01/19 16:38		
EPA 6010	Lead	8.6	mg/kg	2.3	11/01/19 16:38		
EPA 7471	Mercury	0.015J	mg/kg	0.039	11/06/19 13:48		
EPA 8270 by SIM	Naphthalene	2.1J	ug/kg	19.8	11/01/19 15:29		
ASTM D2974-87	Percent Moisture	15.9	%	0.10	11/04/19 19:02		
<b>40198063028</b>	<b>SP-106-10-12</b>						
EPA 6010	Barium	5.9	mg/kg	0.49	11/01/19 16:43		
EPA 6010	Chromium	5.2	mg/kg	0.97	11/01/19 16:43		
EPA 6010	Lead	0.99J	mg/kg	1.9	11/01/19 16:43		
EPA 7471	Mercury	0.012J	mg/kg	0.035	11/06/19 13:50		

## REPORT OF LABORATORY ANALYSIS

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## SUMMARY OF DETECTION

Project: 60615481 ALLOUEZ PHASE II ESA

Pace Project No.: 40198063

Lab Sample ID	Client Sample ID						
Method	Parameters	Result	Units	Report Limit	Analyzed	Qualifiers	
<b>40198063028</b>	<b>SP-106-10-12</b>						
EPA 8260	Tetrachloroethene	64.9	ug/kg	61.1	11/05/19 00:49		
ASTM D2974-87	Percent Moisture	1.8	%	0.10	11/04/19 19:02		
<b>40198063029</b>	<b>SP-106-18-19</b>						
EPA 8260	Tetrachloroethene	59.4J	ug/kg	60.0	11/04/19 23:42		
<b>40198063030</b>	<b>SP-108-0.5-1.5</b>						
EPA 6010	Barium	93.2	mg/kg	0.58	11/01/19 16:45		
EPA 6010	Chromium	29.2	mg/kg	1.2	11/01/19 16:45		
EPA 6010	Lead	78.9	mg/kg	4.6	11/05/19 13:09		
EPA 7471	Mercury	0.035J	mg/kg	0.040	11/06/19 13:52		
EPA 8270 by SIM	Anthracene	3.2J	ug/kg	20.2	11/01/19 16:04		
EPA 8270 by SIM	Benzo(a)anthracene	7.8J	ug/kg	20.2	11/01/19 16:04		
EPA 8270 by SIM	Benzo(a)pyrene	7.9J	ug/kg	20.2	11/01/19 16:04		
EPA 8270 by SIM	Benzo(b)fluoranthene	12.8J	ug/kg	20.2	11/01/19 16:04		
EPA 8270 by SIM	Benzo(g,h,i)perylene	6.9J	ug/kg	20.2	11/01/19 16:04		
EPA 8270 by SIM	Benzo(k)fluoranthene	4.7J	ug/kg	20.2	11/01/19 16:04		
EPA 8270 by SIM	Chrysene	10.4J	ug/kg	20.2	11/01/19 16:04		
EPA 8270 by SIM	Fluoranthene	14.7J	ug/kg	20.2	11/01/19 16:04		
EPA 8270 by SIM	Indeno(1,2,3-cd)pyrene	5.1J	ug/kg	20.2	11/01/19 16:04		
EPA 8270 by SIM	1-Methylnaphthalene	11.4J	ug/kg	20.2	11/01/19 16:04		
EPA 8270 by SIM	2-Methylnaphthalene	14.6J	ug/kg	20.2	11/01/19 16:04		
EPA 8270 by SIM	Naphthalene	8.3J	ug/kg	20.2	11/01/19 16:04		
EPA 8270 by SIM	Phenanthrene	10.9J	ug/kg	20.2	11/01/19 16:04		
EPA 8270 by SIM	Pyrene	11.1J	ug/kg	20.2	11/01/19 16:04		
ASTM D2974-87	Percent Moisture	17.4	%	0.10	11/04/19 19:02		
<b>40198063031</b>	<b>SP-108-19-20</b>						
EPA 6010	Arsenic	4.7J	mg/kg	5.7	11/01/19 16:48		
EPA 6010	Barium	15.6	mg/kg	0.59	11/01/19 16:48		
EPA 6010	Chromium	6.7	mg/kg	1.2	11/01/19 16:48		
EPA 6010	Lead	1.9J	mg/kg	2.3	11/01/19 16:48		
EPA 7471	Mercury	0.020J	mg/kg	0.042	11/06/19 13:55		
ASTM D2974-87	Percent Moisture	17.3	%	0.10	11/04/19 19:02		
<b>40198063032</b>	<b>SP-108-19-20D</b>						
EPA 6010	Arsenic	3.3J	mg/kg	5.4	11/01/19 16:50		
EPA 6010	Barium	22.8	mg/kg	0.55	11/01/19 16:50		
EPA 6010	Chromium	10.7	mg/kg	1.1	11/01/19 16:50		
EPA 6010	Lead	1.9J	mg/kg	2.2	11/01/19 16:50		
EPA 7471	Mercury	0.018J	mg/kg	0.040	11/06/19 13:57		
EPA 8270 by SIM	Naphthalene	2.9J	ug/kg	20.0	11/01/19 16:38		
ASTM D2974-87	Percent Moisture	16.3	%	0.10	11/04/19 19:02		
<b>40198063033</b>	<b>SP-109-0.5-1.5</b>						
EPA 6010	Barium	67.7	mg/kg	0.58	11/01/19 16:58		
EPA 6010	Chromium	31.8	mg/kg	1.2	11/01/19 16:58		
EPA 6010	Lead	6.3	mg/kg	4.6	11/05/19 13:11		
EPA 6010	Silver	0.77J	mg/kg	2.3	11/05/19 13:11	D3	

## REPORT OF LABORATORY ANALYSIS

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## SUMMARY OF DETECTION

Project: 60615481 ALLOUEZ PHASE II ESA

Pace Project No.: 40198063

Lab Sample ID	Client Sample ID						
Method	Parameters	Result	Units	Report Limit	Analyzed	Qualifiers	
<b>40198063033</b>	<b>SP-109-0.5-1.5</b>						
EPA 7471	Mercury	0.048	mg/kg	0.037	11/06/19 13:59		
EPA 8270 by SIM	Benzo(a)anthracene	4.0J	ug/kg	19.4	11/01/19 16:55		
EPA 8270 by SIM	Benzo(a)pyrene	3.0J	ug/kg	19.4	11/01/19 16:55		
EPA 8270 by SIM	Benzo(b)fluoranthene	5.6J	ug/kg	19.4	11/01/19 16:55		
EPA 8270 by SIM	Chrysene	5.1J	ug/kg	19.4	11/01/19 16:55		
EPA 8270 by SIM	Fluoranthene	5.2J	ug/kg	19.4	11/01/19 16:55		
EPA 8270 by SIM	2-Methylnaphthalene	4.1J	ug/kg	19.4	11/01/19 16:55		
EPA 8270 by SIM	Naphthalene	3.9J	ug/kg	19.4	11/01/19 16:55		
EPA 8270 by SIM	Phenanthrene	5.0J	ug/kg	19.4	11/01/19 16:55		
EPA 8270 by SIM	Pyrene	4.3J	ug/kg	19.4	11/01/19 16:55		
ASTM D2974-87	Percent Moisture	14.0	%	0.10	11/04/19 19:02		
<b>40198063034</b>	<b>SP-109-18-19</b>						
EPA 6010	Arsenic	3.3J	mg/kg	5.5	11/01/19 17:00		
EPA 6010	Barium	6.7	mg/kg	0.56	11/01/19 17:00		
EPA 6010	Chromium	3.9	mg/kg	1.1	11/01/19 17:00		
EPA 6010	Lead	0.85J	mg/kg	2.2	11/01/19 17:00		
ASTM D2974-87	Percent Moisture	16.4	%	0.10	11/04/19 19:02		
<b>40198063035</b>	<b>SP-110-0.5-1.5</b>						
EPA 6010	Barium	97.1	mg/kg	0.56	11/01/19 17:03		
EPA 6010	Chromium	30.5	mg/kg	1.1	11/01/19 17:03		
EPA 6010	Lead	8.4	mg/kg	4.5	11/05/19 13:14		
EPA 7471	Mercury	0.040	mg/kg	0.040	11/06/19 14:04		
EPA 8270 by SIM	Benzo(a)anthracene	2.7J	ug/kg	20.1	11/01/19 17:12		
EPA 8270 by SIM	Fluoranthene	2.4J	ug/kg	20.1	11/01/19 17:12		
ASTM D2974-87	Percent Moisture	16.8	%	0.10	11/04/19 19:03		
<b>40198063036</b>	<b>SP-110-18-19</b>						
EPA 6010	Arsenic	3.3J	mg/kg	5.8	11/01/19 17:05		
EPA 6010	Barium	38.5	mg/kg	0.60	11/01/19 17:05		
EPA 6010	Cadmium	0.16J	mg/kg	0.60	11/01/19 17:05		
EPA 6010	Chromium	26.5	mg/kg	1.2	11/01/19 17:05		
EPA 6010	Lead	3.4	mg/kg	2.4	11/01/19 17:05		
EPA 7471	Mercury	0.020J	mg/kg	0.040	11/06/19 14:06		
ASTM D2974-87	Percent Moisture	16.9	%	0.10	11/04/19 19:03		

## REPORT OF LABORATORY ANALYSIS

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## ANALYTICAL RESULTS

Project: 60615481 ALLOUEZ PHASE II ESA

Pace Project No.: 40198063

Sample: SP-115-0.5-1.5 Lab ID: 40198063001 Collected: 10/24/19 10:35 Received: 10/25/19 17:47 Matrix: Solid

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

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>6010 MET ICP</b>		Analytical Method: EPA 6010 Preparation Method: EPA 3050							
Arsenic	1.9J	mg/kg	5.4	1.6	1	10/30/19 06:20	11/02/19 23:09	7440-38-2	
Barium	43.6	mg/kg	0.55	0.17	1	10/30/19 06:20	11/02/19 23:09	7440-39-3	
Cadmium	<0.15	mg/kg	0.55	0.15	1	10/30/19 06:20	11/02/19 23:09	7440-43-9	
Chromium	18.1	mg/kg	1.1	0.31	1	10/30/19 06:20	11/02/19 23:09	7440-47-3	
Lead	11.6	mg/kg	2.2	0.66	1	10/30/19 06:20	11/02/19 23:09	7439-92-1	
Selenium	<1.5	mg/kg	4.8	1.5	1	10/30/19 06:20	11/02/19 23:09	7782-49-2	
Silver	<0.68	mg/kg	2.2	0.68	2	10/30/19 06:20	11/05/19 12:43	7440-22-4	D3
<b>7471 Mercury</b>		Analytical Method: EPA 7471 Preparation Method: EPA 7471							
Mercury	0.013J	mg/kg	0.038	0.011	1	11/06/19 08:34	11/06/19 12:34	7439-97-6	
<b>8270 MSSV PAH by SIM</b>		Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3546							
Acenaphthene	3.4J	ug/kg	19.9	2.6	1	10/29/19 08:29	10/30/19 15:18	83-32-9	
Acenaphthylene	<2.5	ug/kg	19.9	2.5	1	10/29/19 08:29	10/30/19 15:18	208-96-8	
Anthracene	10.3J	ug/kg	19.9	2.5	1	10/29/19 08:29	10/30/19 15:18	120-12-7	
Benzo(a)anthracene	61.4	ug/kg	19.9	2.6	1	10/29/19 08:29	10/30/19 15:18	56-55-3	
Benzo(a)pyrene	92.7	ug/kg	19.9	2.3	1	10/29/19 08:29	10/30/19 15:18	50-32-8	
Benzo(b)fluoranthene	142	ug/kg	19.9	2.8	1	10/29/19 08:29	10/30/19 15:18	205-99-2	
Benzo(g,h,i)perylene	88.8	ug/kg	19.9	3.5	1	10/29/19 08:29	10/30/19 15:18	191-24-2	
Benzo(k)fluoranthene	54.6	ug/kg	19.9	2.5	1	10/29/19 08:29	10/30/19 15:18	207-08-9	
Chrysene	103	ug/kg	19.9	3.7	1	10/29/19 08:29	10/30/19 15:18	218-01-9	
Dibenz(a,h)anthracene	19.8J	ug/kg	19.9	2.7	1	10/29/19 08:29	10/30/19 15:18	53-70-3	
Fluoranthene	206	ug/kg	19.9	2.3	1	10/29/19 08:29	10/30/19 15:18	206-44-0	
Fluorene	3.7J	ug/kg	19.9	2.4	1	10/29/19 08:29	10/30/19 15:18	86-73-7	
Indeno(1,2,3-cd)pyrene	69.6	ug/kg	19.9	4.1	1	10/29/19 08:29	10/30/19 15:18	193-39-5	
1-Methylnaphthalene	<2.9	ug/kg	19.9	2.9	1	10/29/19 08:29	10/30/19 15:18	90-12-0	
2-Methylnaphthalene	<2.9	ug/kg	19.9	2.9	1	10/29/19 08:29	10/30/19 15:18	91-57-6	
Naphthalene	2.7J	ug/kg	19.9	1.9	1	10/29/19 08:29	10/30/19 15:18	91-20-3	
Phenanthrene	81.5	ug/kg	19.9	2.3	1	10/29/19 08:29	10/30/19 15:18	85-01-8	
Pyrene	140	ug/kg	19.9	2.9	1	10/29/19 08:29	10/30/19 15:18	129-00-0	
<b>Surrogates</b>									
2-Fluorobiphenyl (S)	70	%	28-99		1	10/29/19 08:29	10/30/19 15:18	321-60-8	
Terphenyl-d14 (S)	62	%	10-107		1	10/29/19 08:29	10/30/19 15:18	1718-51-0	
<b>8260 MSV Med Level Normal List</b>		Analytical Method: EPA 8260 Preparation Method: EPA 5035/5030B							
Benzene	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/04/19 23:20	71-43-2	W
Bromobenzene	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/04/19 23:20	108-86-1	W
Bromochloromethane	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/04/19 23:20	74-97-5	W
Bromodichloromethane	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/04/19 23:20	75-27-4	W
Bromoform	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/04/19 23:20	75-25-2	W
Bromomethane	<69.9	ug/kg	250	69.9	1	11/04/19 10:15	11/04/19 23:20	74-83-9	W
n-Butylbenzene	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/04/19 23:20	104-51-8	W
sec-Butylbenzene	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/04/19 23:20	135-98-8	W
tert-Butylbenzene	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/04/19 23:20	98-06-6	W
Carbon tetrachloride	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/04/19 23:20	56-23-5	W

## REPORT OF LABORATORY ANALYSIS

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## ANALYTICAL RESULTS

Project: 60615481 ALLOUEZ PHASE II ESA

Pace Project No.: 40198063

Sample: SP-115-0.5-1.5      Lab ID: 40198063001      Collected: 10/24/19 10:35      Received: 10/25/19 17:47      Matrix: Solid

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

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260 MSV Med Level Normal List</b>	Analytical Method: EPA 8260 Preparation Method: EPA 5035/5030B								
Chlorobenzene	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/04/19 23:20	108-90-7	W
Chloroethane	<67.0	ug/kg	250	67.0	1	11/04/19 10:15	11/04/19 23:20	75-00-3	W
Chloroform	<46.4	ug/kg	250	46.4	1	11/04/19 10:15	11/04/19 23:20	67-66-3	W
Chloromethane	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/04/19 23:20	74-87-3	W
2-Chlorotoluene	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/04/19 23:20	95-49-8	W
4-Chlorotoluene	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/04/19 23:20	106-43-4	W
1,2-Dibromo-3-chloropropane	<91.2	ug/kg	250	91.2	1	11/04/19 10:15	11/04/19 23:20	96-12-8	W
Dibromochloromethane	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/04/19 23:20	124-48-1	W
1,2-Dibromoethane (EDB)	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/04/19 23:20	106-93-4	W
Dibromomethane	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/04/19 23:20	74-95-3	W
1,2-Dichlorobenzene	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/04/19 23:20	95-50-1	W
1,3-Dichlorobenzene	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/04/19 23:20	541-73-1	W
1,4-Dichlorobenzene	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/04/19 23:20	106-46-7	W
Dichlorodifluoromethane	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/04/19 23:20	75-71-8	W
1,1-Dichloroethane	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/04/19 23:20	75-34-3	W
1,2-Dichloroethane	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/04/19 23:20	107-06-2	W
1,1-Dichloroethene	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/04/19 23:20	75-35-4	W
cis-1,2-Dichloroethene	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/04/19 23:20	156-59-2	W
trans-1,2-Dichloroethene	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/04/19 23:20	156-60-5	W
1,2-Dichloropropane	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/04/19 23:20	78-87-5	W
1,3-Dichloropropane	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/04/19 23:20	142-28-9	W
2,2-Dichloropropane	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/04/19 23:20	594-20-7	W
1,1-Dichloropropene	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/04/19 23:20	563-58-6	W
cis-1,3-Dichloropropene	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/04/19 23:20	10061-01-5	W
trans-1,3-Dichloropropene	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/04/19 23:20	10061-02-6	W
Diisopropyl ether	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/04/19 23:20	108-20-3	W
Ethylbenzene	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/04/19 23:20	100-41-4	W
Hexachloro-1,3-butadiene	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/04/19 23:20	87-68-3	W
Isopropylbenzene (Cumene)	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/04/19 23:20	98-82-8	W
p-Isopropyltoluene	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/04/19 23:20	99-87-6	W
Methylene Chloride	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/04/19 23:20	75-09-2	W
Methyl-tert-butyl ether	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/04/19 23:20	1634-04-4	W
Naphthalene	<40.0	ug/kg	250	40.0	1	11/04/19 10:15	11/04/19 23:20	91-20-3	W
n-Propylbenzene	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/04/19 23:20	103-65-1	W
Styrene	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/04/19 23:20	100-42-5	W
1,1,1,2-Tetrachloroethane	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/04/19 23:20	630-20-6	W
1,1,2,2-Tetrachloroethane	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/04/19 23:20	79-34-5	W
Tetrachloroethene	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/04/19 23:20	127-18-4	W
Toluene	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/04/19 23:20	108-88-3	W
1,2,3-Trichlorobenzene	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/04/19 23:20	87-61-6	W
1,2,4-Trichlorobenzene	<47.6	ug/kg	250	47.6	1	11/04/19 10:15	11/04/19 23:20	120-82-1	W
1,1,1-Trichloroethane	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/04/19 23:20	71-55-6	W
1,1,2-Trichloroethane	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/04/19 23:20	79-00-5	W
Trichloroethene	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/04/19 23:20	79-01-6	W
Trichlorofluoromethane	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/04/19 23:20	75-69-4	W

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## ANALYTICAL RESULTS

Project: 60615481 ALLOUEZ PHASE II ESA

Pace Project No.: 40198063

Sample: SP-115-0.5-1.5 Lab ID: 40198063001 Collected: 10/24/19 10:35 Received: 10/25/19 17:47 Matrix: Solid

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

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260 MSV Med Level Normal List</b>	Analytical Method: EPA 8260 Preparation Method: EPA 5035/5030B								
1,2,3-Trichloropropane	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/04/19 23:20	96-18-4	W
1,2,4-Trimethylbenzene	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/04/19 23:20	95-63-6	W
1,3,5-Trimethylbenzene	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/04/19 23:20	108-67-8	W
Vinyl chloride	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/04/19 23:20	75-01-4	W
Xylene (Total)	<75.0	ug/kg	180	75.0	1	11/04/19 10:15	11/04/19 23:20	1330-20-7	W
m&p-Xylene	<50.0	ug/kg	120	50.0	1	11/04/19 10:15	11/04/19 23:20	179601-23-1	W
o-Xylene	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/04/19 23:20	95-47-6	W
<b>Surrogates</b>									
Dibromofluoromethane (S)	106	%	57-146		1	11/04/19 10:15	11/04/19 23:20	1868-53-7	
Toluene-d8 (S)	118	%	64-134		1	11/04/19 10:15	11/04/19 23:20	2037-26-5	
4-Bromofluorobenzene (S)	99	%	54-126		1	11/04/19 10:15	11/04/19 23:20	460-00-4	
<b>Percent Moisture</b>	Analytical Method: ASTM D2974-87								
Percent Moisture	15.8	%	0.10	0.10	1			11/05/19 15:21	

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## ANALYTICAL RESULTS

Project: 60615481 ALLOUEZ PHASE II ESA

Pace Project No.: 40198063

Sample: SP-115-18-20 Lab ID: 40198063002 Collected: 10/24/19 10:51 Received: 10/25/19 17:47 Matrix: Solid

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

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260 MSV Med Level Normal List</b>		Analytical Method: EPA 8260 Preparation Method: EPA 5035/5030B							
Benzene	<25.0	ug/kg	60.0	25.0	1	11/01/19 14:15	11/04/19 11:50	71-43-2	W
Bromobenzene	<25.0	ug/kg	60.0	25.0	1	11/01/19 14:15	11/04/19 11:50	108-86-1	W
Bromoform	<25.0	ug/kg	60.0	25.0	1	11/01/19 14:15	11/04/19 11:50	74-97-5	W
Bromochloromethane	<25.0	ug/kg	60.0	25.0	1	11/01/19 14:15	11/04/19 11:50	75-27-4	W
Bromodichloromethane	<25.0	ug/kg	60.0	25.0	1	11/01/19 14:15	11/04/19 11:50	75-25-2	W
Bromomethane	<69.9	ug/kg	250	69.9	1	11/01/19 14:15	11/04/19 11:50	74-83-9	W
n-Butylbenzene	<25.0	ug/kg	60.0	25.0	1	11/01/19 14:15	11/04/19 11:50	104-51-8	W
sec-Butylbenzene	<25.0	ug/kg	60.0	25.0	1	11/01/19 14:15	11/04/19 11:50	135-98-8	W
tert-Butylbenzene	<25.0	ug/kg	60.0	25.0	1	11/01/19 14:15	11/04/19 11:50	98-06-6	W
Carbon tetrachloride	<25.0	ug/kg	60.0	25.0	1	11/01/19 14:15	11/04/19 11:50	56-23-5	W
Chlorobenzene	<25.0	ug/kg	60.0	25.0	1	11/01/19 14:15	11/04/19 11:50	108-90-7	W
Chloroethane	<67.0	ug/kg	250	67.0	1	11/01/19 14:15	11/04/19 11:50	75-00-3	W
Chloroform	<46.4	ug/kg	250	46.4	1	11/01/19 14:15	11/04/19 11:50	67-66-3	W
Chloromethane	<25.0	ug/kg	60.0	25.0	1	11/01/19 14:15	11/04/19 11:50	74-87-3	W
2-Chlorotoluene	<25.0	ug/kg	60.0	25.0	1	11/01/19 14:15	11/04/19 11:50	95-49-8	W
4-Chlorotoluene	<25.0	ug/kg	60.0	25.0	1	11/01/19 14:15	11/04/19 11:50	106-43-4	W
1,2-Dibromo-3-chloropropane	<91.2	ug/kg	250	91.2	1	11/01/19 14:15	11/04/19 11:50	96-12-8	W
Dibromochloromethane	<25.0	ug/kg	60.0	25.0	1	11/01/19 14:15	11/04/19 11:50	124-48-1	W
1,2-Dibromoethane (EDB)	<25.0	ug/kg	60.0	25.0	1	11/01/19 14:15	11/04/19 11:50	106-93-4	W
Dibromomethane	<25.0	ug/kg	60.0	25.0	1	11/01/19 14:15	11/04/19 11:50	74-95-3	W
1,2-Dichlorobenzene	<25.0	ug/kg	60.0	25.0	1	11/01/19 14:15	11/04/19 11:50	95-50-1	W
1,3-Dichlorobenzene	<25.0	ug/kg	60.0	25.0	1	11/01/19 14:15	11/04/19 11:50	541-73-1	W
1,4-Dichlorobenzene	<25.0	ug/kg	60.0	25.0	1	11/01/19 14:15	11/04/19 11:50	106-46-7	W
Dichlorodifluoromethane	<25.0	ug/kg	60.0	25.0	1	11/01/19 14:15	11/04/19 11:50	75-71-8	W
1,1-Dichloroethane	<25.0	ug/kg	60.0	25.0	1	11/01/19 14:15	11/04/19 11:50	75-34-3	W
1,2-Dichloroethane	<25.0	ug/kg	60.0	25.0	1	11/01/19 14:15	11/04/19 11:50	107-06-2	W
1,1-Dichloroethene	<25.0	ug/kg	60.0	25.0	1	11/01/19 14:15	11/04/19 11:50	75-35-4	W
cis-1,2-Dichloroethene	<25.0	ug/kg	60.0	25.0	1	11/01/19 14:15	11/04/19 11:50	156-59-2	W
trans-1,2-Dichloroethene	<25.0	ug/kg	60.0	25.0	1	11/01/19 14:15	11/04/19 11:50	156-60-5	W
1,2-Dichloropropane	<25.0	ug/kg	60.0	25.0	1	11/01/19 14:15	11/04/19 11:50	78-87-5	W
1,3-Dichloropropane	<25.0	ug/kg	60.0	25.0	1	11/01/19 14:15	11/04/19 11:50	142-28-9	W
2,2-Dichloropropane	<25.0	ug/kg	60.0	25.0	1	11/01/19 14:15	11/04/19 11:50	594-20-7	W
1,1-Dichloropropene	<25.0	ug/kg	60.0	25.0	1	11/01/19 14:15	11/04/19 11:50	563-58-6	W
cis-1,3-Dichloropropene	<25.0	ug/kg	60.0	25.0	1	11/01/19 14:15	11/04/19 11:50	10061-01-5	W
trans-1,3-Dichloropropene	<25.0	ug/kg	60.0	25.0	1	11/01/19 14:15	11/04/19 11:50	10061-02-6	W
Diisopropyl ether	<25.0	ug/kg	60.0	25.0	1	11/01/19 14:15	11/04/19 11:50	108-20-3	W
Ethylbenzene	<25.0	ug/kg	60.0	25.0	1	11/01/19 14:15	11/04/19 11:50	100-41-4	W
Hexachloro-1,3-butadiene	<25.0	ug/kg	60.0	25.0	1	11/01/19 14:15	11/04/19 11:50	87-68-3	W
Isopropylbenzene (Cumene)	<25.0	ug/kg	60.0	25.0	1	11/01/19 14:15	11/04/19 11:50	98-82-8	W
p-Isopropyltoluene	<25.0	ug/kg	60.0	25.0	1	11/01/19 14:15	11/04/19 11:50	99-87-6	W
Methylene Chloride	<25.0	ug/kg	60.0	25.0	1	11/01/19 14:15	11/04/19 11:50	75-09-2	W
Methyl-tert-butyl ether	<25.0	ug/kg	60.0	25.0	1	11/01/19 14:15	11/04/19 11:50	1634-04-4	W
Naphthalene	<40.0	ug/kg	250	40.0	1	11/01/19 14:15	11/04/19 11:50	91-20-3	W
n-Propylbenzene	<25.0	ug/kg	60.0	25.0	1	11/01/19 14:15	11/04/19 11:50	103-65-1	W
Styrene	<25.0	ug/kg	60.0	25.0	1	11/01/19 14:15	11/04/19 11:50	100-42-5	W

## REPORT OF LABORATORY ANALYSIS

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## ANALYTICAL RESULTS

Project: 60615481 ALLOUEZ PHASE II ESA

Pace Project No.: 40198063

Sample: SP-115-18-20 Lab ID: 40198063002 Collected: 10/24/19 10:51 Received: 10/25/19 17:47 Matrix: Solid

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

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260 MSV Med Level Normal List</b>	Analytical Method: EPA 8260 Preparation Method: EPA 5035/5030B								
1,1,1,2-Tetrachloroethane	<25.0	ug/kg	60.0	25.0	1	11/01/19 14:15	11/04/19 11:50	630-20-6	W
1,1,2,2-Tetrachloroethane	<25.0	ug/kg	60.0	25.0	1	11/01/19 14:15	11/04/19 11:50	79-34-5	W
Tetrachloroethene	368	ug/kg	61.9	25.8	1	11/01/19 14:15	11/04/19 11:50	127-18-4	
Toluene	<25.0	ug/kg	60.0	25.0	1	11/01/19 14:15	11/04/19 11:50	108-88-3	W
1,2,3-Trichlorobenzene	<25.0	ug/kg	60.0	25.0	1	11/01/19 14:15	11/04/19 11:50	87-61-6	W
1,2,4-Trichlorobenzene	<47.6	ug/kg	250	47.6	1	11/01/19 14:15	11/04/19 11:50	120-82-1	W
1,1,1-Trichloroethane	<25.0	ug/kg	60.0	25.0	1	11/01/19 14:15	11/04/19 11:50	71-55-6	W
1,1,2-Trichloroethane	<25.0	ug/kg	60.0	25.0	1	11/01/19 14:15	11/04/19 11:50	79-00-5	W
Trichloroethene	<25.0	ug/kg	60.0	25.0	1	11/01/19 14:15	11/04/19 11:50	79-01-6	W
Trichlorofluoromethane	<25.0	ug/kg	60.0	25.0	1	11/01/19 14:15	11/04/19 11:50	75-69-4	W
1,2,3-Trichloropropane	<25.0	ug/kg	60.0	25.0	1	11/01/19 14:15	11/04/19 11:50	96-18-4	W
1,2,4-Trimethylbenzene	<25.0	ug/kg	60.0	25.0	1	11/01/19 14:15	11/04/19 11:50	95-63-6	W
1,3,5-Trimethylbenzene	<25.0	ug/kg	60.0	25.0	1	11/01/19 14:15	11/04/19 11:50	108-67-8	W
Vinyl chloride	<25.0	ug/kg	60.0	25.0	1	11/01/19 14:15	11/04/19 11:50	75-01-4	W
Xylene (Total)	<75.0	ug/kg	180	75.0	1	11/01/19 14:15	11/04/19 11:50	1330-20-7	W
m&p-Xylene	<50.0	ug/kg	120	50.0	1	11/01/19 14:15	11/04/19 11:50	179601-23-1	W
o-Xylene	<25.0	ug/kg	60.0	25.0	1	11/01/19 14:15	11/04/19 11:50	95-47-6	W
<b>Surrogates</b>									
Dibromofluoromethane (S)	108	%	57-146		1	11/01/19 14:15	11/04/19 11:50	1868-53-7	
Toluene-d8 (S)	113	%	64-134		1	11/01/19 14:15	11/04/19 11:50	2037-26-5	
4-Bromofluorobenzene (S)	97	%	54-126		1	11/01/19 14:15	11/04/19 11:50	460-00-4	
<b>Percent Moisture</b>	Analytical Method: ASTM D2974-87								
Percent Moisture	3.1	%	0.10	0.10	1			11/05/19 15:21	

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## ANALYTICAL RESULTS

Project: 60615481 ALLOUEZ PHASE II ESA

Pace Project No.: 40198063

Sample: SP-115-10-12 Lab ID: 40198063003 Collected: 10/24/19 10:46 Received: 10/25/19 17:47 Matrix: Solid

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

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>6010 MET ICP</b>		Analytical Method: EPA 6010 Preparation Method: EPA 3050							
Arsenic	2.4J	mg/kg	4.9	1.5	1	10/30/19 06:20	11/02/19 23:11	7440-38-2	
Barium	7.3	mg/kg	0.50	0.15	1	10/30/19 06:20	11/02/19 23:11	7440-39-3	
Cadmium	<0.13	mg/kg	0.50	0.13	1	10/30/19 06:20	11/02/19 23:11	7440-43-9	
Chromium	5.2	mg/kg	1.0	0.28	1	10/30/19 06:20	11/02/19 23:11	7440-47-3	
Lead	2.3	mg/kg	2.0	0.60	1	10/30/19 06:20	11/02/19 23:11	7439-92-1	
Selenium	<1.3	mg/kg	4.3	1.3	1	10/30/19 06:20	11/02/19 23:11	7782-49-2	
Silver	<0.31	mg/kg	1.0	0.31	1	10/30/19 06:20	11/02/19 23:11	7440-22-4	
<b>7471 Mercury</b>		Analytical Method: EPA 7471 Preparation Method: EPA 7471							
Mercury	<0.010	mg/kg	0.034	0.010	1	11/06/19 08:34	11/06/19 12:36	7439-97-6	
<b>8270 MSSV PAH by SIM</b>		Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3546							
Acenaphthene	<2.3	ug/kg	17.5	2.3	1	10/29/19 08:29	10/30/19 15:35	83-32-9	
Acenaphthylene	<2.2	ug/kg	17.5	2.2	1	10/29/19 08:29	10/30/19 15:35	208-96-8	
Anthracene	<2.2	ug/kg	17.5	2.2	1	10/29/19 08:29	10/30/19 15:35	120-12-7	
Benzo(a)anthracene	<2.3	ug/kg	17.5	2.3	1	10/29/19 08:29	10/30/19 15:35	56-55-3	
Benzo(a)pyrene	<2.0	ug/kg	17.5	2.0	1	10/29/19 08:29	10/30/19 15:35	50-32-8	
Benzo(b)fluoranthene	<2.4	ug/kg	17.5	2.4	1	10/29/19 08:29	10/30/19 15:35	205-99-2	
Benzo(g,h,i)perylene	<3.1	ug/kg	17.5	3.1	1	10/29/19 08:29	10/30/19 15:35	191-24-2	
Benzo(k)fluoranthene	<2.2	ug/kg	17.5	2.2	1	10/29/19 08:29	10/30/19 15:35	207-08-9	
Chrysene	<3.3	ug/kg	17.5	3.3	1	10/29/19 08:29	10/30/19 15:35	218-01-9	
Dibenz(a,h)anthracene	<2.4	ug/kg	17.5	2.4	1	10/29/19 08:29	10/30/19 15:35	53-70-3	
Fluoranthene	<2.1	ug/kg	17.5	2.1	1	10/29/19 08:29	10/30/19 15:35	206-44-0	
Fluorene	<2.1	ug/kg	17.5	2.1	1	10/29/19 08:29	10/30/19 15:35	86-73-7	
Indeno(1,2,3-cd)pyrene	<3.6	ug/kg	17.5	3.6	1	10/29/19 08:29	10/30/19 15:35	193-39-5	
1-Methylnaphthalene	<2.6	ug/kg	17.5	2.6	1	10/29/19 08:29	10/30/19 15:35	90-12-0	
2-Methylnaphthalene	<2.6	ug/kg	17.5	2.6	1	10/29/19 08:29	10/30/19 15:35	91-57-6	
Naphthalene	<1.7	ug/kg	17.5	1.7	1	10/29/19 08:29	10/30/19 15:35	91-20-3	
Phenanthrene	<2.0	ug/kg	17.5	2.0	1	10/29/19 08:29	10/30/19 15:35	85-01-8	
Pyrene	<2.6	ug/kg	17.5	2.6	1	10/29/19 08:29	10/30/19 15:35	129-00-0	
<b>Surrogates</b>									
2-Fluorobiphenyl (S)	67	%	28-99		1	10/29/19 08:29	10/30/19 15:35	321-60-8	
Terphenyl-d14 (S)	62	%	10-107		1	10/29/19 08:29	10/30/19 15:35	1718-51-0	
<b>8260 MSV Med Level Normal List</b>		Analytical Method: EPA 8260 Preparation Method: EPA 5035/5030B							
Benzene	<25.5	ug/kg	61.2	25.5	1	11/01/19 14:15	11/04/19 12:13	71-43-2	W
Bromobenzene	<25.5	ug/kg	61.2	25.5	1	11/01/19 14:15	11/04/19 12:13	108-86-1	W
Bromochloromethane	<25.5	ug/kg	61.2	25.5	1	11/01/19 14:15	11/04/19 12:13	74-97-5	W
Bromodichloromethane	<25.5	ug/kg	61.2	25.5	1	11/01/19 14:15	11/04/19 12:13	75-27-4	W
Bromoform	<25.5	ug/kg	61.2	25.5	1	11/01/19 14:15	11/04/19 12:13	75-25-2	W
Bromomethane	<71.3	ug/kg	255	71.3	1	11/01/19 14:15	11/04/19 12:13	74-83-9	W
n-Butylbenzene	<25.5	ug/kg	61.2	25.5	1	11/01/19 14:15	11/04/19 12:13	104-51-8	W
sec-Butylbenzene	<25.5	ug/kg	61.2	25.5	1	11/01/19 14:15	11/04/19 12:13	135-98-8	W
tert-Butylbenzene	<25.5	ug/kg	61.2	25.5	1	11/01/19 14:15	11/04/19 12:13	98-06-6	W
Carbon tetrachloride	<25.5	ug/kg	61.2	25.5	1	11/01/19 14:15	11/04/19 12:13	56-23-5	W

## REPORT OF LABORATORY ANALYSIS

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## ANALYTICAL RESULTS

Project: 60615481 ALLOUEZ PHASE II ESA

Pace Project No.: 40198063

Sample: SP-115-10-12 Lab ID: 40198063003 Collected: 10/24/19 10:46 Received: 10/25/19 17:47 Matrix: Solid

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

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260 MSV Med Level Normal List</b>		Analytical Method: EPA 8260 Preparation Method: EPA 5035/5030B							
Chlorobenzene	<25.5	ug/kg	61.2	25.5	1	11/01/19 14:15	11/04/19 12:13	108-90-7	W
Chloroethane	<68.4	ug/kg	255	68.4	1	11/01/19 14:15	11/04/19 12:13	75-00-3	W
Chloroform	<47.4	ug/kg	255	47.4	1	11/01/19 14:15	11/04/19 12:13	67-66-3	W
Chloromethane	<25.5	ug/kg	61.2	25.5	1	11/01/19 14:15	11/04/19 12:13	74-87-3	W
2-Chlorotoluene	<25.5	ug/kg	61.2	25.5	1	11/01/19 14:15	11/04/19 12:13	95-49-8	W
4-Chlorotoluene	<25.5	ug/kg	61.2	25.5	1	11/01/19 14:15	11/04/19 12:13	106-43-4	W
1,2-Dibromo-3-chloropropane	<93.1	ug/kg	255	93.1	1	11/01/19 14:15	11/04/19 12:13	96-12-8	W
Dibromochloromethane	<25.5	ug/kg	61.2	25.5	1	11/01/19 14:15	11/04/19 12:13	124-48-1	W
1,2-Dibromoethane (EDB)	<25.5	ug/kg	61.2	25.5	1	11/01/19 14:15	11/04/19 12:13	106-93-4	W
Dibromomethane	<25.5	ug/kg	61.2	25.5	1	11/01/19 14:15	11/04/19 12:13	74-95-3	W
1,2-Dichlorobenzene	<25.5	ug/kg	61.2	25.5	1	11/01/19 14:15	11/04/19 12:13	95-50-1	W
1,3-Dichlorobenzene	<25.5	ug/kg	61.2	25.5	1	11/01/19 14:15	11/04/19 12:13	541-73-1	W
1,4-Dichlorobenzene	<25.5	ug/kg	61.2	25.5	1	11/01/19 14:15	11/04/19 12:13	106-46-7	W
Dichlorodifluoromethane	<25.5	ug/kg	61.2	25.5	1	11/01/19 14:15	11/04/19 12:13	75-71-8	W
1,1-Dichloroethane	<25.5	ug/kg	61.2	25.5	1	11/01/19 14:15	11/04/19 12:13	75-34-3	W
1,2-Dichloroethane	<25.5	ug/kg	61.2	25.5	1	11/01/19 14:15	11/04/19 12:13	107-06-2	W
1,1-Dichloroethene	<25.5	ug/kg	61.2	25.5	1	11/01/19 14:15	11/04/19 12:13	75-35-4	W
cis-1,2-Dichloroethene	<25.5	ug/kg	61.2	25.5	1	11/01/19 14:15	11/04/19 12:13	156-59-2	W
trans-1,2-Dichloroethene	<25.5	ug/kg	61.2	25.5	1	11/01/19 14:15	11/04/19 12:13	156-60-5	W
1,2-Dichloropropane	<25.5	ug/kg	61.2	25.5	1	11/01/19 14:15	11/04/19 12:13	78-87-5	W
1,3-Dichloropropane	<25.5	ug/kg	61.2	25.5	1	11/01/19 14:15	11/04/19 12:13	142-28-9	W
2,2-Dichloropropane	<25.5	ug/kg	61.2	25.5	1	11/01/19 14:15	11/04/19 12:13	594-20-7	W
1,1-Dichloropropene	<25.5	ug/kg	61.2	25.5	1	11/01/19 14:15	11/04/19 12:13	563-58-6	W
cis-1,3-Dichloropropene	<25.5	ug/kg	61.2	25.5	1	11/01/19 14:15	11/04/19 12:13	10061-01-5	W
trans-1,3-Dichloropropene	<25.5	ug/kg	61.2	25.5	1	11/01/19 14:15	11/04/19 12:13	10061-02-6	W
Diisopropyl ether	<25.5	ug/kg	61.2	25.5	1	11/01/19 14:15	11/04/19 12:13	108-20-3	W
Ethylbenzene	<25.5	ug/kg	61.2	25.5	1	11/01/19 14:15	11/04/19 12:13	100-41-4	W
Hexachloro-1,3-butadiene	<25.5	ug/kg	61.2	25.5	1	11/01/19 14:15	11/04/19 12:13	87-68-3	W
Isopropylbenzene (Cumene)	<25.5	ug/kg	61.2	25.5	1	11/01/19 14:15	11/04/19 12:13	98-82-8	W
p-Isopropyltoluene	<25.5	ug/kg	61.2	25.5	1	11/01/19 14:15	11/04/19 12:13	99-87-6	W
Methylene Chloride	<25.5	ug/kg	61.2	25.5	1	11/01/19 14:15	11/04/19 12:13	75-09-2	W
Methyl-tert-butyl ether	<25.5	ug/kg	61.2	25.5	1	11/01/19 14:15	11/04/19 12:13	1634-04-4	W
Naphthalene	<40.9	ug/kg	255	40.9	1	11/01/19 14:15	11/04/19 12:13	91-20-3	W
n-Propylbenzene	<25.5	ug/kg	61.2	25.5	1	11/01/19 14:15	11/04/19 12:13	103-65-1	W
Styrene	<25.5	ug/kg	61.2	25.5	1	11/01/19 14:15	11/04/19 12:13	100-42-5	W
1,1,1,2-Tetrachloroethane	<25.5	ug/kg	61.2	25.5	1	11/01/19 14:15	11/04/19 12:13	630-20-6	W
1,1,2,2-Tetrachloroethane	<25.5	ug/kg	61.2	25.5	1	11/01/19 14:15	11/04/19 12:13	79-34-5	W
Tetrachloroethene	169	ug/kg	64.1	26.7	1	11/01/19 14:15	11/04/19 12:13	127-18-4	
Toluene	<25.5	ug/kg	61.2	25.5	1	11/01/19 14:15	11/04/19 12:13	108-88-3	W
1,2,3-Trichlorobenzene	<25.5	ug/kg	61.2	25.5	1	11/01/19 14:15	11/04/19 12:13	87-61-6	W
1,2,4-Trichlorobenzene	<48.5	ug/kg	255	48.5	1	11/01/19 14:15	11/04/19 12:13	120-82-1	W
1,1,1-Trichloroethane	<25.5	ug/kg	61.2	25.5	1	11/01/19 14:15	11/04/19 12:13	71-55-6	W
1,1,2-Trichloroethane	<25.5	ug/kg	61.2	25.5	1	11/01/19 14:15	11/04/19 12:13	79-00-5	W
Trichloroethene	<25.5	ug/kg	61.2	25.5	1	11/01/19 14:15	11/04/19 12:13	79-01-6	W
Trichlorofluoromethane	<25.5	ug/kg	61.2	25.5	1	11/01/19 14:15	11/04/19 12:13	75-69-4	W

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## ANALYTICAL RESULTS

Project: 60615481 ALLOUEZ PHASE II ESA

Pace Project No.: 40198063

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Sample: SP-115-10-12      Lab ID: 40198063003      Collected: 10/24/19 10:46      Received: 10/25/19 17:47      Matrix: Solid

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

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260 MSV Med Level Normal List</b>	Analytical Method: EPA 8260 Preparation Method: EPA 5035/5030B								
1,2,3-Trichloropropane	<25.5	ug/kg	61.2	25.5	1	11/01/19 14:15	11/04/19 12:13	96-18-4	W
1,2,4-Trimethylbenzene	<25.5	ug/kg	61.2	25.5	1	11/01/19 14:15	11/04/19 12:13	95-63-6	W
1,3,5-Trimethylbenzene	<25.5	ug/kg	61.2	25.5	1	11/01/19 14:15	11/04/19 12:13	108-67-8	W
Vinyl chloride	<25.5	ug/kg	61.2	25.5	1	11/01/19 14:15	11/04/19 12:13	75-01-4	W
Xylene (Total)	<76.5	ug/kg	184	76.5	1	11/01/19 14:15	11/04/19 12:13	1330-20-7	W
m&p-Xylene	<51.0	ug/kg	122	51.0	1	11/01/19 14:15	11/04/19 12:13	179601-23-1	W
o-Xylene	<25.5	ug/kg	61.2	25.5	1	11/01/19 14:15	11/04/19 12:13	95-47-6	W
<b>Surrogates</b>									
Dibromofluoromethane (S)	103	%	57-146		1	11/01/19 14:15	11/04/19 12:13	1868-53-7	
Toluene-d8 (S)	111	%	64-134		1	11/01/19 14:15	11/04/19 12:13	2037-26-5	
4-Bromofluorobenzene (S)	94	%	54-126		1	11/01/19 14:15	11/04/19 12:13	460-00-4	
<b>Percent Moisture</b>	Analytical Method: ASTM D2974-87								
Percent Moisture	4.5	%	0.10	0.10	1			11/05/19 15:21	

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## ANALYTICAL RESULTS

Project: 60615481 ALLOUEZ PHASE II ESA

Pace Project No.: 40198063

Sample: SP-105-26-27 Lab ID: 40198063004 Collected: 10/25/19 14:06 Received: 10/25/19 17:47 Matrix: Solid

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

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260 MSV Med Level Normal List</b>		Analytical Method: EPA 8260 Preparation Method: EPA 5035/5030B							
Benzene	<25.0	ug/kg	60.0	25.0	1	11/01/19 14:15	11/04/19 12:35	71-43-2	W
Bromobenzene	<25.0	ug/kg	60.0	25.0	1	11/01/19 14:15	11/04/19 12:35	108-86-1	W
Bromoform	<25.0	ug/kg	60.0	25.0	1	11/01/19 14:15	11/04/19 12:35	74-97-5	W
Bromochloromethane	<25.0	ug/kg	60.0	25.0	1	11/01/19 14:15	11/04/19 12:35	75-27-4	W
Bromodichloromethane	<25.0	ug/kg	60.0	25.0	1	11/01/19 14:15	11/04/19 12:35	75-25-2	W
Bromomethane	<69.9	ug/kg	250	69.9	1	11/01/19 14:15	11/04/19 12:35	74-83-9	W
n-Butylbenzene	<25.0	ug/kg	60.0	25.0	1	11/01/19 14:15	11/04/19 12:35	104-51-8	W
sec-Butylbenzene	<25.0	ug/kg	60.0	25.0	1	11/01/19 14:15	11/04/19 12:35	135-98-8	W
tert-Butylbenzene	<25.0	ug/kg	60.0	25.0	1	11/01/19 14:15	11/04/19 12:35	98-06-6	W
Carbon tetrachloride	<25.0	ug/kg	60.0	25.0	1	11/01/19 14:15	11/04/19 12:35	56-23-5	W
Chlorobenzene	<25.0	ug/kg	60.0	25.0	1	11/01/19 14:15	11/04/19 12:35	108-90-7	W
Chloroethane	<67.0	ug/kg	250	67.0	1	11/01/19 14:15	11/04/19 12:35	75-00-3	W
Chloroform	<46.4	ug/kg	250	46.4	1	11/01/19 14:15	11/04/19 12:35	67-66-3	W
Chloromethane	<25.0	ug/kg	60.0	25.0	1	11/01/19 14:15	11/04/19 12:35	74-87-3	W
2-Chlorotoluene	<25.0	ug/kg	60.0	25.0	1	11/01/19 14:15	11/04/19 12:35	95-49-8	W
4-Chlorotoluene	<25.0	ug/kg	60.0	25.0	1	11/01/19 14:15	11/04/19 12:35	106-43-4	W
1,2-Dibromo-3-chloropropane	<91.2	ug/kg	250	91.2	1	11/01/19 14:15	11/04/19 12:35	96-12-8	W
Dibromochloromethane	<25.0	ug/kg	60.0	25.0	1	11/01/19 14:15	11/04/19 12:35	124-48-1	W
1,2-Dibromoethane (EDB)	<25.0	ug/kg	60.0	25.0	1	11/01/19 14:15	11/04/19 12:35	106-93-4	W
Dibromomethane	<25.0	ug/kg	60.0	25.0	1	11/01/19 14:15	11/04/19 12:35	74-95-3	W
1,2-Dichlorobenzene	<25.0	ug/kg	60.0	25.0	1	11/01/19 14:15	11/04/19 12:35	95-50-1	W
1,3-Dichlorobenzene	<25.0	ug/kg	60.0	25.0	1	11/01/19 14:15	11/04/19 12:35	541-73-1	W
1,4-Dichlorobenzene	<25.0	ug/kg	60.0	25.0	1	11/01/19 14:15	11/04/19 12:35	106-46-7	W
Dichlorodifluoromethane	<25.0	ug/kg	60.0	25.0	1	11/01/19 14:15	11/04/19 12:35	75-71-8	W
1,1-Dichloroethane	<25.0	ug/kg	60.0	25.0	1	11/01/19 14:15	11/04/19 12:35	75-34-3	W
1,2-Dichloroethane	<25.0	ug/kg	60.0	25.0	1	11/01/19 14:15	11/04/19 12:35	107-06-2	W
1,1-Dichloroethene	<25.0	ug/kg	60.0	25.0	1	11/01/19 14:15	11/04/19 12:35	75-35-4	W
cis-1,2-Dichloroethene	<25.0	ug/kg	60.0	25.0	1	11/01/19 14:15	11/04/19 12:35	156-59-2	W
trans-1,2-Dichloroethene	<25.0	ug/kg	60.0	25.0	1	11/01/19 14:15	11/04/19 12:35	156-60-5	W
1,2-Dichloropropane	<25.0	ug/kg	60.0	25.0	1	11/01/19 14:15	11/04/19 12:35	78-87-5	W
1,3-Dichloropropane	<25.0	ug/kg	60.0	25.0	1	11/01/19 14:15	11/04/19 12:35	142-28-9	W
2,2-Dichloropropane	<25.0	ug/kg	60.0	25.0	1	11/01/19 14:15	11/04/19 12:35	594-20-7	W
1,1-Dichloropropene	<25.0	ug/kg	60.0	25.0	1	11/01/19 14:15	11/04/19 12:35	563-58-6	W
cis-1,3-Dichloropropene	<25.0	ug/kg	60.0	25.0	1	11/01/19 14:15	11/04/19 12:35	10061-01-5	W
trans-1,3-Dichloropropene	<25.0	ug/kg	60.0	25.0	1	11/01/19 14:15	11/04/19 12:35	10061-02-6	W
Diisopropyl ether	<25.0	ug/kg	60.0	25.0	1	11/01/19 14:15	11/04/19 12:35	108-20-3	W
Ethylbenzene	<25.0	ug/kg	60.0	25.0	1	11/01/19 14:15	11/04/19 12:35	100-41-4	W
Hexachloro-1,3-butadiene	<25.0	ug/kg	60.0	25.0	1	11/01/19 14:15	11/04/19 12:35	87-68-3	W
Isopropylbenzene (Cumene)	<25.0	ug/kg	60.0	25.0	1	11/01/19 14:15	11/04/19 12:35	98-82-8	W
p-Isopropyltoluene	<25.0	ug/kg	60.0	25.0	1	11/01/19 14:15	11/04/19 12:35	99-87-6	W
Methylene Chloride	<25.0	ug/kg	60.0	25.0	1	11/01/19 14:15	11/04/19 12:35	75-09-2	W
Methyl-tert-butyl ether	<25.0	ug/kg	60.0	25.0	1	11/01/19 14:15	11/04/19 12:35	1634-04-4	W
Naphthalene	<40.0	ug/kg	250	40.0	1	11/01/19 14:15	11/04/19 12:35	91-20-3	W
n-Propylbenzene	<25.0	ug/kg	60.0	25.0	1	11/01/19 14:15	11/04/19 12:35	103-65-1	W
Styrene	<25.0	ug/kg	60.0	25.0	1	11/01/19 14:15	11/04/19 12:35	100-42-5	W

## REPORT OF LABORATORY ANALYSIS

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## ANALYTICAL RESULTS

Project: 60615481 ALLOUEZ PHASE II ESA

Pace Project No.: 40198063

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Sample: SP-105-26-27      Lab ID: 40198063004      Collected: 10/25/19 14:06      Received: 10/25/19 17:47      Matrix: Solid

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

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260 MSV Med Level Normal List</b>	Analytical Method: EPA 8260 Preparation Method: EPA 5035/5030B								
1,1,1,2-Tetrachloroethane	<25.0	ug/kg	60.0	25.0	1	11/01/19 14:15	11/04/19 12:35	630-20-6	W
1,1,2,2-Tetrachloroethane	<25.0	ug/kg	60.0	25.0	1	11/01/19 14:15	11/04/19 12:35	79-34-5	W
Tetrachloroethene	69.5J	ug/kg	73.3	30.5	1	11/01/19 14:15	11/04/19 12:35	127-18-4	
Toluene	<25.0	ug/kg	60.0	25.0	1	11/01/19 14:15	11/04/19 12:35	108-88-3	W
1,2,3-Trichlorobenzene	<25.0	ug/kg	60.0	25.0	1	11/01/19 14:15	11/04/19 12:35	87-61-6	W
1,2,4-Trichlorobenzene	<47.6	ug/kg	250	47.6	1	11/01/19 14:15	11/04/19 12:35	120-82-1	W
1,1,1-Trichloroethane	<25.0	ug/kg	60.0	25.0	1	11/01/19 14:15	11/04/19 12:35	71-55-6	W
1,1,2-Trichloroethane	<25.0	ug/kg	60.0	25.0	1	11/01/19 14:15	11/04/19 12:35	79-00-5	W
Trichloroethene	<25.0	ug/kg	60.0	25.0	1	11/01/19 14:15	11/04/19 12:35	79-01-6	W
Trichlorofluoromethane	<25.0	ug/kg	60.0	25.0	1	11/01/19 14:15	11/04/19 12:35	75-69-4	W
1,2,3-Trichloropropane	<25.0	ug/kg	60.0	25.0	1	11/01/19 14:15	11/04/19 12:35	96-18-4	W
1,2,4-Trimethylbenzene	<25.0	ug/kg	60.0	25.0	1	11/01/19 14:15	11/04/19 12:35	95-63-6	W
1,3,5-Trimethylbenzene	<25.0	ug/kg	60.0	25.0	1	11/01/19 14:15	11/04/19 12:35	108-67-8	W
Vinyl chloride	<25.0	ug/kg	60.0	25.0	1	11/01/19 14:15	11/04/19 12:35	75-01-4	W
Xylene (Total)	<75.0	ug/kg	180	75.0	1	11/01/19 14:15	11/04/19 12:35	1330-20-7	W
m&p-Xylene	<50.0	ug/kg	120	50.0	1	11/01/19 14:15	11/04/19 12:35	179601-23-1	W
o-Xylene	<25.0	ug/kg	60.0	25.0	1	11/01/19 14:15	11/04/19 12:35	95-47-6	W
<b>Surrogates</b>									
Dibromofluoromethane (S)	99	%	57-146		1	11/01/19 14:15	11/04/19 12:35	1868-53-7	
Toluene-d8 (S)	109	%	64-134		1	11/01/19 14:15	11/04/19 12:35	2037-26-5	
4-Bromofluorobenzene (S)	88	%	54-126		1	11/01/19 14:15	11/04/19 12:35	460-00-4	
<b>Percent Moisture</b>	Analytical Method: ASTM D2974-87								
Percent Moisture	18.1	%	0.10	0.10	1			11/05/19 18:29	

## REPORT OF LABORATORY ANALYSIS

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## ANALYTICAL RESULTS

Project: 60615481 ALLOUEZ PHASE II ESA

Pace Project No.: 40198063

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**Sample: TRIP BLANK**      Lab ID: **40198063005**      Collected: 10/25/19 17:11      Received: 10/25/19 17:47      Matrix: Solid

*Results reported on a "wet-weight" basis*

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260 MSV Med Level Normal List</b>		Analytical Method: EPA 8260 Preparation Method: EPA 5035/5030B							
Benzene	<25.0	ug/kg	60.0	25.0	1	11/01/19 14:15	11/04/19 11:27	71-43-2	W
Bromobenzene	<25.0	ug/kg	60.0	25.0	1	11/01/19 14:15	11/04/19 11:27	108-86-1	W
Bromoform	<25.0	ug/kg	60.0	25.0	1	11/01/19 14:15	11/04/19 11:27	74-97-5	W
Bromochloromethane	<25.0	ug/kg	60.0	25.0	1	11/01/19 14:15	11/04/19 11:27	75-27-4	W
Bromodichloromethane	<25.0	ug/kg	60.0	25.0	1	11/01/19 14:15	11/04/19 11:27	75-25-2	W
Bromomethane	<69.9	ug/kg	250	69.9	1	11/01/19 14:15	11/04/19 11:27	74-83-9	W
n-Butylbenzene	<25.0	ug/kg	60.0	25.0	1	11/01/19 14:15	11/04/19 11:27	104-51-8	W
sec-Butylbenzene	<25.0	ug/kg	60.0	25.0	1	11/01/19 14:15	11/04/19 11:27	135-98-8	W
tert-Butylbenzene	<25.0	ug/kg	60.0	25.0	1	11/01/19 14:15	11/04/19 11:27	98-06-6	W
Carbon tetrachloride	<25.0	ug/kg	60.0	25.0	1	11/01/19 14:15	11/04/19 11:27	56-23-5	W
Chlorobenzene	<25.0	ug/kg	60.0	25.0	1	11/01/19 14:15	11/04/19 11:27	108-90-7	W
Chloroethane	<67.0	ug/kg	250	67.0	1	11/01/19 14:15	11/04/19 11:27	75-00-3	W
Chloroform	<46.4	ug/kg	250	46.4	1	11/01/19 14:15	11/04/19 11:27	67-66-3	W
Chloromethane	<25.0	ug/kg	60.0	25.0	1	11/01/19 14:15	11/04/19 11:27	74-87-3	W
2-Chlorotoluene	<25.0	ug/kg	60.0	25.0	1	11/01/19 14:15	11/04/19 11:27	95-49-8	W
4-Chlorotoluene	<25.0	ug/kg	60.0	25.0	1	11/01/19 14:15	11/04/19 11:27	106-43-4	W
1,2-Dibromo-3-chloropropane	<91.2	ug/kg	250	91.2	1	11/01/19 14:15	11/04/19 11:27	96-12-8	W
Dibromochloromethane	<25.0	ug/kg	60.0	25.0	1	11/01/19 14:15	11/04/19 11:27	124-48-1	W
1,2-Dibromoethane (EDB)	<25.0	ug/kg	60.0	25.0	1	11/01/19 14:15	11/04/19 11:27	106-93-4	W
Dibromomethane	<25.0	ug/kg	60.0	25.0	1	11/01/19 14:15	11/04/19 11:27	74-95-3	W
1,2-Dichlorobenzene	<25.0	ug/kg	60.0	25.0	1	11/01/19 14:15	11/04/19 11:27	95-50-1	W
1,3-Dichlorobenzene	<25.0	ug/kg	60.0	25.0	1	11/01/19 14:15	11/04/19 11:27	541-73-1	W
1,4-Dichlorobenzene	<25.0	ug/kg	60.0	25.0	1	11/01/19 14:15	11/04/19 11:27	106-46-7	W
Dichlorodifluoromethane	<25.0	ug/kg	60.0	25.0	1	11/01/19 14:15	11/04/19 11:27	75-71-8	W
1,1-Dichloroethane	<25.0	ug/kg	60.0	25.0	1	11/01/19 14:15	11/04/19 11:27	75-34-3	W
1,2-Dichloroethane	<25.0	ug/kg	60.0	25.0	1	11/01/19 14:15	11/04/19 11:27	107-06-2	W
1,1-Dichloroethene	<25.0	ug/kg	60.0	25.0	1	11/01/19 14:15	11/04/19 11:27	75-35-4	W
cis-1,2-Dichloroethene	<25.0	ug/kg	60.0	25.0	1	11/01/19 14:15	11/04/19 11:27	156-59-2	W
trans-1,2-Dichloroethene	<25.0	ug/kg	60.0	25.0	1	11/01/19 14:15	11/04/19 11:27	156-60-5	W
1,2-Dichloropropane	<25.0	ug/kg	60.0	25.0	1	11/01/19 14:15	11/04/19 11:27	78-87-5	W
1,3-Dichloropropane	<25.0	ug/kg	60.0	25.0	1	11/01/19 14:15	11/04/19 11:27	142-28-9	W
2,2-Dichloropropane	<25.0	ug/kg	60.0	25.0	1	11/01/19 14:15	11/04/19 11:27	594-20-7	W
1,1-Dichloropropene	<25.0	ug/kg	60.0	25.0	1	11/01/19 14:15	11/04/19 11:27	563-58-6	W
cis-1,3-Dichloropropene	<25.0	ug/kg	60.0	25.0	1	11/01/19 14:15	11/04/19 11:27	10061-01-5	W
trans-1,3-Dichloropropene	<25.0	ug/kg	60.0	25.0	1	11/01/19 14:15	11/04/19 11:27	10061-02-6	W
Diisopropyl ether	<25.0	ug/kg	60.0	25.0	1	11/01/19 14:15	11/04/19 11:27	108-20-3	W
Ethylbenzene	<25.0	ug/kg	60.0	25.0	1	11/01/19 14:15	11/04/19 11:27	100-41-4	W
Hexachloro-1,3-butadiene	<25.0	ug/kg	60.0	25.0	1	11/01/19 14:15	11/04/19 11:27	87-68-3	W
Isopropylbenzene (Cumene)	<25.0	ug/kg	60.0	25.0	1	11/01/19 14:15	11/04/19 11:27	98-82-8	W
p-Isopropyltoluene	<25.0	ug/kg	60.0	25.0	1	11/01/19 14:15	11/04/19 11:27	99-87-6	W
Methylene Chloride	<25.0	ug/kg	60.0	25.0	1	11/01/19 14:15	11/04/19 11:27	75-09-2	W
Methyl-tert-butyl ether	<25.0	ug/kg	60.0	25.0	1	11/01/19 14:15	11/04/19 11:27	1634-04-4	W
Naphthalene	<40.0	ug/kg	250	40.0	1	11/01/19 14:15	11/04/19 11:27	91-20-3	W
n-Propylbenzene	<25.0	ug/kg	60.0	25.0	1	11/01/19 14:15	11/04/19 11:27	103-65-1	W
Styrene	<25.0	ug/kg	60.0	25.0	1	11/01/19 14:15	11/04/19 11:27	100-42-5	W

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## ANALYTICAL RESULTS

Project: 60615481 ALLOUEZ PHASE II ESA

Pace Project No.: 40198063

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**Sample: TRIP BLANK**      Lab ID: **40198063005**      Collected: 10/25/19 17:11      Received: 10/25/19 17:47      Matrix: Solid

*Results reported on a "wet-weight" basis*

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260 MSV Med Level Normal List</b>		Analytical Method: EPA 8260 Preparation Method: EPA 5035/5030B							
1,1,1,2-Tetrachloroethane	<25.0	ug/kg	60.0	25.0	1	11/01/19 14:15	11/04/19 11:27	630-20-6	W
1,1,2,2-Tetrachloroethane	<25.0	ug/kg	60.0	25.0	1	11/01/19 14:15	11/04/19 11:27	79-34-5	W
Tetrachloroethene	<25.0	ug/kg	60.0	25.0	1	11/01/19 14:15	11/04/19 11:27	127-18-4	W
Toluene	<25.0	ug/kg	60.0	25.0	1	11/01/19 14:15	11/04/19 11:27	108-88-3	W
1,2,3-Trichlorobenzene	<25.0	ug/kg	60.0	25.0	1	11/01/19 14:15	11/04/19 11:27	87-61-6	W
1,2,4-Trichlorobenzene	<47.6	ug/kg	250	47.6	1	11/01/19 14:15	11/04/19 18:25	120-82-1	W
1,1,1-Trichloroethane	<25.0	ug/kg	60.0	25.0	1	11/01/19 14:15	11/04/19 11:27	71-55-6	W
1,1,2-Trichloroethane	<25.0	ug/kg	60.0	25.0	1	11/01/19 14:15	11/04/19 11:27	79-00-5	W
Trichloroethene	<25.0	ug/kg	60.0	25.0	1	11/01/19 14:15	11/04/19 11:27	79-01-6	W
Trichlorofluoromethane	<25.0	ug/kg	60.0	25.0	1	11/01/19 14:15	11/04/19 11:27	75-69-4	W
1,2,3-Trichloropropane	<25.0	ug/kg	60.0	25.0	1	11/01/19 14:15	11/04/19 11:27	96-18-4	W
1,2,4-Trimethylbenzene	<25.0	ug/kg	60.0	25.0	1	11/01/19 14:15	11/04/19 11:27	95-63-6	W
1,3,5-Trimethylbenzene	<25.0	ug/kg	60.0	25.0	1	11/01/19 14:15	11/04/19 11:27	108-67-8	W
Vinyl chloride	<25.0	ug/kg	60.0	25.0	1	11/01/19 14:15	11/04/19 11:27	75-01-4	W
Xylene (Total)	<75.0	ug/kg	180	75.0	1	11/01/19 14:15	11/04/19 11:27	1330-20-7	W
m&p-Xylene	<50.0	ug/kg	120	50.0	1	11/01/19 14:15	11/04/19 11:27	179601-23-1	W
o-Xylene	<25.0	ug/kg	60.0	25.0	1	11/01/19 14:15	11/04/19 11:27	95-47-6	W
<b>Surrogates</b>									
Dibromofluoromethane (S)	93	%	57-146		1	11/01/19 14:15	11/04/19 11:27	1868-53-7	
Toluene-d8 (S)	96	%	64-134		1	11/01/19 14:15	11/04/19 11:27	2037-26-5	
4-Bromofluorobenzene (S)	90	%	54-126		1	11/01/19 14:15	11/04/19 11:27	460-00-4	

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## ANALYTICAL RESULTS

Project: 60615481 ALLOUEZ PHASE II ESA

Pace Project No.: 40198063

Sample: SP-111-0.5-1.5 Lab ID: 40198063006 Collected: 10/25/19 16:17 Received: 10/25/19 17:47 Matrix: Solid

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

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>6010 MET ICP</b>		Analytical Method: EPA 6010 Preparation Method: EPA 3050							
Arsenic	4.1J	mg/kg	5.3	1.6	1	10/30/19 06:20	11/02/19 23:14	7440-38-2	
Barium	61.6	mg/kg	0.54	0.16	1	10/30/19 06:20	11/02/19 23:14	7440-39-3	
Cadmium	0.24J	mg/kg	0.54	0.14	1	10/30/19 06:20	11/02/19 23:14	7440-43-9	
Chromium	17.8	mg/kg	1.1	0.30	1	10/30/19 06:20	11/02/19 23:14	7440-47-3	
Lead	183	mg/kg	2.2	0.65	1	10/30/19 06:20	11/02/19 23:14	7439-92-1	
Selenium	<1.4	mg/kg	4.7	1.4	1	10/30/19 06:20	11/02/19 23:14	7782-49-2	
Silver	0.75J	mg/kg	2.2	0.67	2	10/30/19 06:20	11/05/19 12:45	7440-22-4	D3
<b>7471 Mercury</b>		Analytical Method: EPA 7471 Preparation Method: EPA 7471							
Mercury	0.028J	mg/kg	0.038	0.011	1	11/06/19 08:34	11/06/19 12:38	7439-97-6	
<b>8270 MSSV PAH by SIM</b>		Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3546							
Acenaphthene	<2.5	ug/kg	19.0	2.5	1	10/29/19 08:29	10/30/19 15:52	83-32-9	
Acenaphthylene	<2.4	ug/kg	19.0	2.4	1	10/29/19 08:29	10/30/19 15:52	208-96-8	
Anthracene	<2.4	ug/kg	19.0	2.4	1	10/29/19 08:29	10/30/19 15:52	120-12-7	
Benzo(a)anthracene	2.9J	ug/kg	19.0	2.5	1	10/29/19 08:29	10/30/19 15:52	56-55-3	
Benzo(a)pyrene	<2.2	ug/kg	19.0	2.2	1	10/29/19 08:29	10/30/19 15:52	50-32-8	
Benzo(b)fluoranthene	<2.6	ug/kg	19.0	2.6	1	10/29/19 08:29	10/30/19 15:52	205-99-2	
Benzo(g,h,i)perylene	<3.3	ug/kg	19.0	3.3	1	10/29/19 08:29	10/30/19 15:52	191-24-2	
Benzo(k)fluoranthene	<2.4	ug/kg	19.0	2.4	1	10/29/19 08:29	10/30/19 15:52	207-08-9	
Chrysene	<3.6	ug/kg	19.0	3.6	1	10/29/19 08:29	10/30/19 15:52	218-01-9	
Dibenz(a,h)anthracene	<2.6	ug/kg	19.0	2.6	1	10/29/19 08:29	10/30/19 15:52	53-70-3	
Fluoranthene	2.4J	ug/kg	19.0	2.2	1	10/29/19 08:29	10/30/19 15:52	206-44-0	
Fluorene	<2.3	ug/kg	19.0	2.3	1	10/29/19 08:29	10/30/19 15:52	86-73-7	
Indeno(1,2,3-cd)pyrene	<4.0	ug/kg	19.0	4.0	1	10/29/19 08:29	10/30/19 15:52	193-39-5	
1-Methylnaphthalene	<2.8	ug/kg	19.0	2.8	1	10/29/19 08:29	10/30/19 15:52	90-12-0	
2-Methylnaphthalene	<2.8	ug/kg	19.0	2.8	1	10/29/19 08:29	10/30/19 15:52	91-57-6	
Naphthalene	<1.8	ug/kg	19.0	1.8	1	10/29/19 08:29	10/30/19 15:52	91-20-3	
Phenanthrene	<2.2	ug/kg	19.0	2.2	1	10/29/19 08:29	10/30/19 15:52	85-01-8	
Pyrene	<2.8	ug/kg	19.0	2.8	1	10/29/19 08:29	10/30/19 15:52	129-00-0	
<b>Surrogates</b>									
2-Fluorobiphenyl (S)	72	%	28-99		1	10/29/19 08:29	10/30/19 15:52	321-60-8	
Terphenyl-d14 (S)	63	%	10-107		1	10/29/19 08:29	10/30/19 15:52	1718-51-0	
<b>8260 MSV Med Level Normal List</b>		Analytical Method: EPA 8260 Preparation Method: EPA 5035/5030B							
Benzene	<25.0	ug/kg	60.0	25.0	1	11/01/19 14:15	11/04/19 12:58	71-43-2	W
Bromobenzene	<25.0	ug/kg	60.0	25.0	1	11/01/19 14:15	11/04/19 12:58	108-86-1	W
Bromochloromethane	<25.0	ug/kg	60.0	25.0	1	11/01/19 14:15	11/04/19 12:58	74-97-5	W
Bromodichloromethane	<25.0	ug/kg	60.0	25.0	1	11/01/19 14:15	11/04/19 12:58	75-27-4	W
Bromoform	<25.0	ug/kg	60.0	25.0	1	11/01/19 14:15	11/04/19 12:58	75-25-2	W
Bromomethane	<69.9	ug/kg	250	69.9	1	11/01/19 14:15	11/04/19 12:58	74-83-9	W
n-Butylbenzene	<25.0	ug/kg	60.0	25.0	1	11/01/19 14:15	11/04/19 12:58	104-51-8	W
sec-Butylbenzene	<25.0	ug/kg	60.0	25.0	1	11/01/19 14:15	11/04/19 12:58	135-98-8	W
tert-Butylbenzene	<25.0	ug/kg	60.0	25.0	1	11/01/19 14:15	11/04/19 12:58	98-06-6	W
Carbon tetrachloride	<25.0	ug/kg	60.0	25.0	1	11/01/19 14:15	11/04/19 12:58	56-23-5	W

## REPORT OF LABORATORY ANALYSIS

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## ANALYTICAL RESULTS

Project: 60615481 ALLOUEZ PHASE II ESA

Pace Project No.: 40198063

Sample: SP-111-0.5-1.5 Lab ID: 40198063006 Collected: 10/25/19 16:17 Received: 10/25/19 17:47 Matrix: Solid

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

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260 MSV Med Level Normal List</b>		Analytical Method: EPA 8260 Preparation Method: EPA 5035/5030B							
Chlorobenzene	<25.0	ug/kg	60.0	25.0	1	11/01/19 14:15	11/04/19 12:58	108-90-7	W
Chloroethane	<67.0	ug/kg	250	67.0	1	11/01/19 14:15	11/04/19 12:58	75-00-3	W
Chloroform	<46.4	ug/kg	250	46.4	1	11/01/19 14:15	11/04/19 12:58	67-66-3	W
Chloromethane	<25.0	ug/kg	60.0	25.0	1	11/01/19 14:15	11/04/19 12:58	74-87-3	W
2-Chlorotoluene	<25.0	ug/kg	60.0	25.0	1	11/01/19 14:15	11/04/19 12:58	95-49-8	W
4-Chlorotoluene	<25.0	ug/kg	60.0	25.0	1	11/01/19 14:15	11/04/19 12:58	106-43-4	W
1,2-Dibromo-3-chloropropane	<91.2	ug/kg	250	91.2	1	11/01/19 14:15	11/04/19 12:58	96-12-8	W
Dibromochloromethane	<25.0	ug/kg	60.0	25.0	1	11/01/19 14:15	11/04/19 12:58	124-48-1	W
1,2-Dibromoethane (EDB)	<25.0	ug/kg	60.0	25.0	1	11/01/19 14:15	11/04/19 12:58	106-93-4	W
Dibromomethane	<25.0	ug/kg	60.0	25.0	1	11/01/19 14:15	11/04/19 12:58	74-95-3	W
1,2-Dichlorobenzene	<25.0	ug/kg	60.0	25.0	1	11/01/19 14:15	11/04/19 12:58	95-50-1	W
1,3-Dichlorobenzene	<25.0	ug/kg	60.0	25.0	1	11/01/19 14:15	11/04/19 12:58	541-73-1	W
1,4-Dichlorobenzene	<25.0	ug/kg	60.0	25.0	1	11/01/19 14:15	11/04/19 12:58	106-46-7	W
Dichlorodifluoromethane	<25.0	ug/kg	60.0	25.0	1	11/01/19 14:15	11/04/19 12:58	75-71-8	W
1,1-Dichloroethane	<25.0	ug/kg	60.0	25.0	1	11/01/19 14:15	11/04/19 12:58	75-34-3	W
1,2-Dichloroethane	<25.0	ug/kg	60.0	25.0	1	11/01/19 14:15	11/04/19 12:58	107-06-2	W
1,1-Dichloroethene	<25.0	ug/kg	60.0	25.0	1	11/01/19 14:15	11/04/19 12:58	75-35-4	W
cis-1,2-Dichloroethene	<25.0	ug/kg	60.0	25.0	1	11/01/19 14:15	11/04/19 12:58	156-59-2	W
trans-1,2-Dichloroethene	<25.0	ug/kg	60.0	25.0	1	11/01/19 14:15	11/04/19 12:58	156-60-5	W
1,2-Dichloropropane	<25.0	ug/kg	60.0	25.0	1	11/01/19 14:15	11/04/19 12:58	78-87-5	W
1,3-Dichloropropane	<25.0	ug/kg	60.0	25.0	1	11/01/19 14:15	11/04/19 12:58	142-28-9	W
2,2-Dichloropropane	<25.0	ug/kg	60.0	25.0	1	11/01/19 14:15	11/04/19 12:58	594-20-7	W
1,1-Dichloropropene	<25.0	ug/kg	60.0	25.0	1	11/01/19 14:15	11/04/19 12:58	563-58-6	W
cis-1,3-Dichloropropene	<25.0	ug/kg	60.0	25.0	1	11/01/19 14:15	11/04/19 12:58	10061-01-5	W
trans-1,3-Dichloropropene	<25.0	ug/kg	60.0	25.0	1	11/01/19 14:15	11/04/19 12:58	10061-02-6	W
Diisopropyl ether	<25.0	ug/kg	60.0	25.0	1	11/01/19 14:15	11/04/19 12:58	108-20-3	W
Ethylbenzene	<25.0	ug/kg	60.0	25.0	1	11/01/19 14:15	11/04/19 12:58	100-41-4	W
Hexachloro-1,3-butadiene	<25.0	ug/kg	60.0	25.0	1	11/01/19 14:15	11/04/19 12:58	87-68-3	W
Isopropylbenzene (Cumene)	<25.0	ug/kg	60.0	25.0	1	11/01/19 14:15	11/04/19 12:58	98-82-8	W
p-Isopropyltoluene	<25.0	ug/kg	60.0	25.0	1	11/01/19 14:15	11/04/19 12:58	99-87-6	W
Methylene Chloride	<25.0	ug/kg	60.0	25.0	1	11/01/19 14:15	11/04/19 12:58	75-09-2	W
Methyl-tert-butyl ether	<25.0	ug/kg	60.0	25.0	1	11/01/19 14:15	11/04/19 12:58	1634-04-4	W
Naphthalene	<40.0	ug/kg	250	40.0	1	11/01/19 14:15	11/04/19 12:58	91-20-3	W
n-Propylbenzene	<25.0	ug/kg	60.0	25.0	1	11/01/19 14:15	11/04/19 12:58	103-65-1	W
Styrene	<25.0	ug/kg	60.0	25.0	1	11/01/19 14:15	11/04/19 12:58	100-42-5	W
1,1,1,2-Tetrachloroethane	<25.0	ug/kg	60.0	25.0	1	11/01/19 14:15	11/04/19 12:58	630-20-6	W
1,1,2,2-Tetrachloroethane	<25.0	ug/kg	60.0	25.0	1	11/01/19 14:15	11/04/19 12:58	79-34-5	W
Tetrachloroethene	<25.0	ug/kg	60.0	25.0	1	11/01/19 14:15	11/04/19 12:58	127-18-4	W
Toluene	<25.0	ug/kg	60.0	25.0	1	11/01/19 14:15	11/04/19 12:58	108-88-3	W
1,2,3-Trichlorobenzene	<25.0	ug/kg	60.0	25.0	1	11/01/19 14:15	11/04/19 12:58	87-61-6	W
1,2,4-Trichlorobenzene	<47.6	ug/kg	250	47.6	1	11/01/19 14:15	11/04/19 12:58	120-82-1	W
1,1,1-Trichloroethane	<25.0	ug/kg	60.0	25.0	1	11/01/19 14:15	11/04/19 12:58	71-55-6	W
1,1,2-Trichloroethane	<25.0	ug/kg	60.0	25.0	1	11/01/19 14:15	11/04/19 12:58	79-00-5	W
Trichloroethene	<25.0	ug/kg	60.0	25.0	1	11/01/19 14:15	11/04/19 12:58	79-01-6	W
Trichlorofluoromethane	<25.0	ug/kg	60.0	25.0	1	11/01/19 14:15	11/04/19 12:58	75-69-4	W

## REPORT OF LABORATORY ANALYSIS

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## ANALYTICAL RESULTS

Project: 60615481 ALLOUEZ PHASE II ESA

Pace Project No.: 40198063

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Sample: SP-111-0.5-1.5      Lab ID: 40198063006      Collected: 10/25/19 16:17      Received: 10/25/19 17:47      Matrix: Solid

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

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260 MSV Med Level Normal List</b>	Analytical Method: EPA 8260 Preparation Method: EPA 5035/5030B								
1,2,3-Trichloropropane	<25.0	ug/kg	60.0	25.0	1	11/01/19 14:15	11/04/19 12:58	96-18-4	W
1,2,4-Trimethylbenzene	<25.0	ug/kg	60.0	25.0	1	11/01/19 14:15	11/04/19 12:58	95-63-6	W
1,3,5-Trimethylbenzene	<25.0	ug/kg	60.0	25.0	1	11/01/19 14:15	11/04/19 12:58	108-67-8	W
Vinyl chloride	<25.0	ug/kg	60.0	25.0	1	11/01/19 14:15	11/04/19 12:58	75-01-4	W
Xylene (Total)	<75.0	ug/kg	180	75.0	1	11/01/19 14:15	11/04/19 12:58	1330-20-7	W
m&p-Xylene	<50.0	ug/kg	120	50.0	1	11/01/19 14:15	11/04/19 12:58	179601-23-1	W
o-Xylene	<25.0	ug/kg	60.0	25.0	1	11/01/19 14:15	11/04/19 12:58	95-47-6	W
<b>Surrogates</b>									
Dibromofluoromethane (S)	101	%	57-146		1	11/01/19 14:15	11/04/19 12:58	1868-53-7	
Toluene-d8 (S)	111	%	64-134		1	11/01/19 14:15	11/04/19 12:58	2037-26-5	
4-Bromofluorobenzene (S)	94	%	54-126		1	11/01/19 14:15	11/04/19 12:58	460-00-4	
<b>Percent Moisture</b>	Analytical Method: ASTM D2974-87								
Percent Moisture	11.9	%	0.10	0.10	1			11/05/19 15:21	

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## ANALYTICAL RESULTS

Project: 60615481 ALLOUEZ PHASE II ESA

Pace Project No.: 40198063

Sample: SP-111-21-22 Lab ID: 40198063007 Collected: 10/25/19 16:22 Received: 10/25/19 17:47 Matrix: Solid

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

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>6010 MET ICP</b>	Analytical Method: EPA 6010 Preparation Method: EPA 3050								
Arsenic	1.9J	mg/kg	5.5	1.7	1	10/30/19 06:20	11/02/19 23:16	7440-38-2	
Barium	7.5	mg/kg	0.57	0.17	1	10/30/19 06:20	11/02/19 23:16	7440-39-3	
Cadmium	<0.15	mg/kg	0.57	0.15	1	10/30/19 06:20	11/02/19 23:16	7440-43-9	
Chromium	4.6	mg/kg	1.1	0.31	1	10/30/19 06:20	11/02/19 23:16	7440-47-3	
Lead	1.5J	mg/kg	2.3	0.68	1	10/30/19 06:20	11/02/19 23:16	7439-92-1	
Selenium	<1.5	mg/kg	4.9	1.5	1	10/30/19 06:20	11/02/19 23:16	7782-49-2	
Silver	<0.35	mg/kg	1.1	0.35	1	10/30/19 06:20	11/02/19 23:16	7440-22-4	
<b>7471 Mercury</b>	Analytical Method: EPA 7471 Preparation Method: EPA 7471								
Mercury	<0.012	mg/kg	0.039	0.012	1	11/06/19 08:34	11/06/19 12:41	7439-97-6	
<b>8270 MSSV PAH by SIM</b>	Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3546								
Acenaphthene	<2.6	ug/kg	19.7	2.6	1	10/29/19 08:29	10/30/19 16:09	83-32-9	
Acenaphthylene	<2.5	ug/kg	19.7	2.5	1	10/29/19 08:29	10/30/19 16:09	208-96-8	
Anthracene	<2.4	ug/kg	19.7	2.4	1	10/29/19 08:29	10/30/19 16:09	120-12-7	
Benzo(a)anthracene	<2.5	ug/kg	19.7	2.5	1	10/29/19 08:29	10/30/19 16:09	56-55-3	
Benzo(a)pyrene	<2.2	ug/kg	19.7	2.2	1	10/29/19 08:29	10/30/19 16:09	50-32-8	
Benzo(b)fluoranthene	<2.7	ug/kg	19.7	2.7	1	10/29/19 08:29	10/30/19 16:09	205-99-2	
Benzo(g,h,i)perylene	<3.5	ug/kg	19.7	3.5	1	10/29/19 08:29	10/30/19 16:09	191-24-2	
Benzo(k)fluoranthene	<2.5	ug/kg	19.7	2.5	1	10/29/19 08:29	10/30/19 16:09	207-08-9	
Chrysene	<3.7	ug/kg	19.7	3.7	1	10/29/19 08:29	10/30/19 16:09	218-01-9	
Dibenz(a,h)anthracene	<2.7	ug/kg	19.7	2.7	1	10/29/19 08:29	10/30/19 16:09	53-70-3	
Fluoranthene	<2.3	ug/kg	19.7	2.3	1	10/29/19 08:29	10/30/19 16:09	206-44-0	
Fluorene	<2.4	ug/kg	19.7	2.4	1	10/29/19 08:29	10/30/19 16:09	86-73-7	
Indeno(1,2,3-cd)pyrene	<4.1	ug/kg	19.7	4.1	1	10/29/19 08:29	10/30/19 16:09	193-39-5	
1-Methylnaphthalene	4.5J	ug/kg	19.7	2.9	1	10/29/19 08:29	10/30/19 16:09	90-12-0	
2-Methylnaphthalene	8.0J	ug/kg	19.7	2.9	1	10/29/19 08:29	10/30/19 16:09	91-57-6	
Naphthalene	6.1J	ug/kg	19.7	1.9	1	10/29/19 08:29	10/30/19 16:09	91-20-3	
Phenanthrene	<2.3	ug/kg	19.7	2.3	1	10/29/19 08:29	10/30/19 16:09	85-01-8	
Pyrene	<2.9	ug/kg	19.7	2.9	1	10/29/19 08:29	10/30/19 16:09	129-00-0	
<b>Surrogates</b>									
2-Fluorobiphenyl (S)	75	%	28-99		1	10/29/19 08:29	10/30/19 16:09	321-60-8	
Terphenyl-d14 (S)	72	%	10-107		1	10/29/19 08:29	10/30/19 16:09	1718-51-0	
<b>8260 MSV Med Level Normal List</b>	Analytical Method: EPA 8260 Preparation Method: EPA 5035/5030B								
Benzene	<25.0	ug/kg	60.0	25.0	1	11/01/19 14:15	11/04/19 13:21	71-43-2	W
Bromobenzene	<25.0	ug/kg	60.0	25.0	1	11/01/19 14:15	11/04/19 13:21	108-86-1	W
Bromochloromethane	<25.0	ug/kg	60.0	25.0	1	11/01/19 14:15	11/04/19 13:21	74-97-5	W
Bromodichloromethane	<25.0	ug/kg	60.0	25.0	1	11/01/19 14:15	11/04/19 13:21	75-27-4	W
Bromoform	<25.0	ug/kg	60.0	25.0	1	11/01/19 14:15	11/04/19 13:21	75-25-2	W
Bromomethane	<69.9	ug/kg	250	69.9	1	11/01/19 14:15	11/04/19 13:21	74-83-9	W
n-Butylbenzene	<25.0	ug/kg	60.0	25.0	1	11/01/19 14:15	11/04/19 13:21	104-51-8	W
sec-Butylbenzene	<25.0	ug/kg	60.0	25.0	1	11/01/19 14:15	11/04/19 13:21	135-98-8	W
tert-Butylbenzene	<25.0	ug/kg	60.0	25.0	1	11/01/19 14:15	11/04/19 13:21	98-06-6	W
Carbon tetrachloride	<25.0	ug/kg	60.0	25.0	1	11/01/19 14:15	11/04/19 13:21	56-23-5	W

## REPORT OF LABORATORY ANALYSIS

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## ANALYTICAL RESULTS

Project: 60615481 ALLOUEZ PHASE II ESA

Pace Project No.: 40198063

Sample: SP-111-21-22 Lab ID: 40198063007 Collected: 10/25/19 16:22 Received: 10/25/19 17:47 Matrix: Solid

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

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260 MSV Med Level Normal List</b>		Analytical Method: EPA 8260 Preparation Method: EPA 5035/5030B							
Chlorobenzene	<25.0	ug/kg	60.0	25.0	1	11/01/19 14:15	11/04/19 13:21	108-90-7	W
Chloroethane	<67.0	ug/kg	250	67.0	1	11/01/19 14:15	11/04/19 13:21	75-00-3	W
Chloroform	<46.4	ug/kg	250	46.4	1	11/01/19 14:15	11/04/19 13:21	67-66-3	W
Chloromethane	<25.0	ug/kg	60.0	25.0	1	11/01/19 14:15	11/04/19 13:21	74-87-3	W
2-Chlorotoluene	<25.0	ug/kg	60.0	25.0	1	11/01/19 14:15	11/04/19 13:21	95-49-8	W
4-Chlorotoluene	<25.0	ug/kg	60.0	25.0	1	11/01/19 14:15	11/04/19 13:21	106-43-4	W
1,2-Dibromo-3-chloropropane	<91.2	ug/kg	250	91.2	1	11/01/19 14:15	11/04/19 13:21	96-12-8	W
Dibromochloromethane	<25.0	ug/kg	60.0	25.0	1	11/01/19 14:15	11/04/19 13:21	124-48-1	W
1,2-Dibromoethane (EDB)	<25.0	ug/kg	60.0	25.0	1	11/01/19 14:15	11/04/19 13:21	106-93-4	W
Dibromomethane	<25.0	ug/kg	60.0	25.0	1	11/01/19 14:15	11/04/19 13:21	74-95-3	W
1,2-Dichlorobenzene	<25.0	ug/kg	60.0	25.0	1	11/01/19 14:15	11/04/19 13:21	95-50-1	W
1,3-Dichlorobenzene	<25.0	ug/kg	60.0	25.0	1	11/01/19 14:15	11/04/19 13:21	541-73-1	W
1,4-Dichlorobenzene	<25.0	ug/kg	60.0	25.0	1	11/01/19 14:15	11/04/19 13:21	106-46-7	W
Dichlorodifluoromethane	<25.0	ug/kg	60.0	25.0	1	11/01/19 14:15	11/04/19 13:21	75-71-8	W
1,1-Dichloroethane	<25.0	ug/kg	60.0	25.0	1	11/01/19 14:15	11/04/19 13:21	75-34-3	W
1,2-Dichloroethane	<25.0	ug/kg	60.0	25.0	1	11/01/19 14:15	11/04/19 13:21	107-06-2	W
1,1-Dichloroethene	<25.0	ug/kg	60.0	25.0	1	11/01/19 14:15	11/04/19 13:21	75-35-4	W
cis-1,2-Dichloroethene	<25.0	ug/kg	60.0	25.0	1	11/01/19 14:15	11/04/19 13:21	156-59-2	W
trans-1,2-Dichloroethene	<25.0	ug/kg	60.0	25.0	1	11/01/19 14:15	11/04/19 13:21	156-60-5	W
1,2-Dichloropropane	<25.0	ug/kg	60.0	25.0	1	11/01/19 14:15	11/04/19 13:21	78-87-5	W
1,3-Dichloropropane	<25.0	ug/kg	60.0	25.0	1	11/01/19 14:15	11/04/19 13:21	142-28-9	W
2,2-Dichloropropane	<25.0	ug/kg	60.0	25.0	1	11/01/19 14:15	11/04/19 13:21	594-20-7	W
1,1-Dichloropropene	<25.0	ug/kg	60.0	25.0	1	11/01/19 14:15	11/04/19 13:21	563-58-6	W
cis-1,3-Dichloropropene	<25.0	ug/kg	60.0	25.0	1	11/01/19 14:15	11/04/19 13:21	10061-01-5	W
trans-1,3-Dichloropropene	<25.0	ug/kg	60.0	25.0	1	11/01/19 14:15	11/04/19 13:21	10061-02-6	W
Diisopropyl ether	<25.0	ug/kg	60.0	25.0	1	11/01/19 14:15	11/04/19 13:21	108-20-3	W
Ethylbenzene	<25.0	ug/kg	60.0	25.0	1	11/01/19 14:15	11/04/19 13:21	100-41-4	W
Hexachloro-1,3-butadiene	<25.0	ug/kg	60.0	25.0	1	11/01/19 14:15	11/04/19 13:21	87-68-3	W
Isopropylbenzene (Cumene)	<25.0	ug/kg	60.0	25.0	1	11/01/19 14:15	11/04/19 13:21	98-82-8	W
p-Isopropyltoluene	<25.0	ug/kg	60.0	25.0	1	11/01/19 14:15	11/04/19 13:21	99-87-6	W
Methylene Chloride	<25.0	ug/kg	60.0	25.0	1	11/01/19 14:15	11/04/19 13:21	75-09-2	W
Methyl-tert-butyl ether	<25.0	ug/kg	60.0	25.0	1	11/01/19 14:15	11/04/19 13:21	1634-04-4	W
Naphthalene	<40.0	ug/kg	250	40.0	1	11/01/19 14:15	11/04/19 13:21	91-20-3	W
n-Propylbenzene	<25.0	ug/kg	60.0	25.0	1	11/01/19 14:15	11/04/19 13:21	103-65-1	W
Styrene	<25.0	ug/kg	60.0	25.0	1	11/01/19 14:15	11/04/19 13:21	100-42-5	W
1,1,1,2-Tetrachloroethane	<25.0	ug/kg	60.0	25.0	1	11/01/19 14:15	11/04/19 13:21	630-20-6	W
1,1,2,2-Tetrachloroethane	<25.0	ug/kg	60.0	25.0	1	11/01/19 14:15	11/04/19 13:21	79-34-5	W
Tetrachloroethene	<25.0	ug/kg	60.0	25.0	1	11/01/19 14:15	11/04/19 13:21	127-18-4	W
Toluene	<25.0	ug/kg	60.0	25.0	1	11/01/19 14:15	11/04/19 13:21	108-88-3	W
1,2,3-Trichlorobenzene	<25.0	ug/kg	60.0	25.0	1	11/01/19 14:15	11/04/19 13:21	87-61-6	W
1,2,4-Trichlorobenzene	<47.6	ug/kg	250	47.6	1	11/01/19 14:15	11/04/19 13:21	120-82-1	W
1,1,1-Trichloroethane	<25.0	ug/kg	60.0	25.0	1	11/01/19 14:15	11/04/19 13:21	71-55-6	W
1,1,2-Trichloroethane	<25.0	ug/kg	60.0	25.0	1	11/01/19 14:15	11/04/19 13:21	79-00-5	W
Trichloroethene	<25.0	ug/kg	60.0	25.0	1	11/01/19 14:15	11/04/19 13:21	79-01-6	W
Trichlorofluoromethane	<25.0	ug/kg	60.0	25.0	1	11/01/19 14:15	11/04/19 13:21	75-69-4	W

## REPORT OF LABORATORY ANALYSIS

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## ANALYTICAL RESULTS

Project: 60615481 ALLOUEZ PHASE II ESA

Pace Project No.: 40198063

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Sample: SP-111-21-22      Lab ID: 40198063007      Collected: 10/25/19 16:22      Received: 10/25/19 17:47      Matrix: Solid

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

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260 MSV Med Level Normal List</b>	Analytical Method: EPA 8260 Preparation Method: EPA 5035/5030B								
1,2,3-Trichloropropane	<25.0	ug/kg	60.0	25.0	1	11/01/19 14:15	11/04/19 13:21	96-18-4	W
1,2,4-Trimethylbenzene	<25.0	ug/kg	60.0	25.0	1	11/01/19 14:15	11/04/19 13:21	95-63-6	W
1,3,5-Trimethylbenzene	<25.0	ug/kg	60.0	25.0	1	11/01/19 14:15	11/04/19 13:21	108-67-8	W
Vinyl chloride	<25.0	ug/kg	60.0	25.0	1	11/01/19 14:15	11/04/19 13:21	75-01-4	W
Xylene (Total)	<75.0	ug/kg	180	75.0	1	11/01/19 14:15	11/04/19 13:21	1330-20-7	W
m&p-Xylene	<50.0	ug/kg	120	50.0	1	11/01/19 14:15	11/04/19 13:21	179601-23-1	W
o-Xylene	<25.0	ug/kg	60.0	25.0	1	11/01/19 14:15	11/04/19 13:21	95-47-6	W
<b>Surrogates</b>									
Dibromofluoromethane (S)	86	%	57-146		1	11/01/19 14:15	11/04/19 13:21	1868-53-7	
Toluene-d8 (S)	93	%	64-134		1	11/01/19 14:15	11/04/19 13:21	2037-26-5	
4-Bromofluorobenzene (S)	76	%	54-126		1	11/01/19 14:15	11/04/19 13:21	460-00-4	
<b>Percent Moisture</b>	Analytical Method: ASTM D2974-87								
Percent Moisture	15.0	%	0.10	0.10	1			11/05/19 15:22	

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## ANALYTICAL RESULTS

Project: 60615481 ALLOUEZ PHASE II ESA

Pace Project No.: 40198063

Sample: SP-112-0.5-1.5 Lab ID: 40198063008 Collected: 10/25/19 16:25 Received: 10/25/19 17:47 Matrix: Solid

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

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>6010 MET ICP</b>		Analytical Method: EPA 6010 Preparation Method: EPA 3050							
Arsenic	<1.7	mg/kg	5.6	1.7	1	10/30/19 06:20	11/02/19 23:19	7440-38-2	
Barium	85.2	mg/kg	0.57	0.17	1	10/30/19 06:20	11/02/19 23:19	7440-39-3	
Cadmium	<0.15	mg/kg	0.57	0.15	1	10/30/19 06:20	11/02/19 23:19	7440-43-9	
Chromium	38.9	mg/kg	1.1	0.32	1	10/30/19 06:20	11/02/19 23:19	7440-47-3	
Lead	10.3	mg/kg	2.3	0.69	1	10/30/19 06:20	11/02/19 23:19	7439-92-1	
Selenium	<1.5	mg/kg	5.0	1.5	1	10/30/19 06:20	11/02/19 23:19	7782-49-2	
Silver	<0.70	mg/kg	2.3	0.70	2	10/30/19 06:20	11/05/19 12:47	7440-22-4	D3
<b>7471 Mercury</b>		Analytical Method: EPA 7471 Preparation Method: EPA 7471							
Mercury	0.033J	mg/kg	0.038	0.011	1	11/06/19 08:34	11/06/19 12:43	7439-97-6	
<b>8270 MSSV PAH by SIM</b>		Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3546							
Acenaphthene	4.4J	ug/kg	20.5	2.7	1	10/29/19 08:29	10/30/19 16:26	83-32-9	
Acenaphthylene	3.2J	ug/kg	20.5	2.6	1	10/29/19 08:29	10/30/19 16:26	208-96-8	
Anthracene	7.9J	ug/kg	20.5	2.5	1	10/29/19 08:29	10/30/19 16:26	120-12-7	
Benzo(a)anthracene	14.0J	ug/kg	20.5	2.6	1	10/29/19 08:29	10/30/19 16:26	56-55-3	
Benzo(a)pyrene	9.0J	ug/kg	20.5	2.3	1	10/29/19 08:29	10/30/19 16:26	50-32-8	
Benzo(b)fluoranthene	14.7J	ug/kg	20.5	2.8	1	10/29/19 08:29	10/30/19 16:26	205-99-2	
Benzo(g,h,i)perylene	12.3J	ug/kg	20.5	3.6	1	10/29/19 08:29	10/30/19 16:26	191-24-2	
Benzo(k)fluoranthene	3.6J	ug/kg	20.5	2.6	1	10/29/19 08:29	10/30/19 16:26	207-08-9	
Chrysene	19.3J	ug/kg	20.5	3.9	1	10/29/19 08:29	10/30/19 16:26	218-01-9	
Dibenz(a,h)anthracene	<2.8	ug/kg	20.5	2.8	1	10/29/19 08:29	10/30/19 16:26	53-70-3	
Fluoranthene	14.5J	ug/kg	20.5	2.4	1	10/29/19 08:29	10/30/19 16:26	206-44-0	
Fluorene	8.2J	ug/kg	20.5	2.5	1	10/29/19 08:29	10/30/19 16:26	86-73-7	
Indeno(1,2,3-cd)pyrene	4.8J	ug/kg	20.5	4.3	1	10/29/19 08:29	10/30/19 16:26	193-39-5	
1-Methylnaphthalene	232	ug/kg	20.5	3.0	1	10/29/19 08:29	10/30/19 16:26	90-12-0	
2-Methylnaphthalene	339	ug/kg	20.5	3.0	1	10/29/19 08:29	10/30/19 16:26	91-57-6	
Naphthalene	334	ug/kg	20.5	2.0	1	10/29/19 08:29	10/30/19 16:26	91-20-3	
Phenanthrene	120	ug/kg	20.5	2.3	1	10/29/19 08:29	10/30/19 16:26	85-01-8	
Pyrene	14.9J	ug/kg	20.5	3.0	1	10/29/19 08:29	10/30/19 16:26	129-00-0	
<b>Surrogates</b>									
2-Fluorobiphenyl (S)	68	%	28-99		1	10/29/19 08:29	10/30/19 16:26	321-60-8	
Terphenyl-d14 (S)	63	%	10-107		1	10/29/19 08:29	10/30/19 16:26	1718-51-0	
<b>8260 MSV Med Level Normal List</b>		Analytical Method: EPA 8260 Preparation Method: EPA 5035/5030B							
Benzene	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/04/19 22:57	71-43-2	W
Bromobenzene	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/04/19 22:57	108-86-1	W
Bromochloromethane	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/04/19 22:57	74-97-5	W
Bromodichloromethane	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/04/19 22:57	75-27-4	W
Bromoform	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/04/19 22:57	75-25-2	W
Bromomethane	<69.9	ug/kg	250	69.9	1	11/04/19 10:15	11/04/19 22:57	74-83-9	W
n-Butylbenzene	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/04/19 22:57	104-51-8	W
sec-Butylbenzene	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/04/19 22:57	135-98-8	W
tert-Butylbenzene	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/04/19 22:57	98-06-6	W
Carbon tetrachloride	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/04/19 22:57	56-23-5	W

## REPORT OF LABORATORY ANALYSIS

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## ANALYTICAL RESULTS

Project: 60615481 ALLOUEZ PHASE II ESA

Pace Project No.: 40198063

Sample: SP-112-0.5-1.5 Lab ID: 40198063008 Collected: 10/25/19 16:25 Received: 10/25/19 17:47 Matrix: Solid

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

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260 MSV Med Level Normal List</b>	Analytical Method: EPA 8260 Preparation Method: EPA 5035/5030B								
Chlorobenzene	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/04/19 22:57	108-90-7	W
Chloroethane	<67.0	ug/kg	250	67.0	1	11/04/19 10:15	11/04/19 22:57	75-00-3	W
Chloroform	<46.4	ug/kg	250	46.4	1	11/04/19 10:15	11/04/19 22:57	67-66-3	W
Chloromethane	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/04/19 22:57	74-87-3	W
2-Chlorotoluene	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/04/19 22:57	95-49-8	W
4-Chlorotoluene	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/04/19 22:57	106-43-4	W
1,2-Dibromo-3-chloropropane	<91.2	ug/kg	250	91.2	1	11/04/19 10:15	11/04/19 22:57	96-12-8	W
Dibromochloromethane	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/04/19 22:57	124-48-1	W
1,2-Dibromoethane (EDB)	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/04/19 22:57	106-93-4	W
Dibromomethane	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/04/19 22:57	74-95-3	W
1,2-Dichlorobenzene	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/04/19 22:57	95-50-1	W
1,3-Dichlorobenzene	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/04/19 22:57	541-73-1	W
1,4-Dichlorobenzene	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/04/19 22:57	106-46-7	W
Dichlorodifluoromethane	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/04/19 22:57	75-71-8	W
1,1-Dichloroethane	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/04/19 22:57	75-34-3	W
1,2-Dichloroethane	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/04/19 22:57	107-06-2	W
1,1-Dichloroethene	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/04/19 22:57	75-35-4	W
cis-1,2-Dichloroethene	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/04/19 22:57	156-59-2	W
trans-1,2-Dichloroethene	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/04/19 22:57	156-60-5	W
1,2-Dichloropropane	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/04/19 22:57	78-87-5	W
1,3-Dichloropropane	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/04/19 22:57	142-28-9	W
2,2-Dichloropropane	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/04/19 22:57	594-20-7	W
1,1-Dichloropropene	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/04/19 22:57	563-58-6	W
cis-1,3-Dichloropropene	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/04/19 22:57	10061-01-5	W
trans-1,3-Dichloropropene	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/04/19 22:57	10061-02-6	W
Diisopropyl ether	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/04/19 22:57	108-20-3	W
Ethylbenzene	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/04/19 22:57	100-41-4	W
Hexachloro-1,3-butadiene	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/04/19 22:57	87-68-3	W
Isopropylbenzene (Cumene)	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/04/19 22:57	98-82-8	W
p-Isopropyltoluene	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/04/19 22:57	99-87-6	W
Methylene Chloride	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/04/19 22:57	75-09-2	W
Methyl-tert-butyl ether	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/04/19 22:57	1634-04-4	W
Naphthalene	<40.0	ug/kg	250	40.0	1	11/04/19 10:15	11/04/19 22:57	91-20-3	W
n-Propylbenzene	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/04/19 22:57	103-65-1	W
Styrene	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/04/19 22:57	100-42-5	W
1,1,1,2-Tetrachloroethane	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/04/19 22:57	630-20-6	W
1,1,2,2-Tetrachloroethane	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/04/19 22:57	79-34-5	W
Tetrachloroethene	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/04/19 22:57	127-18-4	W
Toluene	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/04/19 22:57	108-88-3	W
1,2,3-Trichlorobenzene	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/04/19 22:57	87-61-6	W
1,2,4-Trichlorobenzene	<47.6	ug/kg	250	47.6	1	11/04/19 10:15	11/04/19 22:57	120-82-1	W
1,1,1-Trichloroethane	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/04/19 22:57	71-55-6	W
1,1,2-Trichloroethane	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/04/19 22:57	79-00-5	W
Trichloroethene	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/04/19 22:57	79-01-6	W
Trichlorofluoromethane	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/04/19 22:57	75-69-4	W

## REPORT OF LABORATORY ANALYSIS

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## ANALYTICAL RESULTS

Project: 60615481 ALLOUEZ PHASE II ESA

Pace Project No.: 40198063

Sample: SP-112-0.5-1.5 Lab ID: 40198063008 Collected: 10/25/19 16:25 Received: 10/25/19 17:47 Matrix: Solid

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

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260 MSV Med Level Normal List</b>	Analytical Method: EPA 8260 Preparation Method: EPA 5035/5030B								
1,2,3-Trichloropropane	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/04/19 22:57	96-18-4	W
1,2,4-Trimethylbenzene	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/04/19 22:57	95-63-6	W
1,3,5-Trimethylbenzene	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/04/19 22:57	108-67-8	W
Vinyl chloride	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/04/19 22:57	75-01-4	W
Xylene (Total)	<75.0	ug/kg	180	75.0	1	11/04/19 10:15	11/04/19 22:57	1330-20-7	W
m&p-Xylene	<50.0	ug/kg	120	50.0	1	11/04/19 10:15	11/04/19 22:57	179601-23-1	W
o-Xylene	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/04/19 22:57	95-47-6	W
<b>Surrogates</b>									
Dibromofluoromethane (S)	74	%	57-146		1	11/04/19 10:15	11/04/19 22:57	1868-53-7	
Toluene-d8 (S)	79	%	64-134		1	11/04/19 10:15	11/04/19 22:57	2037-26-5	
4-Bromofluorobenzene (S)	67	%	54-126		1	11/04/19 10:15	11/04/19 22:57	460-00-4	
<b>Percent Moisture</b>	Analytical Method: ASTM D2974-87								
Percent Moisture	18.2	%	0.10	0.10	1			11/05/19 15:22	

## REPORT OF LABORATORY ANALYSIS

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## ANALYTICAL RESULTS

Project: 60615481 ALLOUEZ PHASE II ESA

Pace Project No.: 40198063

Sample: SP-112-21-22 Lab ID: 40198063009 Collected: 10/25/19 16:31 Received: 10/25/19 17:47 Matrix: Solid

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

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>6010 MET ICP</b>	Analytical Method: EPA 6010 Preparation Method: EPA 3050								
Arsenic	1.7J	mg/kg	5.3	1.6	1	10/30/19 06:20	11/02/19 23:21	7440-38-2	
Barium	11.0	mg/kg	0.55	0.16	1	10/30/19 06:20	11/02/19 23:21	7440-39-3	
Cadmium	<0.15	mg/kg	0.55	0.15	1	10/30/19 06:20	11/02/19 23:21	7440-43-9	
Chromium	5.9	mg/kg	1.1	0.30	1	10/30/19 06:20	11/02/19 23:21	7440-47-3	
Lead	1.0J	mg/kg	2.2	0.66	1	10/30/19 06:20	11/02/19 23:21	7439-92-1	
Selenium	<1.4	mg/kg	4.8	1.4	1	10/30/19 06:20	11/02/19 23:21	7782-49-2	
Silver	<0.34	mg/kg	1.1	0.34	1	10/30/19 06:20	11/02/19 23:21	7440-22-4	
<b>7471 Mercury</b>	Analytical Method: EPA 7471 Preparation Method: EPA 7471								
Mercury	<0.012	mg/kg	0.040	0.012	1	11/06/19 08:34	11/06/19 12:50	7439-97-6	
<b>8270 MSSV PAH by SIM</b>	Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3546								
Acenaphthene	<2.5	ug/kg	19.3	2.5	1	10/29/19 08:29	10/30/19 16:43	83-32-9	
Acenaphthylene	<2.4	ug/kg	19.3	2.4	1	10/29/19 08:29	10/30/19 16:43	208-96-8	
Anthracene	<2.4	ug/kg	19.3	2.4	1	10/29/19 08:29	10/30/19 16:43	120-12-7	
Benzo(a)anthracene	<2.5	ug/kg	19.3	2.5	1	10/29/19 08:29	10/30/19 16:43	56-55-3	
Benzo(a)pyrene	<2.2	ug/kg	19.3	2.2	1	10/29/19 08:29	10/30/19 16:43	50-32-8	
Benzo(b)fluoranthene	<2.7	ug/kg	19.3	2.7	1	10/29/19 08:29	10/30/19 16:43	205-99-2	
Benzo(g,h,i)perylene	<3.4	ug/kg	19.3	3.4	1	10/29/19 08:29	10/30/19 16:43	191-24-2	
Benzo(k)fluoranthene	<2.5	ug/kg	19.3	2.5	1	10/29/19 08:29	10/30/19 16:43	207-08-9	
Chrysene	<3.6	ug/kg	19.3	3.6	1	10/29/19 08:29	10/30/19 16:43	218-01-9	
Dibenz(a,h)anthracene	<2.7	ug/kg	19.3	2.7	1	10/29/19 08:29	10/30/19 16:43	53-70-3	
Fluoranthene	<2.3	ug/kg	19.3	2.3	1	10/29/19 08:29	10/30/19 16:43	206-44-0	
Fluorene	<2.3	ug/kg	19.3	2.3	1	10/29/19 08:29	10/30/19 16:43	86-73-7	
Indeno(1,2,3-cd)pyrene	<4.0	ug/kg	19.3	4.0	1	10/29/19 08:29	10/30/19 16:43	193-39-5	
1-Methylnaphthalene	<2.8	ug/kg	19.3	2.8	1	10/29/19 08:29	10/30/19 16:43	90-12-0	
2-Methylnaphthalene	<2.8	ug/kg	19.3	2.8	1	10/29/19 08:29	10/30/19 16:43	91-57-6	
Naphthalene	<1.9	ug/kg	19.3	1.9	1	10/29/19 08:29	10/30/19 16:43	91-20-3	
Phenanthrene	<2.2	ug/kg	19.3	2.2	1	10/29/19 08:29	10/30/19 16:43	85-01-8	
Pyrene	<2.8	ug/kg	19.3	2.8	1	10/29/19 08:29	10/30/19 16:43	129-00-0	
<b>Surrogates</b>									
2-Fluorobiphenyl (S)	72	%	28-99		1	10/29/19 08:29	10/30/19 16:43	321-60-8	
Terphenyl-d14 (S)	62	%	10-107		1	10/29/19 08:29	10/30/19 16:43	1718-51-0	
<b>8260 MSV Med Level Normal List</b>	Analytical Method: EPA 8260 Preparation Method: EPA 5035/5030B								
Benzene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 16:11	71-43-2	W
Bromobenzene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 16:11	108-86-1	W
Bromochloromethane	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 16:11	74-97-5	W
Bromodichloromethane	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 16:11	75-27-4	W
Bromoform	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 16:11	75-25-2	W
Bromomethane	<69.9	ug/kg	250	69.9	1	11/02/19 08:30	11/04/19 16:11	74-83-9	W
n-Butylbenzene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 16:11	104-51-8	W
sec-Butylbenzene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 16:11	135-98-8	W
tert-Butylbenzene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 16:11	98-06-6	W
Carbon tetrachloride	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 16:11	56-23-5	W

## REPORT OF LABORATORY ANALYSIS

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## ANALYTICAL RESULTS

Project: 60615481 ALLOUEZ PHASE II ESA

Pace Project No.: 40198063

Sample: SP-112-21-22 Lab ID: 40198063009 Collected: 10/25/19 16:31 Received: 10/25/19 17:47 Matrix: Solid

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

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260 MSV Med Level Normal List</b>		Analytical Method: EPA 8260 Preparation Method: EPA 5035/5030B							
Chlorobenzene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 16:11	108-90-7	W
Chloroethane	<67.0	ug/kg	250	67.0	1	11/02/19 08:30	11/04/19 16:11	75-00-3	W
Chloroform	<46.4	ug/kg	250	46.4	1	11/02/19 08:30	11/04/19 16:11	67-66-3	W
Chloromethane	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 16:11	74-87-3	W
2-Chlorotoluene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 16:11	95-49-8	W
4-Chlorotoluene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 16:11	106-43-4	W
1,2-Dibromo-3-chloropropane	<91.2	ug/kg	250	91.2	1	11/02/19 08:30	11/04/19 16:11	96-12-8	W
Dibromochloromethane	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 16:11	124-48-1	W
1,2-Dibromoethane (EDB)	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 16:11	106-93-4	W
Dibromomethane	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 16:11	74-95-3	W
1,2-Dichlorobenzene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 16:11	95-50-1	W
1,3-Dichlorobenzene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 16:11	541-73-1	W
1,4-Dichlorobenzene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 16:11	106-46-7	W
Dichlorodifluoromethane	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 16:11	75-71-8	W
1,1-Dichloroethane	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 16:11	75-34-3	W
1,2-Dichloroethane	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 16:11	107-06-2	W
1,1-Dichloroethene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 16:11	75-35-4	W
cis-1,2-Dichloroethene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 16:11	156-59-2	W
trans-1,2-Dichloroethene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 16:11	156-60-5	W
1,2-Dichloropropane	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 16:11	78-87-5	W
1,3-Dichloropropane	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 16:11	142-28-9	W
2,2-Dichloropropane	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 16:11	594-20-7	W
1,1-Dichloropropene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 16:11	563-58-6	W
cis-1,3-Dichloropropene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 16:11	10061-01-5	W
trans-1,3-Dichloropropene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 16:11	10061-02-6	W
Diisopropyl ether	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 16:11	108-20-3	W
Ethylbenzene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 16:11	100-41-4	W
Hexachloro-1,3-butadiene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 16:11	87-68-3	W
Isopropylbenzene (Cumene)	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 16:11	98-82-8	W
p-Isopropyltoluene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 16:11	99-87-6	W
Methylene Chloride	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 16:11	75-09-2	W
Methyl-tert-butyl ether	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 16:11	1634-04-4	W
Naphthalene	<40.0	ug/kg	250	40.0	1	11/02/19 08:30	11/04/19 16:11	91-20-3	W
n-Propylbenzene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 16:11	103-65-1	W
Styrene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 16:11	100-42-5	W
1,1,1,2-Tetrachloroethane	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 16:11	630-20-6	W
1,1,2,2-Tetrachloroethane	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 16:11	79-34-5	W
Tetrachloroethene	77.4	ug/kg	69.5	28.9	1	11/02/19 08:30	11/04/19 16:11	127-18-4	
Toluene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 16:11	108-88-3	W
1,2,3-Trichlorobenzene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 16:11	87-61-6	W
1,2,4-Trichlorobenzene	<47.6	ug/kg	250	47.6	1	11/02/19 08:30	11/04/19 16:11	120-82-1	W
1,1,1-Trichloroethane	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 16:11	71-55-6	W
1,1,2-Trichloroethane	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 16:11	79-00-5	W
Trichloroethene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 16:11	79-01-6	W
Trichlorofluoromethane	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 16:11	75-69-4	W

## REPORT OF LABORATORY ANALYSIS

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## ANALYTICAL RESULTS

Project: 60615481 ALLOUEZ PHASE II ESA

Pace Project No.: 40198063

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Sample: SP-112-21-22      Lab ID: 40198063009      Collected: 10/25/19 16:31      Received: 10/25/19 17:47      Matrix: Solid

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

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260 MSV Med Level Normal List</b>	Analytical Method: EPA 8260 Preparation Method: EPA 5035/5030B								
1,2,3-Trichloropropane	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 16:11	96-18-4	W
1,2,4-Trimethylbenzene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 16:11	95-63-6	W
1,3,5-Trimethylbenzene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 16:11	108-67-8	W
Vinyl chloride	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 16:11	75-01-4	W
Xylene (Total)	<75.0	ug/kg	180	75.0	1	11/02/19 08:30	11/04/19 16:11	1330-20-7	W
m&p-Xylene	<50.0	ug/kg	120	50.0	1	11/02/19 08:30	11/04/19 16:11	179601-23-1	W
o-Xylene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 16:11	95-47-6	W
<b>Surrogates</b>									
Dibromofluoromethane (S)	106	%	57-146		1	11/02/19 08:30	11/04/19 16:11	1868-53-7	
Toluene-d8 (S)	109	%	64-134		1	11/02/19 08:30	11/04/19 16:11	2037-26-5	
4-Bromofluorobenzene (S)	97	%	54-126		1	11/02/19 08:30	11/04/19 16:11	460-00-4	
<b>Percent Moisture</b>	Analytical Method: ASTM D2974-87								
Percent Moisture	13.6	%	0.10	0.10	1			11/04/19 13:19	

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## ANALYTICAL RESULTS

Project: 60615481 ALLOUEZ PHASE II ESA

Pace Project No.: 40198063

Sample: SP-113-0.5-1.5 Lab ID: 40198063010 Collected: 10/25/19 16:45 Received: 10/25/19 17:47 Matrix: Solid

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

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>6010 MET ICP</b>	Analytical Method: EPA 6010 Preparation Method: EPA 3050								
Arsenic	1.8J	mg/kg	5.3	1.6	1	10/30/19 06:20	11/02/19 23:28	7440-38-2	
Barium	83.7	mg/kg	0.54	0.16	1	10/30/19 06:20	11/02/19 23:28	7440-39-3	
Cadmium	0.16J	mg/kg	0.54	0.14	1	10/30/19 06:20	11/02/19 23:28	7440-43-9	
Chromium	27.8	mg/kg	1.1	0.30	1	10/30/19 06:20	11/02/19 23:28	7440-47-3	
Lead	6.2	mg/kg	2.2	0.65	1	10/30/19 06:20	11/02/19 23:28	7439-92-1	
Selenium	<1.4	mg/kg	4.7	1.4	1	10/30/19 06:20	11/02/19 23:28	7782-49-2	
Silver	<0.67	mg/kg	2.2	0.67	2	10/30/19 06:20	11/05/19 12:55	7440-22-4	D3
<b>7471 Mercury</b>	Analytical Method: EPA 7471 Preparation Method: EPA 7471								
Mercury	<0.011	mg/kg	0.037	0.011	1	11/06/19 08:34	11/06/19 12:52	7439-97-6	
<b>8270 MSSV PAH by SIM</b>	Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3546								
Acenaphthene	<2.5	ug/kg	19.4	2.5	1	10/30/19 09:30	10/31/19 10:06	83-32-9	
Acenaphthylene	<2.4	ug/kg	19.4	2.4	1	10/30/19 09:30	10/31/19 10:06	208-96-8	
Anthracene	<2.4	ug/kg	19.4	2.4	1	10/30/19 09:30	10/31/19 10:06	120-12-7	
Benzo(a)anthracene	<2.5	ug/kg	19.4	2.5	1	10/30/19 09:30	10/31/19 10:06	56-55-3	
Benzo(a)pyrene	<2.2	ug/kg	19.4	2.2	1	10/30/19 09:30	10/31/19 10:06	50-32-8	
Benzo(b)fluoranthene	<2.7	ug/kg	19.4	2.7	1	10/30/19 09:30	10/31/19 10:06	205-99-2	
Benzo(g,h,i)perylene	<3.4	ug/kg	19.4	3.4	1	10/30/19 09:30	10/31/19 10:06	191-24-2	
Benzo(k)fluoranthene	<2.5	ug/kg	19.4	2.5	1	10/30/19 09:30	10/31/19 10:06	207-08-9	
Chrysene	<3.7	ug/kg	19.4	3.7	1	10/30/19 09:30	10/31/19 10:06	218-01-9	
Dibenz(a,h)anthracene	<2.7	ug/kg	19.4	2.7	1	10/30/19 09:30	10/31/19 10:06	53-70-3	
Fluoranthene	<2.3	ug/kg	19.4	2.3	1	10/30/19 09:30	10/31/19 10:06	206-44-0	
Fluorene	<2.3	ug/kg	19.4	2.3	1	10/30/19 09:30	10/31/19 10:06	86-73-7	
Indeno(1,2,3-cd)pyrene	<4.0	ug/kg	19.4	4.0	1	10/30/19 09:30	10/31/19 10:06	193-39-5	
1-Methylnaphthalene	<2.8	ug/kg	19.4	2.8	1	10/30/19 09:30	10/31/19 10:06	90-12-0	
2-Methylnaphthalene	<2.8	ug/kg	19.4	2.8	1	10/30/19 09:30	10/31/19 10:06	91-57-6	
Naphthalene	<1.9	ug/kg	19.4	1.9	1	10/30/19 09:30	10/31/19 10:06	91-20-3	
Phenanthrene	<2.2	ug/kg	19.4	2.2	1	10/30/19 09:30	10/31/19 10:06	85-01-8	
Pyrene	<2.8	ug/kg	19.4	2.8	1	10/30/19 09:30	10/31/19 10:06	129-00-0	
<b>Surrogates</b>									
2-Fluorobiphenyl (S)	65	%	28-99		1	10/30/19 09:30	10/31/19 10:06	321-60-8	
Terphenyl-d14 (S)	66	%	10-107		1	10/30/19 09:30	10/31/19 10:06	1718-51-0	
<b>8260 MSV Med Level Normal List</b>	Analytical Method: EPA 8260 Preparation Method: EPA 5035/5030B								
Benzene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 15:47	71-43-2	W
Bromobenzene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 15:47	108-86-1	W
Bromochloromethane	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 15:47	74-97-5	W
Bromodichloromethane	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 15:47	75-27-4	W
Bromoform	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 15:47	75-25-2	W
Bromomethane	<69.9	ug/kg	250	69.9	1	11/02/19 08:30	11/04/19 15:47	74-83-9	W
n-Butylbenzene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 15:47	104-51-8	W
sec-Butylbenzene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 15:47	135-98-8	W
tert-Butylbenzene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 15:47	98-06-6	W
Carbon tetrachloride	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 15:47	56-23-5	W

## REPORT OF LABORATORY ANALYSIS

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## ANALYTICAL RESULTS

Project: 60615481 ALLOUEZ PHASE II ESA

Pace Project No.: 40198063

Sample: SP-113-0.5-1.5 Lab ID: 40198063010 Collected: 10/25/19 16:45 Received: 10/25/19 17:47 Matrix: Solid

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

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260 MSV Med Level Normal List</b>		Analytical Method: EPA 8260 Preparation Method: EPA 5035/5030B							
Chlorobenzene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 15:47	108-90-7	W
Chloroethane	<67.0	ug/kg	250	67.0	1	11/02/19 08:30	11/04/19 15:47	75-00-3	W
Chloroform	<46.4	ug/kg	250	46.4	1	11/02/19 08:30	11/04/19 15:47	67-66-3	W
Chloromethane	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 15:47	74-87-3	W
2-Chlorotoluene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 15:47	95-49-8	W
4-Chlorotoluene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 15:47	106-43-4	W
1,2-Dibromo-3-chloropropane	<91.2	ug/kg	250	91.2	1	11/02/19 08:30	11/04/19 15:47	96-12-8	W
Dibromochloromethane	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 15:47	124-48-1	W
1,2-Dibromoethane (EDB)	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 15:47	106-93-4	W
Dibromomethane	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 15:47	74-95-3	W
1,2-Dichlorobenzene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 15:47	95-50-1	W
1,3-Dichlorobenzene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 15:47	541-73-1	W
1,4-Dichlorobenzene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 15:47	106-46-7	W
Dichlorodifluoromethane	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 15:47	75-71-8	W
1,1-Dichloroethane	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 15:47	75-34-3	W
1,2-Dichloroethane	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 15:47	107-06-2	W
1,1-Dichloroethene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 15:47	75-35-4	W
cis-1,2-Dichloroethene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 15:47	156-59-2	W
trans-1,2-Dichloroethene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 15:47	156-60-5	W
1,2-Dichloropropane	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 15:47	78-87-5	W
1,3-Dichloropropane	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 15:47	142-28-9	W
2,2-Dichloropropane	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 15:47	594-20-7	W
1,1-Dichloropropene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 15:47	563-58-6	W
cis-1,3-Dichloropropene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 15:47	10061-01-5	W
trans-1,3-Dichloropropene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 15:47	10061-02-6	W
Diisopropyl ether	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 15:47	108-20-3	W
Ethylbenzene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 15:47	100-41-4	W
Hexachloro-1,3-butadiene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 15:47	87-68-3	W
Isopropylbenzene (Cumene)	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 15:47	98-82-8	W
p-Isopropyltoluene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 15:47	99-87-6	W
Methylene Chloride	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 15:47	75-09-2	W
Methyl-tert-butyl ether	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 15:47	1634-04-4	W
Naphthalene	<40.0	ug/kg	250	40.0	1	11/02/19 08:30	11/04/19 15:47	91-20-3	W
n-Propylbenzene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 15:47	103-65-1	W
Styrene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 15:47	100-42-5	W
1,1,1,2-Tetrachloroethane	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 15:47	630-20-6	W
1,1,2,2-Tetrachloroethane	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 15:47	79-34-5	W
Tetrachloroethene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 15:47	127-18-4	W
Toluene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 15:47	108-88-3	W
1,2,3-Trichlorobenzene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 15:47	87-61-6	W
1,2,4-Trichlorobenzene	<47.6	ug/kg	250	47.6	1	11/02/19 08:30	11/04/19 15:47	120-82-1	W
1,1,1-Trichloroethane	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 15:47	71-55-6	W
1,1,2-Trichloroethane	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 15:47	79-00-5	W
Trichloroethene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 15:47	79-01-6	W
Trichlorofluoromethane	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 15:47	75-69-4	W

## REPORT OF LABORATORY ANALYSIS

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## ANALYTICAL RESULTS

Project: 60615481 ALLOUEZ PHASE II ESA

Pace Project No.: 40198063

Sample: SP-113-0.5-1.5 Lab ID: 40198063010 Collected: 10/25/19 16:45 Received: 10/25/19 17:47 Matrix: Solid

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

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260 MSV Med Level Normal List</b>	Analytical Method: EPA 8260 Preparation Method: EPA 5035/5030B								
1,2,3-Trichloropropane	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 15:47	96-18-4	W
1,2,4-Trimethylbenzene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 15:47	95-63-6	W
1,3,5-Trimethylbenzene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 15:47	108-67-8	W
Vinyl chloride	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 15:47	75-01-4	W
Xylene (Total)	<75.0	ug/kg	180	75.0	1	11/02/19 08:30	11/04/19 15:47	1330-20-7	W
m&p-Xylene	<50.0	ug/kg	120	50.0	1	11/02/19 08:30	11/04/19 15:47	179601-23-1	W
o-Xylene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 15:47	95-47-6	W
<b>Surrogates</b>									
Dibromofluoromethane (S)	106	%	57-146		1	11/02/19 08:30	11/04/19 15:47	1868-53-7	
Toluene-d8 (S)	110	%	64-134		1	11/02/19 08:30	11/04/19 15:47	2037-26-5	
4-Bromofluorobenzene (S)	97	%	54-126		1	11/02/19 08:30	11/04/19 15:47	460-00-4	
<b>Percent Moisture</b>	Analytical Method: ASTM D2974-87								
Percent Moisture	13.8	%	0.10	0.10	1			11/05/19 15:22	

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## ANALYTICAL RESULTS

Project: 60615481 ALLOUEZ PHASE II ESA

Pace Project No.: 40198063

Sample: SP-113-22-23 Lab ID: 40198063011 Collected: 10/25/19 16:50 Received: 10/25/19 17:47 Matrix: Solid

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

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>6010 MET ICP</b>	Analytical Method: EPA 6010 Preparation Method: EPA 3050								
Arsenic	<7.7	mg/kg	25.6	7.7	5	10/30/19 06:20	11/06/19 09:56	7440-38-2	D3
Barium	10.2	mg/kg	0.53	0.16	1	10/30/19 06:20	11/02/19 23:31	7440-39-3	
Cadmium	<0.14	mg/kg	0.53	0.14	1	10/30/19 06:20	11/02/19 23:31	7440-43-9	
Chromium	8.3	mg/kg	1.1	0.29	1	10/30/19 06:20	11/02/19 23:31	7440-47-3	
Lead	1.6J	mg/kg	2.1	0.63	1	10/30/19 06:20	11/02/19 23:31	7439-92-1	
Selenium	<1.4	mg/kg	4.6	1.4	1	10/30/19 06:20	11/02/19 23:31	7782-49-2	
Silver	<0.32	mg/kg	1.1	0.32	1	10/30/19 06:20	11/02/19 23:31	7440-22-4	
<b>7471 Mercury</b>	Analytical Method: EPA 7471 Preparation Method: EPA 7471								
Mercury	<0.012	mg/kg	0.039	0.012	1	11/06/19 08:34	11/06/19 12:55	7439-97-6	
<b>8270 MSSV PAH by SIM</b>	Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3546								
Acenaphthene	<2.4	ug/kg	18.9	2.4	1	10/30/19 09:30	10/31/19 10:23	83-32-9	
Acenaphthylene	<2.4	ug/kg	18.9	2.4	1	10/30/19 09:30	10/31/19 10:23	208-96-8	
Anthracene	<2.3	ug/kg	18.9	2.3	1	10/30/19 09:30	10/31/19 10:23	120-12-7	
Benzo(a)anthracene	<2.4	ug/kg	18.9	2.4	1	10/30/19 09:30	10/31/19 10:23	56-55-3	
Benzo(a)pyrene	<2.1	ug/kg	18.9	2.1	1	10/30/19 09:30	10/31/19 10:23	50-32-8	
Benzo(b)fluoranthene	<2.6	ug/kg	18.9	2.6	1	10/30/19 09:30	10/31/19 10:23	205-99-2	
Benzo(g,h,i)perylene	<3.3	ug/kg	18.9	3.3	1	10/30/19 09:30	10/31/19 10:23	191-24-2	
Benzo(k)fluoranthene	<2.4	ug/kg	18.9	2.4	1	10/30/19 09:30	10/31/19 10:23	207-08-9	
Chrysene	<3.6	ug/kg	18.9	3.6	1	10/30/19 09:30	10/31/19 10:23	218-01-9	
Dibenz(a,h)anthracene	<2.6	ug/kg	18.9	2.6	1	10/30/19 09:30	10/31/19 10:23	53-70-3	
Fluoranthene	<2.2	ug/kg	18.9	2.2	1	10/30/19 09:30	10/31/19 10:23	206-44-0	
Fluorene	<2.3	ug/kg	18.9	2.3	1	10/30/19 09:30	10/31/19 10:23	86-73-7	
Indeno(1,2,3-cd)pyrene	<3.9	ug/kg	18.9	3.9	1	10/30/19 09:30	10/31/19 10:23	193-39-5	
1-Methylnaphthalene	21.9	ug/kg	18.9	2.8	1	10/30/19 09:30	10/31/19 10:23	90-12-0	
2-Methylnaphthalene	7.0J	ug/kg	18.9	2.8	1	10/30/19 09:30	10/31/19 10:23	91-57-6	
Naphthalene	37.6	ug/kg	18.9	1.8	1	10/30/19 09:30	10/31/19 10:23	91-20-3	
Phenanthrene	<2.2	ug/kg	18.9	2.2	1	10/30/19 09:30	10/31/19 10:23	85-01-8	
Pyrene	<2.8	ug/kg	18.9	2.8	1	10/30/19 09:30	10/31/19 10:23	129-00-0	
<b>Surrogates</b>									
2-Fluorobiphenyl (S)	78	%	28-99		1	10/30/19 09:30	10/31/19 10:23	321-60-8	
Terphenyl-d14 (S)	72	%	10-107		1	10/30/19 09:30	10/31/19 10:23	1718-51-0	
<b>8260 MSV Med Level Normal List</b>	Analytical Method: EPA 8260 Preparation Method: EPA 5035/5030B								
Benzene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 15:24	71-43-2	W
Bromobenzene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 15:24	108-86-1	W
Bromochloromethane	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 15:24	74-97-5	W
Bromodichloromethane	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 15:24	75-27-4	W
Bromoform	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 15:24	75-25-2	W
Bromomethane	<69.9	ug/kg	250	69.9	1	11/02/19 08:30	11/04/19 15:24	74-83-9	
n-Butylbenzene	49.9J	ug/kg	67.9	28.3	1	11/02/19 08:30	11/04/19 15:24	104-51-8	
sec-Butylbenzene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 15:24	135-98-8	W
tert-Butylbenzene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 15:24	98-06-6	W
Carbon tetrachloride	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 15:24	56-23-5	W

## REPORT OF LABORATORY ANALYSIS

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## ANALYTICAL RESULTS

Project: 60615481 ALLOUEZ PHASE II ESA

Pace Project No.: 40198063

Sample: SP-113-22-23 Lab ID: 40198063011 Collected: 10/25/19 16:50 Received: 10/25/19 17:47 Matrix: Solid

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

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260 MSV Med Level Normal List</b>		Analytical Method: EPA 8260 Preparation Method: EPA 5035/5030B							
Chlorobenzene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 15:24	108-90-7	W
Chloroethane	<67.0	ug/kg	250	67.0	1	11/02/19 08:30	11/04/19 15:24	75-00-3	W
Chloroform	<46.4	ug/kg	250	46.4	1	11/02/19 08:30	11/04/19 15:24	67-66-3	W
Chloromethane	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 15:24	74-87-3	W
2-Chlorotoluene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 15:24	95-49-8	W
4-Chlorotoluene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 15:24	106-43-4	W
1,2-Dibromo-3-chloropropane	<91.2	ug/kg	250	91.2	1	11/02/19 08:30	11/04/19 15:24	96-12-8	W
Dibromochloromethane	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 15:24	124-48-1	W
1,2-Dibromoethane (EDB)	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 15:24	106-93-4	W
Dibromomethane	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 15:24	74-95-3	W
1,2-Dichlorobenzene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 15:24	95-50-1	W
1,3-Dichlorobenzene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 15:24	541-73-1	W
1,4-Dichlorobenzene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 15:24	106-46-7	W
Dichlorodifluoromethane	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 15:24	75-71-8	W
1,1-Dichloroethane	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 15:24	75-34-3	W
1,2-Dichloroethane	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 15:24	107-06-2	W
1,1-Dichloroethene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 15:24	75-35-4	W
cis-1,2-Dichloroethene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 15:24	156-59-2	W
trans-1,2-Dichloroethene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 15:24	156-60-5	W
1,2-Dichloropropane	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 15:24	78-87-5	W
1,3-Dichloropropane	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 15:24	142-28-9	W
2,2-Dichloropropane	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 15:24	594-20-7	W
1,1-Dichloropropene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 15:24	563-58-6	W
cis-1,3-Dichloropropene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 15:24	10061-01-5	W
trans-1,3-Dichloropropene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 15:24	10061-02-6	W
Diisopropyl ether	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 15:24	108-20-3	W
Ethylbenzene	44.4J	ug/kg	67.9	28.3	1	11/02/19 08:30	11/04/19 15:24	100-41-4	
Hexachloro-1,3-butadiene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 15:24	87-68-3	W
Isopropylbenzene (Cumene)	32.9J	ug/kg	67.9	28.3	1	11/02/19 08:30	11/04/19 15:24	98-82-8	
p-Isopropyltoluene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 15:24	99-87-6	W
Methylene Chloride	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 15:24	75-09-2	W
Methyl-tert-butyl ether	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 15:24	1634-04-4	W
Naphthalene	106J	ug/kg	283	45.3	1	11/02/19 08:30	11/04/19 15:24	91-20-3	
n-Propylbenzene	96.1	ug/kg	67.9	28.3	1	11/02/19 08:30	11/04/19 15:24	103-65-1	
Styrene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 15:24	100-42-5	W
1,1,1,2-Tetrachloroethane	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 15:24	630-20-6	W
1,1,2,2-Tetrachloroethane	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 15:24	79-34-5	W
Tetrachloroethene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 15:24	127-18-4	W
Toluene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 15:24	108-88-3	W
1,2,3-Trichlorobenzene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 15:24	87-61-6	W
1,2,4-Trichlorobenzene	<47.6	ug/kg	250	47.6	1	11/02/19 08:30	11/04/19 15:24	120-82-1	W
1,1,1-Trichloroethane	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 15:24	71-55-6	W
1,1,2-Trichloroethane	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 15:24	79-00-5	W
Trichloroethene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 15:24	79-01-6	W
Trichlorofluoromethane	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 15:24	75-69-4	W

## REPORT OF LABORATORY ANALYSIS

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## ANALYTICAL RESULTS

Project: 60615481 ALLOUEZ PHASE II ESA

Pace Project No.: 40198063

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Sample: SP-113-22-23      Lab ID: 40198063011      Collected: 10/25/19 16:50      Received: 10/25/19 17:47      Matrix: Solid

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

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260 MSV Med Level Normal List</b>	Analytical Method: EPA 8260 Preparation Method: EPA 5035/5030B								
1,2,3-Trichloropropane	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 15:24	96-18-4	W
1,2,4-Trimethylbenzene	630	ug/kg	67.9	28.3	1	11/02/19 08:30	11/04/19 15:24	95-63-6	
1,3,5-Trimethylbenzene	48.4J	ug/kg	67.9	28.3	1	11/02/19 08:30	11/04/19 15:24	108-67-8	
Vinyl chloride	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 15:24	75-01-4	W
Xylene (Total)	124J	ug/kg	204	84.9	1	11/02/19 08:30	11/04/19 15:24	1330-20-7	
m&p-Xylene	111J	ug/kg	136	56.6	1	11/02/19 08:30	11/04/19 15:24	179601-23-1	
o-Xylene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 15:24	95-47-6	W
<b>Surrogates</b>									
Dibromofluoromethane (S)	95	%	57-146		1	11/02/19 08:30	11/04/19 15:24	1868-53-7	
Toluene-d8 (S)	101	%	64-134		1	11/02/19 08:30	11/04/19 15:24	2037-26-5	
4-Bromofluorobenzene (S)	89	%	54-126		1	11/02/19 08:30	11/04/19 15:24	460-00-4	
<b>Percent Moisture</b>	Analytical Method: ASTM D2974-87								
Percent Moisture	11.7	%	0.10	0.10	1			11/05/19 15:22	

## REPORT OF LABORATORY ANALYSIS

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## ANALYTICAL RESULTS

Project: 60615481 ALLOUEZ PHASE II ESA

Pace Project No.: 40198063

Sample: SP-114-0.5-1.5 Lab ID: 40198063012 Collected: 10/25/19 14:39 Received: 10/25/19 17:47 Matrix: Solid

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

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>6010 MET ICP</b>	Analytical Method: EPA 6010 Preparation Method: EPA 3050								
Arsenic	2.5J	mg/kg	6.2	1.9	1	10/30/19 06:20	11/02/19 23:02	7440-38-2	
Barium	77.9	mg/kg	0.63	0.19	1	10/30/19 06:20	11/02/19 23:02	7440-39-3	
Cadmium	<0.17	mg/kg	0.63	0.17	1	10/30/19 06:20	11/02/19 23:02	7440-43-9	
Chromium	29.7	mg/kg	1.3	0.35	1	10/30/19 06:20	11/02/19 23:02	7440-47-3	
Lead	7.4	mg/kg	2.5	0.76	1	10/30/19 06:20	11/02/19 23:02	7439-92-1	
Selenium	<1.7	mg/kg	5.5	1.7	1	10/30/19 06:20	11/02/19 23:02	7782-49-2	
Silver	<0.39	mg/kg	1.3	0.39	1	10/30/19 06:20	11/02/19 23:02	7440-22-4	
<b>7471 Mercury</b>	Analytical Method: EPA 7471 Preparation Method: EPA 7471								
Mercury	0.014J	mg/kg	0.044	0.013	1	11/06/19 08:34	11/06/19 12:27	7439-97-6	
<b>8270 MSSV PAH by SIM</b>	Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3546								
Acenaphthene	<2.8	ug/kg	21.2	2.8	1	10/30/19 09:30	10/31/19 10:40	83-32-9	
Acenaphthylene	<2.7	ug/kg	21.2	2.7	1	10/30/19 09:30	10/31/19 10:40	208-96-8	
Anthracene	<2.6	ug/kg	21.2	2.6	1	10/30/19 09:30	10/31/19 10:40	120-12-7	
Benzo(a)anthracene	<2.7	ug/kg	21.2	2.7	1	10/30/19 09:30	10/31/19 10:40	56-55-3	
Benzo(a)pyrene	<2.4	ug/kg	21.2	2.4	1	10/30/19 09:30	10/31/19 10:40	50-32-8	
Benzo(b)fluoranthene	<2.9	ug/kg	21.2	2.9	1	10/30/19 09:30	10/31/19 10:40	205-99-2	
Benzo(g,h,i)perylene	<3.7	ug/kg	21.2	3.7	1	10/30/19 09:30	10/31/19 10:40	191-24-2	
Benzo(k)fluoranthene	<2.7	ug/kg	21.2	2.7	1	10/30/19 09:30	10/31/19 10:40	207-08-9	
Chrysene	<4.0	ug/kg	21.2	4.0	1	10/30/19 09:30	10/31/19 10:40	218-01-9	
Dibenz(a,h)anthracene	<2.9	ug/kg	21.2	2.9	1	10/30/19 09:30	10/31/19 10:40	53-70-3	
Fluoranthene	<2.5	ug/kg	21.2	2.5	1	10/30/19 09:30	10/31/19 10:40	206-44-0	
Fluorene	<2.5	ug/kg	21.2	2.5	1	10/30/19 09:30	10/31/19 10:40	86-73-7	
Indeno(1,2,3-cd)pyrene	<4.4	ug/kg	21.2	4.4	1	10/30/19 09:30	10/31/19 10:40	193-39-5	
1-Methylnaphthalene	<3.1	ug/kg	21.2	3.1	1	10/30/19 09:30	10/31/19 10:40	90-12-0	
2-Methylnaphthalene	<3.1	ug/kg	21.2	3.1	1	10/30/19 09:30	10/31/19 10:40	91-57-6	
Naphthalene	<2.1	ug/kg	21.2	2.1	1	10/30/19 09:30	10/31/19 10:40	91-20-3	
Phenanthrene	<2.4	ug/kg	21.2	2.4	1	10/30/19 09:30	10/31/19 10:40	85-01-8	
Pyrene	<3.1	ug/kg	21.2	3.1	1	10/30/19 09:30	10/31/19 10:40	129-00-0	
<b>Surrogates</b>									
2-Fluorobiphenyl (S)	50	%	28-99		1	10/30/19 09:30	10/31/19 10:40	321-60-8	
Terphenyl-d14 (S)	56	%	10-107		1	10/30/19 09:30	10/31/19 10:40	1718-51-0	
<b>8260 MSV Med Level Normal List</b>	Analytical Method: EPA 8260 Preparation Method: EPA 5035/5030B								
Benzene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 15:01	71-43-2	W
Bromobenzene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 15:01	108-86-1	W
Bromochloromethane	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 15:01	74-97-5	W
Bromodichloromethane	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 15:01	75-27-4	W
Bromoform	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 15:01	75-25-2	W
Bromomethane	<69.9	ug/kg	250	69.9	1	11/02/19 08:30	11/04/19 15:01	74-83-9	W
n-Butylbenzene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 15:01	104-51-8	W
sec-Butylbenzene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 15:01	135-98-8	W
tert-Butylbenzene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 15:01	98-06-6	W
Carbon tetrachloride	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 15:01	56-23-5	W

## REPORT OF LABORATORY ANALYSIS

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## ANALYTICAL RESULTS

Project: 60615481 ALLOUEZ PHASE II ESA

Pace Project No.: 40198063

Sample: SP-114-0.5-1.5 Lab ID: 40198063012 Collected: 10/25/19 14:39 Received: 10/25/19 17:47 Matrix: Solid

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

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260 MSV Med Level Normal List</b>		Analytical Method: EPA 8260 Preparation Method: EPA 5035/5030B							
Chlorobenzene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 15:01	108-90-7	W
Chloroethane	<67.0	ug/kg	250	67.0	1	11/02/19 08:30	11/04/19 15:01	75-00-3	W
Chloroform	<46.4	ug/kg	250	46.4	1	11/02/19 08:30	11/04/19 15:01	67-66-3	W
Chloromethane	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 15:01	74-87-3	W
2-Chlorotoluene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 15:01	95-49-8	W
4-Chlorotoluene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 15:01	106-43-4	W
1,2-Dibromo-3-chloropropane	<91.2	ug/kg	250	91.2	1	11/02/19 08:30	11/04/19 15:01	96-12-8	W
Dibromochloromethane	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 15:01	124-48-1	W
1,2-Dibromoethane (EDB)	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 15:01	106-93-4	W
Dibromomethane	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 15:01	74-95-3	W
1,2-Dichlorobenzene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 15:01	95-50-1	W
1,3-Dichlorobenzene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 15:01	541-73-1	W
1,4-Dichlorobenzene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 15:01	106-46-7	W
Dichlorodifluoromethane	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 15:01	75-71-8	W
1,1-Dichloroethane	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 15:01	75-34-3	W
1,2-Dichloroethane	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 15:01	107-06-2	W
1,1-Dichloroethene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 15:01	75-35-4	W
cis-1,2-Dichloroethene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 15:01	156-59-2	W
trans-1,2-Dichloroethene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 15:01	156-60-5	W
1,2-Dichloropropane	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 15:01	78-87-5	W
1,3-Dichloropropane	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 15:01	142-28-9	W
2,2-Dichloropropane	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 15:01	594-20-7	W
1,1-Dichloropropene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 15:01	563-58-6	W
cis-1,3-Dichloropropene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 15:01	10061-01-5	W
trans-1,3-Dichloropropene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 15:01	10061-02-6	W
Diisopropyl ether	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 15:01	108-20-3	W
Ethylbenzene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 15:01	100-41-4	W
Hexachloro-1,3-butadiene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 15:01	87-68-3	W
Isopropylbenzene (Cumene)	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 15:01	98-82-8	W
p-Isopropyltoluene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 15:01	99-87-6	W
Methylene Chloride	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 15:01	75-09-2	W
Methyl-tert-butyl ether	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 15:01	1634-04-4	W
Naphthalene	<40.0	ug/kg	250	40.0	1	11/02/19 08:30	11/04/19 15:01	91-20-3	W
n-Propylbenzene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 15:01	103-65-1	W
Styrene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 15:01	100-42-5	W
1,1,1,2-Tetrachloroethane	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 15:01	630-20-6	W
1,1,2,2-Tetrachloroethane	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 15:01	79-34-5	W
Tetrachloroethene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 15:01	127-18-4	W
Toluene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 15:01	108-88-3	W
1,2,3-Trichlorobenzene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 15:01	87-61-6	W
1,2,4-Trichlorobenzene	<47.6	ug/kg	250	47.6	1	11/02/19 08:30	11/04/19 15:01	120-82-1	W
1,1,1-Trichloroethane	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 15:01	71-55-6	W
1,1,2-Trichloroethane	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 15:01	79-00-5	W
Trichloroethene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 15:01	79-01-6	W
Trichlorofluoromethane	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 15:01	75-69-4	W

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## ANALYTICAL RESULTS

Project: 60615481 ALLOUEZ PHASE II ESA

Pace Project No.: 40198063

Sample: SP-114-0.5-1.5 Lab ID: 40198063012 Collected: 10/25/19 14:39 Received: 10/25/19 17:47 Matrix: Solid

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

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260 MSV Med Level Normal List</b>	Analytical Method: EPA 8260 Preparation Method: EPA 5035/5030B								
1,2,3-Trichloropropane	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 15:01	96-18-4	W
1,2,4-Trimethylbenzene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 15:01	95-63-6	W
1,3,5-Trimethylbenzene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 15:01	108-67-8	W
Vinyl chloride	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 15:01	75-01-4	W
Xylene (Total)	<75.0	ug/kg	180	75.0	1	11/02/19 08:30	11/04/19 15:01	1330-20-7	W
m&p-Xylene	<50.0	ug/kg	120	50.0	1	11/02/19 08:30	11/04/19 15:01	179601-23-1	W
o-Xylene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 15:01	95-47-6	W
<b>Surrogates</b>									
Dibromofluoromethane (S)	117	%	57-146		1	11/02/19 08:30	11/04/19 15:01	1868-53-7	
Toluene-d8 (S)	121	%	64-134		1	11/02/19 08:30	11/04/19 15:01	2037-26-5	
4-Bromofluorobenzene (S)	107	%	54-126		1	11/02/19 08:30	11/04/19 15:01	460-00-4	
<b>Percent Moisture</b>	Analytical Method: ASTM D2974-87								
Percent Moisture	<b>21.4</b>	%	0.10	0.10	1			11/05/19 15:22	

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## ANALYTICAL RESULTS

Project: 60615481 ALLOUEZ PHASE II ESA

Pace Project No.: 40198063

Sample: SP-114-21-22 Lab ID: 40198063013 Collected: 10/25/19 17:05 Received: 10/25/19 17:47 Matrix: Solid

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

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>6010 MET ICP</b>		Analytical Method: EPA 6010 Preparation Method: EPA 3050							
Arsenic	1.9J	mg/kg	5.6	1.7	1	10/30/19 06:20	11/02/19 23:33	7440-38-2	
Barium	5.9	mg/kg	0.57	0.17	1	10/30/19 06:20	11/02/19 23:33	7440-39-3	
Cadmium	<0.15	mg/kg	0.57	0.15	1	10/30/19 06:20	11/02/19 23:33	7440-43-9	
Chromium	4.0	mg/kg	1.1	0.32	1	10/30/19 06:20	11/02/19 23:33	7440-47-3	
Lead	0.88J	mg/kg	2.3	0.69	1	10/30/19 06:20	11/02/19 23:33	7439-92-1	
Selenium	<1.5	mg/kg	5.0	1.5	1	10/30/19 06:20	11/02/19 23:33	7782-49-2	
Silver	<0.35	mg/kg	1.1	0.35	1	10/30/19 06:20	11/02/19 23:33	7440-22-4	
<b>7471 Mercury</b>		Analytical Method: EPA 7471 Preparation Method: EPA 7471							
Mercury	<0.011	mg/kg	0.036	0.011	1	11/06/19 08:34	11/06/19 12:57	7439-97-6	
<b>8270 MSSV PAH by SIM</b>		Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3546							
Acenaphthene	<2.6	ug/kg	19.7	2.6	1	10/30/19 09:30	10/31/19 10:57	83-32-9	
Acenaphthylene	<2.5	ug/kg	19.7	2.5	1	10/30/19 09:30	10/31/19 10:57	208-96-8	
Anthracene	<2.4	ug/kg	19.7	2.4	1	10/30/19 09:30	10/31/19 10:57	120-12-7	
Benzo(a)anthracene	<2.6	ug/kg	19.7	2.6	1	10/30/19 09:30	10/31/19 10:57	56-55-3	
Benzo(a)pyrene	<2.2	ug/kg	19.7	2.2	1	10/30/19 09:30	10/31/19 10:57	50-32-8	
Benzo(b)fluoranthene	<2.7	ug/kg	19.7	2.7	1	10/30/19 09:30	10/31/19 10:57	205-99-2	
Benzo(g,h,i)perylene	<3.5	ug/kg	19.7	3.5	1	10/30/19 09:30	10/31/19 10:57	191-24-2	
Benzo(k)fluoranthene	<2.5	ug/kg	19.7	2.5	1	10/30/19 09:30	10/31/19 10:57	207-08-9	
Chrysene	<3.7	ug/kg	19.7	3.7	1	10/30/19 09:30	10/31/19 10:57	218-01-9	
Dibenz(a,h)anthracene	<2.7	ug/kg	19.7	2.7	1	10/30/19 09:30	10/31/19 10:57	53-70-3	
Fluoranthene	<2.3	ug/kg	19.7	2.3	1	10/30/19 09:30	10/31/19 10:57	206-44-0	
Fluorene	<2.4	ug/kg	19.7	2.4	1	10/30/19 09:30	10/31/19 10:57	86-73-7	
Indeno(1,2,3-cd)pyrene	<4.1	ug/kg	19.7	4.1	1	10/30/19 09:30	10/31/19 10:57	193-39-5	
1-Methylnaphthalene	<2.9	ug/kg	19.7	2.9	1	10/30/19 09:30	10/31/19 10:57	90-12-0	
2-Methylnaphthalene	<2.9	ug/kg	19.7	2.9	1	10/30/19 09:30	10/31/19 10:57	91-57-6	
Naphthalene	<1.9	ug/kg	19.7	1.9	1	10/30/19 09:30	10/31/19 10:57	91-20-3	
Phenanthrene	<2.3	ug/kg	19.7	2.3	1	10/30/19 09:30	10/31/19 10:57	85-01-8	
Pyrene	<2.9	ug/kg	19.7	2.9	1	10/30/19 09:30	10/31/19 10:57	129-00-0	
<b>Surrogates</b>									
2-Fluorobiphenyl (S)	69	%	28-99		1	10/30/19 09:30	10/31/19 10:57	321-60-8	
Terphenyl-d14 (S)	67	%	10-107		1	10/30/19 09:30	10/31/19 10:57	1718-51-0	
<b>8260 MSV Med Level Normal List</b>		Analytical Method: EPA 8260 Preparation Method: EPA 5035/5030B							
Benzene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 18:39	71-43-2	W
Bromobenzene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 18:39	108-86-1	W
Bromochloromethane	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 18:39	74-97-5	W
Bromodichloromethane	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 18:39	75-27-4	W
Bromoform	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 18:39	75-25-2	W
Bromomethane	<69.9	ug/kg	250	69.9	1	11/02/19 08:30	11/04/19 18:39	74-83-9	W
n-Butylbenzene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 18:39	104-51-8	W
sec-Butylbenzene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 18:39	135-98-8	W
tert-Butylbenzene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 18:39	98-06-6	W
Carbon tetrachloride	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 18:39	56-23-5	W

## REPORT OF LABORATORY ANALYSIS

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## ANALYTICAL RESULTS

Project: 60615481 ALLOUEZ PHASE II ESA

Pace Project No.: 40198063

Sample: SP-114-21-22 Lab ID: 40198063013 Collected: 10/25/19 17:05 Received: 10/25/19 17:47 Matrix: Solid

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

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260 MSV Med Level Normal List</b>		Analytical Method: EPA 8260 Preparation Method: EPA 5035/5030B							
Chlorobenzene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 18:39	108-90-7	W
Chloroethane	<67.0	ug/kg	250	67.0	1	11/02/19 08:30	11/04/19 18:39	75-00-3	W
Chloroform	<46.4	ug/kg	250	46.4	1	11/02/19 08:30	11/04/19 18:39	67-66-3	W
Chloromethane	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 18:39	74-87-3	W
2-Chlorotoluene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 18:39	95-49-8	W
4-Chlorotoluene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 18:39	106-43-4	W
1,2-Dibromo-3-chloropropane	<91.2	ug/kg	250	91.2	1	11/02/19 08:30	11/04/19 18:39	96-12-8	W
Dibromochloromethane	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 18:39	124-48-1	W
1,2-Dibromoethane (EDB)	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 18:39	106-93-4	W
Dibromomethane	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 18:39	74-95-3	W
1,2-Dichlorobenzene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 18:39	95-50-1	W
1,3-Dichlorobenzene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 18:39	541-73-1	W
1,4-Dichlorobenzene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 18:39	106-46-7	W
Dichlorodifluoromethane	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 18:39	75-71-8	W
1,1-Dichloroethane	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 18:39	75-34-3	W
1,2-Dichloroethane	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 18:39	107-06-2	W
1,1-Dichloroethene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 18:39	75-35-4	W
cis-1,2-Dichloroethene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 18:39	156-59-2	W
trans-1,2-Dichloroethene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 18:39	156-60-5	W
1,2-Dichloropropane	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 18:39	78-87-5	W
1,3-Dichloropropane	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 18:39	142-28-9	W
2,2-Dichloropropane	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 18:39	594-20-7	W
1,1-Dichloropropene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 18:39	563-58-6	W
cis-1,3-Dichloropropene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 18:39	10061-01-5	W
trans-1,3-Dichloropropene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 18:39	10061-02-6	W
Diisopropyl ether	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 18:39	108-20-3	W
Ethylbenzene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 18:39	100-41-4	W
Hexachloro-1,3-butadiene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 18:39	87-68-3	W
Isopropylbenzene (Cumene)	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 18:39	98-82-8	W
p-Isopropyltoluene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 18:39	99-87-6	W
Methylene Chloride	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 18:39	75-09-2	W
Methyl-tert-butyl ether	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 18:39	1634-04-4	W
Naphthalene	<40.0	ug/kg	250	40.0	1	11/02/19 08:30	11/04/19 18:39	91-20-3	W
n-Propylbenzene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 18:39	103-65-1	W
Styrene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 18:39	100-42-5	W
1,1,1,2-Tetrachloroethane	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 18:39	630-20-6	W
1,1,2,2-Tetrachloroethane	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 18:39	79-34-5	W
Tetrachloroethene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 18:39	127-18-4	W
Toluene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 18:39	108-88-3	W
1,2,3-Trichlorobenzene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 18:39	87-61-6	W
1,2,4-Trichlorobenzene	<47.6	ug/kg	250	47.6	1	11/02/19 08:30	11/04/19 18:39	120-82-1	W
1,1,1-Trichloroethane	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 18:39	71-55-6	W
1,1,2-Trichloroethane	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 18:39	79-00-5	W
Trichloroethene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 18:39	79-01-6	W
Trichlorofluoromethane	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 18:39	75-69-4	W

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## ANALYTICAL RESULTS

Project: 60615481 ALLOUEZ PHASE II ESA

Pace Project No.: 40198063

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Sample: SP-114-21-22      Lab ID: 40198063013      Collected: 10/25/19 17:05      Received: 10/25/19 17:47      Matrix: Solid

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

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260 MSV Med Level Normal List</b>	Analytical Method: EPA 8260 Preparation Method: EPA 5035/5030B								
1,2,3-Trichloropropane	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 18:39	96-18-4	W
1,2,4-Trimethylbenzene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 18:39	95-63-6	W
1,3,5-Trimethylbenzene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 18:39	108-67-8	W
Vinyl chloride	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 18:39	75-01-4	W
Xylene (Total)	<75.0	ug/kg	180	75.0	1	11/02/19 08:30	11/04/19 18:39	1330-20-7	W
m&p-Xylene	<50.0	ug/kg	120	50.0	1	11/02/19 08:30	11/04/19 18:39	179601-23-1	W
o-Xylene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 18:39	95-47-6	W
<b>Surrogates</b>									
Dibromofluoromethane (S)	98	%	57-146		1	11/02/19 08:30	11/04/19 18:39	1868-53-7	
Toluene-d8 (S)	102	%	64-134		1	11/02/19 08:30	11/04/19 18:39	2037-26-5	
4-Bromofluorobenzene (S)	91	%	54-126		1	11/02/19 08:30	11/04/19 18:39	460-00-4	
<b>Percent Moisture</b>	Analytical Method: ASTM D2974-87								
Percent Moisture	15.3	%	0.10	0.10	1			11/04/19 14:13	

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## ANALYTICAL RESULTS

Project: 60615481 ALLOUEZ PHASE II ESA

Pace Project No.: 40198063

Sample: SP-101-18-20 Lab ID: 40198063014 Collected: 10/25/19 05:57 Received: 10/25/19 17:47 Matrix: Solid

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

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260 MSV Med Level Normal List</b>		Analytical Method: EPA 8260 Preparation Method: EPA 5035/5030B							
Benzene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 19:03	71-43-2	W
Bromobenzene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 19:03	108-86-1	W
Bromoform	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 19:03	74-97-5	W
Bromochloromethane	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 19:03	75-27-4	W
Bromodichloromethane	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 19:03	75-25-2	W
Bromomethane	<69.9	ug/kg	250	69.9	1	11/02/19 08:30	11/04/19 19:03	74-83-9	W
n-Butylbenzene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 19:03	104-51-8	W
sec-Butylbenzene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 19:03	135-98-8	W
tert-Butylbenzene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 19:03	98-06-6	W
Carbon tetrachloride	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 19:03	56-23-5	W
Chlorobenzene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 19:03	108-90-7	W
Chloroethane	<67.0	ug/kg	250	67.0	1	11/02/19 08:30	11/04/19 19:03	75-00-3	W
Chloroform	<46.4	ug/kg	250	46.4	1	11/02/19 08:30	11/04/19 19:03	67-66-3	W
Chloromethane	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 19:03	74-87-3	W
2-Chlorotoluene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 19:03	95-49-8	W
4-Chlorotoluene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 19:03	106-43-4	W
1,2-Dibromo-3-chloropropane	<91.2	ug/kg	250	91.2	1	11/02/19 08:30	11/04/19 19:03	96-12-8	W
Dibromochloromethane	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 19:03	124-48-1	W
1,2-Dibromoethane (EDB)	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 19:03	106-93-4	W
Dibromomethane	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 19:03	74-95-3	W
1,2-Dichlorobenzene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 19:03	95-50-1	W
1,3-Dichlorobenzene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 19:03	541-73-1	W
1,4-Dichlorobenzene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 19:03	106-46-7	W
Dichlorodifluoromethane	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 19:03	75-71-8	W
1,1-Dichloroethane	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 19:03	75-34-3	W
1,2-Dichloroethane	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 19:03	107-06-2	W
1,1-Dichloroethene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 19:03	75-35-4	W
cis-1,2-Dichloroethene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 19:03	156-59-2	W
trans-1,2-Dichloroethene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 19:03	156-60-5	W
1,2-Dichloropropane	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 19:03	78-87-5	W
1,3-Dichloropropane	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 19:03	142-28-9	W
2,2-Dichloropropane	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 19:03	594-20-7	W
1,1-Dichloropropene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 19:03	563-58-6	W
cis-1,3-Dichloropropene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 19:03	10061-01-5	W
trans-1,3-Dichloropropene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 19:03	10061-02-6	W
Diisopropyl ether	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 19:03	108-20-3	W
Ethylbenzene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 19:03	100-41-4	W
Hexachloro-1,3-butadiene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 19:03	87-68-3	W
Isopropylbenzene (Cumene)	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 19:03	98-82-8	W
p-Isopropyltoluene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 19:03	99-87-6	W
Methylene Chloride	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 19:03	75-09-2	W
Methyl-tert-butyl ether	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 19:03	1634-04-4	W
Naphthalene	<40.0	ug/kg	250	40.0	1	11/02/19 08:30	11/04/19 19:03	91-20-3	W
n-Propylbenzene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 19:03	103-65-1	W
Styrene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 19:03	100-42-5	W

## REPORT OF LABORATORY ANALYSIS

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## ANALYTICAL RESULTS

Project: 60615481 ALLOUEZ PHASE II ESA

Pace Project No.: 40198063

Sample: SP-101-18-20 Lab ID: 40198063014 Collected: 10/25/19 05:57 Received: 10/25/19 17:47 Matrix: Solid

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

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260 MSV Med Level Normal List</b>	Analytical Method: EPA 8260 Preparation Method: EPA 5035/5030B								
1,1,1,2-Tetrachloroethane	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 19:03	630-20-6	W
1,1,2,2-Tetrachloroethane	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 19:03	79-34-5	W
Tetrachloroethene	32.6J	ug/kg	62.8	26.2	1	11/02/19 08:30	11/04/19 19:03	127-18-4	
Toluene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 19:03	108-88-3	W
1,2,3-Trichlorobenzene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 19:03	87-61-6	W
1,2,4-Trichlorobenzene	<47.6	ug/kg	250	47.6	1	11/02/19 08:30	11/04/19 19:03	120-82-1	W
1,1,1-Trichloroethane	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 19:03	71-55-6	W
1,1,2-Trichloroethane	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 19:03	79-00-5	W
Trichloroethene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 19:03	79-01-6	W
Trichlorofluoromethane	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 19:03	75-69-4	W
1,2,3-Trichloropropane	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 19:03	96-18-4	W
1,2,4-Trimethylbenzene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 19:03	95-63-6	W
1,3,5-Trimethylbenzene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 19:03	108-67-8	W
Vinyl chloride	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 19:03	75-01-4	W
Xylene (Total)	<75.0	ug/kg	180	75.0	1	11/02/19 08:30	11/04/19 19:03	1330-20-7	W
m&p-Xylene	<50.0	ug/kg	120	50.0	1	11/02/19 08:30	11/04/19 19:03	179601-23-1	W
o-Xylene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 19:03	95-47-6	W
<b>Surrogates</b>									
Dibromofluoromethane (S)	113	%	57-146		1	11/02/19 08:30	11/04/19 19:03	1868-53-7	
Toluene-d8 (S)	111	%	64-134		1	11/02/19 08:30	11/04/19 19:03	2037-26-5	
4-Bromofluorobenzene (S)	100	%	54-126		1	11/02/19 08:30	11/04/19 19:03	460-00-4	
<b>Percent Moisture</b>	Analytical Method: ASTM D2974-87								
Percent Moisture	4.4	%	0.10	0.10	1			11/05/19 15:22	

## REPORT OF LABORATORY ANALYSIS

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## ANALYTICAL RESULTS

Project: 60615481 ALLOUEZ PHASE II ESA

Pace Project No.: 40198063

Sample: SP-101-8-10 Lab ID: 40198063015 Collected: 10/25/19 05:52 Received: 10/25/19 17:47 Matrix: Solid

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

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>6010 MET ICP</b>		Analytical Method: EPA 6010 Preparation Method: EPA 3050							
Arsenic	2.2J	mg/kg	5.5	1.7	1	10/30/19 06:20	11/02/19 23:36	7440-38-2	
Barium	36.6	mg/kg	0.57	0.17	1	10/30/19 06:20	11/02/19 23:36	7440-39-3	
Cadmium	<0.15	mg/kg	0.57	0.15	1	10/30/19 06:20	11/02/19 23:36	7440-43-9	
Chromium	14.5	mg/kg	1.1	0.31	1	10/30/19 06:20	11/02/19 23:36	7440-47-3	
Lead	3.7	mg/kg	2.3	0.68	1	10/30/19 06:20	11/02/19 23:36	7439-92-1	
Selenium	<1.5	mg/kg	4.9	1.5	1	10/30/19 06:20	11/02/19 23:36	7782-49-2	
Silver	<0.35	mg/kg	1.1	0.35	1	10/30/19 06:20	11/02/19 23:36	7440-22-4	
<b>7471 Mercury</b>		Analytical Method: EPA 7471 Preparation Method: EPA 7471							
Mercury	<0.011	mg/kg	0.038	0.011	1	11/06/19 08:34	11/06/19 12:59	7439-97-6	
<b>8270 MSSV PAH by SIM</b>		Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3546							
Acenaphthene	<2.5	ug/kg	19.5	2.5	1	10/30/19 09:30	10/31/19 11:15	83-32-9	
Acenaphthylene	<2.5	ug/kg	19.5	2.5	1	10/30/19 09:30	10/31/19 11:15	208-96-8	
Anthracene	<2.4	ug/kg	19.5	2.4	1	10/30/19 09:30	10/31/19 11:15	120-12-7	
Benzo(a)anthracene	<2.5	ug/kg	19.5	2.5	1	10/30/19 09:30	10/31/19 11:15	56-55-3	
Benzo(a)pyrene	<2.2	ug/kg	19.5	2.2	1	10/30/19 09:30	10/31/19 11:15	50-32-8	
Benzo(b)fluoranthene	<2.7	ug/kg	19.5	2.7	1	10/30/19 09:30	10/31/19 11:15	205-99-2	
Benzo(g,h,i)perylene	<3.4	ug/kg	19.5	3.4	1	10/30/19 09:30	10/31/19 11:15	191-24-2	
Benzo(k)fluoranthene	<2.5	ug/kg	19.5	2.5	1	10/30/19 09:30	10/31/19 11:15	207-08-9	
Chrysene	<3.7	ug/kg	19.5	3.7	1	10/30/19 09:30	10/31/19 11:15	218-01-9	
Dibenz(a,h)anthracene	<2.7	ug/kg	19.5	2.7	1	10/30/19 09:30	10/31/19 11:15	53-70-3	
Fluoranthene	<2.3	ug/kg	19.5	2.3	1	10/30/19 09:30	10/31/19 11:15	206-44-0	
Fluorene	<2.3	ug/kg	19.5	2.3	1	10/30/19 09:30	10/31/19 11:15	86-73-7	
Indeno(1,2,3-cd)pyrene	<4.1	ug/kg	19.5	4.1	1	10/30/19 09:30	10/31/19 11:15	193-39-5	
1-Methylnaphthalene	<2.9	ug/kg	19.5	2.9	1	10/30/19 09:30	10/31/19 11:15	90-12-0	
2-Methylnaphthalene	<2.9	ug/kg	19.5	2.9	1	10/30/19 09:30	10/31/19 11:15	91-57-6	
Naphthalene	<1.9	ug/kg	19.5	1.9	1	10/30/19 09:30	10/31/19 11:15	91-20-3	
Phenanthrene	<2.2	ug/kg	19.5	2.2	1	10/30/19 09:30	10/31/19 11:15	85-01-8	
Pyrene	<2.9	ug/kg	19.5	2.9	1	10/30/19 09:30	10/31/19 11:15	129-00-0	
<b>Surrogates</b>									
2-Fluorobiphenyl (S)	71	%	28-99		1	10/30/19 09:30	10/31/19 11:15	321-60-8	
Terphenyl-d14 (S)	67	%	10-107		1	10/30/19 09:30	10/31/19 11:15	1718-51-0	
<b>8260 MSV Med Level Normal List</b>		Analytical Method: EPA 8260 Preparation Method: EPA 5035/5030B							
Benzene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 19:26	71-43-2	W
Bromobenzene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 19:26	108-86-1	W
Bromochloromethane	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 19:26	74-97-5	W
Bromodichloromethane	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 19:26	75-27-4	W
Bromoform	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 19:26	75-25-2	W
Bromomethane	<69.9	ug/kg	250	69.9	1	11/02/19 08:30	11/04/19 19:26	74-83-9	W
n-Butylbenzene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 19:26	104-51-8	W
sec-Butylbenzene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 19:26	135-98-8	W
tert-Butylbenzene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 19:26	98-06-6	W
Carbon tetrachloride	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 19:26	56-23-5	W

## REPORT OF LABORATORY ANALYSIS

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## ANALYTICAL RESULTS

Project: 60615481 ALLOUEZ PHASE II ESA

Pace Project No.: 40198063

Sample: SP-101-8-10 Lab ID: 40198063015 Collected: 10/25/19 05:52 Received: 10/25/19 17:47 Matrix: Solid

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

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260 MSV Med Level Normal List</b>		Analytical Method: EPA 8260 Preparation Method: EPA 5035/5030B							
Chlorobenzene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 19:26	108-90-7	W
Chloroethane	<67.0	ug/kg	250	67.0	1	11/02/19 08:30	11/04/19 19:26	75-00-3	W
Chloroform	<46.4	ug/kg	250	46.4	1	11/02/19 08:30	11/04/19 19:26	67-66-3	W
Chloromethane	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 19:26	74-87-3	W
2-Chlorotoluene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 19:26	95-49-8	W
4-Chlorotoluene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 19:26	106-43-4	W
1,2-Dibromo-3-chloropropane	<91.2	ug/kg	250	91.2	1	11/02/19 08:30	11/04/19 19:26	96-12-8	W
Dibromochloromethane	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 19:26	124-48-1	W
1,2-Dibromoethane (EDB)	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 19:26	106-93-4	W
Dibromomethane	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 19:26	74-95-3	W
1,2-Dichlorobenzene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 19:26	95-50-1	W
1,3-Dichlorobenzene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 19:26	541-73-1	W
1,4-Dichlorobenzene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 19:26	106-46-7	W
Dichlorodifluoromethane	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 19:26	75-71-8	W
1,1-Dichloroethane	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 19:26	75-34-3	W
1,2-Dichloroethane	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 19:26	107-06-2	W
1,1-Dichloroethene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 19:26	75-35-4	W
cis-1,2-Dichloroethene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 19:26	156-59-2	W
trans-1,2-Dichloroethene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 19:26	156-60-5	W
1,2-Dichloropropane	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 19:26	78-87-5	W
1,3-Dichloropropane	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 19:26	142-28-9	W
2,2-Dichloropropane	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 19:26	594-20-7	W
1,1-Dichloropropene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 19:26	563-58-6	W
cis-1,3-Dichloropropene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 19:26	10061-01-5	W
trans-1,3-Dichloropropene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 19:26	10061-02-6	W
Diisopropyl ether	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 19:26	108-20-3	W
Ethylbenzene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 19:26	100-41-4	W
Hexachloro-1,3-butadiene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 19:26	87-68-3	W
Isopropylbenzene (Cumene)	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 19:26	98-82-8	W
p-Isopropyltoluene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 19:26	99-87-6	W
Methylene Chloride	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 19:26	75-09-2	W
Methyl-tert-butyl ether	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 19:26	1634-04-4	W
Naphthalene	<40.0	ug/kg	250	40.0	1	11/02/19 08:30	11/04/19 19:26	91-20-3	W
n-Propylbenzene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 19:26	103-65-1	W
Styrene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 19:26	100-42-5	W
1,1,1,2-Tetrachloroethane	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 19:26	630-20-6	W
1,1,2,2-Tetrachloroethane	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 19:26	79-34-5	W
Tetrachloroethene	57.0J	ug/kg	70.2	29.3	1	11/02/19 08:30	11/04/19 19:26	127-18-4	
Toluene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 19:26	108-88-3	W
1,2,3-Trichlorobenzene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 19:26	87-61-6	W
1,2,4-Trichlorobenzene	<47.6	ug/kg	250	47.6	1	11/02/19 08:30	11/04/19 19:26	120-82-1	W
1,1,1-Trichloroethane	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 19:26	71-55-6	W
1,1,2-Trichloroethane	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 19:26	79-00-5	W
Trichloroethene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 19:26	79-01-6	W
Trichlorofluoromethane	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 19:26	75-69-4	W

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## ANALYTICAL RESULTS

Project: 60615481 ALLOUEZ PHASE II ESA

Pace Project No.: 40198063

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Sample: SP-101-8-10      Lab ID: 40198063015      Collected: 10/25/19 05:52      Received: 10/25/19 17:47      Matrix: Solid

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

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260 MSV Med Level Normal List</b>	Analytical Method: EPA 8260 Preparation Method: EPA 5035/5030B								
1,2,3-Trichloropropane	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 19:26	96-18-4	W
1,2,4-Trimethylbenzene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 19:26	95-63-6	W
1,3,5-Trimethylbenzene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 19:26	108-67-8	W
Vinyl chloride	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 19:26	75-01-4	W
Xylene (Total)	<75.0	ug/kg	180	75.0	1	11/02/19 08:30	11/04/19 19:26	1330-20-7	W
m&p-Xylene	<50.0	ug/kg	120	50.0	1	11/02/19 08:30	11/04/19 19:26	179601-23-1	W
o-Xylene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 19:26	95-47-6	W
<b>Surrogates</b>									
Dibromofluoromethane (S)	113	%	57-146		1	11/02/19 08:30	11/04/19 19:26	1868-53-7	
Toluene-d8 (S)	111	%	64-134		1	11/02/19 08:30	11/04/19 19:26	2037-26-5	
4-Bromofluorobenzene (S)	101	%	54-126		1	11/02/19 08:30	11/04/19 19:26	460-00-4	
<b>Percent Moisture</b>	Analytical Method: ASTM D2974-87								
Percent Moisture	14.6	%	0.10	0.10	1			11/05/19 15:22	

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## ANALYTICAL RESULTS

Project: 60615481 ALLOUEZ PHASE II ESA

Pace Project No.: 40198063

Sample: SP-101-0.5-1.5 Lab ID: 40198063016 Collected: 10/25/19 05:47 Received: 10/25/19 17:47 Matrix: Solid

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

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>6010 MET ICP</b>	Analytical Method: EPA 6010 Preparation Method: EPA 3050								
Arsenic	3.3J	mg/kg	5.7	1.7	1	10/30/19 06:20	11/02/19 23:38	7440-38-2	
Barium	50.5	mg/kg	0.58	0.17	1	10/30/19 06:20	11/02/19 23:38	7440-39-3	
Cadmium	0.36J	mg/kg	0.58	0.15	1	10/30/19 06:20	11/02/19 23:38	7440-43-9	
Chromium	15.4	mg/kg	1.2	0.32	1	10/30/19 06:20	11/02/19 23:38	7440-47-3	
Lead	39.1	mg/kg	2.3	0.70	1	10/30/19 06:20	11/02/19 23:38	7439-92-1	
Selenium	<1.5	mg/kg	5.1	1.5	1	10/30/19 06:20	11/02/19 23:38	7782-49-2	
Silver	<0.36	mg/kg	1.2	0.36	1	10/30/19 06:20	11/02/19 23:38	7440-22-4	
<b>7471 Mercury</b>	Analytical Method: EPA 7471 Preparation Method: EPA 7471								
Mercury	0.039J	mg/kg	0.041	0.012	1	11/06/19 08:34	11/06/19 13:01	7439-97-6	
<b>8270 MSSV PAH by SIM</b>	Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3546								
Acenaphthene	3.0J	ug/kg	20.3	2.6	1	10/31/19 08:40	11/01/19 12:53	83-32-9	
Acenaphthylene	<2.6	ug/kg	20.3	2.6	1	10/31/19 08:40	11/01/19 12:53	208-96-8	
Anthracene	9.8J	ug/kg	20.3	2.5	1	10/31/19 08:40	11/01/19 12:53	120-12-7	
Benzo(a)anthracene	40.0	ug/kg	20.3	2.6	1	10/31/19 08:40	11/01/19 12:53	56-55-3	
Benzo(a)pyrene	64.8	ug/kg	20.3	2.3	1	10/31/19 08:40	11/01/19 12:53	50-32-8	
Benzo(b)fluoranthene	64.5	ug/kg	20.3	2.8	1	10/31/19 08:40	11/01/19 12:53	205-99-2	
Benzo(g,h,i)perylene	44.3	ug/kg	20.3	3.6	1	10/31/19 08:40	11/01/19 12:53	191-24-2	
Benzo(k)fluoranthene	29.2	ug/kg	20.3	2.6	1	10/31/19 08:40	11/01/19 12:53	207-08-9	
Chrysene	48.1	ug/kg	20.3	3.8	1	10/31/19 08:40	11/01/19 12:53	218-01-9	
Dibenz(a,h)anthracene	9.6J	ug/kg	20.3	2.8	1	10/31/19 08:40	11/01/19 12:53	53-70-3	
Fluoranthene	112	ug/kg	20.3	2.4	1	10/31/19 08:40	11/01/19 12:53	206-44-0	
Fluorene	2.6J	ug/kg	20.3	2.4	1	10/31/19 08:40	11/01/19 12:53	86-73-7	
Indeno(1,2,3-cd)pyrene	34.8	ug/kg	20.3	4.2	1	10/31/19 08:40	11/01/19 12:53	193-39-5	
1-Methylnaphthalene	<3.0	ug/kg	20.3	3.0	1	10/31/19 08:40	11/01/19 12:53	90-12-0	
2-Methylnaphthalene	<3.0	ug/kg	20.3	3.0	1	10/31/19 08:40	11/01/19 12:53	91-57-6	
Naphthalene	3.2J	ug/kg	20.3	2.0	1	10/31/19 08:40	11/01/19 12:53	91-20-3	
Phenanthrene	51.8	ug/kg	20.3	2.3	1	10/31/19 08:40	11/01/19 12:53	85-01-8	
Pyrene	78.0	ug/kg	20.3	3.0	1	10/31/19 08:40	11/01/19 12:53	129-00-0	
<b>Surrogates</b>									
2-Fluorobiphenyl (S)	68	%	28-99		1	10/31/19 08:40	11/01/19 12:53	321-60-8	
Terphenyl-d14 (S)	56	%	10-107		1	10/31/19 08:40	11/01/19 12:53	1718-51-0	
<b>8260 MSV Med Level Normal List</b>	Analytical Method: EPA 8260 Preparation Method: EPA 5035/5030B								
Benzene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 19:49	71-43-2	W
Bromobenzene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 19:49	108-86-1	W
Bromochloromethane	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 19:49	74-97-5	W
Bromodichloromethane	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 19:49	75-27-4	W
Bromoform	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 19:49	75-25-2	W
Bromomethane	<69.9	ug/kg	250	69.9	1	11/02/19 08:30	11/04/19 19:49	74-83-9	W
n-Butylbenzene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 19:49	104-51-8	W
sec-Butylbenzene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 19:49	135-98-8	W
tert-Butylbenzene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 19:49	98-06-6	W
Carbon tetrachloride	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 19:49	56-23-5	W

## REPORT OF LABORATORY ANALYSIS

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## ANALYTICAL RESULTS

Project: 60615481 ALLOUEZ PHASE II ESA

Pace Project No.: 40198063

Sample: SP-101-0.5-1.5 Lab ID: 40198063016 Collected: 10/25/19 05:47 Received: 10/25/19 17:47 Matrix: Solid

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

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260 MSV Med Level Normal List</b>		Analytical Method: EPA 8260 Preparation Method: EPA 5035/5030B							
Chlorobenzene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 19:49	108-90-7	W
Chloroethane	<67.0	ug/kg	250	67.0	1	11/02/19 08:30	11/04/19 19:49	75-00-3	W
Chloroform	<46.4	ug/kg	250	46.4	1	11/02/19 08:30	11/04/19 19:49	67-66-3	W
Chloromethane	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 19:49	74-87-3	W
2-Chlorotoluene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 19:49	95-49-8	W
4-Chlorotoluene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 19:49	106-43-4	W
1,2-Dibromo-3-chloropropane	<91.2	ug/kg	250	91.2	1	11/02/19 08:30	11/04/19 19:49	96-12-8	W
Dibromochloromethane	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 19:49	124-48-1	W
1,2-Dibromoethane (EDB)	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 19:49	106-93-4	W
Dibromomethane	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 19:49	74-95-3	W
1,2-Dichlorobenzene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 19:49	95-50-1	W
1,3-Dichlorobenzene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 19:49	541-73-1	W
1,4-Dichlorobenzene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 19:49	106-46-7	W
Dichlorodifluoromethane	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 19:49	75-71-8	W
1,1-Dichloroethane	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 19:49	75-34-3	W
1,2-Dichloroethane	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 19:49	107-06-2	W
1,1-Dichloroethene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 19:49	75-35-4	W
cis-1,2-Dichloroethene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 19:49	156-59-2	W
trans-1,2-Dichloroethene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 19:49	156-60-5	W
1,2-Dichloropropane	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 19:49	78-87-5	W
1,3-Dichloropropane	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 19:49	142-28-9	W
2,2-Dichloropropane	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 19:49	594-20-7	W
1,1-Dichloropropene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 19:49	563-58-6	W
cis-1,3-Dichloropropene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 19:49	10061-01-5	W
trans-1,3-Dichloropropene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 19:49	10061-02-6	W
Diisopropyl ether	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 19:49	108-20-3	W
Ethylbenzene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 19:49	100-41-4	W
Hexachloro-1,3-butadiene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 19:49	87-68-3	W
Isopropylbenzene (Cumene)	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 19:49	98-82-8	W
p-Isopropyltoluene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 19:49	99-87-6	W
Methylene Chloride	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 19:49	75-09-2	W
Methyl-tert-butyl ether	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 19:49	1634-04-4	W
Naphthalene	<40.0	ug/kg	250	40.0	1	11/02/19 08:30	11/04/19 19:49	91-20-3	W
n-Propylbenzene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 19:49	103-65-1	W
Styrene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 19:49	100-42-5	W
1,1,1,2-Tetrachloroethane	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 19:49	630-20-6	W
1,1,2,2-Tetrachloroethane	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 19:49	79-34-5	W
Tetrachloroethene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 19:49	127-18-4	W
Toluene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 19:49	108-88-3	W
1,2,3-Trichlorobenzene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 19:49	87-61-6	W
1,2,4-Trichlorobenzene	<47.6	ug/kg	250	47.6	1	11/02/19 08:30	11/04/19 19:49	120-82-1	W
1,1,1-Trichloroethane	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 19:49	71-55-6	W
1,1,2-Trichloroethane	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 19:49	79-00-5	W
Trichloroethene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 19:49	79-01-6	W
Trichlorofluoromethane	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 19:49	75-69-4	W

## REPORT OF LABORATORY ANALYSIS

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## ANALYTICAL RESULTS

Project: 60615481 ALLOUEZ PHASE II ESA

Pace Project No.: 40198063

Sample: SP-101-0.5-1.5 Lab ID: 40198063016 Collected: 10/25/19 05:47 Received: 10/25/19 17:47 Matrix: Solid

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

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260 MSV Med Level Normal List</b>	Analytical Method: EPA 8260 Preparation Method: EPA 5035/5030B								
1,2,3-Trichloropropane	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 19:49	96-18-4	W
1,2,4-Trimethylbenzene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 19:49	95-63-6	W
1,3,5-Trimethylbenzene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 19:49	108-67-8	W
Vinyl chloride	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 19:49	75-01-4	W
Xylene (Total)	<75.0	ug/kg	180	75.0	1	11/02/19 08:30	11/04/19 19:49	1330-20-7	W
m&p-Xylene	<50.0	ug/kg	120	50.0	1	11/02/19 08:30	11/04/19 19:49	179601-23-1	W
o-Xylene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 19:49	95-47-6	W
<b>Surrogates</b>									
Dibromofluoromethane (S)	114	%	57-146		1	11/02/19 08:30	11/04/19 19:49	1868-53-7	
Toluene-d8 (S)	115	%	64-134		1	11/02/19 08:30	11/04/19 19:49	2037-26-5	
4-Bromofluorobenzene (S)	104	%	54-126		1	11/02/19 08:30	11/04/19 19:49	460-00-4	
<b>Percent Moisture</b>	Analytical Method: ASTM D2974-87								
Percent Moisture	17.7	%	0.10	0.10	1			11/04/19 16:19	

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## ANALYTICAL RESULTS

Project: 60615481 ALLOUEZ PHASE II ESA

Pace Project No.: 40198063

Sample: SP-102-0.5-1.5 Lab ID: 40198063017 Collected: 10/25/19 15:00 Received: 10/25/19 17:47 Matrix: Solid

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

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>6010 MET ICP</b>	Analytical Method: EPA 6010 Preparation Method: EPA 3050								
Arsenic	<b>2.9J</b>	mg/kg	5.7	1.7	1	10/30/19 06:20	11/02/19 23:41	7440-38-2	
Barium	<b>111</b>	mg/kg	0.59	0.18	1	10/30/19 06:20	11/02/19 23:41	7440-39-3	
Cadmium	<b>0.20J</b>	mg/kg	0.59	0.16	1	10/30/19 06:20	11/02/19 23:41	7440-43-9	
Chromium	<b>33.3</b>	mg/kg	1.2	0.33	1	10/30/19 06:20	11/02/19 23:41	7440-47-3	
Lead	<b>11.2</b>	mg/kg	2.4	0.71	1	10/30/19 06:20	11/02/19 23:41	7439-92-1	
Selenium	<b>&lt;1.5</b>	mg/kg	5.1	1.5	1	10/30/19 06:20	11/02/19 23:41	7782-49-2	
Silver	<b>&lt;0.72</b>	mg/kg	2.4	0.72	2	10/30/19 06:20	11/05/19 12:57	7440-22-4	D3
<b>7471 Mercury</b>	Analytical Method: EPA 7471 Preparation Method: EPA 7471								
Mercury	<b>0.018J</b>	mg/kg	0.040	0.012	1	11/06/19 08:34	11/06/19 13:04	7439-97-6	
<b>8270 MSSV PAH by SIM</b>	Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3546								
Acenaphthene	<b>&lt;2.7</b>	ug/kg	20.5	2.7	1	11/01/19 09:00	11/01/19 14:38	83-32-9	
Acenaphthylene	<b>7.7J</b>	ug/kg	20.5	2.6	1	11/01/19 09:00	11/01/19 14:38	208-96-8	
Anthracene	<b>6.6J</b>	ug/kg	20.5	2.5	1	11/01/19 09:00	11/01/19 14:38	120-12-7	
Benzo(a)anthracene	<b>17.3J</b>	ug/kg	20.5	2.6	1	11/01/19 09:00	11/01/19 14:38	56-55-3	
Benzo(a)pyrene	<b>23.3</b>	ug/kg	20.5	2.3	1	11/01/19 09:00	11/01/19 14:38	50-32-8	
Benzo(b)fluoranthene	<b>43.0</b>	ug/kg	20.5	2.8	1	11/01/19 09:00	11/01/19 14:38	205-99-2	
Benzo(g,h,i)perylene	<b>23.1</b>	ug/kg	20.5	3.6	1	11/01/19 09:00	11/01/19 14:38	191-24-2	
Benzo(k)fluoranthene	<b>14.3J</b>	ug/kg	20.5	2.6	1	11/01/19 09:00	11/01/19 14:38	207-08-9	
Chrysene	<b>27.5</b>	ug/kg	20.5	3.9	1	11/01/19 09:00	11/01/19 14:38	218-01-9	
Dibenz(a,h)anthracene	<b>6.2J</b>	ug/kg	20.5	2.8	1	11/01/19 09:00	11/01/19 14:38	53-70-3	
Fluoranthene	<b>33.5</b>	ug/kg	20.5	2.4	1	11/01/19 09:00	11/01/19 14:38	206-44-0	
Fluorene	<b>&lt;2.5</b>	ug/kg	20.5	2.5	1	11/01/19 09:00	11/01/19 14:38	86-73-7	
Indeno(1,2,3-cd)pyrene	<b>19.3J</b>	ug/kg	20.5	4.3	1	11/01/19 09:00	11/01/19 14:38	193-39-5	
1-Methylnaphthalene	<b>6.7J</b>	ug/kg	20.5	3.0	1	11/01/19 09:00	11/01/19 14:38	90-12-0	
2-Methylnaphthalene	<b>8.5J</b>	ug/kg	20.5	3.0	1	11/01/19 09:00	11/01/19 14:38	91-57-6	
Naphthalene	<b>10J</b>	ug/kg	20.5	2.0	1	11/01/19 09:00	11/01/19 14:38	91-20-3	
Phenanthrene	<b>16.9J</b>	ug/kg	20.5	2.3	1	11/01/19 09:00	11/01/19 14:38	85-01-8	
Pyrene	<b>26.6</b>	ug/kg	20.5	3.0	1	11/01/19 09:00	11/01/19 14:38	129-00-0	
<b>Surrogates</b>									
2-Fluorobiphenyl (S)	<b>76</b>	%	28-99		1	11/01/19 09:00	11/01/19 14:38	321-60-8	
Terphenyl-d14 (S)	<b>63</b>	%	10-107		1	11/01/19 09:00	11/01/19 14:38	1718-51-0	
<b>8260 MSV Med Level Normal List</b>	Analytical Method: EPA 8260 Preparation Method: EPA 5035/5030B								
Benzene	<b>&lt;25.0</b>	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 20:12	71-43-2	W
Bromobenzene	<b>&lt;25.0</b>	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 20:12	108-86-1	W
Bromochloromethane	<b>&lt;25.0</b>	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 20:12	74-97-5	W
Bromodichloromethane	<b>&lt;25.0</b>	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 20:12	75-27-4	W
Bromoform	<b>&lt;25.0</b>	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 20:12	75-25-2	W
Bromomethane	<b>&lt;69.9</b>	ug/kg	250	69.9	1	11/02/19 08:30	11/04/19 20:12	74-83-9	W
n-Butylbenzene	<b>&lt;25.0</b>	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 20:12	104-51-8	W
sec-Butylbenzene	<b>&lt;25.0</b>	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 20:12	135-98-8	W
tert-Butylbenzene	<b>&lt;25.0</b>	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 20:12	98-06-6	W
Carbon tetrachloride	<b>&lt;25.0</b>	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 20:12	56-23-5	W

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## ANALYTICAL RESULTS

Project: 60615481 ALLOUEZ PHASE II ESA

Pace Project No.: 40198063

Sample: SP-102-0.5-1.5 Lab ID: 40198063017 Collected: 10/25/19 15:00 Received: 10/25/19 17:47 Matrix: Solid

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

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260 MSV Med Level Normal List</b>		Analytical Method: EPA 8260 Preparation Method: EPA 5035/5030B							
Chlorobenzene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 20:12	108-90-7	W
Chloroethane	<67.0	ug/kg	250	67.0	1	11/02/19 08:30	11/04/19 20:12	75-00-3	W
Chloroform	<46.4	ug/kg	250	46.4	1	11/02/19 08:30	11/04/19 20:12	67-66-3	W
Chloromethane	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 20:12	74-87-3	W
2-Chlorotoluene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 20:12	95-49-8	W
4-Chlorotoluene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 20:12	106-43-4	W
1,2-Dibromo-3-chloropropane	<91.2	ug/kg	250	91.2	1	11/02/19 08:30	11/04/19 20:12	96-12-8	W
Dibromochloromethane	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 20:12	124-48-1	W
1,2-Dibromoethane (EDB)	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 20:12	106-93-4	W
Dibromomethane	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 20:12	74-95-3	W
1,2-Dichlorobenzene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 20:12	95-50-1	W
1,3-Dichlorobenzene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 20:12	541-73-1	W
1,4-Dichlorobenzene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 20:12	106-46-7	W
Dichlorodifluoromethane	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 20:12	75-71-8	W
1,1-Dichloroethane	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 20:12	75-34-3	W
1,2-Dichloroethane	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 20:12	107-06-2	W
1,1-Dichloroethene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 20:12	75-35-4	W
cis-1,2-Dichloroethene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 20:12	156-59-2	W
trans-1,2-Dichloroethene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 20:12	156-60-5	W
1,2-Dichloropropane	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 20:12	78-87-5	W
1,3-Dichloropropane	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 20:12	142-28-9	W
2,2-Dichloropropane	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 20:12	594-20-7	W
1,1-Dichloropropene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 20:12	563-58-6	W
cis-1,3-Dichloropropene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 20:12	10061-01-5	W
trans-1,3-Dichloropropene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 20:12	10061-02-6	W
Diisopropyl ether	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 20:12	108-20-3	W
Ethylbenzene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 20:12	100-41-4	W
Hexachloro-1,3-butadiene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 20:12	87-68-3	W
Isopropylbenzene (Cumene)	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 20:12	98-82-8	W
p-Isopropyltoluene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 20:12	99-87-6	W
Methylene Chloride	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 20:12	75-09-2	W
Methyl-tert-butyl ether	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 20:12	1634-04-4	W
Naphthalene	<40.0	ug/kg	250	40.0	1	11/02/19 08:30	11/04/19 20:12	91-20-3	W
n-Propylbenzene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 20:12	103-65-1	W
Styrene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 20:12	100-42-5	W
1,1,1,2-Tetrachloroethane	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 20:12	630-20-6	W
1,1,2,2-Tetrachloroethane	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 20:12	79-34-5	W
Tetrachloroethene	59.5J	ug/kg	73.6	30.6	1	11/02/19 08:30	11/04/19 20:12	127-18-4	
Toluene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 20:12	108-88-3	W
1,2,3-Trichlorobenzene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 20:12	87-61-6	W
1,2,4-Trichlorobenzene	<47.6	ug/kg	250	47.6	1	11/02/19 08:30	11/04/19 20:12	120-82-1	W
1,1,1-Trichloroethane	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 20:12	71-55-6	W
1,1,2-Trichloroethane	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 20:12	79-00-5	W
Trichloroethene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 20:12	79-01-6	W
Trichlorofluoromethane	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 20:12	75-69-4	W

## REPORT OF LABORATORY ANALYSIS

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## ANALYTICAL RESULTS

Project: 60615481 ALLOUEZ PHASE II ESA

Pace Project No.: 40198063

Sample: SP-102-0.5-1.5 Lab ID: 40198063017 Collected: 10/25/19 15:00 Received: 10/25/19 17:47 Matrix: Solid

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

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260 MSV Med Level Normal List</b>	Analytical Method: EPA 8260 Preparation Method: EPA 5035/5030B								
1,2,3-Trichloropropane	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 20:12	96-18-4	W
1,2,4-Trimethylbenzene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 20:12	95-63-6	W
1,3,5-Trimethylbenzene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 20:12	108-67-8	W
Vinyl chloride	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 20:12	75-01-4	W
Xylene (Total)	<75.0	ug/kg	180	75.0	1	11/02/19 08:30	11/04/19 20:12	1330-20-7	W
m&p-Xylene	<50.0	ug/kg	120	50.0	1	11/02/19 08:30	11/04/19 20:12	179601-23-1	W
o-Xylene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 20:12	95-47-6	W
<b>Surrogates</b>									
Dibromofluoromethane (S)	110	%	57-146		1	11/02/19 08:30	11/04/19 20:12	1868-53-7	
Toluene-d8 (S)	113	%	64-134		1	11/02/19 08:30	11/04/19 20:12	2037-26-5	
4-Bromofluorobenzene (S)	102	%	54-126		1	11/02/19 08:30	11/04/19 20:12	460-00-4	
<b>Percent Moisture</b>	Analytical Method: ASTM D2974-87								
Percent Moisture	<b>18.4</b>	%	0.10	0.10	1			11/04/19 16:19	

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## ANALYTICAL RESULTS

Project: 60615481 ALLOUEZ PHASE II ESA

Pace Project No.: 40198063

Sample: SP-102-19-20 Lab ID: 40198063018 Collected: 10/25/19 15:12 Received: 10/25/19 17:47 Matrix: Solid

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

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>6010 MET ICP</b>		Analytical Method: EPA 6010 Preparation Method: EPA 3050							
Arsenic	2.0J	mg/kg	5.1	1.5	1	10/30/19 06:20	11/02/19 23:43	7440-38-2	
Barium	6.8	mg/kg	0.53	0.16	1	10/30/19 06:20	11/02/19 23:43	7440-39-3	
Cadmium	<0.14	mg/kg	0.53	0.14	1	10/30/19 06:20	11/02/19 23:43	7440-43-9	
Chromium	5.0	mg/kg	1.1	0.29	1	10/30/19 06:20	11/02/19 23:43	7440-47-3	
Lead	1.3J	mg/kg	2.1	0.63	1	10/30/19 06:20	11/02/19 23:43	7439-92-1	
Selenium	<1.4	mg/kg	4.6	1.4	1	10/30/19 06:20	11/02/19 23:43	7782-49-2	
Silver	<0.32	mg/kg	1.1	0.32	1	10/30/19 06:20	11/02/19 23:43	7440-22-4	
<b>7471 Mercury</b>		Analytical Method: EPA 7471 Preparation Method: EPA 7471							
Mercury	<0.011	mg/kg	0.035	0.011	1	11/06/19 08:34	11/06/19 13:06	7439-97-6	
<b>8270 MSSV PAH by SIM</b>		Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3546							
Acenaphthene	<2.4	ug/kg	18.7	2.4	1	10/31/19 08:40	10/31/19 16:43	83-32-9	
Acenaphthylene	<2.4	ug/kg	18.7	2.4	1	10/31/19 08:40	10/31/19 16:43	208-96-8	
Anthracene	<2.3	ug/kg	18.7	2.3	1	10/31/19 08:40	10/31/19 16:43	120-12-7	
Benzo(a)anthracene	2.6J	ug/kg	18.7	2.4	1	10/31/19 08:40	10/31/19 16:43	56-55-3	
Benzo(a)pyrene	<2.1	ug/kg	18.7	2.1	1	10/31/19 08:40	10/31/19 16:43	50-32-8	
Benzo(b)fluoranthene	<2.6	ug/kg	18.7	2.6	1	10/31/19 08:40	10/31/19 16:43	205-99-2	
Benzo(g,h,i)perylene	<3.3	ug/kg	18.7	3.3	1	10/31/19 08:40	10/31/19 16:43	191-24-2	
Benzo(k)fluoranthene	<2.4	ug/kg	18.7	2.4	1	10/31/19 08:40	10/31/19 16:43	207-08-9	
Chrysene	<3.5	ug/kg	18.7	3.5	1	10/31/19 08:40	10/31/19 16:43	218-01-9	
Dibenz(a,h)anthracene	<2.6	ug/kg	18.7	2.6	1	10/31/19 08:40	10/31/19 16:43	53-70-3	
Fluoranthene	<2.2	ug/kg	18.7	2.2	1	10/31/19 08:40	10/31/19 16:43	206-44-0	
Fluorene	<2.2	ug/kg	18.7	2.2	1	10/31/19 08:40	10/31/19 16:43	86-73-7	
Indeno(1,2,3-cd)pyrene	<3.9	ug/kg	18.7	3.9	1	10/31/19 08:40	10/31/19 16:43	193-39-5	
1-Methylnaphthalene	<2.7	ug/kg	18.7	2.7	1	10/31/19 08:40	10/31/19 16:43	90-12-0	
2-Methylnaphthalene	<2.7	ug/kg	18.7	2.7	1	10/31/19 08:40	10/31/19 16:43	91-57-6	
Naphthalene	2.0J	ug/kg	18.7	1.8	1	10/31/19 08:40	10/31/19 16:43	91-20-3	
Phenanthrene	<2.1	ug/kg	18.7	2.1	1	10/31/19 08:40	10/31/19 16:43	85-01-8	
Pyrene	<2.8	ug/kg	18.7	2.8	1	10/31/19 08:40	10/31/19 16:43	129-00-0	
<b>Surrogates</b>									
2-Fluorobiphenyl (S)	72	%	28-99		1	10/31/19 08:40	10/31/19 16:43	321-60-8	
Terphenyl-d14 (S)	63	%	10-107		1	10/31/19 08:40	10/31/19 16:43	1718-51-0	
<b>8260 MSV Med Level Normal List</b>		Analytical Method: EPA 8260 Preparation Method: EPA 5035/5030B							
Benzene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 20:35	71-43-2	W
Bromobenzene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 20:35	108-86-1	W
Bromochloromethane	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 20:35	74-97-5	W
Bromodichloromethane	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 20:35	75-27-4	W
Bromoform	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 20:35	75-25-2	W
Bromomethane	<69.9	ug/kg	250	69.9	1	11/02/19 08:30	11/04/19 20:35	74-83-9	W
n-Butylbenzene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 20:35	104-51-8	W
sec-Butylbenzene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 20:35	135-98-8	W
tert-Butylbenzene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 20:35	98-06-6	W
Carbon tetrachloride	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 20:35	56-23-5	W

## REPORT OF LABORATORY ANALYSIS

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## ANALYTICAL RESULTS

Project: 60615481 ALLOUEZ PHASE II ESA

Pace Project No.: 40198063

Sample: SP-102-19-20 Lab ID: 40198063018 Collected: 10/25/19 15:12 Received: 10/25/19 17:47 Matrix: Solid

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

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260 MSV Med Level Normal List</b>		Analytical Method: EPA 8260 Preparation Method: EPA 5035/5030B							
Chlorobenzene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 20:35	108-90-7	W
Chloroethane	<67.0	ug/kg	250	67.0	1	11/02/19 08:30	11/04/19 20:35	75-00-3	W
Chloroform	<46.4	ug/kg	250	46.4	1	11/02/19 08:30	11/04/19 20:35	67-66-3	W
Chloromethane	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 20:35	74-87-3	W
2-Chlorotoluene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 20:35	95-49-8	W
4-Chlorotoluene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 20:35	106-43-4	W
1,2-Dibromo-3-chloropropane	<91.2	ug/kg	250	91.2	1	11/02/19 08:30	11/04/19 20:35	96-12-8	W
Dibromochloromethane	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 20:35	124-48-1	W
1,2-Dibromoethane (EDB)	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 20:35	106-93-4	W
Dibromomethane	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 20:35	74-95-3	W
1,2-Dichlorobenzene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 20:35	95-50-1	W
1,3-Dichlorobenzene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 20:35	541-73-1	W
1,4-Dichlorobenzene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 20:35	106-46-7	W
Dichlorodifluoromethane	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 20:35	75-71-8	W
1,1-Dichloroethane	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 20:35	75-34-3	W
1,2-Dichloroethane	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 20:35	107-06-2	W
1,1-Dichloroethene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 20:35	75-35-4	W
cis-1,2-Dichloroethene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 20:35	156-59-2	W
trans-1,2-Dichloroethene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 20:35	156-60-5	W
1,2-Dichloropropane	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 20:35	78-87-5	W
1,3-Dichloropropane	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 20:35	142-28-9	W
2,2-Dichloropropane	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 20:35	594-20-7	W
1,1-Dichloropropene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 20:35	563-58-6	W
cis-1,3-Dichloropropene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 20:35	10061-01-5	W
trans-1,3-Dichloropropene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 20:35	10061-02-6	W
Diisopropyl ether	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 20:35	108-20-3	W
Ethylbenzene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 20:35	100-41-4	W
Hexachloro-1,3-butadiene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 20:35	87-68-3	W
Isopropylbenzene (Cumene)	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 20:35	98-82-8	W
p-Isopropyltoluene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 20:35	99-87-6	W
Methylene Chloride	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 20:35	75-09-2	W
Methyl-tert-butyl ether	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 20:35	1634-04-4	W
Naphthalene	<40.0	ug/kg	250	40.0	1	11/02/19 08:30	11/04/19 20:35	91-20-3	W
n-Propylbenzene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 20:35	103-65-1	W
Styrene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 20:35	100-42-5	W
1,1,1,2-Tetrachloroethane	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 20:35	630-20-6	W
1,1,2,2-Tetrachloroethane	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 20:35	79-34-5	W
Tetrachloroethene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 20:35	127-18-4	W
Toluene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 20:35	108-88-3	W
1,2,3-Trichlorobenzene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 20:35	87-61-6	W
1,2,4-Trichlorobenzene	<47.6	ug/kg	250	47.6	1	11/02/19 08:30	11/04/19 20:35	120-82-1	W
1,1,1-Trichloroethane	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 20:35	71-55-6	W
1,1,2-Trichloroethane	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 20:35	79-00-5	W
Trichloroethene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 20:35	79-01-6	W
Trichlorofluoromethane	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 20:35	75-69-4	W

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## ANALYTICAL RESULTS

Project: 60615481 ALLOUEZ PHASE II ESA

Pace Project No.: 40198063

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Sample: SP-102-19-20      Lab ID: 40198063018      Collected: 10/25/19 15:12      Received: 10/25/19 17:47      Matrix: Solid

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

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260 MSV Med Level Normal List</b>	Analytical Method: EPA 8260 Preparation Method: EPA 5035/5030B								
1,2,3-Trichloropropane	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 20:35	96-18-4	W
1,2,4-Trimethylbenzene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 20:35	95-63-6	W
1,3,5-Trimethylbenzene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 20:35	108-67-8	W
Vinyl chloride	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 20:35	75-01-4	W
Xylene (Total)	<75.0	ug/kg	180	75.0	1	11/02/19 08:30	11/04/19 20:35	1330-20-7	W
m&p-Xylene	<50.0	ug/kg	120	50.0	1	11/02/19 08:30	11/04/19 20:35	179601-23-1	W
o-Xylene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 20:35	95-47-6	W
<b>Surrogates</b>									
Dibromofluoromethane (S)	103	%	57-146		1	11/02/19 08:30	11/04/19 20:35	1868-53-7	
Toluene-d8 (S)	103	%	64-134		1	11/02/19 08:30	11/04/19 20:35	2037-26-5	
4-Bromofluorobenzene (S)	94	%	54-126		1	11/02/19 08:30	11/04/19 20:35	460-00-4	
<b>Percent Moisture</b>	Analytical Method: ASTM D2974-87								
Percent Moisture	<b>10.8</b>	%	0.10	0.10	1			11/04/19 13:43	

## REPORT OF LABORATORY ANALYSIS

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## ANALYTICAL RESULTS

Project: 60615481 ALLOUEZ PHASE II ESA

Pace Project No.: 40198063

Sample: SP-102-19-20D Lab ID: 40198063019 Collected: 10/25/19 15:12 Received: 10/25/19 17:47 Matrix: Solid

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

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>6010 MET ICP</b>	Analytical Method: EPA 6010 Preparation Method: EPA 3050								
Arsenic	1.6J	mg/kg	5.1	1.5	1	10/30/19 06:20	11/02/19 23:46	7440-38-2	
Barium	6.8	mg/kg	0.52	0.16	1	10/30/19 06:20	11/02/19 23:46	7440-39-3	
Cadmium	<0.14	mg/kg	0.52	0.14	1	10/30/19 06:20	11/02/19 23:46	7440-43-9	
Chromium	4.3	mg/kg	1.0	0.29	1	10/30/19 06:20	11/02/19 23:46	7440-47-3	
Lead	1.0J	mg/kg	2.1	0.63	1	10/30/19 06:20	11/02/19 23:46	7439-92-1	
Selenium	<1.4	mg/kg	4.6	1.4	1	10/30/19 06:20	11/02/19 23:46	7782-49-2	
Silver	<0.32	mg/kg	1.0	0.32	1	10/30/19 06:20	11/02/19 23:46	7440-22-4	
<b>7471 Mercury</b>	Analytical Method: EPA 7471 Preparation Method: EPA 7471								
Mercury	<0.011	mg/kg	0.038	0.011	1	11/06/19 08:34	11/06/19 13:08	7439-97-6	
<b>8270 MSSV PAH by SIM</b>	Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3546								
Acenaphthene	<2.4	ug/kg	18.7	2.4	1	10/31/19 08:40	10/31/19 12:41	83-32-9	
Acenaphthylene	<2.4	ug/kg	18.7	2.4	1	10/31/19 08:40	10/31/19 12:41	208-96-8	
Anthracene	<2.3	ug/kg	18.7	2.3	1	10/31/19 08:40	10/31/19 12:41	120-12-7	
Benzo(a)anthracene	<2.4	ug/kg	18.7	2.4	1	10/31/19 08:40	10/31/19 12:41	56-55-3	
Benzo(a)pyrene	<2.1	ug/kg	18.7	2.1	1	10/31/19 08:40	10/31/19 12:41	50-32-8	
Benzo(b)fluoranthene	<2.6	ug/kg	18.7	2.6	1	10/31/19 08:40	10/31/19 12:41	205-99-2	
Benzo(g,h,i)perylene	<3.3	ug/kg	18.7	3.3	1	10/31/19 08:40	10/31/19 12:41	191-24-2	
Benzo(k)fluoranthene	<2.4	ug/kg	18.7	2.4	1	10/31/19 08:40	10/31/19 12:41	207-08-9	
Chrysene	<3.5	ug/kg	18.7	3.5	1	10/31/19 08:40	10/31/19 12:41	218-01-9	
Dibenz(a,h)anthracene	<2.6	ug/kg	18.7	2.6	1	10/31/19 08:40	10/31/19 12:41	53-70-3	
Fluoranthene	<2.2	ug/kg	18.7	2.2	1	10/31/19 08:40	10/31/19 12:41	206-44-0	
Fluorene	<2.2	ug/kg	18.7	2.2	1	10/31/19 08:40	10/31/19 12:41	86-73-7	
Indeno(1,2,3-cd)pyrene	<3.9	ug/kg	18.7	3.9	1	10/31/19 08:40	10/31/19 12:41	193-39-5	
1-Methylnaphthalene	<2.7	ug/kg	18.7	2.7	1	10/31/19 08:40	10/31/19 12:41	90-12-0	
2-Methylnaphthalene	<2.7	ug/kg	18.7	2.7	1	10/31/19 08:40	10/31/19 12:41	91-57-6	
Naphthalene	2.2J	ug/kg	18.7	1.8	1	10/31/19 08:40	10/31/19 12:41	91-20-3	
Phenanthrene	<2.1	ug/kg	18.7	2.1	1	10/31/19 08:40	10/31/19 12:41	85-01-8	
Pyrene	<2.7	ug/kg	18.7	2.7	1	10/31/19 08:40	10/31/19 12:41	129-00-0	
<b>Surrogates</b>									
2-Fluorobiphenyl (S)	70	%	28-99		1	10/31/19 08:40	10/31/19 12:41	321-60-8	
Terphenyl-d14 (S)	65	%	10-107		1	10/31/19 08:40	10/31/19 12:41	1718-51-0	
<b>8260 MSV Med Level Normal List</b>	Analytical Method: EPA 8260 Preparation Method: EPA 5035/5030B								
Benzene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 20:58	71-43-2	W
Bromobenzene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 20:58	108-86-1	W
Bromochloromethane	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 20:58	74-97-5	W
Bromodichloromethane	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 20:58	75-27-4	W
Bromoform	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 20:58	75-25-2	W
Bromomethane	<69.9	ug/kg	250	69.9	1	11/02/19 08:30	11/04/19 20:58	74-83-9	W
n-Butylbenzene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 20:58	104-51-8	W
sec-Butylbenzene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 20:58	135-98-8	W
tert-Butylbenzene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 20:58	98-06-6	W
Carbon tetrachloride	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 20:58	56-23-5	W

## REPORT OF LABORATORY ANALYSIS

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## ANALYTICAL RESULTS

Project: 60615481 ALLOUEZ PHASE II ESA

Pace Project No.: 40198063

Sample: SP-102-19-20D Lab ID: 40198063019 Collected: 10/25/19 15:12 Received: 10/25/19 17:47 Matrix: Solid

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

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260 MSV Med Level Normal List</b>	Analytical Method: EPA 8260 Preparation Method: EPA 5035/5030B								
Chlorobenzene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 20:58	108-90-7	W
Chloroethane	<67.0	ug/kg	250	67.0	1	11/02/19 08:30	11/04/19 20:58	75-00-3	W
Chloroform	<46.4	ug/kg	250	46.4	1	11/02/19 08:30	11/04/19 20:58	67-66-3	W
Chloromethane	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 20:58	74-87-3	W
2-Chlorotoluene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 20:58	95-49-8	W
4-Chlorotoluene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 20:58	106-43-4	W
1,2-Dibromo-3-chloropropane	<91.2	ug/kg	250	91.2	1	11/02/19 08:30	11/04/19 20:58	96-12-8	W
Dibromochloromethane	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 20:58	124-48-1	W
1,2-Dibromoethane (EDB)	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 20:58	106-93-4	W
Dibromomethane	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 20:58	74-95-3	W
1,2-Dichlorobenzene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 20:58	95-50-1	W
1,3-Dichlorobenzene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 20:58	541-73-1	W
1,4-Dichlorobenzene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 20:58	106-46-7	W
Dichlorodifluoromethane	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 20:58	75-71-8	W
1,1-Dichloroethane	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 20:58	75-34-3	W
1,2-Dichloroethane	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 20:58	107-06-2	W
1,1-Dichloroethene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 20:58	75-35-4	W
cis-1,2-Dichloroethene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 20:58	156-59-2	W
trans-1,2-Dichloroethene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 20:58	156-60-5	W
1,2-Dichloropropane	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 20:58	78-87-5	W
1,3-Dichloropropane	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 20:58	142-28-9	W
2,2-Dichloropropane	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 20:58	594-20-7	W
1,1-Dichloropropene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 20:58	563-58-6	W
cis-1,3-Dichloropropene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 20:58	10061-01-5	W
trans-1,3-Dichloropropene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 20:58	10061-02-6	W
Diisopropyl ether	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 20:58	108-20-3	W
Ethylbenzene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 20:58	100-41-4	W
Hexachloro-1,3-butadiene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 20:58	87-68-3	W
Isopropylbenzene (Cumene)	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 20:58	98-82-8	W
p-Isopropyltoluene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 20:58	99-87-6	W
Methylene Chloride	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 20:58	75-09-2	W
Methyl-tert-butyl ether	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 20:58	1634-04-4	W
Naphthalene	<40.0	ug/kg	250	40.0	1	11/02/19 08:30	11/04/19 20:58	91-20-3	W
n-Propylbenzene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 20:58	103-65-1	W
Styrene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 20:58	100-42-5	W
1,1,1,2-Tetrachloroethane	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 20:58	630-20-6	W
1,1,2,2-Tetrachloroethane	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 20:58	79-34-5	W
Tetrachloroethene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 20:58	127-18-4	W
Toluene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 20:58	108-88-3	W
1,2,3-Trichlorobenzene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 20:58	87-61-6	W
1,2,4-Trichlorobenzene	<47.6	ug/kg	250	47.6	1	11/02/19 08:30	11/04/19 20:58	120-82-1	W
1,1,1-Trichloroethane	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 20:58	71-55-6	W
1,1,2-Trichloroethane	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 20:58	79-00-5	W
Trichloroethene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 20:58	79-01-6	W
Trichlorofluoromethane	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 20:58	75-69-4	W

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## ANALYTICAL RESULTS

Project: 60615481 ALLOUEZ PHASE II ESA

Pace Project No.: 40198063

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Sample: SP-102-19-20D      Lab ID: 40198063019      Collected: 10/25/19 15:12      Received: 10/25/19 17:47      Matrix: Solid

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

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260 MSV Med Level Normal List</b>	Analytical Method: EPA 8260 Preparation Method: EPA 5035/5030B								
1,2,3-Trichloropropane	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 20:58	96-18-4	W
1,2,4-Trimethylbenzene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 20:58	95-63-6	W
1,3,5-Trimethylbenzene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 20:58	108-67-8	W
Vinyl chloride	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 20:58	75-01-4	W
Xylene (Total)	<75.0	ug/kg	180	75.0	1	11/02/19 08:30	11/04/19 20:58	1330-20-7	W
m&p-Xylene	<50.0	ug/kg	120	50.0	1	11/02/19 08:30	11/04/19 20:58	179601-23-1	W
o-Xylene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 20:58	95-47-6	W
<b>Surrogates</b>									
Dibromofluoromethane (S)	108	%	57-146		1	11/02/19 08:30	11/04/19 20:58	1868-53-7	
Toluene-d8 (S)	107	%	64-134		1	11/02/19 08:30	11/04/19 20:58	2037-26-5	
4-Bromofluorobenzene (S)	95	%	54-126		1	11/02/19 08:30	11/04/19 20:58	460-00-4	
<b>Percent Moisture</b>	Analytical Method: ASTM D2974-87								
Percent Moisture	10.6	%	0.10	0.10	1		11/04/19 18:00		

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## ANALYTICAL RESULTS

Project: 60615481 ALLOUEZ PHASE II ESA  
Pace Project No.: 40198063

Sample: SP-103-18-20 Lab ID: 40198063020 Collected: 10/25/19 05:18 Received: 10/25/19 17:47 Matrix: Solid

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

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260 MSV Med Level Normal List</b>		Analytical Method: EPA 8260 Preparation Method: EPA 5035/5030B							
Benzene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 21:21	71-43-2	W
Bromobenzene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 21:21	108-86-1	W
Bromoform	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 21:21	74-97-5	W
Bromochloromethane	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 21:21	75-27-4	W
Bromodichloromethane	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 21:21	75-25-2	W
Bromomethane	<69.9	ug/kg	250	69.9	1	11/02/19 08:30	11/04/19 21:21	74-83-9	W
n-Butylbenzene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 21:21	104-51-8	W
sec-Butylbenzene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 21:21	135-98-8	W
tert-Butylbenzene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 21:21	98-06-6	W
Carbon tetrachloride	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 21:21	56-23-5	W
Chlorobenzene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 21:21	108-90-7	W
Chloroethane	<67.0	ug/kg	250	67.0	1	11/02/19 08:30	11/04/19 21:21	75-00-3	W
Chloroform	<46.4	ug/kg	250	46.4	1	11/02/19 08:30	11/04/19 21:21	67-66-3	W
Chloromethane	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 21:21	74-87-3	W
2-Chlorotoluene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 21:21	95-49-8	W
4-Chlorotoluene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 21:21	106-43-4	W
1,2-Dibromo-3-chloropropane	<91.2	ug/kg	250	91.2	1	11/02/19 08:30	11/04/19 21:21	96-12-8	W
Dibromochloromethane	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 21:21	124-48-1	W
1,2-Dibromoethane (EDB)	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 21:21	106-93-4	W
Dibromomethane	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 21:21	74-95-3	W
1,2-Dichlorobenzene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 21:21	95-50-1	W
1,3-Dichlorobenzene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 21:21	541-73-1	W
1,4-Dichlorobenzene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 21:21	106-46-7	W
Dichlorodifluoromethane	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 21:21	75-71-8	W
1,1-Dichloroethane	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 21:21	75-34-3	W
1,2-Dichloroethane	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 21:21	107-06-2	W
1,1-Dichloroethene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 21:21	75-35-4	W
cis-1,2-Dichloroethene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 21:21	156-59-2	W
trans-1,2-Dichloroethene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 21:21	156-60-5	W
1,2-Dichloropropane	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 21:21	78-87-5	W
1,3-Dichloropropane	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 21:21	142-28-9	W
2,2-Dichloropropane	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 21:21	594-20-7	W
1,1-Dichloropropene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 21:21	563-58-6	W
cis-1,3-Dichloropropene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 21:21	10061-01-5	W
trans-1,3-Dichloropropene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 21:21	10061-02-6	W
Diisopropyl ether	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 21:21	108-20-3	W
Ethylbenzene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 21:21	100-41-4	W
Hexachloro-1,3-butadiene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 21:21	87-68-3	W
Isopropylbenzene (Cumene)	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 21:21	98-82-8	W
p-Isopropyltoluene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 21:21	99-87-6	W
Methylene Chloride	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 21:21	75-09-2	W
Methyl-tert-butyl ether	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 21:21	1634-04-4	W
Naphthalene	<40.0	ug/kg	250	40.0	1	11/02/19 08:30	11/04/19 21:21	91-20-3	W
n-Propylbenzene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 21:21	103-65-1	W
Styrene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 21:21	100-42-5	W

## REPORT OF LABORATORY ANALYSIS

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## ANALYTICAL RESULTS

Project: 60615481 ALLOUEZ PHASE II ESA

Pace Project No.: 40198063

Sample: SP-103-18-20 Lab ID: 40198063020 Collected: 10/25/19 05:18 Received: 10/25/19 17:47 Matrix: Solid

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

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260 MSV Med Level Normal List</b>	Analytical Method: EPA 8260 Preparation Method: EPA 5035/5030B								
1,1,1,2-Tetrachloroethane	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 21:21	630-20-6	W
1,1,2,2-Tetrachloroethane	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 21:21	79-34-5	W
Tetrachloroethene	277	ug/kg	68.2	28.4	1	11/02/19 08:30	11/04/19 21:21	127-18-4	
Toluene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 21:21	108-88-3	W
1,2,3-Trichlorobenzene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 21:21	87-61-6	W
1,2,4-Trichlorobenzene	<47.6	ug/kg	250	47.6	1	11/02/19 08:30	11/04/19 21:21	120-82-1	W
1,1,1-Trichloroethane	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 21:21	71-55-6	W
1,1,2-Trichloroethane	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 21:21	79-00-5	W
Trichloroethene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 21:21	79-01-6	W
Trichlorofluoromethane	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 21:21	75-69-4	W
1,2,3-Trichloropropane	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 21:21	96-18-4	W
1,2,4-Trimethylbenzene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 21:21	95-63-6	W
1,3,5-Trimethylbenzene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 21:21	108-67-8	W
Vinyl chloride	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 21:21	75-01-4	W
Xylene (Total)	<75.0	ug/kg	180	75.0	1	11/02/19 08:30	11/04/19 21:21	1330-20-7	W
m&p-Xylene	<50.0	ug/kg	120	50.0	1	11/02/19 08:30	11/04/19 21:21	179601-23-1	W
o-Xylene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 21:21	95-47-6	W
<b>Surrogates</b>									
Dibromofluoromethane (S)	111	%	57-146		1	11/02/19 08:30	11/04/19 21:21	1868-53-7	
Toluene-d8 (S)	111	%	64-134		1	11/02/19 08:30	11/04/19 21:21	2037-26-5	
4-Bromofluorobenzene (S)	99	%	54-126		1	11/02/19 08:30	11/04/19 21:21	460-00-4	
<b>Percent Moisture</b>	Analytical Method: ASTM D2974-87								
Percent Moisture	12.0	%	0.10	0.10	1			11/04/19 18:00	

## REPORT OF LABORATORY ANALYSIS

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## ANALYTICAL RESULTS

Project: 60615481 ALLOUEZ PHASE II ESA

Pace Project No.: 40198063

Sample: SP-103-0.5-1.5 Lab ID: 40198063021 Collected: 10/25/19 05:15 Received: 10/25/19 17:47 Matrix: Solid

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

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>6010 MET ICP</b>	Analytical Method: EPA 6010 Preparation Method: EPA 3050								
Arsenic	2.1J	mg/kg	5.6	1.7	1	10/30/19 06:20	11/02/19 23:48	7440-38-2	
Barium	73.3	mg/kg	0.57	0.17	1	10/30/19 06:20	11/02/19 23:48	7440-39-3	
Cadmium	0.17J	mg/kg	0.57	0.15	1	10/30/19 06:20	11/02/19 23:48	7440-43-9	
Chromium	27.8	mg/kg	1.1	0.32	1	10/30/19 06:20	11/02/19 23:48	7440-47-3	
Lead	23.3	mg/kg	2.3	0.69	1	10/30/19 06:20	11/02/19 23:48	7439-92-1	
Selenium	<1.5	mg/kg	5.0	1.5	1	10/30/19 06:20	11/02/19 23:48	7782-49-2	
Silver	<0.71	mg/kg	2.3	0.71	2	10/30/19 06:20	11/05/19 12:59	7440-22-4	D3
<b>7471 Mercury</b>	Analytical Method: EPA 7471 Preparation Method: EPA 7471								
Mercury	0.015J	mg/kg	0.040	0.012	1	11/06/19 08:34	11/06/19 13:11	7439-97-6	
<b>8270 MSSV PAH by SIM</b>	Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3546								
Acenaphthene	<2.6	ug/kg	20.2	2.6	1	10/31/19 08:40	10/31/19 17:00	83-32-9	
Acenaphthylene	<2.5	ug/kg	20.2	2.5	1	10/31/19 08:40	10/31/19 17:00	208-96-8	
Anthracene	<2.5	ug/kg	20.2	2.5	1	10/31/19 08:40	10/31/19 17:00	120-12-7	
Benzo(a)anthracene	4.3J	ug/kg	20.2	2.6	1	10/31/19 08:40	10/31/19 17:00	56-55-3	
Benzo(a)pyrene	3.4J	ug/kg	20.2	2.3	1	10/31/19 08:40	10/31/19 17:00	50-32-8	
Benzo(b)fluoranthene	5.0J	ug/kg	20.2	2.8	1	10/31/19 08:40	10/31/19 17:00	205-99-2	
Benzo(g,h,i)perylene	3.7J	ug/kg	20.2	3.5	1	10/31/19 08:40	10/31/19 17:00	191-24-2	
Benzo(k)fluoranthene	2.8J	ug/kg	20.2	2.6	1	10/31/19 08:40	10/31/19 17:00	207-08-9	
Chrysene	4.5J	ug/kg	20.2	3.8	1	10/31/19 08:40	10/31/19 17:00	218-01-9	
Dibenz(a,h)anthracene	<2.8	ug/kg	20.2	2.8	1	10/31/19 08:40	10/31/19 17:00	53-70-3	
Fluoranthene	5.9J	ug/kg	20.2	2.4	1	10/31/19 08:40	10/31/19 17:00	206-44-0	
Fluorene	<2.4	ug/kg	20.2	2.4	1	10/31/19 08:40	10/31/19 17:00	86-73-7	
Indeno(1,2,3-cd)pyrene	<4.2	ug/kg	20.2	4.2	1	10/31/19 08:40	10/31/19 17:00	193-39-5	
1-Methylnaphthalene	<2.9	ug/kg	20.2	2.9	1	10/31/19 08:40	10/31/19 17:00	90-12-0	
2-Methylnaphthalene	<2.9	ug/kg	20.2	2.9	1	10/31/19 08:40	10/31/19 17:00	91-57-6	
Naphthalene	<2.0	ug/kg	20.2	2.0	1	10/31/19 08:40	10/31/19 17:00	91-20-3	
Phenanthrene	<2.3	ug/kg	20.2	2.3	1	10/31/19 08:40	10/31/19 17:00	85-01-8	
Pyrene	4.2J	ug/kg	20.2	3.0	1	10/31/19 08:40	10/31/19 17:00	129-00-0	
<b>Surrogates</b>									
2-Fluorobiphenyl (S)	72	%	28-99		1	10/31/19 08:40	10/31/19 17:00	321-60-8	
Terphenyl-d14 (S)	63	%	10-107		1	10/31/19 08:40	10/31/19 17:00	1718-51-0	
<b>8260 MSV Med Level Normal List</b>	Analytical Method: EPA 8260 Preparation Method: EPA 5035/5030B								
Benzene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 21:44	71-43-2	W
Bromobenzene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 21:44	108-86-1	W
Bromochloromethane	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 21:44	74-97-5	W
Bromodichloromethane	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 21:44	75-27-4	W
Bromoform	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 21:44	75-25-2	W
Bromomethane	<69.9	ug/kg	250	69.9	1	11/02/19 08:30	11/04/19 21:44	74-83-9	W
n-Butylbenzene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 21:44	104-51-8	W
sec-Butylbenzene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 21:44	135-98-8	W
tert-Butylbenzene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 21:44	98-06-6	W
Carbon tetrachloride	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 21:44	56-23-5	W

## REPORT OF LABORATORY ANALYSIS

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## ANALYTICAL RESULTS

Project: 60615481 ALLOUEZ PHASE II ESA

Pace Project No.: 40198063

Sample: SP-103-0.5-1.5 Lab ID: 40198063021 Collected: 10/25/19 05:15 Received: 10/25/19 17:47 Matrix: Solid

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

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260 MSV Med Level Normal List</b>		Analytical Method: EPA 8260 Preparation Method: EPA 5035/5030B							
Chlorobenzene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 21:44	108-90-7	W
Chloroethane	<67.0	ug/kg	250	67.0	1	11/02/19 08:30	11/04/19 21:44	75-00-3	W
Chloroform	<46.4	ug/kg	250	46.4	1	11/02/19 08:30	11/04/19 21:44	67-66-3	W
Chloromethane	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 21:44	74-87-3	W
2-Chlorotoluene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 21:44	95-49-8	W
4-Chlorotoluene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 21:44	106-43-4	W
1,2-Dibromo-3-chloropropane	<91.2	ug/kg	250	91.2	1	11/02/19 08:30	11/04/19 21:44	96-12-8	W
Dibromochloromethane	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 21:44	124-48-1	W
1,2-Dibromoethane (EDB)	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 21:44	106-93-4	W
Dibromomethane	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 21:44	74-95-3	W
1,2-Dichlorobenzene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 21:44	95-50-1	W
1,3-Dichlorobenzene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 21:44	541-73-1	W
1,4-Dichlorobenzene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 21:44	106-46-7	W
Dichlorodifluoromethane	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 21:44	75-71-8	W
1,1-Dichloroethane	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 21:44	75-34-3	W
1,2-Dichloroethane	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 21:44	107-06-2	W
1,1-Dichloroethene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 21:44	75-35-4	W
cis-1,2-Dichloroethene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 21:44	156-59-2	W
trans-1,2-Dichloroethene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 21:44	156-60-5	W
1,2-Dichloropropane	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 21:44	78-87-5	W
1,3-Dichloropropane	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 21:44	142-28-9	W
2,2-Dichloropropane	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 21:44	594-20-7	W
1,1-Dichloropropene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 21:44	563-58-6	W
cis-1,3-Dichloropropene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 21:44	10061-01-5	W
trans-1,3-Dichloropropene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 21:44	10061-02-6	W
Diisopropyl ether	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 21:44	108-20-3	W
Ethylbenzene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 21:44	100-41-4	W
Hexachloro-1,3-butadiene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 21:44	87-68-3	W
Isopropylbenzene (Cumene)	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 21:44	98-82-8	W
p-Isopropyltoluene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 21:44	99-87-6	W
Methylene Chloride	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 21:44	75-09-2	W
Methyl-tert-butyl ether	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 21:44	1634-04-4	W
Naphthalene	<40.0	ug/kg	250	40.0	1	11/02/19 08:30	11/04/19 21:44	91-20-3	W
n-Propylbenzene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 21:44	103-65-1	W
Styrene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 21:44	100-42-5	W
1,1,1,2-Tetrachloroethane	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 21:44	630-20-6	W
1,1,2,2-Tetrachloroethane	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 21:44	79-34-5	W
Tetrachloroethene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 21:44	127-18-4	W
Toluene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 21:44	108-88-3	W
1,2,3-Trichlorobenzene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 21:44	87-61-6	W
1,2,4-Trichlorobenzene	<47.6	ug/kg	250	47.6	1	11/02/19 08:30	11/04/19 21:44	120-82-1	W
1,1,1-Trichloroethane	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 21:44	71-55-6	W
1,1,2-Trichloroethane	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 21:44	79-00-5	W
Trichloroethene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 21:44	79-01-6	W
Trichlorofluoromethane	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 21:44	75-69-4	W

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## ANALYTICAL RESULTS

Project: 60615481 ALLOUEZ PHASE II ESA

Pace Project No.: 40198063

Sample: SP-103-0.5-1.5 Lab ID: 40198063021 Collected: 10/25/19 05:15 Received: 10/25/19 17:47 Matrix: Solid

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

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260 MSV Med Level Normal List</b>	Analytical Method: EPA 8260 Preparation Method: EPA 5035/5030B								
1,2,3-Trichloropropane	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 21:44	96-18-4	W
1,2,4-Trimethylbenzene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 21:44	95-63-6	W
1,3,5-Trimethylbenzene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 21:44	108-67-8	W
Vinyl chloride	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 21:44	75-01-4	W
Xylene (Total)	<75.0	ug/kg	180	75.0	1	11/02/19 08:30	11/04/19 21:44	1330-20-7	W
m&p-Xylene	<50.0	ug/kg	120	50.0	1	11/02/19 08:30	11/04/19 21:44	179601-23-1	W
o-Xylene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 21:44	95-47-6	W
<b>Surrogates</b>									
Dibromofluoromethane (S)	100	%	57-146		1	11/02/19 08:30	11/04/19 21:44	1868-53-7	
Toluene-d8 (S)	99	%	64-134		1	11/02/19 08:30	11/04/19 21:44	2037-26-5	
4-Bromofluorobenzene (S)	90	%	54-126		1	11/02/19 08:30	11/04/19 21:44	460-00-4	
<b>Percent Moisture</b>	Analytical Method: ASTM D2974-87								
Percent Moisture	17.3	%	0.10	0.10	1			11/04/19 18:00	

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## ANALYTICAL RESULTS

Project: 60615481 ALLOUEZ PHASE II ESA

Pace Project No.: 40198063

Sample: SP-103-12-14 Lab ID: 40198063022 Collected: 10/25/19 05:10 Received: 10/25/19 17:47 Matrix: Solid

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

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>6010 MET ICP</b>		Analytical Method: EPA 6010 Preparation Method: EPA 3050							
Arsenic	3.9J	mg/kg	5.5	1.7	1	10/30/19 06:20	11/02/19 23:50	7440-38-2	
Barium	55.3	mg/kg	0.57	0.17	1	10/30/19 06:20	11/02/19 23:50	7440-39-3	
Cadmium	<0.15	mg/kg	0.57	0.15	1	10/30/19 06:20	11/02/19 23:50	7440-43-9	
Chromium	21.0	mg/kg	1.1	0.32	1	10/30/19 06:20	11/02/19 23:50	7440-47-3	
Lead	4.1	mg/kg	2.3	0.68	1	10/30/19 06:20	11/02/19 23:50	7439-92-1	
Selenium	<1.5	mg/kg	5.0	1.5	1	10/30/19 06:20	11/02/19 23:50	7782-49-2	
Silver	<0.70	mg/kg	2.3	0.70	2	10/30/19 06:20	11/05/19 13:02	7440-22-4	D3
<b>7471 Mercury</b>		Analytical Method: EPA 7471 Preparation Method: EPA 7471							
Mercury	<0.012	mg/kg	0.038	0.012	1	11/06/19 08:34	11/06/19 13:18	7439-97-6	
<b>8270 MSSV PAH by SIM</b>		Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3546							
Acenaphthene	<2.5	ug/kg	19.0	2.5	1	10/31/19 08:40	10/31/19 17:17	83-32-9	
Acenaphthylene	<2.4	ug/kg	19.0	2.4	1	10/31/19 08:40	10/31/19 17:17	208-96-8	
Anthracene	<2.4	ug/kg	19.0	2.4	1	10/31/19 08:40	10/31/19 17:17	120-12-7	
Benzo(a)anthracene	<2.5	ug/kg	19.0	2.5	1	10/31/19 08:40	10/31/19 17:17	56-55-3	
Benzo(a)pyrene	<2.2	ug/kg	19.0	2.2	1	10/31/19 08:40	10/31/19 17:17	50-32-8	
Benzo(b)fluoranthene	<2.6	ug/kg	19.0	2.6	1	10/31/19 08:40	10/31/19 17:17	205-99-2	
Benzo(g,h,i)perylene	<3.3	ug/kg	19.0	3.3	1	10/31/19 08:40	10/31/19 17:17	191-24-2	
Benzo(k)fluoranthene	<2.4	ug/kg	19.0	2.4	1	10/31/19 08:40	10/31/19 17:17	207-08-9	
Chrysene	<3.6	ug/kg	19.0	3.6	1	10/31/19 08:40	10/31/19 17:17	218-01-9	
Dibenz(a,h)anthracene	<2.6	ug/kg	19.0	2.6	1	10/31/19 08:40	10/31/19 17:17	53-70-3	
Fluoranthene	<2.3	ug/kg	19.0	2.3	1	10/31/19 08:40	10/31/19 17:17	206-44-0	
Fluorene	<2.3	ug/kg	19.0	2.3	1	10/31/19 08:40	10/31/19 17:17	86-73-7	
Indeno(1,2,3-cd)pyrene	<4.0	ug/kg	19.0	4.0	1	10/31/19 08:40	10/31/19 17:17	193-39-5	
1-Methylnaphthalene	<2.8	ug/kg	19.0	2.8	1	10/31/19 08:40	10/31/19 17:17	90-12-0	
2-Methylnaphthalene	<2.8	ug/kg	19.0	2.8	1	10/31/19 08:40	10/31/19 17:17	91-57-6	
Naphthalene	<1.9	ug/kg	19.0	1.9	1	10/31/19 08:40	10/31/19 17:17	91-20-3	
Phenanthrene	<2.2	ug/kg	19.0	2.2	1	10/31/19 08:40	10/31/19 17:17	85-01-8	
Pyrene	<2.8	ug/kg	19.0	2.8	1	10/31/19 08:40	10/31/19 17:17	129-00-0	
<b>Surrogates</b>									
2-Fluorobiphenyl (S)	84	%	28-99		1	10/31/19 08:40	10/31/19 17:17	321-60-8	
Terphenyl-d14 (S)	80	%	10-107		1	10/31/19 08:40	10/31/19 17:17	1718-51-0	
<b>8260 MSV Med Level Normal List</b>		Analytical Method: EPA 8260 Preparation Method: EPA 5035/5030B							
Benzene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 22:07	71-43-2	W
Bromobenzene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 22:07	108-86-1	W
Bromochloromethane	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 22:07	74-97-5	W
Bromodichloromethane	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 22:07	75-27-4	W
Bromoform	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 22:07	75-25-2	W
Bromomethane	<69.9	ug/kg	250	69.9	1	11/02/19 08:30	11/04/19 22:07	74-83-9	W
n-Butylbenzene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 22:07	104-51-8	W
sec-Butylbenzene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 22:07	135-98-8	W
tert-Butylbenzene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 22:07	98-06-6	W
Carbon tetrachloride	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 22:07	56-23-5	W

## REPORT OF LABORATORY ANALYSIS

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## ANALYTICAL RESULTS

Project: 60615481 ALLOUEZ PHASE II ESA

Pace Project No.: 40198063

Sample: SP-103-12-14 Lab ID: 40198063022 Collected: 10/25/19 05:10 Received: 10/25/19 17:47 Matrix: Solid

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

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260 MSV Med Level Normal List</b>		Analytical Method: EPA 8260 Preparation Method: EPA 5035/5030B							
Chlorobenzene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 22:07	108-90-7	W
Chloroethane	<67.0	ug/kg	250	67.0	1	11/02/19 08:30	11/04/19 22:07	75-00-3	W
Chloroform	<46.4	ug/kg	250	46.4	1	11/02/19 08:30	11/04/19 22:07	67-66-3	W
Chloromethane	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 22:07	74-87-3	W
2-Chlorotoluene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 22:07	95-49-8	W
4-Chlorotoluene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 22:07	106-43-4	W
1,2-Dibromo-3-chloropropane	<91.2	ug/kg	250	91.2	1	11/02/19 08:30	11/04/19 22:07	96-12-8	W
Dibromochloromethane	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 22:07	124-48-1	W
1,2-Dibromoethane (EDB)	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 22:07	106-93-4	W
Dibromomethane	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 22:07	74-95-3	W
1,2-Dichlorobenzene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 22:07	95-50-1	W
1,3-Dichlorobenzene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 22:07	541-73-1	W
1,4-Dichlorobenzene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 22:07	106-46-7	W
Dichlorodifluoromethane	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 22:07	75-71-8	W
1,1-Dichloroethane	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 22:07	75-34-3	W
1,2-Dichloroethane	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 22:07	107-06-2	W
1,1-Dichloroethene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 22:07	75-35-4	W
cis-1,2-Dichloroethene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 22:07	156-59-2	W
trans-1,2-Dichloroethene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 22:07	156-60-5	W
1,2-Dichloropropane	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 22:07	78-87-5	W
1,3-Dichloropropane	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 22:07	142-28-9	W
2,2-Dichloropropane	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 22:07	594-20-7	W
1,1-Dichloropropene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 22:07	563-58-6	W
cis-1,3-Dichloropropene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 22:07	10061-01-5	W
trans-1,3-Dichloropropene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 22:07	10061-02-6	W
Diisopropyl ether	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 22:07	108-20-3	W
Ethylbenzene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 22:07	100-41-4	W
Hexachloro-1,3-butadiene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 22:07	87-68-3	W
Isopropylbenzene (Cumene)	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 22:07	98-82-8	W
p-Isopropyltoluene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 22:07	99-87-6	W
Methylene Chloride	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 22:07	75-09-2	W
Methyl-tert-butyl ether	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 22:07	1634-04-4	W
Naphthalene	<40.0	ug/kg	250	40.0	1	11/02/19 08:30	11/04/19 22:07	91-20-3	W
n-Propylbenzene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 22:07	103-65-1	W
Styrene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 22:07	100-42-5	W
1,1,1,2-Tetrachloroethane	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 22:07	630-20-6	W
1,1,2,2-Tetrachloroethane	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 22:07	79-34-5	W
Tetrachloroethene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 22:07	127-18-4	W
Toluene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 22:07	108-88-3	W
1,2,3-Trichlorobenzene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 22:07	87-61-6	W
1,2,4-Trichlorobenzene	<47.6	ug/kg	250	47.6	1	11/02/19 08:30	11/04/19 22:07	120-82-1	W
1,1,1-Trichloroethane	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 22:07	71-55-6	W
1,1,2-Trichloroethane	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 22:07	79-00-5	W
Trichloroethene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 22:07	79-01-6	W
Trichlorofluoromethane	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 22:07	75-69-4	W

## REPORT OF LABORATORY ANALYSIS

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## ANALYTICAL RESULTS

Project: 60615481 ALLOUEZ PHASE II ESA

Pace Project No.: 40198063

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Sample: SP-103-12-14      Lab ID: 40198063022      Collected: 10/25/19 05:10      Received: 10/25/19 17:47      Matrix: Solid

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

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260 MSV Med Level Normal List</b>	Analytical Method: EPA 8260 Preparation Method: EPA 5035/5030B								
1,2,3-Trichloropropane	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 22:07	96-18-4	W
1,2,4-Trimethylbenzene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 22:07	95-63-6	W
1,3,5-Trimethylbenzene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 22:07	108-67-8	W
Vinyl chloride	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 22:07	75-01-4	W
Xylene (Total)	<75.0	ug/kg	180	75.0	1	11/02/19 08:30	11/04/19 22:07	1330-20-7	W
m&p-Xylene	<50.0	ug/kg	120	50.0	1	11/02/19 08:30	11/04/19 22:07	179601-23-1	W
o-Xylene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 22:07	95-47-6	W
<b>Surrogates</b>									
Dibromofluoromethane (S)	111	%	57-146		1	11/02/19 08:30	11/04/19 22:07	1868-53-7	
Toluene-d8 (S)	114	%	64-134		1	11/02/19 08:30	11/04/19 22:07	2037-26-5	
4-Bromofluorobenzene (S)	101	%	54-126		1	11/02/19 08:30	11/04/19 22:07	460-00-4	
<b>Percent Moisture</b>	Analytical Method: ASTM D2974-87								
Percent Moisture	12.4	%	0.10	0.10	1			11/04/19 18:00	

## REPORT OF LABORATORY ANALYSIS

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## ANALYTICAL RESULTS

Project: 60615481 ALLOUEZ PHASE II ESA

Pace Project No.: 40198063

Sample: SP-104-0.5-1.5 Lab ID: 40198063023 Collected: 10/25/19 14:15 Received: 10/25/19 17:47 Matrix: Solid

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

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>6010 MET ICP</b>	Analytical Method: EPA 6010 Preparation Method: EPA 3050								
Arsenic	3.2J	mg/kg	5.8	1.7	1	10/30/19 06:20	11/02/19 23:58	7440-38-2	
Barium	63.7	mg/kg	0.59	0.18	1	10/30/19 06:20	11/02/19 23:58	7440-39-3	
Cadmium	<0.16	mg/kg	0.59	0.16	1	10/30/19 06:20	11/02/19 23:58	7440-43-9	
Chromium	20.4	mg/kg	1.2	0.33	1	10/30/19 06:20	11/02/19 23:58	7440-47-3	
Lead	5.0	mg/kg	2.4	0.71	1	10/30/19 06:20	11/02/19 23:58	7439-92-1	
Selenium	<1.5	mg/kg	5.2	1.5	1	10/30/19 06:20	11/02/19 23:58	7782-49-2	
Silver	<0.73	mg/kg	2.4	0.73	2	10/30/19 06:20	11/05/19 13:04	7440-22-4	D3
<b>7471 Mercury</b>	Analytical Method: EPA 7471 Preparation Method: EPA 7471								
Mercury	0.013J	mg/kg	0.040	0.012	1	11/06/19 08:34	11/06/19 13:20	7439-97-6	
<b>8270 MSSV PAH by SIM</b>	Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3546								
Acenaphthene	<2.6	ug/kg	19.9	2.6	1	10/31/19 08:40	11/01/19 13:11	83-32-9	
Acenaphthylene	<2.5	ug/kg	19.9	2.5	1	10/31/19 08:40	11/01/19 13:11	208-96-8	
Anthracene	<2.5	ug/kg	19.9	2.5	1	10/31/19 08:40	11/01/19 13:11	120-12-7	
Benzo(a)anthracene	6.9J	ug/kg	19.9	2.6	1	10/31/19 08:40	11/01/19 13:11	56-55-3	
Benzo(a)pyrene	15.2J	ug/kg	19.9	2.3	1	10/31/19 08:40	11/01/19 13:11	50-32-8	
Benzo(b)fluoranthene	12.3J	ug/kg	19.9	2.8	1	10/31/19 08:40	11/01/19 13:11	205-99-2	
Benzo(g,h,i)perylene	12.0J	ug/kg	19.9	3.5	1	10/31/19 08:40	11/01/19 13:11	191-24-2	
Benzo(k)fluoranthene	5.4J	ug/kg	19.9	2.5	1	10/31/19 08:40	11/01/19 13:11	207-08-9	
Chrysene	9.4J	ug/kg	19.9	3.8	1	10/31/19 08:40	11/01/19 13:11	218-01-9	
Dibenz(a,h)anthracene	4.2J	ug/kg	19.9	2.8	1	10/31/19 08:40	11/01/19 13:11	53-70-3	
Fluoranthene	6.6J	ug/kg	19.9	2.4	1	10/31/19 08:40	11/01/19 13:11	206-44-0	
Fluorene	<2.4	ug/kg	19.9	2.4	1	10/31/19 08:40	11/01/19 13:11	86-73-7	
Indeno(1,2,3-cd)pyrene	6.8J	ug/kg	19.9	4.1	1	10/31/19 08:40	11/01/19 13:11	193-39-5	
1-Methylnaphthalene	<2.9	ug/kg	19.9	2.9	1	10/31/19 08:40	11/01/19 13:11	90-12-0	
2-Methylnaphthalene	<2.9	ug/kg	19.9	2.9	1	10/31/19 08:40	11/01/19 13:11	91-57-6	
Naphthalene	<1.9	ug/kg	19.9	1.9	1	10/31/19 08:40	11/01/19 13:11	91-20-3	
Phenanthrene	<2.3	ug/kg	19.9	2.3	1	10/31/19 08:40	11/01/19 13:11	85-01-8	
Pyrene	8.3J	ug/kg	19.9	2.9	1	10/31/19 08:40	11/01/19 13:11	129-00-0	
<b>Surrogates</b>									
2-Fluorobiphenyl (S)	77	%	28-99		1	10/31/19 08:40	11/01/19 13:11	321-60-8	
Terphenyl-d14 (S)	58	%	10-107		1	10/31/19 08:40	11/01/19 13:11	1718-51-0	
<b>8260 MSV Med Level Normal List</b>	Analytical Method: EPA 8260 Preparation Method: EPA 5035/5030B								
Benzene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 22:31	71-43-2	W
Bromobenzene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 22:31	108-86-1	W
Bromochloromethane	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 22:31	74-97-5	W
Bromodichloromethane	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 22:31	75-27-4	W
Bromoform	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 22:31	75-25-2	W
Bromomethane	<69.9	ug/kg	250	69.9	1	11/02/19 08:30	11/04/19 22:31	74-83-9	W
n-Butylbenzene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 22:31	104-51-8	W
sec-Butylbenzene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 22:31	135-98-8	W
tert-Butylbenzene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 22:31	98-06-6	W
Carbon tetrachloride	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 22:31	56-23-5	W

## REPORT OF LABORATORY ANALYSIS

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## ANALYTICAL RESULTS

Project: 60615481 ALLOUEZ PHASE II ESA

Pace Project No.: 40198063

Sample: SP-104-0.5-1.5 Lab ID: 40198063023 Collected: 10/25/19 14:15 Received: 10/25/19 17:47 Matrix: Solid

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

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260 MSV Med Level Normal List</b>		Analytical Method: EPA 8260 Preparation Method: EPA 5035/5030B							
Chlorobenzene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 22:31	108-90-7	W
Chloroethane	<67.0	ug/kg	250	67.0	1	11/02/19 08:30	11/04/19 22:31	75-00-3	W
Chloroform	<46.4	ug/kg	250	46.4	1	11/02/19 08:30	11/04/19 22:31	67-66-3	W
Chloromethane	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 22:31	74-87-3	W
2-Chlorotoluene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 22:31	95-49-8	W
4-Chlorotoluene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 22:31	106-43-4	W
1,2-Dibromo-3-chloropropane	<91.2	ug/kg	250	91.2	1	11/02/19 08:30	11/04/19 22:31	96-12-8	W
Dibromochloromethane	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 22:31	124-48-1	W
1,2-Dibromoethane (EDB)	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 22:31	106-93-4	W
Dibromomethane	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 22:31	74-95-3	W
1,2-Dichlorobenzene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 22:31	95-50-1	W
1,3-Dichlorobenzene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 22:31	541-73-1	W
1,4-Dichlorobenzene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 22:31	106-46-7	W
Dichlorodifluoromethane	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 22:31	75-71-8	W
1,1-Dichloroethane	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 22:31	75-34-3	W
1,2-Dichloroethane	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 22:31	107-06-2	W
1,1-Dichloroethene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 22:31	75-35-4	W
cis-1,2-Dichloroethene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 22:31	156-59-2	W
trans-1,2-Dichloroethene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 22:31	156-60-5	W
1,2-Dichloropropane	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 22:31	78-87-5	W
1,3-Dichloropropane	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 22:31	142-28-9	W
2,2-Dichloropropane	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 22:31	594-20-7	W
1,1-Dichloropropene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 22:31	563-58-6	W
cis-1,3-Dichloropropene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 22:31	10061-01-5	W
trans-1,3-Dichloropropene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 22:31	10061-02-6	W
Diisopropyl ether	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 22:31	108-20-3	W
Ethylbenzene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 22:31	100-41-4	W
Hexachloro-1,3-butadiene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 22:31	87-68-3	W
Isopropylbenzene (Cumene)	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 22:31	98-82-8	W
p-Isopropyltoluene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 22:31	99-87-6	W
Methylene Chloride	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 22:31	75-09-2	W
Methyl-tert-butyl ether	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 22:31	1634-04-4	W
Naphthalene	<40.0	ug/kg	250	40.0	1	11/02/19 08:30	11/04/19 22:31	91-20-3	W
n-Propylbenzene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 22:31	103-65-1	W
Styrene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 22:31	100-42-5	W
1,1,1,2-Tetrachloroethane	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 22:31	630-20-6	W
1,1,2,2-Tetrachloroethane	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 22:31	79-34-5	W
Tetrachloroethene	30.1J	ug/kg	71.6	29.8	1	11/02/19 08:30	11/04/19 22:31	127-18-4	
Toluene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 22:31	108-88-3	W
1,2,3-Trichlorobenzene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 22:31	87-61-6	W
1,2,4-Trichlorobenzene	<47.6	ug/kg	250	47.6	1	11/02/19 08:30	11/04/19 22:31	120-82-1	W
1,1,1-Trichloroethane	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 22:31	71-55-6	W
1,1,2-Trichloroethane	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 22:31	79-00-5	W
Trichloroethene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 22:31	79-01-6	W
Trichlorofluoromethane	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 22:31	75-69-4	W

## REPORT OF LABORATORY ANALYSIS

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## ANALYTICAL RESULTS

Project: 60615481 ALLOUEZ PHASE II ESA

Pace Project No.: 40198063

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Sample: SP-104-0.5-1.5      Lab ID: 40198063023      Collected: 10/25/19 14:15      Received: 10/25/19 17:47      Matrix: Solid

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

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260 MSV Med Level Normal List</b>	Analytical Method: EPA 8260 Preparation Method: EPA 5035/5030B								
1,2,3-Trichloropropane	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 22:31	96-18-4	W
1,2,4-Trimethylbenzene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 22:31	95-63-6	W
1,3,5-Trimethylbenzene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 22:31	108-67-8	W
Vinyl chloride	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 22:31	75-01-4	W
Xylene (Total)	<75.0	ug/kg	180	75.0	1	11/02/19 08:30	11/04/19 22:31	1330-20-7	W
m&p-Xylene	<50.0	ug/kg	120	50.0	1	11/02/19 08:30	11/04/19 22:31	179601-23-1	W
o-Xylene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 22:31	95-47-6	W
<b>Surrogates</b>									
Dibromofluoromethane (S)	111	%	57-146		1	11/02/19 08:30	11/04/19 22:31	1868-53-7	
Toluene-d8 (S)	112	%	64-134		1	11/02/19 08:30	11/04/19 22:31	2037-26-5	
4-Bromofluorobenzene (S)	100	%	54-126		1	11/02/19 08:30	11/04/19 22:31	460-00-4	
<b>Percent Moisture</b>	Analytical Method: ASTM D2974-87								
Percent Moisture	<b>16.2</b>	%	0.10	0.10	1			11/04/19 18:01	

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## ANALYTICAL RESULTS

Project: 60615481 ALLOUEZ PHASE II ESA

Pace Project No.: 40198063

Sample: SP-104-18-19 Lab ID: 40198063024 Collected: 10/25/19 14:22 Received: 10/25/19 17:47 Matrix: Solid

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

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>6010 MET ICP</b>	Analytical Method: EPA 6010 Preparation Method: EPA 3050								
Arsenic	<2.9	mg/kg	9.7	2.9	2	10/30/19 06:20	11/06/19 09:58	7440-38-2	D3
Barium	6.4	mg/kg	0.50	0.15	1	10/30/19 06:20	11/03/19 00:00	7440-39-3	
Cadmium	<0.13	mg/kg	0.50	0.13	1	10/30/19 06:20	11/03/19 00:00	7440-43-9	
Chromium	4.8	mg/kg	0.99	0.28	1	10/30/19 06:20	11/03/19 00:00	7440-47-3	
Lead	1.0J	mg/kg	2.0	0.59	1	10/30/19 06:20	11/03/19 00:00	7439-92-1	
Selenium	<1.3	mg/kg	4.3	1.3	1	10/30/19 06:20	11/03/19 00:00	7782-49-2	
Silver	<0.30	mg/kg	0.99	0.30	1	10/30/19 06:20	11/03/19 00:00	7440-22-4	
<b>7471 Mercury</b>	Analytical Method: EPA 7471 Preparation Method: EPA 7471								
Mercury	<0.011	mg/kg	0.036	0.011	1	11/06/19 09:30	11/06/19 13:31	7439-97-6	
<b>8270 MSSV PAH by SIM</b>	Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3546								
Acenaphthene	<2.3	ug/kg	17.4	2.3	1	10/31/19 08:40	10/31/19 17:35	83-32-9	
Acenaphthylene	<2.2	ug/kg	17.4	2.2	1	10/31/19 08:40	10/31/19 17:35	208-96-8	
Anthracene	<2.2	ug/kg	17.4	2.2	1	10/31/19 08:40	10/31/19 17:35	120-12-7	
Benzo(a)anthracene	<2.2	ug/kg	17.4	2.2	1	10/31/19 08:40	10/31/19 17:35	56-55-3	
Benzo(a)pyrene	<2.0	ug/kg	17.4	2.0	1	10/31/19 08:40	10/31/19 17:35	50-32-8	
Benzo(b)fluoranthene	<2.4	ug/kg	17.4	2.4	1	10/31/19 08:40	10/31/19 17:35	205-99-2	
Benzo(g,h,i)perylene	<3.0	ug/kg	17.4	3.0	1	10/31/19 08:40	10/31/19 17:35	191-24-2	
Benzo(k)fluoranthene	<2.2	ug/kg	17.4	2.2	1	10/31/19 08:40	10/31/19 17:35	207-08-9	
Chrysene	<3.3	ug/kg	17.4	3.3	1	10/31/19 08:40	10/31/19 17:35	218-01-9	
Dibenz(a,h)anthracene	<2.4	ug/kg	17.4	2.4	1	10/31/19 08:40	10/31/19 17:35	53-70-3	
Fluoranthene	<2.1	ug/kg	17.4	2.1	1	10/31/19 08:40	10/31/19 17:35	206-44-0	
Fluorene	<2.1	ug/kg	17.4	2.1	1	10/31/19 08:40	10/31/19 17:35	86-73-7	
Indeno(1,2,3-cd)pyrene	<3.6	ug/kg	17.4	3.6	1	10/31/19 08:40	10/31/19 17:35	193-39-5	
1-Methylnaphthalene	<2.5	ug/kg	17.4	2.5	1	10/31/19 08:40	10/31/19 17:35	90-12-0	
2-Methylnaphthalene	<2.5	ug/kg	17.4	2.5	1	10/31/19 08:40	10/31/19 17:35	91-57-6	
Naphthalene	<1.7	ug/kg	17.4	1.7	1	10/31/19 08:40	10/31/19 17:35	91-20-3	
Phenanthrene	<2.0	ug/kg	17.4	2.0	1	10/31/19 08:40	10/31/19 17:35	85-01-8	
Pyrene	<2.6	ug/kg	17.4	2.6	1	10/31/19 08:40	10/31/19 17:35	129-00-0	
<b>Surrogates</b>									
2-Fluorobiphenyl (S)	67	%	28-99		1	10/31/19 08:40	10/31/19 17:35	321-60-8	
Terphenyl-d14 (S)	62	%	10-107		1	10/31/19 08:40	10/31/19 17:35	1718-51-0	
<b>8260 MSV Med Level Normal List</b>	Analytical Method: EPA 8260 Preparation Method: EPA 5035/5030B								
Benzene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 22:54	71-43-2	W
Bromobenzene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 22:54	108-86-1	W
Bromochloromethane	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 22:54	74-97-5	W
Bromodichloromethane	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 22:54	75-27-4	W
Bromoform	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 22:54	75-25-2	W
Bromomethane	<69.9	ug/kg	250	69.9	1	11/02/19 08:30	11/04/19 22:54	74-83-9	W
n-Butylbenzene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 22:54	104-51-8	W
sec-Butylbenzene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 22:54	135-98-8	W
tert-Butylbenzene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 22:54	98-06-6	W
Carbon tetrachloride	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 22:54	56-23-5	W

## REPORT OF LABORATORY ANALYSIS

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## ANALYTICAL RESULTS

Project: 60615481 ALLOUEZ PHASE II ESA

Pace Project No.: 40198063

Sample: SP-104-18-19 Lab ID: 40198063024 Collected: 10/25/19 14:22 Received: 10/25/19 17:47 Matrix: Solid

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

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260 MSV Med Level Normal List</b>		Analytical Method: EPA 8260 Preparation Method: EPA 5035/5030B							
Chlorobenzene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 22:54	108-90-7	W
Chloroethane	<67.0	ug/kg	250	67.0	1	11/02/19 08:30	11/04/19 22:54	75-00-3	W
Chloroform	<46.4	ug/kg	250	46.4	1	11/02/19 08:30	11/04/19 22:54	67-66-3	W
Chloromethane	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 22:54	74-87-3	W
2-Chlorotoluene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 22:54	95-49-8	W
4-Chlorotoluene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 22:54	106-43-4	W
1,2-Dibromo-3-chloropropane	<91.2	ug/kg	250	91.2	1	11/02/19 08:30	11/04/19 22:54	96-12-8	W
Dibromochloromethane	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 22:54	124-48-1	W
1,2-Dibromoethane (EDB)	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 22:54	106-93-4	W
Dibromomethane	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 22:54	74-95-3	W
1,2-Dichlorobenzene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 22:54	95-50-1	W
1,3-Dichlorobenzene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 22:54	541-73-1	W
1,4-Dichlorobenzene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 22:54	106-46-7	W
Dichlorodifluoromethane	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 22:54	75-71-8	W
1,1-Dichloroethane	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 22:54	75-34-3	W
1,2-Dichloroethane	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 22:54	107-06-2	W
1,1-Dichloroethene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 22:54	75-35-4	W
cis-1,2-Dichloroethene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 22:54	156-59-2	W
trans-1,2-Dichloroethene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 22:54	156-60-5	W
1,2-Dichloropropane	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 22:54	78-87-5	W
1,3-Dichloropropane	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 22:54	142-28-9	W
2,2-Dichloropropane	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 22:54	594-20-7	W
1,1-Dichloropropene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 22:54	563-58-6	W
cis-1,3-Dichloropropene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 22:54	10061-01-5	W
trans-1,3-Dichloropropene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 22:54	10061-02-6	W
Diisopropyl ether	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 22:54	108-20-3	W
Ethylbenzene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 22:54	100-41-4	W
Hexachloro-1,3-butadiene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 22:54	87-68-3	W
Isopropylbenzene (Cumene)	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 22:54	98-82-8	W
p-Isopropyltoluene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 22:54	99-87-6	W
Methylene Chloride	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 22:54	75-09-2	W
Methyl-tert-butyl ether	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 22:54	1634-04-4	W
Naphthalene	<40.0	ug/kg	250	40.0	1	11/02/19 08:30	11/04/19 22:54	91-20-3	W
n-Propylbenzene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 22:54	103-65-1	W
Styrene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 22:54	100-42-5	W
1,1,1,2-Tetrachloroethane	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 22:54	630-20-6	W
1,1,2,2-Tetrachloroethane	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 22:54	79-34-5	W
Tetrachloroethene	63.7	ug/kg	62.4	26.0	1	11/02/19 08:30	11/04/19 22:54	127-18-4	
Toluene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 22:54	108-88-3	W
1,2,3-Trichlorobenzene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 22:54	87-61-6	W
1,2,4-Trichlorobenzene	<47.6	ug/kg	250	47.6	1	11/02/19 08:30	11/04/19 22:54	120-82-1	W
1,1,1-Trichloroethane	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 22:54	71-55-6	W
1,1,2-Trichloroethane	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 22:54	79-00-5	W
Trichloroethene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 22:54	79-01-6	W
Trichlorofluoromethane	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 22:54	75-69-4	W

## REPORT OF LABORATORY ANALYSIS

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## ANALYTICAL RESULTS

Project: 60615481 ALLOUEZ PHASE II ESA

Pace Project No.: 40198063

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Sample: SP-104-18-19      Lab ID: 40198063024      Collected: 10/25/19 14:22      Received: 10/25/19 17:47      Matrix: Solid

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

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260 MSV Med Level Normal List</b>	Analytical Method: EPA 8260 Preparation Method: EPA 5035/5030B								
1,2,3-Trichloropropane	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 22:54	96-18-4	W
1,2,4-Trimethylbenzene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 22:54	95-63-6	W
1,3,5-Trimethylbenzene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 22:54	108-67-8	W
Vinyl chloride	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 22:54	75-01-4	W
Xylene (Total)	<75.0	ug/kg	180	75.0	1	11/02/19 08:30	11/04/19 22:54	1330-20-7	W
m&p-Xylene	<50.0	ug/kg	120	50.0	1	11/02/19 08:30	11/04/19 22:54	179601-23-1	W
o-Xylene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 22:54	95-47-6	W
<b>Surrogates</b>									
Dibromofluoromethane (S)	116	%	57-146		1	11/02/19 08:30	11/04/19 22:54	1868-53-7	
Toluene-d8 (S)	119	%	64-134		1	11/02/19 08:30	11/04/19 22:54	2037-26-5	
4-Bromofluorobenzene (S)	103	%	54-126		1	11/02/19 08:30	11/04/19 22:54	460-00-4	
<b>Percent Moisture</b>	Analytical Method: ASTM D2974-87								
Percent Moisture	3.8	%	0.10	0.10	1			11/04/19 18:01	

## REPORT OF LABORATORY ANALYSIS

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## ANALYTICAL RESULTS

Project: 60615481 ALLOUEZ PHASE II ESA

Pace Project No.: 40198063

Sample: SP-105-0.5-1.5 Lab ID: 40198063025 Collected: 10/25/19 11:15 Received: 10/25/19 17:47 Matrix: Solid

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

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>6010 MET ICP</b>		Analytical Method: EPA 6010 Preparation Method: EPA 3050							
Arsenic	2.1J	mg/kg	5.9	1.8	1	10/30/19 06:20	11/03/19 00:03	7440-38-2	
Barium	110	mg/kg	0.60	0.18	1	10/30/19 06:20	11/03/19 00:03	7440-39-3	
Cadmium	0.17J	mg/kg	0.60	0.16	1	10/30/19 06:20	11/03/19 00:03	7440-43-9	
Chromium	35.9	mg/kg	1.2	0.33	1	10/30/19 06:20	11/03/19 00:03	7440-47-3	
Lead	9.1	mg/kg	2.4	0.72	1	10/30/19 06:20	11/03/19 00:03	7439-92-1	
Selenium	<1.6	mg/kg	5.2	1.6	1	10/30/19 06:20	11/03/19 00:03	7782-49-2	
Silver	<0.74	mg/kg	2.4	0.74	2	10/30/19 06:20	11/05/19 13:07	7440-22-4	D3
<b>7471 Mercury</b>		Analytical Method: EPA 7471 Preparation Method: EPA 7471							
Mercury	0.022J	mg/kg	0.037	0.011	1	11/06/19 09:30	11/06/19 13:38	7439-97-6	
<b>8270 MSSV PAH by SIM</b>		Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3546							
Acenaphthene	<2.6	ug/kg	20.0	2.6	1	11/01/19 09:00	11/01/19 14:55	83-32-9	
Acenaphthylene	<2.5	ug/kg	20.0	2.5	1	11/01/19 09:00	11/01/19 14:55	208-96-8	
Anthracene	<2.5	ug/kg	20.0	2.5	1	11/01/19 09:00	11/01/19 14:55	120-12-7	
Benzo(a)anthracene	<2.6	ug/kg	20.0	2.6	1	11/01/19 09:00	11/01/19 14:55	56-55-3	
Benzo(a)pyrene	<2.3	ug/kg	20.0	2.3	1	11/01/19 09:00	11/01/19 14:55	50-32-8	
Benzo(b)fluoranthene	<2.8	ug/kg	20.0	2.8	1	11/01/19 09:00	11/01/19 14:55	205-99-2	
Benzo(g,h,i)perylene	<3.5	ug/kg	20.0	3.5	1	11/01/19 09:00	11/01/19 14:55	191-24-2	
Benzo(k)fluoranthene	<2.6	ug/kg	20.0	2.6	1	11/01/19 09:00	11/01/19 14:55	207-08-9	
Chrysene	<3.8	ug/kg	20.0	3.8	1	11/01/19 09:00	11/01/19 14:55	218-01-9	
Dibenz(a,h)anthracene	<2.8	ug/kg	20.0	2.8	1	11/01/19 09:00	11/01/19 14:55	53-70-3	
Fluoranthene	<2.4	ug/kg	20.0	2.4	1	11/01/19 09:00	11/01/19 14:55	206-44-0	
Fluorene	<2.4	ug/kg	20.0	2.4	1	11/01/19 09:00	11/01/19 14:55	86-73-7	
Indeno(1,2,3-cd)pyrene	<4.2	ug/kg	20.0	4.2	1	11/01/19 09:00	11/01/19 14:55	193-39-5	
1-Methylnaphthalene	<2.9	ug/kg	20.0	2.9	1	11/01/19 09:00	11/01/19 14:55	90-12-0	
2-Methylnaphthalene	<2.9	ug/kg	20.0	2.9	1	11/01/19 09:00	11/01/19 14:55	91-57-6	
Naphthalene	<2.0	ug/kg	20.0	2.0	1	11/01/19 09:00	11/01/19 14:55	91-20-3	
Phenanthrene	<2.3	ug/kg	20.0	2.3	1	11/01/19 09:00	11/01/19 14:55	85-01-8	
Pyrene	<2.9	ug/kg	20.0	2.9	1	11/01/19 09:00	11/01/19 14:55	129-00-0	
<b>Surrogates</b>									
2-Fluorobiphenyl (S)	72	%	28-99		1	11/01/19 09:00	11/01/19 14:55	321-60-8	
Terphenyl-d14 (S)	60	%	10-107		1	11/01/19 09:00	11/01/19 14:55	1718-51-0	
<b>8260 MSV Med Level Normal List</b>		Analytical Method: EPA 8260 Preparation Method: EPA 5035/5030B							
Benzene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 23:17	71-43-2	W
Bromobenzene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 23:17	108-86-1	W
Bromochloromethane	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 23:17	74-97-5	W
Bromodichloromethane	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 23:17	75-27-4	W
Bromoform	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 23:17	75-25-2	W
Bromomethane	<69.9	ug/kg	250	69.9	1	11/02/19 08:30	11/04/19 23:17	74-83-9	W
n-Butylbenzene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 23:17	104-51-8	W
sec-Butylbenzene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 23:17	135-98-8	W
tert-Butylbenzene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 23:17	98-06-6	W
Carbon tetrachloride	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 23:17	56-23-5	W

## REPORT OF LABORATORY ANALYSIS

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## ANALYTICAL RESULTS

Project: 60615481 ALLOUEZ PHASE II ESA

Pace Project No.: 40198063

Sample: SP-105-0.5-1.5 Lab ID: 40198063025 Collected: 10/25/19 11:15 Received: 10/25/19 17:47 Matrix: Solid

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

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260 MSV Med Level Normal List</b>		Analytical Method: EPA 8260 Preparation Method: EPA 5035/5030B							
Chlorobenzene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 23:17	108-90-7	W
Chloroethane	<67.0	ug/kg	250	67.0	1	11/02/19 08:30	11/04/19 23:17	75-00-3	W
Chloroform	<46.4	ug/kg	250	46.4	1	11/02/19 08:30	11/04/19 23:17	67-66-3	W
Chloromethane	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 23:17	74-87-3	W
2-Chlorotoluene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 23:17	95-49-8	W
4-Chlorotoluene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 23:17	106-43-4	W
1,2-Dibromo-3-chloropropane	<91.2	ug/kg	250	91.2	1	11/02/19 08:30	11/04/19 23:17	96-12-8	W
Dibromochloromethane	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 23:17	124-48-1	W
1,2-Dibromoethane (EDB)	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 23:17	106-93-4	W
Dibromomethane	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 23:17	74-95-3	W
1,2-Dichlorobenzene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 23:17	95-50-1	W
1,3-Dichlorobenzene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 23:17	541-73-1	W
1,4-Dichlorobenzene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 23:17	106-46-7	W
Dichlorodifluoromethane	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 23:17	75-71-8	W
1,1-Dichloroethane	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 23:17	75-34-3	W
1,2-Dichloroethane	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 23:17	107-06-2	W
1,1-Dichloroethene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 23:17	75-35-4	W
cis-1,2-Dichloroethene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 23:17	156-59-2	W
trans-1,2-Dichloroethene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 23:17	156-60-5	W
1,2-Dichloropropane	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 23:17	78-87-5	W
1,3-Dichloropropane	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 23:17	142-28-9	W
2,2-Dichloropropane	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 23:17	594-20-7	W
1,1-Dichloropropene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 23:17	563-58-6	W
cis-1,3-Dichloropropene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 23:17	10061-01-5	W
trans-1,3-Dichloropropene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 23:17	10061-02-6	W
Diisopropyl ether	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 23:17	108-20-3	W
Ethylbenzene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 23:17	100-41-4	W
Hexachloro-1,3-butadiene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 23:17	87-68-3	W
Isopropylbenzene (Cumene)	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 23:17	98-82-8	W
p-Isopropyltoluene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 23:17	99-87-6	W
Methylene Chloride	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 23:17	75-09-2	W
Methyl-tert-butyl ether	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 23:17	1634-04-4	W
Naphthalene	<40.0	ug/kg	250	40.0	1	11/02/19 08:30	11/04/19 23:17	91-20-3	W
n-Propylbenzene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 23:17	103-65-1	W
Styrene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 23:17	100-42-5	W
1,1,1,2-Tetrachloroethane	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 23:17	630-20-6	W
1,1,2,2-Tetrachloroethane	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 23:17	79-34-5	W
Tetrachloroethene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 23:17	127-18-4	W
Toluene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 23:17	108-88-3	W
1,2,3-Trichlorobenzene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 23:17	87-61-6	W
1,2,4-Trichlorobenzene	<47.6	ug/kg	250	47.6	1	11/02/19 08:30	11/04/19 23:17	120-82-1	W
1,1,1-Trichloroethane	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 23:17	71-55-6	W
1,1,2-Trichloroethane	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 23:17	79-00-5	W
Trichloroethene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 23:17	79-01-6	W
Trichlorofluoromethane	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 23:17	75-69-4	W

## REPORT OF LABORATORY ANALYSIS

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## ANALYTICAL RESULTS

Project: 60615481 ALLOUEZ PHASE II ESA

Pace Project No.: 40198063

Sample: SP-105-0.5-1.5 Lab ID: 40198063025 Collected: 10/25/19 11:15 Received: 10/25/19 17:47 Matrix: Solid

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

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260 MSV Med Level Normal List</b>	Analytical Method: EPA 8260 Preparation Method: EPA 5035/5030B								
1,2,3-Trichloropropane	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 23:17	96-18-4	W
1,2,4-Trimethylbenzene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 23:17	95-63-6	W
1,3,5-Trimethylbenzene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 23:17	108-67-8	W
Vinyl chloride	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 23:17	75-01-4	W
Xylene (Total)	<75.0	ug/kg	180	75.0	1	11/02/19 08:30	11/04/19 23:17	1330-20-7	W
m&p-Xylene	<50.0	ug/kg	120	50.0	1	11/02/19 08:30	11/04/19 23:17	179601-23-1	W
o-Xylene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 23:17	95-47-6	W
<b>Surrogates</b>									
Dibromofluoromethane (S)	106	%	57-146		1	11/02/19 08:30	11/04/19 23:17	1868-53-7	
Toluene-d8 (S)	112	%	64-134		1	11/02/19 08:30	11/04/19 23:17	2037-26-5	
4-Bromofluorobenzene (S)	99	%	54-126		1	11/02/19 08:30	11/04/19 23:17	460-00-4	
<b>Percent Moisture</b>	Analytical Method: ASTM D2974-87								
Percent Moisture	16.7	%	0.10	0.10	1			11/04/19 18:01	

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## ANALYTICAL RESULTS

Project: 60615481 ALLOUEZ PHASE II ESA

Pace Project No.: 40198063

Sample: SP-105-20-21 Lab ID: 40198063026 Collected: 10/25/19 13:57 Received: 10/25/19 17:47 Matrix: Solid

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

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>6010 MET ICP</b>	Analytical Method: EPA 6010 Preparation Method: EPA 3050								
Arsenic	3.4J	mg/kg	5.7	1.7	1	10/30/19 06:39	11/01/19 16:36	7440-38-2	
Barium	6.2	mg/kg	0.58	0.17	1	10/30/19 06:39	11/01/19 16:36	7440-39-3	
Cadmium	<0.15	mg/kg	0.58	0.15	1	10/30/19 06:39	11/01/19 16:36	7440-43-9	
Chromium	3.5	mg/kg	1.2	0.32	1	10/30/19 06:39	11/01/19 16:36	7440-47-3	
Lead	0.72J	mg/kg	2.3	0.70	1	10/30/19 06:39	11/01/19 16:36	7439-92-1	
Selenium	<1.5	mg/kg	5.1	1.5	1	10/30/19 06:39	11/01/19 16:36	7782-49-2	
Silver	<0.36	mg/kg	1.2	0.36	1	10/30/19 06:39	11/01/19 16:36	7440-22-4	
<b>7471 Mercury</b>	Analytical Method: EPA 7471 Preparation Method: EPA 7471								
Mercury	<0.011	mg/kg	0.037	0.011	1	11/06/19 09:30	11/06/19 13:45	7439-97-6	
<b>8270 MSSV PAH by SIM</b>	Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3546								
Acenaphthene	<2.6	ug/kg	19.9	2.6	1	11/01/19 09:00	11/01/19 15:12	83-32-9	
Acenaphthylene	<2.5	ug/kg	19.9	2.5	1	11/01/19 09:00	11/01/19 15:12	208-96-8	
Anthracene	<2.5	ug/kg	19.9	2.5	1	11/01/19 09:00	11/01/19 15:12	120-12-7	
Benzo(a)anthracene	<2.6	ug/kg	19.9	2.6	1	11/01/19 09:00	11/01/19 15:12	56-55-3	
Benzo(a)pyrene	<2.3	ug/kg	19.9	2.3	1	11/01/19 09:00	11/01/19 15:12	50-32-8	
Benzo(b)fluoranthene	<2.8	ug/kg	19.9	2.8	1	11/01/19 09:00	11/01/19 15:12	205-99-2	
Benzo(g,h,i)perylene	<3.5	ug/kg	19.9	3.5	1	11/01/19 09:00	11/01/19 15:12	191-24-2	
Benzo(k)fluoranthene	<2.5	ug/kg	19.9	2.5	1	11/01/19 09:00	11/01/19 15:12	207-08-9	
Chrysene	<3.8	ug/kg	19.9	3.8	1	11/01/19 09:00	11/01/19 15:12	218-01-9	
Dibenz(a,h)anthracene	<2.8	ug/kg	19.9	2.8	1	11/01/19 09:00	11/01/19 15:12	53-70-3	
Fluoranthene	<2.4	ug/kg	19.9	2.4	1	11/01/19 09:00	11/01/19 15:12	206-44-0	
Fluorene	<2.4	ug/kg	19.9	2.4	1	11/01/19 09:00	11/01/19 15:12	86-73-7	
Indeno(1,2,3-cd)pyrene	<4.1	ug/kg	19.9	4.1	1	11/01/19 09:00	11/01/19 15:12	193-39-5	
1-Methylnaphthalene	<2.9	ug/kg	19.9	2.9	1	11/01/19 09:00	11/01/19 15:12	90-12-0	
2-Methylnaphthalene	<2.9	ug/kg	19.9	2.9	1	11/01/19 09:00	11/01/19 15:12	91-57-6	
Naphthalene	<1.9	ug/kg	19.9	1.9	1	11/01/19 09:00	11/01/19 15:12	91-20-3	
Phenanthrene	<2.3	ug/kg	19.9	2.3	1	11/01/19 09:00	11/01/19 15:12	85-01-8	
Pyrene	<2.9	ug/kg	19.9	2.9	1	11/01/19 09:00	11/01/19 15:12	129-00-0	
<b>Surrogates</b>									
2-Fluorobiphenyl (S)	81	%	28-99		1	11/01/19 09:00	11/01/19 15:12	321-60-8	
Terphenyl-d14 (S)	72	%	10-107		1	11/01/19 09:00	11/01/19 15:12	1718-51-0	
<b>8260 MSV Med Level Normal List</b>	Analytical Method: EPA 8260 Preparation Method: EPA 5035/5030B								
Benzene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 23:40	71-43-2	W
Bromobenzene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 23:40	108-86-1	W
Bromochloromethane	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 23:40	74-97-5	W
Bromodichloromethane	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 23:40	75-27-4	W
Bromoform	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 23:40	75-25-2	W
Bromomethane	<69.9	ug/kg	250	69.9	1	11/02/19 08:30	11/04/19 23:40	74-83-9	W
n-Butylbenzene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 23:40	104-51-8	W
sec-Butylbenzene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 23:40	135-98-8	W
tert-Butylbenzene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 23:40	98-06-6	W
Carbon tetrachloride	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 23:40	56-23-5	W

## REPORT OF LABORATORY ANALYSIS

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## ANALYTICAL RESULTS

Project: 60615481 ALLOUEZ PHASE II ESA

Pace Project No.: 40198063

Sample: SP-105-20-21 Lab ID: 40198063026 Collected: 10/25/19 13:57 Received: 10/25/19 17:47 Matrix: Solid

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

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260 MSV Med Level Normal List</b>		Analytical Method: EPA 8260 Preparation Method: EPA 5035/5030B							
Chlorobenzene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 23:40	108-90-7	W
Chloroethane	<67.0	ug/kg	250	67.0	1	11/02/19 08:30	11/04/19 23:40	75-00-3	W
Chloroform	<46.4	ug/kg	250	46.4	1	11/02/19 08:30	11/04/19 23:40	67-66-3	W
Chloromethane	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 23:40	74-87-3	W
2-Chlorotoluene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 23:40	95-49-8	W
4-Chlorotoluene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 23:40	106-43-4	W
1,2-Dibromo-3-chloropropane	<91.2	ug/kg	250	91.2	1	11/02/19 08:30	11/04/19 23:40	96-12-8	W
Dibromochloromethane	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 23:40	124-48-1	W
1,2-Dibromoethane (EDB)	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 23:40	106-93-4	W
Dibromomethane	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 23:40	74-95-3	W
1,2-Dichlorobenzene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 23:40	95-50-1	W
1,3-Dichlorobenzene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 23:40	541-73-1	W
1,4-Dichlorobenzene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 23:40	106-46-7	W
Dichlorodifluoromethane	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 23:40	75-71-8	W
1,1-Dichloroethane	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 23:40	75-34-3	W
1,2-Dichloroethane	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 23:40	107-06-2	W
1,1-Dichloroethene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 23:40	75-35-4	W
cis-1,2-Dichloroethene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 23:40	156-59-2	W
trans-1,2-Dichloroethene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 23:40	156-60-5	W
1,2-Dichloropropane	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 23:40	78-87-5	W
1,3-Dichloropropane	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 23:40	142-28-9	W
2,2-Dichloropropane	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 23:40	594-20-7	W
1,1-Dichloropropene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 23:40	563-58-6	W
cis-1,3-Dichloropropene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 23:40	10061-01-5	W
trans-1,3-Dichloropropene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 23:40	10061-02-6	W
Diisopropyl ether	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 23:40	108-20-3	W
Ethylbenzene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 23:40	100-41-4	W
Hexachloro-1,3-butadiene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 23:40	87-68-3	W
Isopropylbenzene (Cumene)	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 23:40	98-82-8	W
p-Isopropyltoluene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 23:40	99-87-6	W
Methylene Chloride	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 23:40	75-09-2	W
Methyl-tert-butyl ether	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 23:40	1634-04-4	W
Naphthalene	<40.0	ug/kg	250	40.0	1	11/02/19 08:30	11/04/19 23:40	91-20-3	W
n-Propylbenzene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 23:40	103-65-1	W
Styrene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 23:40	100-42-5	W
1,1,1,2-Tetrachloroethane	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 23:40	630-20-6	W
1,1,2,2-Tetrachloroethane	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 23:40	79-34-5	W
Tetrachloroethene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 23:40	127-18-4	W
Toluene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 23:40	108-88-3	W
1,2,3-Trichlorobenzene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 23:40	87-61-6	W
1,2,4-Trichlorobenzene	<47.6	ug/kg	250	47.6	1	11/02/19 08:30	11/04/19 23:40	120-82-1	W
1,1,1-Trichloroethane	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 23:40	71-55-6	W
1,1,2-Trichloroethane	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 23:40	79-00-5	W
Trichloroethene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 23:40	79-01-6	W
Trichlorofluoromethane	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 23:40	75-69-4	W

## REPORT OF LABORATORY ANALYSIS

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## ANALYTICAL RESULTS

Project: 60615481 ALLOUEZ PHASE II ESA

Pace Project No.: 40198063

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Sample: SP-105-20-21      Lab ID: 40198063026      Collected: 10/25/19 13:57      Received: 10/25/19 17:47      Matrix: Solid

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

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260 MSV Med Level Normal List</b>	Analytical Method: EPA 8260 Preparation Method: EPA 5035/5030B								
1,2,3-Trichloropropane	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 23:40	96-18-4	W
1,2,4-Trimethylbenzene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 23:40	95-63-6	W
1,3,5-Trimethylbenzene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 23:40	108-67-8	W
Vinyl chloride	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 23:40	75-01-4	W
Xylene (Total)	<75.0	ug/kg	180	75.0	1	11/02/19 08:30	11/04/19 23:40	1330-20-7	W
m&p-Xylene	<50.0	ug/kg	120	50.0	1	11/02/19 08:30	11/04/19 23:40	179601-23-1	W
o-Xylene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/04/19 23:40	95-47-6	W
<b>Surrogates</b>									
Dibromofluoromethane (S)	104	%	57-146		1	11/02/19 08:30	11/04/19 23:40	1868-53-7	
Toluene-d8 (S)	104	%	64-134		1	11/02/19 08:30	11/04/19 23:40	2037-26-5	
4-Bromofluorobenzene (S)	93	%	54-126		1	11/02/19 08:30	11/04/19 23:40	460-00-4	
<b>Percent Moisture</b>	Analytical Method: ASTM D2974-87								
Percent Moisture	16.1	%	0.10	0.10	1			11/04/19 19:02	

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## ANALYTICAL RESULTS

Project: 60615481 ALLOUEZ PHASE II ESA

Pace Project No.: 40198063

Sample: SP-106-0.5-1.5 Lab ID: 40198063027 Collected: 10/25/19 13:23 Received: 10/25/19 17:47 Matrix: Solid

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

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>6010 MET ICP</b>	Analytical Method: EPA 6010 Preparation Method: EPA 3050								
Arsenic	2.7J	mg/kg	5.5	1.7	1	10/30/19 06:39	11/01/19 16:38	7440-38-2	
Barium	47.8	mg/kg	0.56	0.17	1	10/30/19 06:39	11/01/19 16:38	7440-39-3	
Cadmium	<0.15	mg/kg	0.56	0.15	1	10/30/19 06:39	11/01/19 16:38	7440-43-9	
Chromium	18.4	mg/kg	1.1	0.31	1	10/30/19 06:39	11/01/19 16:38	7440-47-3	
Lead	8.6	mg/kg	2.3	0.68	1	10/30/19 06:39	11/01/19 16:38	7439-92-1	
Selenium	<1.5	mg/kg	4.9	1.5	1	10/30/19 06:39	11/01/19 16:38	7782-49-2	
Silver	<0.35	mg/kg	1.1	0.35	1	10/30/19 06:39	11/01/19 16:38	7440-22-4	
<b>7471 Mercury</b>	Analytical Method: EPA 7471 Preparation Method: EPA 7471								
Mercury	0.015J	mg/kg	0.039	0.012	1	11/06/19 09:30	11/06/19 13:48	7439-97-6	
<b>8270 MSSV PAH by SIM</b>	Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3546								
Acenaphthene	<2.6	ug/kg	19.8	2.6	1	11/01/19 09:00	11/01/19 15:29	83-32-9	
Acenaphthylene	<2.5	ug/kg	19.8	2.5	1	11/01/19 09:00	11/01/19 15:29	208-96-8	
Anthracene	<2.5	ug/kg	19.8	2.5	1	11/01/19 09:00	11/01/19 15:29	120-12-7	
Benzo(a)anthracene	<2.6	ug/kg	19.8	2.6	1	11/01/19 09:00	11/01/19 15:29	56-55-3	
Benzo(a)pyrene	<2.3	ug/kg	19.8	2.3	1	11/01/19 09:00	11/01/19 15:29	50-32-8	
Benzo(b)fluoranthene	<2.8	ug/kg	19.8	2.8	1	11/01/19 09:00	11/01/19 15:29	205-99-2	
Benzo(g,h,i)perylene	<3.5	ug/kg	19.8	3.5	1	11/01/19 09:00	11/01/19 15:29	191-24-2	
Benzo(k)fluoranthene	<2.5	ug/kg	19.8	2.5	1	11/01/19 09:00	11/01/19 15:29	207-08-9	
Chrysene	<3.7	ug/kg	19.8	3.7	1	11/01/19 09:00	11/01/19 15:29	218-01-9	
Dibenz(a,h)anthracene	<2.7	ug/kg	19.8	2.7	1	11/01/19 09:00	11/01/19 15:29	53-70-3	
Fluoranthene	<2.3	ug/kg	19.8	2.3	1	11/01/19 09:00	11/01/19 15:29	206-44-0	
Fluorene	<2.4	ug/kg	19.8	2.4	1	11/01/19 09:00	11/01/19 15:29	86-73-7	
Indeno(1,2,3-cd)pyrene	<4.1	ug/kg	19.8	4.1	1	11/01/19 09:00	11/01/19 15:29	193-39-5	
1-Methylnaphthalene	<2.9	ug/kg	19.8	2.9	1	11/01/19 09:00	11/01/19 15:29	90-12-0	
2-Methylnaphthalene	<2.9	ug/kg	19.8	2.9	1	11/01/19 09:00	11/01/19 15:29	91-57-6	
Naphthalene	2.1J	ug/kg	19.8	1.9	1	11/01/19 09:00	11/01/19 15:29	91-20-3	
Phenanthrene	<2.3	ug/kg	19.8	2.3	1	11/01/19 09:00	11/01/19 15:29	85-01-8	
Pyrene	<2.9	ug/kg	19.8	2.9	1	11/01/19 09:00	11/01/19 15:29	129-00-0	
<b>Surrogates</b>									
2-Fluorobiphenyl (S)	82	%	28-99		1	11/01/19 09:00	11/01/19 15:29	321-60-8	
Terphenyl-d14 (S)	67	%	10-107		1	11/01/19 09:00	11/01/19 15:29	1718-51-0	
<b>8260 MSV Med Level Normal List</b>	Analytical Method: EPA 8260 Preparation Method: EPA 5035/5030B								
Benzene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/05/19 00:03	71-43-2	W
Bromobenzene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/05/19 00:03	108-86-1	W
Bromochloromethane	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/05/19 00:03	74-97-5	W
Bromodichloromethane	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/05/19 00:03	75-27-4	W
Bromoform	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/05/19 00:03	75-25-2	W
Bromomethane	<69.9	ug/kg	250	69.9	1	11/02/19 08:30	11/05/19 00:03	74-83-9	W
n-Butylbenzene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/05/19 00:03	104-51-8	W
sec-Butylbenzene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/05/19 00:03	135-98-8	W
tert-Butylbenzene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/05/19 00:03	98-06-6	W
Carbon tetrachloride	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/05/19 00:03	56-23-5	W

## REPORT OF LABORATORY ANALYSIS

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## ANALYTICAL RESULTS

Project: 60615481 ALLOUEZ PHASE II ESA

Pace Project No.: 40198063

Sample: SP-106-0.5-1.5 Lab ID: 40198063027 Collected: 10/25/19 13:23 Received: 10/25/19 17:47 Matrix: Solid

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

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260 MSV Med Level Normal List</b>	Analytical Method: EPA 8260 Preparation Method: EPA 5035/5030B								
Chlorobenzene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/05/19 00:03	108-90-7	W
Chloroethane	<67.0	ug/kg	250	67.0	1	11/02/19 08:30	11/05/19 00:03	75-00-3	W
Chloroform	<46.4	ug/kg	250	46.4	1	11/02/19 08:30	11/05/19 00:03	67-66-3	W
Chloromethane	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/05/19 00:03	74-87-3	W
2-Chlorotoluene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/05/19 00:03	95-49-8	W
4-Chlorotoluene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/05/19 00:03	106-43-4	W
1,2-Dibromo-3-chloropropane	<91.2	ug/kg	250	91.2	1	11/02/19 08:30	11/05/19 00:03	96-12-8	W
Dibromochloromethane	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/05/19 00:03	124-48-1	W
1,2-Dibromoethane (EDB)	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/05/19 00:03	106-93-4	W
Dibromomethane	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/05/19 00:03	74-95-3	W
1,2-Dichlorobenzene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/05/19 00:03	95-50-1	W
1,3-Dichlorobenzene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/05/19 00:03	541-73-1	W
1,4-Dichlorobenzene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/05/19 00:03	106-46-7	W
Dichlorodifluoromethane	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/05/19 00:03	75-71-8	W
1,1-Dichloroethane	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/05/19 00:03	75-34-3	W
1,2-Dichloroethane	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/05/19 00:03	107-06-2	W
1,1-Dichloroethene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/05/19 00:03	75-35-4	W
cis-1,2-Dichloroethene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/05/19 00:03	156-59-2	W
trans-1,2-Dichloroethene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/05/19 00:03	156-60-5	W
1,2-Dichloropropane	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/05/19 00:03	78-87-5	W
1,3-Dichloropropane	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/05/19 00:03	142-28-9	W
2,2-Dichloropropane	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/05/19 00:03	594-20-7	W
1,1-Dichloropropene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/05/19 00:03	563-58-6	W
cis-1,3-Dichloropropene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/05/19 00:03	10061-01-5	W
trans-1,3-Dichloropropene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/05/19 00:03	10061-02-6	W
Diisopropyl ether	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/05/19 00:03	108-20-3	W
Ethylbenzene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/05/19 00:03	100-41-4	W
Hexachloro-1,3-butadiene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/05/19 00:03	87-68-3	W
Isopropylbenzene (Cumene)	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/05/19 00:03	98-82-8	W
p-Isopropyltoluene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/05/19 00:03	99-87-6	W
Methylene Chloride	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/05/19 00:03	75-09-2	W
Methyl-tert-butyl ether	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/05/19 00:03	1634-04-4	W
Naphthalene	<40.0	ug/kg	250	40.0	1	11/02/19 08:30	11/05/19 00:03	91-20-3	W
n-Propylbenzene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/05/19 00:03	103-65-1	W
Styrene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/05/19 00:03	100-42-5	W
1,1,1,2-Tetrachloroethane	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/05/19 00:03	630-20-6	W
1,1,2,2-Tetrachloroethane	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/05/19 00:03	79-34-5	W
Tetrachloroethene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/05/19 00:03	127-18-4	W
Toluene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/05/19 00:03	108-88-3	W
1,2,3-Trichlorobenzene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/05/19 00:03	87-61-6	W
1,2,4-Trichlorobenzene	<47.6	ug/kg	250	47.6	1	11/02/19 08:30	11/05/19 00:03	120-82-1	W
1,1,1-Trichloroethane	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/05/19 00:03	71-55-6	W
1,1,2-Trichloroethane	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/05/19 00:03	79-00-5	W
Trichloroethene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/05/19 00:03	79-01-6	W
Trichlorofluoromethane	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/05/19 00:03	75-69-4	W

## REPORT OF LABORATORY ANALYSIS

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## ANALYTICAL RESULTS

Project: 60615481 ALLOUEZ PHASE II ESA

Pace Project No.: 40198063

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Sample: SP-106-0.5-1.5      Lab ID: 40198063027      Collected: 10/25/19 13:23      Received: 10/25/19 17:47      Matrix: Solid

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

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260 MSV Med Level Normal List</b>	Analytical Method: EPA 8260 Preparation Method: EPA 5035/5030B								
1,2,3-Trichloropropane	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/05/19 00:03	96-18-4	W
1,2,4-Trimethylbenzene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/05/19 00:03	95-63-6	W
1,3,5-Trimethylbenzene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/05/19 00:03	108-67-8	W
Vinyl chloride	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/05/19 00:03	75-01-4	W
Xylene (Total)	<75.0	ug/kg	180	75.0	1	11/02/19 08:30	11/05/19 00:03	1330-20-7	W
m&p-Xylene	<50.0	ug/kg	120	50.0	1	11/02/19 08:30	11/05/19 00:03	179601-23-1	W
o-Xylene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/05/19 00:03	95-47-6	W
<b>Surrogates</b>									
Dibromofluoromethane (S)	104	%	57-146		1	11/02/19 08:30	11/05/19 00:03	1868-53-7	
Toluene-d8 (S)	106	%	64-134		1	11/02/19 08:30	11/05/19 00:03	2037-26-5	
4-Bromofluorobenzene (S)	93	%	54-126		1	11/02/19 08:30	11/05/19 00:03	460-00-4	
<b>Percent Moisture</b>	Analytical Method: ASTM D2974-87								
Percent Moisture	15.9	%	0.10	0.10	1			11/04/19 19:02	

## REPORT OF LABORATORY ANALYSIS

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## ANALYTICAL RESULTS

Project: 60615481 ALLOUEZ PHASE II ESA

Pace Project No.: 40198063

Sample: SP-106-10-12 Lab ID: 40198063028 Collected: 10/25/19 13:35 Received: 10/25/19 17:47 Matrix: Solid

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

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>6010 MET ICP</b>	Analytical Method: EPA 6010 Preparation Method: EPA 3050								
Arsenic	<7.1	mg/kg	23.8	7.1	5	10/30/19 06:39	11/01/19 16:40	7440-38-2	D3
Barium	5.9	mg/kg	0.49	0.15	1	10/30/19 06:39	11/01/19 16:43	7440-39-3	
Cadmium	<0.13	mg/kg	0.49	0.13	1	10/30/19 06:39	11/01/19 16:43	7440-43-9	
Chromium	5.2	mg/kg	0.97	0.27	1	10/30/19 06:39	11/01/19 16:43	7440-47-3	
Lead	0.99J	mg/kg	1.9	0.58	1	10/30/19 06:39	11/01/19 16:43	7439-92-1	
Selenium	<1.3	mg/kg	4.3	1.3	1	10/30/19 06:39	11/01/19 16:43	7782-49-2	
Silver	<0.30	mg/kg	0.97	0.30	1	10/30/19 06:39	11/01/19 16:43	7440-22-4	
<b>7471 Mercury</b>	Analytical Method: EPA 7471 Preparation Method: EPA 7471								
Mercury	0.012J	mg/kg	0.035	0.010	1	11/06/19 09:30	11/06/19 13:50	7439-97-6	
<b>8270 MSSV PAH by SIM</b>	Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3546								
Acenaphthene	<2.2	ug/kg	17.0	2.2	1	11/01/19 09:00	11/01/19 15:47	83-32-9	
Acenaphthylene	<2.1	ug/kg	17.0	2.1	1	11/01/19 09:00	11/01/19 15:47	208-96-8	
Anthracene	<2.1	ug/kg	17.0	2.1	1	11/01/19 09:00	11/01/19 15:47	120-12-7	
Benzo(a)anthracene	<2.2	ug/kg	17.0	2.2	1	11/01/19 09:00	11/01/19 15:47	56-55-3	
Benzo(a)pyrene	<1.9	ug/kg	17.0	1.9	1	11/01/19 09:00	11/01/19 15:47	50-32-8	
Benzo(b)fluoranthene	<2.4	ug/kg	17.0	2.4	1	11/01/19 09:00	11/01/19 15:47	205-99-2	
Benzo(g,h,i)perylene	<3.0	ug/kg	17.0	3.0	1	11/01/19 09:00	11/01/19 15:47	191-24-2	
Benzo(k)fluoranthene	<2.2	ug/kg	17.0	2.2	1	11/01/19 09:00	11/01/19 15:47	207-08-9	
Chrysene	<3.2	ug/kg	17.0	3.2	1	11/01/19 09:00	11/01/19 15:47	218-01-9	
Dibenz(a,h)anthracene	<2.4	ug/kg	17.0	2.4	1	11/01/19 09:00	11/01/19 15:47	53-70-3	
Fluoranthene	<2.0	ug/kg	17.0	2.0	1	11/01/19 09:00	11/01/19 15:47	206-44-0	
Fluorene	<2.0	ug/kg	17.0	2.0	1	11/01/19 09:00	11/01/19 15:47	86-73-7	
Indeno(1,2,3-cd)pyrene	<3.5	ug/kg	17.0	3.5	1	11/01/19 09:00	11/01/19 15:47	193-39-5	
1-Methylnaphthalene	<2.5	ug/kg	17.0	2.5	1	11/01/19 09:00	11/01/19 15:47	90-12-0	
2-Methylnaphthalene	<2.5	ug/kg	17.0	2.5	1	11/01/19 09:00	11/01/19 15:47	91-57-6	
Naphthalene	<1.7	ug/kg	17.0	1.7	1	11/01/19 09:00	11/01/19 15:47	91-20-3	
Phenanthrene	<1.9	ug/kg	17.0	1.9	1	11/01/19 09:00	11/01/19 15:47	85-01-8	
Pyrene	<2.5	ug/kg	17.0	2.5	1	11/01/19 09:00	11/01/19 15:47	129-00-0	
<b>Surrogates</b>									
2-Fluorobiphenyl (S)	88	%	28-99		1	11/01/19 09:00	11/01/19 15:47	321-60-8	
Terphenyl-d14 (S)	74	%	10-107		1	11/01/19 09:00	11/01/19 15:47	1718-51-0	
<b>8260 MSV Med Level Normal List</b>	Analytical Method: EPA 8260 Preparation Method: EPA 5035/5030B								
Benzene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/05/19 00:49	71-43-2	W
Bromobenzene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/05/19 00:49	108-86-1	W
Bromochloromethane	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/05/19 00:49	74-97-5	W
Bromodichloromethane	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/05/19 00:49	75-27-4	W
Bromoform	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/05/19 00:49	75-25-2	W
Bromomethane	<69.9	ug/kg	250	69.9	1	11/02/19 08:30	11/05/19 00:49	74-83-9	W
n-Butylbenzene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/05/19 00:49	104-51-8	W
sec-Butylbenzene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/05/19 00:49	135-98-8	W
tert-Butylbenzene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/05/19 00:49	98-06-6	W
Carbon tetrachloride	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/05/19 00:49	56-23-5	W

## REPORT OF LABORATORY ANALYSIS

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## ANALYTICAL RESULTS

Project: 60615481 ALLOUEZ PHASE II ESA

Pace Project No.: 40198063

Sample: SP-106-10-12 Lab ID: 40198063028 Collected: 10/25/19 13:35 Received: 10/25/19 17:47 Matrix: Solid

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

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260 MSV Med Level Normal List</b>		Analytical Method: EPA 8260 Preparation Method: EPA 5035/5030B							
Chlorobenzene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/05/19 00:49	108-90-7	W
Chloroethane	<67.0	ug/kg	250	67.0	1	11/02/19 08:30	11/05/19 00:49	75-00-3	W
Chloroform	<46.4	ug/kg	250	46.4	1	11/02/19 08:30	11/05/19 00:49	67-66-3	W
Chloromethane	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/05/19 00:49	74-87-3	W
2-Chlorotoluene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/05/19 00:49	95-49-8	W
4-Chlorotoluene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/05/19 00:49	106-43-4	W
1,2-Dibromo-3-chloropropane	<91.2	ug/kg	250	91.2	1	11/02/19 08:30	11/05/19 00:49	96-12-8	W
Dibromochloromethane	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/05/19 00:49	124-48-1	W
1,2-Dibromoethane (EDB)	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/05/19 00:49	106-93-4	W
Dibromomethane	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/05/19 00:49	74-95-3	W
1,2-Dichlorobenzene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/05/19 00:49	95-50-1	W
1,3-Dichlorobenzene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/05/19 00:49	541-73-1	W
1,4-Dichlorobenzene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/05/19 00:49	106-46-7	W
Dichlorodifluoromethane	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/05/19 00:49	75-71-8	W
1,1-Dichloroethane	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/05/19 00:49	75-34-3	W
1,2-Dichloroethane	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/05/19 00:49	107-06-2	W
1,1-Dichloroethene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/05/19 00:49	75-35-4	W
cis-1,2-Dichloroethene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/05/19 00:49	156-59-2	W
trans-1,2-Dichloroethene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/05/19 00:49	156-60-5	W
1,2-Dichloropropane	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/05/19 00:49	78-87-5	W
1,3-Dichloropropane	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/05/19 00:49	142-28-9	W
2,2-Dichloropropane	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/05/19 00:49	594-20-7	W
1,1-Dichloropropene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/05/19 00:49	563-58-6	W
cis-1,3-Dichloropropene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/05/19 00:49	10061-01-5	W
trans-1,3-Dichloropropene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/05/19 00:49	10061-02-6	W
Diisopropyl ether	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/05/19 00:49	108-20-3	W
Ethylbenzene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/05/19 00:49	100-41-4	W
Hexachloro-1,3-butadiene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/05/19 00:49	87-68-3	W
Isopropylbenzene (Cumene)	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/05/19 00:49	98-82-8	W
p-Isopropyltoluene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/05/19 00:49	99-87-6	W
Methylene Chloride	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/05/19 00:49	75-09-2	W
Methyl-tert-butyl ether	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/05/19 00:49	1634-04-4	W
Naphthalene	<40.0	ug/kg	250	40.0	1	11/02/19 08:30	11/05/19 00:49	91-20-3	W
n-Propylbenzene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/05/19 00:49	103-65-1	W
Styrene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/05/19 00:49	100-42-5	W
1,1,1,2-Tetrachloroethane	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/05/19 00:49	630-20-6	W
1,1,2,2-Tetrachloroethane	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/05/19 00:49	79-34-5	W
Tetrachloroethene	64.9	ug/kg	61.1	25.5	1	11/02/19 08:30	11/05/19 00:49	127-18-4	
Toluene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/05/19 00:49	108-88-3	W
1,2,3-Trichlorobenzene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/05/19 00:49	87-61-6	W
1,2,4-Trichlorobenzene	<47.6	ug/kg	250	47.6	1	11/02/19 08:30	11/05/19 00:49	120-82-1	W
1,1,1-Trichloroethane	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/05/19 00:49	71-55-6	W
1,1,2-Trichloroethane	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/05/19 00:49	79-00-5	W
Trichloroethene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/05/19 00:49	79-01-6	W
Trichlorofluoromethane	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/05/19 00:49	75-69-4	W

## REPORT OF LABORATORY ANALYSIS

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## ANALYTICAL RESULTS

Project: 60615481 ALLOUEZ PHASE II ESA

Pace Project No.: 40198063

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Sample: SP-106-10-12      Lab ID: 40198063028      Collected: 10/25/19 13:35      Received: 10/25/19 17:47      Matrix: Solid

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

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260 MSV Med Level Normal List</b>	Analytical Method: EPA 8260 Preparation Method: EPA 5035/5030B								
1,2,3-Trichloropropane	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/05/19 00:49	96-18-4	W
1,2,4-Trimethylbenzene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/05/19 00:49	95-63-6	W
1,3,5-Trimethylbenzene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/05/19 00:49	108-67-8	W
Vinyl chloride	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/05/19 00:49	75-01-4	W
Xylene (Total)	<75.0	ug/kg	180	75.0	1	11/02/19 08:30	11/05/19 00:49	1330-20-7	W
m&p-Xylene	<50.0	ug/kg	120	50.0	1	11/02/19 08:30	11/05/19 00:49	179601-23-1	W
o-Xylene	<25.0	ug/kg	60.0	25.0	1	11/02/19 08:30	11/05/19 00:49	95-47-6	W
<b>Surrogates</b>									
Dibromofluoromethane (S)	105	%	57-146		1	11/02/19 08:30	11/05/19 00:49	1868-53-7	
Toluene-d8 (S)	109	%	64-134		1	11/02/19 08:30	11/05/19 00:49	2037-26-5	
4-Bromofluorobenzene (S)	96	%	54-126		1	11/02/19 08:30	11/05/19 00:49	460-00-4	
<b>Percent Moisture</b>	Analytical Method: ASTM D2974-87								
Percent Moisture	<b>1.8</b>	%	0.10	0.10	1			11/04/19 19:02	

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## ANALYTICAL RESULTS

Project: 60615481 ALLOUEZ PHASE II ESA

Pace Project No.: 40198063

Sample: SP-106-18-19 Lab ID: 40198063029 Collected: 10/25/19 13:44 Received: 10/25/19 17:47 Matrix: Solid

*Results reported on a "wet-weight" basis*

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260 MSV Med Level Normal List</b>		Analytical Method: EPA 8260 Preparation Method: EPA 5035/5030B							
Benzene	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/04/19 23:42	71-43-2	W
Bromobenzene	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/04/19 23:42	108-86-1	W
Bromoform	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/04/19 23:42	74-97-5	W
Bromochloromethane	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/04/19 23:42	75-27-4	W
Bromodichloromethane	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/04/19 23:42	75-25-2	W
Bromomethane	<69.9	ug/kg	250	69.9	1	11/04/19 10:15	11/04/19 23:42	74-83-9	W
n-Butylbenzene	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/04/19 23:42	104-51-8	W
sec-Butylbenzene	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/04/19 23:42	135-98-8	W
tert-Butylbenzene	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/04/19 23:42	98-06-6	W
Carbon tetrachloride	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/04/19 23:42	56-23-5	W
Chlorobenzene	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/04/19 23:42	108-90-7	W
Chloroethane	<67.0	ug/kg	250	67.0	1	11/04/19 10:15	11/04/19 23:42	75-00-3	W
Chloroform	<46.4	ug/kg	250	46.4	1	11/04/19 10:15	11/04/19 23:42	67-66-3	W
Chloromethane	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/04/19 23:42	74-87-3	W
2-Chlorotoluene	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/04/19 23:42	95-49-8	W
4-Chlorotoluene	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/04/19 23:42	106-43-4	W
1,2-Dibromo-3-chloropropane	<91.2	ug/kg	250	91.2	1	11/04/19 10:15	11/04/19 23:42	96-12-8	W
Dibromochloromethane	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/04/19 23:42	124-48-1	W
1,2-Dibromoethane (EDB)	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/04/19 23:42	106-93-4	W
Dibromomethane	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/04/19 23:42	74-95-3	W
1,2-Dichlorobenzene	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/04/19 23:42	95-50-1	W
1,3-Dichlorobenzene	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/04/19 23:42	541-73-1	W
1,4-Dichlorobenzene	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/04/19 23:42	106-46-7	W
Dichlorodifluoromethane	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/04/19 23:42	75-71-8	W
1,1-Dichloroethane	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/04/19 23:42	75-34-3	W
1,2-Dichloroethane	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/04/19 23:42	107-06-2	W
1,1-Dichloroethene	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/04/19 23:42	75-35-4	W
cis-1,2-Dichloroethene	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/04/19 23:42	156-59-2	W
trans-1,2-Dichloroethene	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/04/19 23:42	156-60-5	W
1,2-Dichloropropane	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/04/19 23:42	78-87-5	W
1,3-Dichloropropane	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/04/19 23:42	142-28-9	W
2,2-Dichloropropane	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/04/19 23:42	594-20-7	W
1,1-Dichloropropene	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/04/19 23:42	563-58-6	W
cis-1,3-Dichloropropene	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/04/19 23:42	10061-01-5	W
trans-1,3-Dichloropropene	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/04/19 23:42	10061-02-6	W
Diisopropyl ether	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/04/19 23:42	108-20-3	W
Ethylbenzene	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/04/19 23:42	100-41-4	W
Hexachloro-1,3-butadiene	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/04/19 23:42	87-68-3	W
Isopropylbenzene (Cumene)	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/04/19 23:42	98-82-8	W
p-Isopropyltoluene	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/04/19 23:42	99-87-6	W
Methylene Chloride	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/04/19 23:42	75-09-2	W
Methyl-tert-butyl ether	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/04/19 23:42	1634-04-4	W
Naphthalene	<40.0	ug/kg	250	40.0	1	11/04/19 10:15	11/04/19 23:42	91-20-3	W
n-Propylbenzene	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/04/19 23:42	103-65-1	W
Styrene	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/04/19 23:42	100-42-5	W

## REPORT OF LABORATORY ANALYSIS

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## ANALYTICAL RESULTS

Project: 60615481 ALLOUEZ PHASE II ESA

Pace Project No.: 40198063

Sample: SP-106-18-19 Lab ID: 40198063029 Collected: 10/25/19 13:44 Received: 10/25/19 17:47 Matrix: Solid

*Results reported on a "wet-weight" basis*

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260 MSV Med Level Normal List</b>		Analytical Method: EPA 8260 Preparation Method: EPA 5035/5030B							
1,1,1,2-Tetrachloroethane	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/04/19 23:42	630-20-6	W
1,1,2,2-Tetrachloroethane	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/04/19 23:42	79-34-5	W
Tetrachloroethene	59.4J	ug/kg	60.0	25.0	1	11/04/19 10:15	11/04/19 23:42	127-18-4	
Toluene	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/04/19 23:42	108-88-3	W
1,2,3-Trichlorobenzene	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/04/19 23:42	87-61-6	W
1,2,4-Trichlorobenzene	<47.6	ug/kg	250	47.6	1	11/04/19 10:15	11/04/19 23:42	120-82-1	W
1,1,1-Trichloroethane	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/04/19 23:42	71-55-6	W
1,1,2-Trichloroethane	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/04/19 23:42	79-00-5	W
Trichloroethene	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/04/19 23:42	79-01-6	W
Trichlorofluoromethane	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/04/19 23:42	75-69-4	W
1,2,3-Trichloropropane	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/04/19 23:42	96-18-4	W
1,2,4-Trimethylbenzene	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/04/19 23:42	95-63-6	W
1,3,5-Trimethylbenzene	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/04/19 23:42	108-67-8	W
Vinyl chloride	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/04/19 23:42	75-01-4	W
Xylene (Total)	<75.0	ug/kg	180	75.0	1	11/04/19 10:15	11/04/19 23:42	1330-20-7	W
m&p-Xylene	<50.0	ug/kg	120	50.0	1	11/04/19 10:15	11/04/19 23:42	179601-23-1	W
o-Xylene	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/04/19 23:42	95-47-6	W
<b>Surrogates</b>									
Dibromofluoromethane (S)	102	%	57-146		1	11/04/19 10:15	11/04/19 23:42	1868-53-7	
Toluene-d8 (S)	107	%	64-134		1	11/04/19 10:15	11/04/19 23:42	2037-26-5	
4-Bromofluorobenzene (S)	94	%	54-126		1	11/04/19 10:15	11/04/19 23:42	460-00-4	

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## ANALYTICAL RESULTS

Project: 60615481 ALLOUEZ PHASE II ESA

Pace Project No.: 40198063

Sample: SP-108-0.5-1.5 Lab ID: 40198063030 Collected: 10/25/19 15:27 Received: 10/25/19 17:47 Matrix: Solid

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

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>6010 MET ICP</b>		Analytical Method: EPA 6010 Preparation Method: EPA 3050							
Arsenic	<3.4	mg/kg	11.3	3.4	2	10/30/19 06:39	11/05/19 13:09	7440-38-2	D3
Barium	93.2	mg/kg	0.58	0.17	1	10/30/19 06:39	11/01/19 16:45	7440-39-3	
Cadmium	<0.31	mg/kg	1.2	0.31	2	10/30/19 06:39	11/05/19 13:09	7440-43-9	D3
Chromium	29.2	mg/kg	1.2	0.32	1	10/30/19 06:39	11/01/19 16:45	7440-47-3	
Lead	78.9	mg/kg	4.6	1.4	2	10/30/19 06:39	11/05/19 13:09	7439-92-1	
Selenium	<3.0	mg/kg	10.1	3.0	2	10/30/19 06:39	11/05/19 13:09	7782-49-2	D3
Silver	<0.71	mg/kg	2.3	0.71	2	10/30/19 06:39	11/05/19 13:09	7440-22-4	D3
<b>7471 Mercury</b>		Analytical Method: EPA 7471 Preparation Method: EPA 7471							
Mercury	0.035J	mg/kg	0.040	0.012	1	11/06/19 09:30	11/06/19 13:52	7439-97-6	
<b>8270 MSSV PAH by SIM</b>		Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3546							
Acenaphthene	<2.6	ug/kg	20.2	2.6	1	11/01/19 09:00	11/01/19 16:04	83-32-9	
Acenaphthylene	<2.5	ug/kg	20.2	2.5	1	11/01/19 09:00	11/01/19 16:04	208-96-8	
Anthracene	3.2J	ug/kg	20.2	2.5	1	11/01/19 09:00	11/01/19 16:04	120-12-7	
Benzo(a)anthracene	7.8J	ug/kg	20.2	2.6	1	11/01/19 09:00	11/01/19 16:04	56-55-3	
Benzo(a)pyrene	7.9J	ug/kg	20.2	2.3	1	11/01/19 09:00	11/01/19 16:04	50-32-8	
Benzo(b)fluoranthene	12.8J	ug/kg	20.2	2.8	1	11/01/19 09:00	11/01/19 16:04	205-99-2	
Benzo(g,h,i)perylene	6.9J	ug/kg	20.2	3.5	1	11/01/19 09:00	11/01/19 16:04	191-24-2	
Benzo(k)fluoranthene	4.7J	ug/kg	20.2	2.6	1	11/01/19 09:00	11/01/19 16:04	207-08-9	
Chrysene	10.4J	ug/kg	20.2	3.8	1	11/01/19 09:00	11/01/19 16:04	218-01-9	
Dibenz(a,h)anthracene	<2.8	ug/kg	20.2	2.8	1	11/01/19 09:00	11/01/19 16:04	53-70-3	
Fluoranthene	14.7J	ug/kg	20.2	2.4	1	11/01/19 09:00	11/01/19 16:04	206-44-0	
Fluorene	<2.4	ug/kg	20.2	2.4	1	11/01/19 09:00	11/01/19 16:04	86-73-7	
Indeno(1,2,3-cd)pyrene	5.1J	ug/kg	20.2	4.2	1	11/01/19 09:00	11/01/19 16:04	193-39-5	
1-Methylnaphthalene	11.4J	ug/kg	20.2	3.0	1	11/01/19 09:00	11/01/19 16:04	90-12-0	
2-Methylnaphthalene	14.6J	ug/kg	20.2	3.0	1	11/01/19 09:00	11/01/19 16:04	91-57-6	
Naphthalene	8.3J	ug/kg	20.2	2.0	1	11/01/19 09:00	11/01/19 16:04	91-20-3	
Phenanthrene	10.9J	ug/kg	20.2	2.3	1	11/01/19 09:00	11/01/19 16:04	85-01-8	
Pyrene	11.1J	ug/kg	20.2	3.0	1	11/01/19 09:00	11/01/19 16:04	129-00-0	
<b>Surrogates</b>									
2-Fluorobiphenyl (S)	77	%	28-99		1	11/01/19 09:00	11/01/19 16:04	321-60-8	
Terphenyl-d14 (S)	63	%	10-107		1	11/01/19 09:00	11/01/19 16:04	1718-51-0	
<b>8260 MSV Med Level Normal List</b>		Analytical Method: EPA 8260 Preparation Method: EPA 5035/5030B							
Benzene	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/05/19 00:05	71-43-2	W
Bromobenzene	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/05/19 00:05	108-86-1	W
Bromochloromethane	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/05/19 00:05	74-97-5	W
Bromodichloromethane	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/05/19 00:05	75-27-4	W
Bromoform	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/05/19 00:05	75-25-2	W
Bromomethane	<69.9	ug/kg	250	69.9	1	11/04/19 10:15	11/05/19 00:05	74-83-9	W
n-Butylbenzene	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/05/19 00:05	104-51-8	W
sec-Butylbenzene	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/05/19 00:05	135-98-8	W
tert-Butylbenzene	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/05/19 00:05	98-06-6	W
Carbon tetrachloride	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/05/19 00:05	56-23-5	W

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## ANALYTICAL RESULTS

Project: 60615481 ALLOUEZ PHASE II ESA

Pace Project No.: 40198063

Sample: SP-108-0.5-1.5 Lab ID: 40198063030 Collected: 10/25/19 15:27 Received: 10/25/19 17:47 Matrix: Solid

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

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260 MSV Med Level Normal List</b>		Analytical Method: EPA 8260 Preparation Method: EPA 5035/5030B							
Chlorobenzene	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/05/19 00:05	108-90-7	W
Chloroethane	<67.0	ug/kg	250	67.0	1	11/04/19 10:15	11/05/19 00:05	75-00-3	W
Chloroform	<46.4	ug/kg	250	46.4	1	11/04/19 10:15	11/05/19 00:05	67-66-3	W
Chloromethane	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/05/19 00:05	74-87-3	W
2-Chlorotoluene	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/05/19 00:05	95-49-8	W
4-Chlorotoluene	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/05/19 00:05	106-43-4	W
1,2-Dibromo-3-chloropropane	<91.2	ug/kg	250	91.2	1	11/04/19 10:15	11/05/19 00:05	96-12-8	W
Dibromochloromethane	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/05/19 00:05	124-48-1	W
1,2-Dibromoethane (EDB)	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/05/19 00:05	106-93-4	W
Dibromomethane	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/05/19 00:05	74-95-3	W
1,2-Dichlorobenzene	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/05/19 00:05	95-50-1	W
1,3-Dichlorobenzene	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/05/19 00:05	541-73-1	W
1,4-Dichlorobenzene	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/05/19 00:05	106-46-7	W
Dichlorodifluoromethane	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/05/19 00:05	75-71-8	W
1,1-Dichloroethane	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/05/19 00:05	75-34-3	W
1,2-Dichloroethane	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/05/19 00:05	107-06-2	W
1,1-Dichloroethene	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/05/19 00:05	75-35-4	W
cis-1,2-Dichloroethene	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/05/19 00:05	156-59-2	W
trans-1,2-Dichloroethene	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/05/19 00:05	156-60-5	W
1,2-Dichloropropane	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/05/19 00:05	78-87-5	W
1,3-Dichloropropane	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/05/19 00:05	142-28-9	W
2,2-Dichloropropane	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/05/19 00:05	594-20-7	W
1,1-Dichloropropene	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/05/19 00:05	563-58-6	W
cis-1,3-Dichloropropene	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/05/19 00:05	10061-01-5	W
trans-1,3-Dichloropropene	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/05/19 00:05	10061-02-6	W
Diisopropyl ether	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/05/19 00:05	108-20-3	W
Ethylbenzene	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/05/19 00:05	100-41-4	W
Hexachloro-1,3-butadiene	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/05/19 00:05	87-68-3	W
Isopropylbenzene (Cumene)	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/05/19 00:05	98-82-8	W
p-Isopropyltoluene	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/05/19 00:05	99-87-6	W
Methylene Chloride	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/05/19 00:05	75-09-2	W
Methyl-tert-butyl ether	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/05/19 00:05	1634-04-4	W
Naphthalene	<40.0	ug/kg	250	40.0	1	11/04/19 10:15	11/05/19 00:05	91-20-3	W
n-Propylbenzene	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/05/19 00:05	103-65-1	W
Styrene	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/05/19 00:05	100-42-5	W
1,1,1,2-Tetrachloroethane	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/05/19 00:05	630-20-6	W
1,1,2,2-Tetrachloroethane	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/05/19 00:05	79-34-5	W
Tetrachloroethene	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/05/19 00:05	127-18-4	W
Toluene	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/05/19 00:05	108-88-3	W
1,2,3-Trichlorobenzene	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/05/19 00:05	87-61-6	W
1,2,4-Trichlorobenzene	<47.6	ug/kg	250	47.6	1	11/04/19 10:15	11/05/19 00:05	120-82-1	W
1,1,1-Trichloroethane	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/05/19 00:05	71-55-6	W
1,1,2-Trichloroethane	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/05/19 00:05	79-00-5	W
Trichloroethene	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/05/19 00:05	79-01-6	W
Trichlorofluoromethane	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/05/19 00:05	75-69-4	W

## REPORT OF LABORATORY ANALYSIS

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## ANALYTICAL RESULTS

Project: 60615481 ALLOUEZ PHASE II ESA

Pace Project No.: 40198063

Sample: SP-108-0.5-1.5 Lab ID: 40198063030 Collected: 10/25/19 15:27 Received: 10/25/19 17:47 Matrix: Solid

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

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260 MSV Med Level Normal List</b>	Analytical Method: EPA 8260 Preparation Method: EPA 5035/5030B								
1,2,3-Trichloropropane	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/05/19 00:05	96-18-4	W
1,2,4-Trimethylbenzene	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/05/19 00:05	95-63-6	W
1,3,5-Trimethylbenzene	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/05/19 00:05	108-67-8	W
Vinyl chloride	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/05/19 00:05	75-01-4	W
Xylene (Total)	<75.0	ug/kg	180	75.0	1	11/04/19 10:15	11/05/19 00:05	1330-20-7	W
m&p-Xylene	<50.0	ug/kg	120	50.0	1	11/04/19 10:15	11/05/19 00:05	179601-23-1	W
o-Xylene	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/05/19 00:05	95-47-6	W
<b>Surrogates</b>									
Dibromofluoromethane (S)	104	%	57-146		1	11/04/19 10:15	11/05/19 00:05	1868-53-7	
Toluene-d8 (S)	101	%	64-134		1	11/04/19 10:15	11/05/19 00:05	2037-26-5	
4-Bromofluorobenzene (S)	87	%	54-126		1	11/04/19 10:15	11/05/19 00:05	460-00-4	
<b>Percent Moisture</b>	Analytical Method: ASTM D2974-87								
Percent Moisture	17.4	%	0.10	0.10	1			11/04/19 19:02	

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## ANALYTICAL RESULTS

Project: 60615481 ALLOUEZ PHASE II ESA

Pace Project No.: 40198063

Sample: SP-108-19-20 Lab ID: 40198063031 Collected: 10/25/19 15:35 Received: 10/25/19 17:47 Matrix: Solid

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

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>6010 MET ICP</b>		Analytical Method: EPA 6010 Preparation Method: EPA 3050							
Arsenic	4.7J	mg/kg	5.7	1.7	1	10/30/19 06:39	11/01/19 16:48	7440-38-2	
Barium	15.6	mg/kg	0.59	0.18	1	10/30/19 06:39	11/01/19 16:48	7440-39-3	
Cadmium	<0.16	mg/kg	0.59	0.16	1	10/30/19 06:39	11/01/19 16:48	7440-43-9	
Chromium	6.7	mg/kg	1.2	0.33	1	10/30/19 06:39	11/01/19 16:48	7440-47-3	
Lead	1.9J	mg/kg	2.3	0.70	1	10/30/19 06:39	11/01/19 16:48	7439-92-1	
Selenium	<1.5	mg/kg	5.1	1.5	1	10/30/19 06:39	11/01/19 16:48	7782-49-2	
Silver	<0.36	mg/kg	1.2	0.36	1	10/30/19 06:39	11/01/19 16:48	7440-22-4	
<b>7471 Mercury</b>		Analytical Method: EPA 7471 Preparation Method: EPA 7471							
Mercury	0.020J	mg/kg	0.042	0.012	1	11/06/19 09:30	11/06/19 13:55	7439-97-6	
<b>8270 MSSV PAH by SIM</b>		Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3546							
Acenaphthene	<2.6	ug/kg	20.2	2.6	1	11/01/19 09:00	11/01/19 16:21	83-32-9	
Acenaphthylene	<2.5	ug/kg	20.2	2.5	1	11/01/19 09:00	11/01/19 16:21	208-96-8	
Anthracene	<2.5	ug/kg	20.2	2.5	1	11/01/19 09:00	11/01/19 16:21	120-12-7	
Benzo(a)anthracene	<2.6	ug/kg	20.2	2.6	1	11/01/19 09:00	11/01/19 16:21	56-55-3	
Benzo(a)pyrene	<2.3	ug/kg	20.2	2.3	1	11/01/19 09:00	11/01/19 16:21	50-32-8	
Benzo(b)fluoranthene	<2.8	ug/kg	20.2	2.8	1	11/01/19 09:00	11/01/19 16:21	205-99-2	
Benzo(g,h,i)perylene	<3.5	ug/kg	20.2	3.5	1	11/01/19 09:00	11/01/19 16:21	191-24-2	
Benzo(k)fluoranthene	<2.6	ug/kg	20.2	2.6	1	11/01/19 09:00	11/01/19 16:21	207-08-9	
Chrysene	<3.8	ug/kg	20.2	3.8	1	11/01/19 09:00	11/01/19 16:21	218-01-9	
Dibenz(a,h)anthracene	<2.8	ug/kg	20.2	2.8	1	11/01/19 09:00	11/01/19 16:21	53-70-3	
Fluoranthene	<2.4	ug/kg	20.2	2.4	1	11/01/19 09:00	11/01/19 16:21	206-44-0	
Fluorene	<2.4	ug/kg	20.2	2.4	1	11/01/19 09:00	11/01/19 16:21	86-73-7	
Indeno(1,2,3-cd)pyrene	<4.2	ug/kg	20.2	4.2	1	11/01/19 09:00	11/01/19 16:21	193-39-5	
1-Methylnaphthalene	<2.9	ug/kg	20.2	2.9	1	11/01/19 09:00	11/01/19 16:21	90-12-0	
2-Methylnaphthalene	<3.0	ug/kg	20.2	3.0	1	11/01/19 09:00	11/01/19 16:21	91-57-6	
Naphthalene	<2.0	ug/kg	20.2	2.0	1	11/01/19 09:00	11/01/19 16:21	91-20-3	
Phenanthrene	<2.3	ug/kg	20.2	2.3	1	11/01/19 09:00	11/01/19 16:21	85-01-8	
Pyrene	<3.0	ug/kg	20.2	3.0	1	11/01/19 09:00	11/01/19 16:21	129-00-0	
<b>Surrogates</b>									
2-Fluorobiphenyl (S)	82	%	28-99		1	11/01/19 09:00	11/01/19 16:21	321-60-8	
Terphenyl-d14 (S)	72	%	10-107		1	11/01/19 09:00	11/01/19 16:21	1718-51-0	
<b>8260 MSV Med Level Normal List</b>		Analytical Method: EPA 8260 Preparation Method: EPA 5035/5030B							
Benzene	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/05/19 00:27	71-43-2	W
Bromobenzene	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/05/19 00:27	108-86-1	W
Bromochloromethane	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/05/19 00:27	74-97-5	W
Bromodichloromethane	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/05/19 00:27	75-27-4	W
Bromoform	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/05/19 00:27	75-25-2	W
Bromomethane	<69.9	ug/kg	250	69.9	1	11/04/19 10:15	11/05/19 00:27	74-83-9	W
n-Butylbenzene	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/05/19 00:27	104-51-8	W
sec-Butylbenzene	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/05/19 00:27	135-98-8	W
tert-Butylbenzene	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/05/19 00:27	98-06-6	W
Carbon tetrachloride	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/05/19 00:27	56-23-5	W

## REPORT OF LABORATORY ANALYSIS

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## ANALYTICAL RESULTS

Project: 60615481 ALLOUEZ PHASE II ESA

Pace Project No.: 40198063

Sample: SP-108-19-20 Lab ID: 40198063031 Collected: 10/25/19 15:35 Received: 10/25/19 17:47 Matrix: Solid

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

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260 MSV Med Level Normal List</b>		Analytical Method: EPA 8260 Preparation Method: EPA 5035/5030B							
Chlorobenzene	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/05/19 00:27	108-90-7	W
Chloroethane	<67.0	ug/kg	250	67.0	1	11/04/19 10:15	11/05/19 00:27	75-00-3	W
Chloroform	<46.4	ug/kg	250	46.4	1	11/04/19 10:15	11/05/19 00:27	67-66-3	W
Chloromethane	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/05/19 00:27	74-87-3	W
2-Chlorotoluene	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/05/19 00:27	95-49-8	W
4-Chlorotoluene	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/05/19 00:27	106-43-4	W
1,2-Dibromo-3-chloropropane	<91.2	ug/kg	250	91.2	1	11/04/19 10:15	11/05/19 00:27	96-12-8	W
Dibromochloromethane	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/05/19 00:27	124-48-1	W
1,2-Dibromoethane (EDB)	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/05/19 00:27	106-93-4	W
Dibromomethane	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/05/19 00:27	74-95-3	W
1,2-Dichlorobenzene	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/05/19 00:27	95-50-1	W
1,3-Dichlorobenzene	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/05/19 00:27	541-73-1	W
1,4-Dichlorobenzene	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/05/19 00:27	106-46-7	W
Dichlorodifluoromethane	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/05/19 00:27	75-71-8	W
1,1-Dichloroethane	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/05/19 00:27	75-34-3	W
1,2-Dichloroethane	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/05/19 00:27	107-06-2	W
1,1-Dichloroethene	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/05/19 00:27	75-35-4	W
cis-1,2-Dichloroethene	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/05/19 00:27	156-59-2	W
trans-1,2-Dichloroethene	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/05/19 00:27	156-60-5	W
1,2-Dichloropropane	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/05/19 00:27	78-87-5	W
1,3-Dichloropropane	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/05/19 00:27	142-28-9	W
2,2-Dichloropropane	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/05/19 00:27	594-20-7	W
1,1-Dichloropropene	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/05/19 00:27	563-58-6	W
cis-1,3-Dichloropropene	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/05/19 00:27	10061-01-5	W
trans-1,3-Dichloropropene	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/05/19 00:27	10061-02-6	W
Diisopropyl ether	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/05/19 00:27	108-20-3	W
Ethylbenzene	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/05/19 00:27	100-41-4	W
Hexachloro-1,3-butadiene	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/05/19 00:27	87-68-3	W
Isopropylbenzene (Cumene)	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/05/19 00:27	98-82-8	W
p-Isopropyltoluene	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/05/19 00:27	99-87-6	W
Methylene Chloride	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/05/19 00:27	75-09-2	W
Methyl-tert-butyl ether	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/05/19 00:27	1634-04-4	W
Naphthalene	<40.0	ug/kg	250	40.0	1	11/04/19 10:15	11/05/19 00:27	91-20-3	W
n-Propylbenzene	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/05/19 00:27	103-65-1	W
Styrene	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/05/19 00:27	100-42-5	W
1,1,1,2-Tetrachloroethane	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/05/19 00:27	630-20-6	W
1,1,2,2-Tetrachloroethane	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/05/19 00:27	79-34-5	W
Tetrachloroethene	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/05/19 00:27	127-18-4	W
Toluene	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/05/19 00:27	108-88-3	W
1,2,3-Trichlorobenzene	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/05/19 00:27	87-61-6	W
1,2,4-Trichlorobenzene	<47.6	ug/kg	250	47.6	1	11/04/19 10:15	11/05/19 00:27	120-82-1	W
1,1,1-Trichloroethane	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/05/19 00:27	71-55-6	W
1,1,2-Trichloroethane	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/05/19 00:27	79-00-5	W
Trichloroethene	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/05/19 00:27	79-01-6	W
Trichlorofluoromethane	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/05/19 00:27	75-69-4	W

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## ANALYTICAL RESULTS

Project: 60615481 ALLOUEZ PHASE II ESA

Pace Project No.: 40198063

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Sample: SP-108-19-20      Lab ID: 40198063031      Collected: 10/25/19 15:35      Received: 10/25/19 17:47      Matrix: Solid

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

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260 MSV Med Level Normal List</b>	Analytical Method: EPA 8260 Preparation Method: EPA 5035/5030B								
1,2,3-Trichloropropane	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/05/19 00:27	96-18-4	W
1,2,4-Trimethylbenzene	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/05/19 00:27	95-63-6	W
1,3,5-Trimethylbenzene	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/05/19 00:27	108-67-8	W
Vinyl chloride	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/05/19 00:27	75-01-4	W
Xylene (Total)	<75.0	ug/kg	180	75.0	1	11/04/19 10:15	11/05/19 00:27	1330-20-7	W
m&p-Xylene	<50.0	ug/kg	120	50.0	1	11/04/19 10:15	11/05/19 00:27	179601-23-1	W
o-Xylene	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/05/19 00:27	95-47-6	W
<b>Surrogates</b>									
Dibromofluoromethane (S)	107	%	57-146		1	11/04/19 10:15	11/05/19 00:27	1868-53-7	
Toluene-d8 (S)	111	%	64-134		1	11/04/19 10:15	11/05/19 00:27	2037-26-5	
4-Bromofluorobenzene (S)	95	%	54-126		1	11/04/19 10:15	11/05/19 00:27	460-00-4	
<b>Percent Moisture</b>	Analytical Method: ASTM D2974-87								
Percent Moisture	17.3	%	0.10	0.10	1			11/04/19 19:02	

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## ANALYTICAL RESULTS

Project: 60615481 ALLOUEZ PHASE II ESA

Pace Project No.: 40198063

Sample: SP-108-19-20D Lab ID: 40198063032 Collected: 10/25/19 15:35 Received: 10/25/19 17:47 Matrix: Solid

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

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>6010 MET ICP</b>		Analytical Method: EPA 6010 Preparation Method: EPA 3050							
Arsenic	3.3J	mg/kg	5.4	1.6	1	10/30/19 06:39	11/01/19 16:50	7440-38-2	
Barium	22.8	mg/kg	0.55	0.16	1	10/30/19 06:39	11/01/19 16:50	7440-39-3	
Cadmium	<0.15	mg/kg	0.55	0.15	1	10/30/19 06:39	11/01/19 16:50	7440-43-9	
Chromium	10.7	mg/kg	1.1	0.31	1	10/30/19 06:39	11/01/19 16:50	7440-47-3	
Lead	1.9J	mg/kg	2.2	0.66	1	10/30/19 06:39	11/01/19 16:50	7439-92-1	
Selenium	<1.4	mg/kg	4.8	1.4	1	10/30/19 06:39	11/01/19 16:50	7782-49-2	
Silver	<0.34	mg/kg	1.1	0.34	1	10/30/19 06:39	11/01/19 16:50	7440-22-4	
<b>7471 Mercury</b>		Analytical Method: EPA 7471 Preparation Method: EPA 7471							
Mercury	0.018J	mg/kg	0.040	0.012	1	11/06/19 09:30	11/06/19 13:57	7439-97-6	
<b>8270 MSSV PAH by SIM</b>		Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3546							
Acenaphthene	<2.6	ug/kg	20.0	2.6	1	11/01/19 09:00	11/01/19 16:38	83-32-9	
Acenaphthylene	<2.5	ug/kg	20.0	2.5	1	11/01/19 09:00	11/01/19 16:38	208-96-8	
Anthracene	<2.5	ug/kg	20.0	2.5	1	11/01/19 09:00	11/01/19 16:38	120-12-7	
Benzo(a)anthracene	<2.6	ug/kg	20.0	2.6	1	11/01/19 09:00	11/01/19 16:38	56-55-3	
Benzo(a)pyrene	<2.3	ug/kg	20.0	2.3	1	11/01/19 09:00	11/01/19 16:38	50-32-8	
Benzo(b)fluoranthene	<2.8	ug/kg	20.0	2.8	1	11/01/19 09:00	11/01/19 16:38	205-99-2	
Benzo(g,h,i)perylene	<3.5	ug/kg	20.0	3.5	1	11/01/19 09:00	11/01/19 16:38	191-24-2	
Benzo(k)fluoranthene	<2.6	ug/kg	20.0	2.6	1	11/01/19 09:00	11/01/19 16:38	207-08-9	
Chrysene	<3.8	ug/kg	20.0	3.8	1	11/01/19 09:00	11/01/19 16:38	218-01-9	
Dibenz(a,h)anthracene	<2.8	ug/kg	20.0	2.8	1	11/01/19 09:00	11/01/19 16:38	53-70-3	
Fluoranthene	<2.4	ug/kg	20.0	2.4	1	11/01/19 09:00	11/01/19 16:38	206-44-0	
Fluorene	<2.4	ug/kg	20.0	2.4	1	11/01/19 09:00	11/01/19 16:38	86-73-7	
Indeno(1,2,3-cd)pyrene	<4.2	ug/kg	20.0	4.2	1	11/01/19 09:00	11/01/19 16:38	193-39-5	
1-Methylnaphthalene	<2.9	ug/kg	20.0	2.9	1	11/01/19 09:00	11/01/19 16:38	90-12-0	
2-Methylnaphthalene	<2.9	ug/kg	20.0	2.9	1	11/01/19 09:00	11/01/19 16:38	91-57-6	
Naphthalene	2.9J	ug/kg	20.0	1.9	1	11/01/19 09:00	11/01/19 16:38	91-20-3	
Phenanthrene	<2.3	ug/kg	20.0	2.3	1	11/01/19 09:00	11/01/19 16:38	85-01-8	
Pyrene	<2.9	ug/kg	20.0	2.9	1	11/01/19 09:00	11/01/19 16:38	129-00-0	
<b>Surrogates</b>									
2-Fluorobiphenyl (S)	77	%	28-99		1	11/01/19 09:00	11/01/19 16:38	321-60-8	
Terphenyl-d14 (S)	66	%	10-107		1	11/01/19 09:00	11/01/19 16:38	1718-51-0	
<b>8260 MSV Med Level Normal List</b>		Analytical Method: EPA 8260 Preparation Method: EPA 5035/5030B							
Benzene	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/05/19 00:50	71-43-2	W
Bromobenzene	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/05/19 00:50	108-86-1	W
Bromochloromethane	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/05/19 00:50	74-97-5	W
Bromodichloromethane	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/05/19 00:50	75-27-4	W
Bromoform	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/05/19 00:50	75-25-2	W
Bromomethane	<69.9	ug/kg	250	69.9	1	11/04/19 10:15	11/05/19 00:50	74-83-9	W
n-Butylbenzene	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/05/19 00:50	104-51-8	W
sec-Butylbenzene	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/05/19 00:50	135-98-8	W
tert-Butylbenzene	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/05/19 00:50	98-06-6	W
Carbon tetrachloride	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/05/19 00:50	56-23-5	W

## REPORT OF LABORATORY ANALYSIS

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## ANALYTICAL RESULTS

Project: 60615481 ALLOUEZ PHASE II ESA

Pace Project No.: 40198063

Sample: SP-108-19-20D Lab ID: 40198063032 Collected: 10/25/19 15:35 Received: 10/25/19 17:47 Matrix: Solid

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

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260 MSV Med Level Normal List</b>		Analytical Method: EPA 8260 Preparation Method: EPA 5035/5030B							
Chlorobenzene	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/05/19 00:50	108-90-7	W
Chloroethane	<67.0	ug/kg	250	67.0	1	11/04/19 10:15	11/05/19 00:50	75-00-3	W
Chloroform	<46.4	ug/kg	250	46.4	1	11/04/19 10:15	11/05/19 00:50	67-66-3	W
Chloromethane	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/05/19 00:50	74-87-3	W
2-Chlorotoluene	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/05/19 00:50	95-49-8	W
4-Chlorotoluene	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/05/19 00:50	106-43-4	W
1,2-Dibromo-3-chloropropane	<91.2	ug/kg	250	91.2	1	11/04/19 10:15	11/05/19 00:50	96-12-8	W
Dibromochloromethane	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/05/19 00:50	124-48-1	W
1,2-Dibromoethane (EDB)	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/05/19 00:50	106-93-4	W
Dibromomethane	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/05/19 00:50	74-95-3	W
1,2-Dichlorobenzene	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/05/19 00:50	95-50-1	W
1,3-Dichlorobenzene	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/05/19 00:50	541-73-1	W
1,4-Dichlorobenzene	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/05/19 00:50	106-46-7	W
Dichlorodifluoromethane	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/05/19 00:50	75-71-8	W
1,1-Dichloroethane	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/05/19 00:50	75-34-3	W
1,2-Dichloroethane	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/05/19 00:50	107-06-2	W
1,1-Dichloroethene	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/05/19 00:50	75-35-4	W
cis-1,2-Dichloroethene	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/05/19 00:50	156-59-2	W
trans-1,2-Dichloroethene	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/05/19 00:50	156-60-5	W
1,2-Dichloropropane	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/05/19 00:50	78-87-5	W
1,3-Dichloropropane	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/05/19 00:50	142-28-9	W
2,2-Dichloropropane	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/05/19 00:50	594-20-7	W
1,1-Dichloropropene	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/05/19 00:50	563-58-6	W
cis-1,3-Dichloropropene	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/05/19 00:50	10061-01-5	W
trans-1,3-Dichloropropene	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/05/19 00:50	10061-02-6	W
Diisopropyl ether	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/05/19 00:50	108-20-3	W
Ethylbenzene	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/05/19 00:50	100-41-4	W
Hexachloro-1,3-butadiene	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/05/19 00:50	87-68-3	W
Isopropylbenzene (Cumene)	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/05/19 00:50	98-82-8	W
p-Isopropyltoluene	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/05/19 00:50	99-87-6	W
Methylene Chloride	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/05/19 00:50	75-09-2	W
Methyl-tert-butyl ether	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/05/19 00:50	1634-04-4	W
Naphthalene	<40.0	ug/kg	250	40.0	1	11/04/19 10:15	11/05/19 00:50	91-20-3	W
n-Propylbenzene	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/05/19 00:50	103-65-1	W
Styrene	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/05/19 00:50	100-42-5	W
1,1,1,2-Tetrachloroethane	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/05/19 00:50	630-20-6	W
1,1,2,2-Tetrachloroethane	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/05/19 00:50	79-34-5	W
Tetrachloroethene	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/05/19 00:50	127-18-4	W
Toluene	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/05/19 00:50	108-88-3	W
1,2,3-Trichlorobenzene	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/05/19 00:50	87-61-6	W
1,2,4-Trichlorobenzene	<47.6	ug/kg	250	47.6	1	11/04/19 10:15	11/05/19 00:50	120-82-1	W
1,1,1-Trichloroethane	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/05/19 00:50	71-55-6	W
1,1,2-Trichloroethane	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/05/19 00:50	79-00-5	W
Trichloroethene	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/05/19 00:50	79-01-6	W
Trichlorofluoromethane	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/05/19 00:50	75-69-4	W

## REPORT OF LABORATORY ANALYSIS

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## ANALYTICAL RESULTS

Project: 60615481 ALLOUEZ PHASE II ESA

Pace Project No.: 40198063

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Sample: SP-108-19-20D      Lab ID: 40198063032      Collected: 10/25/19 15:35      Received: 10/25/19 17:47      Matrix: Solid

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

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260 MSV Med Level Normal List</b>	Analytical Method: EPA 8260 Preparation Method: EPA 5035/5030B								
1,2,3-Trichloropropane	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/05/19 00:50	96-18-4	W
1,2,4-Trimethylbenzene	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/05/19 00:50	95-63-6	W
1,3,5-Trimethylbenzene	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/05/19 00:50	108-67-8	W
Vinyl chloride	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/05/19 00:50	75-01-4	W
Xylene (Total)	<75.0	ug/kg	180	75.0	1	11/04/19 10:15	11/05/19 00:50	1330-20-7	W
m&p-Xylene	<50.0	ug/kg	120	50.0	1	11/04/19 10:15	11/05/19 00:50	179601-23-1	W
o-Xylene	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/05/19 00:50	95-47-6	W
<b>Surrogates</b>									
Dibromofluoromethane (S)	94	%	57-146		1	11/04/19 10:15	11/05/19 00:50	1868-53-7	
Toluene-d8 (S)	99	%	64-134		1	11/04/19 10:15	11/05/19 00:50	2037-26-5	
4-Bromofluorobenzene (S)	84	%	54-126		1	11/04/19 10:15	11/05/19 00:50	460-00-4	
<b>Percent Moisture</b>	Analytical Method: ASTM D2974-87								
Percent Moisture	<b>16.3</b>	%	0.10	0.10	1			11/04/19 19:02	

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## ANALYTICAL RESULTS

Project: 60615481 ALLOUEZ PHASE II ESA

Pace Project No.: 40198063

Sample: SP-109-0.5-1.5 Lab ID: 40198063033 Collected: 10/25/19 15:50 Received: 10/25/19 17:47 Matrix: Solid

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

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>6010 MET ICP</b>	Analytical Method: EPA 6010 Preparation Method: EPA 3050								
Arsenic	<3.4	mg/kg	11.2	3.4	2	10/30/19 06:39	11/05/19 13:11	7440-38-2	D3
Barium	67.7	mg/kg	0.58	0.17	1	10/30/19 06:39	11/01/19 16:58	7440-39-3	
Cadmium	<0.31	mg/kg	1.2	0.31	2	10/30/19 06:39	11/05/19 13:11	7440-43-9	D3
Chromium	31.8	mg/kg	1.2	0.32	1	10/30/19 06:39	11/01/19 16:58	7440-47-3	
Lead	6.3	mg/kg	4.6	1.4	2	10/30/19 06:39	11/05/19 13:11	7439-92-1	
Selenium	<3.0	mg/kg	10.0	3.0	2	10/30/19 06:39	11/05/19 13:11	7782-49-2	D3
Silver	0.77J	mg/kg	2.3	0.71	2	10/30/19 06:39	11/05/19 13:11	7440-22-4	D3
<b>7471 Mercury</b>	Analytical Method: EPA 7471 Preparation Method: EPA 7471								
Mercury	0.048	mg/kg	0.037	0.011	1	11/06/19 09:30	11/06/19 13:59	7439-97-6	
<b>8270 MSSV PAH by SIM</b>	Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3546								
Acenaphthene	<2.5	ug/kg	19.4	2.5	1	11/01/19 09:00	11/01/19 16:55	83-32-9	
Acenaphthylene	<2.4	ug/kg	19.4	2.4	1	11/01/19 09:00	11/01/19 16:55	208-96-8	
Anthracene	<2.4	ug/kg	19.4	2.4	1	11/01/19 09:00	11/01/19 16:55	120-12-7	
Benzo(a)anthracene	4.0J	ug/kg	19.4	2.5	1	11/01/19 09:00	11/01/19 16:55	56-55-3	
Benzo(a)pyrene	3.0J	ug/kg	19.4	2.2	1	11/01/19 09:00	11/01/19 16:55	50-32-8	
Benzo(b)fluoranthene	5.6J	ug/kg	19.4	2.7	1	11/01/19 09:00	11/01/19 16:55	205-99-2	
Benzo(g,h,i)perylene	<3.4	ug/kg	19.4	3.4	1	11/01/19 09:00	11/01/19 16:55	191-24-2	
Benzo(k)fluoranthene	<2.5	ug/kg	19.4	2.5	1	11/01/19 09:00	11/01/19 16:55	207-08-9	
Chrysene	5.1J	ug/kg	19.4	3.7	1	11/01/19 09:00	11/01/19 16:55	218-01-9	
Dibenz(a,h)anthracene	<2.7	ug/kg	19.4	2.7	1	11/01/19 09:00	11/01/19 16:55	53-70-3	
Fluoranthene	5.2J	ug/kg	19.4	2.3	1	11/01/19 09:00	11/01/19 16:55	206-44-0	
Fluorene	<2.3	ug/kg	19.4	2.3	1	11/01/19 09:00	11/01/19 16:55	86-73-7	
Indeno(1,2,3-cd)pyrene	<4.0	ug/kg	19.4	4.0	1	11/01/19 09:00	11/01/19 16:55	193-39-5	
1-Methylnaphthalene	<2.8	ug/kg	19.4	2.8	1	11/01/19 09:00	11/01/19 16:55	90-12-0	
2-Methylnaphthalene	4.1J	ug/kg	19.4	2.8	1	11/01/19 09:00	11/01/19 16:55	91-57-6	
Naphthalene	3.9J	ug/kg	19.4	1.9	1	11/01/19 09:00	11/01/19 16:55	91-20-3	
Phenanthrene	5.0J	ug/kg	19.4	2.2	1	11/01/19 09:00	11/01/19 16:55	85-01-8	
Pyrene	4.3J	ug/kg	19.4	2.9	1	11/01/19 09:00	11/01/19 16:55	129-00-0	
<b>Surrogates</b>									
2-Fluorobiphenyl (S)	70	%	28-99		1	11/01/19 09:00	11/01/19 16:55	321-60-8	
Terphenyl-d14 (S)	62	%	10-107		1	11/01/19 09:00	11/01/19 16:55	1718-51-0	
<b>8260 MSV Med Level Normal List</b>	Analytical Method: EPA 8260 Preparation Method: EPA 5035/5030B								
Benzene	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/05/19 01:13	71-43-2	W
Bromobenzene	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/05/19 01:13	108-86-1	W
Bromochloromethane	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/05/19 01:13	74-97-5	W
Bromodichloromethane	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/05/19 01:13	75-27-4	W
Bromoform	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/05/19 01:13	75-25-2	W
Bromomethane	<69.9	ug/kg	250	69.9	1	11/04/19 10:15	11/05/19 01:13	74-83-9	W
n-Butylbenzene	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/05/19 01:13	104-51-8	W
sec-Butylbenzene	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/05/19 01:13	135-98-8	W
tert-Butylbenzene	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/05/19 01:13	98-06-6	W
Carbon tetrachloride	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/05/19 01:13	56-23-5	W

## REPORT OF LABORATORY ANALYSIS

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## ANALYTICAL RESULTS

Project: 60615481 ALLOUEZ PHASE II ESA

Pace Project No.: 40198063

Sample: SP-109-0.5-1.5 Lab ID: 40198063033 Collected: 10/25/19 15:50 Received: 10/25/19 17:47 Matrix: Solid

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

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260 MSV Med Level Normal List</b>		Analytical Method: EPA 8260 Preparation Method: EPA 5035/5030B							
Chlorobenzene	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/05/19 01:13	108-90-7	W
Chloroethane	<67.0	ug/kg	250	67.0	1	11/04/19 10:15	11/05/19 01:13	75-00-3	W
Chloroform	<46.4	ug/kg	250	46.4	1	11/04/19 10:15	11/05/19 01:13	67-66-3	W
Chloromethane	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/05/19 01:13	74-87-3	W
2-Chlorotoluene	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/05/19 01:13	95-49-8	W
4-Chlorotoluene	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/05/19 01:13	106-43-4	W
1,2-Dibromo-3-chloropropane	<91.2	ug/kg	250	91.2	1	11/04/19 10:15	11/05/19 01:13	96-12-8	W
Dibromochloromethane	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/05/19 01:13	124-48-1	W
1,2-Dibromoethane (EDB)	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/05/19 01:13	106-93-4	W
Dibromomethane	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/05/19 01:13	74-95-3	W
1,2-Dichlorobenzene	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/05/19 01:13	95-50-1	W
1,3-Dichlorobenzene	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/05/19 01:13	541-73-1	W
1,4-Dichlorobenzene	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/05/19 01:13	106-46-7	W
Dichlorodifluoromethane	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/05/19 01:13	75-71-8	W
1,1-Dichloroethane	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/05/19 01:13	75-34-3	W
1,2-Dichloroethane	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/05/19 01:13	107-06-2	W
1,1-Dichloroethene	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/05/19 01:13	75-35-4	W
cis-1,2-Dichloroethene	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/05/19 01:13	156-59-2	W
trans-1,2-Dichloroethene	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/05/19 01:13	156-60-5	W
1,2-Dichloropropane	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/05/19 01:13	78-87-5	W
1,3-Dichloropropane	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/05/19 01:13	142-28-9	W
2,2-Dichloropropane	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/05/19 01:13	594-20-7	W
1,1-Dichloropropene	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/05/19 01:13	563-58-6	W
cis-1,3-Dichloropropene	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/05/19 01:13	10061-01-5	W
trans-1,3-Dichloropropene	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/05/19 01:13	10061-02-6	W
Diisopropyl ether	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/05/19 01:13	108-20-3	W
Ethylbenzene	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/05/19 01:13	100-41-4	W
Hexachloro-1,3-butadiene	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/05/19 01:13	87-68-3	W
Isopropylbenzene (Cumene)	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/05/19 01:13	98-82-8	W
p-Isopropyltoluene	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/05/19 01:13	99-87-6	W
Methylene Chloride	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/05/19 01:13	75-09-2	W
Methyl-tert-butyl ether	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/05/19 01:13	1634-04-4	W
Naphthalene	<40.0	ug/kg	250	40.0	1	11/04/19 10:15	11/05/19 01:13	91-20-3	W
n-Propylbenzene	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/05/19 01:13	103-65-1	W
Styrene	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/05/19 01:13	100-42-5	W
1,1,1,2-Tetrachloroethane	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/05/19 01:13	630-20-6	W
1,1,2,2-Tetrachloroethane	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/05/19 01:13	79-34-5	W
Tetrachloroethene	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/05/19 01:13	127-18-4	W
Toluene	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/05/19 01:13	108-88-3	W
1,2,3-Trichlorobenzene	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/05/19 01:13	87-61-6	W
1,2,4-Trichlorobenzene	<47.6	ug/kg	250	47.6	1	11/04/19 10:15	11/05/19 01:13	120-82-1	W
1,1,1-Trichloroethane	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/05/19 01:13	71-55-6	W
1,1,2-Trichloroethane	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/05/19 01:13	79-00-5	W
Trichloroethene	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/05/19 01:13	79-01-6	W
Trichlorofluoromethane	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/05/19 01:13	75-69-4	W

## REPORT OF LABORATORY ANALYSIS

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## ANALYTICAL RESULTS

Project: 60615481 ALLOUEZ PHASE II ESA

Pace Project No.: 40198063

Sample: SP-109-0.5-1.5 Lab ID: 40198063033 Collected: 10/25/19 15:50 Received: 10/25/19 17:47 Matrix: Solid

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

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260 MSV Med Level Normal List</b>	Analytical Method: EPA 8260 Preparation Method: EPA 5035/5030B								
1,2,3-Trichloropropane	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/05/19 01:13	96-18-4	W
1,2,4-Trimethylbenzene	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/05/19 01:13	95-63-6	W
1,3,5-Trimethylbenzene	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/05/19 01:13	108-67-8	W
Vinyl chloride	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/05/19 01:13	75-01-4	W
Xylene (Total)	<75.0	ug/kg	180	75.0	1	11/04/19 10:15	11/05/19 01:13	1330-20-7	W
m&p-Xylene	<50.0	ug/kg	120	50.0	1	11/04/19 10:15	11/05/19 01:13	179601-23-1	W
o-Xylene	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/05/19 01:13	95-47-6	W
<b>Surrogates</b>									
Dibromofluoromethane (S)	104	%	57-146		1	11/04/19 10:15	11/05/19 01:13	1868-53-7	
Toluene-d8 (S)	112	%	64-134		1	11/04/19 10:15	11/05/19 01:13	2037-26-5	
4-Bromofluorobenzene (S)	97	%	54-126		1	11/04/19 10:15	11/05/19 01:13	460-00-4	
<b>Percent Moisture</b>	Analytical Method: ASTM D2974-87								
Percent Moisture	14.0	%	0.10	0.10	1			11/04/19 19:02	

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## ANALYTICAL RESULTS

Project: 60615481 ALLOUEZ PHASE II ESA

Pace Project No.: 40198063

Sample: SP-109-18-19 Lab ID: 40198063034 Collected: 10/25/19 15:59 Received: 10/25/19 17:47 Matrix: Solid

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

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>6010 MET ICP</b>		Analytical Method: EPA 6010 Preparation Method: EPA 3050							
Arsenic	3.3J	mg/kg	5.5	1.6	1	10/30/19 06:39	11/01/19 17:00	7440-38-2	
Barium	6.7	mg/kg	0.56	0.17	1	10/30/19 06:39	11/01/19 17:00	7440-39-3	
Cadmium	<0.15	mg/kg	0.56	0.15	1	10/30/19 06:39	11/01/19 17:00	7440-43-9	
Chromium	3.9	mg/kg	1.1	0.31	1	10/30/19 06:39	11/01/19 17:00	7440-47-3	
Lead	0.85J	mg/kg	2.2	0.67	1	10/30/19 06:39	11/01/19 17:00	7439-92-1	
Selenium	<1.5	mg/kg	4.9	1.5	1	10/30/19 06:39	11/01/19 17:00	7782-49-2	
Silver	<0.34	mg/kg	1.1	0.34	1	10/30/19 06:39	11/01/19 17:00	7440-22-4	
<b>7471 Mercury</b>		Analytical Method: EPA 7471 Preparation Method: EPA 7471							
Mercury	<0.011	mg/kg	0.038	0.011	1	11/06/19 09:30	11/06/19 14:02	7439-97-6	
<b>8270 MSSV PAH by SIM</b>		Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3546							
Acenaphthene	<2.6	ug/kg	20.0	2.6	1	11/01/19 09:00	11/01/19 13:47	83-32-9	
Acenaphthylene	<2.5	ug/kg	20.0	2.5	1	11/01/19 09:00	11/01/19 13:47	208-96-8	
Anthracene	<2.5	ug/kg	20.0	2.5	1	11/01/19 09:00	11/01/19 13:47	120-12-7	
Benzo(a)anthracene	<2.6	ug/kg	20.0	2.6	1	11/01/19 09:00	11/01/19 13:47	56-55-3	
Benzo(a)pyrene	<2.3	ug/kg	20.0	2.3	1	11/01/19 09:00	11/01/19 13:47	50-32-8	
Benzo(b)fluoranthene	<2.8	ug/kg	20.0	2.8	1	11/01/19 09:00	11/01/19 13:47	205-99-2	
Benzo(g,h,i)perylene	<3.5	ug/kg	20.0	3.5	1	11/01/19 09:00	11/01/19 13:47	191-24-2	
Benzo(k)fluoranthene	<2.6	ug/kg	20.0	2.6	1	11/01/19 09:00	11/01/19 13:47	207-08-9	
Chrysene	<3.8	ug/kg	20.0	3.8	1	11/01/19 09:00	11/01/19 13:47	218-01-9	
Dibenz(a,h)anthracene	<2.8	ug/kg	20.0	2.8	1	11/01/19 09:00	11/01/19 13:47	53-70-3	
Fluoranthene	<2.4	ug/kg	20.0	2.4	1	11/01/19 09:00	11/01/19 13:47	206-44-0	
Fluorene	<2.4	ug/kg	20.0	2.4	1	11/01/19 09:00	11/01/19 13:47	86-73-7	
Indeno(1,2,3-cd)pyrene	<4.2	ug/kg	20.0	4.2	1	11/01/19 09:00	11/01/19 13:47	193-39-5	
1-Methylnaphthalene	<2.9	ug/kg	20.0	2.9	1	11/01/19 09:00	11/01/19 13:47	90-12-0	
2-Methylnaphthalene	<2.9	ug/kg	20.0	2.9	1	11/01/19 09:00	11/01/19 13:47	91-57-6	
Naphthalene	<1.9	ug/kg	20.0	1.9	1	11/01/19 09:00	11/01/19 13:47	91-20-3	
Phenanthrene	<2.3	ug/kg	20.0	2.3	1	11/01/19 09:00	11/01/19 13:47	85-01-8	
Pyrene	<2.9	ug/kg	20.0	2.9	1	11/01/19 09:00	11/01/19 13:47	129-00-0	
<b>Surrogates</b>									
2-Fluorobiphenyl (S)	92	%	28-99		1	11/01/19 09:00	11/01/19 13:47	321-60-8	
Terphenyl-d14 (S)	65	%	10-107		1	11/01/19 09:00	11/01/19 13:47	1718-51-0	
<b>8260 MSV Med Level Normal List</b>		Analytical Method: EPA 8260 Preparation Method: EPA 5035/5030B							
Benzene	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/05/19 01:35	71-43-2	W
Bromobenzene	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/05/19 01:35	108-86-1	W
Bromochloromethane	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/05/19 01:35	74-97-5	W
Bromodichloromethane	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/05/19 01:35	75-27-4	W
Bromoform	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/05/19 01:35	75-25-2	W
Bromomethane	<69.9	ug/kg	250	69.9	1	11/04/19 10:15	11/05/19 01:35	74-83-9	W
n-Butylbenzene	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/05/19 01:35	104-51-8	W
sec-Butylbenzene	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/05/19 01:35	135-98-8	W
tert-Butylbenzene	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/05/19 01:35	98-06-6	W
Carbon tetrachloride	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/05/19 01:35	56-23-5	W

## REPORT OF LABORATORY ANALYSIS

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## ANALYTICAL RESULTS

Project: 60615481 ALLOUEZ PHASE II ESA

Pace Project No.: 40198063

Sample: SP-109-18-19 Lab ID: 40198063034 Collected: 10/25/19 15:59 Received: 10/25/19 17:47 Matrix: Solid

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

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260 MSV Med Level Normal List</b>		Analytical Method: EPA 8260 Preparation Method: EPA 5035/5030B							
Chlorobenzene	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/05/19 01:35	108-90-7	W
Chloroethane	<67.0	ug/kg	250	67.0	1	11/04/19 10:15	11/05/19 01:35	75-00-3	W
Chloroform	<46.4	ug/kg	250	46.4	1	11/04/19 10:15	11/05/19 01:35	67-66-3	W
Chloromethane	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/05/19 01:35	74-87-3	W
2-Chlorotoluene	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/05/19 01:35	95-49-8	W
4-Chlorotoluene	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/05/19 01:35	106-43-4	W
1,2-Dibromo-3-chloropropane	<91.2	ug/kg	250	91.2	1	11/04/19 10:15	11/05/19 01:35	96-12-8	W
Dibromochloromethane	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/05/19 01:35	124-48-1	W
1,2-Dibromoethane (EDB)	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/05/19 01:35	106-93-4	W
Dibromomethane	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/05/19 01:35	74-95-3	W
1,2-Dichlorobenzene	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/05/19 01:35	95-50-1	W
1,3-Dichlorobenzene	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/05/19 01:35	541-73-1	W
1,4-Dichlorobenzene	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/05/19 01:35	106-46-7	W
Dichlorodifluoromethane	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/05/19 01:35	75-71-8	W
1,1-Dichloroethane	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/05/19 01:35	75-34-3	W
1,2-Dichloroethane	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/05/19 01:35	107-06-2	W
1,1-Dichloroethene	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/05/19 01:35	75-35-4	W
cis-1,2-Dichloroethene	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/05/19 01:35	156-59-2	W
trans-1,2-Dichloroethene	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/05/19 01:35	156-60-5	W
1,2-Dichloropropane	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/05/19 01:35	78-87-5	W
1,3-Dichloropropane	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/05/19 01:35	142-28-9	W
2,2-Dichloropropane	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/05/19 01:35	594-20-7	W
1,1-Dichloropropene	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/05/19 01:35	563-58-6	W
cis-1,3-Dichloropropene	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/05/19 01:35	10061-01-5	W
trans-1,3-Dichloropropene	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/05/19 01:35	10061-02-6	W
Diisopropyl ether	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/05/19 01:35	108-20-3	W
Ethylbenzene	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/05/19 01:35	100-41-4	W
Hexachloro-1,3-butadiene	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/05/19 01:35	87-68-3	W
Isopropylbenzene (Cumene)	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/05/19 01:35	98-82-8	W
p-Isopropyltoluene	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/05/19 01:35	99-87-6	W
Methylene Chloride	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/05/19 01:35	75-09-2	W
Methyl-tert-butyl ether	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/05/19 01:35	1634-04-4	W
Naphthalene	<40.0	ug/kg	250	40.0	1	11/04/19 10:15	11/05/19 01:35	91-20-3	W
n-Propylbenzene	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/05/19 01:35	103-65-1	W
Styrene	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/05/19 01:35	100-42-5	W
1,1,1,2-Tetrachloroethane	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/05/19 01:35	630-20-6	W
1,1,2,2-Tetrachloroethane	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/05/19 01:35	79-34-5	W
Tetrachloroethene	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/05/19 01:35	127-18-4	W
Toluene	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/05/19 01:35	108-88-3	W
1,2,3-Trichlorobenzene	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/05/19 01:35	87-61-6	W
1,2,4-Trichlorobenzene	<47.6	ug/kg	250	47.6	1	11/04/19 10:15	11/05/19 01:35	120-82-1	W
1,1,1-Trichloroethane	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/05/19 01:35	71-55-6	W
1,1,2-Trichloroethane	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/05/19 01:35	79-00-5	W
Trichloroethene	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/05/19 01:35	79-01-6	W
Trichlorofluoromethane	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/05/19 01:35	75-69-4	W

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## ANALYTICAL RESULTS

Project: 60615481 ALLOUEZ PHASE II ESA

Pace Project No.: 40198063

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Sample: SP-109-18-19      Lab ID: 40198063034      Collected: 10/25/19 15:59      Received: 10/25/19 17:47      Matrix: Solid

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

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260 MSV Med Level Normal List</b>	Analytical Method: EPA 8260 Preparation Method: EPA 5035/5030B								
1,2,3-Trichloropropane	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/05/19 01:35	96-18-4	W
1,2,4-Trimethylbenzene	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/05/19 01:35	95-63-6	W
1,3,5-Trimethylbenzene	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/05/19 01:35	108-67-8	W
Vinyl chloride	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/05/19 01:35	75-01-4	W
Xylene (Total)	<75.0	ug/kg	180	75.0	1	11/04/19 10:15	11/05/19 01:35	1330-20-7	W
m&p-Xylene	<50.0	ug/kg	120	50.0	1	11/04/19 10:15	11/05/19 01:35	179601-23-1	W
o-Xylene	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/05/19 01:35	95-47-6	W
<b>Surrogates</b>									
Dibromofluoromethane (S)	101	%	57-146		1	11/04/19 10:15	11/05/19 01:35	1868-53-7	
Toluene-d8 (S)	107	%	64-134		1	11/04/19 10:15	11/05/19 01:35	2037-26-5	
4-Bromofluorobenzene (S)	87	%	54-126		1	11/04/19 10:15	11/05/19 01:35	460-00-4	
<b>Percent Moisture</b>	Analytical Method: ASTM D2974-87								
Percent Moisture	16.4	%	0.10	0.10	1			11/04/19 19:02	

## REPORT OF LABORATORY ANALYSIS

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## ANALYTICAL RESULTS

Project: 60615481 ALLOUEZ PHASE II ESA

Pace Project No.: 40198063

Sample: SP-110-0.5-1.5 Lab ID: 40198063035 Collected: 10/25/19 16:02 Received: 10/25/19 17:47 Matrix: Solid

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

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>6010 MET ICP</b>	Analytical Method: EPA 6010 Preparation Method: EPA 3050								
Arsenic	<3.3	mg/kg	10.9	3.3	2	10/30/19 06:39	11/05/19 13:14	7440-38-2	D3
Barium	97.1	mg/kg	0.56	0.17	1	10/30/19 06:39	11/01/19 17:03	7440-39-3	
Cadmium	<0.30	mg/kg	1.1	0.30	2	10/30/19 06:39	11/05/19 13:14	7440-43-9	D3
Chromium	30.5	mg/kg	1.1	0.31	1	10/30/19 06:39	11/01/19 17:03	7440-47-3	
Lead	8.4	mg/kg	4.5	1.3	2	10/30/19 06:39	11/05/19 13:14	7439-92-1	
Selenium	<2.9	mg/kg	9.8	2.9	2	10/30/19 06:39	11/05/19 13:14	7782-49-2	D3
Silver	<0.69	mg/kg	2.2	0.69	2	10/30/19 06:39	11/05/19 13:14	7440-22-4	D3
<b>7471 Mercury</b>	Analytical Method: EPA 7471 Preparation Method: EPA 7471								
Mercury	0.040	mg/kg	0.040	0.012	1	11/06/19 09:30	11/06/19 14:04	7439-97-6	
<b>8270 MSSV PAH by SIM</b>	Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3546								
Acenaphthene	<2.6	ug/kg	20.1	2.6	1	11/01/19 09:00	11/01/19 17:12	83-32-9	
Acenaphthylene	<2.5	ug/kg	20.1	2.5	1	11/01/19 09:00	11/01/19 17:12	208-96-8	
Anthracene	<2.5	ug/kg	20.1	2.5	1	11/01/19 09:00	11/01/19 17:12	120-12-7	
Benzo(a)anthracene	2.7J	ug/kg	20.1	2.6	1	11/01/19 09:00	11/01/19 17:12	56-55-3	
Benzo(a)pyrene	<2.3	ug/kg	20.1	2.3	1	11/01/19 09:00	11/01/19 17:12	50-32-8	
Benzo(b)fluoranthene	<2.8	ug/kg	20.1	2.8	1	11/01/19 09:00	11/01/19 17:12	205-99-2	
Benzo(g,h,i)perylene	<3.5	ug/kg	20.1	3.5	1	11/01/19 09:00	11/01/19 17:12	191-24-2	
Benzo(k)fluoranthene	<2.6	ug/kg	20.1	2.6	1	11/01/19 09:00	11/01/19 17:12	207-08-9	
Chrysene	<3.8	ug/kg	20.1	3.8	1	11/01/19 09:00	11/01/19 17:12	218-01-9	
Dibenz(a,h)anthracene	<2.8	ug/kg	20.1	2.8	1	11/01/19 09:00	11/01/19 17:12	53-70-3	
Fluoranthene	2.4J	ug/kg	20.1	2.4	1	11/01/19 09:00	11/01/19 17:12	206-44-0	
Fluorene	<2.4	ug/kg	20.1	2.4	1	11/01/19 09:00	11/01/19 17:12	86-73-7	
Indeno(1,2,3-cd)pyrene	<4.2	ug/kg	20.1	4.2	1	11/01/19 09:00	11/01/19 17:12	193-39-5	
1-Methylnaphthalene	<2.9	ug/kg	20.1	2.9	1	11/01/19 09:00	11/01/19 17:12	90-12-0	
2-Methylnaphthalene	<2.9	ug/kg	20.1	2.9	1	11/01/19 09:00	11/01/19 17:12	91-57-6	
Naphthalene	<2.0	ug/kg	20.1	2.0	1	11/01/19 09:00	11/01/19 17:12	91-20-3	
Phenanthrene	<2.3	ug/kg	20.1	2.3	1	11/01/19 09:00	11/01/19 17:12	85-01-8	
Pyrene	<3.0	ug/kg	20.1	3.0	1	11/01/19 09:00	11/01/19 17:12	129-00-0	
<b>Surrogates</b>									
2-Fluorobiphenyl (S)	64	%	28-99		1	11/01/19 09:00	11/01/19 17:12	321-60-8	
Terphenyl-d14 (S)	60	%	10-107		1	11/01/19 09:00	11/01/19 17:12	1718-51-0	
<b>8260 MSV Med Level Normal List</b>	Analytical Method: EPA 8260 Preparation Method: EPA 5035/5030B								
Benzene	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/05/19 01:58	71-43-2	W
Bromobenzene	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/05/19 01:58	108-86-1	W
Bromochloromethane	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/05/19 01:58	74-97-5	W
Bromodichloromethane	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/05/19 01:58	75-27-4	W
Bromoform	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/05/19 01:58	75-25-2	W
Bromomethane	<69.9	ug/kg	250	69.9	1	11/04/19 10:15	11/05/19 01:58	74-83-9	W
n-Butylbenzene	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/05/19 01:58	104-51-8	W
sec-Butylbenzene	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/05/19 01:58	135-98-8	W
tert-Butylbenzene	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/05/19 01:58	98-06-6	W
Carbon tetrachloride	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/05/19 01:58	56-23-5	W

## REPORT OF LABORATORY ANALYSIS

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## ANALYTICAL RESULTS

Project: 60615481 ALLOUEZ PHASE II ESA

Pace Project No.: 40198063

Sample: SP-110-0.5-1.5 Lab ID: 40198063035 Collected: 10/25/19 16:02 Received: 10/25/19 17:47 Matrix: Solid

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

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260 MSV Med Level Normal List</b>		Analytical Method: EPA 8260 Preparation Method: EPA 5035/5030B							
Chlorobenzene	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/05/19 01:58	108-90-7	W
Chloroethane	<67.0	ug/kg	250	67.0	1	11/04/19 10:15	11/05/19 01:58	75-00-3	W
Chloroform	<46.4	ug/kg	250	46.4	1	11/04/19 10:15	11/05/19 01:58	67-66-3	W
Chloromethane	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/05/19 01:58	74-87-3	W
2-Chlorotoluene	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/05/19 01:58	95-49-8	W
4-Chlorotoluene	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/05/19 01:58	106-43-4	W
1,2-Dibromo-3-chloropropane	<91.2	ug/kg	250	91.2	1	11/04/19 10:15	11/05/19 01:58	96-12-8	W
Dibromochloromethane	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/05/19 01:58	124-48-1	W
1,2-Dibromoethane (EDB)	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/05/19 01:58	106-93-4	W
Dibromomethane	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/05/19 01:58	74-95-3	W
1,2-Dichlorobenzene	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/05/19 01:58	95-50-1	W
1,3-Dichlorobenzene	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/05/19 01:58	541-73-1	W
1,4-Dichlorobenzene	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/05/19 01:58	106-46-7	W
Dichlorodifluoromethane	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/05/19 01:58	75-71-8	W
1,1-Dichloroethane	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/05/19 01:58	75-34-3	W
1,2-Dichloroethane	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/05/19 01:58	107-06-2	W
1,1-Dichloroethene	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/05/19 01:58	75-35-4	W
cis-1,2-Dichloroethene	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/05/19 01:58	156-59-2	W
trans-1,2-Dichloroethene	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/05/19 01:58	156-60-5	W
1,2-Dichloropropane	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/05/19 01:58	78-87-5	W
1,3-Dichloropropane	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/05/19 01:58	142-28-9	W
2,2-Dichloropropane	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/05/19 01:58	594-20-7	W
1,1-Dichloropropene	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/05/19 01:58	563-58-6	W
cis-1,3-Dichloropropene	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/05/19 01:58	10061-01-5	W
trans-1,3-Dichloropropene	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/05/19 01:58	10061-02-6	W
Diisopropyl ether	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/05/19 01:58	108-20-3	W
Ethylbenzene	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/05/19 01:58	100-41-4	W
Hexachloro-1,3-butadiene	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/05/19 01:58	87-68-3	W
Isopropylbenzene (Cumene)	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/05/19 01:58	98-82-8	W
p-Isopropyltoluene	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/05/19 01:58	99-87-6	W
Methylene Chloride	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/05/19 01:58	75-09-2	W
Methyl-tert-butyl ether	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/05/19 01:58	1634-04-4	W
Naphthalene	<40.0	ug/kg	250	40.0	1	11/04/19 10:15	11/05/19 01:58	91-20-3	W
n-Propylbenzene	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/05/19 01:58	103-65-1	W
Styrene	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/05/19 01:58	100-42-5	W
1,1,1,2-Tetrachloroethane	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/05/19 01:58	630-20-6	W
1,1,2,2-Tetrachloroethane	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/05/19 01:58	79-34-5	W
Tetrachloroethene	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/05/19 01:58	127-18-4	W
Toluene	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/05/19 01:58	108-88-3	W
1,2,3-Trichlorobenzene	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/05/19 01:58	87-61-6	W
1,2,4-Trichlorobenzene	<47.6	ug/kg	250	47.6	1	11/04/19 10:15	11/05/19 01:58	120-82-1	W
1,1,1-Trichloroethane	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/05/19 01:58	71-55-6	W
1,1,2-Trichloroethane	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/05/19 01:58	79-00-5	W
Trichloroethene	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/05/19 01:58	79-01-6	W
Trichlorofluoromethane	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/05/19 01:58	75-69-4	W

## REPORT OF LABORATORY ANALYSIS

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## ANALYTICAL RESULTS

Project: 60615481 ALLOUEZ PHASE II ESA

Pace Project No.: 40198063

Sample: SP-110-0.5-1.5 Lab ID: 40198063035 Collected: 10/25/19 16:02 Received: 10/25/19 17:47 Matrix: Solid

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

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260 MSV Med Level Normal List</b>	Analytical Method: EPA 8260 Preparation Method: EPA 5035/5030B								
1,2,3-Trichloropropane	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/05/19 01:58	96-18-4	W
1,2,4-Trimethylbenzene	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/05/19 01:58	95-63-6	W
1,3,5-Trimethylbenzene	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/05/19 01:58	108-67-8	W
Vinyl chloride	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/05/19 01:58	75-01-4	W
Xylene (Total)	<75.0	ug/kg	180	75.0	1	11/04/19 10:15	11/05/19 01:58	1330-20-7	W
m&p-Xylene	<50.0	ug/kg	120	50.0	1	11/04/19 10:15	11/05/19 01:58	179601-23-1	W
o-Xylene	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/05/19 01:58	95-47-6	W
<b>Surrogates</b>									
Dibromofluoromethane (S)	103	%	57-146		1	11/04/19 10:15	11/05/19 01:58	1868-53-7	
Toluene-d8 (S)	106	%	64-134		1	11/04/19 10:15	11/05/19 01:58	2037-26-5	
4-Bromofluorobenzene (S)	89	%	54-126		1	11/04/19 10:15	11/05/19 01:58	460-00-4	
<b>Percent Moisture</b>	Analytical Method: ASTM D2974-87								
Percent Moisture	<b>16.8</b>	%	0.10	0.10	1			11/04/19 19:03	

## REPORT OF LABORATORY ANALYSIS

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## ANALYTICAL RESULTS

Project: 60615481 ALLOUEZ PHASE II ESA

Pace Project No.: 40198063

Sample: SP-110-18-19 Lab ID: 40198063036 Collected: 10/25/19 16:07 Received: 10/25/19 17:47 Matrix: Solid

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

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>6010 MET ICP</b>		Analytical Method: EPA 6010 Preparation Method: EPA 3050							
Arsenic	3.3J	mg/kg	5.8	1.7	1	10/30/19 06:39	11/01/19 17:05	7440-38-2	
Barium	38.5	mg/kg	0.60	0.18	1	10/30/19 06:39	11/01/19 17:05	7440-39-3	
Cadmium	0.16J	mg/kg	0.60	0.16	1	10/30/19 06:39	11/01/19 17:05	7440-43-9	
Chromium	26.5	mg/kg	1.2	0.33	1	10/30/19 06:39	11/01/19 17:05	7440-47-3	
Lead	3.4	mg/kg	2.4	0.71	1	10/30/19 06:39	11/01/19 17:05	7439-92-1	
Selenium	<1.6	mg/kg	5.2	1.6	1	10/30/19 06:39	11/01/19 17:05	7782-49-2	
Silver	<0.37	mg/kg	1.2	0.37	1	10/30/19 06:39	11/01/19 17:05	7440-22-4	
<b>7471 Mercury</b>		Analytical Method: EPA 7471 Preparation Method: EPA 7471							
Mercury	0.020J	mg/kg	0.040	0.012	1	11/06/19 09:30	11/06/19 14:06	7439-97-6	
<b>8270 MSSV PAH by SIM</b>		Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3546							
Acenaphthene	<2.6	ug/kg	20.1	2.6	1	11/01/19 09:00	11/01/19 17:30	83-32-9	
Acenaphthylene	<2.5	ug/kg	20.1	2.5	1	11/01/19 09:00	11/01/19 17:30	208-96-8	
Anthracene	<2.5	ug/kg	20.1	2.5	1	11/01/19 09:00	11/01/19 17:30	120-12-7	
Benzo(a)anthracene	<2.6	ug/kg	20.1	2.6	1	11/01/19 09:00	11/01/19 17:30	56-55-3	
Benzo(a)pyrene	<2.3	ug/kg	20.1	2.3	1	11/01/19 09:00	11/01/19 17:30	50-32-8	
Benzo(b)fluoranthene	<2.8	ug/kg	20.1	2.8	1	11/01/19 09:00	11/01/19 17:30	205-99-2	
Benzo(g,h,i)perylene	<3.5	ug/kg	20.1	3.5	1	11/01/19 09:00	11/01/19 17:30	191-24-2	
Benzo(k)fluoranthene	<2.6	ug/kg	20.1	2.6	1	11/01/19 09:00	11/01/19 17:30	207-08-9	
Chrysene	<3.8	ug/kg	20.1	3.8	1	11/01/19 09:00	11/01/19 17:30	218-01-9	
Dibenz(a,h)anthracene	<2.8	ug/kg	20.1	2.8	1	11/01/19 09:00	11/01/19 17:30	53-70-3	
Fluoranthene	<2.4	ug/kg	20.1	2.4	1	11/01/19 09:00	11/01/19 17:30	206-44-0	
Fluorene	<2.4	ug/kg	20.1	2.4	1	11/01/19 09:00	11/01/19 17:30	86-73-7	
Indeno(1,2,3-cd)pyrene	<4.2	ug/kg	20.1	4.2	1	11/01/19 09:00	11/01/19 17:30	193-39-5	
1-Methylnaphthalene	<2.9	ug/kg	20.1	2.9	1	11/01/19 09:00	11/01/19 17:30	90-12-0	
2-Methylnaphthalene	<2.9	ug/kg	20.1	2.9	1	11/01/19 09:00	11/01/19 17:30	91-57-6	
Naphthalene	<2.0	ug/kg	20.1	2.0	1	11/01/19 09:00	11/01/19 17:30	91-20-3	
Phenanthrene	<2.3	ug/kg	20.1	2.3	1	11/01/19 09:00	11/01/19 17:30	85-01-8	
Pyrene	<3.0	ug/kg	20.1	3.0	1	11/01/19 09:00	11/01/19 17:30	129-00-0	
<b>Surrogates</b>									
2-Fluorobiphenyl (S)	67	%	28-99		1	11/01/19 09:00	11/01/19 17:30	321-60-8	
Terphenyl-d14 (S)	72	%	10-107		1	11/01/19 09:00	11/01/19 17:30	1718-51-0	
<b>8260 MSV Med Level Normal List</b>		Analytical Method: EPA 8260 Preparation Method: EPA 5035/5030B							
Benzene	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/05/19 02:21	71-43-2	W
Bromobenzene	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/05/19 02:21	108-86-1	W
Bromochloromethane	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/05/19 02:21	74-97-5	W
Bromodichloromethane	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/05/19 02:21	75-27-4	W
Bromoform	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/05/19 02:21	75-25-2	W
Bromomethane	<69.9	ug/kg	250	69.9	1	11/04/19 10:15	11/05/19 02:21	74-83-9	W
n-Butylbenzene	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/05/19 02:21	104-51-8	W
sec-Butylbenzene	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/05/19 02:21	135-98-8	W
tert-Butylbenzene	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/05/19 02:21	98-06-6	W
Carbon tetrachloride	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/05/19 02:21	56-23-5	W

## REPORT OF LABORATORY ANALYSIS

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## ANALYTICAL RESULTS

Project: 60615481 ALLOUEZ PHASE II ESA

Pace Project No.: 40198063

Sample: SP-110-18-19 Lab ID: 40198063036 Collected: 10/25/19 16:07 Received: 10/25/19 17:47 Matrix: Solid

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

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260 MSV Med Level Normal List</b>		Analytical Method: EPA 8260 Preparation Method: EPA 5035/5030B							
Chlorobenzene	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/05/19 02:21	108-90-7	W
Chloroethane	<67.0	ug/kg	250	67.0	1	11/04/19 10:15	11/05/19 02:21	75-00-3	W
Chloroform	<46.4	ug/kg	250	46.4	1	11/04/19 10:15	11/05/19 02:21	67-66-3	W
Chloromethane	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/05/19 02:21	74-87-3	W
2-Chlorotoluene	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/05/19 02:21	95-49-8	W
4-Chlorotoluene	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/05/19 02:21	106-43-4	W
1,2-Dibromo-3-chloropropane	<91.2	ug/kg	250	91.2	1	11/04/19 10:15	11/05/19 02:21	96-12-8	W
Dibromochloromethane	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/05/19 02:21	124-48-1	W
1,2-Dibromoethane (EDB)	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/05/19 02:21	106-93-4	W
Dibromomethane	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/05/19 02:21	74-95-3	W
1,2-Dichlorobenzene	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/05/19 02:21	95-50-1	W
1,3-Dichlorobenzene	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/05/19 02:21	541-73-1	W
1,4-Dichlorobenzene	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/05/19 02:21	106-46-7	W
Dichlorodifluoromethane	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/05/19 02:21	75-71-8	W
1,1-Dichloroethane	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/05/19 02:21	75-34-3	W
1,2-Dichloroethane	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/05/19 02:21	107-06-2	W
1,1-Dichloroethene	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/05/19 02:21	75-35-4	W
cis-1,2-Dichloroethene	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/05/19 02:21	156-59-2	W
trans-1,2-Dichloroethene	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/05/19 02:21	156-60-5	W
1,2-Dichloropropane	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/05/19 02:21	78-87-5	W
1,3-Dichloropropane	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/05/19 02:21	142-28-9	W
2,2-Dichloropropane	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/05/19 02:21	594-20-7	W
1,1-Dichloropropene	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/05/19 02:21	563-58-6	W
cis-1,3-Dichloropropene	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/05/19 02:21	10061-01-5	W
trans-1,3-Dichloropropene	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/05/19 02:21	10061-02-6	W
Diisopropyl ether	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/05/19 02:21	108-20-3	W
Ethylbenzene	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/05/19 02:21	100-41-4	W
Hexachloro-1,3-butadiene	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/05/19 02:21	87-68-3	W
Isopropylbenzene (Cumene)	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/05/19 02:21	98-82-8	W
p-Isopropyltoluene	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/05/19 02:21	99-87-6	W
Methylene Chloride	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/05/19 02:21	75-09-2	W
Methyl-tert-butyl ether	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/05/19 02:21	1634-04-4	W
Naphthalene	<40.0	ug/kg	250	40.0	1	11/04/19 10:15	11/05/19 02:21	91-20-3	W
n-Propylbenzene	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/05/19 02:21	103-65-1	W
Styrene	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/05/19 02:21	100-42-5	W
1,1,1,2-Tetrachloroethane	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/05/19 02:21	630-20-6	W
1,1,2,2-Tetrachloroethane	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/05/19 02:21	79-34-5	W
Tetrachloroethene	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/05/19 02:21	127-18-4	W
Toluene	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/05/19 02:21	108-88-3	W
1,2,3-Trichlorobenzene	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/05/19 02:21	87-61-6	W
1,2,4-Trichlorobenzene	<47.6	ug/kg	250	47.6	1	11/04/19 10:15	11/05/19 02:21	120-82-1	W
1,1,1-Trichloroethane	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/05/19 02:21	71-55-6	W
1,1,2-Trichloroethane	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/05/19 02:21	79-00-5	W
Trichloroethene	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/05/19 02:21	79-01-6	W
Trichlorofluoromethane	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/05/19 02:21	75-69-4	W

## REPORT OF LABORATORY ANALYSIS

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## ANALYTICAL RESULTS

Project: 60615481 ALLOUEZ PHASE II ESA

Pace Project No.: 40198063

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Sample: SP-110-18-19      Lab ID: 40198063036      Collected: 10/25/19 16:07      Received: 10/25/19 17:47      Matrix: Solid

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

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260 MSV Med Level Normal List</b>	Analytical Method: EPA 8260 Preparation Method: EPA 5035/5030B								
1,2,3-Trichloropropane	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/05/19 02:21	96-18-4	W
1,2,4-Trimethylbenzene	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/05/19 02:21	95-63-6	W
1,3,5-Trimethylbenzene	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/05/19 02:21	108-67-8	W
Vinyl chloride	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/05/19 02:21	75-01-4	W
Xylene (Total)	<75.0	ug/kg	180	75.0	1	11/04/19 10:15	11/05/19 02:21	1330-20-7	W
m&p-Xylene	<50.0	ug/kg	120	50.0	1	11/04/19 10:15	11/05/19 02:21	179601-23-1	W
o-Xylene	<25.0	ug/kg	60.0	25.0	1	11/04/19 10:15	11/05/19 02:21	95-47-6	W
<b>Surrogates</b>									
Dibromofluoromethane (S)	97	%	57-146		1	11/04/19 10:15	11/05/19 02:21	1868-53-7	
Toluene-d8 (S)	101	%	64-134		1	11/04/19 10:15	11/05/19 02:21	2037-26-5	
4-Bromofluorobenzene (S)	85	%	54-126		1	11/04/19 10:15	11/05/19 02:21	460-00-4	
<b>Percent Moisture</b>	Analytical Method: ASTM D2974-87								
Percent Moisture	<b>16.9</b>	%	0.10	0.10	1			11/04/19 19:03	

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## QUALITY CONTROL DATA

Project: 60615481 ALLOUEZ PHASE II ESA

Pace Project No.: 40198063

QC Batch: 339779 Analysis Method: EPA 7471

QC Batch Method: EPA 7471 Analysis Description: 7471 Mercury

Associated Lab Samples: 40198063001, 40198063003, 40198063006, 40198063007, 40198063008, 40198063009, 40198063010,  
40198063011, 40198063012, 40198063013, 40198063015, 40198063016, 40198063017, 40198063018,  
40198063019, 40198063021, 40198063022, 40198063023

METHOD BLANK: 1973123 Matrix: Solid

Associated Lab Samples: 40198063001, 40198063003, 40198063006, 40198063007, 40198063008, 40198063009, 40198063010,  
40198063011, 40198063012, 40198063013, 40198063015, 40198063016, 40198063017, 40198063018,  
40198063019, 40198063021, 40198063022, 40198063023

Parameter	Units	Blank	Reporting	Analyzed	Qualifiers
		Result	Limit		
Mercury	mg/kg	<0.010	0.035	11/06/19 12:22	

LABORATORY CONTROL SAMPLE: 1973124

Parameter	Units	Spike	LCS	LCS	% Rec	Qualifiers
		Conc.	Result	% Rec	Limits	
Mercury	mg/kg	0.83	0.84	101	85-115	

MATRIX SPIKE &amp; MATRIX SPIKE DUPLICATE: 1973125 1973126

Parameter	Units	MS	MSD	MS	MSD	MS	MSD	% Rec	% Rec	RPD	Max
		40198063012	Spike								
Mercury	mg/kg	0.014J	1.1	1.1	1.1	1.1	1.1	103	102	85-115	0 20

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## QUALITY CONTROL DATA

Project: 60615481 ALLOUEZ PHASE II ESA  
Pace Project No.: 40198063

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QC Batch:	339780	Analysis Method:	EPA 7471
QC Batch Method:	EPA 7471	Analysis Description:	7471 Mercury
Associated Lab Samples:	40198063024, 40198063025, 40198063026, 40198063027, 40198063028, 40198063030, 40198063031, 40198063032, 40198063033, 40198063034, 40198063035, 40198063036		

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METHOD BLANK:	1973127	Matrix:	Solid
Associated Lab Samples:	40198063024, 40198063025, 40198063026, 40198063027, 40198063028, 40198063030, 40198063031, 40198063032, 40198063033, 40198063034, 40198063035, 40198063036		

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Parameter	Units	Blank	Reporting	Analyzed	Qualifiers
		Result	Limit		
Mercury	mg/kg	<0.010	0.035	11/06/19 13:27	

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LABORATORY CONTROL SAMPLE: 1973128

Parameter	Units	Spike	LCS	LCS	% Rec	Qualifiers
		Conc.	Result	% Rec	Limits	
Mercury	mg/kg	0.83	0.84	101	85-115	

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MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1973129 1973130

Parameter	Units	MS	MSD	MS	MSD	MS	MSD	% Rec	% Rec	RPD	Max
		40198063024	Spike								
Mercury	mg/kg	<0.011	0.86	0.86	0.87	0.89	100	102	85-115	3	20

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## QUALITY CONTROL DATA

Project: 60615481 ALLOUEZ PHASE II ESA

Pace Project No.: 40198063

QC Batch: 338981 Analysis Method: EPA 6010

QC Batch Method: EPA 3050 Analysis Description: 6010 MET

Associated Lab Samples: 40198063001, 40198063003, 40198063006, 40198063007, 40198063008, 40198063009, 40198063010,  
40198063011, 40198063012, 40198063013, 40198063015, 40198063016, 40198063017, 40198063018,  
40198063019, 40198063021, 40198063022, 40198063023, 40198063024, 40198063025

METHOD BLANK: 1968892 Matrix: Solid

Associated Lab Samples: 40198063001, 40198063003, 40198063006, 40198063007, 40198063008, 40198063009, 40198063010,  
40198063011, 40198063012, 40198063013, 40198063015, 40198063016, 40198063017, 40198063018,  
40198063019, 40198063021, 40198063022, 40198063023, 40198063024, 40198063025

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Arsenic	mg/kg	<1.5	4.9	11/02/19 22:52	
Barium	mg/kg	<0.15	0.50	11/02/19 22:52	
Cadmium	mg/kg	<0.13	0.50	11/02/19 22:52	
Chromium	mg/kg	<0.28	1.0	11/02/19 22:52	
Lead	mg/kg	<0.60	2.0	11/02/19 22:52	
Selenium	mg/kg	<1.3	4.4	11/02/19 22:52	
Silver	mg/kg	<0.31	1.0	11/02/19 22:52	

LABORATORY CONTROL SAMPLE: 1968893

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Arsenic	mg/kg	50	50.7	101	80-120	
Barium	mg/kg	50	52.4	105	80-120	
Cadmium	mg/kg	50	51.6	103	80-120	
Chromium	mg/kg	50	50.6	101	80-120	
Lead	mg/kg	50	51.9	104	80-120	
Selenium	mg/kg	50	51.9	104	80-120	
Silver	mg/kg	25	27.0	108	80-120	

MATRIX SPIKE &amp; MATRIX SPIKE DUPLICATE: 1968894 1968895

Parameter	Units	MS		MSD		MS		MSD		% Rec		RPD	Max RPD	Qual
		40198063012 Result	Spike Conc.	Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	Limits	RPD	RPD			
Arsenic	mg/kg	2.5J	63.5	63.5	57.6	56.1	87	84	75-125	3	20			
Barium	mg/kg	77.9	63.5	63.5	144	140	104	98	75-125	3	20			
Cadmium	mg/kg	<0.17	63.5	63.5	59.2	59.1	93	93	75-125	0	20			
Chromium	mg/kg	29.7	63.5	63.5	91.9	89.0	98	93	75-125	3	20			
Lead	mg/kg	7.4	63.5	63.5	65.1	64.7	91	90	75-125	1	20			
Selenium	mg/kg	<1.7	63.5	63.5	55.8	56.3	88	89	75-125	1	20			
Silver	mg/kg	<0.39	31.8	31.8	28.9	29.7	91	94	75-125	3	20			

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## QUALITY CONTROL DATA

Project: 60615481 ALLOUEZ PHASE II ESA

Pace Project No.: 40198063

QC Batch:	338982	Analysis Method:	EPA 6010
QC Batch Method:	EPA 3050	Analysis Description:	6010 MET
Associated Lab Samples: 40198063026, 40198063027, 40198063028, 40198063030, 40198063031, 40198063032, 40198063033, 40198063034, 40198063035, 40198063036			

METHOD BLANK:	1968896	Matrix:	Solid
Associated Lab Samples: 40198063026, 40198063027, 40198063028, 40198063030, 40198063031, 40198063032, 40198063033, 40198063034, 40198063035, 40198063036			

Parameter	Units	Blank	Reporting		Qualifiers
		Result	Limit	Analyzed	
Arsenic	mg/kg	<1.5	4.9	11/01/19 16:02	
Barium	mg/kg	<0.15	0.50	11/01/19 16:02	
Cadmium	mg/kg	<0.13	0.50	11/01/19 16:02	
Chromium	mg/kg	<0.28	1.0	11/01/19 16:02	
Lead	mg/kg	<0.60	2.0	11/01/19 16:02	
Selenium	mg/kg	<1.3	4.4	11/01/19 16:02	
Silver	mg/kg	<0.31	1.0	11/01/19 16:02	

LABORATORY CONTROL SAMPLE:	1968897					
Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Arsenic	mg/kg	50	47.8	96	80-120	
Barium	mg/kg	50	48.8	98	80-120	
Cadmium	mg/kg	50	49.1	98	80-120	
Chromium	mg/kg	50	48.6	97	80-120	
Lead	mg/kg	50	49.9	100	80-120	
Selenium	mg/kg	50	48.8	98	80-120	
Silver	mg/kg	25	25.3	101	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE:	1968898			1968899			
Parameter	Units	40197979001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec
Arsenic	mg/kg	10.9	58.6	58.4	70.6	71.3	102
Barium	mg/kg	59.0	58.6	58.4	129	102	119
Cadmium	mg/kg	0.30J	58.6	58.4	57.9	55.4	99
Chromium	mg/kg	25.7	58.6	58.4	80.8	81.6	94
Lead	mg/kg	23.4	58.6	58.4	79.8	72.3	97
Selenium	mg/kg	<1.5	58.6	58.4	56.0	51.8	96
Silver	mg/kg	<0.36	29.2	29.2	28.2	28.1	96
							75-125
							103
							1
							20
							M0,R1
							23
							5
							20
							1
							20
							10
							8
							20
							0
							20

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## QUALITY CONTROL DATA

Project: 60615481 ALLOUEZ PHASE II ESA

Pace Project No.: 40198063

QC Batch:	339468	Analysis Method:	EPA 8260
QC Batch Method:	EPA 5035/5030B	Analysis Description:	8260 MSV Med Level Normal List
Associated Lab Samples:	40198063002, 40198063003, 40198063004, 40198063005, 40198063006, 40198063007		

METHOD BLANK: 1971505	Matrix: Solid
Associated Lab Samples:	40198063002, 40198063003, 40198063004, 40198063005, 40198063006, 40198063007

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1,1,2-Tetrachloroethane	ug/kg	<13.7	50.0	11/04/19 08:48	
1,1,1-Trichloroethane	ug/kg	<14.4	50.0	11/04/19 08:48	
1,1,2,2-Tetrachloroethane	ug/kg	<17.5	50.0	11/04/19 08:48	
1,1,2-Trichloroethane	ug/kg	<20.2	50.0	11/04/19 08:48	
1,1-Dichloroethane	ug/kg	<17.6	50.0	11/04/19 08:48	
1,1-Dichloroethene	ug/kg	<17.6	50.0	11/04/19 08:48	
1,1-Dichloropropene	ug/kg	<14.0	50.0	11/04/19 08:48	
1,2,3-Trichlorobenzene	ug/kg	17.2J	50.0	11/04/19 08:48	
1,2,3-Trichloropropane	ug/kg	<22.3	50.0	11/04/19 08:48	
1,2,4-Trichlorobenzene	ug/kg	<47.6	250	11/04/19 08:48	
1,2,4-Trimethylbenzene	ug/kg	<12.2	50.0	11/04/19 08:48	
1,2-Dibromo-3-chloropropane	ug/kg	<91.2	250	11/04/19 08:48	
1,2-Dibromoethane (EDB)	ug/kg	<14.7	50.0	11/04/19 08:48	
1,2-Dichlorobenzene	ug/kg	<16.2	50.0	11/04/19 08:48	
1,2-Dichloroethane	ug/kg	<15.0	50.0	11/04/19 08:48	
1,2-Dichloropropane	ug/kg	<16.8	50.0	11/04/19 08:48	
1,3,5-Trimethylbenzene	ug/kg	<14.5	50.0	11/04/19 08:48	
1,3-Dichlorobenzene	ug/kg	<13.2	50.0	11/04/19 08:48	
1,3-Dichloropropane	ug/kg	<12.0	50.0	11/04/19 08:48	
1,4-Dichlorobenzene	ug/kg	<15.9	50.0	11/04/19 08:48	
2,2-Dichloropropane	ug/kg	<12.6	50.0	11/04/19 08:48	
2-Chlorotoluene	ug/kg	<15.8	50.0	11/04/19 08:48	
4-Chlorotoluene	ug/kg	<13.0	50.0	11/04/19 08:48	
Benzene	ug/kg	<9.2	20.0	11/04/19 08:48	
Bromobenzene	ug/kg	<20.6	50.0	11/04/19 08:48	
Bromochloromethane	ug/kg	<21.4	50.0	11/04/19 08:48	
Bromodichloromethane	ug/kg	<9.8	50.0	11/04/19 08:48	
Bromoform	ug/kg	<19.8	50.0	11/04/19 08:48	
Bromomethane	ug/kg	<69.9	250	11/04/19 08:48	
Carbon tetrachloride	ug/kg	<12.1	50.0	11/04/19 08:48	
Chlorobenzene	ug/kg	<14.8	50.0	11/04/19 08:48	
Chloroethane	ug/kg	<67.0	250	11/04/19 08:48	
Chloroform	ug/kg	<46.4	250	11/04/19 08:48	
Chloromethane	ug/kg	<20.4	50.0	11/04/19 08:48	
cis-1,2-Dichloroethene	ug/kg	<16.6	50.0	11/04/19 08:48	
cis-1,3-Dichloropropene	ug/kg	<16.6	50.0	11/04/19 08:48	
Dibromochloromethane	ug/kg	<17.9	50.0	11/04/19 08:48	
Dibromomethane	ug/kg	<19.3	50.0	11/04/19 08:48	
Dichlorodifluoromethane	ug/kg	<12.3	50.0	11/04/19 08:48	
Diisopropyl ether	ug/kg	<17.7	50.0	11/04/19 08:48	
Ethylbenzene	ug/kg	<12.4	50.0	11/04/19 08:48	

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## QUALITY CONTROL DATA

Project: 60615481 ALLOUEZ PHASE II ESA

Pace Project No.: 40198063

METHOD BLANK: 1971505

Matrix: Solid

Associated Lab Samples: 40198063002, 40198063003, 40198063004, 40198063005, 40198063006, 40198063007

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Hexachloro-1,3-butadiene	ug/kg	28.7J	50.0	11/04/19 08:48	
Isopropylbenzene (Cumene)	ug/kg	<12.6	50.0	11/04/19 08:48	
m&p-Xylene	ug/kg	<34.4	100	11/04/19 08:48	
Methyl-tert-butyl ether	ug/kg	<12.7	50.0	11/04/19 08:48	
Methylene Chloride	ug/kg	<16.2	50.0	11/04/19 08:48	
n-Butylbenzene	ug/kg	16.4J	50.0	11/04/19 08:48	
n-Propylbenzene	ug/kg	<11.6	50.0	11/04/19 08:48	
Naphthalene	ug/kg	<40.0	250	11/04/19 08:48	
o-Xylene	ug/kg	<14.0	50.0	11/04/19 08:48	
p-Isopropyltoluene	ug/kg	<12.0	50.0	11/04/19 08:48	
sec-Butylbenzene	ug/kg	<11.9	50.0	11/04/19 08:48	
Styrene	ug/kg	<9.0	50.0	11/04/19 08:48	
tert-Butylbenzene	ug/kg	<9.5	50.0	11/04/19 08:48	
Tetrachloroethene	ug/kg	<12.9	50.0	11/04/19 08:48	
Toluene	ug/kg	<11.2	50.0	11/04/19 08:48	
trans-1,2-Dichloroethene	ug/kg	<16.5	50.0	11/04/19 08:48	
trans-1,3-Dichloropropene	ug/kg	<14.4	50.0	11/04/19 08:48	
Trichloroethene	ug/kg	<23.6	50.0	11/04/19 08:48	
Trichlorofluoromethane	ug/kg	<24.7	50.0	11/04/19 08:48	
Vinyl chloride	ug/kg	<21.1	50.0	11/04/19 08:48	
4-Bromofluorobenzene (S)	%	91	54-126	11/04/19 08:48	
Dibromofluoromethane (S)	%	99	57-146	11/04/19 08:48	
Toluene-d8 (S)	%	109	64-134	11/04/19 08:48	

LABORATORY CONTROL SAMPLE: 1971506

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1-Trichloroethane	ug/kg	2500	2650	106	70-132	
1,1,2,2-Tetrachloroethane	ug/kg	2500	2880	115	70-130	
1,1,2-Trichloroethane	ug/kg	2500	2740	110	70-130	
1,1-Dichloroethane	ug/kg	2500	2710	108	70-130	
1,1-Dichloroethene	ug/kg	2500	2650	106	77-126	
1,2,4-Trichlorobenzene	ug/kg	2500	2270	91	66-130	
1,2-Dibromo-3-chloropropane	ug/kg	2500	2870	115	54-129	
1,2-Dibromoethane (EDB)	ug/kg	2500	2580	103	70-130	
1,2-Dichlorobenzene	ug/kg	2500	2710	108	70-130	
1,2-Dichloroethane	ug/kg	2500	2670	107	70-134	
1,2-Dichloropropane	ug/kg	2500	2790	112	74-124	
1,3-Dichlorobenzene	ug/kg	2500	2840	113	70-130	
1,4-Dichlorobenzene	ug/kg	2500	2750	110	70-130	
Benzene	ug/kg	2500	2500	100	70-130	
Bromodichloromethane	ug/kg	2500	2670	107	70-130	
Bromoform	ug/kg	2500	2430	97	47-115	
Bromomethane	ug/kg	2500	1820	73	64-165	

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## REPORT OF LABORATORY ANALYSIS

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## QUALITY CONTROL DATA

Project: 60615481 ALLOUEZ PHASE II ESA

Pace Project No.: 40198063

**LABORATORY CONTROL SAMPLE: 1971506**

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Carbon tetrachloride	ug/kg	2500	2540	102	70-131	
Chlorobenzene	ug/kg	2500	2640	106	70-130	
Chloroethane	ug/kg	2500	2200	88	28-197	
Chloroform	ug/kg	2500	2430	97	80-131	
Chloromethane	ug/kg	2500	1920	77	45-118	
cis-1,2-Dichloroethene	ug/kg	2500	2320	93	70-130	
cis-1,3-Dichloropropene	ug/kg	2500	2460	98	70-130	
Dibromochloromethane	ug/kg	2500	2610	105	70-130	
Dichlorodifluoromethane	ug/kg	2500	1330	53	38-108	
Ethylbenzene	ug/kg	2500	2620	105	82-122	
Isopropylbenzene (Cumene)	ug/kg	2500	2660	106	70-130	
m&p-Xylene	ug/kg	5000	5470	109	70-130	
Methyl-tert-butyl ether	ug/kg	2500	2640	106	70-130	
Methylene Chloride	ug/kg	2500	2320	93	70-130	
o-Xylene	ug/kg	2500	2670	107	70-130	
Styrene	ug/kg	2500	2770	111	70-130	
Tetrachloroethene	ug/kg	2500	2690	107	70-130	
Toluene	ug/kg	2500	2790	112	80-121	
trans-1,2-Dichloroethene	ug/kg	2500	2650	106	70-130	
trans-1,3-Dichloropropene	ug/kg	2500	2670	107	70-130	
Trichloroethene	ug/kg	2500	2560	102	70-130	
Trichlorofluoromethane	ug/kg	2500	2480	99	81-141	
Vinyl chloride	ug/kg	2500	2200	88	68-121	
4-Bromofluorobenzene (S)	%			99	54-126	
Dibromofluoromethane (S)	%			98	57-146	
Toluene-d8 (S)	%			109	64-134	

**MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1971507 1971508**

Parameter	Units	MS		MSD		MS		MSD		% Rec Limits	RPD	Max RPD	Qual
		40198063007	Result	Spike Conc.	Spike Conc.	Result	MSD	Result	% Rec				
1,1,1-Trichloroethane	ug/kg	<25.0	1470	1470	1430	1430	97	97	64-132	0	20		
1,1,2,2-Tetrachloroethane	ug/kg	<25.0	1470	1470	1810	1750	123	119	70-132	3	20		
1,1,2-Trichloroethane	ug/kg	<25.0	1470	1470	1590	1620	108	110	70-130	2	20		
1,1-Dichloroethane	ug/kg	<25.0	1470	1470	1530	1550	104	105	70-130	2	20		
1,1-Dichloroethene	ug/kg	<25.0	1470	1470	1470	1430	100	97	65-126	3	21		
1,2,4-Trichlorobenzene	ug/kg	<47.6	1470	1470	1620	1510	110	103	66-139	7	20		
1,2-Dibromo-3-chloropropane	ug/kg	<91.2	1470	1470	1800	1680	123	114	47-146	7	23		
1,2-Dibromoethane (EDB)	ug/kg	<25.0	1470	1470	1500	1510	102	102	70-130	0	20		
1,2-Dichlorobenzene	ug/kg	<25.0	1470	1470	1630	1650	111	112	70-130	1	20		
1,2-Dichloroethane	ug/kg	<25.0	1470	1470	1470	1560	100	106	70-136	5	20		
1,2-Dichloropropane	ug/kg	<25.0	1470	1470	1540	1550	105	106	74-124	1	20		
1,3-Dichlorobenzene	ug/kg	<25.0	1470	1470	1710	1650	116	112	70-130	4	20		
1,4-Dichlorobenzene	ug/kg	<25.0	1470	1470	1640	1590	111	108	70-130	3	20		

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## QUALITY CONTROL DATA

Project: 60615481 ALLOUEZ PHASE II ESA

Pace Project No.: 40198063

Parameter	Units	40198063007		MSD		1971508		% Rec	Limits	RPD	Max RPD	Qual
		MS Result	Spike Conc.	Spike Conc.	MS Result	MSD Result	% Rec					
Benzene	ug/kg	<25.0	1470	1470	1380	1420	94	96	70-130	3	20	
Bromodichloromethane	ug/kg	<25.0	1470	1470	1530	1530	104	104	70-130	0	20	
Bromoform	ug/kg	<25.0	1470	1470	1510	1460	102	99	47-129	3	20	
Bromomethane	ug/kg	<69.9	1470	1470	1120	1200	76	82	41-180	7	20	
Carbon tetrachloride	ug/kg	<25.0	1470	1470	1280	1290	87	88	58-133	0	20	
Chlorobenzene	ug/kg	<25.0	1470	1470	1490	1460	101	100	70-130	2	20	
Chloroethane	ug/kg	<67.0	1470	1470	1290	1340	88	91	28-197	3	20	
Chloroform	ug/kg	<46.4	1470	1470	1360	1410	92	96	80-131	4	20	
Chloromethane	ug/kg	<25.0	1470	1470	1200	1260	82	86	26-118	5	20	
cis-1,2-Dichloroethene	ug/kg	<25.0	1470	1470	1250	1270	85	87	70-130	1	20	
cis-1,3-Dichloropropene	ug/kg	<25.0	1470	1470	1470	1450	100	99	70-130	1	20	
Dibromochloromethane	ug/kg	<25.0	1470	1470	1540	1480	104	101	67-130	3	20	
Dichlorodifluoromethane	ug/kg	<25.0	1470	1470	885	858	60	58	12-108	3	29	
Ethylbenzene	ug/kg	<25.0	1470	1470	1380	1410	94	96	80-122	2	20	
Isopropylbenzene (Cumene)	ug/kg	<25.0	1470	1470	1420	1360	97	93	70-130	4	20	
m&p-Xylene	ug/kg	<50.0	2940	2940	2920	2880	99	98	70-130	1	20	
Methyl-tert-butyl ether	ug/kg	<25.0	1470	1470	1580	1510	107	103	70-130	4	20	
Methylene Chloride	ug/kg	<25.0	1470	1470	1310	1370	89	93	70-130	4	20	
o-Xylene	ug/kg	<25.0	1470	1470	1450	1410	99	96	70-130	3	20	
Styrene	ug/kg	<25.0	1470	1470	1470	1460	100	99	70-130	1	20	
Tetrachloroethene	ug/kg	<25.0	1470	1470	1400	1390	95	95	70-130	1	20	
Toluene	ug/kg	<25.0	1470	1470	1500	1490	102	102	80-121	0	20	
trans-1,2-Dichloroethene	ug/kg	<25.0	1470	1470	1400	1450	95	98	70-130	3	20	
trans-1,3-Dichloropropene	ug/kg	<25.0	1470	1470	1550	1490	105	102	70-130	4	20	
Trichloroethene	ug/kg	<25.0	1470	1470	1370	1370	93	93	70-130	0	20	
Trichlorofluoromethane	ug/kg	<25.0	1470	1470	1340	1340	91	91	60-141	0	26	
Vinyl chloride	ug/kg	<25.0	1470	1470	1270	1290	86	87	46-121	1	20	
4-Bromofluorobenzene (S)	%						85	83	54-126			
Dibromofluoromethane (S)	%						82	86	57-146			
Toluene-d8 (S)	%						92	93	64-134			

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## QUALITY CONTROL DATA

Project: 60615481 ALLOUEZ PHASE II ESA

Pace Project No.: 40198063

QC Batch:	339483	Analysis Method:	EPA 8260
QC Batch Method:	EPA 5035/5030B	Analysis Description:	8260 MSV Med Level Normal List
Associated Lab Samples:	40198063009, 40198063010, 40198063011, 40198063012, 40198063013, 40198063014, 40198063015, 40198063016, 40198063017, 40198063018, 40198063019, 40198063020, 40198063021, 40198063022, 40198063023, 40198063024, 40198063025, 40198063026, 40198063027, 40198063028		

METHOD BLANK:

1971771

Matrix: Solid

Associated Lab Samples: 40198063009, 40198063010, 40198063011, 40198063012, 40198063013, 40198063014, 40198063015,  
40198063016, 40198063017, 40198063018, 40198063019, 40198063020, 40198063021, 40198063022,  
40198063023, 40198063024, 40198063025, 40198063026, 40198063027, 40198063028

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1,1,2-Tetrachloroethane	ug/kg	<13.7	50.0	11/04/19 07:42	
1,1,1-Trichloroethane	ug/kg	<14.4	50.0	11/04/19 07:42	
1,1,2,2-Tetrachloroethane	ug/kg	<17.5	50.0	11/04/19 07:42	
1,1,2-Trichloroethane	ug/kg	<20.2	50.0	11/04/19 07:42	
1,1-Dichloroethane	ug/kg	<17.6	50.0	11/04/19 07:42	
1,1-Dichloroethene	ug/kg	<17.6	50.0	11/04/19 07:42	
1,1-Dichloropropene	ug/kg	<14.0	50.0	11/04/19 07:42	
1,2,3-Trichlorobenzene	ug/kg	<17.0	50.0	11/04/19 07:42	
1,2,3-Trichloropropane	ug/kg	<22.3	50.0	11/04/19 07:42	
1,2,4-Trichlorobenzene	ug/kg	<47.6	250	11/04/19 07:42	
1,2,4-Trimethylbenzene	ug/kg	<12.2	50.0	11/04/19 07:42	
1,2-Dibromo-3-chloropropane	ug/kg	<91.2	250	11/04/19 07:42	
1,2-Dibromoethane (EDB)	ug/kg	<14.7	50.0	11/04/19 07:42	
1,2-Dichlorobenzene	ug/kg	<16.2	50.0	11/04/19 07:42	
1,2-Dichloroethane	ug/kg	<15.0	50.0	11/04/19 07:42	
1,2-Dichloropropane	ug/kg	<16.8	50.0	11/04/19 07:42	
1,3,5-Trimethylbenzene	ug/kg	<14.5	50.0	11/04/19 07:42	
1,3-Dichlorobenzene	ug/kg	<13.2	50.0	11/04/19 07:42	
1,3-Dichloropropane	ug/kg	<12.0	50.0	11/04/19 07:42	
1,4-Dichlorobenzene	ug/kg	<15.9	50.0	11/04/19 07:42	
2,2-Dichloropropane	ug/kg	<12.6	50.0	11/04/19 07:42	
2-Chlorotoluene	ug/kg	<15.8	50.0	11/04/19 07:42	
4-Chlorotoluene	ug/kg	<13.0	50.0	11/04/19 07:42	
Benzene	ug/kg	<9.2	20.0	11/04/19 07:42	
Bromobenzene	ug/kg	<20.6	50.0	11/04/19 07:42	
Bromochloromethane	ug/kg	<21.4	50.0	11/04/19 07:42	
Bromodichloromethane	ug/kg	<9.8	50.0	11/04/19 07:42	
Bromoform	ug/kg	<19.8	50.0	11/04/19 07:42	
Bromomethane	ug/kg	<69.9	250	11/04/19 07:42	
Carbon tetrachloride	ug/kg	<12.1	50.0	11/04/19 07:42	
Chlorobenzene	ug/kg	<14.8	50.0	11/04/19 07:42	
Chloroethane	ug/kg	<67.0	250	11/04/19 07:42	
Chloroform	ug/kg	<46.4	250	11/04/19 07:42	
Chloromethane	ug/kg	<20.4	50.0	11/04/19 07:42	
cis-1,2-Dichloroethene	ug/kg	<16.6	50.0	11/04/19 07:42	
cis-1,3-Dichloropropene	ug/kg	<16.6	50.0	11/04/19 07:42	
Dibromochloromethane	ug/kg	<17.9	50.0	11/04/19 07:42	
Dibromomethane	ug/kg	<19.3	50.0	11/04/19 07:42	

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## QUALITY CONTROL DATA

Project: 60615481 ALLOUEZ PHASE II ESA

Pace Project No.: 40198063

METHOD BLANK: 1971771                          Matrix: Solid

Associated Lab Samples: 40198063009, 40198063010, 40198063011, 40198063012, 40198063013, 40198063014, 40198063015,  
40198063016, 40198063017, 40198063018, 40198063019, 40198063020, 40198063021, 40198063022,  
40198063023, 40198063024, 40198063025, 40198063026, 40198063027, 40198063028

Parameter	Units	Blank	Reporting		Qualifiers
		Result	Limit	Analyzed	
Dichlorodifluoromethane	ug/kg	<12.3	50.0	11/04/19 07:42	
Diisopropyl ether	ug/kg	<17.7	50.0	11/04/19 07:42	
Ethylbenzene	ug/kg	<12.4	50.0	11/04/19 07:42	
Hexachloro-1,3-butadiene	ug/kg	<24.5	50.0	11/04/19 07:42	
Isopropylbenzene (Cumene)	ug/kg	<12.6	50.0	11/04/19 07:42	
m&p-Xylene	ug/kg	<34.4	100	11/04/19 07:42	
Methyl-tert-butyl ether	ug/kg	<12.7	50.0	11/04/19 07:42	
Methylene Chloride	ug/kg	<16.2	50.0	11/04/19 07:42	
n-Butylbenzene	ug/kg	<10.5	50.0	11/04/19 07:42	
n-Propylbenzene	ug/kg	<11.6	50.0	11/04/19 07:42	
Naphthalene	ug/kg	<40.0	250	11/04/19 07:42	
o-Xylene	ug/kg	<14.0	50.0	11/04/19 07:42	
p-Isopropyltoluene	ug/kg	<12.0	50.0	11/04/19 07:42	
sec-Butylbenzene	ug/kg	<11.9	50.0	11/04/19 07:42	
Styrene	ug/kg	<9.0	50.0	11/04/19 07:42	
tert-Butylbenzene	ug/kg	<9.5	50.0	11/04/19 07:42	
Tetrachloroethene	ug/kg	<12.9	50.0	11/04/19 07:42	
Toluene	ug/kg	<11.2	50.0	11/04/19 07:42	
trans-1,2-Dichloroethene	ug/kg	<16.5	50.0	11/04/19 07:42	
trans-1,3-Dichloropropene	ug/kg	<14.4	50.0	11/04/19 07:42	
Trichloroethene	ug/kg	<23.6	50.0	11/04/19 07:42	
Trichlorofluoromethane	ug/kg	<24.7	50.0	11/04/19 07:42	
Vinyl chloride	ug/kg	<21.1	50.0	11/04/19 07:42	
4-Bromofluorobenzene (S)	%	97	54-126	11/04/19 07:42	
Dibromofluoromethane (S)	%	104	57-146	11/04/19 07:42	
Toluene-d8 (S)	%	106	64-134	11/04/19 07:42	

LABORATORY CONTROL SAMPLE: 1971772

Parameter	Units	Spike	LCS	LCS	% Rec	Qualifiers
		Conc.	Result	% Rec	Limits	
1,1,1-Trichloroethane	ug/kg	2500	2510	101	70-132	
1,1,2,2-Tetrachloroethane	ug/kg	2500	2320	93	70-130	
1,1,2-Trichloroethane	ug/kg	2500	2500	100	70-130	
1,1-Dichloroethane	ug/kg	2500	2580	103	70-130	
1,1-Dichloroethene	ug/kg	2500	2630	105	77-126	
1,2,4-Trichlorobenzene	ug/kg	2500	2500	100	66-130	
1,2-Dibromo-3-chloropropane	ug/kg	2500	2040	82	54-129	
1,2-Dibromoethane (EDB)	ug/kg	2500	2530	101	70-130	
1,2-Dichlorobenzene	ug/kg	2500	2460	99	70-130	
1,2-Dichloroethane	ug/kg	2500	2600	104	70-134	
1,2-Dichloropropane	ug/kg	2500	2470	99	74-124	
1,3-Dichlorobenzene	ug/kg	2500	2500	100	70-130	

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## REPORT OF LABORATORY ANALYSIS

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## QUALITY CONTROL DATA

Project: 60615481 ALLOUEZ PHASE II ESA

Pace Project No.: 40198063

LABORATORY CONTROL SAMPLE: 1971772

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,4-Dichlorobenzene	ug/kg	2500	2400	96	70-130	
Benzene	ug/kg	2500	2470	99	70-130	
Bromodichloromethane	ug/kg	2500	2380	95	70-130	
Bromoform	ug/kg	2500	2410	96	47-115	
Bromomethane	ug/kg	2500	2600	104	64-165	
Carbon tetrachloride	ug/kg	2500	2390	96	70-131	
Chlorobenzene	ug/kg	2500	2550	102	70-130	
Chloroethane	ug/kg	2500	2710	108	28-197	
Chloroform	ug/kg	2500	2380	95	80-131	
Chloromethane	ug/kg	2500	1840	74	45-118	
cis-1,2-Dichloroethene	ug/kg	2500	2310	92	70-130	
cis-1,3-Dichloropropene	ug/kg	2500	2280	91	70-130	
Dibromochloromethane	ug/kg	2500	2450	98	70-130	
Dichlorodifluoromethane	ug/kg	2500	1780	71	38-108	
Ethylbenzene	ug/kg	2500	2560	103	82-122	
Isopropylbenzene (Cumene)	ug/kg	2500	2570	103	70-130	
m&p-Xylene	ug/kg	5000	5210	104	70-130	
Methyl-tert-butyl ether	ug/kg	2500	2370	95	70-130	
Methylene Chloride	ug/kg	2500	2770	111	70-130	
o-Xylene	ug/kg	2500	2500	100	70-130	
Styrene	ug/kg	2500	2570	103	70-130	
Tetrachloroethene	ug/kg	2500	2650	106	70-130	
Toluene	ug/kg	2500	2590	104	80-121	
trans-1,2-Dichloroethene	ug/kg	2500	2710	108	70-130	
trans-1,3-Dichloropropene	ug/kg	2500	2370	95	70-130	
Trichloroethene	ug/kg	2500	2610	104	70-130	
Trichlorofluoromethane	ug/kg	2500	2630	105	81-141	
Vinyl chloride	ug/kg	2500	2200	88	68-121	
4-Bromofluorobenzene (S)	%			97	54-126	
Dibromofluoromethane (S)	%			105	57-146	
Toluene-d8 (S)	%			106	64-134	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1971773 1971774

Parameter	Units	MS		MSD		MS		MSD		% Rec		Max RPD	RPD	Qual
		40198063012	Result	Spike Conc.	Spike Conc.	Result	MSD	Result	% Rec	MSD	% Rec	Limits		
1,1,1-Trichloroethane	ug/kg	<25.0	1600	1600	1660	1670	104	105	64-132	1	20			
1,1,2,2-Tetrachloroethane	ug/kg	<25.0	1600	1600	1540	1610	96	101	70-132	5	20			
1,1,2-Trichloroethane	ug/kg	<25.0	1600	1600	1630	1690	102	105	70-130	4	20			
1,1-Dichloroethane	ug/kg	<25.0	1600	1600	1750	1750	109	110	70-130	0	20			
1,1-Dichloroethene	ug/kg	<25.0	1600	1600	1840	1790	115	112	65-126	3	21			
1,2,4-Trichlorobenzene	ug/kg	<47.6	1600	1600	1670	1690	105	106	66-139	1	20			
1,2-Dibromo-3-chloropropane	ug/kg	<91.2	1600	1600	1210	1320	76	83	47-146	9	23			
1,2-Dibromoethane (EDB)	ug/kg	<25.0	1600	1600	1680	1710	105	107	70-130	1	20			

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## QUALITY CONTROL DATA

Project: 60615481 ALLOUEZ PHASE II ESA

Pace Project No.: 40198063

Parameter	Units	40198063012		MSD		1971773		1971774		% Rec	Limits	RPD	Max RPD	Qual
		MS Result	Spike Conc.	Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec						
1,2-Dichlorobenzene	ug/kg	<25.0	1600	1600	1730	1790	108	112	70-130	3	20			
1,2-Dichloroethane	ug/kg	<25.0	1600	1600	1720	1780	107	111	70-136	3	20			
1,2-Dichloropropane	ug/kg	<25.0	1600	1600	1610	1660	101	104	74-124	3	20			
1,3-Dichlorobenzene	ug/kg	<25.0	1600	1600	1690	1710	105	107	70-130	1	20			
1,4-Dichlorobenzene	ug/kg	<25.0	1600	1600	1640	1630	103	102	70-130	1	20			
Benzene	ug/kg	<25.0	1600	1600	1650	1700	103	106	70-130	3	20			
Bromodichloromethane	ug/kg	<25.0	1600	1600	1530	1570	96	98	70-130	2	20			
Bromoform	ug/kg	<25.0	1600	1600	1460	1510	91	95	47-129	4	20			
Bromomethane	ug/kg	<69.9	1600	1600	1890	1920	118	120	41-180	1	20			
Carbon tetrachloride	ug/kg	<25.0	1600	1600	1610	1660	101	104	58-133	3	20			
Chlorobenzene	ug/kg	<25.0	1600	1600	1690	1770	105	111	70-130	5	20			
Chloroethane	ug/kg	<67.0	1600	1600	1900	1970	119	123	28-197	3	20			
Chloroform	ug/kg	<46.4	1600	1600	1610	1640	101	103	80-131	2	20			
Chloromethane	ug/kg	<25.0	1600	1600	1330	1320	83	82	26-118	1	20			
cis-1,2-Dichloroethene	ug/kg	<25.0	1600	1600	1530	1590	95	99	70-130	4	20			
cis-1,3-Dichloropropene	ug/kg	<25.0	1600	1600	1450	1500	91	93	70-130	3	20			
Dibromochloromethane	ug/kg	<25.0	1600	1600	1520	1590	95	99	67-130	5	20			
Dichlorodifluoromethane	ug/kg	<25.0	1600	1600	1260	1160	79	72	12-108	9	29			
Ethylbenzene	ug/kg	<25.0	1600	1600	1690	1720	106	108	80-122	2	20			
Isopropylbenzene (Cumene)	ug/kg	<25.0	1600	1600	1690	1740	105	109	70-130	3	20			
m&p-Xylene	ug/kg	<50.0	3190	3210	3470	3540	108	111	70-130	2	20			
Methyl-tert-butyl ether	ug/kg	<25.0	1600	1600	1580	1650	99	103	70-130	5	20			
Methylene Chloride	ug/kg	<25.0	1600	1600	1860	1880	116	117	70-130	1	20			
o-Xylene	ug/kg	<25.0	1600	1600	1660	1720	104	107	70-130	3	20			
Styrene	ug/kg	<25.0	1600	1600	1660	1720	104	108	70-130	4	20			
Tetrachloroethene	ug/kg	<25.0	1600	1600	1760	1830	110	115	70-130	4	20			
Toluene	ug/kg	<25.0	1600	1600	1720	1760	108	110	80-121	2	20			
trans-1,2-Dichloroethene	ug/kg	<25.0	1600	1600	1850	1850	116	116	70-130	0	20			
trans-1,3-Dichloropropene	ug/kg	<25.0	1600	1600	1500	1520	94	95	70-130	1	20			
Trichloroethene	ug/kg	<25.0	1600	1600	1750	1780	109	111	70-130	2	20			
Trichlorofluoromethane	ug/kg	<25.0	1600	1600	1780	1830	111	115	60-141	3	26			
Vinyl chloride	ug/kg	<25.0	1600	1600	1490	1530	93	95	46-121	3	20			
4-Bromofluorobenzene (S)	%						105	101	54-126					
Dibromofluoromethane (S)	%						114	110	57-146					
Toluene-d8 (S)	%						112	108	64-134					

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## QUALITY CONTROL DATA

Project: 60615481 ALLOUEZ PHASE II ESA

Pace Project No.: 40198063

QC Batch:	339573	Analysis Method:	EPA 8260
QC Batch Method:	EPA 5035/5030B	Analysis Description:	8260 MSV Med Level Normal List
Associated Lab Samples:	40198063001, 40198063008, 40198063029, 40198063030, 40198063031, 40198063032, 40198063033, 40198063034, 40198063035, 40198063036		

METHOD BLANK: 1972151 Matrix: Solid

Associated Lab Samples: 40198063001, 40198063008, 40198063029, 40198063030, 40198063031, 40198063032, 40198063033,  
40198063034, 40198063035, 40198063036

Parameter	Units	Blank Result	Reporting Limit		Qualifiers
			Analyzed		
1,1,1,2-Tetrachloroethane	ug/kg	<13.7	50.0	11/04/19 18:02	
1,1,1-Trichloroethane	ug/kg	<14.4	50.0	11/04/19 18:02	
1,1,2,2-Tetrachloroethane	ug/kg	<17.5	50.0	11/04/19 18:02	
1,1,2-Trichloroethane	ug/kg	<20.2	50.0	11/04/19 18:02	
1,1-Dichloroethane	ug/kg	<17.6	50.0	11/04/19 18:02	
1,1-Dichloroethene	ug/kg	<17.6	50.0	11/04/19 18:02	
1,1-Dichloropropene	ug/kg	<14.0	50.0	11/04/19 18:02	
1,2,3-Trichlorobenzene	ug/kg	24.0J	50.0	11/04/19 18:02	
1,2,3-Trichloropropane	ug/kg	<22.3	50.0	11/04/19 18:02	
1,2,4-Trichlorobenzene	ug/kg	<47.6	250	11/04/19 18:02	
1,2,4-Trimethylbenzene	ug/kg	<12.2	50.0	11/04/19 18:02	
1,2-Dibromo-3-chloropropane	ug/kg	<91.2	250	11/04/19 18:02	
1,2-Dibromoethane (EDB)	ug/kg	<14.7	50.0	11/04/19 18:02	
1,2-Dichlorobenzene	ug/kg	<16.2	50.0	11/04/19 18:02	
1,2-Dichloroethane	ug/kg	<15.0	50.0	11/04/19 18:02	
1,2-Dichloropropane	ug/kg	<16.8	50.0	11/04/19 18:02	
1,3,5-Trimethylbenzene	ug/kg	<14.5	50.0	11/04/19 18:02	
1,3-Dichlorobenzene	ug/kg	<13.2	50.0	11/04/19 18:02	
1,3-Dichloropropane	ug/kg	<12.0	50.0	11/04/19 18:02	
1,4-Dichlorobenzene	ug/kg	<15.9	50.0	11/04/19 18:02	
2,2-Dichloropropane	ug/kg	<12.6	50.0	11/04/19 18:02	
2-Chlorotoluene	ug/kg	<15.8	50.0	11/04/19 18:02	
4-Chlorotoluene	ug/kg	<13.0	50.0	11/04/19 18:02	
Benzene	ug/kg	<9.2	20.0	11/04/19 18:02	
Bromobenzene	ug/kg	<20.6	50.0	11/04/19 18:02	
Bromochloromethane	ug/kg	<21.4	50.0	11/04/19 18:02	
Bromodichloromethane	ug/kg	<9.8	50.0	11/04/19 18:02	
Bromoform	ug/kg	<19.8	50.0	11/04/19 18:02	
Bromomethane	ug/kg	<69.9	250	11/04/19 18:02	
Carbon tetrachloride	ug/kg	<12.1	50.0	11/04/19 18:02	
Chlorobenzene	ug/kg	<14.8	50.0	11/04/19 18:02	
Chloroethane	ug/kg	<67.0	250	11/04/19 18:02	
Chloroform	ug/kg	<46.4	250	11/04/19 18:02	
Chloromethane	ug/kg	<20.4	50.0	11/04/19 18:02	
cis-1,2-Dichloroethene	ug/kg	<16.6	50.0	11/04/19 18:02	
cis-1,3-Dichloropropene	ug/kg	<16.6	50.0	11/04/19 18:02	
Dibromochloromethane	ug/kg	<17.9	50.0	11/04/19 18:02	
Dibromomethane	ug/kg	<19.3	50.0	11/04/19 18:02	
Dichlorodifluoromethane	ug/kg	<12.3	50.0	11/04/19 18:02	
Diisopropyl ether	ug/kg	<17.7	50.0	11/04/19 18:02	

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## QUALITY CONTROL DATA

Project: 60615481 ALLOUEZ PHASE II ESA

Pace Project No.: 40198063

METHOD BLANK: 1972151                          Matrix: Solid

Associated Lab Samples: 40198063001, 40198063008, 40198063029, 40198063030, 40198063031, 40198063032, 40198063033,  
40198063034, 40198063035, 40198063036

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Ethylbenzene	ug/kg	<12.4	50.0	11/04/19 18:02	
Hexachloro-1,3-butadiene	ug/kg	49.2J	50.0	11/04/19 18:02	
Isopropylbenzene (Cumene)	ug/kg	<12.6	50.0	11/04/19 18:02	
m&p-Xylene	ug/kg	<34.4	100	11/04/19 18:02	
Methyl-tert-butyl ether	ug/kg	<12.7	50.0	11/04/19 18:02	
Methylene Chloride	ug/kg	<16.2	50.0	11/04/19 18:02	
n-Butylbenzene	ug/kg	14.0J	50.0	11/04/19 18:02	
n-Propylbenzene	ug/kg	<11.6	50.0	11/04/19 18:02	
Naphthalene	ug/kg	<40.0	250	11/04/19 18:02	
o-Xylene	ug/kg	<14.0	50.0	11/04/19 18:02	
p-Isopropyltoluene	ug/kg	<12.0	50.0	11/04/19 18:02	
sec-Butylbenzene	ug/kg	<11.9	50.0	11/04/19 18:02	
Styrene	ug/kg	<9.0	50.0	11/04/19 18:02	
tert-Butylbenzene	ug/kg	<9.5	50.0	11/04/19 18:02	
Tetrachloroethene	ug/kg	<12.9	50.0	11/04/19 18:02	
Toluene	ug/kg	<11.2	50.0	11/04/19 18:02	
trans-1,2-Dichloroethene	ug/kg	<16.5	50.0	11/04/19 18:02	
trans-1,3-Dichloropropene	ug/kg	<14.4	50.0	11/04/19 18:02	
Trichloroethene	ug/kg	<23.6	50.0	11/04/19 18:02	
Trichlorofluoromethane	ug/kg	<24.7	50.0	11/04/19 18:02	
Vinyl chloride	ug/kg	<21.1	50.0	11/04/19 18:02	
Xylene (Total)	ug/kg	<48.4	150	11/04/19 18:02	
4-Bromofluorobenzene (S)	%	94	54-126	11/04/19 18:02	
Dibromofluoromethane (S)	%	105	57-146	11/04/19 18:02	
Toluene-d8 (S)	%	114	64-134	11/04/19 18:02	

LABORATORY CONTROL SAMPLE: 1972152

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1-Trichloroethane	ug/kg	2500	2500	100	70-132	
1,1,2,2-Tetrachloroethane	ug/kg	2500	2980	119	70-130	
1,1,2-Trichloroethane	ug/kg	2500	2740	109	70-130	
1,1-Dichloroethane	ug/kg	2500	2590	104	70-130	
1,1-Dichloroethene	ug/kg	2500	2780	111	77-126	
1,2,4-Trichlorobenzene	ug/kg	2500	2150	86	66-130	
1,2-Dibromo-3-chloropropane	ug/kg	2500	2700	108	54-129	
1,2-Dibromoethane (EDB)	ug/kg	2500	2500	100	70-130	
1,2-Dichlorobenzene	ug/kg	2500	2660	107	70-130	
1,2-Dichloroethane	ug/kg	2500	2570	103	70-134	
1,2-Dichloropropane	ug/kg	2500	2730	109	74-124	
1,3-Dichlorobenzene	ug/kg	2500	2820	113	70-130	
1,4-Dichlorobenzene	ug/kg	2500	2730	109	70-130	
Benzene	ug/kg	2500	2410	96	70-130	

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## QUALITY CONTROL DATA

Project: 60615481 ALLOUEZ PHASE II ESA

Pace Project No.: 40198063

**LABORATORY CONTROL SAMPLE: 1972152**

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Bromodichloromethane	ug/kg	2500	2650	106	70-130	
Bromoform	ug/kg	2500	2320	93	47-115	
Bromomethane	ug/kg	2500	1780	71	64-165	
Carbon tetrachloride	ug/kg	2500	2410	96	70-131	
Chlorobenzene	ug/kg	2500	2590	104	70-130	
Chloroethane	ug/kg	2500	2250	90	28-197	
Chloroform	ug/kg	2500	2310	92	80-131	
Chloromethane	ug/kg	2500	2010	80	45-118	
cis-1,2-Dichloroethene	ug/kg	2500	2200	88	70-130	
cis-1,3-Dichloropropene	ug/kg	2500	2430	97	70-130	
Dibromochloromethane	ug/kg	2500	2430	97	70-130	
Dichlorodifluoromethane	ug/kg	2500	1730	69	38-108	
Ethylbenzene	ug/kg	2500	2580	103	82-122	
Isopropylbenzene (Cumene)	ug/kg	2500	2590	103	70-130	
m&p-Xylene	ug/kg	5000	5470	109	70-130	
Methyl-tert-butyl ether	ug/kg	2500	2500	100	70-130	
Methylene Chloride	ug/kg	2500	2410	96	70-130	
o-Xylene	ug/kg	2500	2620	105	70-130	
Styrene	ug/kg	2500	2670	107	70-130	
Tetrachloroethene	ug/kg	2500	2630	105	70-130	
Toluene	ug/kg	2500	2740	110	80-121	
trans-1,2-Dichloroethene	ug/kg	2500	2510	100	70-130	
trans-1,3-Dichloropropene	ug/kg	2500	2600	104	70-130	
Trichloroethene	ug/kg	2500	2440	98	70-130	
Trichlorofluoromethane	ug/kg	2500	2530	101	81-141	
Vinyl chloride	ug/kg	2500	2130	85	68-121	
Xylene (Total)	ug/kg	7500	8090	108	70-130	
4-Bromofluorobenzene (S)	%			103	54-126	
Dibromofluoromethane (S)	%			99	57-146	
Toluene-d8 (S)	%			111	64-134	

**MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1972153 1972154**

Parameter	Units	MS		MSD		MS		MSD		% Rec Limits	RPD	Max RPD	Qual
		40198063008	Result	Spike Conc.	Spike Conc.	Result	MSD % Rec	MSD % Rec	MSD % Rec				
1,1,1-Trichloroethane	ug/kg	<25.0	1530	1530	1560	1570	102	103	64-132	1	20		
1,1,2,2-Tetrachloroethane	ug/kg	<25.0	1530	1530	1810	1790	118	117	70-132	1	20		
1,1,2-Trichloroethane	ug/kg	<25.0	1530	1530	1690	1630	110	107	70-130	3	20		
1,1-Dichloroethane	ug/kg	<25.0	1530	1530	1630	1680	106	110	70-130	3	20		
1,1-Dichloroethene	ug/kg	<25.0	1530	1530	1730	1760	113	115	65-126	2	21		
1,2,4-Trichlorobenzene	ug/kg	<47.6	1530	1530	1660	1730	109	113	66-139	4	20		
1,2-Dibromo-3-chloropropane	ug/kg	<91.2	1530	1530	1690	1800	110	117	47-146	6	23		
1,2-Dibromoethane (EDB)	ug/kg	<25.0	1530	1530	1600	1590	104	104	70-130	1	20		
1,2-Dichlorobenzene	ug/kg	<25.0	1530	1530	1720	1780	112	117	70-130	4	20		

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## QUALITY CONTROL DATA

Project: 60615481 ALLOUEZ PHASE II ESA

Pace Project No.: 40198063

Parameter	Units	40198063008		MSD		1972153		1972154		% Rec	Limits	RPD	Max RPD	Qual
		Result	Spike Conc.	Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec						
1,2-Dichloroethane	ug/kg	<25.0	1530	1530	1570	1660	103	109	70-136	6	20			
1,2-Dichloropropane	ug/kg	<25.0	1530	1530	1670	1680	109	110	74-124	1	20			
1,3-Dichlorobenzene	ug/kg	<25.0	1530	1530	1710	1750	112	114	70-130	2	20			
1,4-Dichlorobenzene	ug/kg	<25.0	1530	1530	1760	1860	115	121	70-130	5	20			
Benzene	ug/kg	<25.0	1530	1530	1470	1530	96	100	70-130	4	20			
Bromodichloromethane	ug/kg	<25.0	1530	1530	1640	1560	107	102	70-130	5	20			
Bromoform	ug/kg	<25.0	1530	1530	1510	1550	99	102	47-129	3	20			
Bromomethane	ug/kg	<69.9	1530	1530	1190	1360	78	89	41-180	13	20			
Carbon tetrachloride	ug/kg	<25.0	1530	1530	1410	1470	92	96	58-133	4	20			
Chlorobenzene	ug/kg	<25.0	1530	1530	1660	1600	108	105	70-130	3	20			
Chloroethane	ug/kg	<67.0	1530	1530	1480	1590	97	104	28-197	7	20			
Chloroform	ug/kg	<46.4	1530	1530	1420	1480	93	96	80-131	4	20			
Chloromethane	ug/kg	<25.0	1530	1530	1270	1340	83	87	26-118	5	20			
cis-1,2-Dichloroethene	ug/kg	<25.0	1530	1530	1340	1380	88	90	70-130	3	20			
cis-1,3-Dichloropropene	ug/kg	<25.0	1530	1530	1510	1490	99	98	70-130	1	20			
Dibromochloromethane	ug/kg	<25.0	1530	1530	1610	1580	105	103	67-130	2	20			
Dichlorodifluoromethane	ug/kg	<25.0	1530	1530	950	976	62	64	12-108	3	29			
Ethylbenzene	ug/kg	<25.0	1530	1530	1520	1500	99	98	80-122	1	20			
Isopropylbenzene (Cumene)	ug/kg	<25.0	1530	1530	1540	1490	100	97	70-130	3	20			
m&p-Xylene	ug/kg	<50.0	3060	3060	3320	3170	108	104	70-130	4	20			
Methyl-tert-butyl ether	ug/kg	<25.0	1530	1530	1590	1570	104	103	70-130	1	20			
Methylene Chloride	ug/kg	<25.0	1530	1530	1520	1710	98	111	70-130	12	20			
o-Xylene	ug/kg	<25.0	1530	1530	1540	1590	101	104	70-130	3	20			
Styrene	ug/kg	<25.0	1530	1530	1620	1590	106	104	70-130	2	20			
Tetrachloroethene	ug/kg	<25.0	1530	1530	1570	1530	103	100	70-130	3	20			
Toluene	ug/kg	<25.0	1530	1530	1670	1580	109	104	80-121	5	20			
trans-1,2-Dichloroethene	ug/kg	<25.0	1530	1530	1550	1590	101	104	70-130	2	20			
trans-1,3-Dichloropropene	ug/kg	<25.0	1530	1530	1610	1610	105	105	70-130	0	20			
Trichloroethene	ug/kg	<25.0	1530	1530	1560	1500	102	98	70-130	4	20			
Trichlorofluoromethane	ug/kg	<25.0	1530	1530	1540	1530	101	100	60-141	1	26			
Vinyl chloride	ug/kg	<25.0	1530	1530	1370	1330	90	87	46-121	3	20			
Xylene (Total)	ug/kg	<75.0	4590	4590	4860	4760	106	104	70-130	2	20			
4-Bromofluorobenzene (S)	%						73	72	54-126					
Dibromofluoromethane (S)	%						71	76	57-146					
Toluene-d8 (S)	%						80	78	64-134					

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## REPORT OF LABORATORY ANALYSIS

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## QUALITY CONTROL DATA

Project: 60615481 ALLOUEZ PHASE II ESA

Pace Project No.: 40198063

QC Batch:	338985	Analysis Method:	EPA 8270 by SIM
QC Batch Method:	EPA 3546	Analysis Description:	8270/3546 MSSV PAH by SIM
Associated Lab Samples:	40198063001, 40198063003, 40198063006, 40198063007, 40198063008, 40198063009		

METHOD BLANK: 1968904 Matrix: Solid

Associated Lab Samples: 40198063001, 40198063003, 40198063006, 40198063007, 40198063008, 40198063009

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1-Methylnaphthalene	ug/kg	<2.4	16.7	10/30/19 09:34	
2-Methylnaphthalene	ug/kg	<2.4	16.7	10/30/19 09:34	
Acenaphthene	ug/kg	<2.2	16.7	10/30/19 09:34	
Acenaphthylene	ug/kg	<2.1	16.7	10/30/19 09:34	
Anthracene	ug/kg	<2.1	16.7	10/30/19 09:34	
Benzo(a)anthracene	ug/kg	<2.2	16.7	10/30/19 09:34	
Benzo(a)pyrene	ug/kg	<1.9	16.7	10/30/19 09:34	
Benzo(b)fluoranthene	ug/kg	<2.3	16.7	10/30/19 09:34	
Benzo(g,h,i)perylene	ug/kg	<2.9	16.7	10/30/19 09:34	
Benzo(k)fluoranthene	ug/kg	<2.1	16.7	10/30/19 09:34	
Chrysene	ug/kg	<3.1	16.7	10/30/19 09:34	
Dibenz(a,h)anthracene	ug/kg	<2.3	16.7	10/30/19 09:34	
Fluoranthene	ug/kg	<2.0	16.7	10/30/19 09:34	
Fluorene	ug/kg	<2.0	16.7	10/30/19 09:34	
Indeno(1,2,3-cd)pyrene	ug/kg	<3.5	16.7	10/30/19 09:34	
Naphthalene	ug/kg	<1.6	16.7	10/30/19 09:34	
Phenanthrene	ug/kg	<1.9	16.7	10/30/19 09:34	
Pyrene	ug/kg	<2.5	16.7	10/30/19 09:34	
2-Fluorobiphenyl (S)	%	74	28-99	10/30/19 09:34	
Terphenyl-d14 (S)	%	80	10-107	10/30/19 09:34	

LABORATORY CONTROL SAMPLE: 1968905

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1-Methylnaphthalene	ug/kg	333	262	79	47-104	
2-Methylnaphthalene	ug/kg	333	261	78	50-100	
Acenaphthene	ug/kg	333	263	79	56-113	
Acenaphthylene	ug/kg	333	282	85	55-113	
Anthracene	ug/kg	333	302	91	59-103	
Benzo(a)anthracene	ug/kg	333	261	78	55-102	
Benzo(a)pyrene	ug/kg	333	309	93	59-114	
Benzo(b)fluoranthene	ug/kg	333	284	85	53-124	
Benzo(g,h,i)perylene	ug/kg	333	311	93	48-114	
Benzo(k)fluoranthene	ug/kg	333	319	96	61-118	
Chrysene	ug/kg	333	278	84	62-108	
Dibenz(a,h)anthracene	ug/kg	333	313	94	51-114	
Fluoranthene	ug/kg	333	286	86	59-113	
Fluorene	ug/kg	333	284	85	56-117	
Indeno(1,2,3-cd)pyrene	ug/kg	333	321	96	52-115	
Naphthalene	ug/kg	333	254	76	54-95	

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## QUALITY CONTROL DATA

Project: 60615481 ALLOUEZ PHASE II ESA

Pace Project No.: 40198063

**LABORATORY CONTROL SAMPLE:** 1968905

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Phenanthrene	ug/kg	333	259	78	58-101	
Pyrene	ug/kg	333	280	84	56-105	
2-Fluorobiphenyl (S)	%			87	28-99	
Terphenyl-d14 (S)	%			77	10-107	

**MATRIX SPIKE & MATRIX SPIKE DUPLICATE:** 1968906      1968907

Parameter	Units	MS		MSD		MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
		40198083009	Result	Spike Conc.	Conc.						
1-Methylnaphthalene	ug/kg	2120	429	429	4330	4320	516	513	39-104	0	29 M6
2-Methylnaphthalene	ug/kg	4430	429	429	8990	8930	1060	1050	40-100	1	32 M6
Acenaphthene	ug/kg	<69.5	429	429	367J	345J	86	81	50-113		21
Acenaphthylene	ug/kg	<67.6	429	429	346J	323J	81	75	42-114		27
Anthracene	ug/kg	<66.5	429	429	320J	366J	75	85	33-105		21
Benzo(a)anthracene	ug/kg	<0.069 mg/kg	429	429	368J	363J	71	70	43-102		21
Benzo(a)pyrene	ug/kg	<0.061 mg/kg	429	429	300J	294J	70	69	34-117		22
Benzo(b)fluoranthene	ug/kg	<0.074 mg/kg	429	429	299J	266J	63	55	35-124		35
Benzo(g,h,i)perylene	ug/kg	<94.1	429	429	351J	343J	82	80	10-120		30
Benzo(k)fluoranthene	ug/kg	<0.069 mg/kg	429	429	292J	314J	62	67	31-128		27
Chrysene	ug/kg	<0.10 mg/kg	429	429	389J	383J	83	82	39-108		20
Dibenz(a,h)anthracene	ug/kg	<0.074 mg/kg	429	429	315J	336J	74	78	19-114		28
Fluoranthene	ug/kg	<63.4	429	429	<63.5	317J	0	74	45-113		22 M6
Fluorene	ug/kg	<64.3	429	429	330J	300J	77	70	48-117		21
Indeno(1,2,3-cd)pyrene	ug/kg	<0.11 mg/kg	429	429	337J	343J	79	80	10-123		28
Naphthalene	ug/kg	4.1 mg/kg	429	429	8200	8420	959	1010	32-101	3	27 M6
Phenanthrene	ug/kg	<61.4	429	429	331J	335J	77	78	40-101		20
Pyrene	ug/kg	<78.8	429	429	368J	362J	86	85	35-105		26
2-Fluorobiphenyl (S)	%						81	78	28-99		
Terphenyl-d14 (S)	%						74	67	10-107		

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## QUALITY CONTROL DATA

Project: 60615481 ALLOUEZ PHASE II ESA

Pace Project No.: 40198063

QC Batch:	339144	Analysis Method:	EPA 8270 by SIM
QC Batch Method:	EPA 3546	Analysis Description:	8270/3546 MSSV PAH by SIM
Associated Lab Samples:	40198063010, 40198063011, 40198063012, 40198063013, 40198063015		

METHOD BLANK: 1969740 Matrix: Solid

Associated Lab Samples: 40198063010, 40198063011, 40198063012, 40198063013, 40198063015

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1-Methylnaphthalene	ug/kg	<2.4	16.7	10/30/19 14:09	
2-Methylnaphthalene	ug/kg	<2.4	16.7	10/30/19 14:09	
Acenaphthene	ug/kg	<2.2	16.7	10/30/19 14:09	
Acenaphthylene	ug/kg	<2.1	16.7	10/30/19 14:09	
Anthracene	ug/kg	<2.1	16.7	10/30/19 14:09	
Benzo(a)anthracene	ug/kg	<2.2	16.7	10/30/19 14:09	
Benzo(a)pyrene	ug/kg	<1.9	16.7	10/30/19 14:09	
Benzo(b)fluoranthene	ug/kg	<2.3	16.7	10/30/19 14:09	
Benzo(g,h,i)perylene	ug/kg	<2.9	16.7	10/30/19 14:09	
Benzo(k)fluoranthene	ug/kg	<2.1	16.7	10/30/19 14:09	
Chrysene	ug/kg	<3.1	16.7	10/30/19 14:09	
Dibenz(a,h)anthracene	ug/kg	<2.3	16.7	10/30/19 14:09	
Fluoranthene	ug/kg	<2.0	16.7	10/30/19 14:09	
Fluorene	ug/kg	<2.0	16.7	10/30/19 14:09	
Indeno(1,2,3-cd)pyrene	ug/kg	<3.5	16.7	10/30/19 14:09	
Naphthalene	ug/kg	<1.6	16.7	10/30/19 14:09	
Phenanthrene	ug/kg	<1.9	16.7	10/30/19 14:09	
Pyrene	ug/kg	<2.5	16.7	10/30/19 14:09	
2-Fluorobiphenyl (S)	%	76	28-99	10/30/19 14:09	
Terphenyl-d14 (S)	%	82	10-107	10/30/19 14:09	

LABORATORY CONTROL SAMPLE: 1969741

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1-Methylnaphthalene	ug/kg	334	232	69	47-104	
2-Methylnaphthalene	ug/kg	334	234	70	50-100	
Acenaphthene	ug/kg	334	239	72	56-113	
Acenaphthylene	ug/kg	334	258	77	55-113	
Anthracene	ug/kg	334	296	89	59-103	
Benzo(a)anthracene	ug/kg	334	240	72	55-102	
Benzo(a)pyrene	ug/kg	334	286	86	59-114	
Benzo(b)fluoranthene	ug/kg	334	270	81	53-124	
Benzo(g,h,i)perylene	ug/kg	334	269	81	48-114	
Benzo(k)fluoranthene	ug/kg	334	290	87	61-118	
Chrysene	ug/kg	334	262	79	62-108	
Dibenz(a,h)anthracene	ug/kg	334	272	82	51-114	
Fluoranthene	ug/kg	334	283	85	59-113	
Fluorene	ug/kg	334	251	75	56-117	
Indeno(1,2,3-cd)pyrene	ug/kg	334	283	85	52-115	
Naphthalene	ug/kg	334	238	71	54-95	

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## QUALITY CONTROL DATA

Project: 60615481 ALLOUEZ PHASE II ESA

Pace Project No.: 40198063

LABORATORY CONTROL SAMPLE: 1969741

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Phenanthrene	ug/kg	334	253	76	58-101	
Pyrene	ug/kg	334	253	76	56-105	
2-Fluorobiphenyl (S)	%			78	28-99	
Terphenyl-d14 (S)	%			70	10-107	

MATRIX SPIKE &amp; MATRIX SPIKE DUPLICATE: 1969742 1969743

Parameter	Units	MS		MSD		MS Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
		40198057002	Spike Conc.	Spike Conc.	MS Result							
1-Methylnaphthalene	ug/kg	<2.8	381	382	234	262	61	69	39-104	12	29	
2-Methylnaphthalene	ug/kg	<2.8	381	382	229	263	60	69	40-100	14	32	
Acenaphthene	ug/kg	<2.5	381	382	254	279	67	73	50-113	9	21	
Acenaphthylene	ug/kg	<2.4	381	382	275	301	72	79	42-114	9	27	
Anthracene	ug/kg	<2.4	381	382	292	308	77	81	33-105	5	21	
Benz(a)anthracene	ug/kg	4.0J	381	382	268	280	69	72	43-102	4	21	
Benz(a)pyrene	ug/kg	2.9J	381	382	307	338	80	88	34-117	10	22	
Benz(b)fluoranthene	ug/kg	4.5J	381	382	297	313	77	81	35-124	5	35	
Benz(g,h,i)perylene	ug/kg	<3.4	381	382	283	301	74	78	10-120	6	30	
Benz(k)fluoranthene	ug/kg	<2.4	381	382	291	314	76	82	31-128	8	27	
Chrysene	ug/kg	<3.6	381	382	269	284	70	73	39-108	5	20	
Dibenz(a,h)anthracene	ug/kg	<2.6	381	382	284	301	75	79	19-114	6	28	
Fluoranthene	ug/kg	5.0J	381	382	292	311	75	80	45-113	6	22	
Fluorene	ug/kg	<2.3	381	382	281	292	74	77	48-117	4	21	
Indeno(1,2,3-cd)pyrene	ug/kg	<4.0	381	382	292	313	76	81	10-123	7	28	
Naphthalene	ug/kg	<1.9	381	382	219	267	57	69	32-101	20	27	
Phenanthrene	ug/kg	<2.2	381	382	264	275	69	72	40-101	4	20	
Pyrene	ug/kg	4.1J	381	382	269	279	70	72	35-105	3	26	
2-Fluorobiphenyl (S)	%						63	74	28-99			
Terphenyl-d14 (S)	%						62	65	10-107			

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## QUALITY CONTROL DATA

Project: 60615481 ALLOUEZ PHASE II ESA

Pace Project No.: 40198063

QC Batch: 339251 Analysis Method: EPA 8270 by SIM

QC Batch Method: EPA 3546 Analysis Description: 8270/3546 MSSV PAH by SIM

Associated Lab Samples: 40198063016, 40198063018, 40198063019, 40198063021, 40198063022, 40198063023, 40198063024

METHOD BLANK: 1970480 Matrix: Solid

Associated Lab Samples: 40198063016, 40198063018, 40198063019, 40198063021, 40198063022, 40198063023, 40198063024

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1-Methylnaphthalene	ug/kg	<2.4	16.7	10/31/19 11:49	
2-Methylnaphthalene	ug/kg	<2.4	16.7	10/31/19 11:49	
Acenaphthene	ug/kg	<2.2	16.7	10/31/19 11:49	
Acenaphthylene	ug/kg	<2.1	16.7	10/31/19 11:49	
Anthracene	ug/kg	<2.1	16.7	10/31/19 11:49	
Benzo(a)anthracene	ug/kg	<2.2	16.7	10/31/19 11:49	
Benzo(a)pyrene	ug/kg	<1.9	16.7	10/31/19 11:49	
Benzo(b)fluoranthene	ug/kg	<2.3	16.7	10/31/19 11:49	
Benzo(g,h,i)perylene	ug/kg	<2.9	16.7	10/31/19 11:49	
Benzo(k)fluoranthene	ug/kg	<2.1	16.7	10/31/19 11:49	
Chrysene	ug/kg	<3.2	16.7	10/31/19 11:49	
Dibenz(a,h)anthracene	ug/kg	<2.3	16.7	10/31/19 11:49	
Fluoranthene	ug/kg	<2.0	16.7	10/31/19 11:49	
Fluorene	ug/kg	<2.0	16.7	10/31/19 11:49	
Indeno(1,2,3-cd)pyrene	ug/kg	<3.5	16.7	10/31/19 11:49	
Naphthalene	ug/kg	<1.6	16.7	10/31/19 11:49	
Phenanthrene	ug/kg	<1.9	16.7	10/31/19 11:49	
Pyrene	ug/kg	<2.5	16.7	10/31/19 11:49	
2-Fluorobiphenyl (S)	%	72	28-99	10/31/19 11:49	
Terphenyl-d14 (S)	%	79	10-107	10/31/19 11:49	

LABORATORY CONTROL SAMPLE: 1970481

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1-Methylnaphthalene	ug/kg	333	211	63	47-104	
2-Methylnaphthalene	ug/kg	333	209	63	50-100	
Acenaphthene	ug/kg	333	237	71	56-113	
Acenaphthylene	ug/kg	333	251	75	55-113	
Anthracene	ug/kg	333	296	89	59-103	
Benzo(a)anthracene	ug/kg	333	260	78	55-102	
Benzo(a)pyrene	ug/kg	333	308	92	59-114	
Benzo(b)fluoranthene	ug/kg	333	299	90	53-124	
Benzo(g,h,i)perylene	ug/kg	333	285	85	48-114	
Benzo(k)fluoranthene	ug/kg	333	310	93	61-118	
Chrysene	ug/kg	333	269	81	62-108	
Dibenz(a,h)anthracene	ug/kg	333	296	89	51-114	
Fluoranthene	ug/kg	333	309	93	59-113	
Fluorene	ug/kg	333	271	81	56-117	
Indeno(1,2,3-cd)pyrene	ug/kg	333	300	90	52-115	
Naphthalene	ug/kg	333	222	67	54-95	

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## QUALITY CONTROL DATA

Project: 60615481 ALLOUEZ PHASE II ESA

Pace Project No.: 40198063

LABORATORY CONTROL SAMPLE: 1970481

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Phenanthrene	ug/kg	333	262	79	58-101	
Pyrene	ug/kg	333	252	76	56-105	
2-Fluorobiphenyl (S)	%			72	28-99	
Terphenyl-d14 (S)	%			71	10-107	

MATRIX SPIKE &amp; MATRIX SPIKE DUPLICATE: 1970482      1970483

Parameter	Units	MS		MSD		MS Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
		40198063019	Spike Conc.	Spike Conc.	MS Result							
1-Methylnaphthalene	ug/kg	<2.7	374	373	209	213	56	57	39-104	2	29	
2-Methylnaphthalene	ug/kg	<2.7	374	373	217	216	58	58	40-100	1	32	
Acenaphthene	ug/kg	<2.4	374	373	219	217	59	58	50-113	1	21	
Acenaphthylene	ug/kg	<2.4	374	373	237	227	63	61	42-114	4	27	
Anthracene	ug/kg	<2.3	374	373	242	245	65	66	33-105	1	21	
Benz(a)anthracene	ug/kg	<2.4	374	373	211	221	57	59	43-102	5	21	
Benz(a)pyrene	ug/kg	<2.1	374	373	350	282	94	76	34-117	22	22	
Benz(b)fluoranthene	ug/kg	<2.6	374	373	237	244	63	65	35-124	3	35	
Benz(g,h,i)perylene	ug/kg	<3.3	374	373	246	246	66	66	10-120	0	30	
Benz(k)fluoranthene	ug/kg	<2.4	374	373	248	268	66	72	31-128	8	27	
Chrysene	ug/kg	<3.5	374	373	216	228	58	61	39-108	5	20	
Dibenz(a,h)anthracene	ug/kg	<2.6	374	373	243	247	65	66	19-114	2	28	
Fluoranthene	ug/kg	<2.2	374	373	242	251	65	67	45-113	4	22	
Fluorene	ug/kg	<2.2	374	373	236	233	63	62	48-117	1	21	
Indeno(1,2,3-cd)pyrene	ug/kg	<3.9	374	373	250	254	67	68	10-123	2	28	
Naphthalene	ug/kg	2.2J	374	373	223	221	59	59	32-101	1	27	
Phenanthrene	ug/kg	<2.1	374	373	212	212	57	57	40-101	0	20	
Pyrene	ug/kg	<2.7	374	373	208	208	56	56	35-105	0	26	
2-Fluorobiphenyl (S)	%						65	62	28-99			
Terphenyl-d14 (S)	%						53	51	10-107			

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## REPORT OF LABORATORY ANALYSIS

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## QUALITY CONTROL DATA

Project: 60615481 ALLOUEZ PHASE II ESA

Pace Project No.: 40198063

QC Batch:	339392	Analysis Method:	EPA 8270 by SIM
QC Batch Method:	EPA 3546	Analysis Description:	8270/3546 MSSV PAH by SIM
Associated Lab Samples:	40198063017, 40198063025, 40198063026, 40198063027, 40198063028, 40198063030, 40198063031, 40198063032, 40198063033, 40198063034, 40198063035, 40198063036		

METHOD BLANK: 1971086                                  Matrix: Solid

Associated Lab Samples: 40198063017, 40198063025, 40198063026, 40198063027, 40198063028, 40198063030, 40198063031, 40198063032, 40198063033, 40198063034, 40198063035, 40198063036

Parameter	Units	Blank	Reporting		Qualifiers
		Result	Limit	Analyzed	
1-Methylnaphthalene	ug/kg	<2.4	16.7	11/01/19 11:45	
2-Methylnaphthalene	ug/kg	<2.4	16.7	11/01/19 11:45	
Acenaphthene	ug/kg	<2.2	16.7	11/01/19 11:45	
Acenaphthylene	ug/kg	<2.1	16.7	11/01/19 11:45	
Anthracene	ug/kg	<2.1	16.7	11/01/19 11:45	
Benzo(a)anthracene	ug/kg	<2.2	16.7	11/01/19 11:45	
Benzo(a)pyrene	ug/kg	<1.9	16.7	11/01/19 11:45	
Benzo(b)fluoranthene	ug/kg	<2.3	16.7	11/01/19 11:45	
Benzo(g,h,i)perylene	ug/kg	<2.9	16.7	11/01/19 11:45	
Benzo(k)fluoranthene	ug/kg	<2.1	16.7	11/01/19 11:45	
Chrysene	ug/kg	<3.1	16.7	11/01/19 11:45	
Dibenz(a,h)anthracene	ug/kg	<2.3	16.7	11/01/19 11:45	
Fluoranthene	ug/kg	<2.0	16.7	11/01/19 11:45	
Fluorene	ug/kg	<2.0	16.7	11/01/19 11:45	
Indeno(1,2,3-cd)pyrene	ug/kg	<3.5	16.7	11/01/19 11:45	
Naphthalene	ug/kg	<1.6	16.7	11/01/19 11:45	
Phenanthrene	ug/kg	<1.9	16.7	11/01/19 11:45	
Pyrene	ug/kg	<2.5	16.7	11/01/19 11:45	
2-Fluorobiphenyl (S)	%	86	28-99	11/01/19 11:45	
Terphenyl-d14 (S)	%	87	10-107	11/01/19 11:45	

LABORATORY CONTROL SAMPLE: 1971087

Parameter	Units	Spike	LCS	LCS	% Rec	Qualifiers
		Conc.	Result	% Rec	Limits	
1-Methylnaphthalene	ug/kg	333	208	63	47-104	
2-Methylnaphthalene	ug/kg	333	212	63	50-100	
Acenaphthene	ug/kg	333	240	72	56-113	
Acenaphthylene	ug/kg	333	263	79	55-113	
Anthracene	ug/kg	333	276	83	59-103	
Benzo(a)anthracene	ug/kg	333	261	78	55-102	
Benzo(a)pyrene	ug/kg	333	319	96	59-114	
Benzo(b)fluoranthene	ug/kg	333	306	92	53-124	
Benzo(g,h,i)perylene	ug/kg	333	299	90	48-114	
Benzo(k)fluoranthene	ug/kg	333	304	91	61-118	
Chrysene	ug/kg	333	266	80	62-108	
Dibenz(a,h)anthracene	ug/kg	333	299	90	51-114	
Fluoranthene	ug/kg	333	263	79	59-113	
Fluorene	ug/kg	333	278	83	56-117	

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## QUALITY CONTROL DATA

Project: 60615481 ALLOUEZ PHASE II ESA

Pace Project No.: 40198063

LABORATORY CONTROL SAMPLE: 1971087

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Indeno(1,2,3-cd)pyrene	ug/kg	333	306	92	52-115	
Naphthalene	ug/kg	333	231	69	54-95	
Phenanthrene	ug/kg	333	256	77	58-101	
Pyrene	ug/kg	333	256	77	56-105	
2-Fluorobiphenyl (S)	%			76	28-99	
Terphenyl-d14 (S)	%			75	10-107	

MATRIX SPIKE &amp; MATRIX SPIKE DUPLICATE: 1971088      1971089

Parameter	Units	MS		MSD		MS % Rec	MSD % Rec	% Rec Limits	Max		
		40198063034	Result	Spike Conc.	MS Result				RPD	RPD	Qual
1-Methylnaphthalene	ug/kg	<2.9	398	398	278	279	70	70	39-104	0	29
2-Methylnaphthalene	ug/kg	<2.9	398	398	275	270	69	68	40-100	2	32
Acenaphthene	ug/kg	<2.6	398	398	279	279	70	70	50-113	0	21
Acenaphthylene	ug/kg	<2.5	398	398	296	302	74	76	42-114	2	27
Anthracene	ug/kg	<2.5	398	398	298	303	75	76	33-105	2	21
Benzo(a)anthracene	ug/kg	<2.6	398	398	280	278	70	69	43-102	1	21
Benzo(a)pyrene	ug/kg	<2.3	398	398	331	325	83	82	34-117	2	22
Benzo(b)fluoranthene	ug/kg	<2.8	398	398	310	311	78	78	35-124	0	35
Benzo(g,h,i)perylene	ug/kg	<3.5	398	398	292	283	73	71	10-120	3	30
Benzo(k)fluoranthene	ug/kg	<2.6	398	398	341	329	86	83	31-128	3	27
Chrysene	ug/kg	<3.8	398	398	286	285	72	71	39-108	1	20
Dibenz(a,h)anthracene	ug/kg	<2.8	398	398	292	283	73	71	19-114	3	28
Fluoranthene	ug/kg	<2.4	398	398	316	318	79	80	45-113	1	22
Fluorene	ug/kg	<2.4	398	398	283	287	71	72	48-117	1	21
Indeno(1,2,3-cd)pyrene	ug/kg	<4.2	398	398	300	291	75	73	10-123	3	28
Naphthalene	ug/kg	<1.9	398	398	278	280	70	70	32-101	1	27
Phenanthrene	ug/kg	<2.3	398	398	262	271	66	68	40-101	3	20
Pyrene	ug/kg	<2.9	398	398	281	276	71	69	35-105	2	26
2-Fluorobiphenyl (S)	%						81	80	28-99		
Terphenyl-d14 (S)	%						64	64	10-107		

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## QUALITY CONTROL DATA

Project: 60615481 ALLOUEZ PHASE II ESA

Pace Project No.: 40198063

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QC Batch: 339594 Analysis Method: ASTM D2974-87  
QC Batch Method: ASTM D2974-87 Analysis Description: Dry Weight/Percent Moisture  
Associated Lab Samples: 40198063009

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SAMPLE DUPLICATE: 1972292

Parameter	Units	Result	Dup Result	RPD	Max RPD	Qualifiers
Percent Moisture	%	13.6	13.9	2	10	

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## REPORT OF LABORATORY ANALYSIS

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## QUALITY CONTROL DATA

Project: 60615481 ALLOUEZ PHASE II ESA

Pace Project No.: 40198063

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QC Batch: 339599 Analysis Method: ASTM D2974-87  
QC Batch Method: ASTM D2974-87 Analysis Description: Dry Weight/Percent Moisture  
Associated Lab Samples: 40198063018

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SAMPLE DUPLICATE: 1972302

Parameter	Units	Result	Dup Result	RPD	Max RPD	Qualifiers
Percent Moisture	%	10.8	11.1	3	10	

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## QUALITY CONTROL DATA

Project: 60615481 ALLOUEZ PHASE II ESA

Pace Project No.: 40198063

QC Batch: 339608

Analysis Method: ASTM D2974-87

QC Batch Method: ASTM D2974-87

Analysis Description: Dry Weight/Percent Moisture

Associated Lab Samples: 40198063013

SAMPLE DUPLICATE: 1972323

Parameter	Units	Result	Dup Result	RPD	Max RPD	Qualifiers
Percent Moisture	%	15.3	16.0	5	10	

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## QUALITY CONTROL DATA

Project: 60615481 ALLOUEZ PHASE II ESA

Pace Project No.: 40198063

QC Batch: 339621 Analysis Method: ASTM D2974-87

QC Batch Method: ASTM D2974-87 Analysis Description: Dry Weight/Percent Moisture

Associated Lab Samples: 40198063016, 40198063017

SAMPLE DUPLICATE: 1972370

Parameter	Units	Result	Dup Result	RPD	Max RPD	Qualifiers
Percent Moisture	%	17.8	17.5	2	10	

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## QUALITY CONTROL DATA

Project: 60615481 ALLOUEZ PHASE II ESA

Pace Project No.: 40198063

QC Batch: 339626 Analysis Method: ASTM D2974-87

QC Batch Method: ASTM D2974-87 Analysis Description: Dry Weight/Percent Moisture

Associated Lab Samples: 40198063019, 40198063020, 40198063021, 40198063022, 40198063023, 40198063024, 40198063025

SAMPLE DUPLICATE: 1972438

Parameter	Units	40197752019 Result	Dup Result	RPD	Max RPD	Qualifiers
Percent Moisture	%	37.5	39.9	6	10	

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## QUALITY CONTROL DATA

Project: 60615481 ALLOUEZ PHASE II ESA

Pace Project No.: 40198063

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QC Batch: 339627 Analysis Method: ASTM D2974-87  
QC Batch Method: ASTM D2974-87 Analysis Description: Dry Weight/Percent Moisture  
Associated Lab Samples: 40198063026, 40198063027, 40198063028, 40198063030, 40198063031, 40198063032, 40198063033,  
40198063034, 40198063035, 40198063036

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SAMPLE DUPLICATE: 1972441

Parameter	Units	40197755017 Result	Dup Result	RPD	Max RPD	Qualifiers
Percent Moisture	%	20.6	21.4	4	10	

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## QUALITY CONTROL DATA

Project: 60615481 ALLOUEZ PHASE II ESA

Pace Project No.: 40198063

QC Batch: 339741 Analysis Method: ASTM D2974-87

QC Batch Method: ASTM D2974-87 Analysis Description: Dry Weight/Percent Moisture

Associated Lab Samples: 40198063001, 40198063002, 40198063003, 40198063006, 40198063007, 40198063008, 40198063010,  
40198063011, 40198063012, 40198063014, 40198063015

SAMPLE DUPLICATE: 1972922

Parameter	Units	40198063001 Result	Dup Result	RPD	Max RPD	Qualifiers
Percent Moisture	%	15.8	14.6	8	10	

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## QUALITY CONTROL DATA

Project: 60615481 ALLOUEZ PHASE II ESA

Pace Project No.: 40198063

QC Batch:	339763	Analysis Method:	ASTM D2974-87
QC Batch Method:	ASTM D2974-87	Analysis Description:	Dry Weight/Percent Moisture
Associated Lab Samples: 40198063004			

SAMPLE DUPLICATE: 1973079

Parameter	Units	Result	Dup Result	RPD	Max RPD	Qualifiers
Percent Moisture	%	17.8	19.6	10	10	

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## QUALIFIERS

Project: 60615481 ALLOUEZ PHASE II ESA

Pace Project No.: 40198063

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### DEFINITIONS

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

ND - Not Detected at or above LOD.

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

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

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

S - Surrogate

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

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

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

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

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

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

TNI - The NELAC Institute.

### LABORATORIES

PASI-G Pace Analytical Services - Green Bay

### ANALYTE QUALIFIERS

C4 Sample container did not meet EPA or method requirements.

D3 Sample was diluted due to the presence of high levels of non-target analytes or other matrix interference.

M0 Matrix spike recovery and/or matrix spike duplicate recovery was outside laboratory control limits.

M6 Matrix spike and Matrix spike duplicate recovery not evaluated against control limits due to sample dilution.

R1 RPD value was outside control limits.

W Non-detect results are reported on a wet weight basis.

## REPORT OF LABORATORY ANALYSIS

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**QUALITY CONTROL DATA CROSS REFERENCE TABLE**

Project: 60615481 ALLOUEZ PHASE II ESA

Pace Project No.: 40198063

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
40198063001	SP-115-0.5-1.5	EPA 3050	338981	EPA 6010	339359
40198063003	SP-115-10-12	EPA 3050	338981	EPA 6010	339359
40198063006	SP-111-0.5-1.5	EPA 3050	338981	EPA 6010	339359
40198063007	SP-111-21-22	EPA 3050	338981	EPA 6010	339359
40198063008	SP-112-0.5-1.5	EPA 3050	338981	EPA 6010	339359
40198063009	SP-112-21-22	EPA 3050	338981	EPA 6010	339359
40198063010	SP-113-0.5-1.5	EPA 3050	338981	EPA 6010	339359
40198063011	SP-113-22-23	EPA 3050	338981	EPA 6010	339359
40198063012	SP-114-0.5-1.5	EPA 3050	338981	EPA 6010	339359
40198063013	SP-114-21-22	EPA 3050	338981	EPA 6010	339359
40198063015	SP-101-8-10	EPA 3050	338981	EPA 6010	339359
40198063016	SP-101-0.5-1.5	EPA 3050	338981	EPA 6010	339359
40198063017	SP-102-0.5-1.5	EPA 3050	338981	EPA 6010	339359
40198063018	SP-102-19-20	EPA 3050	338981	EPA 6010	339359
40198063019	SP-102-19-20D	EPA 3050	338981	EPA 6010	339359
40198063021	SP-103-0.5-1.5	EPA 3050	338981	EPA 6010	339359
40198063022	SP-103-12-14	EPA 3050	338981	EPA 6010	339359
40198063023	SP-104-0.5-1.5	EPA 3050	338981	EPA 6010	339359
40198063024	SP-104-18-19	EPA 3050	338981	EPA 6010	339359
40198063025	SP-105-0.5-1.5	EPA 3050	338981	EPA 6010	339359
40198063026	SP-105-20-21	EPA 3050	338982	EPA 6010	339263
40198063027	SP-106-0.5-1.5	EPA 3050	338982	EPA 6010	339263
40198063028	SP-106-10-12	EPA 3050	338982	EPA 6010	339263
40198063030	SP-108-0.5-1.5	EPA 3050	338982	EPA 6010	339263
40198063031	SP-108-19-20	EPA 3050	338982	EPA 6010	339263
40198063032	SP-108-19-20D	EPA 3050	338982	EPA 6010	339263
40198063033	SP-109-0.5-1.5	EPA 3050	338982	EPA 6010	339263
40198063034	SP-109-18-19	EPA 3050	338982	EPA 6010	339263
40198063035	SP-110-0.5-1.5	EPA 3050	338982	EPA 6010	339263
40198063036	SP-110-18-19	EPA 3050	338982	EPA 6010	339263
40198063001	SP-115-0.5-1.5	EPA 7471	339779	EPA 7471	339824
40198063003	SP-115-10-12	EPA 7471	339779	EPA 7471	339824
40198063006	SP-111-0.5-1.5	EPA 7471	339779	EPA 7471	339824
40198063007	SP-111-21-22	EPA 7471	339779	EPA 7471	339824
40198063008	SP-112-0.5-1.5	EPA 7471	339779	EPA 7471	339824
40198063009	SP-112-21-22	EPA 7471	339779	EPA 7471	339824
40198063010	SP-113-0.5-1.5	EPA 7471	339779	EPA 7471	339824
40198063011	SP-113-22-23	EPA 7471	339779	EPA 7471	339824
40198063012	SP-114-0.5-1.5	EPA 7471	339779	EPA 7471	339824
40198063013	SP-114-21-22	EPA 7471	339779	EPA 7471	339824
40198063015	SP-101-8-10	EPA 7471	339779	EPA 7471	339824
40198063016	SP-101-0.5-1.5	EPA 7471	339779	EPA 7471	339824
40198063017	SP-102-0.5-1.5	EPA 7471	339779	EPA 7471	339824
40198063018	SP-102-19-20	EPA 7471	339779	EPA 7471	339824
40198063019	SP-102-19-20D	EPA 7471	339779	EPA 7471	339824
40198063021	SP-103-0.5-1.5	EPA 7471	339779	EPA 7471	339824
40198063022	SP-103-12-14	EPA 7471	339779	EPA 7471	339824
40198063023	SP-104-0.5-1.5	EPA 7471	339779	EPA 7471	339824

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## QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: 60615481 ALLOUEZ PHASE II ESA  
Pace Project No.: 40198063

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
40198063024	SP-104-18-19	EPA 7471	339780	EPA 7471	339829
40198063025	SP-105-0.5-1.5	EPA 7471	339780	EPA 7471	339829
40198063026	SP-105-20-21	EPA 7471	339780	EPA 7471	339829
40198063027	SP-106-0.5-1.5	EPA 7471	339780	EPA 7471	339829
40198063028	SP-106-10-12	EPA 7471	339780	EPA 7471	339829
40198063030	SP-108-0.5-1.5	EPA 7471	339780	EPA 7471	339829
40198063031	SP-108-19-20	EPA 7471	339780	EPA 7471	339829
40198063032	SP-108-19-20D	EPA 7471	339780	EPA 7471	339829
40198063033	SP-109-0.5-1.5	EPA 7471	339780	EPA 7471	339829
40198063034	SP-109-18-19	EPA 7471	339780	EPA 7471	339829
40198063035	SP-110-0.5-1.5	EPA 7471	339780	EPA 7471	339829
40198063036	SP-110-18-19	EPA 7471	339780	EPA 7471	339829
40198063001	SP-115-0.5-1.5	EPA 3546	338985	EPA 8270 by SIM	339040
40198063003	SP-115-10-12	EPA 3546	338985	EPA 8270 by SIM	339040
40198063006	SP-111-0.5-1.5	EPA 3546	338985	EPA 8270 by SIM	339040
40198063007	SP-111-21-22	EPA 3546	338985	EPA 8270 by SIM	339040
40198063008	SP-112-0.5-1.5	EPA 3546	338985	EPA 8270 by SIM	339040
40198063009	SP-112-21-22	EPA 3546	338985	EPA 8270 by SIM	339040
40198063010	SP-113-0.5-1.5	EPA 3546	339144	EPA 8270 by SIM	339201
40198063011	SP-113-22-23	EPA 3546	339144	EPA 8270 by SIM	339201
40198063012	SP-114-0.5-1.5	EPA 3546	339144	EPA 8270 by SIM	339201
40198063013	SP-114-21-22	EPA 3546	339144	EPA 8270 by SIM	339201
40198063015	SP-101-8-10	EPA 3546	339144	EPA 8270 by SIM	339201
40198063016	SP-101-0.5-1.5	EPA 3546	339251	EPA 8270 by SIM	339303
40198063017	SP-102-0.5-1.5	EPA 3546	339392	EPA 8270 by SIM	339431
40198063018	SP-102-19-20	EPA 3546	339251	EPA 8270 by SIM	339303
40198063019	SP-102-19-20D	EPA 3546	339251	EPA 8270 by SIM	339303
40198063021	SP-103-0.5-1.5	EPA 3546	339251	EPA 8270 by SIM	339303
40198063022	SP-103-12-14	EPA 3546	339251	EPA 8270 by SIM	339303
40198063023	SP-104-0.5-1.5	EPA 3546	339251	EPA 8270 by SIM	339303
40198063024	SP-104-18-19	EPA 3546	339251	EPA 8270 by SIM	339303
40198063025	SP-105-0.5-1.5	EPA 3546	339392	EPA 8270 by SIM	339431
40198063026	SP-105-20-21	EPA 3546	339392	EPA 8270 by SIM	339431
40198063027	SP-106-0.5-1.5	EPA 3546	339392	EPA 8270 by SIM	339431
40198063028	SP-106-10-12	EPA 3546	339392	EPA 8270 by SIM	339431
40198063030	SP-108-0.5-1.5	EPA 3546	339392	EPA 8270 by SIM	339431
40198063031	SP-108-19-20	EPA 3546	339392	EPA 8270 by SIM	339431
40198063032	SP-108-19-20D	EPA 3546	339392	EPA 8270 by SIM	339431
40198063033	SP-109-0.5-1.5	EPA 3546	339392	EPA 8270 by SIM	339431
40198063034	SP-109-18-19	EPA 3546	339392	EPA 8270 by SIM	339431
40198063035	SP-110-0.5-1.5	EPA 3546	339392	EPA 8270 by SIM	339431
40198063036	SP-110-18-19	EPA 3546	339392	EPA 8270 by SIM	339431
40198063001	SP-115-0.5-1.5	EPA 5035/5030B	339573	EPA 8260	339575
40198063002	SP-115-18-20	EPA 5035/5030B	339468	EPA 8260	339470

## REPORT OF LABORATORY ANALYSIS

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**QUALITY CONTROL DATA CROSS REFERENCE TABLE**

Project: 60615481 ALLOUEZ PHASE II ESA  
Pace Project No.: 40198063

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
40198063003	SP-115-10-12	EPA 5035/5030B	339468	EPA 8260	339470
40198063004	SP-105-26-27	EPA 5035/5030B	339468	EPA 8260	339470
40198063005	TRIP BLANK	EPA 5035/5030B	339468	EPA 8260	339470
40198063006	SP-111-0.5-1.5	EPA 5035/5030B	339468	EPA 8260	339470
40198063007	SP-111-21-22	EPA 5035/5030B	339468	EPA 8260	339470
40198063008	SP-112-0.5-1.5	EPA 5035/5030B	339573	EPA 8260	339575
40198063009	SP-112-21-22	EPA 5035/5030B	339483	EPA 8260	339484
40198063010	SP-113-0.5-1.5	EPA 5035/5030B	339483	EPA 8260	339484
40198063011	SP-113-22-23	EPA 5035/5030B	339483	EPA 8260	339484
40198063012	SP-114-0.5-1.5	EPA 5035/5030B	339483	EPA 8260	339484
40198063013	SP-114-21-22	EPA 5035/5030B	339483	EPA 8260	339484
40198063014	SP-101-18-20	EPA 5035/5030B	339483	EPA 8260	339484
40198063015	SP-101-8-10	EPA 5035/5030B	339483	EPA 8260	339484
40198063016	SP-101-0.5-1.5	EPA 5035/5030B	339483	EPA 8260	339484
40198063017	SP-102-0.5-1.5	EPA 5035/5030B	339483	EPA 8260	339484
40198063018	SP-102-19-20	EPA 5035/5030B	339483	EPA 8260	339484
40198063019	SP-102-19-20D	EPA 5035/5030B	339483	EPA 8260	339484
40198063020	SP-103-18-20	EPA 5035/5030B	339483	EPA 8260	339484
40198063021	SP-103-0.5-1.5	EPA 5035/5030B	339483	EPA 8260	339484
40198063022	SP-103-12-14	EPA 5035/5030B	339483	EPA 8260	339484
40198063023	SP-104-0.5-1.5	EPA 5035/5030B	339483	EPA 8260	339484
40198063024	SP-104-18-19	EPA 5035/5030B	339483	EPA 8260	339484
40198063025	SP-105-0.5-1.5	EPA 5035/5030B	339483	EPA 8260	339484
40198063026	SP-105-20-21	EPA 5035/5030B	339483	EPA 8260	339484
40198063027	SP-106-0.5-1.5	EPA 5035/5030B	339483	EPA 8260	339484
40198063028	SP-106-10-12	EPA 5035/5030B	339483	EPA 8260	339484
40198063029	SP-106-18-19	EPA 5035/5030B	339573	EPA 8260	339575
40198063030	SP-108-0.5-1.5	EPA 5035/5030B	339573	EPA 8260	339575
40198063031	SP-108-19-20	EPA 5035/5030B	339573	EPA 8260	339575
40198063032	SP-108-19-20D	EPA 5035/5030B	339573	EPA 8260	339575
40198063033	SP-109-0.5-1.5	EPA 5035/5030B	339573	EPA 8260	339575
40198063034	SP-109-18-19	EPA 5035/5030B	339573	EPA 8260	339575
40198063035	SP-110-0.5-1.5	EPA 5035/5030B	339573	EPA 8260	339575
40198063036	SP-110-18-19	EPA 5035/5030B	339573	EPA 8260	339575
40198063001	SP-115-0.5-1.5	ASTM D2974-87	339741		
40198063002	SP-115-18-20	ASTM D2974-87	339741		
40198063003	SP-115-10-12	ASTM D2974-87	339741		
40198063004	SP-105-26-27	ASTM D2974-87	339763		
40198063006	SP-111-0.5-1.5	ASTM D2974-87	339741		
40198063007	SP-111-21-22	ASTM D2974-87	339741		
40198063008	SP-112-0.5-1.5	ASTM D2974-87	339741		
40198063009	SP-112-21-22	ASTM D2974-87	339594		
40198063010	SP-113-0.5-1.5	ASTM D2974-87	339741		
40198063011	SP-113-22-23	ASTM D2974-87	339741		
40198063012	SP-114-0.5-1.5	ASTM D2974-87	339741		

**REPORT OF LABORATORY ANALYSIS**

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### QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: 60615481 ALLOUEZ PHASE II ESA  
Pace Project No.: 40198063

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
40198063013	SP-114-21-22	ASTM D2974-87	339608		
40198063014	SP-101-18-20	ASTM D2974-87	339741		
40198063015	SP-101-8-10	ASTM D2974-87	339741		
40198063016	SP-101-0.5-1.5	ASTM D2974-87	339621		
40198063017	SP-102-0.5-1.5	ASTM D2974-87	339621		
40198063018	SP-102-19-20	ASTM D2974-87	339599		
40198063019	SP-102-19-20D	ASTM D2974-87	339626		
40198063020	SP-103-18-20	ASTM D2974-87	339626		
40198063021	SP-103-0.5-1.5	ASTM D2974-87	339626		
40198063022	SP-103-12-14	ASTM D2974-87	339626		
40198063023	SP-104-0.5-1.5	ASTM D2974-87	339626		
40198063024	SP-104-18-19	ASTM D2974-87	339626		
40198063025	SP-105-0.5-1.5	ASTM D2974-87	339626		
40198063026	SP-105-20-21	ASTM D2974-87	339627		
40198063027	SP-106-0.5-1.5	ASTM D2974-87	339627		
40198063028	SP-106-10-12	ASTM D2974-87	339627		
40198063030	SP-108-0.5-1.5	ASTM D2974-87	339627		
40198063031	SP-108-19-20	ASTM D2974-87	339627		
40198063032	SP-108-19-20D	ASTM D2974-87	339627		
40198063033	SP-109-0.5-1.5	ASTM D2974-87	339627		
40198063034	SP-109-18-19	ASTM D2974-87	339627		
40198063035	SP-110-0.5-1.5	ASTM D2974-87	339627		
40198063036	SP-110-18-19	ASTM D2974-87	339627		

### REPORT OF LABORATORY ANALYSIS

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(Please Print Clearly)

Company Name:	AECOM		
Branch/Location:	Milwaukee		
Project Contact:	Lorette Altenbach		
Phone:	414-944-6186		
Project Number:	60608519		
Project Name:	WAT Alluvial Phase II		
Project State:	Wisconsin		
Sampled By (Print):	Mike Polak		
Sampled By (Sign):			
PO #:		Regulatory Program:	

**Data Package Options**

(billable)

EPA Level III

EPA Level IV

**MS/MSD**

On your sample  
(billable)

NOT needed on  
your sample

**Matrix Codes**

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

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

Y/N	X	X	X					
Pick Letter	T	A	A					
Analyses Requested	COL	BI	8280	8270	8270	RCRA met		
	DATE	TIME						

16/26/07

**PACE LAB #**

**CLIENT FIELD ID**

001

SP-115-0.5-1.5

**COLLECTION**

DATE

TIME

MATRIX

10/24/19

1025

S

L

X

X

A

X

X

RCRA

met

002

SP-115-18-20

DATE

TIME

1051

S

L

X

X

RCRA

met

003

SP-115-10-12

DATE

TIME

1046

S

L

X

X

RCRA

met

004

SP-105-26-27

DATE

TIME

1406

S

L

X

X

RCRA

met

005

TRIP Blank

DATE

TIME

1025/19

1711

W

L

X

X

RCRA

met

006

SP-115-0.5-1.5

DATE

TIME

1025/19

1711

W

L

X

X

RCRA

met

007

SP-115-18-20

DATE

TIME

1025/19

1711

W

L

X

X

RCRA

met

008

SP-115-10-12

DATE

TIME

1046

S

L

X

X

RCRA

met

009

SP-105-26-27

DATE

TIME

1406

S

L

X

X

RCRA

met

010

SP-115-0.5-1.5

DATE

TIME

1025/19

1711

W

L

X</

(Please Print Clearly)

Company Name:	AECOM
Branch/Location:	Milwaukee
Project Contact:	Lanette Altenbach
Phone:	414-944-6186
Project Number:	60608519
Project Name:	Allinez Phase II
Project State:	WI
Sampled By (Print):	Mike Pantale
Sampled By (Sign):	~~~~~
PO #:	
Data Package Options (billable)	<input type="checkbox"/> EPA Level III <input type="checkbox"/> EPA Level IV
MS/MSD	<input type="checkbox"/> On your sample (billable) <input type="checkbox"/> NOT needed on your sample
Regulatory Program:	

**UPPER MIDWEST REGION**

MN: 612-607-1700 WI: 920-469-2436

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**CHAIN OF CUSTODY**

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

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

Y/N

Pick  
Letter

X

F

X

A

X

A

Quote #:

Mail To Contact:

Lanette Altenbach

Mail To Company:

AECOM

Mail To Address:

1555 N River Center Dr.  
Milwaukee, WI 53212

Invoice To Contact:

Lanette Altenbach

Invoice To Company:

AECOM

Invoice To Address:

1555 N River Center Dr.  
Milwaukee, WI 53212

Invoice To Phone:

CLIENT COMMENTS  
(Lab Use Only)LAB COMMENTS  
(Lab Use Only)

Profile #

Data Package Options (billable)		MS/MSD	Matrix Codes	
<input type="checkbox"/>	EPA Level III	<input type="checkbox"/>	On your sample (billable)	A = Air B = Biota C = Charcoal O = Oil S = Soil SI = Sludge
<input type="checkbox"/>	EPA Level IV	<input type="checkbox"/>	NOT needed on your sample	W = Water DW = Drinking Water GW = Ground Water SW = Surface Water WW = Waste Water WP = Wipe

PACE LAB #	CLIENT FIELD ID	COLLECTION		MATRIX
		DATE	TIME	
006	SP-110	10/25/06		
006	SP-111-0.5-1.5	10/26/06	1617	S
007	SP-111-21-22		1622	S
008	SP-111			
008	SP-112-0.5-1.5	10/26/06	1625	S
009	SP-112-21-22	10/26/06	1631	S
010	SP-112			
010	SP-113 - 0.5-1.5	10/26/06	1645	S
011	SP-113 - 22-23	10/26/06	1650	S
012	SP-113			
012	SP-114 .. 0.5-1.5	10/26/06	1659	S
013	SP-114-21-22	10/26/06	1705	S
013	SP-114			

Rush Turnaround Time Requested - Prelims  
(Rush TAT subject to approval/surcharge)  
Date Needed: 5pm 10/26

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

Email #1:	Relinquished By:	Date/Time:	Received By:	Date/Time:	PACE Project No.
Email #2:	Relinquished By:	Date/Time:	Received By:	Date/Time:	U0198063
Telephone:	Relinquished By:	Date/Time:	Received By:	Date/Time:	Receipt Temp = 201 °C
Fax:	Relinquished By:	Date/Time:	Received By:	Date/Time:	Sample Receipt pH OK / Adjusted

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

Relinquished By: Date/Time: Received By: Date/Time:

Cooler Custody Seal

Present / Not Present  
Intact / Not Intact

Version 6.0 06/14/06

ORIGINAL



(Please Print Clearly)						
Company Name:	AECLM					
Branch/Location:	Orkirk					
Project Contact:	Lanette Almeland					
Phone:	414-944-6186					
Project Number:	60608519					
Project Name:	Alluvium Phase II					
Project State:	WI					
Sampled By (Print):	Mike Park					
Sampled By (Sign):						
PO #:		Regulatory Program:				
Data Package Options (billable)		MS/MSD	Matrix Codes			
<input type="checkbox"/> EPA Level III		<input type="checkbox"/> On your sample (billable)	A = Air W = Water			
<input type="checkbox"/> EPA Level IV		<input type="checkbox"/> NOT needed on your sample	B = Biota DW = Drinking Water			
			C = Charcoal GW = Ground Water			
			O = Oil SW = Surface Water			
			S = Soil WW = Waste Water			
			SI = Sludge WP = Wipe			
PACE LAB #	CLIENT FIELD ID		COLLECTION	MATRIX		
			DATE	TIME		
025	021	SP-108 - 0.5-1.5	10/25/19	1115	S	
026	022	SP-108 - 20-21	10/25/19	1357	S	
027	023	SP-108 - 0.5-1.5	10/25/19	1323	S	
028	024	SP-108 - 10-12	10/25/19	1335	S	
029	025	SP-108 - 18-19	10/25/19	1344	S	
030	026	SP-108 - 0.5-1.5	10/25/19	1527	S	
031	027	SP-108 - 19-20	10/25/19	1535	S	
032	028	SP-108-19-20 D	10/25/19	1535	S	
033	029	SP-109 - 0.5-1.5	10/25/19	1550	S	
034	030	SP-109 - 18-19	10/25/19	1559	S	
035	031	SP-110 - 0.5-1.5	10/25/19	1602	S	
036	032	SP-110 - 18-19	10/25/19	1607	S	
Rush Turnaround Time Requested - Prelims (Rush TAT subject to approval/surcharge)			Relinquished By:	Date/Time:	Received By:	PACE Project No.
Date Needed: <u>10/25/19</u>				1800 10/25/19	Alan Pace	10/25/19 1747
Transmit Prelim Rush Results by (complete what you want):			Relinquished By:	Date/Time:	Received By:	Receipt Temp = <u>40</u> °C
Email #1:			Relinquished By:	Date/Time:	Received By:	Sample Receipt pH
Email #2:			Relinquished By:	Date/Time:	Received By:	OK / Adjusted
Telephone:			Relinquished By:	Date/Time:	Received By:	Cooler Custody Seal
Fax:			Relinquished By:	Date/Time:	Received By:	Present / Not Present
Samples on HOLD are subject to special pricing and release of liability			Relinquished By:	Date/Time:	Received By:	Intact / Not Intact



UPPER MIDWEST REGION

MN: 612-607-1700 WI: 920-469-2436

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## CHAIN OF CUSTODY

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

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

Y/N	N	N				
Pick Letter	X	A	A			

Analyses Requested

W C S A H H 8d70 RCR 100

Quote #:	40198063	
Mail To Contact:	Lanette Almeland	
Mail To Company:	AECLM	
Mail To Address:	1088 N Rivercenter Dr. Milwaukee, WI 53212	
Invoice To Contact:	AECLM Lanette Almeland	
Invoice To Company:	AECLM	
Invoice To Address:	1088 N Rivercenter Dr. Milwaukee, WI 53212	
Invoice To Phone:		
CLIENT COMMENTS	LAB COMMENTS (Lab Use Only)	Profile #

# Sample Preservation Receipt Form

Pace Analytical Services, LLC  
1241 Bellevue Street, Suite 160  
Green Bay, WI 54302

Client Name: AFCom

Project # Y0198063

All containers needing preservation have been checked and noted below:  Yes  No  N/A

Lab Lot# of pH paper:

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

Initial when completed:

Date/  
Time:

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Pace Lab #	Glass					Plastic				Vials			Jars			General			VOA Vials (>6mm) *	H2SO4 pH ≤2	NaOH+Zn Act pH ≥9	NaOH pH ≥12	HNO3 pH ≤2	pH after adjusted	Volume (mL)		
	AG1U	AG1H	AG4S	AG4U	AG5U	AG2S	BG3U	BP1U	BP2N	BP2Z	BP3U	BP3B	BP3N	BP3S	DG9A	DG9T	VG9U	VG9H	VG9M	VG9D	JGFU	WGFU	WPFU	SP5T	ZPLC	GN	
001																											2.5 / 5 / 10
002																											2.5 / 5 / 10
003																											2.5 / 5 / 10
004																											2.5 / 5 / 10
005																											2.5 / 5 / 10
006																											2.5 / 5 / 10
007																											2.5 / 5 / 10
008																											2.5 / 5 / 10
009																											2.5 / 5 / 10
010																											2.5 / 5 / 10
011																											2.5 / 5 / 10
012																											2.5 / 5 / 10
013																											2.5 / 5 / 10
014																											2.5 / 5 / 10
015																											2.5 / 5 / 10
016																											2.5 / 5 / 10
017																											2.5 / 5 / 10
018																											2.5 / 5 / 10
019																											2.5 / 5 / 10
020																											2.5 / 5 / 10

Exceptions to preservation check: VOA, Coliform, TOC, TOX, TOH, O&G, WI DRO, Phenolics, Other:

Headspace in VOA Vials (>6mm):  Yes  No  N/A \*If yes look in headspace column

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

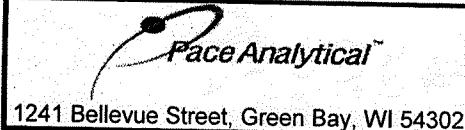
### Sample Preservation Receipt Form

Project #: U0198063

Client Name: AECOM

Pace Lab #	Glass		Plastic		Vials		Jars		General		VOA Vials (>6mm) *	H2SO4 pH ≤ 2	NaOH+Zn Act pH ≥ 9	NaOH pH ≥ 12	HNO3 pH ≤ 2	pH after adjusted	Volume (mL)								
	AG1U	AG1H	AG4S	AG4U	AG5U	AG2S	BG3U	BP1U	BP2N	BP2Z	BP3U	BP3B	BP3N	BP3S	DG9A	DG9T	VG9U	VG9H	VG9M	VG9D	JGFU	WGFU	WPFU	SPST	ZPLC
021																									2.5 / 5 / 10
022																									2.5 / 5 / 10
023																									2.5 / 5 / 10
024																									2.5 / 5 / 10
025																									2.5 / 5 / 10
026																									2.5 / 5 / 10
027																									2.5 / 5 / 10
028																									2.5 / 5 / 10
029																									2.5 / 5 / 10
030																									2.5 / 5 / 10
031																									2.5 / 5 / 10
032																									2.5 / 5 / 10
033																									2.5 / 5 / 10
034																									2.5 / 5 / 10
035																									2.5 / 5 / 10
036																									2.5 / 5 / 10
																									2.5 / 5 / 11
																									2.5 / 5 / 12
																									2.5 / 5 / 13
																									2.5 / 5 / 14
																									2.5 / 5 / 15
																									2.5 / 5 / 16
																									2.5 / 5 / 17
																									2.5 / 5 / 18
																									2.5 / 5 / 19
																									2.5 / 5 / 20

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Document Name:  
Sample Condition Upon Receipt (SCUR)

Document Revised: 25Apr2018

Document No.:  
F-GB-C-031-Rev.07Issuing Authority:  
Pace Green Bay Quality Office

## Sample Condition Upon Receipt Form (SCUR)

Project #:

WO# : 40198063

Client Name: AFCom

Courier:  CS Logistics  FedEx  Speedee  UPS  Waltco  
 Client  Pace Other: \_\_\_\_\_

Tracking #: N/A

Custody Seal on Cooler/Box Present:  yes  no Seals intact:  yes  noCustody Seal on Samples Present:  yes  no Seals intact:  yes  noPacking Material:  Bubble Wrap  Bubble Bags  None  Other

Thermometer Used SR - N/A

Type of Ice:  Wet  Blue  Dry  None Samples on ice, cooling process has begun

Cooler Temperature Uncorr: 20°C /Corr: \_\_\_\_\_

Temp Blank Present:  yes  noBiological Tissue is Frozen:  yes  no

Temp should be above freezing to 6°C.

Biota Samples may be received at ≤ 0°C.

Person examining contents:

Date: 10/26/19

Initials: P/J

Chain of Custody Present:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	1.
Chain of Custody Filled Out:	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	2. <i>10/26/19 P/J</i>
Chain of Custody Relinquished:	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	3. <i>Date 10/26/19 P/J</i>
Sampler Name & Signature on COC:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	4.
Samples Arrived within Hold Time:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	5.
- VOA Samples frozen upon receipt	<input type="checkbox"/> Yes <input type="checkbox"/> No	Date/Time:
Short Hold Time Analysis (<72hr):	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	6.
Rush Turn Around Time Requested:	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	7.
Sufficient Volume:	8. Missing "106 19-19" ova. Possible sample w/o label. four pH/methyls held shelf.	
For Analysis: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No MS/MSD: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	9. Only vials needed for -029 from 10/26/19 to 10/28/19	
Correct Containers Used:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
-Pace Containers Used:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
-Pace IR Containers Used:	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	
Containers Intact:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	10.
Filtered volume received for Dissolved tests	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	11.
Sample Labels match COC:	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	12. 0110 "114" matched by depth & time. Vial label bleed and illegible 19/26/29. 1 JBEU No Label placed on hold shelf 10/26/19 P/J
-Includes date/time/ID/Analysis Matrix:	<i>S</i>	
Trip Blank Present:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	13.
Trip Blank Custody Seals Present	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
Pace Trip Blank Lot # (if purchased):	<i>Covered</i>	

## Client Notification/ Resolution:

Person Contacted:

If checked, see attached form for additional comments 

Comments/ Resolution:

*019 Missing 10/26/19 P/J*

Date/Time:

Project Manager Review:

*BG*

Date:

10-28-19

November 04, 2019

Lanette Altenbach  
AECOM, Inc.  
1555 N River Center Drive  
Suite 214  
Milwaukee, WI 53212

RE: Project: 60615481 ALLOUEZ PHASE II ESA  
Pace Project No.: 40198330

Dear Lanette Altenbach:

Enclosed are the analytical results for sample(s) received by the laboratory on October 31, 2019. The results relate only to the samples included in this report. Results reported herein conform to the most current, applicable TNI/NELAC standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

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

Sincerely,



Christopher Hyska  
christopher.hyska@pacelabs.com  
(920)469-2436  
Project Manager

Enclosures



## REPORT OF LABORATORY ANALYSIS

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## CERTIFICATIONS

Project: 60615481 ALLOUEZ PHASE II ESA  
Pace Project No.: 40198330

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### Green Bay Certification IDs

1241 Bellevue Street, Green Bay, WI 54302  
Florida/NELAP Certification #: E87948  
Illinois Certification #: 200050  
Kentucky UST Certification #: 82  
Louisiana Certification #: 04168  
Minnesota Certification #: 055-999-334  
New York Certification #: 12064  
North Dakota Certification #: R-150

Virginia VELAP ID: 460263  
South Carolina Certification #: 83006001  
Texas Certification #: T104704529-14-1  
Wisconsin Certification #: 405132750  
Wisconsin DATCP Certification #: 105-444  
USDA Soil Permit #: P330-16-00157  
Federal Fish & Wildlife Permit #: LE51774A-0

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## REPORT OF LABORATORY ANALYSIS

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## SAMPLE SUMMARY

Project: 60615481 ALLOUEZ PHASE II ESA  
 Pace Project No.: 40198330

Lab ID	Sample ID	Matrix	Date Collected	Date Received
40198330001	SP-109	Water	10/31/19 09:45	10/31/19 12:40
40198330002	SP-105	Water	10/31/19 10:00	10/31/19 12:40
40198330003	SP-111	Water	10/31/19 10:15	10/31/19 12:40
40198330004	SP-112	Water	10/31/19 10:30	10/31/19 12:40
40198330005	SP-114	Water	10/31/19 10:45	10/31/19 12:40
40198330006	DUP SP-112	Water	10/31/19 10:30	10/31/19 12:40
40198330007	MW-5	Water	10/31/19 11:00	10/31/19 12:40
40198330008	MW-4	Water	10/31/19 11:15	10/31/19 12:40
40198330009	MW-6	Water	10/31/19 11:30	10/31/19 12:40
40198330010	TRIP BLANK	Water	10/31/19 09:30	10/31/19 12:40

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## SAMPLE ANALYTE COUNT

Project: 60615481 ALLOUEZ PHASE II ESA  
 Pace Project No.: 40198330

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
40198330001	SP-109	EPA 8260	HNW	65	PASI-G
40198330002	SP-105	EPA 8260	HNW	65	PASI-G
40198330003	SP-111	EPA 8260	HNW	65	PASI-G
40198330004	SP-112	EPA 8260	HNW	65	PASI-G
40198330005	SP-114	EPA 8260	HNW	65	PASI-G
40198330006	DUP SP-112	EPA 8260	HNW	65	PASI-G
40198330007	MW-5	EPA 8260	HNW	65	PASI-G
40198330008	MW-4	EPA 8260	HNW	65	PASI-G
40198330009	MW-6	EPA 8260	HNW	65	PASI-G
40198330010	TRIP BLANK	EPA 8260	HNW	65	PASI-G

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## SUMMARY OF DETECTION

Project: 60615481 ALLOUEZ PHASE II ESA

Pace Project No.: 40198330

Lab Sample ID	Client Sample ID						
Method	Parameters	Result	Units	Report Limit	Analyzed	Qualifiers	
<b>40198330001</b>	<b>SP-109</b>						
EPA 8260	Tetrachloroethene	5.0	ug/L	1.1	11/01/19 16:12		
EPA 8260	Toluene	0.42J	ug/L	5.0	11/01/19 16:12		
<b>40198330002</b>	<b>SP-105</b>						
EPA 8260	Benzene	16.1	ug/L	1.0	11/01/19 16:34		
EPA 8260	cis-1,2-Dichloroethene	25.8	ug/L	1.0	11/01/19 16:34		
EPA 8260	trans-1,2-Dichloroethene	12.9	ug/L	3.6	11/01/19 16:34		
EPA 8260	Ethylbenzene	10.5	ug/L	1.0	11/01/19 16:34		
EPA 8260	Isopropylbenzene (Cumene)	1.9J	ug/L	5.0	11/01/19 16:34		
EPA 8260	Naphthalene	1.8J	ug/L	5.0	11/01/19 16:34		
EPA 8260	n-Propylbenzene	0.95J	ug/L	5.0	11/01/19 16:34		
EPA 8260	Tetrachloroethene	87.3	ug/L	1.1	11/01/19 16:34		
EPA 8260	Toluene	19.7	ug/L	5.0	11/01/19 16:34		
EPA 8260	Trichloroethene	9.0	ug/L	1.0	11/01/19 16:34		
EPA 8260	1,2,4-Trimethylbenzene	15.3	ug/L	2.8	11/01/19 16:34		
EPA 8260	1,3,5-Trimethylbenzene	2.0J	ug/L	2.9	11/01/19 16:34		
EPA 8260	Xylene (Total)	61.3	ug/L	3.0	11/01/19 16:34		
EPA 8260	m&p-Xylene	55.3	ug/L	2.0	11/01/19 16:34		
EPA 8260	o-Xylene	5.9	ug/L	1.0	11/01/19 16:34		
<b>40198330003</b>	<b>SP-111</b>						
EPA 8260	Benzene	0.36J	ug/L	1.0	11/01/19 16:55		
EPA 8260	Tetrachloroethene	2.9	ug/L	1.1	11/01/19 16:55		
EPA 8260	Toluene	0.92J	ug/L	5.0	11/01/19 16:55		
EPA 8260	Trichloroethene	0.73J	ug/L	1.0	11/01/19 16:55		
<b>40198330004</b>	<b>SP-112</b>						
EPA 8260	Tetrachloroethene	33.3	ug/L	1.1	11/01/19 17:16		
<b>40198330005</b>	<b>SP-114</b>						
EPA 8260	Benzene	0.28J	ug/L	1.0	11/01/19 17:38		
EPA 8260	Bromodichloromethane	0.41J	ug/L	1.2	11/01/19 17:38		
EPA 8260	cis-1,2-Dichloroethene	1.7	ug/L	1.0	11/01/19 17:38		
EPA 8260	Tetrachloroethene	25.0	ug/L	1.1	11/01/19 17:38		
EPA 8260	Trichloroethene	2.8	ug/L	1.0	11/01/19 17:38		
<b>40198330006</b>	<b>DUP SP-112</b>						
EPA 8260	Tetrachloroethene	43.6	ug/L	1.1	11/01/19 17:59		
EPA 8260	Toluene	0.28J	ug/L	5.0	11/01/19 17:59		
<b>40198330007</b>	<b>MW-5</b>						
EPA 8260	Benzene	1.6J	ug/L	5.0	11/01/19 22:17		
EPA 8260	n-Butylbenzene	5.8J	ug/L	11.8	11/01/19 22:17		
EPA 8260	cis-1,2-Dichloroethene	79.7	ug/L	5.0	11/01/19 22:17		
EPA 8260	trans-1,2-Dichloroethene	10.6J	ug/L	18.2	11/01/19 22:17		
EPA 8260	Ethylbenzene	92.7	ug/L	5.0	11/01/19 22:17		
EPA 8260	Isopropylbenzene (Cumene)	27.4	ug/L	25.0	11/01/19 22:17		
EPA 8260	Naphthalene	89.6	ug/L	25.0	11/01/19 22:17		
EPA 8260	n-Propylbenzene	54.9	ug/L	25.0	11/01/19 22:17		
EPA 8260	Tetrachloroethene	4.2J	ug/L	5.4	11/01/19 22:17		

## REPORT OF LABORATORY ANALYSIS

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## SUMMARY OF DETECTION

Project: 60615481 ALLOUEZ PHASE II ESA

Pace Project No.: 40198330

Lab Sample ID	Client Sample ID						
Method	Parameters	Result	Units	Report Limit	Analyzed	Qualifiers	
<b>40198330007</b>	<b>MW-5</b>						
EPA 8260	Toluene	6.2J	ug/L	25.0	11/01/19 22:17		
EPA 8260	1,2,4-Trimethylbenzene	575	ug/L	14.0	11/01/19 22:17		
EPA 8260	1,3,5-Trimethylbenzene	97.8	ug/L	14.6	11/01/19 22:17		
EPA 8260	Xylene (Total)	531	ug/L	15.0	11/01/19 22:17		
EPA 8260	m&p-Xylene	496	ug/L	10.0	11/01/19 22:17		
EPA 8260	o-Xylene	35.1	ug/L	5.0	11/01/19 22:17		
<b>40198330008</b>	<b>MW-4</b>						
EPA 8260	cis-1,2-Dichloroethene	1.5	ug/L	1.0	11/01/19 21:55		
EPA 8260	trans-1,2-Dichloroethene	1.7J	ug/L	3.6	11/01/19 21:55		
EPA 8260	Tetrachloroethene	85.5	ug/L	1.1	11/01/19 21:55		
EPA 8260	Trichloroethene	2.2	ug/L	1.0	11/01/19 21:55		
<b>40198330009</b>	<b>MW-6</b>						
EPA 8260	Benzene	21.7	ug/L	4.0	11/01/19 22:38		
EPA 8260	Chloroform	5.9J	ug/L	20.0	11/01/19 22:38		
EPA 8260	cis-1,2-Dichloroethene	48.4	ug/L	4.0	11/01/19 22:38		
EPA 8260	trans-1,2-Dichloroethene	100	ug/L	14.5	11/01/19 22:38		
EPA 8260	Ethylbenzene	64.6	ug/L	4.0	11/01/19 22:38		
EPA 8260	Isopropylbenzene (Cumene)	5.9J	ug/L	20.0	11/01/19 22:38		
EPA 8260	Naphthalene	16.6J	ug/L	20.0	11/01/19 22:38		
EPA 8260	n-Propylbenzene	8.2J	ug/L	20.0	11/01/19 22:38		
EPA 8260	Tetrachloroethene	101	ug/L	4.4	11/01/19 22:38		
EPA 8260	Toluene	85.4	ug/L	20.0	11/01/19 22:38		
EPA 8260	Trichloroethene	212	ug/L	4.0	11/01/19 22:38		
EPA 8260	1,2,4-Trimethylbenzene	81.9	ug/L	11.2	11/01/19 22:38		
EPA 8260	1,3,5-Trimethylbenzene	10.8J	ug/L	11.6	11/01/19 22:38		
EPA 8260	Xylene (Total)	200	ug/L	12.0	11/01/19 22:38		
EPA 8260	m&p-Xylene	183	ug/L	8.0	11/01/19 22:38		
EPA 8260	o-Xylene	16.4	ug/L	4.0	11/01/19 22:38		

## REPORT OF LABORATORY ANALYSIS

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## ANALYTICAL RESULTS

Project: 60615481 ALLOUEZ PHASE II ESA

Pace Project No.: 40198330

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**Sample: SP-109**      **Lab ID: 40198330001**      Collected: 10/31/19 09:45      Received: 10/31/19 12:40      Matrix: Water

---

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260 MSV</b>	Analytical Method: EPA 8260								
Benzene	<0.25	ug/L	1.0	0.25	1		11/01/19 16:12	71-43-2	
Bromobenzene	<0.24	ug/L	1.0	0.24	1		11/01/19 16:12	108-86-1	
Bromochloromethane	<0.36	ug/L	5.0	0.36	1		11/01/19 16:12	74-97-5	
Bromodichloromethane	<0.36	ug/L	1.2	0.36	1		11/01/19 16:12	75-27-4	
Bromoform	<4.0	ug/L	13.2	4.0	1		11/01/19 16:12	75-25-2	
Bromomethane	<0.97	ug/L	5.0	0.97	1		11/01/19 16:12	74-83-9	
n-Butylbenzene	<0.71	ug/L	2.4	0.71	1		11/01/19 16:12	104-51-8	
sec-Butylbenzene	<0.85	ug/L	5.0	0.85	1		11/01/19 16:12	135-98-8	
tert-Butylbenzene	<0.30	ug/L	1.0	0.30	1		11/01/19 16:12	98-06-6	
Carbon tetrachloride	<0.17	ug/L	1.0	0.17	1		11/01/19 16:12	56-23-5	
Chlorobenzene	<0.71	ug/L	2.4	0.71	1		11/01/19 16:12	108-90-7	
Chloroethane	<1.3	ug/L	5.0	1.3	1		11/01/19 16:12	75-00-3	
Chloroform	<1.3	ug/L	5.0	1.3	1		11/01/19 16:12	67-66-3	
Chloromethane	<2.2	ug/L	7.3	2.2	1		11/01/19 16:12	74-87-3	
2-Chlorotoluene	<0.93	ug/L	5.0	0.93	1		11/01/19 16:12	95-49-8	
4-Chlorotoluene	<0.76	ug/L	2.5	0.76	1		11/01/19 16:12	106-43-4	
1,2-Dibromo-3-chloropropane	<1.8	ug/L	5.9	1.8	1		11/01/19 16:12	96-12-8	
Dibromochloromethane	<2.6	ug/L	8.7	2.6	1		11/01/19 16:12	124-48-1	
1,2-Dibromoethane (EDB)	<0.83	ug/L	2.8	0.83	1		11/01/19 16:12	106-93-4	
Dibromomethane	<0.94	ug/L	3.1	0.94	1		11/01/19 16:12	74-95-3	
1,2-Dichlorobenzene	<0.71	ug/L	2.4	0.71	1		11/01/19 16:12	95-50-1	
1,3-Dichlorobenzene	<0.63	ug/L	2.1	0.63	1		11/01/19 16:12	541-73-1	
1,4-Dichlorobenzene	<0.94	ug/L	3.1	0.94	1		11/01/19 16:12	106-46-7	
Dichlorodifluoromethane	<0.50	ug/L	5.0	0.50	1		11/01/19 16:12	75-71-8	
1,1-Dichloroethane	<0.27	ug/L	1.0	0.27	1		11/01/19 16:12	75-34-3	
1,2-Dichloroethane	<0.28	ug/L	1.0	0.28	1		11/01/19 16:12	107-06-2	
1,1-Dichloroethene	<0.24	ug/L	1.0	0.24	1		11/01/19 16:12	75-35-4	
cis-1,2-Dichloroethene	<0.27	ug/L	1.0	0.27	1		11/01/19 16:12	156-59-2	
trans-1,2-Dichloroethene	<1.1	ug/L	3.6	1.1	1		11/01/19 16:12	156-60-5	
1,2-Dichloropropane	<0.28	ug/L	1.0	0.28	1		11/01/19 16:12	78-87-5	
1,3-Dichloropropane	<0.83	ug/L	2.8	0.83	1		11/01/19 16:12	142-28-9	
2,2-Dichloropropane	<2.3	ug/L	7.6	2.3	1		11/01/19 16:12	594-20-7	
1,1-Dichloropropene	<0.54	ug/L	1.8	0.54	1		11/01/19 16:12	563-58-6	
cis-1,3-Dichloropropene	<3.6	ug/L	12.1	3.6	1		11/01/19 16:12	10061-01-5	
trans-1,3-Dichloropropene	<4.4	ug/L	14.6	4.4	1		11/01/19 16:12	10061-02-6	
Diisopropyl ether	<1.9	ug/L	6.3	1.9	1		11/01/19 16:12	108-20-3	
Ethylbenzene	<0.22	ug/L	1.0	0.22	1		11/01/19 16:12	100-41-4	
Hexachloro-1,3-butadiene	<1.2	ug/L	5.0	1.2	1		11/01/19 16:12	87-68-3	
Isopropylbenzene (Cumene)	<0.39	ug/L	5.0	0.39	1		11/01/19 16:12	98-82-8	
p-Isopropyltoluene	<0.80	ug/L	2.7	0.80	1		11/01/19 16:12	99-87-6	
Methylene Chloride	<0.58	ug/L	5.0	0.58	1		11/01/19 16:12	75-09-2	
Methyl-tert-butyl ether	<1.2	ug/L	4.2	1.2	1		11/01/19 16:12	1634-04-4	
Naphthalene	<1.2	ug/L	5.0	1.2	1		11/01/19 16:12	91-20-3	
n-Propylbenzene	<0.81	ug/L	5.0	0.81	1		11/01/19 16:12	103-65-1	
Styrene	<0.47	ug/L	1.6	0.47	1		11/01/19 16:12	100-42-5	
1,1,1,2-Tetrachloroethane	<0.27	ug/L	1.0	0.27	1		11/01/19 16:12	630-20-6	

## REPORT OF LABORATORY ANALYSIS

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## ANALYTICAL RESULTS

Project: 60615481 ALLOUEZ PHASE II ESA

Pace Project No.: 40198330

Sample: SP-109	Lab ID: 40198330001	Collected: 10/31/19 09:45	Received: 10/31/19 12:40	Matrix: Water					
Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260 MSV</b>	Analytical Method: EPA 8260								
1,1,2,2-Tetrachloroethane	<0.28	ug/L	1.0	0.28	1		11/01/19 16:12	79-34-5	
Tetrachloroethene	5.0	ug/L	1.1	0.33	1		11/01/19 16:12	127-18-4	
Toluene	0.42J	ug/L	5.0	0.17	1		11/01/19 16:12	108-88-3	
1,2,3-Trichlorobenzene	<0.63	ug/L	5.0	0.63	1		11/01/19 16:12	87-61-6	
1,2,4-Trichlorobenzene	<0.95	ug/L	5.0	0.95	1		11/01/19 16:12	120-82-1	
1,1,1-Trichloroethane	<0.24	ug/L	1.0	0.24	1		11/01/19 16:12	71-55-6	
1,1,2-Trichloroethane	<0.55	ug/L	5.0	0.55	1		11/01/19 16:12	79-00-5	
Trichloroethene	<0.26	ug/L	1.0	0.26	1		11/01/19 16:12	79-01-6	
Trichlorofluoromethane	<0.21	ug/L	1.0	0.21	1		11/01/19 16:12	75-69-4	
1,2,3-Trichloropropane	<0.59	ug/L	5.0	0.59	1		11/01/19 16:12	96-18-4	
1,2,4-Trimethylbenzene	<0.84	ug/L	2.8	0.84	1		11/01/19 16:12	95-63-6	
1,3,5-Trimethylbenzene	<0.87	ug/L	2.9	0.87	1		11/01/19 16:12	108-67-8	
Vinyl chloride	<0.17	ug/L	1.0	0.17	1		11/01/19 16:12	75-01-4	
Xylene (Total)	<1.5	ug/L	3.0	1.5	1		11/01/19 16:12	1330-20-7	
m&p-Xylene	<0.47	ug/L	2.0	0.47	1		11/01/19 16:12	179601-23-1	
o-Xylene	<0.26	ug/L	1.0	0.26	1		11/01/19 16:12	95-47-6	
<b>Surrogates</b>									
4-Bromofluorobenzene (S)	90	%	70-130		1		11/01/19 16:12	460-00-4	pH
Dibromofluoromethane (S)	100	%	70-130		1		11/01/19 16:12	1868-53-7	
Toluene-d8 (S)	99	%	70-130		1		11/01/19 16:12	2037-26-5	

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## ANALYTICAL RESULTS

Project: 60615481 ALLOUEZ PHASE II ESA

Pace Project No.: 40198330

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**Sample: SP-105**      **Lab ID: 40198330002**      Collected: 10/31/19 10:00      Received: 10/31/19 12:40      Matrix: Water

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Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260 MSV</b>	Analytical Method: EPA 8260								
Benzene	<b>16.1</b>	ug/L	1.0	0.25	1		11/01/19 16:34	71-43-2	
Bromobenzene	<0.24	ug/L	1.0	0.24	1		11/01/19 16:34	108-86-1	
Bromo(chloromethane)	<0.36	ug/L	5.0	0.36	1		11/01/19 16:34	74-97-5	
Bromodichloromethane	<0.36	ug/L	1.2	0.36	1		11/01/19 16:34	75-27-4	
Bromoform	<4.0	ug/L	13.2	4.0	1		11/01/19 16:34	75-25-2	
Bromomethane	<0.97	ug/L	5.0	0.97	1		11/01/19 16:34	74-83-9	
n-Butylbenzene	<0.71	ug/L	2.4	0.71	1		11/01/19 16:34	104-51-8	
sec-Butylbenzene	<0.85	ug/L	5.0	0.85	1		11/01/19 16:34	135-98-8	
tert-Butylbenzene	<0.30	ug/L	1.0	0.30	1		11/01/19 16:34	98-06-6	
Carbon tetrachloride	<0.17	ug/L	1.0	0.17	1		11/01/19 16:34	56-23-5	
Chlorobenzene	<0.71	ug/L	2.4	0.71	1		11/01/19 16:34	108-90-7	
Chloroethane	<1.3	ug/L	5.0	1.3	1		11/01/19 16:34	75-00-3	
Chloroform	<1.3	ug/L	5.0	1.3	1		11/01/19 16:34	67-66-3	
Chloromethane	<2.2	ug/L	7.3	2.2	1		11/01/19 16:34	74-87-3	
2-Chlorotoluene	<0.93	ug/L	5.0	0.93	1		11/01/19 16:34	95-49-8	
4-Chlorotoluene	<0.76	ug/L	2.5	0.76	1		11/01/19 16:34	106-43-4	
1,2-Dibromo-3-chloropropane	<1.8	ug/L	5.9	1.8	1		11/01/19 16:34	96-12-8	
Dibromochloromethane	<2.6	ug/L	8.7	2.6	1		11/01/19 16:34	124-48-1	
1,2-Dibromoethane (EDB)	<0.83	ug/L	2.8	0.83	1		11/01/19 16:34	106-93-4	
Dibromomethane	<0.94	ug/L	3.1	0.94	1		11/01/19 16:34	74-95-3	
1,2-Dichlorobenzene	<0.71	ug/L	2.4	0.71	1		11/01/19 16:34	95-50-1	
1,3-Dichlorobenzene	<0.63	ug/L	2.1	0.63	1		11/01/19 16:34	541-73-1	
1,4-Dichlorobenzene	<0.94	ug/L	3.1	0.94	1		11/01/19 16:34	106-46-7	
Dichlorodifluoromethane	<0.50	ug/L	5.0	0.50	1		11/01/19 16:34	75-71-8	
1,1-Dichloroethane	<0.27	ug/L	1.0	0.27	1		11/01/19 16:34	75-34-3	
1,2-Dichloroethane	<0.28	ug/L	1.0	0.28	1		11/01/19 16:34	107-06-2	
1,1-Dichloroethene	<0.24	ug/L	1.0	0.24	1		11/01/19 16:34	75-35-4	
cis-1,2-Dichloroethene	<b>25.8</b>	ug/L	1.0	0.27	1		11/01/19 16:34	156-59-2	
trans-1,2-Dichloroethene	<b>12.9</b>	ug/L	3.6	1.1	1		11/01/19 16:34	156-60-5	
1,2-Dichloropropane	<0.28	ug/L	1.0	0.28	1		11/01/19 16:34	78-87-5	
1,3-Dichloropropane	<0.83	ug/L	2.8	0.83	1		11/01/19 16:34	142-28-9	
2,2-Dichloropropane	<2.3	ug/L	7.6	2.3	1		11/01/19 16:34	594-20-7	
1,1-Dichloropropene	<0.54	ug/L	1.8	0.54	1		11/01/19 16:34	563-58-6	
cis-1,3-Dichloropropene	<3.6	ug/L	12.1	3.6	1		11/01/19 16:34	10061-01-5	
trans-1,3-Dichloropropene	<4.4	ug/L	14.6	4.4	1		11/01/19 16:34	10061-02-6	
Diisopropyl ether	<1.9	ug/L	6.3	1.9	1		11/01/19 16:34	108-20-3	
Ethylbenzene	<b>10.5</b>	ug/L	1.0	0.22	1		11/01/19 16:34	100-41-4	
Hexachloro-1,3-butadiene	<1.2	ug/L	5.0	1.2	1		11/01/19 16:34	87-68-3	
Isopropylbenzene (Cumene)	<b>1.9J</b>	ug/L	5.0	0.39	1		11/01/19 16:34	98-82-8	
p-Isopropyltoluene	<0.80	ug/L	2.7	0.80	1		11/01/19 16:34	99-87-6	
Methylene Chloride	<0.58	ug/L	5.0	0.58	1		11/01/19 16:34	75-09-2	
Methyl-tert-butyl ether	<1.2	ug/L	4.2	1.2	1		11/01/19 16:34	1634-04-4	
Naphthalene	<b>1.8J</b>	ug/L	5.0	1.2	1		11/01/19 16:34	91-20-3	
n-Propylbenzene	<b>0.95J</b>	ug/L	5.0	0.81	1		11/01/19 16:34	103-65-1	
Styrene	<0.47	ug/L	1.6	0.47	1		11/01/19 16:34	100-42-5	
1,1,1,2-Tetrachloroethane	<0.27	ug/L	1.0	0.27	1		11/01/19 16:34	630-20-6	

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## ANALYTICAL RESULTS

Project: 60615481 ALLOUEZ PHASE II ESA

Pace Project No.: 40198330

Sample: SP-105	Lab ID: 40198330002	Collected: 10/31/19 10:00	Received: 10/31/19 12:40	Matrix: Water					
Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260 MSV</b>	Analytical Method: EPA 8260								
1,1,2,2-Tetrachloroethane	<0.28	ug/L	1.0	0.28	1		11/01/19 16:34	79-34-5	
Tetrachloroethene	87.3	ug/L	1.1	0.33	1		11/01/19 16:34	127-18-4	
Toluene	19.7	ug/L	5.0	0.17	1		11/01/19 16:34	108-88-3	
1,2,3-Trichlorobenzene	<0.63	ug/L	5.0	0.63	1		11/01/19 16:34	87-61-6	
1,2,4-Trichlorobenzene	<0.95	ug/L	5.0	0.95	1		11/01/19 16:34	120-82-1	
1,1,1-Trichloroethane	<0.24	ug/L	1.0	0.24	1		11/01/19 16:34	71-55-6	
1,1,2-Trichloroethane	<0.55	ug/L	5.0	0.55	1		11/01/19 16:34	79-00-5	
Trichloroethene	9.0	ug/L	1.0	0.26	1		11/01/19 16:34	79-01-6	
Trichlorofluoromethane	<0.21	ug/L	1.0	0.21	1		11/01/19 16:34	75-69-4	
1,2,3-Trichloropropane	<0.59	ug/L	5.0	0.59	1		11/01/19 16:34	96-18-4	
1,2,4-Trimethylbenzene	15.3	ug/L	2.8	0.84	1		11/01/19 16:34	95-63-6	
1,3,5-Trimethylbenzene	2.0J	ug/L	2.9	0.87	1		11/01/19 16:34	108-67-8	
Vinyl chloride	<0.17	ug/L	1.0	0.17	1		11/01/19 16:34	75-01-4	
Xylene (Total)	61.3	ug/L	3.0	1.5	1		11/01/19 16:34	1330-20-7	
m&p-Xylene	55.3	ug/L	2.0	0.47	1		11/01/19 16:34	179601-23-1	
o-Xylene	5.9	ug/L	1.0	0.26	1		11/01/19 16:34	95-47-6	
<b>Surrogates</b>									
4-Bromofluorobenzene (S)	93	%	70-130		1		11/01/19 16:34	460-00-4	pH
Dibromofluoromethane (S)	92	%	70-130		1		11/01/19 16:34	1868-53-7	
Toluene-d8 (S)	101	%	70-130		1		11/01/19 16:34	2037-26-5	

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## ANALYTICAL RESULTS

Project: 60615481 ALLOUEZ PHASE II ESA

Pace Project No.: 40198330

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**Sample: SP-111**      **Lab ID: 40198330003**      Collected: 10/31/19 10:15      Received: 10/31/19 12:40      Matrix: Water

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Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260 MSV</b>	Analytical Method: EPA 8260								
Benzene	<b>0.36J</b>	ug/L	1.0	0.25	1		11/01/19 16:55	71-43-2	
Bromobenzene	<0.24	ug/L	1.0	0.24	1		11/01/19 16:55	108-86-1	
Bromochloromethane	<0.36	ug/L	5.0	0.36	1		11/01/19 16:55	74-97-5	
Bromodichloromethane	<0.36	ug/L	1.2	0.36	1		11/01/19 16:55	75-27-4	
Bromoform	<4.0	ug/L	13.2	4.0	1		11/01/19 16:55	75-25-2	
Bromomethane	<0.97	ug/L	5.0	0.97	1		11/01/19 16:55	74-83-9	
n-Butylbenzene	<0.71	ug/L	2.4	0.71	1		11/01/19 16:55	104-51-8	
sec-Butylbenzene	<0.85	ug/L	5.0	0.85	1		11/01/19 16:55	135-98-8	
tert-Butylbenzene	<0.30	ug/L	1.0	0.30	1		11/01/19 16:55	98-06-6	
Carbon tetrachloride	<0.17	ug/L	1.0	0.17	1		11/01/19 16:55	56-23-5	
Chlorobenzene	<0.71	ug/L	2.4	0.71	1		11/01/19 16:55	108-90-7	
Chloroethane	<1.3	ug/L	5.0	1.3	1		11/01/19 16:55	75-00-3	
Chloroform	<1.3	ug/L	5.0	1.3	1		11/01/19 16:55	67-66-3	
Chloromethane	<2.2	ug/L	7.3	2.2	1		11/01/19 16:55	74-87-3	
2-Chlorotoluene	<0.93	ug/L	5.0	0.93	1		11/01/19 16:55	95-49-8	
4-Chlorotoluene	<0.76	ug/L	2.5	0.76	1		11/01/19 16:55	106-43-4	
1,2-Dibromo-3-chloropropane	<1.8	ug/L	5.9	1.8	1		11/01/19 16:55	96-12-8	
Dibromochloromethane	<2.6	ug/L	8.7	2.6	1		11/01/19 16:55	124-48-1	
1,2-Dibromoethane (EDB)	<0.83	ug/L	2.8	0.83	1		11/01/19 16:55	106-93-4	
Dibromomethane	<0.94	ug/L	3.1	0.94	1		11/01/19 16:55	74-95-3	
1,2-Dichlorobenzene	<0.71	ug/L	2.4	0.71	1		11/01/19 16:55	95-50-1	
1,3-Dichlorobenzene	<0.63	ug/L	2.1	0.63	1		11/01/19 16:55	541-73-1	
1,4-Dichlorobenzene	<0.94	ug/L	3.1	0.94	1		11/01/19 16:55	106-46-7	
Dichlorodifluoromethane	<0.50	ug/L	5.0	0.50	1		11/01/19 16:55	75-71-8	
1,1-Dichloroethane	<0.27	ug/L	1.0	0.27	1		11/01/19 16:55	75-34-3	
1,2-Dichloroethane	<0.28	ug/L	1.0	0.28	1		11/01/19 16:55	107-06-2	
1,1-Dichloroethene	<0.24	ug/L	1.0	0.24	1		11/01/19 16:55	75-35-4	
cis-1,2-Dichloroethene	<0.27	ug/L	1.0	0.27	1		11/01/19 16:55	156-59-2	
trans-1,2-Dichloroethene	<1.1	ug/L	3.6	1.1	1		11/01/19 16:55	156-60-5	
1,2-Dichloropropane	<0.28	ug/L	1.0	0.28	1		11/01/19 16:55	78-87-5	
1,3-Dichloropropane	<0.83	ug/L	2.8	0.83	1		11/01/19 16:55	142-28-9	
2,2-Dichloropropane	<2.3	ug/L	7.6	2.3	1		11/01/19 16:55	594-20-7	
1,1-Dichloropropene	<0.54	ug/L	1.8	0.54	1		11/01/19 16:55	563-58-6	
cis-1,3-Dichloropropene	<3.6	ug/L	12.1	3.6	1		11/01/19 16:55	10061-01-5	
trans-1,3-Dichloropropene	<4.4	ug/L	14.6	4.4	1		11/01/19 16:55	10061-02-6	
Diisopropyl ether	<1.9	ug/L	6.3	1.9	1		11/01/19 16:55	108-20-3	
Ethylbenzene	<0.22	ug/L	1.0	0.22	1		11/01/19 16:55	100-41-4	
Hexachloro-1,3-butadiene	<1.2	ug/L	5.0	1.2	1		11/01/19 16:55	87-68-3	
Isopropylbenzene (Cumene)	<0.39	ug/L	5.0	0.39	1		11/01/19 16:55	98-82-8	
p-Isopropyltoluene	<0.80	ug/L	2.7	0.80	1		11/01/19 16:55	99-87-6	
Methylene Chloride	<0.58	ug/L	5.0	0.58	1		11/01/19 16:55	75-09-2	
Methyl-tert-butyl ether	<1.2	ug/L	4.2	1.2	1		11/01/19 16:55	1634-04-4	
Naphthalene	<1.2	ug/L	5.0	1.2	1		11/01/19 16:55	91-20-3	
n-Propylbenzene	<0.81	ug/L	5.0	0.81	1		11/01/19 16:55	103-65-1	
Styrene	<0.47	ug/L	1.6	0.47	1		11/01/19 16:55	100-42-5	
1,1,1,2-Tetrachloroethane	<0.27	ug/L	1.0	0.27	1		11/01/19 16:55	630-20-6	

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## ANALYTICAL RESULTS

Project: 60615481 ALLOUEZ PHASE II ESA

Pace Project No.: 40198330

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**Sample: SP-111**      **Lab ID: 40198330003**      Collected: 10/31/19 10:15      Received: 10/31/19 12:40      Matrix: Water

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Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260 MSV</b>	Analytical Method: EPA 8260								
1,1,2,2-Tetrachloroethane	<0.28	ug/L	1.0	0.28	1		11/01/19 16:55	79-34-5	
Tetrachloroethene	2.9	ug/L	1.1	0.33	1		11/01/19 16:55	127-18-4	
Toluene	0.92J	ug/L	5.0	0.17	1		11/01/19 16:55	108-88-3	
1,2,3-Trichlorobenzene	<0.63	ug/L	5.0	0.63	1		11/01/19 16:55	87-61-6	
1,2,4-Trichlorobenzene	<0.95	ug/L	5.0	0.95	1		11/01/19 16:55	120-82-1	
1,1,1-Trichloroethane	<0.24	ug/L	1.0	0.24	1		11/01/19 16:55	71-55-6	
1,1,2-Trichloroethane	<0.55	ug/L	5.0	0.55	1		11/01/19 16:55	79-00-5	
Trichloroethene	0.73J	ug/L	1.0	0.26	1		11/01/19 16:55	79-01-6	
Trichlorofluoromethane	<0.21	ug/L	1.0	0.21	1		11/01/19 16:55	75-69-4	
1,2,3-Trichloropropane	<0.59	ug/L	5.0	0.59	1		11/01/19 16:55	96-18-4	
1,2,4-Trimethylbenzene	<0.84	ug/L	2.8	0.84	1		11/01/19 16:55	95-63-6	
1,3,5-Trimethylbenzene	<0.87	ug/L	2.9	0.87	1		11/01/19 16:55	108-67-8	
Vinyl chloride	<0.17	ug/L	1.0	0.17	1		11/01/19 16:55	75-01-4	
Xylene (Total)	<1.5	ug/L	3.0	1.5	1		11/01/19 16:55	1330-20-7	
m&p-Xylene	<0.47	ug/L	2.0	0.47	1		11/01/19 16:55	179601-23-1	
o-Xylene	<0.26	ug/L	1.0	0.26	1		11/01/19 16:55	95-47-6	
<b>Surrogates</b>									
4-Bromofluorobenzene (S)	88	%	70-130		1		11/01/19 16:55	460-00-4	
Dibromofluoromethane (S)	97	%	70-130		1		11/01/19 16:55	1868-53-7	
Toluene-d8 (S)	98	%	70-130		1		11/01/19 16:55	2037-26-5	

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## ANALYTICAL RESULTS

Project: 60615481 ALLOUEZ PHASE II ESA

Pace Project No.: 40198330

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**Sample: SP-112**      **Lab ID: 40198330004**      Collected: 10/31/19 10:30      Received: 10/31/19 12:40      Matrix: Water

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Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260 MSV</b>	Analytical Method: EPA 8260								
Benzene	<0.25	ug/L	1.0	0.25	1		11/01/19 17:16	71-43-2	
Bromobenzene	<0.24	ug/L	1.0	0.24	1		11/01/19 17:16	108-86-1	
Bromochloromethane	<0.36	ug/L	5.0	0.36	1		11/01/19 17:16	74-97-5	
Bromodichloromethane	<0.36	ug/L	1.2	0.36	1		11/01/19 17:16	75-27-4	
Bromoform	<4.0	ug/L	13.2	4.0	1		11/01/19 17:16	75-25-2	
Bromomethane	<0.97	ug/L	5.0	0.97	1		11/01/19 17:16	74-83-9	
n-Butylbenzene	<0.71	ug/L	2.4	0.71	1		11/01/19 17:16	104-51-8	
sec-Butylbenzene	<0.85	ug/L	5.0	0.85	1		11/01/19 17:16	135-98-8	
tert-Butylbenzene	<0.30	ug/L	1.0	0.30	1		11/01/19 17:16	98-06-6	
Carbon tetrachloride	<0.17	ug/L	1.0	0.17	1		11/01/19 17:16	56-23-5	
Chlorobenzene	<0.71	ug/L	2.4	0.71	1		11/01/19 17:16	108-90-7	
Chloroethane	<1.3	ug/L	5.0	1.3	1		11/01/19 17:16	75-00-3	
Chloroform	<1.3	ug/L	5.0	1.3	1		11/01/19 17:16	67-66-3	
Chloromethane	<2.2	ug/L	7.3	2.2	1		11/01/19 17:16	74-87-3	
2-Chlorotoluene	<0.93	ug/L	5.0	0.93	1		11/01/19 17:16	95-49-8	
4-Chlorotoluene	<0.76	ug/L	2.5	0.76	1		11/01/19 17:16	106-43-4	
1,2-Dibromo-3-chloropropane	<1.8	ug/L	5.9	1.8	1		11/01/19 17:16	96-12-8	
Dibromochloromethane	<2.6	ug/L	8.7	2.6	1		11/01/19 17:16	124-48-1	
1,2-Dibromoethane (EDB)	<0.83	ug/L	2.8	0.83	1		11/01/19 17:16	106-93-4	
Dibromomethane	<0.94	ug/L	3.1	0.94	1		11/01/19 17:16	74-95-3	
1,2-Dichlorobenzene	<0.71	ug/L	2.4	0.71	1		11/01/19 17:16	95-50-1	
1,3-Dichlorobenzene	<0.63	ug/L	2.1	0.63	1		11/01/19 17:16	541-73-1	
1,4-Dichlorobenzene	<0.94	ug/L	3.1	0.94	1		11/01/19 17:16	106-46-7	
Dichlorodifluoromethane	<0.50	ug/L	5.0	0.50	1		11/01/19 17:16	75-71-8	
1,1-Dichloroethane	<0.27	ug/L	1.0	0.27	1		11/01/19 17:16	75-34-3	
1,2-Dichloroethane	<0.28	ug/L	1.0	0.28	1		11/01/19 17:16	107-06-2	
1,1-Dichloroethene	<0.24	ug/L	1.0	0.24	1		11/01/19 17:16	75-35-4	
cis-1,2-Dichloroethene	<0.27	ug/L	1.0	0.27	1		11/01/19 17:16	156-59-2	
trans-1,2-Dichloroethene	<1.1	ug/L	3.6	1.1	1		11/01/19 17:16	156-60-5	
1,2-Dichloropropane	<0.28	ug/L	1.0	0.28	1		11/01/19 17:16	78-87-5	
1,3-Dichloropropane	<0.83	ug/L	2.8	0.83	1		11/01/19 17:16	142-28-9	
2,2-Dichloropropane	<2.3	ug/L	7.6	2.3	1		11/01/19 17:16	594-20-7	
1,1-Dichloropropene	<0.54	ug/L	1.8	0.54	1		11/01/19 17:16	563-58-6	
cis-1,3-Dichloropropene	<3.6	ug/L	12.1	3.6	1		11/01/19 17:16	10061-01-5	
trans-1,3-Dichloropropene	<4.4	ug/L	14.6	4.4	1		11/01/19 17:16	10061-02-6	
Diisopropyl ether	<1.9	ug/L	6.3	1.9	1		11/01/19 17:16	108-20-3	
Ethylbenzene	<0.22	ug/L	1.0	0.22	1		11/01/19 17:16	100-41-4	
Hexachloro-1,3-butadiene	<1.2	ug/L	5.0	1.2	1		11/01/19 17:16	87-68-3	
Isopropylbenzene (Cumene)	<0.39	ug/L	5.0	0.39	1		11/01/19 17:16	98-82-8	
p-Isopropyltoluene	<0.80	ug/L	2.7	0.80	1		11/01/19 17:16	99-87-6	
Methylene Chloride	<0.58	ug/L	5.0	0.58	1		11/01/19 17:16	75-09-2	
Methyl-tert-butyl ether	<1.2	ug/L	4.2	1.2	1		11/01/19 17:16	1634-04-4	
Naphthalene	<1.2	ug/L	5.0	1.2	1		11/01/19 17:16	91-20-3	
n-Propylbenzene	<0.81	ug/L	5.0	0.81	1		11/01/19 17:16	103-65-1	
Styrene	<0.47	ug/L	1.6	0.47	1		11/01/19 17:16	100-42-5	
1,1,1,2-Tetrachloroethane	<0.27	ug/L	1.0	0.27	1		11/01/19 17:16	630-20-6	

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## ANALYTICAL RESULTS

Project: 60615481 ALLOUEZ PHASE II ESA

Pace Project No.: 40198330

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**Sample: SP-112**      **Lab ID: 40198330004**      Collected: 10/31/19 10:30      Received: 10/31/19 12:40      Matrix: Water

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Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260 MSV</b>	Analytical Method: EPA 8260								
1,1,2,2-Tetrachloroethane	<0.28	ug/L	1.0	0.28	1		11/01/19 17:16	79-34-5	
Tetrachloroethene	33.3	ug/L	1.1	0.33	1		11/01/19 17:16	127-18-4	
Toluene	<0.17	ug/L	5.0	0.17	1		11/01/19 17:16	108-88-3	
1,2,3-Trichlorobenzene	<0.63	ug/L	5.0	0.63	1		11/01/19 17:16	87-61-6	
1,2,4-Trichlorobenzene	<0.95	ug/L	5.0	0.95	1		11/01/19 17:16	120-82-1	
1,1,1-Trichloroethane	<0.24	ug/L	1.0	0.24	1		11/01/19 17:16	71-55-6	
1,1,2-Trichloroethane	<0.55	ug/L	5.0	0.55	1		11/01/19 17:16	79-00-5	
Trichloroethene	<0.26	ug/L	1.0	0.26	1		11/01/19 17:16	79-01-6	
Trichlorofluoromethane	<0.21	ug/L	1.0	0.21	1		11/01/19 17:16	75-69-4	
1,2,3-Trichloropropane	<0.59	ug/L	5.0	0.59	1		11/01/19 17:16	96-18-4	
1,2,4-Trimethylbenzene	<0.84	ug/L	2.8	0.84	1		11/01/19 17:16	95-63-6	
1,3,5-Trimethylbenzene	<0.87	ug/L	2.9	0.87	1		11/01/19 17:16	108-67-8	
Vinyl chloride	<0.17	ug/L	1.0	0.17	1		11/01/19 17:16	75-01-4	
Xylene (Total)	<1.5	ug/L	3.0	1.5	1		11/01/19 17:16	1330-20-7	
m&p-Xylene	<0.47	ug/L	2.0	0.47	1		11/01/19 17:16	179601-23-1	
o-Xylene	<0.26	ug/L	1.0	0.26	1		11/01/19 17:16	95-47-6	
<b>Surrogates</b>									
4-Bromofluorobenzene (S)	87	%	70-130		1		11/01/19 17:16	460-00-4	
Dibromofluoromethane (S)	98	%	70-130		1		11/01/19 17:16	1868-53-7	
Toluene-d8 (S)	97	%	70-130		1		11/01/19 17:16	2037-26-5	

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## ANALYTICAL RESULTS

Project: 60615481 ALLOUEZ PHASE II ESA

Pace Project No.: 40198330

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**Sample: SP-114**      **Lab ID: 40198330005**      Collected: 10/31/19 10:45      Received: 10/31/19 12:40      Matrix: Water

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Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260 MSV</b>	Analytical Method: EPA 8260								
Benzene	<b>0.28J</b>	ug/L	1.0	0.25	1		11/01/19 17:38	71-43-2	
Bromobenzene	<0.24	ug/L	1.0	0.24	1		11/01/19 17:38	108-86-1	
Bromochloromethane	<0.36	ug/L	5.0	0.36	1		11/01/19 17:38	74-97-5	
Bromodichloromethane	<b>0.41J</b>	ug/L	1.2	0.36	1		11/01/19 17:38	75-27-4	
Bromoform	<4.0	ug/L	13.2	4.0	1		11/01/19 17:38	75-25-2	
Bromomethane	<0.97	ug/L	5.0	0.97	1		11/01/19 17:38	74-83-9	
n-Butylbenzene	<0.71	ug/L	2.4	0.71	1		11/01/19 17:38	104-51-8	
sec-Butylbenzene	<0.85	ug/L	5.0	0.85	1		11/01/19 17:38	135-98-8	
tert-Butylbenzene	<0.30	ug/L	1.0	0.30	1		11/01/19 17:38	98-06-6	
Carbon tetrachloride	<0.17	ug/L	1.0	0.17	1		11/01/19 17:38	56-23-5	
Chlorobenzene	<0.71	ug/L	2.4	0.71	1		11/01/19 17:38	108-90-7	
Chloroethane	<1.3	ug/L	5.0	1.3	1		11/01/19 17:38	75-00-3	
Chloroform	<1.3	ug/L	5.0	1.3	1		11/01/19 17:38	67-66-3	
Chloromethane	<2.2	ug/L	7.3	2.2	1		11/01/19 17:38	74-87-3	
2-Chlorotoluene	<0.93	ug/L	5.0	0.93	1		11/01/19 17:38	95-49-8	
4-Chlorotoluene	<0.76	ug/L	2.5	0.76	1		11/01/19 17:38	106-43-4	
1,2-Dibromo-3-chloropropane	<1.8	ug/L	5.9	1.8	1		11/01/19 17:38	96-12-8	
Dibromochloromethane	<2.6	ug/L	8.7	2.6	1		11/01/19 17:38	124-48-1	
1,2-Dibromoethane (EDB)	<0.83	ug/L	2.8	0.83	1		11/01/19 17:38	106-93-4	
Dibromomethane	<0.94	ug/L	3.1	0.94	1		11/01/19 17:38	74-95-3	
1,2-Dichlorobenzene	<0.71	ug/L	2.4	0.71	1		11/01/19 17:38	95-50-1	
1,3-Dichlorobenzene	<0.63	ug/L	2.1	0.63	1		11/01/19 17:38	541-73-1	
1,4-Dichlorobenzene	<0.94	ug/L	3.1	0.94	1		11/01/19 17:38	106-46-7	
Dichlorodifluoromethane	<0.50	ug/L	5.0	0.50	1		11/01/19 17:38	75-71-8	
1,1-Dichloroethane	<0.27	ug/L	1.0	0.27	1		11/01/19 17:38	75-34-3	
1,2-Dichloroethane	<0.28	ug/L	1.0	0.28	1		11/01/19 17:38	107-06-2	
1,1-Dichloroethene	<0.24	ug/L	1.0	0.24	1		11/01/19 17:38	75-35-4	
cis-1,2-Dichloroethene	1.7	ug/L	1.0	0.27	1		11/01/19 17:38	156-59-2	
trans-1,2-Dichloroethene	<1.1	ug/L	3.6	1.1	1		11/01/19 17:38	156-60-5	
1,2-Dichloropropane	<0.28	ug/L	1.0	0.28	1		11/01/19 17:38	78-87-5	
1,3-Dichloropropane	<0.83	ug/L	2.8	0.83	1		11/01/19 17:38	142-28-9	
2,2-Dichloropropane	<2.3	ug/L	7.6	2.3	1		11/01/19 17:38	594-20-7	
1,1-Dichloropropene	<0.54	ug/L	1.8	0.54	1		11/01/19 17:38	563-58-6	
cis-1,3-Dichloropropene	<3.6	ug/L	12.1	3.6	1		11/01/19 17:38	10061-01-5	
trans-1,3-Dichloropropene	<4.4	ug/L	14.6	4.4	1		11/01/19 17:38	10061-02-6	
Diisopropyl ether	<1.9	ug/L	6.3	1.9	1		11/01/19 17:38	108-20-3	
Ethylbenzene	<0.22	ug/L	1.0	0.22	1		11/01/19 17:38	100-41-4	
Hexachloro-1,3-butadiene	<1.2	ug/L	5.0	1.2	1		11/01/19 17:38	87-68-3	
Isopropylbenzene (Cumene)	<0.39	ug/L	5.0	0.39	1		11/01/19 17:38	98-82-8	
p-Isopropyltoluene	<0.80	ug/L	2.7	0.80	1		11/01/19 17:38	99-87-6	
Methylene Chloride	<0.58	ug/L	5.0	0.58	1		11/01/19 17:38	75-09-2	
Methyl-tert-butyl ether	<1.2	ug/L	4.2	1.2	1		11/01/19 17:38	1634-04-4	
Naphthalene	<1.2	ug/L	5.0	1.2	1		11/01/19 17:38	91-20-3	
n-Propylbenzene	<0.81	ug/L	5.0	0.81	1		11/01/19 17:38	103-65-1	
Styrene	<0.47	ug/L	1.6	0.47	1		11/01/19 17:38	100-42-5	
1,1,1,2-Tetrachloroethane	<0.27	ug/L	1.0	0.27	1		11/01/19 17:38	630-20-6	

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## ANALYTICAL RESULTS

Project: 60615481 ALLOUEZ PHASE II ESA

Pace Project No.: 40198330

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**Sample: SP-114**      **Lab ID: 40198330005**      Collected: 10/31/19 10:45      Received: 10/31/19 12:40      Matrix: Water

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Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260 MSV</b>	Analytical Method: EPA 8260								
1,1,2,2-Tetrachloroethane	<0.28	ug/L	1.0	0.28	1		11/01/19 17:38	79-34-5	
Tetrachloroethene	25.0	ug/L	1.1	0.33	1		11/01/19 17:38	127-18-4	
Toluene	<0.17	ug/L	5.0	0.17	1		11/01/19 17:38	108-88-3	
1,2,3-Trichlorobenzene	<0.63	ug/L	5.0	0.63	1		11/01/19 17:38	87-61-6	
1,2,4-Trichlorobenzene	<0.95	ug/L	5.0	0.95	1		11/01/19 17:38	120-82-1	
1,1,1-Trichloroethane	<0.24	ug/L	1.0	0.24	1		11/01/19 17:38	71-55-6	
1,1,2-Trichloroethane	<0.55	ug/L	5.0	0.55	1		11/01/19 17:38	79-00-5	
Trichloroethene	2.8	ug/L	1.0	0.26	1		11/01/19 17:38	79-01-6	
Trichlorofluoromethane	<0.21	ug/L	1.0	0.21	1		11/01/19 17:38	75-69-4	
1,2,3-Trichloropropane	<0.59	ug/L	5.0	0.59	1		11/01/19 17:38	96-18-4	
1,2,4-Trimethylbenzene	<0.84	ug/L	2.8	0.84	1		11/01/19 17:38	95-63-6	
1,3,5-Trimethylbenzene	<0.87	ug/L	2.9	0.87	1		11/01/19 17:38	108-67-8	
Vinyl chloride	<0.17	ug/L	1.0	0.17	1		11/01/19 17:38	75-01-4	
Xylene (Total)	<1.5	ug/L	3.0	1.5	1		11/01/19 17:38	1330-20-7	
m&p-Xylene	<0.47	ug/L	2.0	0.47	1		11/01/19 17:38	179601-23-1	
o-Xylene	<0.26	ug/L	1.0	0.26	1		11/01/19 17:38	95-47-6	
<b>Surrogates</b>									
4-Bromofluorobenzene (S)	89	%	70-130		1		11/01/19 17:38	460-00-4	
Dibromofluoromethane (S)	99	%	70-130		1		11/01/19 17:38	1868-53-7	
Toluene-d8 (S)	99	%	70-130		1		11/01/19 17:38	2037-26-5	

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## ANALYTICAL RESULTS

Project: 60615481 ALLOUEZ PHASE II ESA

Pace Project No.: 40198330

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**Sample: DUP SP-112**      **Lab ID: 40198330006**      Collected: 10/31/19 10:30      Received: 10/31/19 12:40      Matrix: Water

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Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260 MSV</b>	Analytical Method: EPA 8260								
Benzene	<0.25	ug/L	1.0	0.25	1		11/01/19 17:59	71-43-2	
Bromobenzene	<0.24	ug/L	1.0	0.24	1		11/01/19 17:59	108-86-1	
Bromochloromethane	<0.36	ug/L	5.0	0.36	1		11/01/19 17:59	74-97-5	
Bromodichloromethane	<0.36	ug/L	1.2	0.36	1		11/01/19 17:59	75-27-4	
Bromoform	<4.0	ug/L	13.2	4.0	1		11/01/19 17:59	75-25-2	
Bromomethane	<0.97	ug/L	5.0	0.97	1		11/01/19 17:59	74-83-9	
n-Butylbenzene	<0.71	ug/L	2.4	0.71	1		11/01/19 17:59	104-51-8	
sec-Butylbenzene	<0.85	ug/L	5.0	0.85	1		11/01/19 17:59	135-98-8	
tert-Butylbenzene	<0.30	ug/L	1.0	0.30	1		11/01/19 17:59	98-06-6	
Carbon tetrachloride	<0.17	ug/L	1.0	0.17	1		11/01/19 17:59	56-23-5	
Chlorobenzene	<0.71	ug/L	2.4	0.71	1		11/01/19 17:59	108-90-7	
Chloroethane	<1.3	ug/L	5.0	1.3	1		11/01/19 17:59	75-00-3	
Chloroform	<1.3	ug/L	5.0	1.3	1		11/01/19 17:59	67-66-3	
Chloromethane	<2.2	ug/L	7.3	2.2	1		11/01/19 17:59	74-87-3	
2-Chlorotoluene	<0.93	ug/L	5.0	0.93	1		11/01/19 17:59	95-49-8	
4-Chlorotoluene	<0.76	ug/L	2.5	0.76	1		11/01/19 17:59	106-43-4	
1,2-Dibromo-3-chloropropane	<1.8	ug/L	5.9	1.8	1		11/01/19 17:59	96-12-8	
Dibromochloromethane	<2.6	ug/L	8.7	2.6	1		11/01/19 17:59	124-48-1	
1,2-Dibromoethane (EDB)	<0.83	ug/L	2.8	0.83	1		11/01/19 17:59	106-93-4	
Dibromomethane	<0.94	ug/L	3.1	0.94	1		11/01/19 17:59	74-95-3	
1,2-Dichlorobenzene	<0.71	ug/L	2.4	0.71	1		11/01/19 17:59	95-50-1	
1,3-Dichlorobenzene	<0.63	ug/L	2.1	0.63	1		11/01/19 17:59	541-73-1	
1,4-Dichlorobenzene	<0.94	ug/L	3.1	0.94	1		11/01/19 17:59	106-46-7	
Dichlorodifluoromethane	<0.50	ug/L	5.0	0.50	1		11/01/19 17:59	75-71-8	
1,1-Dichloroethane	<0.27	ug/L	1.0	0.27	1		11/01/19 17:59	75-34-3	
1,2-Dichloroethane	<0.28	ug/L	1.0	0.28	1		11/01/19 17:59	107-06-2	
1,1-Dichloroethene	<0.24	ug/L	1.0	0.24	1		11/01/19 17:59	75-35-4	
cis-1,2-Dichloroethene	<0.27	ug/L	1.0	0.27	1		11/01/19 17:59	156-59-2	
trans-1,2-Dichloroethene	<1.1	ug/L	3.6	1.1	1		11/01/19 17:59	156-60-5	
1,2-Dichloropropane	<0.28	ug/L	1.0	0.28	1		11/01/19 17:59	78-87-5	
1,3-Dichloropropane	<0.83	ug/L	2.8	0.83	1		11/01/19 17:59	142-28-9	
2,2-Dichloropropane	<2.3	ug/L	7.6	2.3	1		11/01/19 17:59	594-20-7	
1,1-Dichloropropene	<0.54	ug/L	1.8	0.54	1		11/01/19 17:59	563-58-6	
cis-1,3-Dichloropropene	<3.6	ug/L	12.1	3.6	1		11/01/19 17:59	10061-01-5	
trans-1,3-Dichloropropene	<4.4	ug/L	14.6	4.4	1		11/01/19 17:59	10061-02-6	
Diisopropyl ether	<1.9	ug/L	6.3	1.9	1		11/01/19 17:59	108-20-3	
Ethylbenzene	<0.22	ug/L	1.0	0.22	1		11/01/19 17:59	100-41-4	
Hexachloro-1,3-butadiene	<1.2	ug/L	5.0	1.2	1		11/01/19 17:59	87-68-3	
Isopropylbenzene (Cumene)	<0.39	ug/L	5.0	0.39	1		11/01/19 17:59	98-82-8	
p-Isopropyltoluene	<0.80	ug/L	2.7	0.80	1		11/01/19 17:59	99-87-6	
Methylene Chloride	<0.58	ug/L	5.0	0.58	1		11/01/19 17:59	75-09-2	
Methyl-tert-butyl ether	<1.2	ug/L	4.2	1.2	1		11/01/19 17:59	1634-04-4	
Naphthalene	<1.2	ug/L	5.0	1.2	1		11/01/19 17:59	91-20-3	
n-Propylbenzene	<0.81	ug/L	5.0	0.81	1		11/01/19 17:59	103-65-1	
Styrene	<0.47	ug/L	1.6	0.47	1		11/01/19 17:59	100-42-5	
1,1,1,2-Tetrachloroethane	<0.27	ug/L	1.0	0.27	1		11/01/19 17:59	630-20-6	

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## ANALYTICAL RESULTS

Project: 60615481 ALLOUEZ PHASE II ESA

Pace Project No.: 40198330

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**Sample: DUP SP-112      Lab ID: 40198330006      Collected: 10/31/19 10:30      Received: 10/31/19 12:40      Matrix: Water**


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Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260 MSV</b>	Analytical Method: EPA 8260								
1,1,2,2-Tetrachloroethane	<0.28	ug/L	1.0	0.28	1		11/01/19 17:59	79-34-5	
Tetrachloroethene	43.6	ug/L	1.1	0.33	1		11/01/19 17:59	127-18-4	
Toluene	0.28J	ug/L	5.0	0.17	1		11/01/19 17:59	108-88-3	
1,2,3-Trichlorobenzene	<0.63	ug/L	5.0	0.63	1		11/01/19 17:59	87-61-6	
1,2,4-Trichlorobenzene	<0.95	ug/L	5.0	0.95	1		11/01/19 17:59	120-82-1	
1,1,1-Trichloroethane	<0.24	ug/L	1.0	0.24	1		11/01/19 17:59	71-55-6	
1,1,2-Trichloroethane	<0.55	ug/L	5.0	0.55	1		11/01/19 17:59	79-00-5	
Trichloroethene	<0.26	ug/L	1.0	0.26	1		11/01/19 17:59	79-01-6	
Trichlorofluoromethane	<0.21	ug/L	1.0	0.21	1		11/01/19 17:59	75-69-4	
1,2,3-Trichloropropane	<0.59	ug/L	5.0	0.59	1		11/01/19 17:59	96-18-4	
1,2,4-Trimethylbenzene	<0.84	ug/L	2.8	0.84	1		11/01/19 17:59	95-63-6	
1,3,5-Trimethylbenzene	<0.87	ug/L	2.9	0.87	1		11/01/19 17:59	108-67-8	
Vinyl chloride	<0.17	ug/L	1.0	0.17	1		11/01/19 17:59	75-01-4	
Xylene (Total)	<1.5	ug/L	3.0	1.5	1		11/01/19 17:59	1330-20-7	
m&p-Xylene	<0.47	ug/L	2.0	0.47	1		11/01/19 17:59	179601-23-1	
o-Xylene	<0.26	ug/L	1.0	0.26	1		11/01/19 17:59	95-47-6	
<b>Surrogates</b>									
4-Bromofluorobenzene (S)	87	%	70-130		1		11/01/19 17:59	460-00-4	
Dibromofluoromethane (S)	101	%	70-130		1		11/01/19 17:59	1868-53-7	
Toluene-d8 (S)	99	%	70-130		1		11/01/19 17:59	2037-26-5	

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## ANALYTICAL RESULTS

Project: 60615481 ALLOUEZ PHASE II ESA

Pace Project No.: 40198330

Sample: MW-5	Lab ID: 40198330007	Collected: 10/31/19 11:00	Received: 10/31/19 12:40	Matrix: Water					
Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260 MSV</b>	Analytical Method: EPA 8260								
Benzene	1.6J	ug/L	5.0	1.2	5		11/01/19 22:17	71-43-2	
Bromobenzene	<1.2	ug/L	5.0	1.2	5		11/01/19 22:17	108-86-1	
Bromo(chloromethane)	<1.8	ug/L	25.0	1.8	5		11/01/19 22:17	74-97-5	
Bromodichloromethane	<1.8	ug/L	6.1	1.8	5		11/01/19 22:17	75-27-4	
Bromoform	<19.9	ug/L	66.2	19.9	5		11/01/19 22:17	75-25-2	
Bromomethane	<4.9	ug/L	25.0	4.9	5		11/01/19 22:17	74-83-9	
n-Butylbenzene	5.8J	ug/L	11.8	3.5	5		11/01/19 22:17	104-51-8	
sec-Butylbenzene	<4.2	ug/L	25.0	4.2	5		11/01/19 22:17	135-98-8	
tert-Butylbenzene	<1.5	ug/L	5.1	1.5	5		11/01/19 22:17	98-06-6	
Carbon tetrachloride	<0.83	ug/L	5.0	0.83	5		11/01/19 22:17	56-23-5	
Chlorobenzene	<3.6	ug/L	11.8	3.6	5		11/01/19 22:17	108-90-7	
Chloroethane	<6.7	ug/L	25.0	6.7	5		11/01/19 22:17	75-00-3	
Chloroform	<6.4	ug/L	25.0	6.4	5		11/01/19 22:17	67-66-3	
Chloromethane	<10.9	ug/L	36.5	10.9	5		11/01/19 22:17	74-87-3	
2-Chlorotoluene	<4.6	ug/L	25.0	4.6	5		11/01/19 22:17	95-49-8	
4-Chlorotoluene	<3.8	ug/L	12.6	3.8	5		11/01/19 22:17	106-43-4	
1,2-Dibromo-3-chloropropane	<8.8	ug/L	29.4	8.8	5		11/01/19 22:17	96-12-8	
Dibromochloromethane	<13.0	ug/L	43.4	13.0	5		11/01/19 22:17	124-48-1	
1,2-Dibromoethane (EDB)	<4.1	ug/L	13.8	4.1	5		11/01/19 22:17	106-93-4	
Dibromomethane	<4.7	ug/L	15.6	4.7	5		11/01/19 22:17	74-95-3	
1,2-Dichlorobenzene	<3.5	ug/L	11.8	3.5	5		11/01/19 22:17	95-50-1	
1,3-Dichlorobenzene	<3.1	ug/L	10.5	3.1	5		11/01/19 22:17	541-73-1	
1,4-Dichlorobenzene	<4.7	ug/L	15.7	4.7	5		11/01/19 22:17	106-46-7	
Dichlorodifluoromethane	<2.5	ug/L	25.0	2.5	5		11/01/19 22:17	75-71-8	
1,1-Dichloroethane	<1.4	ug/L	5.0	1.4	5		11/01/19 22:17	75-34-3	
1,2-Dichloroethane	<1.4	ug/L	5.0	1.4	5		11/01/19 22:17	107-06-2	
1,1-Dichloroethene	<1.2	ug/L	5.0	1.2	5		11/01/19 22:17	75-35-4	
cis-1,2-Dichloroethene	79.7	ug/L	5.0	1.4	5		11/01/19 22:17	156-59-2	
trans-1,2-Dichloroethene	10.6J	ug/L	18.2	5.5	5		11/01/19 22:17	156-60-5	
1,2-Dichloropropane	<1.4	ug/L	5.0	1.4	5		11/01/19 22:17	78-87-5	
1,3-Dichloropropane	<4.1	ug/L	13.8	4.1	5		11/01/19 22:17	142-28-9	
2,2-Dichloropropane	<11.3	ug/L	37.8	11.3	5		11/01/19 22:17	594-20-7	
1,1-Dichloropropene	<2.7	ug/L	9.0	2.7	5		11/01/19 22:17	563-58-6	
cis-1,3-Dichloropropene	<18.1	ug/L	60.5	18.1	5		11/01/19 22:17	10061-01-5	
trans-1,3-Dichloropropene	<21.9	ug/L	72.8	21.9	5		11/01/19 22:17	10061-02-6	
Diisopropyl ether	<9.4	ug/L	31.5	9.4	5		11/01/19 22:17	108-20-3	
Ethylbenzene	92.7	ug/L	5.0	1.1	5		11/01/19 22:17	100-41-4	
Hexachloro-1,3-butadiene	<5.9	ug/L	25.0	5.9	5		11/01/19 22:17	87-68-3	
Isopropylbenzene (Cumene)	27.4	ug/L	25.0	2.0	5		11/01/19 22:17	98-82-8	
p-Isopropyltoluene	<4.0	ug/L	13.3	4.0	5		11/01/19 22:17	99-87-6	
Methylene Chloride	<2.9	ug/L	25.0	2.9	5		11/01/19 22:17	75-09-2	
Methyl-tert-butyl ether	<6.2	ug/L	20.8	6.2	5		11/01/19 22:17	1634-04-4	
Naphthalene	89.6	ug/L	25.0	5.9	5		11/01/19 22:17	91-20-3	
n-Propylbenzene	54.9	ug/L	25.0	4.1	5		11/01/19 22:17	103-65-1	
Styrene	<2.3	ug/L	7.8	2.3	5		11/01/19 22:17	100-42-5	
1,1,1,2-Tetrachloroethane	<1.3	ug/L	5.0	1.3	5		11/01/19 22:17	630-20-6	

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## ANALYTICAL RESULTS

Project: 60615481 ALLOUEZ PHASE II ESA

Pace Project No.: 40198330

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**Sample: MW-5**      **Lab ID: 40198330007**      Collected: 10/31/19 11:00      Received: 10/31/19 12:40      Matrix: Water

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Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260 MSV</b>	Analytical Method: EPA 8260								
1,1,2,2-Tetrachloroethane	<1.4	ug/L	5.0	1.4	5		11/01/19 22:17	79-34-5	
Tetrachloroethene	4.2J	ug/L	5.4	1.6	5		11/01/19 22:17	127-18-4	
Toluene	6.2J	ug/L	25.0	0.86	5		11/01/19 22:17	108-88-3	
1,2,3-Trichlorobenzene	<3.1	ug/L	25.0	3.1	5		11/01/19 22:17	87-61-6	
1,2,4-Trichlorobenzene	<4.8	ug/L	25.0	4.8	5		11/01/19 22:17	120-82-1	
1,1,1-Trichloroethane	<1.2	ug/L	5.0	1.2	5		11/01/19 22:17	71-55-6	
1,1,2-Trichloroethane	<2.8	ug/L	25.0	2.8	5		11/01/19 22:17	79-00-5	
Trichloroethene	<1.3	ug/L	5.0	1.3	5		11/01/19 22:17	79-01-6	
Trichlorofluoromethane	<1.1	ug/L	5.0	1.1	5		11/01/19 22:17	75-69-4	
1,2,3-Trichloropropane	<3.0	ug/L	25.0	3.0	5		11/01/19 22:17	96-18-4	
1,2,4-Trimethylbenzene	575	ug/L	14.0	4.2	5		11/01/19 22:17	95-63-6	
1,3,5-Trimethylbenzene	97.8	ug/L	14.6	4.4	5		11/01/19 22:17	108-67-8	
Vinyl chloride	<0.87	ug/L	5.0	0.87	5		11/01/19 22:17	75-01-4	
Xylene (Total)	531	ug/L	15.0	7.5	5		11/01/19 22:17	1330-20-7	
m&p-Xylene	496	ug/L	10.0	2.3	5		11/01/19 22:17	179601-23-1	
o-Xylene	35.1	ug/L	5.0	1.3	5		11/01/19 22:17	95-47-6	
<b>Surrogates</b>									
4-Bromofluorobenzene (S)	94	%	70-130		5		11/01/19 22:17	460-00-4	
Dibromofluoromethane (S)	95	%	70-130		5		11/01/19 22:17	1868-53-7	
Toluene-d8 (S)	102	%	70-130		5		11/01/19 22:17	2037-26-5	

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## ANALYTICAL RESULTS

Project: 60615481 ALLOUEZ PHASE II ESA

Pace Project No.: 40198330

Sample: MW-4	Lab ID: 40198330008	Collected: 10/31/19 11:15	Received: 10/31/19 12:40	Matrix: Water					
Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260 MSV</b>	Analytical Method: EPA 8260								
Benzene	<0.25	ug/L	1.0	0.25	1		11/01/19 21:55	71-43-2	
Bromobenzene	<0.24	ug/L	1.0	0.24	1		11/01/19 21:55	108-86-1	
Bromochloromethane	<0.36	ug/L	5.0	0.36	1		11/01/19 21:55	74-97-5	
Bromodichloromethane	<0.36	ug/L	1.2	0.36	1		11/01/19 21:55	75-27-4	
Bromoform	<4.0	ug/L	13.2	4.0	1		11/01/19 21:55	75-25-2	
Bromomethane	<0.97	ug/L	5.0	0.97	1		11/01/19 21:55	74-83-9	
n-Butylbenzene	<0.71	ug/L	2.4	0.71	1		11/01/19 21:55	104-51-8	
sec-Butylbenzene	<0.85	ug/L	5.0	0.85	1		11/01/19 21:55	135-98-8	
tert-Butylbenzene	<0.30	ug/L	1.0	0.30	1		11/01/19 21:55	98-06-6	
Carbon tetrachloride	<0.17	ug/L	1.0	0.17	1		11/01/19 21:55	56-23-5	
Chlorobenzene	<0.71	ug/L	2.4	0.71	1		11/01/19 21:55	108-90-7	
Chloroethane	<1.3	ug/L	5.0	1.3	1		11/01/19 21:55	75-00-3	
Chloroform	<1.3	ug/L	5.0	1.3	1		11/01/19 21:55	67-66-3	
Chloromethane	<2.2	ug/L	7.3	2.2	1		11/01/19 21:55	74-87-3	
2-Chlorotoluene	<0.93	ug/L	5.0	0.93	1		11/01/19 21:55	95-49-8	
4-Chlorotoluene	<0.76	ug/L	2.5	0.76	1		11/01/19 21:55	106-43-4	
1,2-Dibromo-3-chloropropane	<1.8	ug/L	5.9	1.8	1		11/01/19 21:55	96-12-8	
Dibromochloromethane	<2.6	ug/L	8.7	2.6	1		11/01/19 21:55	124-48-1	
1,2-Dibromoethane (EDB)	<0.83	ug/L	2.8	0.83	1		11/01/19 21:55	106-93-4	
Dibromomethane	<0.94	ug/L	3.1	0.94	1		11/01/19 21:55	74-95-3	
1,2-Dichlorobenzene	<0.71	ug/L	2.4	0.71	1		11/01/19 21:55	95-50-1	
1,3-Dichlorobenzene	<0.63	ug/L	2.1	0.63	1		11/01/19 21:55	541-73-1	
1,4-Dichlorobenzene	<0.94	ug/L	3.1	0.94	1		11/01/19 21:55	106-46-7	
Dichlorodifluoromethane	<0.50	ug/L	5.0	0.50	1		11/01/19 21:55	75-71-8	
1,1-Dichloroethane	<0.27	ug/L	1.0	0.27	1		11/01/19 21:55	75-34-3	
1,2-Dichloroethane	<0.28	ug/L	1.0	0.28	1		11/01/19 21:55	107-06-2	
1,1-Dichloroethene	<0.24	ug/L	1.0	0.24	1		11/01/19 21:55	75-35-4	
cis-1,2-Dichloroethene	1.5	ug/L	1.0	0.27	1		11/01/19 21:55	156-59-2	
trans-1,2-Dichloroethene	1.7J	ug/L	3.6	1.1	1		11/01/19 21:55	156-60-5	
1,2-Dichloropropane	<0.28	ug/L	1.0	0.28	1		11/01/19 21:55	78-87-5	
1,3-Dichloropropane	<0.83	ug/L	2.8	0.83	1		11/01/19 21:55	142-28-9	
2,2-Dichloropropane	<2.3	ug/L	7.6	2.3	1		11/01/19 21:55	594-20-7	
1,1-Dichloropropene	<0.54	ug/L	1.8	0.54	1		11/01/19 21:55	563-58-6	
cis-1,3-Dichloropropene	<3.6	ug/L	12.1	3.6	1		11/01/19 21:55	10061-01-5	
trans-1,3-Dichloropropene	<4.4	ug/L	14.6	4.4	1		11/01/19 21:55	10061-02-6	
Diisopropyl ether	<1.9	ug/L	6.3	1.9	1		11/01/19 21:55	108-20-3	
Ethylbenzene	<0.22	ug/L	1.0	0.22	1		11/01/19 21:55	100-41-4	
Hexachloro-1,3-butadiene	<1.2	ug/L	5.0	1.2	1		11/01/19 21:55	87-68-3	
Isopropylbenzene (Cumene)	<0.39	ug/L	5.0	0.39	1		11/01/19 21:55	98-82-8	
p-Isopropyltoluene	<0.80	ug/L	2.7	0.80	1		11/01/19 21:55	99-87-6	
Methylene Chloride	<0.58	ug/L	5.0	0.58	1		11/01/19 21:55	75-09-2	
Methyl-tert-butyl ether	<1.2	ug/L	4.2	1.2	1		11/01/19 21:55	1634-04-4	
Naphthalene	<1.2	ug/L	5.0	1.2	1		11/01/19 21:55	91-20-3	
n-Propylbenzene	<0.81	ug/L	5.0	0.81	1		11/01/19 21:55	103-65-1	
Styrene	<0.47	ug/L	1.6	0.47	1		11/01/19 21:55	100-42-5	
1,1,1,2-Tetrachloroethane	<0.27	ug/L	1.0	0.27	1		11/01/19 21:55	630-20-6	

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## ANALYTICAL RESULTS

Project: 60615481 ALLOUEZ PHASE II ESA

Pace Project No.: 40198330

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**Sample: MW-4**      **Lab ID: 40198330008**      Collected: 10/31/19 11:15      Received: 10/31/19 12:40      Matrix: Water

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Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260 MSV</b>	Analytical Method: EPA 8260								
1,1,2,2-Tetrachloroethane	<0.28	ug/L	1.0	0.28	1		11/01/19 21:55	79-34-5	
Tetrachloroethene	85.5	ug/L	1.1	0.33	1		11/01/19 21:55	127-18-4	
Toluene	<0.17	ug/L	5.0	0.17	1		11/01/19 21:55	108-88-3	
1,2,3-Trichlorobenzene	<0.63	ug/L	5.0	0.63	1		11/01/19 21:55	87-61-6	
1,2,4-Trichlorobenzene	<0.95	ug/L	5.0	0.95	1		11/01/19 21:55	120-82-1	
1,1,1-Trichloroethane	<0.24	ug/L	1.0	0.24	1		11/01/19 21:55	71-55-6	
1,1,2-Trichloroethane	<0.55	ug/L	5.0	0.55	1		11/01/19 21:55	79-00-5	
Trichloroethene	2.2	ug/L	1.0	0.26	1		11/01/19 21:55	79-01-6	
Trichlorofluoromethane	<0.21	ug/L	1.0	0.21	1		11/01/19 21:55	75-69-4	
1,2,3-Trichloropropane	<0.59	ug/L	5.0	0.59	1		11/01/19 21:55	96-18-4	
1,2,4-Trimethylbenzene	<0.84	ug/L	2.8	0.84	1		11/01/19 21:55	95-63-6	
1,3,5-Trimethylbenzene	<0.87	ug/L	2.9	0.87	1		11/01/19 21:55	108-67-8	
Vinyl chloride	<0.17	ug/L	1.0	0.17	1		11/01/19 21:55	75-01-4	
Xylene (Total)	<1.5	ug/L	3.0	1.5	1		11/01/19 21:55	1330-20-7	
m&p-Xylene	<0.47	ug/L	2.0	0.47	1		11/01/19 21:55	179601-23-1	
o-Xylene	<0.26	ug/L	1.0	0.26	1		11/01/19 21:55	95-47-6	
<b>Surrogates</b>									
4-Bromofluorobenzene (S)	86	%	70-130		1		11/01/19 21:55	460-00-4	
Dibromofluoromethane (S)	102	%	70-130		1		11/01/19 21:55	1868-53-7	
Toluene-d8 (S)	99	%	70-130		1		11/01/19 21:55	2037-26-5	

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## ANALYTICAL RESULTS

Project: 60615481 ALLOUEZ PHASE II ESA

Pace Project No.: 40198330

Sample: MW-6	Lab ID: 40198330009	Collected: 10/31/19 11:30	Received: 10/31/19 12:40	Matrix: Water					
Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260 MSV</b>	Analytical Method: EPA 8260								
Benzene	<b>21.7</b>	ug/L	4.0	0.99	4		11/01/19 22:38	71-43-2	
Bromobenzene	<0.96	ug/L	4.0	0.96	4		11/01/19 22:38	108-86-1	
Bromo(chloromethane)	<1.4	ug/L	20.0	1.4	4		11/01/19 22:38	74-97-5	
Bromodichloromethane	<1.5	ug/L	4.8	1.5	4		11/01/19 22:38	75-27-4	
Bromoform	<15.9	ug/L	53.0	15.9	4		11/01/19 22:38	75-25-2	
Bromomethane	<3.9	ug/L	20.0	3.9	4		11/01/19 22:38	74-83-9	
n-Butylbenzene	<2.8	ug/L	9.4	2.8	4		11/01/19 22:38	104-51-8	
sec-Butylbenzene	<3.4	ug/L	20.0	3.4	4		11/01/19 22:38	135-98-8	
tert-Butylbenzene	<1.2	ug/L	4.1	1.2	4		11/01/19 22:38	98-06-6	
Carbon tetrachloride	<0.66	ug/L	4.0	0.66	4		11/01/19 22:38	56-23-5	
Chlorobenzene	<2.8	ug/L	9.5	2.8	4		11/01/19 22:38	108-90-7	
Chloroethane	<5.4	ug/L	20.0	5.4	4		11/01/19 22:38	75-00-3	
Chloroform	<b>5.9J</b>	ug/L	20.0	5.1	4		11/01/19 22:38	67-66-3	
Chloromethane	<8.8	ug/L	29.2	8.8	4		11/01/19 22:38	74-87-3	
2-Chlorotoluene	<3.7	ug/L	20.0	3.7	4		11/01/19 22:38	95-49-8	
4-Chlorotoluene	<3.0	ug/L	10.1	3.0	4		11/01/19 22:38	106-43-4	
1,2-Dibromo-3-chloropropane	<7.1	ug/L	23.5	7.1	4		11/01/19 22:38	96-12-8	
Dibromochloromethane	<10.4	ug/L	34.7	10.4	4		11/01/19 22:38	124-48-1	
1,2-Dibromoethane (EDB)	<3.3	ug/L	11.1	3.3	4		11/01/19 22:38	106-93-4	
Dibromomethane	<3.7	ug/L	12.5	3.7	4		11/01/19 22:38	74-95-3	
1,2-Dichlorobenzene	<2.8	ug/L	9.4	2.8	4		11/01/19 22:38	95-50-1	
1,3-Dichlorobenzene	<2.5	ug/L	8.4	2.5	4		11/01/19 22:38	541-73-1	
1,4-Dichlorobenzene	<3.8	ug/L	12.6	3.8	4		11/01/19 22:38	106-46-7	
Dichlorodifluoromethane	<2.0	ug/L	20.0	2.0	4		11/01/19 22:38	75-71-8	
1,1-Dichloroethane	<1.1	ug/L	4.0	1.1	4		11/01/19 22:38	75-34-3	
1,2-Dichloroethane	<1.1	ug/L	4.0	1.1	4		11/01/19 22:38	107-06-2	
1,1-Dichloroethene	<0.98	ug/L	4.0	0.98	4		11/01/19 22:38	75-35-4	
cis-1,2-Dichloroethene	<b>48.4</b>	ug/L	4.0	1.1	4		11/01/19 22:38	156-59-2	
trans-1,2-Dichloroethene	<b>100</b>	ug/L	14.5	4.4	4		11/01/19 22:38	156-60-5	
1,2-Dichloropropane	<1.1	ug/L	4.0	1.1	4		11/01/19 22:38	78-87-5	
1,3-Dichloropropane	<3.3	ug/L	11.0	3.3	4		11/01/19 22:38	142-28-9	
2,2-Dichloropropane	<9.1	ug/L	30.2	9.1	4		11/01/19 22:38	594-20-7	
1,1-Dichloropropene	<2.2	ug/L	7.2	2.2	4		11/01/19 22:38	563-58-6	
cis-1,3-Dichloropropene	<14.5	ug/L	48.4	14.5	4		11/01/19 22:38	10061-01-5	
trans-1,3-Dichloropropene	<17.5	ug/L	58.3	17.5	4		11/01/19 22:38	10061-02-6	
Diisopropyl ether	<7.6	ug/L	25.2	7.6	4		11/01/19 22:38	108-20-3	
Ethylbenzene	<b>64.6</b>	ug/L	4.0	0.87	4		11/01/19 22:38	100-41-4	
Hexachloro-1,3-butadiene	<4.7	ug/L	20.0	4.7	4		11/01/19 22:38	87-68-3	
Isopropylbenzene (Cumene)	<b>5.9J</b>	ug/L	20.0	1.6	4		11/01/19 22:38	98-82-8	
p-Isopropyltoluene	<3.2	ug/L	10.7	3.2	4		11/01/19 22:38	99-87-6	
Methylene Chloride	<2.3	ug/L	20.0	2.3	4		11/01/19 22:38	75-09-2	
Methyl-tert-butyl ether	<5.0	ug/L	16.6	5.0	4		11/01/19 22:38	1634-04-4	
Naphthalene	<b>16.6J</b>	ug/L	20.0	4.7	4		11/01/19 22:38	91-20-3	
n-Propylbenzene	<b>8.2J</b>	ug/L	20.0	3.2	4		11/01/19 22:38	103-65-1	
Styrene	<1.9	ug/L	6.2	1.9	4		11/01/19 22:38	100-42-5	
1,1,1,2-Tetrachloroethane	<1.1	ug/L	4.0	1.1	4		11/01/19 22:38	630-20-6	

## REPORT OF LABORATORY ANALYSIS

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## ANALYTICAL RESULTS

Project: 60615481 ALLOUEZ PHASE II ESA

Pace Project No.: 40198330

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**Sample: MW-6**      **Lab ID: 40198330009**      Collected: 10/31/19 11:30      Received: 10/31/19 12:40      Matrix: Water

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Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260 MSV</b>	Analytical Method: EPA 8260								
1,1,2,2-Tetrachloroethane	<1.1	ug/L	4.0	1.1	4		11/01/19 22:38	79-34-5	
Tetrachloroethene	101	ug/L	4.4	1.3	4		11/01/19 22:38	127-18-4	
Toluene	85.4	ug/L	20.0	0.69	4		11/01/19 22:38	108-88-3	
1,2,3-Trichlorobenzene	<2.5	ug/L	20.0	2.5	4		11/01/19 22:38	87-61-6	
1,2,4-Trichlorobenzene	<3.8	ug/L	20.0	3.8	4		11/01/19 22:38	120-82-1	
1,1,1-Trichloroethane	<0.98	ug/L	4.0	0.98	4		11/01/19 22:38	71-55-6	
1,1,2-Trichloroethane	<2.2	ug/L	20.0	2.2	4		11/01/19 22:38	79-00-5	
Trichloroethene	212	ug/L	4.0	1.0	4		11/01/19 22:38	79-01-6	
Trichlorofluoromethane	<0.86	ug/L	4.0	0.86	4		11/01/19 22:38	75-69-4	
1,2,3-Trichloropropane	<2.4	ug/L	20.0	2.4	4		11/01/19 22:38	96-18-4	
1,2,4-Trimethylbenzene	81.9	ug/L	11.2	3.4	4		11/01/19 22:38	95-63-6	
1,3,5-Trimethylbenzene	10.8J	ug/L	11.6	3.5	4		11/01/19 22:38	108-67-8	
Vinyl chloride	<0.70	ug/L	4.0	0.70	4		11/01/19 22:38	75-01-4	
Xylene (Total)	200	ug/L	12.0	6.0	4		11/01/19 22:38	1330-20-7	
m&p-Xylene	183	ug/L	8.0	1.9	4		11/01/19 22:38	179601-23-1	
o-Xylene	16.4	ug/L	4.0	1.0	4		11/01/19 22:38	95-47-6	
<b>Surrogates</b>									
4-Bromofluorobenzene (S)	94	%	70-130		4		11/01/19 22:38	460-00-4	
Dibromofluoromethane (S)	95	%	70-130		4		11/01/19 22:38	1868-53-7	
Toluene-d8 (S)	102	%	70-130		4		11/01/19 22:38	2037-26-5	

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## ANALYTICAL RESULTS

Project: 60615481 ALLOUEZ PHASE II ESA

Pace Project No.: 40198330

Sample: TRIP BLANK	Lab ID: 40198330010	Collected: 10/31/19 09:30	Received: 10/31/19 12:40	Matrix: Water					
Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260 MSV</b>	Analytical Method: EPA 8260								
Benzene	<0.25	ug/L	1.0	0.25	1		11/01/19 15:29	71-43-2	
Bromobenzene	<0.24	ug/L	1.0	0.24	1		11/01/19 15:29	108-86-1	
Bromochloromethane	<0.36	ug/L	5.0	0.36	1		11/01/19 15:29	74-97-5	
Bromodichloromethane	<0.36	ug/L	1.2	0.36	1		11/01/19 15:29	75-27-4	
Bromoform	<4.0	ug/L	13.2	4.0	1		11/01/19 15:29	75-25-2	
Bromomethane	<0.97	ug/L	5.0	0.97	1		11/01/19 15:29	74-83-9	
n-Butylbenzene	<0.71	ug/L	2.4	0.71	1		11/01/19 15:29	104-51-8	
sec-Butylbenzene	<0.85	ug/L	5.0	0.85	1		11/01/19 15:29	135-98-8	
tert-Butylbenzene	<0.30	ug/L	1.0	0.30	1		11/01/19 15:29	98-06-6	
Carbon tetrachloride	<0.17	ug/L	1.0	0.17	1		11/01/19 15:29	56-23-5	
Chlorobenzene	<0.71	ug/L	2.4	0.71	1		11/01/19 15:29	108-90-7	
Chloroethane	<1.3	ug/L	5.0	1.3	1		11/01/19 15:29	75-00-3	
Chloroform	<1.3	ug/L	5.0	1.3	1		11/01/19 15:29	67-66-3	
Chloromethane	<2.2	ug/L	7.3	2.2	1		11/01/19 15:29	74-87-3	
2-Chlorotoluene	<0.93	ug/L	5.0	0.93	1		11/01/19 15:29	95-49-8	
4-Chlorotoluene	<0.76	ug/L	2.5	0.76	1		11/01/19 15:29	106-43-4	
1,2-Dibromo-3-chloropropane	<1.8	ug/L	5.9	1.8	1		11/01/19 15:29	96-12-8	
Dibromochloromethane	<2.6	ug/L	8.7	2.6	1		11/01/19 15:29	124-48-1	
1,2-Dibromoethane (EDB)	<0.83	ug/L	2.8	0.83	1		11/01/19 15:29	106-93-4	
Dibromomethane	<0.94	ug/L	3.1	0.94	1		11/01/19 15:29	74-95-3	
1,2-Dichlorobenzene	<0.71	ug/L	2.4	0.71	1		11/01/19 15:29	95-50-1	
1,3-Dichlorobenzene	<0.63	ug/L	2.1	0.63	1		11/01/19 15:29	541-73-1	
1,4-Dichlorobenzene	<0.94	ug/L	3.1	0.94	1		11/01/19 15:29	106-46-7	
Dichlorodifluoromethane	<0.50	ug/L	5.0	0.50	1		11/01/19 15:29	75-71-8	
1,1-Dichloroethane	<0.27	ug/L	1.0	0.27	1		11/01/19 15:29	75-34-3	
1,2-Dichloroethane	<0.28	ug/L	1.0	0.28	1		11/01/19 15:29	107-06-2	
1,1-Dichloroethene	<0.24	ug/L	1.0	0.24	1		11/01/19 15:29	75-35-4	
cis-1,2-Dichloroethene	<0.27	ug/L	1.0	0.27	1		11/01/19 15:29	156-59-2	
trans-1,2-Dichloroethene	<1.1	ug/L	3.6	1.1	1		11/01/19 15:29	156-60-5	
1,2-Dichloropropane	<0.28	ug/L	1.0	0.28	1		11/01/19 15:29	78-87-5	
1,3-Dichloropropane	<0.83	ug/L	2.8	0.83	1		11/01/19 15:29	142-28-9	
2,2-Dichloropropane	<2.3	ug/L	7.6	2.3	1		11/01/19 15:29	594-20-7	
1,1-Dichloropropene	<0.54	ug/L	1.8	0.54	1		11/01/19 15:29	563-58-6	
cis-1,3-Dichloropropene	<3.6	ug/L	12.1	3.6	1		11/01/19 15:29	10061-01-5	
trans-1,3-Dichloropropene	<4.4	ug/L	14.6	4.4	1		11/01/19 15:29	10061-02-6	
Diisopropyl ether	<1.9	ug/L	6.3	1.9	1		11/01/19 15:29	108-20-3	
Ethylbenzene	<0.22	ug/L	1.0	0.22	1		11/01/19 15:29	100-41-4	
Hexachloro-1,3-butadiene	<1.2	ug/L	5.0	1.2	1		11/01/19 15:29	87-68-3	
Isopropylbenzene (Cumene)	<0.39	ug/L	5.0	0.39	1		11/01/19 15:29	98-82-8	
p-Isopropyltoluene	<0.80	ug/L	2.7	0.80	1		11/01/19 15:29	99-87-6	
Methylene Chloride	<0.58	ug/L	5.0	0.58	1		11/01/19 15:29	75-09-2	
Methyl-tert-butyl ether	<1.2	ug/L	4.2	1.2	1		11/01/19 15:29	1634-04-4	
Naphthalene	<1.2	ug/L	5.0	1.2	1		11/01/19 15:29	91-20-3	
n-Propylbenzene	<0.81	ug/L	5.0	0.81	1		11/01/19 15:29	103-65-1	
Styrene	<0.47	ug/L	1.6	0.47	1		11/01/19 15:29	100-42-5	
1,1,1,2-Tetrachloroethane	<0.27	ug/L	1.0	0.27	1		11/01/19 15:29	630-20-6	

## REPORT OF LABORATORY ANALYSIS

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## ANALYTICAL RESULTS

Project: 60615481 ALLOUEZ PHASE II ESA

Pace Project No.: 40198330

Sample: TRIP BLANK	Lab ID: 40198330010	Collected: 10/31/19 09:30	Received: 10/31/19 12:40	Matrix: Water					
Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260 MSV</b>	Analytical Method: EPA 8260								
1,1,2,2-Tetrachloroethane	<0.28	ug/L	1.0	0.28	1		11/01/19 15:29	79-34-5	
Tetrachloroethene	<0.33	ug/L	1.1	0.33	1		11/01/19 15:29	127-18-4	
Toluene	<0.17	ug/L	5.0	0.17	1		11/01/19 15:29	108-88-3	
1,2,3-Trichlorobenzene	<0.63	ug/L	5.0	0.63	1		11/01/19 15:29	87-61-6	
1,2,4-Trichlorobenzene	<0.95	ug/L	5.0	0.95	1		11/01/19 15:29	120-82-1	
1,1,1-Trichloroethane	<0.24	ug/L	1.0	0.24	1		11/01/19 15:29	71-55-6	
1,1,2-Trichloroethane	<0.55	ug/L	5.0	0.55	1		11/01/19 15:29	79-00-5	
Trichloroethene	<0.26	ug/L	1.0	0.26	1		11/01/19 15:29	79-01-6	
Trichlorofluoromethane	<0.21	ug/L	1.0	0.21	1		11/01/19 15:29	75-69-4	
1,2,3-Trichloropropane	<0.59	ug/L	5.0	0.59	1		11/01/19 15:29	96-18-4	
1,2,4-Trimethylbenzene	<0.84	ug/L	2.8	0.84	1		11/01/19 15:29	95-63-6	
1,3,5-Trimethylbenzene	<0.87	ug/L	2.9	0.87	1		11/01/19 15:29	108-67-8	
Vinyl chloride	<0.17	ug/L	1.0	0.17	1		11/01/19 15:29	75-01-4	
Xylene (Total)	<1.5	ug/L	3.0	1.5	1		11/01/19 15:29	1330-20-7	
m&p-Xylene	<0.47	ug/L	2.0	0.47	1		11/01/19 15:29	179601-23-1	
o-Xylene	<0.26	ug/L	1.0	0.26	1		11/01/19 15:29	95-47-6	
<b>Surrogates</b>									
4-Bromofluorobenzene (S)	87	%	70-130		1		11/01/19 15:29	460-00-4	HS
Dibromofluoromethane (S)	99	%	70-130		1		11/01/19 15:29	1868-53-7	
Toluene-d8 (S)	97	%	70-130		1		11/01/19 15:29	2037-26-5	

## REPORT OF LABORATORY ANALYSIS

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## QUALITY CONTROL DATA

Project: 60615481 ALLOUEZ PHASE II ESA

Pace Project No.: 40198330

QC Batch:

339381

Analysis Method:

EPA 8260

QC Batch Method:

EPA 8260

Analysis Description:

8260 MSV

Associated Lab Samples: 40198330001, 40198330002, 40198330003, 40198330004, 40198330005, 40198330006, 40198330007,  
40198330008, 40198330009

METHOD BLANK: 1971029

Matrix: Water

Associated Lab Samples: 40198330001, 40198330002, 40198330003, 40198330004, 40198330005, 40198330006, 40198330007,  
40198330008, 40198330009

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1,1,2-Tetrachloroethane	ug/L	<0.27	1.0	11/01/19 12:38	
1,1,1-Trichloroethane	ug/L	<0.24	1.0	11/01/19 12:38	
1,1,2,2-Tetrachloroethane	ug/L	<0.28	1.0	11/01/19 12:38	
1,1,2-Trichloroethane	ug/L	<0.55	5.0	11/01/19 12:38	
1,1-Dichloroethane	ug/L	<0.27	1.0	11/01/19 12:38	
1,1-Dichloroethene	ug/L	<0.24	1.0	11/01/19 12:38	
1,1-Dichloropropene	ug/L	<0.54	1.8	11/01/19 12:38	
1,2,3-Trichlorobenzene	ug/L	<0.63	5.0	11/01/19 12:38	
1,2,3-Trichloropropane	ug/L	<0.59	5.0	11/01/19 12:38	
1,2,4-Trichlorobenzene	ug/L	<0.95	5.0	11/01/19 12:38	
1,2,4-Trimethylbenzene	ug/L	<0.84	2.8	11/01/19 12:38	
1,2-Dibromo-3-chloropropane	ug/L	<1.8	5.9	11/01/19 12:38	
1,2-Dibromoethane (EDB)	ug/L	<0.83	2.8	11/01/19 12:38	
1,2-Dichlorobenzene	ug/L	<0.71	2.4	11/01/19 12:38	
1,2-Dichloroethane	ug/L	<0.28	1.0	11/01/19 12:38	
1,2-Dichloropropane	ug/L	<0.28	1.0	11/01/19 12:38	
1,3,5-Trimethylbenzene	ug/L	<0.87	2.9	11/01/19 12:38	
1,3-Dichlorobenzene	ug/L	<0.63	2.1	11/01/19 12:38	
1,3-Dichloropropene	ug/L	<0.83	2.8	11/01/19 12:38	
1,4-Dichlorobenzene	ug/L	<0.94	3.1	11/01/19 12:38	
2,2-Dichloropropane	ug/L	<2.3	7.6	11/01/19 12:38	
2-Chlorotoluene	ug/L	<0.93	5.0	11/01/19 12:38	
4-Chlorotoluene	ug/L	<0.76	2.5	11/01/19 12:38	
Benzene	ug/L	<0.25	1.0	11/01/19 12:38	
Bromobenzene	ug/L	<0.24	1.0	11/01/19 12:38	
Bromochloromethane	ug/L	<0.36	5.0	11/01/19 12:38	
Bromodichloromethane	ug/L	<0.36	1.2	11/01/19 12:38	
Bromoform	ug/L	<4.0	13.2	11/01/19 12:38	
Bromomethane	ug/L	<0.97	5.0	11/01/19 12:38	
Carbon tetrachloride	ug/L	<0.17	1.0	11/01/19 12:38	
Chlorobenzene	ug/L	<0.71	2.4	11/01/19 12:38	
Chloroethane	ug/L	<1.3	5.0	11/01/19 12:38	
Chloroform	ug/L	<1.3	5.0	11/01/19 12:38	
Chloromethane	ug/L	<2.2	7.3	11/01/19 12:38	
cis-1,2-Dichloroethene	ug/L	<0.27	1.0	11/01/19 12:38	
cis-1,3-Dichloropropene	ug/L	<3.6	12.1	11/01/19 12:38	
Dibromochloromethane	ug/L	<2.6	8.7	11/01/19 12:38	
Dibromomethane	ug/L	<0.94	3.1	11/01/19 12:38	
Dichlorodifluoromethane	ug/L	<0.50	5.0	11/01/19 12:38	
Diisopropyl ether	ug/L	<1.9	6.3	11/01/19 12:38	

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

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## QUALITY CONTROL DATA

Project: 60615481 ALLOUEZ PHASE II ESA

Pace Project No.: 40198330

METHOD BLANK: 1971029

Matrix: Water

Associated Lab Samples: 40198330001, 40198330002, 40198330003, 40198330004, 40198330005, 40198330006, 40198330007,  
40198330008, 40198330009

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Ethylbenzene	ug/L	<0.22	1.0	11/01/19 12:38	
Hexachloro-1,3-butadiene	ug/L	<1.2	5.0	11/01/19 12:38	
Isopropylbenzene (Cumene)	ug/L	<0.39	5.0	11/01/19 12:38	
m&p-Xylene	ug/L	<0.47	2.0	11/01/19 12:38	
Methyl-tert-butyl ether	ug/L	<1.2	4.2	11/01/19 12:38	
Methylene Chloride	ug/L	<0.58	5.0	11/01/19 12:38	
n-Butylbenzene	ug/L	<0.71	2.4	11/01/19 12:38	
n-Propylbenzene	ug/L	<0.81	5.0	11/01/19 12:38	
Naphthalene	ug/L	<1.2	5.0	11/01/19 12:38	
o-Xylene	ug/L	<0.26	1.0	11/01/19 12:38	
p-Isopropyltoluene	ug/L	<0.80	2.7	11/01/19 12:38	
sec-Butylbenzene	ug/L	<0.85	5.0	11/01/19 12:38	
Styrene	ug/L	<0.47	1.6	11/01/19 12:38	
tert-Butylbenzene	ug/L	<0.30	1.0	11/01/19 12:38	
Tetrachloroethene	ug/L	<0.33	1.1	11/01/19 12:38	
Toluene	ug/L	<0.17	5.0	11/01/19 12:38	
trans-1,2-Dichloroethene	ug/L	<1.1	3.6	11/01/19 12:38	
trans-1,3-Dichloropropene	ug/L	<4.4	14.6	11/01/19 12:38	
Trichloroethene	ug/L	<0.26	1.0	11/01/19 12:38	
Trichlorofluoromethane	ug/L	<0.21	1.0	11/01/19 12:38	
Vinyl chloride	ug/L	<0.17	1.0	11/01/19 12:38	
Xylene (Total)	ug/L	<1.5	3.0	11/01/19 12:38	
4-Bromofluorobenzene (S)	%	89	70-130	11/01/19 12:38	
Dibromofluoromethane (S)	%	99	70-130	11/01/19 12:38	
Toluene-d8 (S)	%	97	70-130	11/01/19 12:38	

LABORATORY CONTROL SAMPLE: 1971030

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1-Trichloroethane	ug/L	50	53.4	107	70-130	
1,1,2,2-Tetrachloroethane	ug/L	50	46.5	93	70-130	
1,1,2-Trichloroethane	ug/L	50	50.1	100	70-130	
1,1-Dichloroethane	ug/L	50	54.2	108	73-150	
1,1-Dichloroethene	ug/L	50	52.9	106	73-138	
1,2,4-Trichlorobenzene	ug/L	50	49.6	99	70-130	
1,2-Dibromo-3-chloropropane	ug/L	50	43.9	88	64-129	
1,2-Dibromoethane (EDB)	ug/L	50	48.9	98	70-130	
1,2-Dichlorobenzene	ug/L	50	49.7	99	70-130	
1,2-Dichloroethane	ug/L	50	47.9	96	75-140	
1,2-Dichloropropane	ug/L	50	46.6	93	73-135	
1,3-Dichlorobenzene	ug/L	50	49.9	100	70-130	
1,4-Dichlorobenzene	ug/L	50	50.6	101	70-130	
Benzene	ug/L	50	48.5	97	70-130	

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## REPORT OF LABORATORY ANALYSIS

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## QUALITY CONTROL DATA

Project: 60615481 ALLOUEZ PHASE II ESA

Pace Project No.: 40198330

LABORATORY CONTROL SAMPLE: 1971030

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Bromodichloromethane	ug/L	50	48.5	97	70-130	
Bromoform	ug/L	50	48.4	97	68-129	
Bromomethane	ug/L	50	39.2	78	18-159	
Carbon tetrachloride	ug/L	50	53.1	106	70-130	
Chlorobenzene	ug/L	50	51.7	103	70-130	
Chloroethane	ug/L	50	49.2	98	53-147	
Chloroform	ug/L	50	47.1	94	74-136	
Chloromethane	ug/L	50	46.0	92	29-115	
cis-1,2-Dichloroethene	ug/L	50	48.4	97	70-130	
cis-1,3-Dichloropropene	ug/L	50	49.0	98	70-130	
Dibromochloromethane	ug/L	50	51.8	104	70-130	
Dichlorodifluoromethane	ug/L	50	49.4	99	10-130	
Ethylbenzene	ug/L	50	54.1	108	80-124	
Isopropylbenzene (Cumene)	ug/L	50	50.3	101	70-130	
m&p-Xylene	ug/L	100	111	111	70-130	
Methyl-tert-butyl ether	ug/L	50	46.7	93	54-137	
Methylene Chloride	ug/L	50	49.8	100	73-138	
o-Xylene	ug/L	50	54.1	108	70-130	
Styrene	ug/L	50	49.0	98	70-130	
Tetrachloroethene	ug/L	50	52.6	105	70-130	
Toluene	ug/L	50	52.6	105	80-126	
trans-1,2-Dichloroethene	ug/L	50	54.6	109	73-145	
trans-1,3-Dichloropropene	ug/L	50	46.9	94	70-130	
Trichloroethene	ug/L	50	52.2	104	70-130	
Trichlorofluoromethane	ug/L	50	52.7	105	76-147	
Vinyl chloride	ug/L	50	53.1	106	51-120	
Xylene (Total)	ug/L	150	165	110	70-130	
4-Bromofluorobenzene (S)	%			102	70-130	
Dibromofluoromethane (S)	%			97	70-130	
Toluene-d8 (S)	%			98	70-130	

MATRIX SPIKE &amp; MATRIX SPIKE DUPLICATE: 1971031 1971032

Parameter	Units	MS		MSD		MS		MSD		% Rec Limits	RPD	Max RPD	Qual
		40198330001	Result	Spike Conc.	Spike Conc.	Result	% Rec	Result	% Rec				
1,1,1-Trichloroethane	ug/L	<0.24	50	50	54.1	52.8	108	106	70-130	2	20		
1,1,2,2-Tetrachloroethane	ug/L	<0.28	50	50	46.6	48.0	93	96	70-130	3	20		
1,1,2-Trichloroethane	ug/L	<0.55	50	50	49.3	49.6	99	99	70-137	0	20		
1,1-Dichloroethane	ug/L	<0.27	50	50	54.4	53.9	109	108	73-153	1	20		
1,1-Dichloroethene	ug/L	<0.24	50	50	52.8	51.5	106	103	73-138	3	20		
1,2,4-Trichlorobenzene	ug/L	<0.95	50	50	49.0	49.6	98	99	70-130	1	20		
1,2-Dibromo-3-chloropropane	ug/L	<1.8	50	50	45.8	47.1	92	94	58-129	3	20		
1,2-Dibromoethane (EDB)	ug/L	<0.83	50	50	50.3	49.9	101	100	70-130	1	20		
1,2-Dichlorobenzene	ug/L	<0.71	50	50	50.4	50.5	101	101	70-130	0	20		

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## QUALITY CONTROL DATA

Project: 60615481 ALLOUEZ PHASE II ESA

Pace Project No.: 40198330

Parameter	Units	40198330001		MSD		1971032		% Rec	Limits	RPD	Max RPD	Qual
		MS Result	Spike Conc.	Spike Conc.	MS Result	MSD						
					% Rec	MSD % Rec						
1,2-Dichloroethane	ug/L	<0.28	50	50	49.3	49.8	99	100	75-140	1	20	
1,2-Dichloropropane	ug/L	<0.28	50	50	47.4	48.1	95	96	71-138	1	20	
1,3-Dichlorobenzene	ug/L	<0.63	50	50	48.9	49.6	98	99	70-130	1	20	
1,4-Dichlorobenzene	ug/L	<0.94	50	50	50.0	50.6	100	101	70-130	1	20	
Benzene	ug/L	<0.25	50	50	49.4	48.5	99	97	70-130	2	20	
Bromodichloromethane	ug/L	<0.36	50	50	50.5	48.8	101	98	70-130	3	20	
Bromoform	ug/L	<4.0	50	50	48.7	49.1	97	98	68-129	1	20	
Bromomethane	ug/L	<0.97	50	50	40.3	38.9	81	78	15-170	4	20	
Carbon tetrachloride	ug/L	<0.17	50	50	53.4	52.4	107	105	70-130	2	20	
Chlorobenzene	ug/L	<0.71	50	50	52.3	51.2	105	102	70-130	2	20	
Chloroethane	ug/L	<1.3	50	50	53.6	51.5	107	103	51-148	4	20	
Chloroform	ug/L	<1.3	50	50	48.2	47.1	96	94	74-136	2	20	
Chloromethane	ug/L	<2.2	50	50	47.9	47.4	95	94	23-115	1	20	
cis-1,2-Dichloroethene	ug/L	<0.27	50	50	48.6	48.7	97	97	70-131	0	20	
cis-1,3-Dichloropropene	ug/L	<3.6	50	50	50.6	49.0	101	98	70-130	3	20	
Dibromochloromethane	ug/L	<2.6	50	50	52.7	52.5	105	105	70-130	0	20	
Dichlorodifluoromethane	ug/L	<0.50	50	50	50.0	48.6	100	97	10-132	3	20	
Ethylbenzene	ug/L	<0.22	50	50	54.4	53.0	109	106	80-125	3	20	
Isopropylbenzene (Cumene)	ug/L	<0.39	50	50	50.7	49.7	101	99	70-130	2	20	
m&p-Xylene	ug/L	<0.47	100	100	112	112	112	111	70-130	0	20	
Methyl-tert-butyl ether	ug/L	<1.2	50	50	47.6	47.0	95	94	51-145	1	20	
Methylene Chloride	ug/L	<0.58	50	50	51.2	49.4	102	99	73-140	4	20	
o-Xylene	ug/L	<0.26	50	50	55.5	54.0	111	108	70-130	3	20	
Styrene	ug/L	<0.47	50	50	50.6	49.6	101	99	70-130	2	20	
Tetrachloroethene	ug/L	5.0	50	50	56.6	54.5	103	99	70-130	4	20	
Toluene	ug/L	0.42J	50	50	53.9	52.5	107	104	80-131	3	20	
trans-1,2-Dichloroethene	ug/L	<1.1	50	50	55.3	55.2	111	110	73-148	0	20	
trans-1,3-Dichloropropene	ug/L	<4.4	50	50	47.0	46.0	94	92	70-130	2	20	
Trichloroethene	ug/L	<0.26	50	50	52.4	52.5	105	105	70-130	0	20	
Trichlorofluoromethane	ug/L	<0.21	50	50	54.1	53.0	108	106	74-147	2	20	
Vinyl chloride	ug/L	<0.17	50	50	54.2	54.1	108	108	41-129	0	20	
Xylene (Total)	ug/L	<1.5	150	150	168	165	112	110	70-130	1	20	
4-Bromofluorobenzene (S)	%						100	100	70-130			pH
Dibromofluoromethane (S)	%						97	95	70-130			
Toluene-d8 (S)	%						97	98	70-130			

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## REPORT OF LABORATORY ANALYSIS

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## QUALITY CONTROL DATA

Project: 60615481 ALLOUEZ PHASE II ESA

Pace Project No.: 40198330

QC Batch:	339432	Analysis Method:	EPA 8260
QC Batch Method:	EPA 8260	Analysis Description:	8260 MSV
Associated Lab Samples:	40198330010		

METHOD BLANK: 1971231                          Matrix: Water

Associated Lab Samples: 40198330010

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1,1,2-Tetrachloroethane	ug/L	<0.27	1.0	11/01/19 07:01	
1,1,1-Trichloroethane	ug/L	<0.24	1.0	11/01/19 07:01	
1,1,2,2-Tetrachloroethane	ug/L	<0.28	1.0	11/01/19 07:01	
1,1,2-Trichloroethane	ug/L	<0.55	5.0	11/01/19 07:01	
1,1-Dichloroethane	ug/L	<0.27	1.0	11/01/19 07:01	
1,1-Dichloroethene	ug/L	<0.24	1.0	11/01/19 07:01	
1,1-Dichloropropene	ug/L	<0.54	1.8	11/01/19 07:01	
1,2,3-Trichlorobenzene	ug/L	<0.63	5.0	11/01/19 07:01	
1,2,3-Trichloropropane	ug/L	<0.59	5.0	11/01/19 07:01	
1,2,4-Trichlorobenzene	ug/L	<0.95	5.0	11/01/19 07:01	
1,2,4-Trimethylbenzene	ug/L	<0.84	2.8	11/01/19 07:01	
1,2-Dibromo-3-chloropropane	ug/L	<1.8	5.9	11/01/19 07:01	
1,2-Dibromoethane (EDB)	ug/L	<0.83	2.8	11/01/19 07:01	
1,2-Dichlorobenzene	ug/L	<0.71	2.4	11/01/19 07:01	
1,2-Dichloroethane	ug/L	<0.28	1.0	11/01/19 07:01	
1,2-Dichloropropane	ug/L	<0.28	1.0	11/01/19 07:01	
1,3,5-Trimethylbenzene	ug/L	<0.87	2.9	11/01/19 07:01	
1,3-Dichlorobenzene	ug/L	<0.63	2.1	11/01/19 07:01	
1,3-Dichloropropane	ug/L	<0.83	2.8	11/01/19 07:01	
1,4-Dichlorobenzene	ug/L	<0.94	3.1	11/01/19 07:01	
2,2-Dichloropropane	ug/L	<2.3	7.6	11/01/19 07:01	
2-Chlorotoluene	ug/L	<0.93	5.0	11/01/19 07:01	
4-Chlorotoluene	ug/L	<0.76	2.5	11/01/19 07:01	
Benzene	ug/L	<0.25	1.0	11/01/19 07:01	
Bromobenzene	ug/L	<0.24	1.0	11/01/19 07:01	
Bromochloromethane	ug/L	<0.36	5.0	11/01/19 07:01	
Bromodichloromethane	ug/L	<0.36	1.2	11/01/19 07:01	
Bromoform	ug/L	<4.0	13.2	11/01/19 07:01	
Bromomethane	ug/L	<0.97	5.0	11/01/19 07:01	
Carbon tetrachloride	ug/L	<0.17	1.0	11/01/19 07:01	
Chlorobenzene	ug/L	<0.71	2.4	11/01/19 07:01	
Chloroethane	ug/L	<1.3	5.0	11/01/19 07:01	
Chloroform	ug/L	<1.3	5.0	11/01/19 07:01	
Chloromethane	ug/L	<2.2	7.3	11/01/19 07:01	
cis-1,2-Dichloroethene	ug/L	<0.27	1.0	11/01/19 07:01	
cis-1,3-Dichloropropene	ug/L	<3.6	12.1	11/01/19 07:01	
Dibromochloromethane	ug/L	<2.6	8.7	11/01/19 07:01	
Dibromomethane	ug/L	<0.94	3.1	11/01/19 07:01	
Dichlorodifluoromethane	ug/L	<0.50	5.0	11/01/19 07:01	
Diisopropyl ether	ug/L	<1.9	6.3	11/01/19 07:01	
Ethylbenzene	ug/L	<0.22	1.0	11/01/19 07:01	

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## REPORT OF LABORATORY ANALYSIS

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## QUALITY CONTROL DATA

Project: 60615481 ALLOUEZ PHASE II ESA

Pace Project No.: 40198330

METHOD BLANK: 1971231

Matrix: Water

Associated Lab Samples: 40198330010

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Hexachloro-1,3-butadiene	ug/L	<1.2	5.0	11/01/19 07:01	
Isopropylbenzene (Cumene)	ug/L	<0.39	5.0	11/01/19 07:01	
m&p-Xylene	ug/L	<0.47	2.0	11/01/19 07:01	
Methyl-tert-butyl ether	ug/L	<1.2	4.2	11/01/19 07:01	
Methylene Chloride	ug/L	<0.58	5.0	11/01/19 07:01	
n-Butylbenzene	ug/L	<0.71	2.4	11/01/19 07:01	
n-Propylbenzene	ug/L	<0.81	5.0	11/01/19 07:01	
Naphthalene	ug/L	<1.2	5.0	11/01/19 07:01	
o-Xylene	ug/L	<0.26	1.0	11/01/19 07:01	
p-Isopropyltoluene	ug/L	<0.80	2.7	11/01/19 07:01	
sec-Butylbenzene	ug/L	<0.85	5.0	11/01/19 07:01	
Styrene	ug/L	<0.47	1.6	11/01/19 07:01	
tert-Butylbenzene	ug/L	<0.30	1.0	11/01/19 07:01	
Tetrachloroethene	ug/L	<0.33	1.1	11/01/19 07:01	
Toluene	ug/L	<0.17	5.0	11/01/19 07:01	
trans-1,2-Dichloroethene	ug/L	<1.1	3.6	11/01/19 07:01	
trans-1,3-Dichloropropene	ug/L	<4.4	14.6	11/01/19 07:01	
Trichloroethene	ug/L	<0.26	1.0	11/01/19 07:01	
Trichlorofluoromethane	ug/L	<0.21	1.0	11/01/19 07:01	
Vinyl chloride	ug/L	<0.17	1.0	11/01/19 07:01	
Xylene (Total)	ug/L	<1.5	3.0	11/01/19 07:01	
4-Bromofluorobenzene (S)	%	91	70-130	11/01/19 07:01	
Dibromofluoromethane (S)	%	98	70-130	11/01/19 07:01	
Toluene-d8 (S)	%	98	70-130	11/01/19 07:01	

LABORATORY CONTROL SAMPLE: 1971232

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1-Trichloroethane	ug/L	50	55.2	110	70-130	
1,1,2,2-Tetrachloroethane	ug/L	50	47.5	95	70-130	
1,1,2-Trichloroethane	ug/L	50	51.3	103	70-130	
1,1-Dichloroethane	ug/L	50	55.7	111	73-150	
1,1-Dichloroethene	ug/L	50	54.3	109	73-138	
1,2,4-Trichlorobenzene	ug/L	50	50.0	100	70-130	
1,2-Dibromo-3-chloropropane	ug/L	50	45.2	90	64-129	
1,2-Dibromoethane (EDB)	ug/L	50	50.5	101	70-130	
1,2-Dichlorobenzene	ug/L	50	51.2	102	70-130	
1,2-Dichloroethane	ug/L	50	50.3	101	75-140	
1,2-Dichloropropane	ug/L	50	49.5	99	73-135	
1,3-Dichlorobenzene	ug/L	50	50.7	101	70-130	
1,4-Dichlorobenzene	ug/L	50	50.9	102	70-130	
Benzene	ug/L	50	49.4	99	70-130	
Bromodichloromethane	ug/L	50	50.7	101	70-130	
Bromoform	ug/L	50	51.1	102	68-129	

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## QUALITY CONTROL DATA

Project: 60615481 ALLOUEZ PHASE II ESA

Pace Project No.: 40198330

LABORATORY CONTROL SAMPLE: 1971232

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Bromomethane	ug/L	50	38.8	78	18-159	
Carbon tetrachloride	ug/L	50	53.7	107	70-130	
Chlorobenzene	ug/L	50	53.4	107	70-130	
Chloroethane	ug/L	50	55.0	110	53-147	
Chloroform	ug/L	50	49.0	98	74-136	
Chloromethane	ug/L	50	49.7	99	29-115	
cis-1,2-Dichloroethene	ug/L	50	49.8	100	70-130	
cis-1,3-Dichloropropene	ug/L	50	49.2	98	70-130	
Dibromochloromethane	ug/L	50	54.3	109	70-130	
Dichlorodifluoromethane	ug/L	50	53.7	107	10-130	
Ethylbenzene	ug/L	50	55.2	110	80-124	
Isopropylbenzene (Cumene)	ug/L	50	52.5	105	70-130	
m&p-Xylene	ug/L	100	115	115	70-130	
Methyl-tert-butyl ether	ug/L	50	48.2	96	54-137	
Methylene Chloride	ug/L	50	52.0	104	73-138	
o-Xylene	ug/L	50	56.2	112	70-130	
Styrene	ug/L	50	51.2	102	70-130	
Tetrachloroethene	ug/L	50	53.0	106	70-130	
Toluene	ug/L	50	54.0	108	80-126	
trans-1,2-Dichloroethene	ug/L	50	56.2	112	73-145	
trans-1,3-Dichloropropene	ug/L	50	45.3	91	70-130	
Trichloroethene	ug/L	50	53.8	108	70-130	
Trichlorofluoromethane	ug/L	50	54.7	109	76-147	
Vinyl chloride	ug/L	50	55.2	110	51-120	
Xylene (Total)	ug/L	150	171	114	70-130	
4-Bromofluorobenzene (S)	%			100	70-130	
Dibromofluoromethane (S)	%			98	70-130	
Toluene-d8 (S)	%			99	70-130	

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## QUALIFIERS

Project: 60615481 ALLOUEZ PHASE II ESA  
Pace Project No.: 40198330

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### DEFINITIONS

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

ND - Not Detected at or above LOD.

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

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

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

S - Surrogate

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

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

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

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

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

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

TNI - The NELAC Institute.

### LABORATORIES

PASI-G Pace Analytical Services - Green Bay

### ANALYTE QUALIFIERS

HS Results are from sample aliquot taken from VOA vial with headspace (air bubble greater than 6 mm diameter).

pH Post-analysis pH measurement indicates insufficient VOA sample preservation.

## REPORT OF LABORATORY ANALYSIS

## QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: 60615481 ALLOUEZ PHASE II ESA

Pace Project No.: 40198330

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
40198330001	SP-109	EPA 8260	339381		
40198330002	SP-105	EPA 8260	339381		
40198330003	SP-111	EPA 8260	339381		
40198330004	SP-112	EPA 8260	339381		
40198330005	SP-114	EPA 8260	339381		
40198330006	DUP SP-112	EPA 8260	339381		
40198330007	MW-5	EPA 8260	339381		
40198330008	MW-4	EPA 8260	339381		
40198330009	MW-6	EPA 8260	339381		
40198330010	TRIP BLANK	EPA 8260	339432		

## REPORT OF LABORATORY ANALYSIS

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# Sample Preservation Receipt Form

Client Name: AECOM

Pace Analytical Services, LLC 38  
1241 Bellevue Street, Suite 9  
Green Bay, WI 54302  
Page 37 of 38

Project # 40198330

All containers needing preservation have been checked and noted below:  Yes  No  N/A

Lab Lot# of pH paper:

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

Initial when completed:

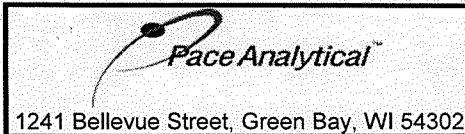
Date/  
Time:

Pace Lab #	Glass					Plastic					Vials					Jars			General			VOA Vials (>6mm) *	H2SO4 pH ≤2	NaOH+Zn Act pH ≥9	NaOH pH ≥12	HNO3 pH ≤2	pH after adjusted	Volume (mL)	
	AG1U	AG1H	AG4S	AG4U	AG5U	AG2S	BG3U	BP1U	BP2N	BP2Z	BP3U	BP3B	BP3N	BP3S	DG9A	DG9T	VG9U	VG9H	VG9M	VG9D	JGFU	WGFU	WPFU	SP5T	ZPLC	GN			
001																													2.5 / 5 / 10
002																													2.5 / 5 / 10
003																													2.5 / 5 / 10
004																													2.5 / 5 / 10
005																													2.5 / 5 / 10
006																													2.5 / 5 / 10
007																													2.5 / 5 / 10
008																													2.5 / 5 / 10
009																													2.5 / 5 / 10
010																													2.5 / 5 / 10
011																													2.5 / 5 / 10
012																													2.5 / 5 / 10
013																													2.5 / 5 / 10
014																													2.5 / 5 / 10
015																													2.5 / 5 / 10
016																													2.5 / 5 / 10
017																													2.5 / 5 / 10
018																													2.5 / 5 / 10
019																													2.5 / 5 / 10
020																													2.5 / 5 / 10

Exceptions to preservation check: VOA, Coliform, TOC, TOX, TOH, O&G, WJ DRO, Phenolics, Other:

Headspace in VOA Vials (>6mm) :  Yes  No  N/A \*If yes look in headspace column

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



Document Name: Sample Condition Upon Receipt (SCUR)	Document Revised: 25Apr2018
Document No.: F-GB-C-031-Rev.07	Issuing Authority: Pace Green Bay Quality Office

### Sample Condition Upon Receipt Form (SCUR)

Client Name: AECOM Project #: WO# : 40198330

Courier:  CS Logistics  Fed Ex  Speedee  UPS  Waltco  
 Client  Pace Other: \_\_\_\_\_

Tracking #: N/A

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

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

Packing Material:  Bubble Wrap  Bubble Bags  None  Other

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

Cooler Temperature Uncorr: 201 /Corr: \_\_\_\_\_

Temp Blank Present:  yes  no Biological Tissue is Frozen:  yes  no  
Temp should be above freezing to 6°C.  
Biota Samples may be received at ≤ 0°C.

Person examining contents:  
Date: 10/31/19  
Initials: JTB

Chain of Custody Present:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	1.
Chain of Custody Filled Out:	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	2. <u>No Page#, No mail info 10/31/19 JTB</u>
Chain of Custody Relinquished:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	3.
Sampler Name & Signature on COC:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	4.
Samples Arrived within Hold Time: - VOA Samples frozen upon receipt	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	5. Date/Time: _____
Short Hold Time Analysis (<72hr):	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	6.
Rush Turn Around Time Requested:	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	7.
Sufficient Volume: For Analysis: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No MS/MSD: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	8.	
Correct Containers Used: -Pace Containers Used: -Pace IR Containers Used:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	9.
Containers Intact:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	10.
Filtered volume received for Dissolved tests	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	11.
Sample Labels match COC: -Includes date/time/ID/Analysis Matrix: <u>W</u>	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	12. <u>① HEAVY Siderment in 001, 002, 003 10/31/19 JTB</u>
Trip Blank Present:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	13.
Trip Blank Custody Seals Present	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
Pace Trip Blank Lot # (if purchased): <u>433</u>		

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

Person Contacted: \_\_\_\_\_ Date/Time: \_\_\_\_\_

Comments/ Resolution: ① HEAVY Siderment in 001, 002, 003 10/31/19 JTB

Project Manager Review: Otk Date: 10/31/19

February 04, 2020

Lanette Altenbach  
AECOM, Inc.  
1555 N River Center Drive  
Suite 214  
Milwaukee, WI 53212

RE: Project: 60615481 ALLOUEZ PH II  
Pace Project No.: 40202694

Dear Lanette Altenbach:

Enclosed are the analytical results for sample(s) received by the laboratory on January 30, 2020. The results relate only to the samples included in this report. Results reported herein conform to the most current, applicable TNI/NELAC standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

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

Sincerely,



Christopher Hyska  
christopher.hyska@pacelabs.com  
(920)469-2436  
Project Manager

Enclosures



## REPORT OF LABORATORY ANALYSIS

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## CERTIFICATIONS

Project: 60615481 ALLOUEZ PH II  
Pace Project No.: 40202694

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### Pace Analytical Services Green Bay

1241 Bellevue Street, Green Bay, WI 54302  
Florida/NELAP Certification #: E87948  
Illinois Certification #: 200050  
Kentucky UST Certification #: 82  
Louisiana Certification #: 04168  
Minnesota Certification #: 055-999-334  
New York Certification #: 12064  
North Dakota Certification #: R-150

Virginia VELAP ID: 460263  
South Carolina Certification #: 83006001  
Texas Certification #: T104704529-14-1  
Wisconsin Certification #: 405132750  
Wisconsin DATCP Certification #: 105-444  
USDA Soil Permit #: P330-16-00157  
Federal Fish & Wildlife Permit #: LE51774A-0

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## REPORT OF LABORATORY ANALYSIS

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## SAMPLE SUMMARY

Project: 60615481 ALLOUEZ PH II

Pace Project No.: 40202694

Lab ID	Sample ID	Matrix	Date Collected	Date Received
40202694001	SP-109	Water	01/30/20 12:12	01/30/20 16:30
40202694002	SP-105	Water	01/30/20 12:34	01/30/20 16:30
40202694003	SP-111	Water	01/30/20 12:55	01/30/20 16:30
40202694004	SP-112	Water	01/30/20 13:12	01/30/20 16:30
40202694005	SP-114	Water	01/30/20 13:35	01/30/20 16:30
40202694006	MW-4	Water	01/30/20 13:58	01/30/20 16:30
40202694007	MW-5	Water	01/30/20 14:20	01/30/20 16:30
40202694008	MW-6	Water	01/30/20 15:02	01/30/20 16:30
40202694009	TRIP	Water	01/30/20 15:10	01/30/20 16:30

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## SAMPLE ANALYTE COUNT

Project: 60615481 ALLOUEZ PH II

Pace Project No.: 40202694

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
40202694001	SP-109	EPA 8260	HNW	65	PASI-G
40202694002	SP-105	EPA 8260	HNW	65	PASI-G
40202694003	SP-111	EPA 8260	HNW	65	PASI-G
40202694004	SP-112	EPA 8260	HNW	65	PASI-G
40202694005	SP-114	EPA 8260	HNW	65	PASI-G
40202694006	MW-4	EPA 8260	HNW	65	PASI-G
40202694007	MW-5	EPA 8260	HNW	65	PASI-G
40202694008	MW-6	EPA 8260	HNW	65	PASI-G
40202694009	TRIP	EPA 8260	HNW	65	PASI-G

## REPORT OF LABORATORY ANALYSIS

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## SUMMARY OF DETECTION

Project: 60615481 ALLOUEZ PH II

Pace Project No.: 40202694

Lab Sample ID	Client Sample ID					
Method	Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
<b>40202694002</b>	<b>SP-105</b>					
EPA 8260	Benzene	30.1	ug/L	1.0	02/03/20 14:59	
EPA 8260	cis-1,2-Dichloroethene	26.8	ug/L	1.0	02/03/20 14:59	
EPA 8260	trans-1,2-Dichloroethene	13.9	ug/L	3.6	02/03/20 14:59	
EPA 8260	Ethylbenzene	2.6	ug/L	1.0	02/03/20 14:59	
EPA 8260	Isopropylbenzene (Cumene)	15.2	ug/L	5.0	02/03/20 14:59	
EPA 8260	n-Propylbenzene	4.9J	ug/L	5.0	02/03/20 14:59	
EPA 8260	Tetrachloroethene	92.6	ug/L	1.1	02/03/20 14:59	
EPA 8260	Toluene	18.3	ug/L	5.0	02/03/20 14:59	
EPA 8260	Trichloroethene	10.5	ug/L	1.0	02/03/20 14:59	
EPA 8260	Xylene (Total)	11.5	ug/L	3.0	02/03/20 14:59	
EPA 8260	m&p-Xylene	0.97J	ug/L	2.0	02/03/20 14:59	
EPA 8260	o-Xylene	10.5	ug/L	1.0	02/03/20 14:59	
<b>40202694003</b>	<b>SP-111</b>					
EPA 8260	Tetrachloroethene	3.2	ug/L	1.1	02/04/20 07:43	
EPA 8260	Toluene	0.31J	ug/L	5.0	02/04/20 07:43	
<b>40202694004</b>	<b>SP-112</b>					
EPA 8260	Tetrachloroethene	39.9	ug/L	1.1	02/04/20 08:05	
<b>40202694005</b>	<b>SP-114</b>					
EPA 8260	Benzene	0.57J	ug/L	1.0	02/04/20 08:28	
EPA 8260	cis-1,2-Dichloroethene	1.4	ug/L	1.0	02/04/20 08:28	
EPA 8260	Tetrachloroethene	27.2	ug/L	1.1	02/04/20 08:28	
EPA 8260	Trichloroethene	3.0	ug/L	1.0	02/04/20 08:28	
<b>40202694006</b>	<b>MW-4</b>					
EPA 8260	cis-1,2-Dichloroethene	1.3	ug/L	1.0	02/04/20 08:50	
EPA 8260	Tetrachloroethene	65.7	ug/L	1.1	02/04/20 08:50	
EPA 8260	Trichloroethene	1.8	ug/L	1.0	02/04/20 08:50	
<b>40202694007</b>	<b>MW-5</b>					
EPA 8260	Benzene	1.3J	ug/L	5.0	02/04/20 09:13	
EPA 8260	cis-1,2-Dichloroethene	85.5	ug/L	5.0	02/04/20 09:13	
EPA 8260	trans-1,2-Dichloroethene	8.3J	ug/L	18.2	02/04/20 09:13	
EPA 8260	Ethylbenzene	74.1	ug/L	5.0	02/04/20 09:13	
EPA 8260	Isopropylbenzene (Cumene)	17.4J	ug/L	25.0	02/04/20 09:13	
EPA 8260	Naphthalene	95.5	ug/L	25.0	02/04/20 09:13	
EPA 8260	n-Propylbenzene	28.4	ug/L	25.0	02/04/20 09:13	
EPA 8260	Tetrachloroethene	1.9J	ug/L	5.4	02/04/20 09:13	
EPA 8260	Toluene	4.7J	ug/L	25.0	02/04/20 09:13	
EPA 8260	1,2,4-Trimethylbenzene	535	ug/L	14.0	02/04/20 09:13	
EPA 8260	1,3,5-Trimethylbenzene	34.0	ug/L	14.6	02/04/20 09:13	
EPA 8260	Xylene (Total)	228	ug/L	15.0	02/04/20 09:13	
EPA 8260	m&p-Xylene	196	ug/L	10.0	02/04/20 09:13	
EPA 8260	o-Xylene	31.9	ug/L	5.0	02/04/20 09:13	
<b>40202694008</b>	<b>MW-6</b>					
EPA 8260	Benzene	12.0	ug/L	4.0	02/04/20 09:35	
EPA 8260	cis-1,2-Dichloroethene	48.5	ug/L	4.0	02/04/20 09:35	

## REPORT OF LABORATORY ANALYSIS

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## SUMMARY OF DETECTION

Project: 60615481 ALLOUEZ PH II

Pace Project No.: 40202694

Lab Sample ID	Client Sample ID					
Method	Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
<b>40202694008</b>	<b>MW-6</b>					
EPA 8260	trans-1,2-Dichloroethene	90.0	ug/L	14.5	02/04/20 09:35	
EPA 8260	Ethylbenzene	30.5	ug/L	4.0	02/04/20 09:35	
EPA 8260	Isopropylbenzene (Cumene)	2.3J	ug/L	20.0	02/04/20 09:35	
EPA 8260	Naphthalene	6.8J	ug/L	20.0	02/04/20 09:35	
EPA 8260	n-Propylbenzene	5.1J	ug/L	20.0	02/04/20 09:35	
EPA 8260	Tetrachloroethene	113	ug/L	4.4	02/04/20 09:35	
EPA 8260	Toluene	21.0	ug/L	20.0	02/04/20 09:35	
EPA 8260	Trichloroethene	251	ug/L	4.0	02/04/20 09:35	
EPA 8260	1,2,4-Trimethylbenzene	34.1	ug/L	11.2	02/04/20 09:35	
EPA 8260	Xylene (Total)	56.4	ug/L	12.0	02/04/20 09:35	
EPA 8260	m&p-Xylene	51.3	ug/L	8.0	02/04/20 09:35	
EPA 8260	o-Xylene	5.1	ug/L	4.0	02/04/20 09:35	

## REPORT OF LABORATORY ANALYSIS

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## ANALYTICAL RESULTS

Project: 60615481 ALLOUEZ PH II

Pace Project No.: 40202694

---

**Sample: SP-109**      **Lab ID: 40202694001**      Collected: 01/30/20 12:12      Received: 01/30/20 16:30      Matrix: Water

---

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260 MSV</b>	Analytical Method: EPA 8260								
Benzene	<0.25	ug/L	1.0	0.25	1		02/03/20 14:36	71-43-2	
Bromobenzene	<0.24	ug/L	1.0	0.24	1		02/03/20 14:36	108-86-1	
Bromochloromethane	<0.36	ug/L	5.0	0.36	1		02/03/20 14:36	74-97-5	
Bromodichloromethane	<0.36	ug/L	1.2	0.36	1		02/03/20 14:36	75-27-4	
Bromoform	<4.0	ug/L	13.2	4.0	1		02/03/20 14:36	75-25-2	
Bromomethane	<0.97	ug/L	5.0	0.97	1		02/03/20 14:36	74-83-9	
n-Butylbenzene	<0.71	ug/L	2.4	0.71	1		02/03/20 14:36	104-51-8	
sec-Butylbenzene	<0.85	ug/L	5.0	0.85	1		02/03/20 14:36	135-98-8	
tert-Butylbenzene	<0.30	ug/L	1.0	0.30	1		02/03/20 14:36	98-06-6	
Carbon tetrachloride	<0.17	ug/L	1.0	0.17	1		02/03/20 14:36	56-23-5	
Chlorobenzene	<0.71	ug/L	2.4	0.71	1		02/03/20 14:36	108-90-7	
Chloroethane	<1.3	ug/L	5.0	1.3	1		02/03/20 14:36	75-00-3	
Chloroform	<1.3	ug/L	5.0	1.3	1		02/03/20 14:36	67-66-3	
Chloromethane	<2.2	ug/L	7.3	2.2	1		02/03/20 14:36	74-87-3	
2-Chlorotoluene	<0.93	ug/L	5.0	0.93	1		02/03/20 14:36	95-49-8	
4-Chlorotoluene	<0.76	ug/L	2.5	0.76	1		02/03/20 14:36	106-43-4	
1,2-Dibromo-3-chloropropane	<1.8	ug/L	5.9	1.8	1		02/03/20 14:36	96-12-8	
Dibromochloromethane	<2.6	ug/L	8.7	2.6	1		02/03/20 14:36	124-48-1	
1,2-Dibromoethane (EDB)	<0.83	ug/L	2.8	0.83	1		02/03/20 14:36	106-93-4	
Dibromomethane	<0.94	ug/L	3.1	0.94	1		02/03/20 14:36	74-95-3	
1,2-Dichlorobenzene	<0.71	ug/L	2.4	0.71	1		02/03/20 14:36	95-50-1	
1,3-Dichlorobenzene	<0.63	ug/L	2.1	0.63	1		02/03/20 14:36	541-73-1	
1,4-Dichlorobenzene	<0.94	ug/L	3.1	0.94	1		02/03/20 14:36	106-46-7	
Dichlorodifluoromethane	<0.50	ug/L	5.0	0.50	1		02/03/20 14:36	75-71-8	
1,1-Dichloroethane	<0.27	ug/L	1.0	0.27	1		02/03/20 14:36	75-34-3	
1,2-Dichloroethane	<0.28	ug/L	1.0	0.28	1		02/03/20 14:36	107-06-2	
1,1-Dichloroethene	<0.24	ug/L	1.0	0.24	1		02/03/20 14:36	75-35-4	
cis-1,2-Dichloroethene	<0.27	ug/L	1.0	0.27	1		02/03/20 14:36	156-59-2	
trans-1,2-Dichloroethene	<1.1	ug/L	3.6	1.1	1		02/03/20 14:36	156-60-5	
1,2-Dichloropropane	<0.28	ug/L	1.0	0.28	1		02/03/20 14:36	78-87-5	
1,3-Dichloropropane	<0.83	ug/L	2.8	0.83	1		02/03/20 14:36	142-28-9	
2,2-Dichloropropane	<2.3	ug/L	7.6	2.3	1		02/03/20 14:36	594-20-7	
1,1-Dichloropropene	<0.54	ug/L	1.8	0.54	1		02/03/20 14:36	563-58-6	
cis-1,3-Dichloropropene	<3.6	ug/L	12.1	3.6	1		02/03/20 14:36	10061-01-5	
trans-1,3-Dichloropropene	<4.4	ug/L	14.6	4.4	1		02/03/20 14:36	10061-02-6	
Diisopropyl ether	<1.9	ug/L	6.3	1.9	1		02/03/20 14:36	108-20-3	
Ethylbenzene	<0.22	ug/L	1.0	0.22	1		02/03/20 14:36	100-41-4	
Hexachloro-1,3-butadiene	<1.2	ug/L	5.0	1.2	1		02/03/20 14:36	87-68-3	
Isopropylbenzene (Cumene)	<0.39	ug/L	5.0	0.39	1		02/03/20 14:36	98-82-8	
p-Isopropyltoluene	<0.80	ug/L	2.7	0.80	1		02/03/20 14:36	99-87-6	
Methylene Chloride	<0.58	ug/L	5.0	0.58	1		02/03/20 14:36	75-09-2	
Methyl-tert-butyl ether	<1.2	ug/L	4.2	1.2	1		02/03/20 14:36	1634-04-4	
Naphthalene	<1.2	ug/L	5.0	1.2	1		02/03/20 14:36	91-20-3	
n-Propylbenzene	<0.81	ug/L	5.0	0.81	1		02/03/20 14:36	103-65-1	
Styrene	<0.47	ug/L	1.6	0.47	1		02/03/20 14:36	100-42-5	
1,1,1,2-Tetrachloroethane	<0.27	ug/L	1.0	0.27	1		02/03/20 14:36	630-20-6	

## REPORT OF LABORATORY ANALYSIS

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## ANALYTICAL RESULTS

Project: 60615481 ALLOUEZ PH II

Pace Project No.: 40202694

---

**Sample: SP-109**      **Lab ID: 40202694001**      Collected: 01/30/20 12:12      Received: 01/30/20 16:30      Matrix: Water

---

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260 MSV</b>	Analytical Method: EPA 8260								
1,1,2,2-Tetrachloroethane	<0.28	ug/L	1.0	0.28	1		02/03/20 14:36	79-34-5	
Tetrachloroethene	<0.33	ug/L	1.1	0.33	1		02/03/20 14:36	127-18-4	
Toluene	<0.17	ug/L	5.0	0.17	1		02/03/20 14:36	108-88-3	
1,2,3-Trichlorobenzene	<0.63	ug/L	5.0	0.63	1		02/03/20 14:36	87-61-6	
1,2,4-Trichlorobenzene	<0.95	ug/L	5.0	0.95	1		02/03/20 14:36	120-82-1	
1,1,1-Trichloroethane	<0.24	ug/L	1.0	0.24	1		02/03/20 14:36	71-55-6	
1,1,2-Trichloroethane	<0.55	ug/L	5.0	0.55	1		02/03/20 14:36	79-00-5	
Trichloroethene	<0.26	ug/L	1.0	0.26	1		02/03/20 14:36	79-01-6	
Trichlorofluoromethane	<0.21	ug/L	1.0	0.21	1		02/03/20 14:36	75-69-4	
1,2,3-Trichloropropane	<0.59	ug/L	5.0	0.59	1		02/03/20 14:36	96-18-4	
1,2,4-Trimethylbenzene	<0.84	ug/L	2.8	0.84	1		02/03/20 14:36	95-63-6	
1,3,5-Trimethylbenzene	<0.87	ug/L	2.9	0.87	1		02/03/20 14:36	108-67-8	
Vinyl chloride	<0.17	ug/L	1.0	0.17	1		02/03/20 14:36	75-01-4	
Xylene (Total)	<1.5	ug/L	3.0	1.5	1		02/03/20 14:36	1330-20-7	
m&p-Xylene	<0.47	ug/L	2.0	0.47	1		02/03/20 14:36	179601-23-1	
o-Xylene	<0.26	ug/L	1.0	0.26	1		02/03/20 14:36	95-47-6	
<b>Surrogates</b>									
4-Bromofluorobenzene (S)	97	%	70-130		1		02/03/20 14:36	460-00-4	
Dibromofluoromethane (S)	106	%	70-130		1		02/03/20 14:36	1868-53-7	
Toluene-d8 (S)	102	%	70-130		1		02/03/20 14:36	2037-26-5	

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## ANALYTICAL RESULTS

Project: 60615481 ALLOUEZ PH II

Pace Project No.: 40202694

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**Sample: SP-105      Lab ID: 40202694002      Collected: 01/30/20 12:34      Received: 01/30/20 16:30      Matrix: Water**


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Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260 MSV</b>	Analytical Method: EPA 8260								
Benzene	<b>30.1</b>	ug/L	1.0	0.25	1		02/03/20 14:59	71-43-2	
Bromobenzene	<0.24	ug/L	1.0	0.24	1		02/03/20 14:59	108-86-1	
Bromochloromethane	<0.36	ug/L	5.0	0.36	1		02/03/20 14:59	74-97-5	
Bromodichloromethane	<0.36	ug/L	1.2	0.36	1		02/03/20 14:59	75-27-4	
Bromoform	<4.0	ug/L	13.2	4.0	1		02/03/20 14:59	75-25-2	
Bromomethane	<0.97	ug/L	5.0	0.97	1		02/03/20 14:59	74-83-9	
n-Butylbenzene	<0.71	ug/L	2.4	0.71	1		02/03/20 14:59	104-51-8	
sec-Butylbenzene	<0.85	ug/L	5.0	0.85	1		02/03/20 14:59	135-98-8	
tert-Butylbenzene	<0.30	ug/L	1.0	0.30	1		02/03/20 14:59	98-06-6	
Carbon tetrachloride	<0.17	ug/L	1.0	0.17	1		02/03/20 14:59	56-23-5	
Chlorobenzene	<0.71	ug/L	2.4	0.71	1		02/03/20 14:59	108-90-7	
Chloroethane	<1.3	ug/L	5.0	1.3	1		02/03/20 14:59	75-00-3	
Chloroform	<1.3	ug/L	5.0	1.3	1		02/03/20 14:59	67-66-3	
Chloromethane	<2.2	ug/L	7.3	2.2	1		02/03/20 14:59	74-87-3	
2-Chlorotoluene	<0.93	ug/L	5.0	0.93	1		02/03/20 14:59	95-49-8	
4-Chlorotoluene	<0.76	ug/L	2.5	0.76	1		02/03/20 14:59	106-43-4	
1,2-Dibromo-3-chloropropane	<1.8	ug/L	5.9	1.8	1		02/03/20 14:59	96-12-8	
Dibromochloromethane	<2.6	ug/L	8.7	2.6	1		02/03/20 14:59	124-48-1	
1,2-Dibromoethane (EDB)	<0.83	ug/L	2.8	0.83	1		02/03/20 14:59	106-93-4	
Dibromomethane	<0.94	ug/L	3.1	0.94	1		02/03/20 14:59	74-95-3	
1,2-Dichlorobenzene	<0.71	ug/L	2.4	0.71	1		02/03/20 14:59	95-50-1	
1,3-Dichlorobenzene	<0.63	ug/L	2.1	0.63	1		02/03/20 14:59	541-73-1	
1,4-Dichlorobenzene	<0.94	ug/L	3.1	0.94	1		02/03/20 14:59	106-46-7	
Dichlorodifluoromethane	<0.50	ug/L	5.0	0.50	1		02/03/20 14:59	75-71-8	
1,1-Dichloroethane	<0.27	ug/L	1.0	0.27	1		02/03/20 14:59	75-34-3	
1,2-Dichloroethane	<0.28	ug/L	1.0	0.28	1		02/03/20 14:59	107-06-2	
1,1-Dichloroethene	<0.24	ug/L	1.0	0.24	1		02/03/20 14:59	75-35-4	
cis-1,2-Dichloroethene	<b>26.8</b>	ug/L	1.0	0.27	1		02/03/20 14:59	156-59-2	
trans-1,2-Dichloroethene	<b>13.9</b>	ug/L	3.6	1.1	1		02/03/20 14:59	156-60-5	
1,2-Dichloropropane	<0.28	ug/L	1.0	0.28	1		02/03/20 14:59	78-87-5	
1,3-Dichloropropane	<0.83	ug/L	2.8	0.83	1		02/03/20 14:59	142-28-9	
2,2-Dichloropropane	<2.3	ug/L	7.6	2.3	1		02/03/20 14:59	594-20-7	
1,1-Dichloropropene	<0.54	ug/L	1.8	0.54	1		02/03/20 14:59	563-58-6	
cis-1,3-Dichloropropene	<3.6	ug/L	12.1	3.6	1		02/03/20 14:59	10061-01-5	
trans-1,3-Dichloropropene	<4.4	ug/L	14.6	4.4	1		02/03/20 14:59	10061-02-6	
Diisopropyl ether	<1.9	ug/L	6.3	1.9	1		02/03/20 14:59	108-20-3	
Ethylbenzene	<b>2.6</b>	ug/L	1.0	0.22	1		02/03/20 14:59	100-41-4	
Hexachloro-1,3-butadiene	<1.2	ug/L	5.0	1.2	1		02/03/20 14:59	87-68-3	
Isopropylbenzene (Cumene)	<b>15.2</b>	ug/L	5.0	0.39	1		02/03/20 14:59	98-82-8	
p-Isopropyltoluene	<0.80	ug/L	2.7	0.80	1		02/03/20 14:59	99-87-6	
Methylene Chloride	<0.58	ug/L	5.0	0.58	1		02/03/20 14:59	75-09-2	
Methyl-tert-butyl ether	<1.2	ug/L	4.2	1.2	1		02/03/20 14:59	1634-04-4	
Naphthalene	<1.2	ug/L	5.0	1.2	1		02/03/20 14:59	91-20-3	
n-Propylbenzene	<b>4.9J</b>	ug/L	5.0	0.81	1		02/03/20 14:59	103-65-1	
Styrene	<0.47	ug/L	1.6	0.47	1		02/03/20 14:59	100-42-5	
1,1,1,2-Tetrachloroethane	<0.27	ug/L	1.0	0.27	1		02/03/20 14:59	630-20-6	

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## ANALYTICAL RESULTS

Project: 60615481 ALLOUEZ PH II

Pace Project No.: 40202694

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**Sample: SP-105      Lab ID: 40202694002      Collected: 01/30/20 12:34      Received: 01/30/20 16:30      Matrix: Water**


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Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260 MSV</b>	Analytical Method: EPA 8260								
1,1,2,2-Tetrachloroethane	<0.28	ug/L	1.0	0.28	1		02/03/20 14:59	79-34-5	
Tetrachloroethene	92.6	ug/L	1.1	0.33	1		02/03/20 14:59	127-18-4	
Toluene	18.3	ug/L	5.0	0.17	1		02/03/20 14:59	108-88-3	
1,2,3-Trichlorobenzene	<0.63	ug/L	5.0	0.63	1		02/03/20 14:59	87-61-6	
1,2,4-Trichlorobenzene	<0.95	ug/L	5.0	0.95	1		02/03/20 14:59	120-82-1	
1,1,1-Trichloroethane	<0.24	ug/L	1.0	0.24	1		02/03/20 14:59	71-55-6	
1,1,2-Trichloroethane	<0.55	ug/L	5.0	0.55	1		02/03/20 14:59	79-00-5	
Trichloroethene	10.5	ug/L	1.0	0.26	1		02/03/20 14:59	79-01-6	
Trichlorofluoromethane	<0.21	ug/L	1.0	0.21	1		02/03/20 14:59	75-69-4	
1,2,3-Trichloropropane	<0.59	ug/L	5.0	0.59	1		02/03/20 14:59	96-18-4	
1,2,4-Trimethylbenzene	<0.84	ug/L	2.8	0.84	1		02/03/20 14:59	95-63-6	
1,3,5-Trimethylbenzene	<0.87	ug/L	2.9	0.87	1		02/03/20 14:59	108-67-8	
Vinyl chloride	<0.17	ug/L	1.0	0.17	1		02/03/20 14:59	75-01-4	
Xylene (Total)	11.5	ug/L	3.0	1.5	1		02/03/20 14:59	1330-20-7	
m&p-Xylene	0.97J	ug/L	2.0	0.47	1		02/03/20 14:59	179601-23-1	
o-Xylene	10.5	ug/L	1.0	0.26	1		02/03/20 14:59	95-47-6	
<b>Surrogates</b>									
4-Bromofluorobenzene (S)	99	%	70-130		1		02/03/20 14:59	460-00-4	
Dibromofluoromethane (S)	103	%	70-130		1		02/03/20 14:59	1868-53-7	
Toluene-d8 (S)	103	%	70-130		1		02/03/20 14:59	2037-26-5	

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## ANALYTICAL RESULTS

Project: 60615481 ALLOUEZ PH II

Pace Project No.: 40202694

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**Sample: SP-111**      **Lab ID: 40202694003**      Collected: 01/30/20 12:55      Received: 01/30/20 16:30      Matrix: Water

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Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260 MSV</b>	Analytical Method: EPA 8260								
Benzene	<0.25	ug/L	1.0	0.25	1		02/04/20 07:43	71-43-2	
Bromobenzene	<0.24	ug/L	1.0	0.24	1		02/04/20 07:43	108-86-1	
Bromochloromethane	<0.36	ug/L	5.0	0.36	1		02/04/20 07:43	74-97-5	
Bromodichloromethane	<0.36	ug/L	1.2	0.36	1		02/04/20 07:43	75-27-4	
Bromoform	<4.0	ug/L	13.2	4.0	1		02/04/20 07:43	75-25-2	
Bromomethane	<0.97	ug/L	5.0	0.97	1		02/04/20 07:43	74-83-9	
n-Butylbenzene	<0.71	ug/L	2.4	0.71	1		02/04/20 07:43	104-51-8	
sec-Butylbenzene	<0.85	ug/L	5.0	0.85	1		02/04/20 07:43	135-98-8	
tert-Butylbenzene	<0.30	ug/L	1.0	0.30	1		02/04/20 07:43	98-06-6	
Carbon tetrachloride	<0.17	ug/L	1.0	0.17	1		02/04/20 07:43	56-23-5	
Chlorobenzene	<0.71	ug/L	2.4	0.71	1		02/04/20 07:43	108-90-7	
Chloroethane	<1.3	ug/L	5.0	1.3	1		02/04/20 07:43	75-00-3	
Chloroform	<1.3	ug/L	5.0	1.3	1		02/04/20 07:43	67-66-3	
Chloromethane	<2.2	ug/L	7.3	2.2	1		02/04/20 07:43	74-87-3	
2-Chlorotoluene	<0.93	ug/L	5.0	0.93	1		02/04/20 07:43	95-49-8	
4-Chlorotoluene	<0.76	ug/L	2.5	0.76	1		02/04/20 07:43	106-43-4	
1,2-Dibromo-3-chloropropane	<1.8	ug/L	5.9	1.8	1		02/04/20 07:43	96-12-8	
Dibromochloromethane	<2.6	ug/L	8.7	2.6	1		02/04/20 07:43	124-48-1	
1,2-Dibromoethane (EDB)	<0.83	ug/L	2.8	0.83	1		02/04/20 07:43	106-93-4	
Dibromomethane	<0.94	ug/L	3.1	0.94	1		02/04/20 07:43	74-95-3	
1,2-Dichlorobenzene	<0.71	ug/L	2.4	0.71	1		02/04/20 07:43	95-50-1	
1,3-Dichlorobenzene	<0.63	ug/L	2.1	0.63	1		02/04/20 07:43	541-73-1	
1,4-Dichlorobenzene	<0.94	ug/L	3.1	0.94	1		02/04/20 07:43	106-46-7	
Dichlorodifluoromethane	<0.50	ug/L	5.0	0.50	1		02/04/20 07:43	75-71-8	
1,1-Dichloroethane	<0.27	ug/L	1.0	0.27	1		02/04/20 07:43	75-34-3	
1,2-Dichloroethane	<0.28	ug/L	1.0	0.28	1		02/04/20 07:43	107-06-2	
1,1-Dichloroethene	<0.24	ug/L	1.0	0.24	1		02/04/20 07:43	75-35-4	
cis-1,2-Dichloroethene	<0.27	ug/L	1.0	0.27	1		02/04/20 07:43	156-59-2	
trans-1,2-Dichloroethene	<1.1	ug/L	3.6	1.1	1		02/04/20 07:43	156-60-5	
1,2-Dichloropropane	<0.28	ug/L	1.0	0.28	1		02/04/20 07:43	78-87-5	
1,3-Dichloropropane	<0.83	ug/L	2.8	0.83	1		02/04/20 07:43	142-28-9	
2,2-Dichloropropane	<2.3	ug/L	7.6	2.3	1		02/04/20 07:43	594-20-7	
1,1-Dichloropropene	<0.54	ug/L	1.8	0.54	1		02/04/20 07:43	563-58-6	
cis-1,3-Dichloropropene	<3.6	ug/L	12.1	3.6	1		02/04/20 07:43	10061-01-5	
trans-1,3-Dichloropropene	<4.4	ug/L	14.6	4.4	1		02/04/20 07:43	10061-02-6	
Diisopropyl ether	<1.9	ug/L	6.3	1.9	1		02/04/20 07:43	108-20-3	
Ethylbenzene	<0.22	ug/L	1.0	0.22	1		02/04/20 07:43	100-41-4	
Hexachloro-1,3-butadiene	<1.2	ug/L	5.0	1.2	1		02/04/20 07:43	87-68-3	
Isopropylbenzene (Cumene)	<0.39	ug/L	5.0	0.39	1		02/04/20 07:43	98-82-8	
p-Isopropyltoluene	<0.80	ug/L	2.7	0.80	1		02/04/20 07:43	99-87-6	
Methylene Chloride	<0.58	ug/L	5.0	0.58	1		02/04/20 07:43	75-09-2	
Methyl-tert-butyl ether	<1.2	ug/L	4.2	1.2	1		02/04/20 07:43	1634-04-4	
Naphthalene	<1.2	ug/L	5.0	1.2	1		02/04/20 07:43	91-20-3	
n-Propylbenzene	<0.81	ug/L	5.0	0.81	1		02/04/20 07:43	103-65-1	
Styrene	<0.47	ug/L	1.6	0.47	1		02/04/20 07:43	100-42-5	
1,1,1,2-Tetrachloroethane	<0.27	ug/L	1.0	0.27	1		02/04/20 07:43	630-20-6	

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## ANALYTICAL RESULTS

Project: 60615481 ALLOUEZ PH II

Pace Project No.: 40202694

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**Sample: SP-111**      **Lab ID: 40202694003**      Collected: 01/30/20 12:55      Received: 01/30/20 16:30      Matrix: Water

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Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260 MSV</b>	Analytical Method: EPA 8260								
1,1,2,2-Tetrachloroethane	<0.28	ug/L	1.0	0.28	1		02/04/20 07:43	79-34-5	
Tetrachloroethene	3.2	ug/L	1.1	0.33	1		02/04/20 07:43	127-18-4	
Toluene	0.31J	ug/L	5.0	0.17	1		02/04/20 07:43	108-88-3	
1,2,3-Trichlorobenzene	<0.63	ug/L	5.0	0.63	1		02/04/20 07:43	87-61-6	
1,2,4-Trichlorobenzene	<0.95	ug/L	5.0	0.95	1		02/04/20 07:43	120-82-1	
1,1,1-Trichloroethane	<0.24	ug/L	1.0	0.24	1		02/04/20 07:43	71-55-6	
1,1,2-Trichloroethane	<0.55	ug/L	5.0	0.55	1		02/04/20 07:43	79-00-5	
Trichloroethene	<0.26	ug/L	1.0	0.26	1		02/04/20 07:43	79-01-6	
Trichlorofluoromethane	<0.21	ug/L	1.0	0.21	1		02/04/20 07:43	75-69-4	
1,2,3-Trichloropropane	<0.59	ug/L	5.0	0.59	1		02/04/20 07:43	96-18-4	
1,2,4-Trimethylbenzene	<0.84	ug/L	2.8	0.84	1		02/04/20 07:43	95-63-6	
1,3,5-Trimethylbenzene	<0.87	ug/L	2.9	0.87	1		02/04/20 07:43	108-67-8	
Vinyl chloride	<0.17	ug/L	1.0	0.17	1		02/04/20 07:43	75-01-4	
Xylene (Total)	<1.5	ug/L	3.0	1.5	1		02/04/20 07:43	1330-20-7	
m&p-Xylene	<0.47	ug/L	2.0	0.47	1		02/04/20 07:43	179601-23-1	
o-Xylene	<0.26	ug/L	1.0	0.26	1		02/04/20 07:43	95-47-6	
<b>Surrogates</b>									
4-Bromofluorobenzene (S)	98	%	70-130		1		02/04/20 07:43	460-00-4	
Dibromofluoromethane (S)	105	%	70-130		1		02/04/20 07:43	1868-53-7	
Toluene-d8 (S)	103	%	70-130		1		02/04/20 07:43	2037-26-5	

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## ANALYTICAL RESULTS

Project: 60615481 ALLOUEZ PH II

Pace Project No.: 40202694

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**Sample: SP-112**      **Lab ID: 40202694004**      Collected: 01/30/20 13:12      Received: 01/30/20 16:30      Matrix: Water

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Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260 MSV</b>	Analytical Method: EPA 8260								
Benzene	<0.25	ug/L	1.0	0.25	1		02/04/20 08:05	71-43-2	
Bromobenzene	<0.24	ug/L	1.0	0.24	1		02/04/20 08:05	108-86-1	
Bromochloromethane	<0.36	ug/L	5.0	0.36	1		02/04/20 08:05	74-97-5	
Bromodichloromethane	<0.36	ug/L	1.2	0.36	1		02/04/20 08:05	75-27-4	
Bromoform	<4.0	ug/L	13.2	4.0	1		02/04/20 08:05	75-25-2	
Bromomethane	<0.97	ug/L	5.0	0.97	1		02/04/20 08:05	74-83-9	
n-Butylbenzene	<0.71	ug/L	2.4	0.71	1		02/04/20 08:05	104-51-8	
sec-Butylbenzene	<0.85	ug/L	5.0	0.85	1		02/04/20 08:05	135-98-8	
tert-Butylbenzene	<0.30	ug/L	1.0	0.30	1		02/04/20 08:05	98-06-6	
Carbon tetrachloride	<0.17	ug/L	1.0	0.17	1		02/04/20 08:05	56-23-5	
Chlorobenzene	<0.71	ug/L	2.4	0.71	1		02/04/20 08:05	108-90-7	
Chloroethane	<1.3	ug/L	5.0	1.3	1		02/04/20 08:05	75-00-3	
Chloroform	<1.3	ug/L	5.0	1.3	1		02/04/20 08:05	67-66-3	
Chloromethane	<2.2	ug/L	7.3	2.2	1		02/04/20 08:05	74-87-3	
2-Chlorotoluene	<0.93	ug/L	5.0	0.93	1		02/04/20 08:05	95-49-8	
4-Chlorotoluene	<0.76	ug/L	2.5	0.76	1		02/04/20 08:05	106-43-4	
1,2-Dibromo-3-chloropropane	<1.8	ug/L	5.9	1.8	1		02/04/20 08:05	96-12-8	
Dibromochloromethane	<2.6	ug/L	8.7	2.6	1		02/04/20 08:05	124-48-1	
1,2-Dibromoethane (EDB)	<0.83	ug/L	2.8	0.83	1		02/04/20 08:05	106-93-4	
Dibromomethane	<0.94	ug/L	3.1	0.94	1		02/04/20 08:05	74-95-3	
1,2-Dichlorobenzene	<0.71	ug/L	2.4	0.71	1		02/04/20 08:05	95-50-1	
1,3-Dichlorobenzene	<0.63	ug/L	2.1	0.63	1		02/04/20 08:05	541-73-1	
1,4-Dichlorobenzene	<0.94	ug/L	3.1	0.94	1		02/04/20 08:05	106-46-7	
Dichlorodifluoromethane	<0.50	ug/L	5.0	0.50	1		02/04/20 08:05	75-71-8	
1,1-Dichloroethane	<0.27	ug/L	1.0	0.27	1		02/04/20 08:05	75-34-3	
1,2-Dichloroethane	<0.28	ug/L	1.0	0.28	1		02/04/20 08:05	107-06-2	
1,1-Dichloroethene	<0.24	ug/L	1.0	0.24	1		02/04/20 08:05	75-35-4	
cis-1,2-Dichloroethene	<0.27	ug/L	1.0	0.27	1		02/04/20 08:05	156-59-2	
trans-1,2-Dichloroethene	<1.1	ug/L	3.6	1.1	1		02/04/20 08:05	156-60-5	
1,2-Dichloropropane	<0.28	ug/L	1.0	0.28	1		02/04/20 08:05	78-87-5	
1,3-Dichloropropane	<0.83	ug/L	2.8	0.83	1		02/04/20 08:05	142-28-9	
2,2-Dichloropropane	<2.3	ug/L	7.6	2.3	1		02/04/20 08:05	594-20-7	
1,1-Dichloropropene	<0.54	ug/L	1.8	0.54	1		02/04/20 08:05	563-58-6	
cis-1,3-Dichloropropene	<3.6	ug/L	12.1	3.6	1		02/04/20 08:05	10061-01-5	
trans-1,3-Dichloropropene	<4.4	ug/L	14.6	4.4	1		02/04/20 08:05	10061-02-6	
Diisopropyl ether	<1.9	ug/L	6.3	1.9	1		02/04/20 08:05	108-20-3	
Ethylbenzene	<0.22	ug/L	1.0	0.22	1		02/04/20 08:05	100-41-4	
Hexachloro-1,3-butadiene	<1.2	ug/L	5.0	1.2	1		02/04/20 08:05	87-68-3	
Isopropylbenzene (Cumene)	<0.39	ug/L	5.0	0.39	1		02/04/20 08:05	98-82-8	
p-Isopropyltoluene	<0.80	ug/L	2.7	0.80	1		02/04/20 08:05	99-87-6	
Methylene Chloride	<0.58	ug/L	5.0	0.58	1		02/04/20 08:05	75-09-2	
Methyl-tert-butyl ether	<1.2	ug/L	4.2	1.2	1		02/04/20 08:05	1634-04-4	
Naphthalene	<1.2	ug/L	5.0	1.2	1		02/04/20 08:05	91-20-3	
n-Propylbenzene	<0.81	ug/L	5.0	0.81	1		02/04/20 08:05	103-65-1	
Styrene	<0.47	ug/L	1.6	0.47	1		02/04/20 08:05	100-42-5	
1,1,1,2-Tetrachloroethane	<0.27	ug/L	1.0	0.27	1		02/04/20 08:05	630-20-6	

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## ANALYTICAL RESULTS

Project: 60615481 ALLOUEZ PH II

Pace Project No.: 40202694

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**Sample: SP-112**      **Lab ID: 40202694004**      Collected: 01/30/20 13:12      Received: 01/30/20 16:30      Matrix: Water

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Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260 MSV</b>	Analytical Method: EPA 8260								
1,1,2,2-Tetrachloroethane	<0.28	ug/L	1.0	0.28	1		02/04/20 08:05	79-34-5	
Tetrachloroethene	39.9	ug/L	1.1	0.33	1		02/04/20 08:05	127-18-4	
Toluene	<0.17	ug/L	5.0	0.17	1		02/04/20 08:05	108-88-3	
1,2,3-Trichlorobenzene	<0.63	ug/L	5.0	0.63	1		02/04/20 08:05	87-61-6	
1,2,4-Trichlorobenzene	<0.95	ug/L	5.0	0.95	1		02/04/20 08:05	120-82-1	
1,1,1-Trichloroethane	<0.24	ug/L	1.0	0.24	1		02/04/20 08:05	71-55-6	
1,1,2-Trichloroethane	<0.55	ug/L	5.0	0.55	1		02/04/20 08:05	79-00-5	
Trichloroethene	<0.26	ug/L	1.0	0.26	1		02/04/20 08:05	79-01-6	
Trichlorofluoromethane	<0.21	ug/L	1.0	0.21	1		02/04/20 08:05	75-69-4	
1,2,3-Trichloropropane	<0.59	ug/L	5.0	0.59	1		02/04/20 08:05	96-18-4	
1,2,4-Trimethylbenzene	<0.84	ug/L	2.8	0.84	1		02/04/20 08:05	95-63-6	
1,3,5-Trimethylbenzene	<0.87	ug/L	2.9	0.87	1		02/04/20 08:05	108-67-8	
Vinyl chloride	<0.17	ug/L	1.0	0.17	1		02/04/20 08:05	75-01-4	
Xylene (Total)	<1.5	ug/L	3.0	1.5	1		02/04/20 08:05	1330-20-7	
m&p-Xylene	<0.47	ug/L	2.0	0.47	1		02/04/20 08:05	179601-23-1	
o-Xylene	<0.26	ug/L	1.0	0.26	1		02/04/20 08:05	95-47-6	
<b>Surrogates</b>									
4-Bromofluorobenzene (S)	97	%	70-130		1		02/04/20 08:05	460-00-4	
Dibromofluoromethane (S)	102	%	70-130		1		02/04/20 08:05	1868-53-7	
Toluene-d8 (S)	104	%	70-130		1		02/04/20 08:05	2037-26-5	

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## ANALYTICAL RESULTS

Project: 60615481 ALLOUEZ PH II

Pace Project No.: 40202694

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**Sample: SP-114**      **Lab ID: 40202694005**      Collected: 01/30/20 13:35      Received: 01/30/20 16:30      Matrix: Water

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Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260 MSV</b>	Analytical Method: EPA 8260								
Benzene	<b>0.57J</b>	ug/L	1.0	0.25	1		02/04/20 08:28	71-43-2	
Bromobenzene	<0.24	ug/L	1.0	0.24	1		02/04/20 08:28	108-86-1	
Bromochloromethane	<0.36	ug/L	5.0	0.36	1		02/04/20 08:28	74-97-5	
Bromodichloromethane	<0.36	ug/L	1.2	0.36	1		02/04/20 08:28	75-27-4	
Bromoform	<4.0	ug/L	13.2	4.0	1		02/04/20 08:28	75-25-2	
Bromomethane	<0.97	ug/L	5.0	0.97	1		02/04/20 08:28	74-83-9	
n-Butylbenzene	<0.71	ug/L	2.4	0.71	1		02/04/20 08:28	104-51-8	
sec-Butylbenzene	<0.85	ug/L	5.0	0.85	1		02/04/20 08:28	135-98-8	
tert-Butylbenzene	<0.30	ug/L	1.0	0.30	1		02/04/20 08:28	98-06-6	
Carbon tetrachloride	<0.17	ug/L	1.0	0.17	1		02/04/20 08:28	56-23-5	
Chlorobenzene	<0.71	ug/L	2.4	0.71	1		02/04/20 08:28	108-90-7	
Chloroethane	<1.3	ug/L	5.0	1.3	1		02/04/20 08:28	75-00-3	
Chloroform	<1.3	ug/L	5.0	1.3	1		02/04/20 08:28	67-66-3	
Chloromethane	<2.2	ug/L	7.3	2.2	1		02/04/20 08:28	74-87-3	
2-Chlorotoluene	<0.93	ug/L	5.0	0.93	1		02/04/20 08:28	95-49-8	
4-Chlorotoluene	<0.76	ug/L	2.5	0.76	1		02/04/20 08:28	106-43-4	
1,2-Dibromo-3-chloropropane	<1.8	ug/L	5.9	1.8	1		02/04/20 08:28	96-12-8	
Dibromochloromethane	<2.6	ug/L	8.7	2.6	1		02/04/20 08:28	124-48-1	
1,2-Dibromoethane (EDB)	<0.83	ug/L	2.8	0.83	1		02/04/20 08:28	106-93-4	
Dibromomethane	<0.94	ug/L	3.1	0.94	1		02/04/20 08:28	74-95-3	
1,2-Dichlorobenzene	<0.71	ug/L	2.4	0.71	1		02/04/20 08:28	95-50-1	
1,3-Dichlorobenzene	<0.63	ug/L	2.1	0.63	1		02/04/20 08:28	541-73-1	
1,4-Dichlorobenzene	<0.94	ug/L	3.1	0.94	1		02/04/20 08:28	106-46-7	
Dichlorodifluoromethane	<0.50	ug/L	5.0	0.50	1		02/04/20 08:28	75-71-8	
1,1-Dichloroethane	<0.27	ug/L	1.0	0.27	1		02/04/20 08:28	75-34-3	
1,2-Dichloroethane	<0.28	ug/L	1.0	0.28	1		02/04/20 08:28	107-06-2	
1,1-Dichloroethene	<0.24	ug/L	1.0	0.24	1		02/04/20 08:28	75-35-4	
cis-1,2-Dichloroethene	1.4	ug/L	1.0	0.27	1		02/04/20 08:28	156-59-2	
trans-1,2-Dichloroethene	<1.1	ug/L	3.6	1.1	1		02/04/20 08:28	156-60-5	
1,2-Dichloropropane	<0.28	ug/L	1.0	0.28	1		02/04/20 08:28	78-87-5	
1,3-Dichloropropane	<0.83	ug/L	2.8	0.83	1		02/04/20 08:28	142-28-9	
2,2-Dichloropropane	<2.3	ug/L	7.6	2.3	1		02/04/20 08:28	594-20-7	
1,1-Dichloropropene	<0.54	ug/L	1.8	0.54	1		02/04/20 08:28	563-58-6	
cis-1,3-Dichloropropene	<3.6	ug/L	12.1	3.6	1		02/04/20 08:28	10061-01-5	
trans-1,3-Dichloropropene	<4.4	ug/L	14.6	4.4	1		02/04/20 08:28	10061-02-6	
Diisopropyl ether	<1.9	ug/L	6.3	1.9	1		02/04/20 08:28	108-20-3	
Ethylbenzene	<0.22	ug/L	1.0	0.22	1		02/04/20 08:28	100-41-4	
Hexachloro-1,3-butadiene	<1.2	ug/L	5.0	1.2	1		02/04/20 08:28	87-68-3	
Isopropylbenzene (Cumene)	<0.39	ug/L	5.0	0.39	1		02/04/20 08:28	98-82-8	
p-Isopropyltoluene	<0.80	ug/L	2.7	0.80	1		02/04/20 08:28	99-87-6	
Methylene Chloride	<0.58	ug/L	5.0	0.58	1		02/04/20 08:28	75-09-2	
Methyl-tert-butyl ether	<1.2	ug/L	4.2	1.2	1		02/04/20 08:28	1634-04-4	
Naphthalene	<1.2	ug/L	5.0	1.2	1		02/04/20 08:28	91-20-3	
n-Propylbenzene	<0.81	ug/L	5.0	0.81	1		02/04/20 08:28	103-65-1	
Styrene	<0.47	ug/L	1.6	0.47	1		02/04/20 08:28	100-42-5	
1,1,1,2-Tetrachloroethane	<0.27	ug/L	1.0	0.27	1		02/04/20 08:28	630-20-6	

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## ANALYTICAL RESULTS

Project: 60615481 ALLOUEZ PH II

Pace Project No.: 40202694

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**Sample: SP-114      Lab ID: 40202694005      Collected: 01/30/20 13:35      Received: 01/30/20 16:30      Matrix: Water**


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Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260 MSV</b>	Analytical Method: EPA 8260								
1,1,2,2-Tetrachloroethane	<0.28	ug/L	1.0	0.28	1		02/04/20 08:28	79-34-5	
Tetrachloroethene	27.2	ug/L	1.1	0.33	1		02/04/20 08:28	127-18-4	
Toluene	<0.17	ug/L	5.0	0.17	1		02/04/20 08:28	108-88-3	
1,2,3-Trichlorobenzene	<0.63	ug/L	5.0	0.63	1		02/04/20 08:28	87-61-6	
1,2,4-Trichlorobenzene	<0.95	ug/L	5.0	0.95	1		02/04/20 08:28	120-82-1	
1,1,1-Trichloroethane	<0.24	ug/L	1.0	0.24	1		02/04/20 08:28	71-55-6	
1,1,2-Trichloroethane	<0.55	ug/L	5.0	0.55	1		02/04/20 08:28	79-00-5	
Trichloroethene	3.0	ug/L	1.0	0.26	1		02/04/20 08:28	79-01-6	
Trichlorofluoromethane	<0.21	ug/L	1.0	0.21	1		02/04/20 08:28	75-69-4	
1,2,3-Trichloropropane	<0.59	ug/L	5.0	0.59	1		02/04/20 08:28	96-18-4	
1,2,4-Trimethylbenzene	<0.84	ug/L	2.8	0.84	1		02/04/20 08:28	95-63-6	
1,3,5-Trimethylbenzene	<0.87	ug/L	2.9	0.87	1		02/04/20 08:28	108-67-8	
Vinyl chloride	<0.17	ug/L	1.0	0.17	1		02/04/20 08:28	75-01-4	
Xylene (Total)	<1.5	ug/L	3.0	1.5	1		02/04/20 08:28	1330-20-7	
m&p-Xylene	<0.47	ug/L	2.0	0.47	1		02/04/20 08:28	179601-23-1	
o-Xylene	<0.26	ug/L	1.0	0.26	1		02/04/20 08:28	95-47-6	
<b>Surrogates</b>									
4-Bromofluorobenzene (S)	99	%	70-130		1		02/04/20 08:28	460-00-4	
Dibromofluoromethane (S)	106	%	70-130		1		02/04/20 08:28	1868-53-7	
Toluene-d8 (S)	103	%	70-130		1		02/04/20 08:28	2037-26-5	

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## ANALYTICAL RESULTS

Project: 60615481 ALLOUEZ PH II

Pace Project No.: 40202694

Sample: MW-4	Lab ID: 40202694006	Collected: 01/30/20 13:58	Received: 01/30/20 16:30	Matrix: Water					
Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260 MSV</b>	Analytical Method: EPA 8260								
Benzene	<0.25	ug/L	1.0	0.25	1		02/04/20 08:50	71-43-2	
Bromobenzene	<0.24	ug/L	1.0	0.24	1		02/04/20 08:50	108-86-1	
Bromochloromethane	<0.36	ug/L	5.0	0.36	1		02/04/20 08:50	74-97-5	
Bromodichloromethane	<0.36	ug/L	1.2	0.36	1		02/04/20 08:50	75-27-4	
Bromoform	<4.0	ug/L	13.2	4.0	1		02/04/20 08:50	75-25-2	
Bromomethane	<0.97	ug/L	5.0	0.97	1		02/04/20 08:50	74-83-9	
n-Butylbenzene	<0.71	ug/L	2.4	0.71	1		02/04/20 08:50	104-51-8	
sec-Butylbenzene	<0.85	ug/L	5.0	0.85	1		02/04/20 08:50	135-98-8	
tert-Butylbenzene	<0.30	ug/L	1.0	0.30	1		02/04/20 08:50	98-06-6	
Carbon tetrachloride	<0.17	ug/L	1.0	0.17	1		02/04/20 08:50	56-23-5	
Chlorobenzene	<0.71	ug/L	2.4	0.71	1		02/04/20 08:50	108-90-7	
Chloroethane	<1.3	ug/L	5.0	1.3	1		02/04/20 08:50	75-00-3	
Chloroform	<1.3	ug/L	5.0	1.3	1		02/04/20 08:50	67-66-3	
Chloromethane	<2.2	ug/L	7.3	2.2	1		02/04/20 08:50	74-87-3	
2-Chlorotoluene	<0.93	ug/L	5.0	0.93	1		02/04/20 08:50	95-49-8	
4-Chlorotoluene	<0.76	ug/L	2.5	0.76	1		02/04/20 08:50	106-43-4	
1,2-Dibromo-3-chloropropane	<1.8	ug/L	5.9	1.8	1		02/04/20 08:50	96-12-8	
Dibromochloromethane	<2.6	ug/L	8.7	2.6	1		02/04/20 08:50	124-48-1	
1,2-Dibromoethane (EDB)	<0.83	ug/L	2.8	0.83	1		02/04/20 08:50	106-93-4	
Dibromomethane	<0.94	ug/L	3.1	0.94	1		02/04/20 08:50	74-95-3	
1,2-Dichlorobenzene	<0.71	ug/L	2.4	0.71	1		02/04/20 08:50	95-50-1	
1,3-Dichlorobenzene	<0.63	ug/L	2.1	0.63	1		02/04/20 08:50	541-73-1	
1,4-Dichlorobenzene	<0.94	ug/L	3.1	0.94	1		02/04/20 08:50	106-46-7	
Dichlorodifluoromethane	<0.50	ug/L	5.0	0.50	1		02/04/20 08:50	75-71-8	
1,1-Dichloroethane	<0.27	ug/L	1.0	0.27	1		02/04/20 08:50	75-34-3	
1,2-Dichloroethane	<0.28	ug/L	1.0	0.28	1		02/04/20 08:50	107-06-2	
1,1-Dichloroethene	<0.24	ug/L	1.0	0.24	1		02/04/20 08:50	75-35-4	
cis-1,2-Dichloroethene	1.3	ug/L	1.0	0.27	1		02/04/20 08:50	156-59-2	
trans-1,2-Dichloroethene	<1.1	ug/L	3.6	1.1	1		02/04/20 08:50	156-60-5	
1,2-Dichloropropane	<0.28	ug/L	1.0	0.28	1		02/04/20 08:50	78-87-5	
1,3-Dichloropropane	<0.83	ug/L	2.8	0.83	1		02/04/20 08:50	142-28-9	
2,2-Dichloropropane	<2.3	ug/L	7.6	2.3	1		02/04/20 08:50	594-20-7	
1,1-Dichloropropene	<0.54	ug/L	1.8	0.54	1		02/04/20 08:50	563-58-6	
cis-1,3-Dichloropropene	<3.6	ug/L	12.1	3.6	1		02/04/20 08:50	10061-01-5	
trans-1,3-Dichloropropene	<4.4	ug/L	14.6	4.4	1		02/04/20 08:50	10061-02-6	
Diisopropyl ether	<1.9	ug/L	6.3	1.9	1		02/04/20 08:50	108-20-3	
Ethylbenzene	<0.22	ug/L	1.0	0.22	1		02/04/20 08:50	100-41-4	
Hexachloro-1,3-butadiene	<1.2	ug/L	5.0	1.2	1		02/04/20 08:50	87-68-3	
Isopropylbenzene (Cumene)	<0.39	ug/L	5.0	0.39	1		02/04/20 08:50	98-82-8	
p-Isopropyltoluene	<0.80	ug/L	2.7	0.80	1		02/04/20 08:50	99-87-6	
Methylene Chloride	<0.58	ug/L	5.0	0.58	1		02/04/20 08:50	75-09-2	
Methyl-tert-butyl ether	<1.2	ug/L	4.2	1.2	1		02/04/20 08:50	1634-04-4	
Naphthalene	<1.2	ug/L	5.0	1.2	1		02/04/20 08:50	91-20-3	
n-Propylbenzene	<0.81	ug/L	5.0	0.81	1		02/04/20 08:50	103-65-1	
Styrene	<0.47	ug/L	1.6	0.47	1		02/04/20 08:50	100-42-5	
1,1,1,2-Tetrachloroethane	<0.27	ug/L	1.0	0.27	1		02/04/20 08:50	630-20-6	

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## ANALYTICAL RESULTS

Project: 60615481 ALLOUEZ PH II

Pace Project No.: 40202694

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**Sample: MW-4**      **Lab ID: 40202694006**      Collected: 01/30/20 13:58      Received: 01/30/20 16:30      Matrix: Water

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Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260 MSV</b>	Analytical Method: EPA 8260								
1,1,2,2-Tetrachloroethane	<0.28	ug/L	1.0	0.28	1		02/04/20 08:50	79-34-5	
Tetrachloroethene	65.7	ug/L	1.1	0.33	1		02/04/20 08:50	127-18-4	
Toluene	<0.17	ug/L	5.0	0.17	1		02/04/20 08:50	108-88-3	
1,2,3-Trichlorobenzene	<0.63	ug/L	5.0	0.63	1		02/04/20 08:50	87-61-6	
1,2,4-Trichlorobenzene	<0.95	ug/L	5.0	0.95	1		02/04/20 08:50	120-82-1	
1,1,1-Trichloroethane	<0.24	ug/L	1.0	0.24	1		02/04/20 08:50	71-55-6	
1,1,2-Trichloroethane	<0.55	ug/L	5.0	0.55	1		02/04/20 08:50	79-00-5	
Trichloroethene	1.8	ug/L	1.0	0.26	1		02/04/20 08:50	79-01-6	
Trichlorofluoromethane	<0.21	ug/L	1.0	0.21	1		02/04/20 08:50	75-69-4	
1,2,3-Trichloropropane	<0.59	ug/L	5.0	0.59	1		02/04/20 08:50	96-18-4	
1,2,4-Trimethylbenzene	<0.84	ug/L	2.8	0.84	1		02/04/20 08:50	95-63-6	
1,3,5-Trimethylbenzene	<0.87	ug/L	2.9	0.87	1		02/04/20 08:50	108-67-8	
Vinyl chloride	<0.17	ug/L	1.0	0.17	1		02/04/20 08:50	75-01-4	
Xylene (Total)	<1.5	ug/L	3.0	1.5	1		02/04/20 08:50	1330-20-7	
m&p-Xylene	<0.47	ug/L	2.0	0.47	1		02/04/20 08:50	179601-23-1	
o-Xylene	<0.26	ug/L	1.0	0.26	1		02/04/20 08:50	95-47-6	
<b>Surrogates</b>									
4-Bromofluorobenzene (S)	98	%	70-130		1		02/04/20 08:50	460-00-4	
Dibromofluoromethane (S)	107	%	70-130		1		02/04/20 08:50	1868-53-7	
Toluene-d8 (S)	102	%	70-130		1		02/04/20 08:50	2037-26-5	

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## ANALYTICAL RESULTS

Project: 60615481 ALLOUEZ PH II

Pace Project No.: 40202694

Sample: MW-5	Lab ID: 40202694007	Collected: 01/30/20 14:20	Received: 01/30/20 16:30	Matrix: Water					
Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260 MSV</b>	Analytical Method: EPA 8260								
Benzene	1.3J	ug/L	5.0	1.2	5		02/04/20 09:13	71-43-2	
Bromobenzene	<1.2	ug/L	5.0	1.2	5		02/04/20 09:13	108-86-1	
Bromo(chloromethane)	<1.8	ug/L	25.0	1.8	5		02/04/20 09:13	74-97-5	
Bromodichloromethane	<1.8	ug/L	6.1	1.8	5		02/04/20 09:13	75-27-4	
Bromoform	<19.9	ug/L	66.2	19.9	5		02/04/20 09:13	75-25-2	
Bromomethane	<4.9	ug/L	25.0	4.9	5		02/04/20 09:13	74-83-9	
n-Butylbenzene	<3.5	ug/L	11.8	3.5	5		02/04/20 09:13	104-51-8	
sec-Butylbenzene	<4.2	ug/L	25.0	4.2	5		02/04/20 09:13	135-98-8	
tert-Butylbenzene	<1.5	ug/L	5.1	1.5	5		02/04/20 09:13	98-06-6	
Carbon tetrachloride	<0.83	ug/L	5.0	0.83	5		02/04/20 09:13	56-23-5	
Chlorobenzene	<3.6	ug/L	11.8	3.6	5		02/04/20 09:13	108-90-7	
Chloroethane	<6.7	ug/L	25.0	6.7	5		02/04/20 09:13	75-00-3	
Chloroform	<6.4	ug/L	25.0	6.4	5		02/04/20 09:13	67-66-3	
Chloromethane	<10.9	ug/L	36.5	10.9	5		02/04/20 09:13	74-87-3	
2-Chlorotoluene	<4.6	ug/L	25.0	4.6	5		02/04/20 09:13	95-49-8	
4-Chlorotoluene	<3.8	ug/L	12.6	3.8	5		02/04/20 09:13	106-43-4	
1,2-Dibromo-3-chloropropane	<8.8	ug/L	29.4	8.8	5		02/04/20 09:13	96-12-8	
Dibromochloromethane	<13.0	ug/L	43.4	13.0	5		02/04/20 09:13	124-48-1	
1,2-Dibromoethane (EDB)	<4.1	ug/L	13.8	4.1	5		02/04/20 09:13	106-93-4	
Dibromomethane	<4.7	ug/L	15.6	4.7	5		02/04/20 09:13	74-95-3	
1,2-Dichlorobenzene	<3.5	ug/L	11.8	3.5	5		02/04/20 09:13	95-50-1	
1,3-Dichlorobenzene	<3.1	ug/L	10.5	3.1	5		02/04/20 09:13	541-73-1	
1,4-Dichlorobenzene	<4.7	ug/L	15.7	4.7	5		02/04/20 09:13	106-46-7	
Dichlorodifluoromethane	<2.5	ug/L	25.0	2.5	5		02/04/20 09:13	75-71-8	
1,1-Dichloroethane	<1.4	ug/L	5.0	1.4	5		02/04/20 09:13	75-34-3	
1,2-Dichloroethane	<1.4	ug/L	5.0	1.4	5		02/04/20 09:13	107-06-2	
1,1-Dichloroethene	<1.2	ug/L	5.0	1.2	5		02/04/20 09:13	75-35-4	
cis-1,2-Dichloroethene	85.5	ug/L	5.0	1.4	5		02/04/20 09:13	156-59-2	
trans-1,2-Dichloroethene	8.3J	ug/L	18.2	5.5	5		02/04/20 09:13	156-60-5	
1,2-Dichloropropane	<1.4	ug/L	5.0	1.4	5		02/04/20 09:13	78-87-5	
1,3-Dichloropropane	<4.1	ug/L	13.8	4.1	5		02/04/20 09:13	142-28-9	
2,2-Dichloropropane	<11.3	ug/L	37.8	11.3	5		02/04/20 09:13	594-20-7	
1,1-Dichloropropene	<2.7	ug/L	9.0	2.7	5		02/04/20 09:13	563-58-6	
cis-1,3-Dichloropropene	<18.1	ug/L	60.5	18.1	5		02/04/20 09:13	10061-01-5	
trans-1,3-Dichloropropene	<21.9	ug/L	72.8	21.9	5		02/04/20 09:13	10061-02-6	
Diisopropyl ether	<9.4	ug/L	31.5	9.4	5		02/04/20 09:13	108-20-3	
Ethylbenzene	74.1	ug/L	5.0	1.1	5		02/04/20 09:13	100-41-4	
Hexachloro-1,3-butadiene	<5.9	ug/L	25.0	5.9	5		02/04/20 09:13	87-68-3	
Isopropylbenzene (Cumene)	17.4J	ug/L	25.0	2.0	5		02/04/20 09:13	98-82-8	
p-Isopropyltoluene	<4.0	ug/L	13.3	4.0	5		02/04/20 09:13	99-87-6	
Methylene Chloride	<2.9	ug/L	25.0	2.9	5		02/04/20 09:13	75-09-2	
Methyl-tert-butyl ether	<6.2	ug/L	20.8	6.2	5		02/04/20 09:13	1634-04-4	
Naphthalene	95.5	ug/L	25.0	5.9	5		02/04/20 09:13	91-20-3	
n-Propylbenzene	28.4	ug/L	25.0	4.1	5		02/04/20 09:13	103-65-1	
Styrene	<2.3	ug/L	7.8	2.3	5		02/04/20 09:13	100-42-5	
1,1,1,2-Tetrachloroethane	<1.3	ug/L	5.0	1.3	5		02/04/20 09:13	630-20-6	

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## ANALYTICAL RESULTS

Project: 60615481 ALLOUEZ PH II

Pace Project No.: 40202694

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**Sample: MW-5                          Lab ID: 40202694007                  Collected: 01/30/20 14:20                  Received: 01/30/20 16:30                  Matrix: Water**


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Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260 MSV</b>	Analytical Method: EPA 8260								
1,1,2,2-Tetrachloroethane	<1.4	ug/L	5.0	1.4	5		02/04/20 09:13	79-34-5	
Tetrachloroethene	1.9J	ug/L	5.4	1.6	5		02/04/20 09:13	127-18-4	
Toluene	4.7J	ug/L	25.0	0.86	5		02/04/20 09:13	108-88-3	
1,2,3-Trichlorobenzene	<3.1	ug/L	25.0	3.1	5		02/04/20 09:13	87-61-6	
1,2,4-Trichlorobenzene	<4.8	ug/L	25.0	4.8	5		02/04/20 09:13	120-82-1	
1,1,1-Trichloroethane	<1.2	ug/L	5.0	1.2	5		02/04/20 09:13	71-55-6	
1,1,2-Trichloroethane	<2.8	ug/L	25.0	2.8	5		02/04/20 09:13	79-00-5	
Trichloroethene	<1.3	ug/L	5.0	1.3	5		02/04/20 09:13	79-01-6	
Trichlorofluoromethane	<1.1	ug/L	5.0	1.1	5		02/04/20 09:13	75-69-4	
1,2,3-Trichloropropane	<3.0	ug/L	25.0	3.0	5		02/04/20 09:13	96-18-4	
1,2,4-Trimethylbenzene	535	ug/L	14.0	4.2	5		02/04/20 09:13	95-63-6	
1,3,5-Trimethylbenzene	34.0	ug/L	14.6	4.4	5		02/04/20 09:13	108-67-8	
Vinyl chloride	<0.87	ug/L	5.0	0.87	5		02/04/20 09:13	75-01-4	
Xylene (Total)	228	ug/L	15.0	7.5	5		02/04/20 09:13	1330-20-7	
m&p-Xylene	196	ug/L	10.0	2.3	5		02/04/20 09:13	179601-23-1	
o-Xylene	31.9	ug/L	5.0	1.3	5		02/04/20 09:13	95-47-6	
<b>Surrogates</b>									
4-Bromofluorobenzene (S)	100	%	70-130		5		02/04/20 09:13	460-00-4	
Dibromofluoromethane (S)	105	%	70-130		5		02/04/20 09:13	1868-53-7	
Toluene-d8 (S)	104	%	70-130		5		02/04/20 09:13	2037-26-5	

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## ANALYTICAL RESULTS

Project: 60615481 ALLOUEZ PH II

Pace Project No.: 40202694

Sample: MW-6	Lab ID: 40202694008	Collected: 01/30/20 15:02	Received: 01/30/20 16:30	Matrix: Water					
Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260 MSV</b>	Analytical Method: EPA 8260								
Benzene	<b>12.0</b>	ug/L	4.0	0.99	4		02/04/20 09:35	71-43-2	
Bromobenzene	<0.96	ug/L	4.0	0.96	4		02/04/20 09:35	108-86-1	
Bromo(chloromethane)	<1.4	ug/L	20.0	1.4	4		02/04/20 09:35	74-97-5	
Bromodichloromethane	<1.5	ug/L	4.8	1.5	4		02/04/20 09:35	75-27-4	
Bromoform	<15.9	ug/L	53.0	15.9	4		02/04/20 09:35	75-25-2	
Bromomethane	<3.9	ug/L	20.0	3.9	4		02/04/20 09:35	74-83-9	
n-Butylbenzene	<2.8	ug/L	9.4	2.8	4		02/04/20 09:35	104-51-8	
sec-Butylbenzene	<3.4	ug/L	20.0	3.4	4		02/04/20 09:35	135-98-8	
tert-Butylbenzene	<1.2	ug/L	4.1	1.2	4		02/04/20 09:35	98-06-6	
Carbon tetrachloride	<0.66	ug/L	4.0	0.66	4		02/04/20 09:35	56-23-5	
Chlorobenzene	<2.8	ug/L	9.5	2.8	4		02/04/20 09:35	108-90-7	
Chloroethane	<5.4	ug/L	20.0	5.4	4		02/04/20 09:35	75-00-3	
Chloroform	<5.1	ug/L	20.0	5.1	4		02/04/20 09:35	67-66-3	
Chloromethane	<8.8	ug/L	29.2	8.8	4		02/04/20 09:35	74-87-3	
2-Chlorotoluene	<3.7	ug/L	20.0	3.7	4		02/04/20 09:35	95-49-8	
4-Chlorotoluene	<3.0	ug/L	10.1	3.0	4		02/04/20 09:35	106-43-4	
1,2-Dibromo-3-chloropropane	<7.1	ug/L	23.5	7.1	4		02/04/20 09:35	96-12-8	
Dibromochloromethane	<10.4	ug/L	34.7	10.4	4		02/04/20 09:35	124-48-1	
1,2-Dibromoethane (EDB)	<3.3	ug/L	11.1	3.3	4		02/04/20 09:35	106-93-4	
Dibromomethane	<3.7	ug/L	12.5	3.7	4		02/04/20 09:35	74-95-3	
1,2-Dichlorobenzene	<2.8	ug/L	9.4	2.8	4		02/04/20 09:35	95-50-1	
1,3-Dichlorobenzene	<2.5	ug/L	8.4	2.5	4		02/04/20 09:35	541-73-1	
1,4-Dichlorobenzene	<3.8	ug/L	12.6	3.8	4		02/04/20 09:35	106-46-7	
Dichlorodifluoromethane	<2.0	ug/L	20.0	2.0	4		02/04/20 09:35	75-71-8	
1,1-Dichloroethane	<1.1	ug/L	4.0	1.1	4		02/04/20 09:35	75-34-3	
1,2-Dichloroethane	<1.1	ug/L	4.0	1.1	4		02/04/20 09:35	107-06-2	
1,1-Dichloroethene	<0.98	ug/L	4.0	0.98	4		02/04/20 09:35	75-35-4	
cis-1,2-Dichloroethene	48.5	ug/L	4.0	1.1	4		02/04/20 09:35	156-59-2	
trans-1,2-Dichloroethene	<b>90.0</b>	ug/L	14.5	4.4	4		02/04/20 09:35	156-60-5	
1,2-Dichloropropane	<1.1	ug/L	4.0	1.1	4		02/04/20 09:35	78-87-5	
1,3-Dichloropropane	<3.3	ug/L	11.0	3.3	4		02/04/20 09:35	142-28-9	
2,2-Dichloropropane	<9.1	ug/L	30.2	9.1	4		02/04/20 09:35	594-20-7	
1,1-Dichloropropene	<2.2	ug/L	7.2	2.2	4		02/04/20 09:35	563-58-6	
cis-1,3-Dichloropropene	<14.5	ug/L	48.4	14.5	4		02/04/20 09:35	10061-01-5	
trans-1,3-Dichloropropene	<17.5	ug/L	58.3	17.5	4		02/04/20 09:35	10061-02-6	
Diisopropyl ether	<7.6	ug/L	25.2	7.6	4		02/04/20 09:35	108-20-3	
Ethylbenzene	<b>30.5</b>	ug/L	4.0	0.87	4		02/04/20 09:35	100-41-4	
Hexachloro-1,3-butadiene	<4.7	ug/L	20.0	4.7	4		02/04/20 09:35	87-68-3	
Isopropylbenzene (Cumene)	<b>2.3J</b>	ug/L	20.0	1.6	4		02/04/20 09:35	98-82-8	
p-Isopropyltoluene	<3.2	ug/L	10.7	3.2	4		02/04/20 09:35	99-87-6	
Methylene Chloride	<2.3	ug/L	20.0	2.3	4		02/04/20 09:35	75-09-2	
Methyl-tert-butyl ether	<5.0	ug/L	16.6	5.0	4		02/04/20 09:35	1634-04-4	
Naphthalene	<b>6.8J</b>	ug/L	20.0	4.7	4		02/04/20 09:35	91-20-3	
n-Propylbenzene	<b>5.1J</b>	ug/L	20.0	3.2	4		02/04/20 09:35	103-65-1	
Styrene	<1.9	ug/L	6.2	1.9	4		02/04/20 09:35	100-42-5	
1,1,1,2-Tetrachloroethane	<1.1	ug/L	4.0	1.1	4		02/04/20 09:35	630-20-6	

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## ANALYTICAL RESULTS

Project: 60615481 ALLOUEZ PH II

Pace Project No.: 40202694

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**Sample: MW-6                          Lab ID: 40202694008                  Collected: 01/30/20 15:02                  Received: 01/30/20 16:30                  Matrix: Water**


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Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260 MSV</b>	Analytical Method: EPA 8260								
1,1,2,2-Tetrachloroethane	<1.1	ug/L	4.0	1.1	4		02/04/20 09:35	79-34-5	
Tetrachloroethene	113	ug/L	4.4	1.3	4		02/04/20 09:35	127-18-4	
Toluene	21.0	ug/L	20.0	0.69	4		02/04/20 09:35	108-88-3	
1,2,3-Trichlorobenzene	<2.5	ug/L	20.0	2.5	4		02/04/20 09:35	87-61-6	
1,2,4-Trichlorobenzene	<3.8	ug/L	20.0	3.8	4		02/04/20 09:35	120-82-1	
1,1,1-Trichloroethane	<0.98	ug/L	4.0	0.98	4		02/04/20 09:35	71-55-6	
1,1,2-Trichloroethane	<2.2	ug/L	20.0	2.2	4		02/04/20 09:35	79-00-5	
Trichloroethene	251	ug/L	4.0	1.0	4		02/04/20 09:35	79-01-6	
Trichlorofluoromethane	<0.86	ug/L	4.0	0.86	4		02/04/20 09:35	75-69-4	
1,2,3-Trichloropropane	<2.4	ug/L	20.0	2.4	4		02/04/20 09:35	96-18-4	
1,2,4-Trimethylbenzene	34.1	ug/L	11.2	3.4	4		02/04/20 09:35	95-63-6	
1,3,5-Trimethylbenzene	<3.5	ug/L	11.6	3.5	4		02/04/20 09:35	108-67-8	
Vinyl chloride	<0.70	ug/L	4.0	0.70	4		02/04/20 09:35	75-01-4	
Xylene (Total)	56.4	ug/L	12.0	6.0	4		02/04/20 09:35	1330-20-7	
m&p-Xylene	51.3	ug/L	8.0	1.9	4		02/04/20 09:35	179601-23-1	
o-Xylene	5.1	ug/L	4.0	1.0	4		02/04/20 09:35	95-47-6	
<b>Surrogates</b>									
4-Bromofluorobenzene (S)	99	%	70-130		4		02/04/20 09:35	460-00-4	
Dibromofluoromethane (S)	104	%	70-130		4		02/04/20 09:35	1868-53-7	
Toluene-d8 (S)	102	%	70-130		4		02/04/20 09:35	2037-26-5	

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## ANALYTICAL RESULTS

Project: 60615481 ALLOUEZ PH II

Pace Project No.: 40202694

Sample: TRIP	Lab ID: 40202694009	Collected: 01/30/20 15:10	Received: 01/30/20 16:30	Matrix: Water					
Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260 MSV</b>	Analytical Method: EPA 8260								
Benzene	<0.25	ug/L	1.0	0.25	1		02/03/20 10:46	71-43-2	
Bromobenzene	<0.24	ug/L	1.0	0.24	1		02/03/20 10:46	108-86-1	
Bromochloromethane	<0.36	ug/L	5.0	0.36	1		02/03/20 10:46	74-97-5	
Bromodichloromethane	<0.36	ug/L	1.2	0.36	1		02/03/20 10:46	75-27-4	
Bromoform	<4.0	ug/L	13.2	4.0	1		02/03/20 10:46	75-25-2	
Bromomethane	<0.97	ug/L	5.0	0.97	1		02/03/20 10:46	74-83-9	
n-Butylbenzene	<0.71	ug/L	2.4	0.71	1		02/03/20 10:46	104-51-8	
sec-Butylbenzene	<0.85	ug/L	5.0	0.85	1		02/03/20 10:46	135-98-8	
tert-Butylbenzene	<0.30	ug/L	1.0	0.30	1		02/03/20 10:46	98-06-6	
Carbon tetrachloride	<0.17	ug/L	1.0	0.17	1		02/03/20 10:46	56-23-5	
Chlorobenzene	<0.71	ug/L	2.4	0.71	1		02/03/20 10:46	108-90-7	
Chloroethane	<1.3	ug/L	5.0	1.3	1		02/03/20 10:46	75-00-3	
Chloroform	<1.3	ug/L	5.0	1.3	1		02/03/20 10:46	67-66-3	
Chloromethane	<2.2	ug/L	7.3	2.2	1		02/03/20 10:46	74-87-3	
2-Chlorotoluene	<0.93	ug/L	5.0	0.93	1		02/03/20 10:46	95-49-8	
4-Chlorotoluene	<0.76	ug/L	2.5	0.76	1		02/03/20 10:46	106-43-4	
1,2-Dibromo-3-chloropropane	<1.8	ug/L	5.9	1.8	1		02/03/20 10:46	96-12-8	
Dibromochloromethane	<2.6	ug/L	8.7	2.6	1		02/03/20 10:46	124-48-1	
1,2-Dibromoethane (EDB)	<0.83	ug/L	2.8	0.83	1		02/03/20 10:46	106-93-4	
Dibromomethane	<0.94	ug/L	3.1	0.94	1		02/03/20 10:46	74-95-3	
1,2-Dichlorobenzene	<0.71	ug/L	2.4	0.71	1		02/03/20 10:46	95-50-1	
1,3-Dichlorobenzene	<0.63	ug/L	2.1	0.63	1		02/03/20 10:46	541-73-1	
1,4-Dichlorobenzene	<0.94	ug/L	3.1	0.94	1		02/03/20 10:46	106-46-7	
Dichlorodifluoromethane	<0.50	ug/L	5.0	0.50	1		02/03/20 10:46	75-71-8	
1,1-Dichloroethane	<0.27	ug/L	1.0	0.27	1		02/03/20 10:46	75-34-3	
1,2-Dichloroethane	<0.28	ug/L	1.0	0.28	1		02/03/20 10:46	107-06-2	
1,1-Dichloroethene	<0.24	ug/L	1.0	0.24	1		02/03/20 10:46	75-35-4	
cis-1,2-Dichloroethene	<0.27	ug/L	1.0	0.27	1		02/03/20 10:46	156-59-2	
trans-1,2-Dichloroethene	<1.1	ug/L	3.6	1.1	1		02/03/20 10:46	156-60-5	
1,2-Dichloropropane	<0.28	ug/L	1.0	0.28	1		02/03/20 10:46	78-87-5	
1,3-Dichloropropane	<0.83	ug/L	2.8	0.83	1		02/03/20 10:46	142-28-9	
2,2-Dichloropropane	<2.3	ug/L	7.6	2.3	1		02/03/20 10:46	594-20-7	
1,1-Dichloropropene	<0.54	ug/L	1.8	0.54	1		02/03/20 10:46	563-58-6	
cis-1,3-Dichloropropene	<3.6	ug/L	12.1	3.6	1		02/03/20 10:46	10061-01-5	
trans-1,3-Dichloropropene	<4.4	ug/L	14.6	4.4	1		02/03/20 10:46	10061-02-6	
Diisopropyl ether	<1.9	ug/L	6.3	1.9	1		02/03/20 10:46	108-20-3	
Ethylbenzene	<0.22	ug/L	1.0	0.22	1		02/03/20 10:46	100-41-4	
Hexachloro-1,3-butadiene	<1.2	ug/L	5.0	1.2	1		02/03/20 10:46	87-68-3	
Isopropylbenzene (Cumene)	<0.39	ug/L	5.0	0.39	1		02/03/20 10:46	98-82-8	
p-Isopropyltoluene	<0.80	ug/L	2.7	0.80	1		02/03/20 10:46	99-87-6	
Methylene Chloride	<0.58	ug/L	5.0	0.58	1		02/03/20 10:46	75-09-2	
Methyl-tert-butyl ether	<1.2	ug/L	4.2	1.2	1		02/03/20 10:46	1634-04-4	
Naphthalene	<1.2	ug/L	5.0	1.2	1		02/03/20 10:46	91-20-3	
n-Propylbenzene	<0.81	ug/L	5.0	0.81	1		02/03/20 10:46	103-65-1	
Styrene	<0.47	ug/L	1.6	0.47	1		02/03/20 10:46	100-42-5	
1,1,1,2-Tetrachloroethane	<0.27	ug/L	1.0	0.27	1		02/03/20 10:46	630-20-6	

## REPORT OF LABORATORY ANALYSIS

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## ANALYTICAL RESULTS

Project: 60615481 ALLOUEZ PH II

Pace Project No.: 40202694

Sample: TRIP	Lab ID: 40202694009	Collected: 01/30/20 15:10	Received: 01/30/20 16:30	Matrix: Water					
Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260 MSV</b>	Analytical Method: EPA 8260								
1,1,2,2-Tetrachloroethane	<0.28	ug/L	1.0	0.28	1		02/03/20 10:46	79-34-5	
Tetrachloroethene	<0.33	ug/L	1.1	0.33	1		02/03/20 10:46	127-18-4	
Toluene	<0.17	ug/L	5.0	0.17	1		02/03/20 10:46	108-88-3	
1,2,3-Trichlorobenzene	<0.63	ug/L	5.0	0.63	1		02/03/20 10:46	87-61-6	
1,2,4-Trichlorobenzene	<0.95	ug/L	5.0	0.95	1		02/03/20 10:46	120-82-1	
1,1,1-Trichloroethane	<0.24	ug/L	1.0	0.24	1		02/03/20 10:46	71-55-6	
1,1,2-Trichloroethane	<0.55	ug/L	5.0	0.55	1		02/03/20 10:46	79-00-5	
Trichloroethene	<0.26	ug/L	1.0	0.26	1		02/03/20 10:46	79-01-6	
Trichlorofluoromethane	<0.21	ug/L	1.0	0.21	1		02/03/20 10:46	75-69-4	
1,2,3-Trichloropropane	<0.59	ug/L	5.0	0.59	1		02/03/20 10:46	96-18-4	
1,2,4-Trimethylbenzene	<0.84	ug/L	2.8	0.84	1		02/03/20 10:46	95-63-6	
1,3,5-Trimethylbenzene	<0.87	ug/L	2.9	0.87	1		02/03/20 10:46	108-67-8	
Vinyl chloride	<0.17	ug/L	1.0	0.17	1		02/03/20 10:46	75-01-4	
Xylene (Total)	<1.5	ug/L	3.0	1.5	1		02/03/20 10:46	1330-20-7	
m&p-Xylene	<0.47	ug/L	2.0	0.47	1		02/03/20 10:46	179601-23-1	
o-Xylene	<0.26	ug/L	1.0	0.26	1		02/03/20 10:46	95-47-6	
<b>Surrogates</b>									
4-Bromofluorobenzene (S)	97	%	70-130		1		02/03/20 10:46	460-00-4	HS
Dibromofluoromethane (S)	106	%	70-130		1		02/03/20 10:46	1868-53-7	
Toluene-d8 (S)	102	%	70-130		1		02/03/20 10:46	2037-26-5	

## REPORT OF LABORATORY ANALYSIS

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## QUALITY CONTROL DATA

Project: 60615481 ALLOUEZ PH II

Pace Project No.: 40202694

QC Batch: 346723 Analysis Method: EPA 8260

QC Batch Method: EPA 8260 Analysis Description: 8260 MSV

Associated Lab Samples: 40202694001, 40202694002, 40202694003, 40202694004, 40202694005, 40202694006, 40202694007,  
40202694008, 40202694009

METHOD BLANK: 2010687

Matrix: Water

Associated Lab Samples: 40202694001, 40202694002, 40202694003, 40202694004, 40202694005, 40202694006, 40202694007,  
40202694008, 40202694009

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1,1,2-Tetrachloroethane	ug/L	<0.27	1.0	02/03/20 08:13	
1,1,1-Trichloroethane	ug/L	<0.24	1.0	02/03/20 08:13	
1,1,2,2-Tetrachloroethane	ug/L	<0.28	1.0	02/03/20 08:13	
1,1,2-Trichloroethane	ug/L	<0.55	5.0	02/03/20 08:13	
1,1-Dichloroethane	ug/L	<0.27	1.0	02/03/20 08:13	
1,1-Dichloroethene	ug/L	<0.24	1.0	02/03/20 08:13	
1,1-Dichloropropene	ug/L	<0.54	1.8	02/03/20 08:13	
1,2,3-Trichlorobenzene	ug/L	<0.63	5.0	02/03/20 08:13	
1,2,3-Trichloropropane	ug/L	<0.59	5.0	02/03/20 08:13	
1,2,4-Trichlorobenzene	ug/L	<0.95	5.0	02/03/20 08:13	
1,2,4-Trimethylbenzene	ug/L	<0.84	2.8	02/03/20 08:13	
1,2-Dibromo-3-chloropropane	ug/L	<1.8	5.9	02/03/20 08:13	
1,2-Dibromoethane (EDB)	ug/L	<0.83	2.8	02/03/20 08:13	
1,2-Dichlorobenzene	ug/L	<0.71	2.4	02/03/20 08:13	
1,2-Dichloroethane	ug/L	<0.28	1.0	02/03/20 08:13	
1,2-Dichloropropene	ug/L	<0.28	1.0	02/03/20 08:13	
1,3,5-Trimethylbenzene	ug/L	<0.87	2.9	02/03/20 08:13	
1,3-Dichlorobenzene	ug/L	<0.63	2.1	02/03/20 08:13	
1,3-Dichloropropene	ug/L	<0.83	2.8	02/03/20 08:13	
1,4-Dichlorobenzene	ug/L	<0.94	3.1	02/03/20 08:13	
2,2-Dichloropropane	ug/L	<2.3	7.6	02/03/20 08:13	
2-Chlorotoluene	ug/L	<0.93	5.0	02/03/20 08:13	
4-Chlorotoluene	ug/L	<0.76	2.5	02/03/20 08:13	
Benzene	ug/L	<0.25	1.0	02/03/20 08:13	
Bromobenzene	ug/L	<0.24	1.0	02/03/20 08:13	
Bromochloromethane	ug/L	<0.36	5.0	02/03/20 08:13	
Bromodichloromethane	ug/L	<0.36	1.2	02/03/20 08:13	
Bromoform	ug/L	<4.0	13.2	02/03/20 08:13	
Bromomethane	ug/L	<0.97	5.0	02/03/20 08:13	
Carbon tetrachloride	ug/L	<0.17	1.0	02/03/20 08:13	
Chlorobenzene	ug/L	<0.71	2.4	02/03/20 08:13	
Chloroethane	ug/L	<1.3	5.0	02/03/20 08:13	
Chloroform	ug/L	<1.3	5.0	02/03/20 08:13	
Chloromethane	ug/L	<2.2	7.3	02/03/20 08:13	
cis-1,2-Dichloroethene	ug/L	<0.27	1.0	02/03/20 08:13	
cis-1,3-Dichloropropene	ug/L	<3.6	12.1	02/03/20 08:13	
Dibromochloromethane	ug/L	<2.6	8.7	02/03/20 08:13	
Dibromomethane	ug/L	<0.94	3.1	02/03/20 08:13	
Dichlorodifluoromethane	ug/L	<0.50	5.0	02/03/20 08:13	
Diisopropyl ether	ug/L	<1.9	6.3	02/03/20 08:13	

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## REPORT OF LABORATORY ANALYSIS

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## QUALITY CONTROL DATA

Project: 60615481 ALLOUEZ PH II

Pace Project No.: 40202694

METHOD BLANK: 2010687

Matrix: Water

Associated Lab Samples: 40202694001, 40202694002, 40202694003, 40202694004, 40202694005, 40202694006, 40202694007,  
40202694008, 40202694009

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Ethylbenzene	ug/L	<0.22	1.0	02/03/20 08:13	
Hexachloro-1,3-butadiene	ug/L	<1.2	5.0	02/03/20 08:13	
Isopropylbenzene (Cumene)	ug/L	<0.39	5.0	02/03/20 08:13	
m&p-Xylene	ug/L	<0.47	2.0	02/03/20 08:13	
Methyl-tert-butyl ether	ug/L	<1.2	4.2	02/03/20 08:13	
Methylene Chloride	ug/L	<0.58	5.0	02/03/20 08:13	
n-Butylbenzene	ug/L	<0.71	2.4	02/03/20 08:13	
n-Propylbenzene	ug/L	<0.81	5.0	02/03/20 08:13	
Naphthalene	ug/L	<1.2	5.0	02/03/20 08:13	
o-Xylene	ug/L	<0.26	1.0	02/03/20 08:13	
p-Isopropyltoluene	ug/L	<0.80	2.7	02/03/20 08:13	
sec-Butylbenzene	ug/L	<0.85	5.0	02/03/20 08:13	
Styrene	ug/L	<0.47	1.6	02/03/20 08:13	
tert-Butylbenzene	ug/L	<0.30	1.0	02/03/20 08:13	
Tetrachloroethene	ug/L	<0.33	1.1	02/03/20 08:13	
Toluene	ug/L	<0.17	5.0	02/03/20 08:13	
trans-1,2-Dichloroethene	ug/L	<1.1	3.6	02/03/20 08:13	
trans-1,3-Dichloropropene	ug/L	<4.4	14.6	02/03/20 08:13	
Trichloroethene	ug/L	<0.26	1.0	02/03/20 08:13	
Trichlorofluoromethane	ug/L	<0.21	1.0	02/03/20 08:13	
Vinyl chloride	ug/L	<0.17	1.0	02/03/20 08:13	
Xylene (Total)	ug/L	<1.5	3.0	02/03/20 08:13	
4-Bromofluorobenzene (S)	%	96	70-130	02/03/20 08:13	
Dibromofluoromethane (S)	%	104	70-130	02/03/20 08:13	
Toluene-d8 (S)	%	100	70-130	02/03/20 08:13	

LABORATORY CONTROL SAMPLE: 2010688

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1-Trichloroethane	ug/L	50	49.3	99	70-130	
1,1,2,2-Tetrachloroethane	ug/L	50	52.8	106	70-130	
1,1,2-Trichloroethane	ug/L	50	51.9	104	70-130	
1,1-Dichloroethane	ug/L	50	54.5	109	73-150	
1,1-Dichloroethene	ug/L	50	51.3	103	73-138	
1,2,4-Trichlorobenzene	ug/L	50	49.3	99	70-130	
1,2-Dibromo-3-chloropropane	ug/L	50	44.0	88	64-129	
1,2-Dibromoethane (EDB)	ug/L	50	48.9	98	70-130	
1,2-Dichlorobenzene	ug/L	50	51.0	102	70-130	
1,2-Dichloroethane	ug/L	50	55.0	110	75-140	
1,2-Dichloropropane	ug/L	50	53.6	107	73-135	
1,3-Dichlorobenzene	ug/L	50	51.4	103	70-130	
1,4-Dichlorobenzene	ug/L	50	51.1	102	70-130	
Benzene	ug/L	50	53.8	108	70-130	

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## QUALITY CONTROL DATA

Project: 60615481 ALLOUEZ PH II

Pace Project No.: 40202694

LABORATORY CONTROL SAMPLE: 2010688

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Bromodichloromethane	ug/L	50	50.9	102	70-130	
Bromoform	ug/L	50	44.4	89	68-129	
Bromomethane	ug/L	50	43.9	88	18-159	
Carbon tetrachloride	ug/L	50	49.6	99	70-130	
Chlorobenzene	ug/L	50	52.3	105	70-130	
Chloroethane	ug/L	50	47.8	96	53-147	
Chloroform	ug/L	50	52.1	104	74-136	
Chloromethane	ug/L	50	38.1	76	29-115	
cis-1,2-Dichloroethene	ug/L	50	51.5	103	70-130	
cis-1,3-Dichloropropene	ug/L	50	45.8	92	70-130	
Dibromochloromethane	ug/L	50	48.7	97	70-130	
Dichlorodifluoromethane	ug/L	50	43.6	87	10-130	
Ethylbenzene	ug/L	50	51.6	103	80-124	
Isopropylbenzene (Cumene)	ug/L	50	51.5	103	70-130	
m&p-Xylene	ug/L	100	103	103	70-130	
Methyl-tert-butyl ether	ug/L	50	46.3	93	54-137	
Methylene Chloride	ug/L	50	50.7	101	73-138	
o-Xylene	ug/L	50	50.1	100	70-130	
Styrene	ug/L	50	51.9	104	70-130	
Tetrachloroethene	ug/L	50	50.6	101	70-130	
Toluene	ug/L	50	50.8	102	80-126	
trans-1,2-Dichloroethene	ug/L	50	50.6	101	73-145	
trans-1,3-Dichloropropene	ug/L	50	40.6	81	70-130	
Trichloroethene	ug/L	50	54.1	108	70-130	
Trichlorofluoromethane	ug/L	50	57.5	115	76-147	
Vinyl chloride	ug/L	50	44.4	89	51-120	
Xylene (Total)	ug/L	150	153	102	70-130	
4-Bromofluorobenzene (S)	%			99	70-130	
Dibromofluoromethane (S)	%			106	70-130	
Toluene-d8 (S)	%			100	70-130	

MATRIX SPIKE &amp; MATRIX SPIKE DUPLICATE: 2011691 2011692

Parameter	Units	MS		MSD		MS		MSD		% Rec Limits	RPD	Max RPD	Qual
		40202688002	Spike Result	Spike Conc.	Conc.	Result	% Rec	Result	% Rec				
1,1,1-Trichloroethane	ug/L	<0.24	50	50	49.3	49.9	99	100	70-130	1	20		
1,1,2,2-Tetrachloroethane	ug/L	<0.28	50	50	52.7	52.2	105	104	70-130	1	20		
1,1,2-Trichloroethane	ug/L	<0.55	50	50	51.3	51.7	103	103	70-137	1	20		
1,1-Dichloroethane	ug/L	<0.27	50	50	54.5	54.6	109	109	73-153	0	20		
1,1-Dichloroethene	ug/L	<0.24	50	50	51.4	50.9	103	102	73-138	1	20		
1,2,4-Trichlorobenzene	ug/L	<0.95	50	50	51.6	50.4	103	101	70-130	2	20		
1,2-Dibromo-3-chloropropane	ug/L	<1.8	50	50	42.9	44.2	86	88	58-129	3	20		
1,2-Dibromoethane (EDB)	ug/L	<0.83	50	50	48.8	48.6	98	97	70-130	0	20		
1,2-Dichlorobenzene	ug/L	<0.71	50	50	51.3	51.1	103	102	70-130	0	20		

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## QUALITY CONTROL DATA

Project: 60615481 ALLOUEZ PH II

Pace Project No.: 40202694

Parameter	Units	40202688002		MS		MSD		2011692				
		Result	Spike Conc.	Spike	Conc.	MS Result	MSD	MS % Rec	MSD % Rec	% Rec	RPD	Max RPD
										Limits		Max Qual
1,2-Dichloroethane	ug/L	<0.28	50	50	54.5	52.8	109	106	75-140	3	20	
1,2-Dichloropropane	ug/L	<0.28	50	50	54.1	54.3	108	109	71-138	0	20	
1,3-Dichlorobenzene	ug/L	<0.63	50	50	51.5	51.5	103	103	70-130	0	20	
1,4-Dichlorobenzene	ug/L	<0.94	50	50	51.8	51.5	104	103	70-130	1	20	
Benzene	ug/L	<0.25	50	50	53.2	53.6	106	107	70-130	1	20	
Bromodichloromethane	ug/L	<0.36	50	50	51.5	51.7	103	103	70-130	0	20	
Bromoform	ug/L	<4.0	50	50	44.1	44.3	88	89	68-129	0	20	
Bromomethane	ug/L	<0.97	50	50	49.5	51.7	99	103	15-170	4	20	
Carbon tetrachloride	ug/L	<0.17	50	50	50.6	51.1	101	102	70-130	1	20	
Chlorobenzene	ug/L	<0.71	50	50	52.0	52.1	104	104	70-130	0	20	
Chloroethane	ug/L	<1.3	50	50	47.1	46.5	94	93	51-148	1	20	
Chloroform	ug/L	<1.3	50	50	51.8	52.0	104	104	74-136	0	20	
Chloromethane	ug/L	<2.2	50	50	36.9	37.1	74	74	23-115	0	20	
cis-1,2-Dichloroethene	ug/L	<0.27	50	50	51.5	51.4	103	103	70-131	0	20	
cis-1,3-Dichloropropene	ug/L	<3.6	50	50	46.2	46.4	92	93	70-130	0	20	
Dibromochloromethane	ug/L	<2.6	50	50	48.3	49.1	97	98	70-130	1	20	
Dichlorodifluoromethane	ug/L	<0.50	50	50	41.9	41.4	84	83	10-132	1	20	
Ethylbenzene	ug/L	<0.22	50	50	51.6	52.1	103	104	80-125	1	20	
Isopropylbenzene (Cumene)	ug/L	<0.39	50	50	51.5	51.9	103	104	70-130	1	20	
m&p-Xylene	ug/L	<0.47	100	100	102	103	102	103	70-130	0	20	
Methyl-tert-butyl ether	ug/L	<1.2	50	50	46.2	45.9	92	92	51-145	1	20	
Methylene Chloride	ug/L	<0.58	50	50	48.8	49.1	98	98	73-140	1	20	
o-Xylene	ug/L	<0.26	50	50	49.9	50.4	100	101	70-130	1	20	
Styrene	ug/L	<0.47	50	50	51.5	52.0	103	104	70-130	1	20	
Tetrachloroethene	ug/L	<0.33	50	50	51.2	51.2	102	102	70-130	0	20	
Toluene	ug/L	<0.17	50	50	50.5	51.2	101	102	80-131	1	20	
trans-1,2-Dichloroethene	ug/L	<1.1	50	50	50.7	50.6	101	101	73-148	0	20	
trans-1,3-Dichloropropene	ug/L	<4.4	50	50	41.5	41.8	83	84	70-130	1	20	
Trichloroethene	ug/L	<0.26	50	50	54.2	54.2	108	108	70-130	0	20	
Trichlorofluoromethane	ug/L	<0.21	50	50	57.6	57.2	115	114	74-147	1	20	
Vinyl chloride	ug/L	<0.17	50	50	43.7	43.4	87	87	41-129	1	20	
Xylene (Total)	ug/L	<1.5	150	150	152	153	101	102	70-130	1	20	
4-Bromofluorobenzene (S)	%							99	99	70-130		
Dibromofluoromethane (S)	%							105	105	70-130		
Toluene-d8 (S)	%							99	100	70-130		

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

## REPORT OF LABORATORY ANALYSIS

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without the written consent of Pace Analytical Services, LLC.

## QUALIFIERS

Project: 60615481 ALLOUEZ PH II

Pace Project No.: 40202694

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### DEFINITIONS

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

ND - Not Detected at or above LOD.

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

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

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

S - Surrogate

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

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

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

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

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

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

TNI - The NELAC Institute.

### LABORATORIES

PASI-G Pace Analytical Services - Green Bay

### ANALYTE QUALIFIERS

HS Results are from sample aliquot taken from VOA vial with headspace (air bubble greater than 6 mm diameter).

## REPORT OF LABORATORY ANALYSIS

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### QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: 60615481 ALLOUEZ PH II

Pace Project No.: 40202694

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
40202694001	SP-109	EPA 8260	346723		
40202694002	SP-105	EPA 8260	346723		
40202694003	SP-111	EPA 8260	346723		
40202694004	SP-112	EPA 8260	346723		
40202694005	SP-114	EPA 8260	346723		
40202694006	MW-4	EPA 8260	346723		
40202694007	MW-5	EPA 8260	346723		
40202694008	MW-6	EPA 8260	346723		
40202694009	TRIP	EPA 8260	346723		

### REPORT OF LABORATORY ANALYSIS

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**(Please Print Clearly)**

Company Name:	AECOM	
Branch/Location:	Milwaukee	
Project Contact:	Lanette Altenbach	
Phone:	843-3100	
Project Number:	60615481	
Project Name:	Allouez Ph II	
Project State:	WI	
Sampled By (Print):	Mike Pawlik	
Sampled By (Sign):		
PO #:		Regulatory Program



#### **UPPER MIDWEST REGION**

MN: 612-607-1700 WI: 920-469-2436

Page 1 of

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## **CHAIN OF CUSTODY**

<b>*Preservation Codes</b>							
A=None	B=HCl	C=H <sub>2</sub> SO <sub>4</sub>	D=HNO <sub>3</sub>	E=DI Water	F=Methanol	G=NaOH	
H=Sodium Bisulfate Solution	I=Sodium Thiosulfate	J=Other					

FILTERED? (YES/NO)							Suite 214 Milwaukee, WI
PRESERVATION (CODE)*	Y/N	N					
	Pick Letter	B					Invoice To Contact: Lanette Attenbach
							Invoice To Company: AECOM
							Invoice To Address: 1555 N River Centre Dr. Suite 214, Milwaukee WI
							Invoice To Phone: Lanette.Aettenbach@ecom.com
							CLIENT COMMENTS (Lab Use Only)
							LAB COMMENTS
ix Codes	Analyses Requested	VOC by 8260					Profile #
W = Water							
DW = Drinking Water							
GW = Ground Water							
SW = Surface Water							
WW = Waste Water							
WP = Wipe							
CTION	MATRIX						
TIME							
1212	GW	X					WAM Project
1234	GV	X					
1255	GW	X					
1312	GV	x					
1335	GW	X					
1358	GW	X					
1420	GW	X					
1502	GW	X					
1510	W	X					

Rush Turnaround Time Requested - Prelims (Rush TAT subject to approval/surcharge) Date Needed: Standard	Relinquished By: <i>M. B. B.</i>	Date/Time: 1/30/20 1630	Received By: <i>SJM JL Pace</i>	Date/Time: 1/30/2020 1630	PACE Project No. <b>40202694</b>
Transmit Prelim Rush Results by (complete what you want):	Relinquished By:	Date/Time:	Received By:	Date/Time:	Receipt Temp = <b>BD</b> °C
Email #1:	Relinquished By:	Date/Time:	Received By:	Date/Time:	Sample Receipt pH
Email #2:	Relinquished By:	Date/Time:	Received By:	Date/Time:	OK / Adjusted
Telephone:	Relinquished By:	Date/Time:	Received By:	Date/Time:	Cooler Custody Seal
Fax:	Relinquished By:	Date/Time:	Received By:	Date/Time:	Present / Not Present
<b>Samples on HOLD are subject to special pricing and release of liability</b>	Relinquished By:	Date/Time:	Received By:	Date/Time:	Intact / Not Intact

# Sample Preservation Receipt Form

Client Name: AECOM

Pace Analytical Services, LLC 33  
1241 Bellevue Street, Suite 9  
Green Bay, WI 54302

Project # 402021094

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All containers needing preservation have been checked and noted below:  Yes  No  N/A

Lab Lot# of pH paper:

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

Initial when completed:

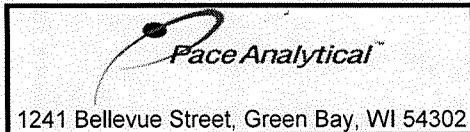
Date/  
Time:

Pace Lab #	Glass					Plastic					Vials					Jars			General			VOA Vials (>6mm) *	H2SO4 pH ≤	NaOH+Zn Act pH ≥9	NaOH pH ≥12	HNO3 pH ≤	pH after adjusted	Volume (mL)	
	AG1U	AG1H	AG4S	AG4U	AG5U	AG2S	BG3U	BP1U	BP2N	BP2Z	BP3U	BP3B	BP3N	BP3S	DG9A	DG9T	VG9U	VG9H	VG9M	VG9D	JGFU	WGFU	WPFU	SP5T	ZPLC	GN			
001															3	3												2.5 / 5 / 10	
002															3	3												2.5 / 5 / 10	
003															3	3												2.5 / 5 / 10	
004															3	3												2.5 / 5 / 10	
005															3	3												2.5 / 5 / 10	
006															3	3												2.5 / 5 / 10	
007															3	3												2.5 / 5 / 10	
008															3	3												2.5 / 5 / 10	
009															2													2.5 / 5 / 10	
010																													2.5 / 5 / 10
011																													2.5 / 5 / 10
012																													2.5 / 5 / 10
013																													2.5 / 5 / 10
014																													2.5 / 5 / 10
015																													2.5 / 5 / 10
016																													2.5 / 5 / 10
017																													2.5 / 5 / 10
018																													2.5 / 5 / 10
019																													2.5 / 5 / 10
020																													2.5 / 5 / 10

Exceptions to preservation check: VOA, Poliform, TOC, TOX, TOH, O&G, WI DRO, Phenolics, Other:

Headspace in VOA Vials (>6mm) :  Yes  No  N/A \*If yes look in headspace column

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



Document Name:  
Sample Condition Upon Receipt (SCUR)

Document Revised: 25Apr2018

Document No.:  
F-GB-C-031-Rev.07

Issuing Authority:  
Pace Green Bay Quality Office

### Sample Condition Upon Receipt Form (SCUR)

Project #:

Client Name: AECOM

Courier:  CS Logistics  Fed Ex  Speedee  UPS  Waltco

Client  Pace Other: \_\_\_\_\_

Tracking #:

WO# : **40202694**



40202694

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

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

Packing Material:  Bubble Wrap  Bubble Bags  None  Other

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

Cooler Temperature Uncorr: - /Corr:

Temp Blank Present:  yes  no

Biological Tissue is Frozen:  yes  no

Temp should be above freezing to 6°C.

Biota Samples may be received at ≤ 0°C.

Person examining contents:

Date: 11/30/20

Initials: JG

Chain of Custody Present:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	1.
Chain of Custody Filled Out:	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	2. <u>Pace #101 phone</u> <u>11/30/20 JG</u>
Chain of Custody Relinquished:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	3.
Sampler Name & Signature on COC:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	4.
Samples Arrived within Hold Time: - VOA Samples frozen upon receipt	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	5. Date/Time:
Short Hold Time Analysis (<72hr):	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	6.
Rush Turn Around Time Requested:	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	7.
Sufficient Volume: For Analysis: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No MS/MSD: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	8.	
Correct Containers Used: -Pace Containers Used: -Pace IR Containers Used:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	9.
Containers Intact:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	10.
Filtered volume received for Dissolved tests	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	11.
Sample Labels match COC: -Includes date/time/ID/Analysis Matrix: <u>W</u>	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	12.
Trip Blank Present:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	13.
Trip Blank Custody Seals Present	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
Pace Trip Blank Lot # (if purchased): <u>439</u>		

#### Client Notification/ Resolution:

If checked, see attached form for additional comments

Person Contacted: \_\_\_\_\_ Date/Time: \_\_\_\_\_

Comments/ Resolution: \_\_\_\_\_

\_\_\_\_\_

Project Manager Review: AA

Date: 11/30/20

