

**Adelaar**  
**(Former Concord Hotel and Resort)**  
**SULLIVAN COUNTY**  
**TOWN OF THOMPSON, NEW YORK**

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**Periodic Review Report**

**NYSDEC Brownfield Cleanup Program Site Number: C353014**

**AKRF Project Number: 40376**

**Prepared for:**

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**APRIL 2021**

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## P.E. CERTIFICATION

I, Michelle Lapin, am currently a registered professional engineer licensed by the State of New York. I had primary direct responsibility for implementation of the December 2017 Site Management Plan protocols, and I certify that the documentation of site management activities is accurately presented in this Periodic Review Report for the Adelaar (Former Concord Hotel and Resort) site, located in the Town of Thompson, New York (BCP Site No. C353014).

For each institutional or engineering control identified for the Site, I certify that all of the following statements are true:

- The inspection of the Site to confirm the effectiveness of the institutional and engineering controls required by the remedial program was performed under my direction;
- The institutional control and engineering controls employed at this Site are unchanged from the date the controls were put in place, or last approved by the NYSDEC;
- Nothing has occurred that would impair the ability of the control to protect the public health and environment;
- Nothing has occurred that would constitute a violation or failure to comply with any site management plan for this control;
- Access to the Site will continue to be provided to the NYSDEC to evaluate the remedy, including access to evaluate the continued maintenance of the engineering controls;
- If a financial assurance mechanism is required under the oversight document for the Site, the mechanism remains valid and sufficient for the intended purpose under the document;
- Use of the Site is compliant with the environmental easement;
- The engineering control systems are performing as designed and are effective;
- No new information has come to my attention, including groundwater monitoring data from wells located at the Site boundary, if any, to indicate that the assumptions made in the qualitative exposure assessment of off-site contamination are no longer valid;
- To the best of my knowledge and belief, the work and conclusions described in this certification are in accordance with the requirements of the site remedial program and generally accepted engineering practices; and
- The information presented in this report is accurate and complete.

I certify that all information and statements in this certification form are true. I understand that a false statement made herein is punishable as a Class "A" misdemeanor, pursuant to Section 210.45 of the Penal Law. I, Michelle Lapin of AKRF, Inc., am certifying Owner's Designated Site Representative and I have been authorized to sign this certification for the Site.



Professional Engineer

04/28/2021

Date

A handwritten signature in black ink, appearing to read "Michelle Lapin". A small circle is drawn around the end of the signature line.

Signature

## EXECUTIVE SUMMARY

This Periodic Review Report (PRR) was prepared on behalf of the EPR Concord II, L.P. (the “Volunteer”) as an element of the remedial program at the Adelaar Site located in the Town of Thompson, New York (the “Site”) under the New York State (NYS) Brownfield Cleanup Program (BCP) administered by New York State Department of Environmental Conservation (NYSDEC). A Site location map is provided as Figure 1. The Site, owned by the Volunteer, includes four separate remediation areas or Operating Units (OUs), described as the following:

- OU-1B – Former Gas Station – Remediated to Track 1 Unrestricted Use, specific end use not yet determined.
- OU-1C – International Club House Disposal Area – Remediated to Track 1 Unrestricted Use, specific end use not yet determined.
- OU-2 – Golf Maintenance Building and Disposal Area – Maintenance Building and disposal area remediated to Track 2 Commercial Use. OU-2 was redeveloped as part of the Chalet Road realignment and includes a stormwater detention basin.
- OU-3 – International Golf Course Disposal Area – Remediated to Track 2 Commercial Use, and was redeveloped as part of a Waterpark.

As reported to NYSDEC and the New York State Department of Health (NYSDOH), a Remedial Investigation (RI) completed at the Site between August and December 2008 confirmed that soil and groundwater contamination related to underground storage tanks (USTs) and/or unregulated landfills was present at the OUs. Each OU was remediated in accordance with the Brownfield Cleanup Agreement (BCA) for Site #C353014, which was executed on August 19, 2015. Remedial activities included soil removal at each OU, and utilization of a site cover system over the consolidated landfill area at OU-2. The remediation work was completed between June 2016 and August 2017. The NYSDEC-approved remediation plan for OU-2 and OU-3 included the use of Engineering and/or Institutional Controls (ECs/ICs) to achieve the Remedial Action Objectives (RAOs). NYSDEC approved the Final Engineering Report (FER) and Site Management Plan (SMP), and issued a Certificate of Completion (COC) to the Volunteer on December 28, 2017.

The purpose of this PRR is to document the site management activities associated with the Site’s ECs/ICs and to certify that the controls have been implemented in accordance with the SMP.

In summary, the remedy remains effective and protective of human health and the environment with continued implementation of the SMP. A site cover inspection at OU-2, and annual groundwater sampling at OU-2 and OU-3, were performed to document Site conditions. As documented and certified herein, the Volunteer was fully compliant with the SMP for the reporting period from April 28, 2020 through April 28, 2021. The status of each of the remaining remedial program elements are summarized below.

### **Site Cover System**

The permanent Site cover system over the consolidated landfill area at OU-2 was maintained in good condition to prevent contact with underlying soil and groundwater.

### **Groundwater Monitoring**

Groundwater sampling results for OU-2 (VOCs, SVOCs, PCBs, pesticides, and metals) and OU-3 (metals) have shown that the remedy (i.e., soil source removal) has been effective in reducing contaminant concentrations in the remediation areas.

## 1.0 INTRODUCTION

This Periodic Review Report (PRR) was prepared for the Adelaar Site located in the Town of Thompson, New York (hereinafter referred to as the “Site”) under the New York State (NYS) Brownfield Cleanup Program (BCP) administered by New York State Department of Environmental Conservation (NYSDEC). The Site was remediated in accordance with the Brownfield Cleanup Agreement (BCA) for Site #C353014, which was executed on August 19, 2015.

EPR Concord II, LP entered into a BCA on August 19, 2015 with NYSDEC to remediate four separate areas or Operating Units (OUs) totaling approximately 12.5 acres within the Site. A figure showing the location of the Adelaar property, and the location of each OU, is provided as Figure 1. A Decision Document (DD) was prepared by NYSDEC at the start of the project to outline the approved remedy for each OU. The DD required that a Site Management Plan (SMP) be developed and implemented at OU-2 and OU-3. The boundaries of OU-2 and OU-3 are included on Figures 2A and 2B, respectively, and are more fully described in the metes and bounds site description that is part of the Environmental Easement in Appendix A of the SMP. The remedial excavation areas and site cap location at OU-2 are shown on Figure 2A, and the remedial excavation area at OU-3 is shown on Figure 2B for reference. The remediation of OU-1B and OU-1C did not rely on the use of ECs and ICs and, therefore, are not subject to the SMP.

After completion of the remedial work, some contamination was left at OU-2 and OU-3, which is hereafter referred to as “remaining contamination.” ECs and ICs have been incorporated into the Site remedy to control exposure to remaining contamination to ensure protection of public health and the environment. An Environmental Easement granted to NYSDEC, and recorded with the Sullivan County Clerk, requires compliance with the SMP and all ECs and ICs placed on the parcel areas included within the borders of OU-2 and OU-3.

A Final Engineering Report (FER) detailing Site remedial activities was submitted to and approved by NYSDEC, which resulted in the issuance of a Certificate of Completion (COC) on December 28, 2017. Ongoing Site management activities are being performed in accordance with the NYSDEC-approved December 2017 SMP. The SMP provides detailed descriptions of all procedures required to manage known and potential residual contamination. Activities conducted at the Site under the SMP during this reporting period have included:

- Annual monitoring well gauging and groundwater sampling
- Site Cover/Site Cap Inspection

The purpose of this PRR is to document the Site management activities associated with the Site’s ECs and ICs and to certify that the controls have been implemented in accordance with the SMP. The reporting period on the EC/ IC Certification form is from April 28, 2020 to April 28, 2021, and constitutes the third reporting year since receiving the COC.

## 2.0 SITE MANAGEMENT REQUIREMENTS

### 2.1 Introduction

For additional details related to the nature and extent of contamination and the remedial cleanup, please refer to the appropriate sections of the FER and SMP. The site management requirements for evaluating the performance and effectiveness of the remedy at the Site, the site cover system, and all affected Site media are summarized in Table T1 below (referenced from the December 2017 SMP) with an indication of what was completed this reporting period (first reporting year since receipt of the COC).

**Table T1**  
**Monitoring/Inspection Requirement Summary**

Monitoring Program	Frequency*	Purpose	Analysis	Completed this Period?
Site Cover System	Annually. First inspection no more than 18 months after COC, then at least annually thereafter.	Site Conditions at OU-2 and OU-3, and Cover System Integrity at OU-2	Visual Inspection of Conditions	Yes
Groundwater Monitoring and Sampling at OU-2 and OU-3	Annually. First inspection no more than 18 months after COC, then at least annually thereafter.	Groundwater remediation performance at OU-2 and OU-3	OU-2: VOCs, SVOCs, PCBs, Pesticides, and Metals by EPA Methods 8260, 8270, 8082, 8081, and 6020, respectively  OU-3: Metals by EPA Method 6020	Yes

Notes: \*The frequency of events was conducted as specified in the SMP.

COC – Certificate of Completion; VOCs – Volatile Organic Compounds; SVOCs – Semivolatile Organic Compounds; PID – Photoionization Detector

EPA – Environmental Protection Agency

### 2.2 Monitoring Requirements

This section describes the measures completed to satisfy the monitoring requirements of the SMP. The results of the Site monitoring program are described in Section 3.0.

#### 2.2.1 OU2 Site Cover System

Exposure to landfill materials within the consolidated landfill area on the eastern side of the Site is prevented by an engineered site cover system made up of a 12-inch soil cap with an underlying demarcation layer that met the specific cleanup objectives.

The site cover system continues to remain intact 24 hours a day, 7 days a week, for 365 days a year. Disturbance of the site cover system or EC components is prohibited by the Environmental Easement. In the unlikely event of an unanticipated accidental or required disturbance of the site cover system, the response procedure is outlined in Section 4.3 of the SMP. Annual monitoring of the site cover system is required by the SMP, and

monitoring of the site cover system will continue on an annual basis as long as the Environmental Easement is in effect to ensure the system's integrity.

AKRF inspected the site cover during a site visit on November 23, 2020. The inspection consisted of observing the site conditions and associated soil cap at OU2. The location and details of the site cover system as maintained over the course of this reporting period are shown on Figure 2A. The landscaped and soil areas were inspected for erosion and signs of excavation. Results of the site cover system inspection are summarized in Section 3.1 of this PRR.

### 2.2.2 Groundwater Monitoring and Sampling

Groundwater monitoring is required on an annual basis after issuance of the COC to assess the performance of the remedy. Groundwater monitoring was performed on November 23, 2020 and November 24, 2020. The sampling locations and analytical parameters for each OU are summarized in Table T2.

**Table T2**  
**Groundwater Monitoring and Sampling Plan**

<b>Location (OU)</b>	<b>Monitoring Well ID</b>	<b>Analytes</b>
OU2	OU2-MW1	VOCs, SVOCs, PCBs, Pesticides, and Metals by EPA Methods 8260, 8270, 8082, 8081, and 6020
OU2	OU2-MW15	VOCs, SVOCs, PCBs, Pesticides, and Metals by EPA Methods 8260, 8270, 8082, 8081, and 6020
OU2	OU2-MW32	VOCs, SVOCs, PCBs, Pesticides, and Metals by EPA Methods 8260, 8270, 8082, 8081, and 6020
OU3	OU3-MW2	Metals by EPA Method 6020
OU3	OU3-MW4	Metals by EPA Method 6020
OU3	OU3-MW14	Metals by EPA Method 6020
OU3	OU3-MW18	Metals by EPA Method 6020

### 2.3 Monitoring Reporting Requirements

The SMP requirement for reporting to NYSDEC includes an annual PRR. The reporting requirements are maintained until the termination of the Environmental Easement. This PRR fulfills the annual reporting requirements for the April 28, 2020 to April 28, 2021 monitoring period.

### 3.0 SITE MANAGEMENT MONITORING AND INSPECTION RESULTS

The site management monitoring inspections completed during this reporting period are summarized in the following sections.

#### 3.1 OU2 Site Cover System

The soil cap at OU-2 was found to be intact, with no observable signs of damage, excavation, or erosion that would affect the integrity and purpose of the site cover. The vegetative cover, planted in 2017 has fully taken root and covers the site cap area. No additional corrective actions are recommended following the completion of this reporting period. A copy of the Site Inspection form is included in Appendix A.

#### 3.2 Groundwater Sampling Observations and Analytical Results

Groundwater sampling logs documenting the general chemistry parameters collected during low flow sampling are included in Appendix A. Groundwater analytical results generated during the annual sampling event are included as Tables 1 to 4. Summaries of recent laboratory results are shown on Figure 2A for OU-2 and Figure 2B for OU-3. The groundwater analytical report and the Data Usability Summary Report (DUSR) are provided in Appendix B. The DUSR confirmed that the laboratory analyses were completed in accordance with the method requirements and the data can be relied upon to draw conclusions related to the objectives of this PRR.

The analytical results documented in Tables 1 to 4 include updated laboratory qualifiers as reported in the DUSR. These updates are based on a review of the raw analytical data and the laboratory's minimum reporting requirement, and adjustments are made, where applicable, based on the updated EPA method standard requirements and guidelines for validation.

##### 3.2.1 OU2 Groundwater Analytical Results

###### VOCs

The analytical results for VOCs are included in Table 1.

###### OU2-MW-1

1,3,5-trimethylbenzene (TMB), 1,2,4-TMB, benzene, ethylbenzene, toluene, methyl tert-butyl ether (MTBE), n-propylbenzene, sec-butylbenzene, n-butylbenzene, and total xylenes were detected at concentrations ranging from an estimated 0.44 micrograms per liter ( $\mu\text{g/l}$ ) of benzene to 36  $\mu\text{g/l}$  of 1,2,4-TMB. Concentrations of 1,2,4-TMB (36  $\mu\text{g/l}$ ), ethylbenzene (5.6  $\mu\text{g/l}$ ), n-propylbenzene (17  $\mu\text{g/l}$ ), and n-butylbenzene (6.4  $\mu\text{g/l}$ ) were detected in excess of the NYSDEC GA Ambient Water Quality Standard (AWQS) of 5  $\mu\text{g/l}$ . The remaining VOC detections were below the GA AWQS.

###### OUW-MW15

1,2,4-TMB was detected in OU-2-MW-15 at an estimated concentration of 0.37  $\mu\text{g/l}$  (flagged with a "J" symbol by the laboratory for being below the method reporting limit, but above the method detection limit), which was below its AWQS. No other VOCs were detected in OU-2-MW-15.

###### OU2-MW-32

Sampling at OU2-MW-32 also included the duplicate sample OU2-MWX. Acetone, 1,2,4-TMB, MTBE, and n-propylbenzene were detected at concentrations ranging from 0.37  $\mu\text{g/l}$  to 5.6  $\mu\text{g/l}$ . Each detection was below its GA AWQS standard for groundwater. The results for OU2-MW-32 and duplicate sample OU2-MW each had the same detected parameters at very consistent concentrations.

**SVOCs**

The analytical results for SVOCs are summarized in Table 2. Naphthalene was detected in OU2-MW-1 at a concentration of 4.7 µg/l, which is below the GA Guidance Value of 10 µg/l. SVOCs were not detected in the remaining OU2 monitoring well samples.

**PCBs/Pesticides**

PCB and pesticide results are summarized in Table 3. PCBs and pesticides were not detected in any of the OU2 monitoring well samples.

**Metals**

The analytical results for metals are summarized in Table 4.

**OU2-MW1**

Manganese was detected at a concentration of 4,560 µg/l, which exceeds its GA AWQS of 300 µg/l. Barium was detected at a concentration of 294 µg/l, which is below its GA AWQS. Arsenic, chromium and nickel were detected at estimated concentrations ranging from 1 µg/l to 6.3 µg/l, with each detection below the respective GA AWQS. Lead was detected at concentrations of 0.13 µg/l and 1.3 µg/l, respectively. These concentrations were below the GA AWQS.

**OU2-MW15**

Manganese was detected at a concentration of 1,150 µg/l, which exceeds its GA AWQS of 300 µg/l. Arsenic and barium were detected at concentrations of 4.6 and 193 µg/l, respectively, which are below their respective GA AWQS. Beryllium, cadmium, chromium, nickel, and zinc were detected at estimated concentrations ranging from 0.098 µg/l to 13.1 µg/l, with each detection below the respective GA AWQS. Lead was detected at concentrations of 0.13 µg/l and 1.3 µg/l, respectively. These concentrations were below the GA AWQS.

**OU2-MW32**

Manganese was detected at a concentration of 4,210 µg/l, which exceeds its GA AWQS of 300 µg/l. Arsenic was detected at a concentration of 62.7 µg/l, which exceeds its GA AWQS of 25 µg/l. Barium, chromium, copper, lead, nickel, and zinc were detected in this sample at concentrations ranging from 7.9 µg/l of chromium to 673 µg/l of barium, with each detection being below the respective GA AWQS. OU2-MWX (Duplicate of OU-2-MW-32)

Manganese was detected at a concentration of 5,170 µg/l, which exceeds its GA AWQS of 300 µg/l. Arsenic was detected at a concentration of 76.9 µg/l, which exceeds its GA AWQS of 25 µg/l. Barium, chromium, copper, lead, nickel, and zinc were detected in this sample at concentrations ranging from 7.3 µg/l of chromium to 716 µg/l of barium, with each detection below the respective GA AWQS.

The results for duplicate sample OU2-MWX included the same parameters that were very consistent concentrations with the OU2-MW-32 results.

### **3.2.2 OU3 Groundwater Analytical Results**

The metals results for OU-3 are summarized in Table 4.

**OU3-MW2**

Manganese (15,400 µg/l) was detected at concentrations exceeding its GA AWQS of 300 µg/l. Arsenic, barium, chromium, copper, lead, nickel, and zinc were also detected in the sample at concentrations ranging from an estimate 0.15 µg/l (beryllium) to 286 µg/l (barium), all of which were below the GA AWQS.

#### OU3-MW4

Manganese (34,500 µg/l) was detected at a concentration exceeding its respective GA AWQS of 300 µg/l. Arsenic, barium, chromium, copper, nickel, and zinc were detected below their respective GA AWQS at concentrations ranging from an estimated 0.75 µg/l (nickel) to 271 µg/l (zinc).

#### OU3-MW14

Arsenic and manganese were detected above their GA AWQS at concentrations of 9,770 µg/l and 35.1 µg/l, respectively. Barium, chromium, copper, lead, nickel, and zinc were also detected in the sample at concentrations from an estimated 0.16 µg/l (beryllium) to 271 µg/l (barium), with each of these detections below their respective GA AWQS.

#### OU3-MW18

Manganese was detected above its GA AWQS of 300 µg/l at a concentration of 352 µg/l. Barium, chromium, lead, nickel, and zinc were also detected in the sample at concentrations ranging from an estimated 1.5 µg/l (chromium) to 136 µg/l (barium), with each of these detections below their respective GA AWQS.

### **3.2.3 Groundwater Summary**

#### OU-2

The OU2 contamination outlined in the NYSDEC Decision Document was identified as VOCs, pesticides, PCBs, and metals associated with the golf maintenance building on the northern side of the Site, and VOCs, PCBs, pesticides and metals associated with the landfill area on the southern side of the Site. The latest round of groundwater laboratory results indicate that the BCP remedy has been effective and protective of human health and the environment. As documented in the FER, and prior to the remedial efforts, the area around monitoring well OU2-MW-1 included grossly contaminated soil and free phase petroleum. The groundwater sampling results for OU2-MW-1 confirmed that only four of the nine VOCs detected (1,2,4-TMB, ethylbenzene, n-propylbenzene, and n-butylbenzene) were present at concentrations just above their respective GA AWQS. These results remain consistent with the 2018 and 2019 PRR sampling events, are a significant improvement over the pre-remediation conditions, and the positive remedial impacts have remained stable for three years post remediation. SVOCs, PCBs, and pesticides were not detected in any of the groundwater samples. Manganese was detected in each well at generally consistent concentrations and may be a naturally occurring condition associated with sediment entrained in the sample. This and the remaining metals results were consistent with previous data and do not indicate any hot spots or continuing sources of contamination.

#### OU-3

Manganese was detected in each well at concentrations exceeding the GA AWQS. Only one other metal, arsenic in OU-3-MW32 and OU-3-MW14, had concentrations above the GA AWQS. These detections, and the manganese exceedances that appear to be naturally occurring, are consistent with historical data and do not indicate any hot spots or continuing sources of contamination. These results indicate that the remedial efforts have been effective, the groundwater conditions have remained stable, and the remaining contamination is not a continuing source for groundwater contamination.

**3.3****Health and Safety Monitoring**

The Health and Safety Plan (HASP), a component of the SMP, includes requirements for personnel training, protocols for work zone air monitoring and community air monitoring, designated personal protection equipment, and decontamination procedures. The HASP also includes a Community Air Monitoring Plan (CAMP), which established protocols for VOC and particulate air monitoring to be conducted at the Site perimeter if work zone perimeter concentrations approach the applicable community action levels.

Because there was no soil disturbance or breaches of the site cover system during the reporting period, no air monitoring was performed. During groundwater monitoring, field personnel followed the HASP protocol using modified Level D personal protective equipment (PPE), including nitrile gloves and safety glasses.

**4.0 IC/EC CERTIFICATION**

A Site-wide inspection was conducted on November 24, 2020, as specified in the SMP, to ensure that all aspects of the remedy were in-place and effective. Based on the Site-wide inspection and the data evaluation summarized in this report, the following certification is made for the Site, as documented in the IC-EC Certification form provided in Appendix C:

- a) The institutional control and engineering controls employed at this Site are unchanged from the date the control was put in place, or last approved by the New York State Department of Environmental Conservation (NYSDEC) Division of Environmental Remediation (DER), with the exceptions cited in this Periodic Review Report;
- b) Nothing has occurred that would impair the ability of such control to protect public health and the environment;
- c) Nothing has occurred that would constitute a violation or failure to comply with any Site Management Plan for this control; and
- d) Access to the Site will continue to be provided to the NYSDEC to evaluate the remedy, including access to evaluate the continued maintenance of this control.

## 5.0 SITE MANAGEMENT SCHEDULE

The site management requirements identified in the SMP for the April 28, 2021 through April 28, 2022 is outlined in Table T3.

**Table T3**  
**Future Monitoring/Inspection Plan**

Monitoring Program	Next Scheduled Event	Frequency	Purpose	Analysis
Site Cover System	October 2021	Annually	Site Conditions at OU-2 and OU-3, and Cover System Integrity at OU-2	Visual Inspection of Conditions
Groundwater Monitoring and Sampling	October 2021	Annually	Groundwater	OU-2: VOCs, SVOCs, PCBs, Pesticides, and Metals by EPA Methods 8260, 8270, 8082, 8081, and 6020, respectively OU-3: Metals by EPA Method 6020

### 5.1 Groundwater Monitoring

In accordance with the existing site management schedule, the April 28, 2021 through April 28, 2022 groundwater sampling frequency will remain as described in the SMP.

### 5.2 Modification to SMP

This Section includes a request to NYSDEC to reduce the number of monitoring wells sampled at each OU. The monitoring results over the last three years have been consistent, the groundwater conditions have remained stable, and the results have not indicated any hot spots or ongoing sources of contamination. The well reduction request is as follows:

#### OU-2

Since VOCs, SVOCs, PCBs, and pesticides have not been detected in groundwater samples collected from OU2-MW-15 and OU2-MW-32 over the last two sampling periods, it is requested that OU2-MW-15 and OU2-MW-32 be removed from the groundwater monitoring and sampling plan for all future sampling rounds. OU2-MW-1 has been the only well where petroleum compounds have exceeded the GA AWQS, and will continue to be sampled as indicated in the SMP.

#### OU-3

The sampling results for metals concentrations at OU3 have indicated that hot spots are not present, groundwater conditions are stable, and the ongoing release of contamination is not occurring. Since OU3-MW-2 has consistently been the well with the highest metals concentrations, it is requested that OU3-MW-2 continue to be sampled as a barometer of Site conditions, with OU3-MW-4, OU3-MW-14 and OU3-MW-18 being removed from the groundwater monitoring and sampling plan.

If this request to change the groundwater monitoring and sampling plan, is approved, the SMP will be modified appropriately to reflect the requirements of future sampling periods. If this request is not approved by NYSDEC and NYSDOH, modifications to the SMP are not required.

## **TABLES**

**Table 1**  
**Adelaar**  
**Thompson, NY**  
 Periodic Review Report  
*Groundwater Analytical Results - Volatile Organic Compounds (VOCs)*

Client ID Lab Sample ID Date Sampled	NYSDEC Class GA AWQSGV	OU-2-MW1-112018 460-169852-3 11/20/2018	OU-2-MW15-112018 460-169852-4 11/20/2018	OU-2-MW32-112018 460-169852-5 11/20/2018	OU-2-MW33-112018 460-169852-6 11/20/2018	OU-2-MW-1-123019 460-200012-1 12/30/2019	OU-2-MW-15-123019 460-200012-2 12/30/2019
Analyte	μg/L						
1,1,1-Trichloroethane	5	1 U	1 U	1 U	1 U	1 U	1 U
1,1-Dichloroethane	5	1 U	1 U	1 U	1 U	1 U	1 U
1,1-Dichloroethene	5	1 U	1 U	1 U	1 U	1 U	1 U
1,2,4-Trimethylbenzene	5	33	1 U	1 U	1 U	47	1 U
1,2-Dichlorobenzene	3	1 U	1 U	1 U	1 U	1 U	1 U
1,2-Dichloroethane	0.6	1 U	1 U	1 U	1 U	1 U	1 U
1,3,5-Trimethylbenzene	5	1.6	1 U	1 U	1 U	1.6	1 U
1,3-Dichlorobenzene	3	1 U	1 U	1 U	1 U	1 U	1 U
1,4-Dichlorobenzene	3	1 U	1 U	1 U	1 U	1 U	1 U
1,4-Dioxane	NS	50 U	50 U	50 U	50 U	50 U	50 U
2-Butanone (MEK)	50	5 U	5 U	5 U	5 U	5 U	5 U
Acetone	50	5 U	5 U	8.2	5.8	5 U	5 U
Benzene	1	1 U	1 U	1 U	1 U	1 U	1 U
Carbon tetrachloride	5	1 U	1 U	1 U	1 U	1 U	1 U
Chlorobenzene	5	1 U	1 U	1 U	1 U	1 U	1 U
Chloroform	7	1 U	1 U	1 U	1 U	1 U	1 U
cis-1,2-Dichloroethene	5	1 U	1 U	1 U	1 U	1 U	1 U
Ethylbenzene	5	7	1 U	1 U	1 U	6.5	1 U
Methyl tert-butyl ether	10	1 U	1 U	2.6	2.5	1 U	1 U
Methylene Chloride	5	1 U	1 U	1 U	1 U	1 U	1 U
n-Butylbenzene	5	4	1 U	1 U	1 U	7.9	1 U
N-Propylbenzene	5	10	1 U	1 U	1 U	15	1 U
sec-Butylbenzene	5	2.3	1 U	1 U	1 U	3.5	1 U
tert-Butylbenzene	5	1 U	1 U	1 U	1 U	1 U	1 U
Tetrachloroethene	5	1 U	1 U	1 U	1 U	1 U	1 U
Toluene	5	0.57 J	1 U	1 U	1 U	0.61 J	1 U
trans-1,2-Dichloroethene	5	1 U	1 U	1 U	1 U	1 U	1 U
Trichloroethene	5	1 U	1 U	1 U	1 U	1 U	1 U
Vinyl chloride	2	1 U	1 U	1 U	1 U	1 U	1 U
Xylenes, Total	NS	3.4	2 U	2 U	2 U	2.5	2 U
Total Conc	NS	61.87	0	10.8	8.3	84.61	0

**Table 1**  
**Adelaar**  
**Thompson, NY**  
 Periodic Review Report  
*Groundwater Analytical Results - Volatile Organic Compounds (VOCs)*

Client ID	NYSDEC Class GA AWQSGV	OU-2-MW-32-123019 460-200012-3 12/30/2019	OU-2-MW-33-123019 460-200012-4 12/30/2019	OU2-MW1_20201124 460-223616-3 11/24/2020	OU2-MW15_20201124 460-223616-6 11/24/2020	OU2-MW32_20201124 460-223616-4 11/24/2020	OU2-MWX_20201124 460-223616-5 11/24/2020
Analyte	µg/L						
1,1,1-Trichloroethane	5	1 U	1 U	1 U	1 U	1 U	1 U
1,1-Dichloroethane	5	1 U	1 U	1 U	1 U	1 U	1 U
1,1-Dichloroethene	5	1 U	1 U	1 U	1 U	1 U	1 U
1,2,4-Trimethylbenzene	5	1 U	1 U	36	0.37 J	0.93 J	0.79 J
1,2-Dichlorobenzene	3	1 U	1 U	1 U	1 U	1 U	1 U
1,2-Dichloroethane	0.6	1 U	1 U	1 U	1 U	1 U	1 U
1,3,5-Trimethylbenzene	5	1 U	1 U	3.8	1 U	1 U	1 U
1,3-Dichlorobenzene	3	1 U	1 U	1 U	1 U	1 U	1 U
1,4-Dichlorobenzene	3	1 U	1 U	1 U	1 U	1 U	1 U
1,4-Dioxane	NS	50 U	50 U	50 U	50 U	50 U	50 U
2-Butanone (MEK)	50	5 U	5 U	5 U	5 U	5 U	5 U
Acetone	50	54	5 U	5 U	5 U	5.1	5.6
Benzene	1	1 U	1 U	0.44 J	1 U	1 U	1 U
Carbon tetrachloride	5	1 U	1 U	1 U	1 U	1 U	1 U
Chlorobenzene	5	1 U	1 U	1 U	1 U	1 U	1 U
Chloroform	7	1 U	1 U	1 U	1 U	1 U	1 U
cis-1,2-Dichloroethene	5	1 U	1 U	1 U	1 U	1 U	1 U
Ethylbenzene	5	1 U	1 U	5.6	1 U	1 U	1 U
Methyl tert-butyl ether	10	1.5	1 U	0.65 J	1 U	2	2.2
Methylene Chloride	5	1 U	1 U	1 U	1 U	1 U	1 U
n-Butylbenzene	5	1 U	1 U	6.4	1 U	1 U	1 U
N-Propylbenzene	5	1 U	1 U	17	1 U	0.43 J	0.37 J
sec-Butylbenzene	5	1 U	1 U	3.3	1 U	1 U	1 U
tert-Butylbenzene	5	1 U	1 U	1 U	1 U	1 U	1 U
Tetrachloroethene	5	1 U	1 U	1 U	1 U	1 U	1 U
Toluene	5	1 U	1 U	0.72 J	1 U	1 U	1 U
trans-1,2-Dichloroethene	5	1 U	1 U	1 U	1 U	1 U	1 U
Trichloroethene	5	1 U	1 U	1 U	1 U	1 U	1 U
Vinyl chloride	2	1 U	1 U	1 U	1 U	1 U	1 U
Xylenes, Total	NS	2 U	2 U	3.7	2 U	2 U	2 U
Total Conc	NS	55.5	0	77.61	0.37	8.46	8.96

**Table 1**  
**Adelaar**  
**Thompson, NY**  
 Periodic Review Report  
*Groundwater Analytical Results - Volatile Organic Compounds (VOCs)*

Client ID	NYSDEC Class GA AWQSGV	Field Blank-112018 460-169852-2 11/20/2018	Trip Blank-112018 460-169852-1 11/20/2018	TB-123119 460-200012-8 12/31/2019	FB-123119 460-200012-9 12/31/2019	FB_20201124 460-223616-7 11/24/2020	TB_20201124 460-223616-8 11/24/2020
Analyte	μg/L						
1,1,1-Trichloroethane	5	1 U	1 U	1 U	1 U	1 U	1 U
1,1-Dichloroethane	5	1 U	1 U	1 U	1 U	1 U	1 U
1,1-Dichloroethene	5	1 U	1 U	1 U	1 U	1 U	1 U
1,2,4-Trimethylbenzene	5	1 U	1 U	1 U	1 U	1 U	1 U
1,2-Dichlorobenzene	3	1 U	1 U	1 U	1 U	1 U	1 U
1,2-Dichloroethane	0.6	1 U	1 U	1 U	1 U	1 U	1 U
1,3,5-Trimethylbenzene	5	1 U	1 U	1 U	1 U	1 U	1 U
1,3-Dichlorobenzene	3	1 U	1 U	1 U	1 U	1 U	1 U
1,4-Dichlorobenzene	3	1 U	1 U	1 U	1 U	1 U	1 U
1,4-Dioxane	NS	50 U	50 U	50 U	50 U	50 U	50 U
2-Butanone (MEK)	50	5 U	5 U	5 U	5 U	5 U	5 U
Acetone	50	7.9	5 U	5 U	5 U	5 U	5 U
Benzene	1	1 U	1 U	1 U	1 U	1 U	1 U
Carbon tetrachloride	5	1 U	1 U	1 U	1 U	1 U	1 U
Chlorobenzene	5	1 U	1 U	1 U	1 U	1 U	1 U
Chloroform	7	1 U	1 U	1 U	1 U	1 U	1 U
cis-1,2-Dichloroethene	5	1 U	1 U	1 U	1 U	1 U	1 U
Ethylbenzene	5	1 U	1 U	1 U	1 U	1 U	1 U
Methyl tert-butyl ether	10	1 U	1 U	1 U	1 U	1 U	1 U
Methylene Chloride	5	1 U	1 U	1 U	1 U	1 U	1 U
n-Butylbenzene	5	1 U	1 U	1 U	1 U	1 U	1 U
N-Propylbenzene	5	1 U	1 U	1 U	1 U	1 U	1 U
sec-Butylbenzene	5	1 U	1 U	1 U	1 U	1 U	1 U
tert-Butylbenzene	5	1 U	1 U	1 U	1 U	1 U	1 U
Tetrachloroethene	5	1 U	1 U	1 U	1 U	1 U	1 U
Toluene	5	1 U	1 U	1 U	1 U	1 U	1 U
trans-1,2-Dichloroethene	5	1 U	1 U	1 U	1 U	1 U	1 U
Trichloroethene	5	1 U	1 U	1 U	1 U	1 U	1 U
Vinyl chloride	2	1 U	1 U	1 U	1 U	1 U	1 U
Xylenes, Total	NS	2 U	2 U	2 U	2 U	2 U	2 U
Total Conc	NS	7.9	0	0	0	0	0

**Table 2**  
**Adelaar**  
**Thompson, NY**  
 Periodic Review Report  
*Groundwater Analytical Results - Semivolatile Organic Compounds (SVOCs)*

Client ID	NYSDEC	OU-2-MW1-112018	OU-2-MW15-112018	OU-2-MW32-112018	OU-2-MW33-112018	OU-2-MW-1-123019
Lab Sample ID	Class GA	460-169852-3	460-169852-4	460-169852-5	460-169852-6	460-200012-1
Date Sampled	AWQSGV	11/20/2018	11/20/2018	11/20/2018	11/20/2018	12/30/2019
<b>Analyte</b>		<b>µg/L</b>				
2-Methylphenol	NS	10 U	10 U	10 U	10 U	10 U
3 & 4 Methylphenol	NS	10 U	10 U	10 U	10 U	10 U
Acenaphthene	20	10 U	10 U	10 U	10 U	10 U
Acenaphthylene	NS	10 U	10 U	10 U	10 U	10 U
Anthracene	50	10 U	10 U	10 U	10 U	10 U
Benzo[a]anthracene	0.002	1 U	1 U	1 U	1 U	1 U
Benzo[a]pyrene	ND	1 U	1 U	1 U	1 U	1 U
Benzo[b]fluoranthene	0.002	2 U	2 U	2 U	2 U	2 U
Benzo[g,h,i]perylene	NS	10 U	10 U	10 U	10 U	10 U
Benzo[k]fluoranthene	0.002	1 U	1 U	1 U	1 U	1 U
Chrysene	0.002	2 U	2 U	2 U	2 U	2 U
Dibenz(a,h)anthracene	NS	1 U	1 UJ	1 UJ	1 UJ	1 U
Dibenzofuran	NS	10 U	10 U	10 U	10 U	10 U
Fluoranthene	50	10 U	10 U	10 U	10 U	10 U
Fluorene	50	10 U	10 U	10 U	10 U	10 U
Hexachlorobenzene	0.04	1 U	1 U	1 U	1 U	1 U
Indeno[1,2,3-cd]pyrene	0.002	2 U	2 UJ	2 UJ	2 UJ	2 U
Naphthalene	10	3.2 J	10 U	10 U	10 U	10 U
Pentachlorophenol	NS	20 U	20 U	20 U	20 U	20 U
Phenanthrene	50	10 U	10 U	10 U	10 U	10 U
Phenol	NS	10 U	10 U	10 U	10 U	10 U
Pyrene	50	10 U	10 U	10 U	10 U	10 U
<b>Total Conc</b>	<b>NS</b>	<b>3.2</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>

**Table 2**  
**Adelaar**  
**Thompson, NY**  
 Periodic Review Report  
*Groundwater Analytical Results - Semivolatile Organic Compounds (SVOCs)*

Client ID	NYSDEC	OU-2-MW-15-123019	OU-2-MW-32-123019	OU-2-MW-33-123019	OU2-MW1_20201124	OU2-MW15_20201124
Lab Sample ID	Class GA	460-200012-2	460-200012-3	460-200012-4	460-223616-3	460-223616-6
Date Sampled	AWQSGV	12/30/2019	12/30/2019	12/30/2019	11/24/2020	11/24/2020
<b>Analyte</b>		<b>µg/L</b>				
2-Methylphenol	NS	10 U	10 U	10 U	10 U	10 U
3 & 4 Methylphenol	NS	10 U	10 U	10 U	10 U	10 U
Acenaphthene	20	10 U	10 U	10 U	10 U	10 U
Acenaphthylene	NS	10 U	10 U	10 U	10 U	10 U
Anthracene	50	10 U	10 U	10 U	10 U	10 U
Benzo[a]anthracene	0.002	1 U	1 U	1 U	1 UJ	1 UJ
Benzo[a]pyrene	ND	1 U	1 U	1 U	1 U	1 U
Benzo[b]fluoranthene	0.002	2 U	2 U	2 U	2 U	2 U
Benzo[g,h,i]perylene	NS	10 U	10 U	10 U	10 U	10 UJ
Benzo[k]fluoranthene	0.002	1 U	1 U	1 U	1 U	1 U
Chrysene	0.002	2 U	2 U	2 U	10 UJ	10 UJ
Dibenz(a,h)anthracene	NS	1 U	1 U	1 U	1 U	1 U
Dibenzofuran	NS	10 U	10 U	10 U	10 U	10 UJ
Fluoranthene	50	10 U	10 U	10 U	10 U	10 U
Fluorene	50	10 U	10 U	10 U	10 U	10 U
Hexachlorobenzene	0.04	1 U	1 U	1 U	1 U	1 U
Indeno[1,2,3-cd]pyrene	0.002	2 U	2 U	2 U	2 U	2 UJ
Naphthalene	10	10 U	10 U	10 U	4.7	2 U
Pentachlorophenol	NS	20 U	20 U	20 U	30 UJ	30 U
Phenanthrene	50	10 U	10 U	10 U	10 U	10 U
Phenol	NS	10 U	10 U	10 U	10 U	10 U
Pyrene	50	10 U	10 U	10 U	10 UJ	10 UJ
Total Conc	NS	0	0	0	4.7	0

**Table 2**  
**Adelaar**  
**Thompson, NY**  
 Periodic Review Report  
*Groundwater Analytical Results - Semivolatile Organic Compounds (SVOCs)*

Client ID	NYSDEC Class GA AWQSGV	OU2-MW32_20201124 460-223616-4 11/24/2020	OU2-MWX_20201124 460-223616-5 11/24/2020	Field Blank-112018 460-169852-2 11/20/2018	FB-123119 460-200012-9 12/31/2019
Analyte	μg/L				
2-Methylphenol	NS	10 U	10 U	10 U	10 U
3 & 4 Methylphenol	NS	10 U	10 U	10 U	10 U
Acenaphthene	20	10 U	10 U	10 U	10 U
Acenaphthylene	NS	10 U	10 U	10 U	10 U
Anthracene	50	10 U	10 U	10 U	10 U
Benzo[a]anthracene	0.002	1 UJ	1 UJ	1 U	1 U
Benzo[a]pyrene	ND	1 U	1 U	1 U	1 U
Benzo[b]fluoranthene	0.002	2 U	2 U	2 U	2 U
Benzo[g,h,i]perylene	NS	10 U	10 U	10 U	10 U
Benzo[k]fluoranthene	0.002	1 U	1 U	1 U	1 U
Chrysene	0.002	10 UJ	10 UJ	2 U	2 U
Dibenz(a,h)anthracene	NS	1 U	1 U	1 UJ	1 U
Dibenzofuran	NS	10 U	10 U	10 U	10 U
Fluoranthene	50	10 U	10 U	10 U	10 U
Fluorene	50	10 U	10 U	10 U	10 U
Hexachlorobenzene	0.04	1 U	1 U	1 U	1 U
Indeno[1,2,3-cd]pyrene	0.002	2 U	2 U	2 UJ	2 U
Naphthalene	10	2 U	2 U	10 U	10 U
Pentachlorophenol	NS	30 UJ	30 UJ	20 U	20 U
Phenanthrene	50	10 U	10 U	10 U	10 U
Phenol	NS	10 U	10 U	10 U	10 U
Pyrene	50	10 UJ	10 UJ	10 U	10 U
Total Conc	NS	0	0	0	0

**Table 3**  
**Adelaar**  
**Thompson, NY**  
Periodic Review Report  
Groundwater Analytical Results - Polychlorinated Biphenyls (PCBs) and Pesticides

Client ID Lab Sample ID Date Sampled	NYSDEC Class GA AWQSGV	OU-2-MW1-112018 460-169852-3 11/20/2018	OU-2-MW15-112018 460-169852-4 11/20/2018	OU-2-MW32-112018 460-169852-5 11/20/2018	OU-2-MW33-112018 460-169852-6 11/20/2018	OU-2-MW-1-123019 460-200012-1 12/30/2019	
PCBs	µg/L						
Aroclor 1016	NS	0.4 U	0.4 UJ	0.4 U	0.4 U	0.4 U	
Aroclor 1221	NS	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	
Aroclor 1232	NS	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	
Aroclor 1242	NS	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	
Aroclor 1248	NS	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	
Aroclor 1254	NS	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	
Aroclor 1260	NS	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	
Aroclor-1262	NS	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	
Aroclor 1268	NS	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	
Polychlorinated biphenyls, Total	0.09	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	

Pesticides	µg/L					
4,4'-DDD	0.3	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U
4,4'-DDE	0.2	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U
4,4'-DDT	0.2	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U
Aldrin	ND	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U
alpha-BHC	0.01	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U
beta-BHC	0.04	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U
Chlordane (technical)	NS	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
cis-Chlordane	NS	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U
delta-BHC	0.04	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U
Dieldrin	0.004	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U
Endosulfan I	NS	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U
Endosulfan II	NS	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U
Endosulfan sulfate	NS	0.02 UJ	0.02 UJ	0.02 UJ	0.02 UJ	0.02 U
Endrin	ND	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U
Endrin aldehyde	5	0.02 UJ	0.02 UJ	0.02 UJ	0.02 UJ	0.02 U
Endrin ketone	5	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U
gamma-BHC (Lindane)	0.05	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U
Heptachlor	0.04	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U
Heptachlor epoxide	0.03	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U
Methoxychlor	35	0.02 UJ	0.02 UJ	0.02 UJ	0.02 UJ	0.02 U
Toxaphene	0.06	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U

**Table 3**  
**Adelaar**  
**Thompson, NY**  
Periodic Review Report  
Groundwater Analytical Results - Polychlorinated Biphenyls (PCBs) and Pesticides

Client ID	NYSDEC	OU-2-MW-15-123019	OU-2-MW-32-123019	OU-2-MW-33-123019	OU2-MW1_20201124	OU2-MW15_20201124
Lab Sample ID	Class GA	460-200012-2	460-200012-3	460-200012-4	460-223616-3	460-223616-6
Date Sampled	AWQSGV	12/30/2019	12/30/2019	12/30/2019	11/24/2020	11/24/2020
<b>PCBs</b>		<b>µg/L</b>				
Aroclor 1016	NS	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U
Aroclor 1221	NS	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U
Aroclor 1232	NS	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U
Aroclor 1242	NS	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U
Aroclor 1248	NS	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U
Aroclor 1254	NS	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U
Aroclor 1260	NS	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U
Aroclor-1262	NS	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U
Aroclor 1268	NS	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U
Polychlorinated biphenyls, Total	0.09	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U

Pesticides	µg/L					
4,4'-DDD	0.3	0.02 U				
4,4'-DDE	0.2	0.02 U				
4,4'-DDT	0.2	0.02 U				
Aldrin	ND	0.02 U				
alpha-BHC	0.01	0.02 U				
beta-BHC	0.04	0.02 U				
Chlordane (technical)	NS	0.5 U				
cis-Chlordane	NS	0.02 U				
delta-BHC	0.04	0.02 U				
Dieldrin	0.004	0.02 U				
Endosulfan I	NS	0.02 U				
Endosulfan II	NS	0.02 U				
Endosulfan sulfate	NS	0.02 U				
Endrin	ND	0.02 U				
Endrin aldehyde	5	0.02 U				
Endrin ketone	5	0.02 U				
gamma-BHC (Lindane)	0.05	0.02 U				
Heptachlor	0.04	0.02 U				
Heptachlor epoxide	0.03	0.02 U				
Methoxychlor	35	0.02 U				
Toxaphene	0.06	0.5 U				

**Table 3**  
**Adelaar**  
**Thompson, NY**  
Periodic Review Report  
Groundwater Analytical Results - Polychlorinated Biphenyls (PCBs) and Pesticides

Client ID	NYSDEC	OU2-MW32_20201124	OU2-MWX_20201124	Field Blank-112018	FB-123119
Lab Sample ID	Class GA	460-223616-4	460-223616-5	460-169852-2	460-200012-9
Date Sampled	AWQSGV	11/24/2020	11/24/2020	11/20/2018	12/31/2019
PCBs	µg/L				
Aroclor 1016	NS	0.4 U	0.4 U	0.4 U	0.4 U
Aroclor 1221	NS	0.4 U	0.4 U	0.4 U	0.4 U
Aroclor 1232	NS	0.4 U	0.4 U	0.4 U	0.4 U
Aroclor 1242	NS	0.4 U	0.4 U	0.4 U	0.4 U
Aroclor 1248	NS	0.4 U	0.4 U	0.4 U	0.4 U
Aroclor 1254	NS	0.4 U	0.4 U	0.4 U	0.4 U
Aroclor 1260	NS	0.4 U	0.4 U	0.4 U	0.4 U
Aroclor-1262	NS	0.4 U	0.4 U	0.4 U	0.4 U
Aroclor 1268	NS	0.4 U	0.4 U	0.4 U	0.4 U
Polychlorinated biphenyls, Total	0.09	0.4 U	0.4 U	0.4 U	0.4 U

Pesticides	µg/L				
4,4'-DDD	0.3	0.02 U	0.02 U	0.02 U	0.02 U
4,4'-DDE	0.2	0.02 U	0.02 U	0.02 U	0.02 U
4,4'-DDT	0.2	0.02 U	0.02 U	0.02 U	0.02 U
Aldrin	ND	0.02 U	0.02 U	0.02 U	0.02 U
alpha-BHC	0.01	0.02 U	0.02 U	0.02 U	0.02 U
beta-BHC	0.04	0.02 U	0.02 U	0.02 U	0.02 U
Chlordane (technical)	NS	0.5 U	0.5 U	0.5 U	0.5 U
cis-Chlordane	NS	0.02 U	0.02 U	0.02 U	0.02 U
delta-BHC	0.04	0.02 U	0.02 U	0.02 U	0.02 U
Dieldrin	0.004	0.02 U	0.02 U	0.02 U	0.02 U
Endosulfan I	NS	0.02 U	0.02 U	0.02 U	0.02 U
Endosulfan II	NS	0.02 U	0.02 U	0.02 U	0.02 U
Endosulfan sulfate	NS	0.02 U	0.02 U	0.02 U	0.02 U
Endrin	ND	0.02 U	0.02 U	0.02 U	0.02 U
Endrin aldehyde	5	0.02 U	0.02 U	0.02 UJ	0.02 U
Endrin ketone	5	0.02 U	0.02 U	0.02 U	0.02 U
gamma-BHC (Lindane)	0.05	0.02 U	0.02 U	0.02 U	0.02 U
Heptachlor	0.04	0.02 U	0.02 U	0.02 U	0.02 U
Heptachlor epoxide	0.03	0.02 U	0.02 U	0.02 U	0.02 U
Methoxychlor	35	0.02 U	0.02 U	0.02 UJ	0.02 U
Toxaphene	0.06	0.5 U	0.5 U	0.5 U	0.5 U

**Table 4**  
**Adelaar**  
**Thompson, NY**  
 Periodic Review Report  
*Groundwater Analytical Results - Metals*

Client ID	NYSDEC	OU-2-MW1-112018	OU-2-MW15-112018	OU-2-MW32-112018	OU-2-MW33-112018	OU-3-MW2-112118	OU-3-MW4-112118
Lab Sample ID	Class GA	460-169852-3	460-169852-4	460-169852-5	460-169852-6	460-169881-1	460-169881-2
Date Sampled	AWQSGV	11/20/2018	11/20/2018	11/20/2018	11/20/2018	11/21/2018	11/21/2018
Dilution		1/2 †	1/2 †	1/2 †	1/2 †	1/2/10 †	1/2 †
Analyte	µg/L						
Arsenic	25	2.3	8.2	64.2	63.8	9	41
Barium	1,000	170	394	795	775	509	308
Beryllium	3	0.8 U	0.35 J	1.1	1.4	1.3	0.27 J
Cadmium	5	2 U	2 U	2 U	2 U	2 U	2 U
Chromium	50	4 U	6.8	18.3	21.3	34.3	4.4
Copper	200	3.6 J	4.7	47.7	49.2	51.6	17.8
Lead	25	3.3	5.9	62.4	59.3	24.9	39.5
Manganese	300	2,120	6,390	4,750	4,360	19,000	4,860
Mercury	0.7	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Nickel	100	3.5 J	9.9	45.7	42.8	55.6	16.9
Selenium	10	10 U	10 U	10 U	10 U	10 U	10 U
Silver	50	2 U	2 U	2 U	2 U	2 U	2 U
Zinc	2,000	16 U	37.3	115	118	114	658

**Table 4**  
**Adelaar**  
**Thompson, NY**  
 Periodic Review Report  
*Groundwater Analytical Results - Metals*

Client ID	NYSDEC Class GA	OU-3-MW14-112118 460-169881-3 11/21/2018 1/2 †	OU-3-MW18-112118 460-169881-4 11/21/2018 1/2 †	OU-2-MW-1-123019 460-200012-1 12/30/2019 1/2 †	OU-2-MW-15-123019 460-200012-2 12/30/2019 1/2 †	OU-2-MW-32-123019 460-200012-3 12/30/2019 1/2 †
Analyte	µg/L					
Arsenic	25	4.5	2.5	3.2	2 U	21.7
Barium	1,000	337	166	236	177	427
Beryllium	3	0.8 U	0.34 J	0.8 U	0.8 U	0.8 U
Cadmium	5	2 U	2 U	2 U	2 U	2 U
Chromium	50	4 U	4.3	4 U	4 U	4
Copper	200	4 U	8.3	4.1	3.6 J	10.7
Lead	25	1.1 J	12.2	1.9	1.2 U	12
Manganese	300	8,760	363	3,130	1,150	4,630
Mercury	0.7	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Nickel	100	4.6	8.2	4 U	4 U	4.4
Selenium	10	10 U	10 U	10 U	10 U	10 U
Silver	50	2 U	2 U	2 U	2 U	2 U
Zinc	2,000	15.9 J	22.2	16 U	16 U	16 U

**Table 4**  
**Adelaar**  
**Thompson, NY**  
 Periodic Review Report  
*Groundwater Analytical Results - Metals*

Client ID	NYSDEC Class GA	OU-2-MW-33-123019 460-200012-4 12/30/2019 1/2 †	OU-3-MW-2-123119 460-200012-5 12/31/2019 1/2/10 †	OU-3-MW-4-123119 460-200012-6 12/31/2019 1/2 †	OU-3-MW-14-123119 460-200012-7 12/31/2019 1/2/10 †	OU-3-MW-18-010320 460-200140-1 01/03/2020 1/2 †
Analyte	µg/L					
Arsenic	25	0.78 J	7.2	52.6	20.6	2.8
Barium	1,000	194	802	278	297	126
Beryllium	3	0.8 U	2.5	0.8 U	0.8 U	0.32 J
Cadmium	5	2 U	2 U	2 U	2 U	2 U
Chromium	50	4 U	34.9	5.1	4 U	5.9
Copper	200	3.8 J	74.8	20.3	4.7	15
Lead	25	1.2 U	53	41.1	2.5	11
Manganese	300	1,130	17,400	7,730	14,300	651
Mercury	0.7	0.2 U	0.2 U	0.22	0.2 U	0.2 U
Nickel	100	4 U	29.9	17.3	5.6	8.8
Selenium	10	10 U	10 U	10 U	10 U	10 U
Silver	50	2 U	2 U	2 U	2 U	2 U
Zinc	2,000	16 U	91.2	1,510	21.8	21.9

**Table 4**  
**Adelaar**  
**Thompson, NY**  
 Periodic Review Report  
*Groundwater Analytical Results - Metals*

Client ID	NYSDEC Class GA AWQSGV	OU2-MW1_20201124 460-223616-3 11/24/2020	OU2-MW15_20201124 460-223616-6 11/24/2020	OU2-MW32_20201124 460-223616-4 11/24/2020	OU2-MWX_20201124 460-223616-5 11/24/2020	OU3-MW2_20201123 460-223616-1 11/23/2020
Analyte	µg/L					
Arsenic	25	1.6 J	4.6	62.7	76.9	1.2 J
Barium	1,000	294	193	673	716	286
Beryllium	3	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U
Cadmium	5	2 U	0.33 J	2 U	2 U	0.22 J
Chromium	50	1 J	2 J	7.9	7.3	4
Copper	200	4 U	2.5 J	16.4	18.4	6.8
Lead	25	1.3	1.6	22.8	21	3.1
Manganese	300	4,560	1,530	4,210	5,170	15,400
Mercury	0.7	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Nickel	100	4 U	2.4 J	10.2	9.8	5.5
Selenium	10	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Silver	50	2 U	2 U	2 U	2 U	2 U
Zinc	2,000	6.3 J	13.1 J	32.2	33.7	23.7

**Table 4**  
**Adelaar**  
**Thompson, NY**  
 Periodic Review Report  
*Groundwater Analytical Results - Metals*

Client ID	NYSDEC	OU3-MW4_20201124	OU3-MW14_20201123	OU3-MW18_20201124	Field Blank-112018	FB-123119
Lab Sample ID	Class GA	460-223616-9	460-223616-2	460-223616-10	460-169852-2	460-200012-9
Date Sampled	AWQSGV	11/24/2020	11/23/2020	11/24/2020	11/20/2018	12/31/2019
Dilution		1/5 †	1	1	1/2 †	1/2 †
Analyte	µg/L					
Arsenic	25	6.5	35.1	2 U	2 U	2 U
Barium	1,000	271	245	136	4 U	4 U
Beryllium	3	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U
Cadmium	5	2 U	2 U	2 U	2 U	2 U
Chromium	50	1.4 J	2.9 J	1.5 J	4 U	4 U
Copper	200	3.2 J	7.8	4 U	4 U	4 U
Lead	25	4	5.2	2	1.2 U	1.2 U
Manganese	300	34,500	9,770	352	8 U	8 U
Mercury	0.7	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Nickel	100	0.75 J	3.6 J	2 J	4 U	4 U
Selenium	10	2.5 U	2.5 U	2.5 U	10 U	10 U
Silver	50	2 U	2 U	2 U	2 U	2 U
Zinc	2,000	94.6	23.3	7 J	16 U	16 U

**Tables 1-4**  
**Adelaar**  
**Thompson, NY**  
Periodic Review Report  
*Notes*

## **DEFINITIONS**

- B** : Compound was found in the blank and sample.
- J** : The concentration given is an estimated value.
- NS** : No standard.
- ND** : The standard is a non-detectable concentration by the approved analytical method.
- U** : The analyte was not detected at the indicated concentration.
- UJ** : The analyte was analyzed for but was not detected.
- \* : LCS or LCSD is outside acceptable limits.
- † : Dilution factor varies.
- µg/L** : micrograms per Liter = parts per billion (ppb)

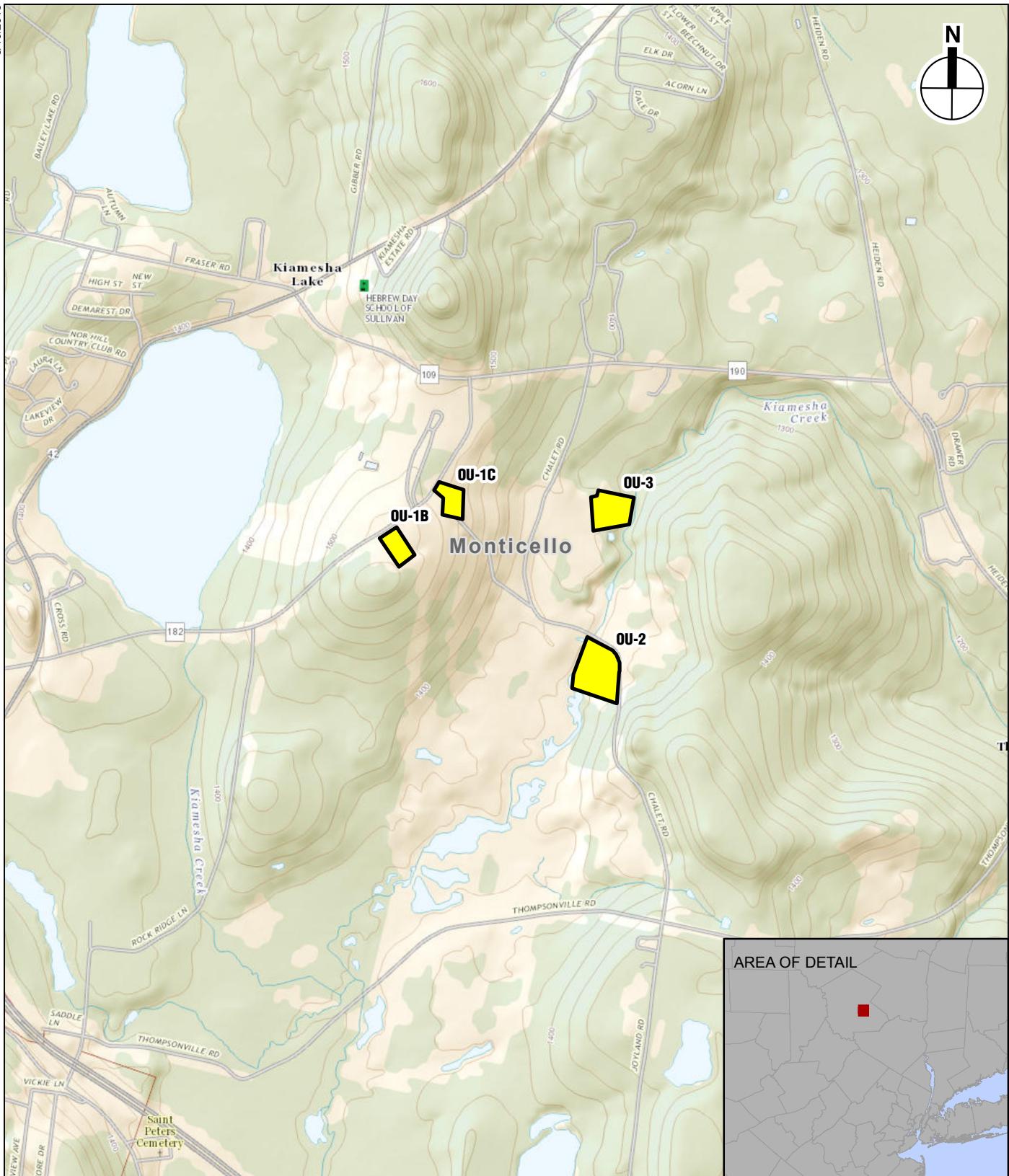
## **STANDARDS**

**NYSDEC**      New York State Department of Environmental Conservation (NYSDEC) Technical and Operational  
**Class GA**    : Guidance Series (1.1.1): Class GA Ambient Water Quality Standards and Guidance Values  
**AWQSGVs**     (AWQSGVs).

**Exceedances of NYSDEC Class GA AWQSGVs are highlighted in gray shading.**

## **FIGURES**

3/10/2015



  Operational Unit

0 2,000 FEET

Approximate coordinates of Operational Units:

OU-1B: 41° 40' 28" N, 74° 39' 22" W

OU-1C: 41° 40' 34" N, 74° 39' 14" W

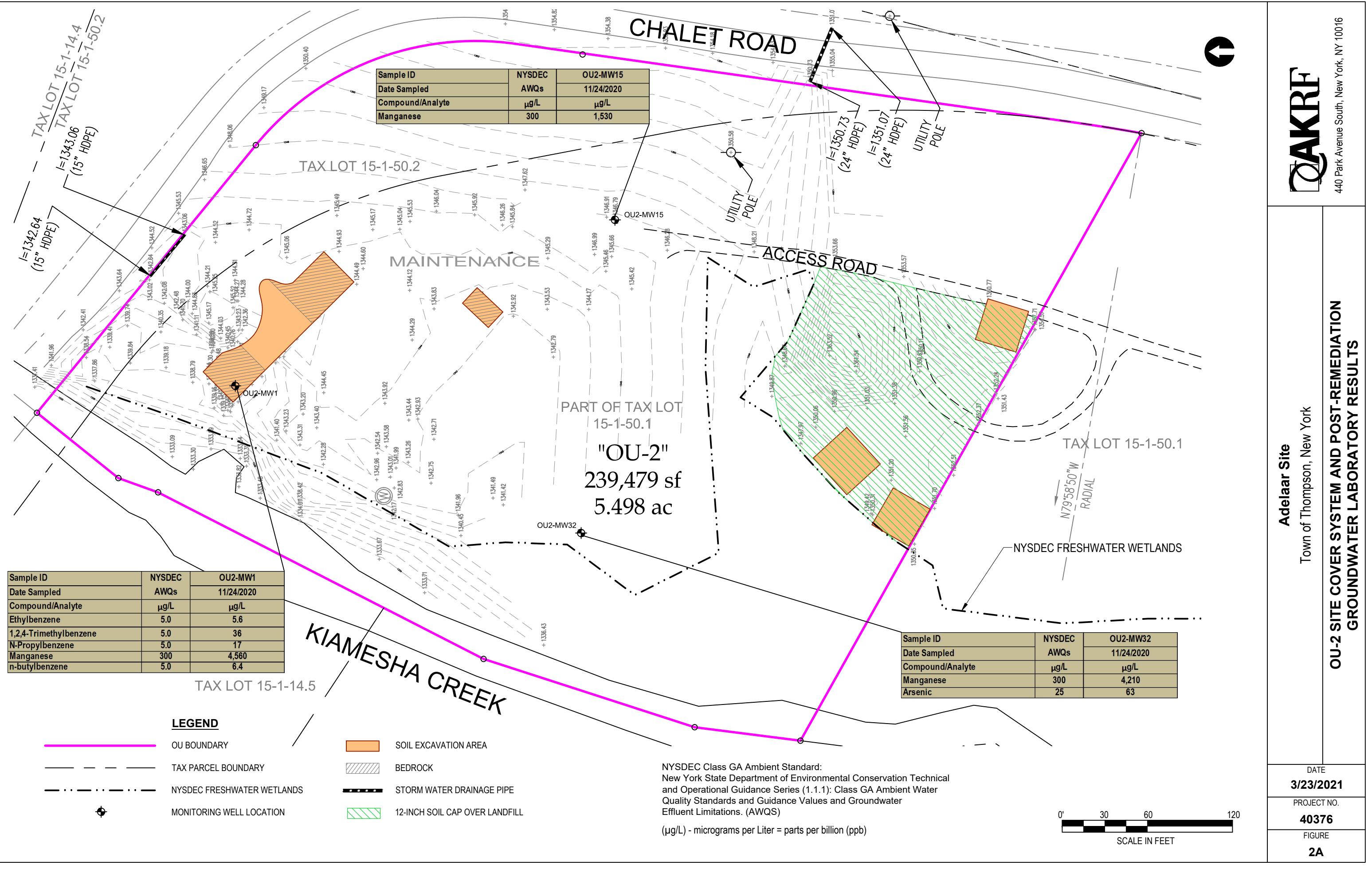
OU-2: 41° 40' 14" N, 74° 38' 51" W

OU-3: 41° 40' 33" N, 74° 38' 49" W

USGS 7.5 Minute Topographic Map  
Monticello Quad  
Figure 1

**ADELAAR**

NYSDEC Site No. C353014





Adelaar Site

Town of Thompson, New York

## OU-3 POST-REMEDIATION GROUNDWATER LABORATORY RESULTS

**KIAMESHA CREEK**

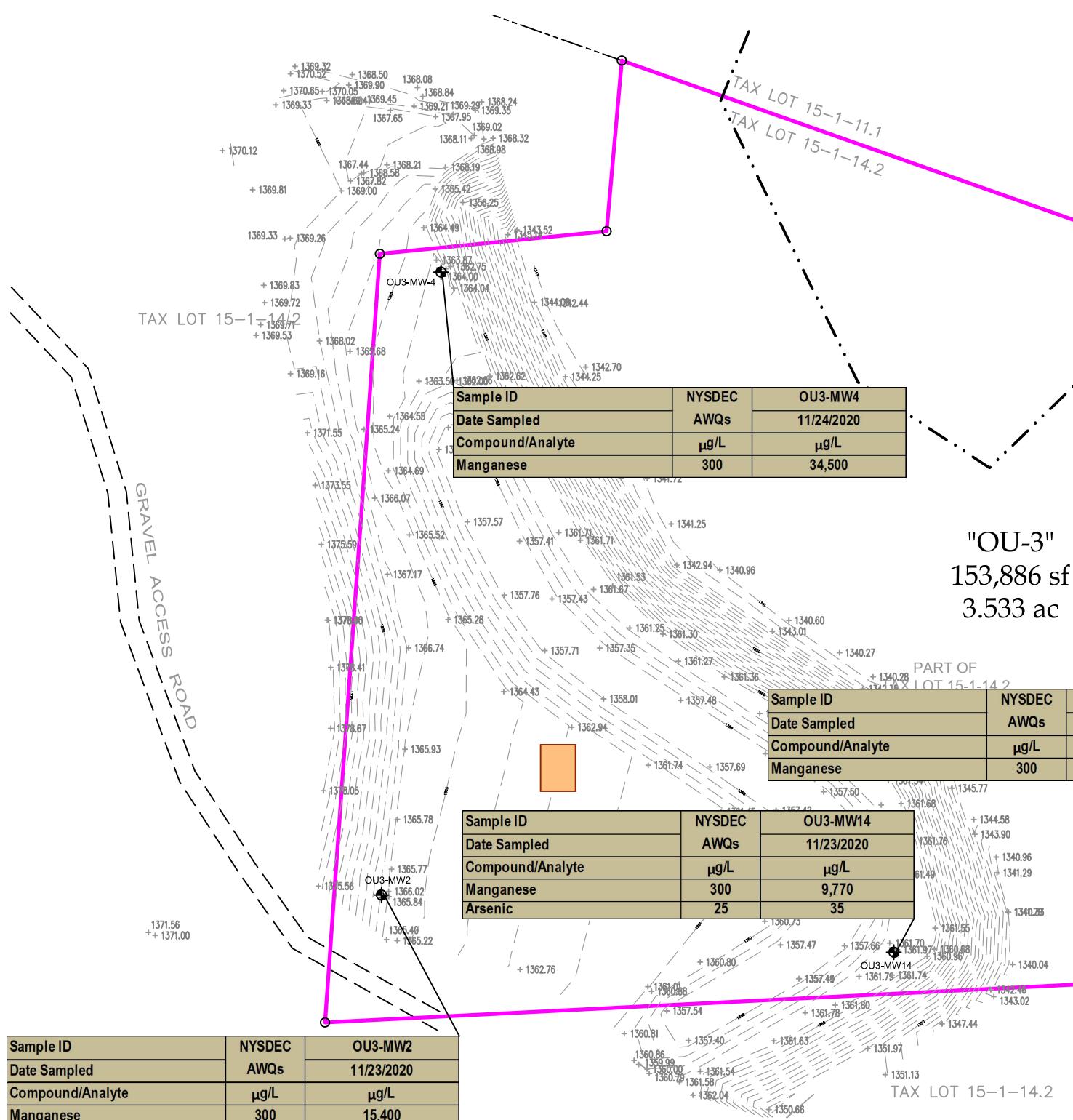
"OU-3"  
153,886 sf  
3.533 ac

TAX LOT 15-1-11.1

TAX LOT 15-1-11.1

TAX LOT 15-1-14.2

TAX LOT 15-1-35.7

**LEGEND**

OU BOUNDARY

SOIL EXCAVATION AREA

TAX PARCEL BOUNDARY

NYSDEC FRESHWATER WETLANDS

MONITORING WELL LOCATION

NYSDEC Class GA Ambient Standard:  
New York State Department of Environmental Conservation Technical  
and Operational Guidance Series (1.1.1): Class GA Ambient Water  
Quality Standards and Guidance Values and Groundwater  
Effluent Limitations. (AWQS)

(µg/L) - micrograms per Liter = parts per billion (ppb)

DATE  
3/23/2021PROJECT NO.  
40376FIGURE  
2B

## **APPENDIX A**

**ADELAAR**  
**OU-2 AND OU3 SITE INSPECTION FORM**  
**TOWN OF THOMPSON, NEW YORK**

Inspector Name: John Sulich	Date: 11/24/20
Reviewed By: Bryan Zieroff	Date: 12/01/20

**OU-2 Soil Cap over Landfill Area**

Site Cap - Soil Cover	Condition Observed			Comments
	Good	Maintenance Required <sup>1/</sup>	Contingency Action Required <sup>2/</sup>	
Subsidence/Settling	X			
Erosion/ Soil Deposition	X			
Vegetative cover	X			
Seeps	X			
Ponding	X			

1/ - Contact the Adelaar Project Manager to coordinate maintenance activities. Document completed maintenance activities on this form.

2/ - Immediately contact the Adelaar and AKRF Project Manager for contingency requirements. Notify NYSDEC within 24 hours and refer to Site Management Plan for contingency requirements.

Emergency Contact Information		
Name	Title	Contact Numbers
Marc Godick	AKRF Project Director	914-922-2356
Bryan Zieroff	AKRF Project Manager	914-922-2382
Paul Roggeman	Adelaar Project Manager	845-794-6060
Paul Turvey	EPR Concord II	816-472-1700



## Well Sampling Log

Job No:		Client:		Well No:							
Project Location: Adelaar		Sampled By: J. Sulich		<i>QJ2-MW3'2</i>							
Date: 11/24/20		Sampling Time: 1100									
LEL at surface: NF											
PID at surface: ND											
Total Depth:	ft. below top of casing	Water Column (WC):	feet	*= 0.163 * WC for 2" wells							
Depth to Water:	5.56	ft. below top of casing	gallons	*= 0.653 * WC for 4" wells							
Depth to Product:	14.02	ft. below top of casing	gallons	*= 1.469 * WC for 6" wells							
Depth to top of screen:	ft. below top of casing	Well Diam.:	inches	Target maximum flow rate is 100 ml/min							
Depth to bottom of screen:	ft. below top of casing	Purging Device (pump type):									
Approx. Pump Intake:	ND	ft. below top of casing									
Time	Depth to Water (Ft.)	Purge Rate (ml/min)	Temp (°C)	Conductivity (mS/cm)	DO (mg/L)	pH	ORP (mV)	Turbidity (NTU)	Comments (problems, odor, sheen)		
950	ND	100	8.71	0.522	6.21	6.64	-2	400	NO ODOR NO SHEEN DURE HIGH QJ2-MW3-2000124		
955			8.72	0.562	6.90	6.62	-39	481			
1000			8.62	0.603	0.81	6.63	-20	444			
1005			8.91	0.600	0.71	6.62	14	302			
1010			8.81	0.480	0.62	6.62	12	212			
1015			8.81	0.589	0.54	6.62	12	134			
1020			8.91	0.592	0.47	6.62	6	220			
1025			8.93	0.621	0.51	6.63	0	48.1			
1030			9.00	0.680	0.58	6.64	0	10.9			
1035			9.95	0.646	0.60	6.66	-3	162			
1040			9.50	0.659	0.63	6.64	-5	138			
1045			9.61	0.662	0.68	6.63	-8	10.9			
1050			9.62	0.640	0.72	6.62	-9	56.7			
1055			9.64	0.706	0.78	6.62	-13	45.2			
1100	1000										
1130	0.63		0.212	0.30	6.61	-13	105	<50 NTU	If water quality parameters do not stabilize and/or turbidity is greater than 50 NTU within two hours, discontinue purging and collect sample.		
Stabilization Criteria:			+/- 3 mS/cm	+/- 0.3 mg/L	+/- 0.1 pH units	+/- 10 mV					
Groundwater samples analyzed for:											



## Well Sampling Log

Job No: 40976		Client:		Well No:  <b>OU2-MW-1</b>					
Project Location: Adelaar		Sampled By: J. Sulich							
Date: 11/29/20		Sampling Time: 9:00							
LEL at surface: NA									
PID at surface: ND									
Total Depth: 11.08	ft. below top of casing	Water Column (WC):		feet	*= 0.163 * WC for 2" wells				
Depth to Water: 10.89	ft. below top of casing	Well Volume*: 100		gallons	*= 0.653 * WC for 4" wells				
Depth to Product:	ft. below top of casing	Volume Purged:		gallons	*= 1.469 * WC for 6" wells				
Depth to top of screen:	ft. below top of casing	Well Diam.: 2		inches	Target maximum flow rate is 100 ml/min				
Depth to bottom of screen:	ft. below top of casing	Purging Device (pump type):							
Approx. Pump Intake:	ft. below top of casing								
Time	Depth to Water (Ft.)	Purge Rate (ml/min)	Temp (°C)	Conductivity (mS/cm)	DO (mg/L)	pH	ORP (mV)	Turbidity (NTU)	Comments (problems, odor, sheen)
9:10	~10	~100	10.49	0.911	4.41	6.88	-70	171	NO ODOR  NO GREEN  M3/M50  H2E
9:15			11.38	0.590	1.00	6.93	-22	934	
9:20			11.18	0.580	1.30	6.93	-33	1000	
9:25			11.02	0.570	1.08	6.90	-40	1000	
9:30			10.84	0.545	0.94	6.90	-45	1000	
9:35			10.64	0.533	0.91	6.88	-50	1000	
9:40			10.27	0.522	0.91	6.86	-55	1000	
9:45			12.01	0.469	0.51	6.73	-36	957	
9:50			11.99	0.435	0.47	6.72	-40	950	
9:55			12.05	0.492	0.47	6.71	-42	30.3	
9:00	SAMPLED								
9:35			12.07	0.495	0.47	6.70	-43	25.2	
Stabilization Criteria:				+/- 3 mS/cm	+/- 0.3 mg/L	+/- 0.1 pH units	+/- 10 mV	<50 NTU	If water quality parameters do not stabilize and/or turbidity is greater than 50 NTU within two hours, discontinue purging and collect sample.
Groundwater samples analyzed for:									



## Well Sampling Log

Job No:		Client:		<b>Well No:</b>  <b>CW8-MW15</b>					
Project Location: Adelaar		Sampled By: J. Sulich							
Date: 11/24/20		Sampling Time: 1230							
LEL at surface: NA									
PID at surface: ND									
Total Depth: 9.61 ft. below top of casing		Water Column (WC): feet		*= 0.163 * WC for 2" wells					
Depth to Water: 9.54 ft. below top of casing		Well Volume*: gallons		*= 0.653 * WC for 4" wells					
Depth to Product:		Volume Purged: gallons		*= 1.469 * WC for 6" wells					
Depth to top of screen:		Well Diam.: inches		Target maximum flow rate is 100 ml/min					
Depth to bottom of screen:		Purging Device (pump type):							
Approx. Pump Intake: N8 ft. below top of casing									
Time	Depth to Water (Ft.)	Purge Rate (ml/min)	Temp (°C)	Conductivity (mS/cm)	DO (mg/L)	pH	ORP (mV)	Turbidity (NTU)	Comments (problems, odor, sheen)
1145			9.02	0.476	9.00	6.65	227	357	NO ODOR  NO FROTH
1150			9.03	0.470	3.21	6.61	271	319	
1155			9.04	0.451	2.79	6.63	298	362	
1200			9.05	0.416	1.04	6.63	324	339	
1205			9.12	0.412	0.80	6.62	325	202	
1210			9.17	0.410	0.65	6.62	329	129	
1215			9.19	0.408	0.60	6.62	330	121	
1220			9.17	0.406	0.60	6.62	330	80.7	
1225			9.17	0.404	0.55	6.62	331	40.9	
1230	STABILIZED		9.17	0.402	0.53	6.62	330	22.2	
Stabilization Criteria:			+- 3 mS/cm	+- 0.3 mg/L	+- 0.1 pH units	+- 10 mV	<50 NTU	If water quality parameters do not stabilize and/or turbidity is greater than 50 NTU within two hours, discontinue purging and collect sample.	
Groundwater samples analyzed for:									



## Well Sampling Log

Job No: 40376	Client:			Well No:					
Project Location: Adelaar	Sampled By: J. Sulich			QU3-MW2					
Date: 11/23/00	Sampling Time: 12:55								
LEL at surface: NA									
PID at surface: NO									
Total Depth: 35.49 ft. below top of casing	Water Column (WC):	feet	*= 0.163 * WC for 2" wells						
Depth to Water: 31.67 ft. below top of casing	Well Volume*:	gallons	*= 0.653 * WC for 4" wells						
Depth to Product: ND ft. below top of casing	Volume Purged:	gallons	*= 1.469 * WC for 6" wells						
Depth to top of screen:	Well Diam.: 2	inches	Target maximum flow rate is 100 ml/min						
Depth to bottom of screen:	Purging Device (pump type): QBO MP50 1/2" BLAUPUMP								
Approx. Pump Intake: ~25 ft. below top of casing									
Time	Depth to Water (Ft.)	Purge Rate (ml/min)	Temp (°C)	Conductivity (mS/cm)	DO (mg/L)	pH	ORP (mV)	Turbidity (NTU)	Comments (problems, odor, sheen)
11:00	~22	N100	11.99	0.620	2.71	7.25	654	1000	No odor No sheen
11:15			10.62	0.642	1.81	6.98	584	1000	
11:20			10.00	0.648	1.02	6.99	528	1000	
11:25			9.45	0.652	1.09	6.82	592	1000	
11:30			9.02	0.660	0.92	6.72	596	1000	
11:35			8.87	0.669	1.83	6.69	609	1000	
11:40			8.67	0.673	2.47	6.69	592	302	
11:45			8.52	0.680	3.58	6.74	580	491	
11:50			8.36	0.690	4.93	6.81	563	354	
11:55			8.20	0.695	5.21	6.84	554	202	
12:00			8.03	0.700	5.38	6.87	544	100	
12:05			8.27	0.703	5.66	6.88	534	59.3	
12:10			8.26	0.705	5.65	6.90	531	49.0	
12:15	SAMPLED								
12:20			8.25	0.708	5.68	6.92	533	49.0	
Stabilization Criteria:		+/- 3 mS/cm	+/- 0.3 mg/L	+/- 0.1 pH units	+/- 10 mV	<50 NTU	If water quality parameters do not stabilize and/or turbidity is greater than 50 NTU within two hours, discontinue purging and collect sample.		
Groundwater samples analyzed for: METALS (6020)									



## Well Sampling Log

Job No:	Client:		Well No:							
Project Location: Adelaar	Sampled By: J. Sulich		QJB-MW4							
Date: 11/24/20	Sampling Time: 1035									
LEL at surface:										
PID at surface:										
Total Depth:	ft. below top of casing	Water Column (WC):	feet							
Depth to Water: 23.19	ft. below top of casing	Well Volume*:	gallons							
Depth to Product: 35.26	ft. below top of casing	Volume Purged:	gallons							
Depth to top of screen:	ft. below top of casing	Well Diam.: inches	Target maximum flow rate is 100 ml/min							
Depth to bottom of screen:	ft. below top of casing	Purging Device (pump type):								
Approx. Pump Intake:	ft. below top of casing									
Time	Depth to Water (Ft.)	Purge Rate (ml/min)	Temp (°C)	Conductivity (mS/cm)	DO (mg/L)	pH	ORP (mV)	Turbidity (NTU)	Comments (problems, odor, sheen)	
1000	N/A	N/A	10.46	0.730	2.77	6.60	152	100	No odor No sheen	
1010			10.53	0.777	2.04	6.53	104	103		
1015			10.21	0.769	1.51	6.57	-3	72.1		
1020			10.94	0.762	0.43	6.55	-21	52.5		
1025			10.16	0.765	0.44	6.54	-28	52.7		
1030			11.02	0.767	0.40	6.53	-32	49.1		
1035	Surf		11.05	0.765	0.33					
1040			11.05	0.767	0.41	6.52	-38	49.2		
Stabilization Criteria:		+/- 3 mS/cm	+/- 0.3 mg/L	+/- 0.1 pH units	+/- 10 mV	<50 NTU	If water quality parameters do not stabilize and/or turbidity is greater than 50 NTU within two hours, discontinue purging and collect sample.			
Groundwater samples analyzed for:										

Turned in to QN 11/24/20 w/ DAKRF



## Well Sampling Log

Job No: 40376		Client:		Well No: Q03-MW14						
Project Location: Adelaar		Sampled By: J. Sulich								
Date: 11/23/20		Sampling Time: 14:00								
LEL at surface: NA										
PID at surface: ND										
Total Depth: 33.10	ft. below top of casing	Water Column (WC):	feet	$\ast = 0.163 \times WC$ for 2" wells $\ast = 0.653 \times WC$ for 4" wells $\ast = 1.469 \times WC$ for 6" wells						
Depth to Water: 28.18	ft. below top of casing	Well Volume*:	gallons							
Depth to Product: 23.10	ft. below top of casing	Volume Purged:	gallons							
Depth to top of screen:	ft. below top of casing	Well Diam.: 2	inches							
Depth to bottom of screen:	ft. below top of casing	Purging Device (pump type):		Target maximum flow rate is 100 ml/min						
Approx. Pump Intake: N 32.5	ft. below top of casing									
Time	Depth to Water (Ft.)	Purge Rate (ml/min)	Temp (°C)			Conductivity (mS/cm)	DO (mg/L)	pH	ORP (mV)	Turbidity (NTU)
1300	N 29	1100	6.00			0.717	0.74	7.14	102	1600
1305			6.32	0.712	1.92	7.13	103	1600		
1310			6.70	0.702	1.36	7.12	84	563		
1315			6.99	0.705	0.86	7.11	75	295		
1320			6.12	0.204	0.74	7.11	66	178		
1325			6.72	0.711	0.73	7.15	55	109		
1330			6.38	0.720	0.72	7.16	44	98.7		
1335			7.97	0.725	0.73	7.13	33	89.3		
1340			7.84	0.727	0.71	7.18	28	69.8		
1345			7.84	0.727	0.69	7.20	22	58.4		
1350			7.84	0.727	0.65	7.21	14	46.1		
1355			7.84	0.727	0.63	7.21	14	44.1		
1400										
1405			7.84	0.727	0.62	7.22	10	48.2		
Stabilization Criteria:				+/- 3 mS/cm	+/- 0.3 mg/L	+/- 0.1 pH units	+/- 10 mV	<50 NTU	If water quality parameters do not stabilize and/or turbidity is greater than 50 NTU within two hours, discontinue purging and collect sample.	
Groundwater samples analyzed for: RGNS										



## Well Sampling Log

Job No:		Client:		Well No:  QUB-MW18					
Project Location: Adelaar		Sampled By: J. Sulich							
Date: 11/24/20		Sampling Time: 10:50 AM 1440							
LEL at surface: NA									
PID at surface: 110									
Total Depth: 1355 ft. below top of casing		Water Column (WC): feet		*= 0.163 * WC for 2" wells					
Depth to Water: 6.00 ft. below top of casing		Well Volume*: gallons		*= 0.653 * WC for 4" wells					
Depth to Product: 16.72 ft. below top of casing		Volume Purged: gallons		*= 1.469 * WC for 6" wells					
Depth to top of screen:		Well Diam.: inches		Target maximum flow rate is 100 ml/min					
Depth to bottom of screen:		Purging Device (pump type):							
Approx. Pump Intake: ft. below top of casing									
Time	Depth to Water (Ft.)	Purge Rate (ml/min)	Temp (°C)	Conductivity (mS/cm)	DO (mg/L)	pH	ORP (mV)	Turbidity (NTU)	Comments (problems, odor, sheen)
1355	N	1100	10.71	0.243	3.07	6.49	102	1000	NO ODORE NO SHEEN
1400			10.61	0.240	1.87	6.47	209	1000	
1405			10.33	0.230	1.62	6.45	312	0.93	
1410			10.00	0.224	1.27	6.44	311	12	
1415			9.94	0.225	1.17	6.44	356	100	
1420			9.71	0.219	0.99	6.42	311	29.8	
1425			9.64	0.213	0.94	6.41	304	61.2	
1430			9.54	0.204	0.84	6.39	299	57.2	
1435	<del>sample</del>		9.51	0.210	0.74	6.39	297	48.8	
1440	10.21								
1445			9.51	0.209	0.70	6.38	295	41.2	
Stabilization Criteria:				+/- 3 mS/cm	+/- 0.3 mg/L	+/- 0.1 pH units	+/- 10 mV	<50 NTU	If water quality parameters do not stabilize and/or turbidity is greater than 50 NTU within two hours, discontinue purging and collect sample.
Groundwater samples analyzed for: <i>Methane</i>									

## **APPENDIX B**



Environment Testing  
TestAmerica

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## ANALYTICAL REPORT

Eurofins TestAmerica, Edison  
777 New Durham Road  
Edison, NJ 08817  
Tel: (732)549-3900

Laboratory Job ID: 460-200012-1  
Client Project/Site: Concord/Adelaar/EPR

For:  
AKRF Inc  
34 South Broadway  
Suite 314  
White Plains, New York 10601

Attn: Mr. Bryan Zieroff

Authorized for release by:  
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### LINKS

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The test results in this report meet all 2003 NELAC and 2009 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed within the body of this report. Release of the data contained in this sample data package and in the electronic data deliverable has been authorized by the Laboratory Manager or his/her designee, as verified by the following signature.



---

Allison Bennett  
Project Manager I  
1/10/2020 1:42:33 PM

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# Definitions/Glossary

Client: AKRF Inc

Project/Site: Concord/Adelaar/EPR

Job ID: 460-200012-1

## Qualifiers

### GC/MS VOA

Qualifier	Qualifier Description
*	MS or MSD is outside acceptance limits.
J	Indicates an estimated value.
U	Analyzed for but not detected.

### GC/MS Semi VOA

Qualifier	Qualifier Description
*	MS or MSD is outside acceptance limits.
*	Surrogate is outside acceptance limits.
U	Analyzed for but not detected.

### GC Semi VOA

Qualifier	Qualifier Description
*	RPD of the LCS and LCSD exceeds the control limits
U	Analyzed for but not detected.

### Metals

Qualifier	Qualifier Description
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.
J	Sample result is greater than the MDL but below the CRDL
U	Indicates analyzed for but not detected.

## Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
□	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

# Case Narrative

Client: AKRF Inc  
Project/Site: Concord/Adelaar/EPR

Job ID: 460-200012-1

**Job ID: 460-200012-1**

**Laboratory: Eurofins TestAmerica, Edison**

Narrative

## CASE NARRATIVE

**Client: AKRF Inc**

**Project: Concord/Adelaar/EPR**

**Report Number: 460-200012-1**

This case narrative is in the form of an exception report, where only the anomalies related to this report, method specific performance and/or QA/QC issues are discussed. If there are no issues to report, this narrative will include a statement that documents that there are no relevant data issues.

It should be noted that samples with elevated Reporting Limits (RLs) as a result of a dilution may not be able to satisfy customer reporting limits in some cases. Such increases in the RLs are unavoidable but acceptable consequence of sample dilution that enables quantification of target analytes or interferences which exceed the calibration range of the instrument.

Calculations are performed before rounding to avoid round-off errors in calculated results.

All holding times were met and proper preservation noted for the methods performed on these samples, unless otherwise detailed in the individual sections below.

### RECEIPT

The samples were received on 1/2/2020 4:00 PM and 1/6/2020 7:20 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 3 coolers at receipt time were 2.8° C, 2.9° C and 3.4° C.

Note: All samples which require thermal preservation are considered acceptable if the arrival temperature is within 2C of the required temperature or method specified range. For samples with a specified temperature of 4C, samples with a temperature ranging from just above freezing temperature of water to 6C shall be acceptable. Samples that are hand delivered immediately following collection may not meet these criteria, however they will be deemed acceptable according to NELAC standards, if there is evidence that the chilling process has begun, such as arrival on ice, etc.

### VOLATILE ORGANIC COMPOUNDS (GC-MS)

Samples OU-2-MW-1-123019 (460-200012-1), OU-2-MW-15-123019 (460-200012-2), OU-2-MW-32-123019 (460-200012-3), OU-2-MW-33-123019 (460-200012-4), TB-123119 (460-200012-8) and FB-123119 (460-200012-9) were analyzed for Volatile organic compounds (GC-MS) in accordance with EPA SW-846 Methods 8260C. The samples were analyzed on 01/03/2020.

The continuing calibration verification (CCV) analyzed in batch 460-666327 was outside the method criteria for the following analyte: 1,2-Dichloroethane. A CCV standard at or below the reporting limit (RL) was analyzed with the affected samples and found to be acceptable. As indicated in the reference method, sample analysis may proceed; however, any detection for the affected analyte(s) is considered estimated.

1,2,4-Trimethylbenzene failed the recovery criteria low for the MS/MSD of sample OU-2-MW-1-123019MS/MSD (460-200012-1) in batch 460-666327.

Refer to the QC report for details.

No other difficulties were encountered during the volatiles analysis.

All other quality control parameters were within the acceptance limits.

### SEMOVOLATILE ORGANIC COMPOUNDS (GC/MS)

Samples OU-2-MW-1-123019 (460-200012-1), OU-2-MW-15-123019 (460-200012-2), OU-2-MW-32-123019 (460-200012-3), OU-2-MW-33-123019 (460-200012-4) and FB-123119 (460-200012-9) were analyzed for semivolatile organic compounds (GC/MS) in

# Case Narrative

Client: AKRF Inc

Project/Site: Concord/Adelaar/EPR

Job ID: 460-200012-1

## Job ID: 460-200012-1 (Continued)

### Laboratory: Eurofins TestAmerica, Edison (Continued)

accordance with EPA SW-846 Method 8270D. The samples were prepared and analyzed on 01/04/2020.

Surrogates recoveries for the following laboratory control sample (LCS) and laboratory control sample duplicate (LCSD) associated with batch 460-666424 were outside the upper control limits. Sample has been reported. 2-Fluorophenol (Surr) and Phenol-d5 (Surr) failed the surrogate recovery criteria high for LCS 460-666424/2-A and LCSD 460-666424/3-A.

Surrogate recovery for the following samples were outside the upper control limit: OU-2-MW-15-123019 (460-200012-2), OU-2-MW-32-123019 (460-200012-3), OU-2-MW-33-123019 (460-200012-4) and FB-123119 (460-200012-9). This sample did not contain any target analytes; therefore, re-extraction and/or re-analysis was not performed.

The surrogate recovery for the blank associated with preparation batch 460-666424 and analytical batch 460-666470 was outside the upper control limits. Phenol-d5 (Surr) failed the surrogate recovery criteria high for MB 460-666424/1-A.

Naphthalene failed the recovery criteria high for the MSD of sample OU-2-MW-1-123019MSD (460-200012-1) in batch 460-666470.

Refer to the QC report for details.

No other difficulties were encountered during the semivolatiles analysis.

All other quality control parameters were within the acceptance limits.

### **PESTICIDES**

Samples OU-2-MW-1-123019 (460-200012-1), OU-2-MW-15-123019 (460-200012-2), OU-2-MW-32-123019 (460-200012-3), OU-2-MW-33-123019 (460-200012-4) and FB-123119 (460-200012-9) were analyzed for Pesticides in accordance with EPA SW-846 Methods 8081B. The samples were prepared on 01/03/2020 and analyzed on 01/06/2020.

The continuing calibration verification (CCV) associated with batch 460-666613 recovered above the upper control limit for Methoxychlor on the secondary column. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported: (CCVIS 460-666613/3).

The RPD of the laboratory control sample (LCS) and laboratory control sample duplicate (LCSD) for preparation batch 460-666393 and analytical batch 460-666613 recovered outside control limits for all analytes: : (LCSD 460-666393/3-A).

Refer to the QC report for details.

No other difficulties were encountered during the pesticides analysis.

All quality control parameters were within the acceptance limits.

### **POLYCHLORINATED BIPHENYLS (PCBS)**

Samples OU-2-MW-1-123019 (460-200012-1), OU-2-MW-15-123019 (460-200012-2), OU-2-MW-32-123019 (460-200012-3), OU-2-MW-33-123019 (460-200012-4) and FB-123119 (460-200012-9) were analyzed for polychlorinated biphenyls (PCBs) in accordance with EPA SW-846 Method 8082A. The samples were prepared on 01/03/2020 and analyzed on 01/07/2020.

No difficulties were encountered during the PCBs analysis.

All quality control parameters were within the acceptance limits.

### **METALS**

Samples OU-2-MW-1-123019 (460-200012-1), OU-3-MW-18-010320 (460-200140-1), OU-2-MW-15-123019 (460-200012-2), OU-2-MW-32-123019 (460-200012-3), OU-2-MW-33-123019 (460-200012-4), OU-3-MW-2-123119 (460-200012-5), OU-3-MW-4-123119 (460-200012-6), OU-3-MW-14-123119 (460-200012-7) and FB-123119 (460-200012-9) were analyzed for Metals in accordance with 6020B. The samples were prepared on 01/09/2020 and analyzed on 01/09/2020 and 01/10/2020.

The presence of the '4' qualifier in the data indicates analytes where the concentration in the unspiked sample exceeded four times the

## Case Narrative

Client: AKRF Inc

Project/Site: Concord/Adelaar/EPR

Job ID: 460-200012-1

### **Job ID: 460-200012-1 (Continued)**

#### **Laboratory: Eurofins TestAmerica, Edison (Continued)**

spiking amount.

Refer to the QC report for details.

Samples OU-3-MW-2-123119 (460-200012-5)[10X] and OU-3-MW-14-123119 (460-200012-7)[10X] required dilution prior to analysis. The reporting limits have been adjusted accordingly.

No difficulties were encountered during the Metals analysis.

All other quality control parameters were within the acceptance limits.

#### **TOTAL MERCURY**

Samples OU-2-MW-1-123019 (460-200012-1), OU-3-MW-18-010320 (460-200140-1), OU-2-MW-15-123019 (460-200012-2), OU-2-MW-32-123019 (460-200012-3), OU-2-MW-33-123019 (460-200012-4), OU-3-MW-2-123119 (460-200012-5), OU-3-MW-4-123119 (460-200012-6), OU-3-MW-14-123119 (460-200012-7) and FB-123119 (460-200012-9) were analyzed for total mercury in accordance with EPA SW-846 Methods 7470A. The samples were prepared and analyzed on 01/03/2020 and 01/07/2020.

No difficulties were encountered during the Hg analysis.

All quality control parameters were within the acceptance limits.

# Detection Summary

Client: AKRF Inc

Project/Site: Concord/Adelaar/EPR

Job ID: 460-200012-1

**Client Sample ID: OU-2-MW-1-123019**

**Lab Sample ID: 460-200012-1**

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,2,4-Trimethylbenzene	47		1.0	0.37	ug/L	1		8260C	Total/NA
1,3,5-Trimethylbenzene	1.6		1.0	0.33	ug/L	1		8260C	Total/NA
Ethylbenzene	6.5		1.0	0.30	ug/L	1		8260C	Total/NA
n-Butylbenzene	7.9		1.0	0.32	ug/L	1		8260C	Total/NA
N-Propylbenzene	15		1.0	0.32	ug/L	1		8260C	Total/NA
sec-Butylbenzene	3.5		1.0	0.37	ug/L	1		8260C	Total/NA
Toluene	0.61	J	1.0	0.38	ug/L	1		8260C	Total/NA
Xylenes, Total	2.5		2.0	0.65	ug/L	1		8260C	Total/NA
Arsenic	3.2		2.0	0.73	ug/L	2		6020B	Total/NA
Barium	236		4.0	1.2	ug/L	2		6020B	Total/NA
Copper	4.1		4.0	2.0	ug/L	2		6020B	Total/NA
Lead	1.9		1.2	0.55	ug/L	2		6020B	Total/NA
Manganese	3130		8.0	2.9	ug/L	2		6020B	Total/NA

**Client Sample ID: OU-2-MW-15-123019**

**Lab Sample ID: 460-200012-2**

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	177		4.0	1.2	ug/L	2		6020B	Total/NA
Copper	3.6	J	4.0	2.0	ug/L	2		6020B	Total/NA
Manganese	1150		8.0	2.9	ug/L	2		6020B	Total/NA

**Client Sample ID: OU-2-MW-32-123019**

**Lab Sample ID: 460-200012-3**

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	54		5.0	4.4	ug/L	1		8260C	Total/NA
Methyl tert-butyl ether	1.5		1.0	0.47	ug/L	1		8260C	Total/NA
Arsenic	21.7		2.0	0.73	ug/L	2		6020B	Total/NA
Barium	427		4.0	1.2	ug/L	2		6020B	Total/NA
Chromium	4.0		4.0	2.3	ug/L	2		6020B	Total/NA
Copper	10.7		4.0	2.0	ug/L	2		6020B	Total/NA
Lead	12.0		1.2	0.55	ug/L	2		6020B	Total/NA
Manganese	4630		8.0	2.9	ug/L	2		6020B	Total/NA
Nickel	4.4		4.0	2.4	ug/L	2		6020B	Total/NA

**Client Sample ID: OU-2-MW-33-123019**

**Lab Sample ID: 460-200012-4**

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	0.78	J	2.0	0.73	ug/L	2		6020B	Total/NA
Barium	194		4.0	1.2	ug/L	2		6020B	Total/NA
Copper	3.8	J	4.0	2.0	ug/L	2		6020B	Total/NA
Manganese	1130		8.0	2.9	ug/L	2		6020B	Total/NA

**Client Sample ID: OU-3-MW-2-123119**

**Lab Sample ID: 460-200012-5**

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	7.2		2.0	0.73	ug/L	2		6020B	Total/NA
Barium	802		4.0	1.2	ug/L	2		6020B	Total/NA
Beryllium	2.5		0.80	0.25	ug/L	2		6020B	Total/NA
Chromium	34.9		4.0	2.3	ug/L	2		6020B	Total/NA
Copper	74.8		4.0	2.0	ug/L	2		6020B	Total/NA
Lead	53.0		1.2	0.55	ug/L	2		6020B	Total/NA
Manganese	17400		40.0	14.4	ug/L	10		6020B	Total/NA
Nickel	29.9		4.0	2.4	ug/L	2		6020B	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins TestAmerica, Edison

# Detection Summary

Client: AKRF Inc  
Project/Site: Concord/Adelaar/EPR

Job ID: 460-200012-1

## **Client Sample ID: OU-3-MW-2-123119 (Continued)**

## **Lab Sample ID: 460-200012-5**

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Zinc	91.2		16.0	11.1	ug/L	2		6020B	Total/NA

## **Client Sample ID: OU-3-MW-4-123119**

## **Lab Sample ID: 460-200012-6**

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	52.6		2.0	0.73	ug/L	2		6020B	Total/NA
Barium	278		4.0	1.2	ug/L	2		6020B	Total/NA
Chromium	5.1		4.0	2.3	ug/L	2		6020B	Total/NA
Copper	20.3		4.0	2.0	ug/L	2		6020B	Total/NA
Lead	41.1		1.2	0.55	ug/L	2		6020B	Total/NA
Manganese	7730		8.0	2.9	ug/L	2		6020B	Total/NA
Nickel	17.3		4.0	2.4	ug/L	2		6020B	Total/NA
Zinc	1510		16.0	11.1	ug/L	2		6020B	Total/NA
Mercury	0.22		0.20	0.12	ug/L	1		7470A	Total/NA

## **Client Sample ID: OU-3-MW-14-123119**

## **Lab Sample ID: 460-200012-7**

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	20.6		2.0	0.73	ug/L	2		6020B	Total/NA
Barium	297		4.0	1.2	ug/L	2		6020B	Total/NA
Copper	4.7		4.0	2.0	ug/L	2		6020B	Total/NA
Lead	2.5		1.2	0.55	ug/L	2		6020B	Total/NA
Manganese	14300		40.0	14.4	ug/L	10		6020B	Total/NA
Nickel	5.6		4.0	2.4	ug/L	2		6020B	Total/NA
Zinc	21.8		16.0	11.1	ug/L	2		6020B	Total/NA

## **Client Sample ID: TB-123119**

## **Lab Sample ID: 460-200012-8**

No Detections.

## **Client Sample ID: FB-123119**

## **Lab Sample ID: 460-200012-9**

No Detections.

## **Client Sample ID: OU-3-MW-18-010320**

## **Lab Sample ID: 460-200140-1**

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	2.8		2.0	0.73	ug/L	2		6020B	Total/NA
Barium	126		4.0	1.2	ug/L	2		6020B	Total/NA
Beryllium	0.32	J	0.80	0.25	ug/L	2		6020B	Total/NA
Chromium	5.9		4.0	2.3	ug/L	2		6020B	Total/NA
Copper	15.0		4.0	2.0	ug/L	2		6020B	Total/NA
Lead	11.0		1.2	0.55	ug/L	2		6020B	Total/NA
Manganese	651		8.0	2.9	ug/L	2		6020B	Total/NA
Nickel	8.8		4.0	2.4	ug/L	2		6020B	Total/NA
Zinc	21.9		16.0	11.1	ug/L	2		6020B	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins TestAmerica, Edison

# Client Sample Results

Client: AKRF Inc

Project/Site: Concord/Adelaar/EPR

Job ID: 460-200012-1

**Client Sample ID: OU-2-MW-1-123019****Lab Sample ID: 460-200012-1**

Date Collected: 12/30/19 12:30

Matrix: Water

Date Received: 01/02/20 16:00

**Method: 8260C - Volatile Organic Compounds by GC/MS**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	1.0	U	1.0	0.24	ug/L			01/03/20 14:52	1
1,1-Dichloroethane	1.0	U	1.0	0.26	ug/L			01/03/20 14:52	1
1,1-Dichloroethene	1.0	U	1.0	0.26	ug/L			01/03/20 14:52	1
<b>1,2,4-Trimethylbenzene</b>	<b>47</b>		1.0	0.37	ug/L			01/03/20 14:52	1
1,2-Dichlorobenzene	1.0	U	1.0	0.43	ug/L			01/03/20 14:52	1
1,2-Dichloroethane	1.0	U	1.0	0.43	ug/L			01/03/20 14:52	1
<b>1,3,5-Trimethylbenzene</b>	<b>1.6</b>		1.0	0.33	ug/L			01/03/20 14:52	1
1,3-Dichlorobenzene	1.0	U	1.0	0.34	ug/L			01/03/20 14:52	1
1,4-Dichlorobenzene	1.0	U	1.0	0.33	ug/L			01/03/20 14:52	1
1,4-Dioxane	50	U	50	28	ug/L			01/03/20 14:52	1
2-Butanone (MEK)	5.0	U	5.0	1.9	ug/L			01/03/20 14:52	1
Acetone	5.0	U	5.0	4.4	ug/L			01/03/20 14:52	1
Benzene	1.0	U	1.0	0.20	ug/L			01/03/20 14:52	1
Carbon tetrachloride	1.0	U	1.0	0.21	ug/L			01/03/20 14:52	1
Chlorobenzene	1.0	U	1.0	0.38	ug/L			01/03/20 14:52	1
Chloroform	1.0	U	1.0	0.33	ug/L			01/03/20 14:52	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.22	ug/L			01/03/20 14:52	1
<b>Ethylbenzene</b>	<b>6.5</b>		1.0	0.30	ug/L			01/03/20 14:52	1
Methyl tert-butyl ether	1.0	U	1.0	0.47	ug/L			01/03/20 14:52	1
Methylene Chloride	1.0	U	1.0	0.32	ug/L			01/03/20 14:52	1
<b>n-Butylbenzene</b>	<b>7.9</b>		1.0	0.32	ug/L			01/03/20 14:52	1
<b>N-Propylbenzene</b>	<b>15</b>		1.0	0.32	ug/L			01/03/20 14:52	1
<b>sec-Butylbenzene</b>	<b>3.5</b>		1.0	0.37	ug/L			01/03/20 14:52	1
tert-Butylbenzene	1.0	U	1.0	0.34	ug/L			01/03/20 14:52	1
Tetrachloroethene	1.0	U	1.0	0.25	ug/L			01/03/20 14:52	1
<b>Toluene</b>	<b>0.61 J</b>		1.0	0.38	ug/L			01/03/20 14:52	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.24	ug/L			01/03/20 14:52	1
Trichloroethene	1.0	U	1.0	0.31	ug/L			01/03/20 14:52	1
Vinyl chloride	1.0	U	1.0	0.17	ug/L			01/03/20 14:52	1
<b>Xylenes, Total</b>	<b>2.5</b>		2.0	0.65	ug/L			01/03/20 14:52	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>		<b>Limits</b>			<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
1,2-Dichloroethane-d4 (Surr)	94			74 - 132				01/03/20 14:52	1
4-Bromofluorobenzene	108			77 - 124				01/03/20 14:52	1
Dibromofluoromethane (Surr)	111			72 - 131				01/03/20 14:52	1
Toluene-d8 (Surr)	101			80 - 120				01/03/20 14:52	1

**Method: 8270D - Semivolatile Organic Compounds (GC/MS)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Methylphenol	10	U	10	0.67	ug/L		01/04/20 07:34	01/04/20 19:21	1
3 & 4 Methylphenol	10	U	10	0.64	ug/L		01/04/20 07:34	01/04/20 19:21	1
Acenaphthene	10	U	10	1.1	ug/L		01/04/20 07:34	01/04/20 19:21	1
Acenaphthylene	10	U	10	0.82	ug/L		01/04/20 07:34	01/04/20 19:21	1
Anthracene	10	U	10	0.63	ug/L		01/04/20 07:34	01/04/20 19:21	1
Benzo[a]anthracene	1.0	U	1.0	0.59	ug/L		01/04/20 07:34	01/04/20 19:21	1
Benzo[a]pyrene	1.0	U	1.0	0.41	ug/L		01/04/20 07:34	01/04/20 19:21	1
Benzo[b]fluoranthene	2.0	U	2.0	0.68	ug/L		01/04/20 07:34	01/04/20 19:21	1
Benzo[g,h,i]perylene	10	U	10	1.4	ug/L		01/04/20 07:34	01/04/20 19:21	1
Benzo[k]fluoranthene	1.0	U	1.0	0.67	ug/L		01/04/20 07:34	01/04/20 19:21	1
Chrysene	2.0	U	2.0	0.91	ug/L		01/04/20 07:34	01/04/20 19:21	1

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# Client Sample Results

Client: AKRF Inc

Project/Site: Concord/Adelaar/EPR

Job ID: 460-200012-1

**Client Sample ID: OU-2-MW-1-123019****Lab Sample ID: 460-200012-1**

Date Collected: 12/30/19 12:30

Matrix: Water

Date Received: 01/02/20 16:00

**Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dibenz(a,h)anthracene	1.0	U	1.0	0.72	ug/L		01/04/20 07:34	01/04/20 19:21	1
Dibenzofuran	10	U	10	1.1	ug/L		01/04/20 07:34	01/04/20 19:21	1
Fluoranthene	10	U	10	0.84	ug/L		01/04/20 07:34	01/04/20 19:21	1
Fluorene	10	U	10	0.91	ug/L		01/04/20 07:34	01/04/20 19:21	1
Hexachlorobenzene	1.0	U	1.0	0.40	ug/L		01/04/20 07:34	01/04/20 19:21	1
Indeno[1,2,3-cd]pyrene	2.0	U	2.0	0.94	ug/L		01/04/20 07:34	01/04/20 19:21	1
Naphthalene	10	U	10	1.1	ug/L		01/04/20 07:34	01/04/20 19:21	1
Pentachlorophenol	20	U	20	1.4	ug/L		01/04/20 07:34	01/04/20 19:21	1
Phenanthenrene	10	U	10	0.58	ug/L		01/04/20 07:34	01/04/20 19:21	1
Phenol	10	U	10	0.29	ug/L		01/04/20 07:34	01/04/20 19:21	1
Pyrene	10	U	10	1.6	ug/L		01/04/20 07:34	01/04/20 19:21	1
<hr/>									
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol (Sur)	70		26 - 139				01/04/20 07:34	01/04/20 19:21	1
2-Fluorobiphenyl	73		45 - 107				01/04/20 07:34	01/04/20 19:21	1
2-Fluorophenol (Sur)	41		25 - 58				01/04/20 07:34	01/04/20 19:21	1
Nitrobenzene-d5 (Sur)	82		51 - 108				01/04/20 07:34	01/04/20 19:21	1
Phenol-d5 (Sur)	29		14 - 39				01/04/20 07:34	01/04/20 19:21	1
Terphenyl-d14 (Sur)	85		40 - 148				01/04/20 07:34	01/04/20 19:21	1

**Method: 8081B - Organochlorine Pesticides (GC)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	0.020	U	0.020	0.0060	ug/L		01/03/20 15:33	01/06/20 15:21	1
4,4'-DDE	0.020	U	0.020	0.0020	ug/L		01/03/20 15:33	01/06/20 15:21	1
4,4'-DDT	0.020	U	0.020	0.0040	ug/L		01/03/20 15:33	01/06/20 15:21	1
Aldrin	0.020	U	0.020	0.0030	ug/L		01/03/20 15:33	01/06/20 15:21	1
alpha-BHC	0.020	U	0.020	0.0070	ug/L		01/03/20 15:33	01/06/20 15:21	1
beta-BHC	0.020	U	0.020	0.0040	ug/L		01/03/20 15:33	01/06/20 15:21	1
Chlordane (technical)	0.50	U	0.50	0.055	ug/L		01/03/20 15:33	01/06/20 15:21	1
cis-Chlordane	0.020	U	0.020	0.0020	ug/L		01/03/20 15:33	01/06/20 15:21	1
delta-BHC	0.020	U	0.020	0.0050	ug/L		01/03/20 15:33	01/06/20 15:21	1
Dieldrin	0.020	U	0.020	0.0030	ug/L		01/03/20 15:33	01/06/20 15:21	1
Endosulfan I	0.020	U	0.020	0.0020	ug/L		01/03/20 15:33	01/06/20 15:21	1
Endosulfan II	0.020	U	0.020	0.0040	ug/L		01/03/20 15:33	01/06/20 15:21	1
Endosulfan sulfate	0.020	U	0.020	0.0060	ug/L		01/03/20 15:33	01/06/20 15:21	1
Endrin	0.020	U	0.020	0.0040	ug/L		01/03/20 15:33	01/06/20 15:21	1
Endrin aldehyde	0.020	U	0.020	0.0080	ug/L		01/03/20 15:33	01/06/20 15:21	1
Endrin ketone	0.020	U	0.020	0.0080	ug/L		01/03/20 15:33	01/06/20 15:21	1
gamma-BHC (Lindane)	0.020	U	0.020	0.012	ug/L		01/03/20 15:33	01/06/20 15:21	1
Heptachlor	0.020	U	0.020	0.0030	ug/L		01/03/20 15:33	01/06/20 15:21	1
Heptachlor epoxide	0.020	U	0.020	0.0050	ug/L		01/03/20 15:33	01/06/20 15:21	1
Methoxychlor	0.020	U	0.020	0.0040	ug/L		01/03/20 15:33	01/06/20 15:21	1
Toxaphene	0.50	U	0.50	0.11	ug/L		01/03/20 15:33	01/06/20 15:21	1
<hr/>									
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl	66		10 - 150				01/03/20 15:33	01/06/20 15:21	1
DCB Decachlorobiphenyl	77		10 - 150				01/03/20 15:33	01/06/20 15:21	1
Tetrachloro-m-xylene	78		12 - 136				01/03/20 15:33	01/06/20 15:21	1
Tetrachloro-m-xylene	81		12 - 136				01/03/20 15:33	01/06/20 15:21	1

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# Client Sample Results

Client: AKRF Inc

Project/Site: Concord/Adelaar/EPR

Job ID: 460-200012-1

**Client Sample ID: OU-2-MW-1-123019****Lab Sample ID: 460-200012-1**

Date Collected: 12/30/19 12:30

Matrix: Water

Date Received: 01/02/20 16:00

**Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor 1016	0.40	U	0.40	0.12	ug/L		01/03/20 15:39	01/07/20 01:02	1
Aroclor 1221	0.40	U	0.40	0.12	ug/L		01/03/20 15:39	01/07/20 01:02	1
Aroclor 1232	0.40	U	0.40	0.12	ug/L		01/03/20 15:39	01/07/20 01:02	1
Aroclor 1242	0.40	U	0.40	0.12	ug/L		01/03/20 15:39	01/07/20 01:02	1
Aroclor 1248	0.40	U	0.40	0.12	ug/L		01/03/20 15:39	01/07/20 01:02	1
Aroclor 1254	0.40	U	0.40	0.11	ug/L		01/03/20 15:39	01/07/20 01:02	1
Aroclor 1260	0.40	U	0.40	0.11	ug/L		01/03/20 15:39	01/07/20 01:02	1
Aroclor-1262	0.40	U	0.40	0.11	ug/L		01/03/20 15:39	01/07/20 01:02	1
Aroclor 1268	0.40	U	0.40	0.11	ug/L		01/03/20 15:39	01/07/20 01:02	1
Polychlorinated biphenyls, Total	0.40	U	0.40	0.12	ug/L		01/03/20 15:39	01/07/20 01:02	1
<b>Surrogate</b>									
DCB Decachlorobiphenyl	51		10 - 150				01/03/20 15:39	01/07/20 01:02	1
DCB Decachlorobiphenyl	64		10 - 150				01/03/20 15:39	01/07/20 01:02	1

**Method: 6020B - Metals (ICP/MS)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Arsenic</b>	<b>3.2</b>		2.0	0.73	ug/L		01/09/20 04:45	01/09/20 10:54	2
<b>Barium</b>	<b>236</b>		4.0	1.2	ug/L		01/09/20 04:45	01/09/20 10:54	2
Beryllium	0.80	U	0.80	0.25	ug/L		01/09/20 04:45	01/09/20 10:54	2
Cadmium	2.0	U	2.0	0.81	ug/L		01/09/20 04:45	01/09/20 10:54	2
Chromium	4.0	U	4.0	2.3	ug/L		01/09/20 04:45	01/09/20 10:54	2
<b>Copper</b>	<b>4.1</b>		4.0	2.0	ug/L		01/09/20 04:45	01/09/20 10:54	2
<b>Lead</b>	<b>1.9</b>		1.2	0.55	ug/L		01/09/20 04:45	01/09/20 10:54	2
<b>Manganese</b>	<b>3130</b>		8.0	2.9	ug/L		01/09/20 04:45	01/09/20 10:54	2
Nickel	4.0	U	4.0	2.4	ug/L		01/09/20 04:45	01/09/20 10:54	2
Selenium	10.0	U	10.0	5.4	ug/L		01/09/20 04:45	01/09/20 10:54	2
Silver	2.0	U	2.0	0.59	ug/L		01/09/20 04:45	01/09/20 10:54	2
Zinc	16.0	U	16.0	11.1	ug/L		01/09/20 04:45	01/09/20 10:54	2

**Method: 7470A - Mercury (CVAA)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.20	U	0.20	0.12	ug/L		01/03/20 12:06	01/03/20 13:20	1

**Client Sample ID: OU-2-MW-15-123019****Lab Sample ID: 460-200012-2**

Date Collected: 12/30/19 10:55

Matrix: Water

Date Received: 01/02/20 16:00

**Method: 8260C - Volatile Organic Compounds by GC/MS**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	1.0	U	1.0	0.24	ug/L		01/03/20 14:27		1
1,1-Dichloroethane	1.0	U	1.0	0.26	ug/L		01/03/20 14:27		1
1,1-Dichloroethene	1.0	U	1.0	0.26	ug/L		01/03/20 14:27		1
1,2,4-Trimethylbenzene	1.0	U	1.0	0.37	ug/L		01/03/20 14:27		1
1,2-Dichlorobenzene	1.0	U	1.0	0.43	ug/L		01/03/20 14:27		1
1,2-Dichloroethane	1.0	U	1.0	0.43	ug/L		01/03/20 14:27		1
1,3,5-Trimethylbenzene	1.0	U	1.0	0.33	ug/L		01/03/20 14:27		1
1,3-Dichlorobenzene	1.0	U	1.0	0.34	ug/L		01/03/20 14:27		1
1,4-Dichlorobenzene	1.0	U	1.0	0.33	ug/L		01/03/20 14:27		1
1,4-Dioxane	50	U	50	28	ug/L		01/03/20 14:27		1
2-Butanone (MEK)	5.0	U	5.0	1.9	ug/L		01/03/20 14:27		1

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# Client Sample Results

Client: AKRF Inc

Project/Site: Concord/Adelaar/EPR

Job ID: 460-200012-1

**Client Sample ID: OU-2-MW-15-123019****Lab Sample ID: 460-200012-2**

Date Collected: 12/30/19 10:55

Matrix: Water

Date Received: 01/02/20 16:00

**Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	5.0	U	5.0	4.4	ug/L			01/03/20 14:27	1
Benzene	1.0	U	1.0	0.20	ug/L			01/03/20 14:27	1
Carbon tetrachloride	1.0	U	1.0	0.21	ug/L			01/03/20 14:27	1
Chlorobenzene	1.0	U	1.0	0.38	ug/L			01/03/20 14:27	1
Chloroform	1.0	U	1.0	0.33	ug/L			01/03/20 14:27	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.22	ug/L			01/03/20 14:27	1
Ethylbenzene	1.0	U	1.0	0.30	ug/L			01/03/20 14:27	1
Methyl tert-butyl ether	1.0	U	1.0	0.47	ug/L			01/03/20 14:27	1
Methylene Chloride	1.0	U	1.0	0.32	ug/L			01/03/20 14:27	1
n-Butylbenzene	1.0	U	1.0	0.32	ug/L			01/03/20 14:27	1
N-Propylbenzene	1.0	U	1.0	0.32	ug/L			01/03/20 14:27	1
sec-Butylbenzene	1.0	U	1.0	0.37	ug/L			01/03/20 14:27	1
tert-Butylbenzene	1.0	U	1.0	0.34	ug/L			01/03/20 14:27	1
Tetrachloroethene	1.0	U	1.0	0.25	ug/L			01/03/20 14:27	1
Toluene	1.0	U	1.0	0.38	ug/L			01/03/20 14:27	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.24	ug/L			01/03/20 14:27	1
Trichloroethene	1.0	U	1.0	0.31	ug/L			01/03/20 14:27	1
Vinyl chloride	1.0	U	1.0	0.17	ug/L			01/03/20 14:27	1
Xylenes, Total	2.0	U	2.0	0.65	ug/L			01/03/20 14:27	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
1,2-Dichloroethane-d4 (Surr)	90		74 - 132					01/03/20 14:27	1
4-Bromofluorobenzene	106		77 - 124					01/03/20 14:27	1
Dibromofluoromethane (Surr)	103		72 - 131					01/03/20 14:27	1
Toluene-d8 (Surr)	101		80 - 120					01/03/20 14:27	1

**Method: 8270D - Semivolatile Organic Compounds (GC/MS)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Methylphenol	10	U	10	0.67	ug/L			01/04/20 07:34	1
3 & 4 Methylphenol	10	U	10	0.64	ug/L			01/04/20 07:34	1
Acenaphthene	10	U	10	1.1	ug/L			01/04/20 07:34	1
Acenaphthylene	10	U	10	0.82	ug/L			01/04/20 07:34	1
Anthracene	10	U	10	0.63	ug/L			01/04/20 07:34	1
Benzo[a]anthracene	1.0	U	1.0	0.59	ug/L			01/04/20 07:34	1
Benzo[a]pyrene	1.0	U	1.0	0.41	ug/L			01/04/20 07:34	1
Benzo[b]fluoranthene	2.0	U	2.0	0.68	ug/L			01/04/20 07:34	1
Benzo[g,h,i]perylene	10	U	10	1.4	ug/L			01/04/20 07:34	1
Benzo[k]fluoranthene	1.0	U	1.0	0.67	ug/L			01/04/20 07:34	1
Chrysene	2.0	U	2.0	0.91	ug/L			01/04/20 07:34	1
Dibenz(a,h)anthracene	1.0	U	1.0	0.72	ug/L			01/04/20 07:34	1
Dibenzofuran	10	U	10	1.1	ug/L			01/04/20 07:34	1
Fluoranthene	10	U	10	0.84	ug/L			01/04/20 07:34	1
Fluorene	10	U	10	0.91	ug/L			01/04/20 07:34	1
Hexachlorobenzene	1.0	U	1.0	0.40	ug/L			01/04/20 07:34	1
Indeno[1,2,3-cd]pyrene	2.0	U	2.0	0.94	ug/L			01/04/20 07:34	1
Naphthalene	10	U	10	1.1	ug/L			01/04/20 07:34	1
Pentachlorophenol	20	U	20	1.4	ug/L			01/04/20 07:34	1
Phenanthrene	10	U	10	0.58	ug/L			01/04/20 07:34	1
Phenol	10	U	10	0.29	ug/L			01/04/20 07:34	1
Pyrene	10	U	10	1.6	ug/L			01/04/20 07:34	1

Eurofins TestAmerica, Edison

# Client Sample Results

Client: AKRF Inc

Project/Site: Concord/Adelaar/EPR

Job ID: 460-200012-1

**Client Sample ID: OU-2-MW-15-123019****Lab Sample ID: 460-200012-2**

Date Collected: 12/30/19 10:55

Matrix: Water

Date Received: 01/02/20 16:00

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol (Surr)	99		26 - 139	01/04/20 07:34	01/04/20 20:24	1
2-Fluorobiphenyl	105		45 - 107	01/04/20 07:34	01/04/20 20:24	1
2-Fluorophenol (Surr)	63 *		25 - 58	01/04/20 07:34	01/04/20 20:24	1
Nitrobenzene-d5 (Surr)	118 *		51 - 108	01/04/20 07:34	01/04/20 20:24	1
Phenol-d5 (Surr)	45 *		14 - 39	01/04/20 07:34	01/04/20 20:24	1
Terphenyl-d14 (Surr)	126		40 - 148	01/04/20 07:34	01/04/20 20:24	1

**Method: 8081B - Organochlorine Pesticides (GC)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	0.020	U	0.020	0.0060	ug/L		01/03/20 15:33	01/06/20 15:37	1
4,4'-DDE	0.020	U	0.020	0.0020	ug/L		01/03/20 15:33	01/06/20 15:37	1
4,4'-DDT	0.020	U	0.020	0.0040	ug/L		01/03/20 15:33	01/06/20 15:37	1
Aldrin	0.020	U	0.020	0.0030	ug/L		01/03/20 15:33	01/06/20 15:37	1
alpha-BHC	0.020	U	0.020	0.0070	ug/L		01/03/20 15:33	01/06/20 15:37	1
beta-BHC	0.020	U	0.020	0.0040	ug/L		01/03/20 15:33	01/06/20 15:37	1
Chlordane (technical)	0.50	U	0.50	0.055	ug/L		01/03/20 15:33	01/06/20 15:37	1
cis-Chlordane	0.020	U	0.020	0.0020	ug/L		01/03/20 15:33	01/06/20 15:37	1
delta-BHC	0.020	U	0.020	0.0050	ug/L		01/03/20 15:33	01/06/20 15:37	1
Dieldrin	0.020	U	0.020	0.0030	ug/L		01/03/20 15:33	01/06/20 15:37	1
Endosulfan I	0.020	U	0.020	0.0020	ug/L		01/03/20 15:33	01/06/20 15:37	1
Endosulfan II	0.020	U	0.020	0.0040	ug/L		01/03/20 15:33	01/06/20 15:37	1
Endosulfan sulfate	0.020	U	0.020	0.0060	ug/L		01/03/20 15:33	01/06/20 15:37	1
Endrin	0.020	U	0.020	0.0040	ug/L		01/03/20 15:33	01/06/20 15:37	1
Endrin aldehyde	0.020	U	0.020	0.0080	ug/L		01/03/20 15:33	01/06/20 15:37	1
Endrin ketone	0.020	U	0.020	0.0080	ug/L		01/03/20 15:33	01/06/20 15:37	1
gamma-BHC (Lindane)	0.020	U	0.020	0.012	ug/L		01/03/20 15:33	01/06/20 15:37	1
Heptachlor	0.020	U	0.020	0.0030	ug/L		01/03/20 15:33	01/06/20 15:37	1
Heptachlor epoxide	0.020	U	0.020	0.0050	ug/L		01/03/20 15:33	01/06/20 15:37	1
Methoxychlor	0.020	U	0.020	0.0040	ug/L		01/03/20 15:33	01/06/20 15:37	1
Toxaphene	0.50	U	0.50	0.11	ug/L		01/03/20 15:33	01/06/20 15:37	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl	74		10 - 150	01/03/20 15:33	01/06/20 15:37	1
DCB Decachlorobiphenyl	86		10 - 150	01/03/20 15:33	01/06/20 15:37	1
Tetrachloro-m-xylene	89		12 - 136	01/03/20 15:33	01/06/20 15:37	1
Tetrachloro-m-xylene	85		12 - 136	01/03/20 15:33	01/06/20 15:37	1

**Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor 1016	0.40	U	0.40	0.12	ug/L		01/03/20 15:39	01/07/20 01:20	1
Aroclor 1221	0.40	U	0.40	0.12	ug/L		01/03/20 15:39	01/07/20 01:20	1
Aroclor 1232	0.40	U	0.40	0.12	ug/L		01/03/20 15:39	01/07/20 01:20	1
Aroclor 1242	0.40	U	0.40	0.12	ug/L		01/03/20 15:39	01/07/20 01:20	1
Aroclor 1248	0.40	U	0.40	0.12	ug/L		01/03/20 15:39	01/07/20 01:20	1
Aroclor 1254	0.40	U	0.40	0.11	ug/L		01/03/20 15:39	01/07/20 01:20	1
Aroclor 1260	0.40	U	0.40	0.11	ug/L		01/03/20 15:39	01/07/20 01:20	1
Aroclor-1262	0.40	U	0.40	0.11	ug/L		01/03/20 15:39	01/07/20 01:20	1
Aroclor 1268	0.40	U	0.40	0.11	ug/L		01/03/20 15:39	01/07/20 01:20	1
Polychlorinated biphenyls, Total	0.40	U	0.40	0.12	ug/L		01/03/20 15:39	01/07/20 01:20	1

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# Client Sample Results

Client: AKRF Inc

Project/Site: Concord/Adelaar/EPR

Job ID: 460-200012-1

**Client Sample ID: OU-2-MW-15-123019****Lab Sample ID: 460-200012-2**

Date Collected: 12/30/19 10:55

Matrix: Water

Date Received: 01/02/20 16:00

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl	50		10 - 150	01/03/20 15:39	01/07/20 01:20	1
DCB Decachlorobiphenyl	53		10 - 150	01/03/20 15:39	01/07/20 01:20	1

**Method: 6020B - Metals (ICP/MS)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	2.0	U	2.0	0.73	ug/L	01/09/20 04:45	01/09/20 11:38		2
<b>Barium</b>	<b>177</b>		4.0	1.2	ug/L	01/09/20 04:45	01/09/20 11:38		2
Beryllium	0.80	U	0.80	0.25	ug/L	01/09/20 04:45	01/09/20 11:38		2
Cadmium	2.0	U	2.0	0.81	ug/L	01/09/20 04:45	01/09/20 11:38		2
Chromium	4.0	U	4.0	2.3	ug/L	01/09/20 04:45	01/09/20 11:38		2
<b>Copper</b>	<b>3.6 J</b>		4.0	2.0	ug/L	01/09/20 04:45	01/09/20 11:38		2
Lead	1.2	U	1.2	0.55	ug/L	01/09/20 04:45	01/09/20 11:38		2
<b>Manganese</b>	<b>1150</b>		8.0	2.9	ug/L	01/09/20 04:45	01/09/20 11:38		2
Nickel	4.0	U	4.0	2.4	ug/L	01/09/20 04:45	01/09/20 11:38		2
Selenium	10.0	U	10.0	5.4	ug/L	01/09/20 04:45	01/09/20 11:38		2
Silver	2.0	U	2.0	0.59	ug/L	01/09/20 04:45	01/09/20 11:38		2
Zinc	16.0	U	16.0	11.1	ug/L	01/09/20 04:45	01/09/20 11:38		2

**Method: 7470A - Mercury (CVAA)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.20	U	0.20	0.12	ug/L	01/03/20 12:06	01/03/20 13:44		1

**Client Sample ID: OU-2-MW-32-123019****Lab Sample ID: 460-200012-3**

Date Collected: 12/30/19 15:05

Matrix: Water

Date Received: 01/02/20 16:00

**Method: 8260C - Volatile Organic Compounds by GC/MS**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	1.0	U	1.0	0.24	ug/L	01/03/20 14:02			1
1,1-Dichloroethane	1.0	U	1.0	0.26	ug/L	01/03/20 14:02			1
1,1-Dichloroethene	1.0	U	1.0	0.26	ug/L	01/03/20 14:02			1
1,2,4-Trimethylbenzene	1.0	U	1.0	0.37	ug/L	01/03/20 14:02			1
1,2-Dichlorobenzene	1.0	U	1.0	0.43	ug/L	01/03/20 14:02			1
1,2-Dichloroethane	1.0	U	1.0	0.43	ug/L	01/03/20 14:02			1
1,3,5-Trimethylbenzene	1.0	U	1.0	0.33	ug/L	01/03/20 14:02			1
1,3-Dichlorobenzene	1.0	U	1.0	0.34	ug/L	01/03/20 14:02			1
1,4-Dichlorobenzene	1.0	U	1.0	0.33	ug/L	01/03/20 14:02			1
1,4-Dioxane	50	U	50	28	ug/L	01/03/20 14:02			1
2-Butanone (MEK)	5.0	U	5.0	1.9	ug/L	01/03/20 14:02			1
<b>Acetone</b>	<b>54</b>		5.0	4.4	ug/L	01/03/20 14:02			1
Benzene	1.0	U	1.0	0.20	ug/L	01/03/20 14:02			1
Carbon tetrachloride	1.0	U	1.0	0.21	ug/L	01/03/20 14:02			1
Chlorobenzene	1.0	U	1.0	0.38	ug/L	01/03/20 14:02			1
Chloroform	1.0	U	1.0	0.33	ug/L	01/03/20 14:02			1
cis-1,2-Dichloroethene	1.0	U	1.0	0.22	ug/L	01/03/20 14:02			1
Ethylbenzene	1.0	U	1.0	0.30	ug/L	01/03/20 14:02			1
<b>Methyl tert-butyl ether</b>	<b>1.5</b>		1.0	0.47	ug/L	01/03/20 14:02			1
Methylene Chloride	1.0	U	1.0	0.32	ug/L	01/03/20 14:02			1
n-Butylbenzene	1.0	U	1.0	0.32	ug/L	01/03/20 14:02			1
N-Propylbenzene	1.0	U	1.0	0.32	ug/L	01/03/20 14:02			1
sec-Butylbenzene	1.0	U	1.0	0.37	ug/L	01/03/20 14:02			1

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# Client Sample Results

Client: AKRF Inc  
Project/Site: Concord/Adelaar/EPR

Job ID: 460-200012-1

**Client Sample ID: OU-2-MW-32-123019**

**Lab Sample ID: 460-200012-3**

**Matrix: Water**

Date Collected: 12/30/19 15:05  
Date Received: 01/02/20 16:00

## Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
tert-Butylbenzene	1.0	U	1.0	0.34	ug/L			01/03/20 14:02	1
Tetrachloroethene	1.0	U	1.0	0.25	ug/L			01/03/20 14:02	1
Toluene	1.0	U	1.0	0.38	ug/L			01/03/20 14:02	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.24	ug/L			01/03/20 14:02	1
Trichloroethene	1.0	U	1.0	0.31	ug/L			01/03/20 14:02	1
Vinyl chloride	1.0	U	1.0	0.17	ug/L			01/03/20 14:02	1
Xylenes, Total	2.0	U	2.0	0.65	ug/L			01/03/20 14:02	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	84		74 - 132					01/03/20 14:02	1
4-Bromofluorobenzene	98		77 - 124					01/03/20 14:02	1
Dibromofluoromethane (Surr)	100		72 - 131					01/03/20 14:02	1
Toluene-d8 (Surr)	93		80 - 120					01/03/20 14:02	1

## Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Methylphenol	10	U	10	0.67	ug/L			01/04/20 07:34	01/04/20 20:45
3 & 4 Methylphenol	10	U	10	0.64	ug/L			01/04/20 07:34	01/04/20 20:45
Acenaphthene	10	U	10	1.1	ug/L			01/04/20 07:34	01/04/20 20:45
Acenaphthylene	10	U	10	0.82	ug/L			01/04/20 07:34	01/04/20 20:45
Anthracene	10	U	10	0.63	ug/L			01/04/20 07:34	01/04/20 20:45
Benzo[a]anthracene	1.0	U	1.0	0.59	ug/L			01/04/20 07:34	01/04/20 20:45
Benzo[a]pyrene	1.0	U	1.0	0.41	ug/L			01/04/20 07:34	01/04/20 20:45
Benzo[b]fluoranthene	2.0	U	2.0	0.68	ug/L			01/04/20 07:34	01/04/20 20:45
Benzo[g,h,i]perylene	10	U	10	1.4	ug/L			01/04/20 07:34	01/04/20 20:45
Benzo[k]fluoranthene	1.0	U	1.0	0.67	ug/L			01/04/20 07:34	01/04/20 20:45
Chrysene	2.0	U	2.0	0.91	ug/L			01/04/20 07:34	01/04/20 20:45
Dibenz(a,h)anthracene	1.0	U	1.0	0.72	ug/L			01/04/20 07:34	01/04/20 20:45
Dibenzofuran	10	U	10	1.1	ug/L			01/04/20 07:34	01/04/20 20:45
Fluoranthene	10	U	10	0.84	ug/L			01/04/20 07:34	01/04/20 20:45
Fluorene	10	U	10	0.91	ug/L			01/04/20 07:34	01/04/20 20:45
Hexachlorobenzene	1.0	U	1.0	0.40	ug/L			01/04/20 07:34	01/04/20 20:45
Indeno[1,2,3-cd]pyrene	2.0	U	2.0	0.94	ug/L			01/04/20 07:34	01/04/20 20:45
Naphthalene	10	U	10	1.1	ug/L			01/04/20 07:34	01/04/20 20:45
Pentachlorophenol	20	U	20	1.4	ug/L			01/04/20 07:34	01/04/20 20:45
Phenanthrene	10	U	10	0.58	ug/L			01/04/20 07:34	01/04/20 20:45
Phenol	10	U	10	0.29	ug/L			01/04/20 07:34	01/04/20 20:45
Pyrene	10	U	10	1.6	ug/L			01/04/20 07:34	01/04/20 20:45

Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol (Surr)	100		26 - 139					01/04/20 07:34	01/04/20 20:45
2-Fluorobiphenyl	110	*	45 - 107					01/04/20 07:34	01/04/20 20:45
2-Fluorophenol (Surr)	65	*	25 - 58					01/04/20 07:34	01/04/20 20:45
Nitrobenzene-d5 (Surr)	122	*	51 - 108					01/04/20 07:34	01/04/20 20:45
Phenol-d5 (Surr)	47	*	14 - 39					01/04/20 07:34	01/04/20 20:45
Terphenyl-d14 (Surr)	124		40 - 148					01/04/20 07:34	01/04/20 20:45

## Method: 8081B - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	0.020	U		0.0060	ug/L			01/03/20 15:33	01/06/20 15:52

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# Client Sample Results

Client: AKRF Inc

Project/Site: Concord/Adelaar/EPR

Job ID: 460-200012-1

**Client Sample ID: OU-2-MW-32-123019****Lab Sample ID: 460-200012-3**

Date Collected: 12/30/19 15:05

Matrix: Water

Date Received: 01/02/20 16:00

**Method: 8081B - Organochlorine Pesticides (GC) (Continued)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDE	0.020	U	0.020	0.0020	ug/L		01/03/20 15:33	01/06/20 15:52	1
4,4'-DDT	0.020	U	0.020	0.0040	ug/L		01/03/20 15:33	01/06/20 15:52	1
Aldrin	0.020	U	0.020	0.0030	ug/L		01/03/20 15:33	01/06/20 15:52	1
alpha-BHC	0.020	U	0.020	0.0070	ug/L		01/03/20 15:33	01/06/20 15:52	1
beta-BHC	0.020	U	0.020	0.0040	ug/L		01/03/20 15:33	01/06/20 15:52	1
Chlordane (technical)	0.50	U	0.50	0.055	ug/L		01/03/20 15:33	01/06/20 15:52	1
cis-Chlordane	0.020	U	0.020	0.0020	ug/L		01/03/20 15:33	01/06/20 15:52	1
delta-BHC	0.020	U	0.020	0.0050	ug/L		01/03/20 15:33	01/06/20 15:52	1
Dieldrin	0.020	U	0.020	0.0030	ug/L		01/03/20 15:33	01/06/20 15:52	1
Endosulfan I	0.020	U	0.020	0.0020	ug/L		01/03/20 15:33	01/06/20 15:52	1
Endosulfan II	0.020	U	0.020	0.0040	ug/L		01/03/20 15:33	01/06/20 15:52	1
Endosulfan sulfate	0.020	U	0.020	0.0060	ug/L		01/03/20 15:33	01/06/20 15:52	1
Endrin	0.020	U	0.020	0.0040	ug/L		01/03/20 15:33	01/06/20 15:52	1
Endrin aldehyde	0.020	U	0.020	0.0080	ug/L		01/03/20 15:33	01/06/20 15:52	1
Endrin ketone	0.020	U	0.020	0.0080	ug/L		01/03/20 15:33	01/06/20 15:52	1
gamma-BHC (Lindane)	0.020	U	0.020	0.012	ug/L		01/03/20 15:33	01/06/20 15:52	1
Heptachlor	0.020	U	0.020	0.0030	ug/L		01/03/20 15:33	01/06/20 15:52	1
Heptachlor epoxide	0.020	U	0.020	0.0050	ug/L		01/03/20 15:33	01/06/20 15:52	1
Methoxychlor	0.020	U	0.020	0.0040	ug/L		01/03/20 15:33	01/06/20 15:52	1
Toxaphene	0.50	U	0.50	0.11	ug/L		01/03/20 15:33	01/06/20 15:52	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
DCB Decachlorobiphenyl	35		10 - 150				01/03/20 15:33	01/06/20 15:52	1
DCB Decachlorobiphenyl	37		10 - 150				01/03/20 15:33	01/06/20 15:52	1
Tetrachloro-m-xylene	77		12 - 136				01/03/20 15:33	01/06/20 15:52	1
Tetrachloro-m-xylene	75		12 - 136				01/03/20 15:33	01/06/20 15:52	1

**Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor 1016	0.40	U	0.40	0.12	ug/L		01/03/20 15:39	01/07/20 01:37	1
Aroclor 1221	0.40	U	0.40	0.12	ug/L		01/03/20 15:39	01/07/20 01:37	1
Aroclor 1232	0.40	U	0.40	0.12	ug/L		01/03/20 15:39	01/07/20 01:37	1
Aroclor 1242	0.40	U	0.40	0.12	ug/L		01/03/20 15:39	01/07/20 01:37	1
Aroclor 1248	0.40	U	0.40	0.12	ug/L		01/03/20 15:39	01/07/20 01:37	1
Aroclor 1254	0.40	U	0.40	0.11	ug/L		01/03/20 15:39	01/07/20 01:37	1
Aroclor 1260	0.40	U	0.40	0.11	ug/L		01/03/20 15:39	01/07/20 01:37	1
Aroclor-1262	0.40	U	0.40	0.11	ug/L		01/03/20 15:39	01/07/20 01:37	1
Aroclor 1268	0.40	U	0.40	0.11	ug/L		01/03/20 15:39	01/07/20 01:37	1
Polychlorinated biphenyls, Total	0.40	U	0.40	0.12	ug/L		01/03/20 15:39	01/07/20 01:37	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
DCB Decachlorobiphenyl	26		10 - 150				01/03/20 15:39	01/07/20 01:37	1
DCB Decachlorobiphenyl	32		10 - 150				01/03/20 15:39	01/07/20 01:37	1

**Method: 6020B - Metals (ICP/MS)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Arsenic</b>	<b>21.7</b>		2.0	0.73	ug/L		01/09/20 04:45	01/09/20 11:40	2
<b>Barium</b>	<b>427</b>		4.0	1.2	ug/L		01/09/20 04:45	01/09/20 11:40	2
Beryllium	0.80	U	0.80	0.25	ug/L		01/09/20 04:45	01/09/20 11:40	2
Cadmium	2.0	U	2.0	0.81	ug/L		01/09/20 04:45	01/09/20 11:40	2

Eurofins TestAmerica, Edison

# Client Sample Results

Client: AKRF Inc

Project/Site: Concord/Adelaar/EPR

Job ID: 460-200012-1

**Client Sample ID: OU-2-MW-32-123019**

Date Collected: 12/30/19 15:05

Date Received: 01/02/20 16:00

**Lab Sample ID: 460-200012-3**

Matrix: Water

**Method: 6020B - Metals (ICP/MS) (Continued)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium	4.0		4.0	2.3	ug/L		01/09/20 04:45	01/09/20 11:40	2
Copper	10.7		4.0	2.0	ug/L		01/09/20 04:45	01/09/20 11:40	2
Lead	12.0		1.2	0.55	ug/L		01/09/20 04:45	01/09/20 11:40	2
Manganese	4630		8.0	2.9	ug/L		01/09/20 04:45	01/09/20 11:40	2
Nickel	4.4		4.0	2.4	ug/L		01/09/20 04:45	01/09/20 11:40	2
Selenium	10.0	U	10.0	5.4	ug/L		01/09/20 04:45	01/09/20 11:40	2
Silver	2.0	U	2.0	0.59	ug/L		01/09/20 04:45	01/09/20 11:40	2
Zinc	16.0	U	16.0	11.1	ug/L		01/09/20 04:45	01/09/20 11:40	2

**Method: 7470A - Mercury (CVAA)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.20	U		0.20	ug/L		01/03/20 12:06	01/03/20 13:46	1

**Client Sample ID: OU-2-MW-33-123019**

Date Collected: 12/30/19 08:55

Date Received: 01/02/20 16:00

**Lab Sample ID: 460-200012-4**

Matrix: Water

**Method: 8260C - Volatile Organic Compounds by GC/MS**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	1.0	U	1.0	0.24	ug/L		01/03/20 13:36		1
1,1-Dichloroethane	1.0	U	1.0	0.26	ug/L		01/03/20 13:36		1
1,1-Dichloroethene	1.0	U	1.0	0.26	ug/L		01/03/20 13:36		1
1,2,4-Trimethylbenzene	1.0	U	1.0	0.37	ug/L		01/03/20 13:36		1
1,2-Dichlorobenzene	1.0	U	1.0	0.43	ug/L		01/03/20 13:36		1
1,2-Dichloroethane	1.0	U	1.0	0.43	ug/L		01/03/20 13:36		1
1,3,5-Trimethylbenzene	1.0	U	1.0	0.33	ug/L		01/03/20 13:36		1
1,3-Dichlorobenzene	1.0	U	1.0	0.34	ug/L		01/03/20 13:36		1
1,4-Dichlorobenzene	1.0	U	1.0	0.33	ug/L		01/03/20 13:36		1
1,4-Dioxane	50	U	50	28	ug/L		01/03/20 13:36		1
2-Butanone (MEK)	5.0	U	5.0	1.9	ug/L		01/03/20 13:36		1
Acetone	5.0	U	5.0	4.4	ug/L		01/03/20 13:36		1
Benzene	1.0	U	1.0	0.20	ug/L		01/03/20 13:36		1
Carbon tetrachloride	1.0	U	1.0	0.21	ug/L		01/03/20 13:36		1
Chlorobenzene	1.0	U	1.0	0.38	ug/L		01/03/20 13:36		1
Chloroform	1.0	U	1.0	0.33	ug/L		01/03/20 13:36		1
cis-1,2-Dichloroethene	1.0	U	1.0	0.22	ug/L		01/03/20 13:36		1
Ethylbenzene	1.0	U	1.0	0.30	ug/L		01/03/20 13:36		1
Methyl tert-butyl ether	1.0	U	1.0	0.47	ug/L		01/03/20 13:36		1
Methylene Chloride	1.0	U	1.0	0.32	ug/L		01/03/20 13:36		1
n-Butylbenzene	1.0	U	1.0	0.32	ug/L		01/03/20 13:36		1
N-Propylbenzene	1.0	U	1.0	0.32	ug/L		01/03/20 13:36		1
sec-Butylbenzene	1.0	U	1.0	0.37	ug/L		01/03/20 13:36		1
tert-Butylbenzene	1.0	U	1.0	0.34	ug/L		01/03/20 13:36		1
Tetrachloroethene	1.0	U	1.0	0.25	ug/L		01/03/20 13:36		1
Toluene	1.0	U	1.0	0.38	ug/L		01/03/20 13:36		1
trans-1,2-Dichloroethene	1.0	U	1.0	0.24	ug/L		01/03/20 13:36		1
Trichloroethene	1.0	U	1.0	0.31	ug/L		01/03/20 13:36		1
Vinyl chloride	1.0	U	1.0	0.17	ug/L		01/03/20 13:36		1
Xylenes, Total	2.0	U	2.0	0.65	ug/L		01/03/20 13:36		1

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# Client Sample Results

Client: AKRF Inc

Project/Site: Concord/Adelaar/EPR

Job ID: 460-200012-1

**Client Sample ID: OU-2-MW-33-123019****Lab Sample ID: 460-200012-4**

Matrix: Water

Date Collected: 12/30/19 08:55

Date Received: 01/02/20 16:00

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	107		74 - 132		01/03/20 13:36	1
4-Bromofluorobenzene	119		77 - 124		01/03/20 13:36	1
Dibromofluoromethane (Surr)	118		72 - 131		01/03/20 13:36	1
Toluene-d8 (Surr)	115		80 - 120		01/03/20 13:36	1

**Method: 8270D - Semivolatile Organic Compounds (GC/MS)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Methylphenol	10	U	10	0.67	ug/L		01/04/20 07:34	01/04/20 21:05	1
3 & 4 Methylphenol	10	U	10	0.64	ug/L		01/04/20 07:34	01/04/20 21:05	1
Acenaphthene	10	U	10	1.1	ug/L		01/04/20 07:34	01/04/20 21:05	1
Acenaphthylene	10	U	10	0.82	ug/L		01/04/20 07:34	01/04/20 21:05	1
Anthracene	10	U	10	0.63	ug/L		01/04/20 07:34	01/04/20 21:05	1
Benzo[a]anthracene	1.0	U	1.0	0.59	ug/L		01/04/20 07:34	01/04/20 21:05	1
Benzo[a]pyrene	1.0	U	1.0	0.41	ug/L		01/04/20 07:34	01/04/20 21:05	1
Benzo[b]fluoranthene	2.0	U	2.0	0.68	ug/L		01/04/20 07:34	01/04/20 21:05	1
Benzo[g,h,i]perylene	10	U	10	1.4	ug/L		01/04/20 07:34	01/04/20 21:05	1
Benzo[k]fluoranthene	1.0	U	1.0	0.67	ug/L		01/04/20 07:34	01/04/20 21:05	1
Chrysene	2.0	U	2.0	0.91	ug/L		01/04/20 07:34	01/04/20 21:05	1
Dibenz(a,h)anthracene	1.0	U	1.0	0.72	ug/L		01/04/20 07:34	01/04/20 21:05	1
Dibenzofuran	10	U	10	1.1	ug/L		01/04/20 07:34	01/04/20 21:05	1
Fluoranthene	10	U	10	0.84	ug/L		01/04/20 07:34	01/04/20 21:05	1
Fluorene	10	U	10	0.91	ug/L		01/04/20 07:34	01/04/20 21:05	1
Hexachlorobenzene	1.0	U	1.0	0.40	ug/L		01/04/20 07:34	01/04/20 21:05	1
Indeno[1,2,3-cd]pyrene	2.0	U	2.0	0.94	ug/L		01/04/20 07:34	01/04/20 21:05	1
Naphthalene	10	U	10	1.1	ug/L		01/04/20 07:34	01/04/20 21:05	1
Pentachlorophenol	20	U	20	1.4	ug/L		01/04/20 07:34	01/04/20 21:05	1
Phenanthrene	10	U	10	0.58	ug/L		01/04/20 07:34	01/04/20 21:05	1
Phenol	10	U	10	0.29	ug/L		01/04/20 07:34	01/04/20 21:05	1
Pyrene	10	U	10	1.6	ug/L		01/04/20 07:34	01/04/20 21:05	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol (Surr)	89		26 - 139		01/04/20 07:34	01/04/20 21:05
2-Fluorobiphenyl	93		45 - 107		01/04/20 07:34	01/04/20 21:05
2-Fluorophenol (Surr)	58		25 - 58		01/04/20 07:34	01/04/20 21:05
Nitrobenzene-d5 (Surr)	109 *		51 - 108		01/04/20 07:34	01/04/20 21:05
Phenol-d5 (Surr)	42 *		14 - 39		01/04/20 07:34	01/04/20 21:05
Terphenyl-d14 (Surr)	113		40 - 148		01/04/20 07:34	01/04/20 21:05

**Method: 8081B - Organochlorine Pesticides (GC)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	0.020	U	0.020	0.0060	ug/L		01/03/20 15:33	01/06/20 16:08	1
4,4'-DDE	0.020	U	0.020	0.0020	ug/L		01/03/20 15:33	01/06/20 16:08	1
4,4'-DDT	0.020	U	0.020	0.0040	ug/L		01/03/20 15:33	01/06/20 16:08	1
Aldrin	0.020	U	0.020	0.0030	ug/L		01/03/20 15:33	01/06/20 16:08	1
alpha-BHC	0.020	U	0.020	0.0070	ug/L		01/03/20 15:33	01/06/20 16:08	1
beta-BHC	0.020	U	0.020	0.0040	ug/L		01/03/20 15:33	01/06/20 16:08	1
Chlordane (technical)	0.50	U	0.50	0.055	ug/L		01/03/20 15:33	01/06/20 16:08	1
cis-Chlordane	0.020	U	0.020	0.0020	ug/L		01/03/20 15:33	01/06/20 16:08	1
delta-BHC	0.020	U	0.020	0.0050	ug/L		01/03/20 15:33	01/06/20 16:08	1
Dieldrin	0.020	U	0.020	0.0030	ug/L		01/03/20 15:33	01/06/20 16:08	1
Endosulfan I	0.020	U	0.020	0.0020	ug/L		01/03/20 15:33	01/06/20 16:08	1

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# Client Sample Results

Client: AKRF Inc  
Project/Site: Concord/Adelaar/EPR

Job ID: 460-200012-1

**Client Sample ID: OU-2-MW-33-123019**

**Lab Sample ID: 460-200012-4**

**Matrix: Water**

Date Collected: 12/30/19 08:55  
Date Received: 01/02/20 16:00

## Method: 8081B - Organochlorine Pesticides (GC) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Endosulfan II	0.020	U	0.020	0.0040	ug/L		01/03/20 15:33	01/06/20 16:08	1
Endosulfan sulfate	0.020	U	0.020	0.0060	ug/L		01/03/20 15:33	01/06/20 16:08	1
Endrin	0.020	U	0.020	0.0040	ug/L		01/03/20 15:33	01/06/20 16:08	1
Endrin aldehyde	0.020	U	0.020	0.0080	ug/L		01/03/20 15:33	01/06/20 16:08	1
Endrin ketone	0.020	U	0.020	0.0080	ug/L		01/03/20 15:33	01/06/20 16:08	1
gamma-BHC (Lindane)	0.020	U	0.020	0.012	ug/L		01/03/20 15:33	01/06/20 16:08	1
Heptachlor	0.020	U	0.020	0.0030	ug/L		01/03/20 15:33	01/06/20 16:08	1
Heptachlor epoxide	0.020	U	0.020	0.0050	ug/L		01/03/20 15:33	01/06/20 16:08	1
Methoxychlor	0.020	U	0.020	0.0040	ug/L		01/03/20 15:33	01/06/20 16:08	1
Toxaphene	0.50	U	0.50	0.11	ug/L		01/03/20 15:33	01/06/20 16:08	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
DCB Decachlorobiphenyl	109		10 - 150				01/03/20 15:33	01/06/20 16:08	1
DCB Decachlorobiphenyl	118		10 - 150				01/03/20 15:33	01/06/20 16:08	1
Tetrachloro-m-xylene	131		12 - 136				01/03/20 15:33	01/06/20 16:08	1
Tetrachloro-m-xylene	131		12 - 136				01/03/20 15:33	01/06/20 16:08	1

## Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor 1016	0.40	U	0.40	0.12	ug/L		01/03/20 15:39	01/07/20 01:54	1
Aroclor 1221	0.40	U	0.40	0.12	ug/L		01/03/20 15:39	01/07/20 01:54	1
Aroclor 1232	0.40	U	0.40	0.12	ug/L		01/03/20 15:39	01/07/20 01:54	1
Aroclor 1242	0.40	U	0.40	0.12	ug/L		01/03/20 15:39	01/07/20 01:54	1
Aroclor 1248	0.40	U	0.40	0.12	ug/L		01/03/20 15:39	01/07/20 01:54	1
Aroclor 1254	0.40	U	0.40	0.11	ug/L		01/03/20 15:39	01/07/20 01:54	1
Aroclor 1260	0.40	U	0.40	0.11	ug/L		01/03/20 15:39	01/07/20 01:54	1
Aroclor-1262	0.40	U	0.40	0.11	ug/L		01/03/20 15:39	01/07/20 01:54	1
Aroclor 1268	0.40	U	0.40	0.11	ug/L		01/03/20 15:39	01/07/20 01:54	1
Polychlorinated biphenyls, Total	0.40	U	0.40	0.12	ug/L		01/03/20 15:39	01/07/20 01:54	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
DCB Decachlorobiphenyl	77		10 - 150				01/03/20 15:39	01/07/20 01:54	1
DCB Decachlorobiphenyl	85		10 - 150				01/03/20 15:39	01/07/20 01:54	1

## Method: 6020B - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Arsenic</b>	<b>0.78</b>	<b>J</b>	2.0	0.73	ug/L		01/09/20 04:45	01/09/20 11:43	2
<b>Barium</b>	<b>194</b>		4.0	1.2	ug/L		01/09/20 04:45	01/09/20 11:43	2
Beryllium	0.80	U	0.80	0.25	ug/L		01/09/20 04:45	01/09/20 11:43	2
Cadmium	2.0	U	2.0	0.81	ug/L		01/09/20 04:45	01/09/20 11:43	2
Chromium	4.0	U	4.0	2.3	ug/L		01/09/20 04:45	01/09/20 11:43	2
<b>Copper</b>	<b>3.8</b>	<b>J</b>	4.0	2.0	ug/L		01/09/20 04:45	01/09/20 11:43	2
Lead	1.2	U	1.2	0.55	ug/L		01/09/20 04:45	01/09/20 11:43	2
<b>Manganese</b>	<b>1130</b>		8.0	2.9	ug/L		01/09/20 04:45	01/09/20 11:43	2
Nickel	4.0	U	4.0	2.4	ug/L		01/09/20 04:45	01/09/20 11:43	2
Selenium	10.0	U	10.0	5.4	ug/L		01/09/20 04:45	01/09/20 11:43	2
Silver	2.0	U	2.0	0.59	ug/L		01/09/20 04:45	01/09/20 11:43	2
Zinc	16.0	U	16.0	11.1	ug/L		01/09/20 04:45	01/09/20 11:43	2

# Client Sample Results

Client: AKRF Inc

Project/Site: Concord/Adelaar/EPR

Job ID: 460-200012-1

**Client Sample ID: OU-2-MW-33-123019**

Date Collected: 12/30/19 08:55

Date Received: 01/02/20 16:00

**Lab Sample ID: 460-200012-4**

Matrix: Water

**Method: 7470A - Mercury (CVAA)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.20	U	0.20	0.12	ug/L		01/03/20 12:06	01/03/20 13:47	1

**Client Sample ID: OU-3-MW-2-123119**

Date Collected: 12/31/19 13:10

Date Received: 01/02/20 16:00

**Lab Sample ID: 460-200012-5**

Matrix: Water

**Method: 6020B - Metals (ICP/MS)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	7.2		2.0	0.73	ug/L		01/09/20 04:45	01/09/20 11:45	2
Barium	802		4.0	1.2	ug/L		01/09/20 04:45	01/09/20 11:45	2
Beryllium	2.5		0.80	0.25	ug/L		01/09/20 04:45	01/09/20 11:45	2
Cadmium	2.0	U	2.0	0.81	ug/L		01/09/20 04:45	01/09/20 11:45	2
Chromium	34.9		4.0	2.3	ug/L		01/09/20 04:45	01/09/20 11:45	2
Copper	74.8		4.0	2.0	ug/L		01/09/20 04:45	01/09/20 11:45	2
Lead	53.0		1.2	0.55	ug/L		01/09/20 04:45	01/09/20 11:45	2
Manganese	17400		40.0	14.4	ug/L		01/09/20 04:45	01/09/20 11:54	10
Nickel	29.9		4.0	2.4	ug/L		01/09/20 04:45	01/09/20 11:45	2
Selenium	10.0	U	10.0	5.4	ug/L		01/09/20 04:45	01/09/20 11:45	2
Silver	2.0	U	2.0	0.59	ug/L		01/09/20 04:45	01/09/20 11:45	2
Zinc	91.2		16.0	11.1	ug/L		01/09/20 04:45	01/09/20 11:45	2

**Method: 7470A - Mercury (CVAA)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.20	U	0.20	0.12	ug/L		01/03/20 12:06	01/03/20 13:49	1

**Client Sample ID: OU-3-MW-4-123119**

Date Collected: 12/31/19 09:55

Date Received: 01/02/20 16:00

**Lab Sample ID: 460-200012-6**

Matrix: Water

**Method: 6020B - Metals (ICP/MS)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	52.6		2.0	0.73	ug/L		01/09/20 04:45	01/09/20 11:56	2
Barium	278		4.0	1.2	ug/L		01/09/20 04:45	01/09/20 11:56	2
Beryllium	0.80	U	0.80	0.25	ug/L		01/09/20 04:45	01/09/20 11:56	2
Cadmium	2.0	U	2.0	0.81	ug/L		01/09/20 04:45	01/09/20 11:56	2
Chromium	5.1		4.0	2.3	ug/L		01/09/20 04:45	01/09/20 11:56	2
Copper	20.3		4.0	2.0	ug/L		01/09/20 04:45	01/09/20 11:56	2
Lead	41.1		1.2	0.55	ug/L		01/09/20 04:45	01/09/20 11:56	2
Manganese	7730		8.0	2.9	ug/L		01/09/20 04:45	01/09/20 11:56	2
Nickel	17.3		4.0	2.4	ug/L		01/09/20 04:45	01/09/20 11:56	2
Selenium	10.0	U	10.0	5.4	ug/L		01/09/20 04:45	01/09/20 11:56	2
Silver	2.0	U	2.0	0.59	ug/L		01/09/20 04:45	01/09/20 11:56	2
Zinc	1510		16.0	11.1	ug/L		01/09/20 04:45	01/09/20 11:56	2

**Method: 7470A - Mercury (CVAA)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.22		0.20	0.12	ug/L		01/03/20 12:06	01/03/20 13:51	1

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# Client Sample Results

Client: AKRF Inc

Project/Site: Concord/Adelaar/EPR

Job ID: 460-200012-1

**Client Sample ID: OU-3-MW-14-123119**

**Lab Sample ID: 460-200012-7**

**Matrix: Water**

Date Collected: 12/31/19 15:15

Date Received: 01/02/20 16:00

## Method: 6020B - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	20.6		2.0	0.73	ug/L	01/09/20 04:45	01/09/20 12:42		2
Barium	297		4.0	1.2	ug/L	01/09/20 04:45	01/09/20 12:42		2
Beryllium	0.80	U	0.80	0.25	ug/L	01/09/20 04:45	01/09/20 12:42		2
Cadmium	2.0	U	2.0	0.81	ug/L	01/09/20 04:45	01/09/20 12:42		2
Chromium	4.0	U	4.0	2.3	ug/L	01/09/20 04:45	01/09/20 12:42		2
Copper	4.7		4.0	2.0	ug/L	01/09/20 04:45	01/09/20 12:42		2
Lead	2.5		1.2	0.55	ug/L	01/09/20 04:45	01/09/20 12:42		2
Manganese	14300		40.0	14.4	ug/L	01/09/20 04:45	01/09/20 12:54	10	9
Nickel	5.6		4.0	2.4	ug/L	01/09/20 04:45	01/09/20 12:42		2
Selenium	10.0	U	10.0	5.4	ug/L	01/09/20 04:45	01/09/20 12:42		2
Silver	2.0	U	2.0	0.59	ug/L	01/09/20 04:45	01/09/20 12:42		2
Zinc	21.8		16.0	11.1	ug/L	01/09/20 04:45	01/09/20 12:42		2

## Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.20	U	0.20	0.12	ug/L	01/03/20 12:06	01/03/20 13:53		1

**Client Sample ID: TB-123119**

**Lab Sample ID: 460-200012-8**

**Matrix: Water**

Date Collected: 12/31/19 00:00

Date Received: 01/02/20 16:00

## Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Vinyl chloride	1.0	U	1.0	0.17	ug/L	01/03/20 11:04			1
Methylene Chloride	1.0	U	1.0	0.32	ug/L	01/03/20 11:04			1
Acetone	5.0	U	5.0	4.4	ug/L	01/03/20 11:04			1
1,1-Dichloroethene	1.0	U	1.0	0.26	ug/L	01/03/20 11:04			1
1,1-Dichloroethane	1.0	U	1.0	0.26	ug/L	01/03/20 11:04			1
trans-1,2-Dichloroethene	1.0	U	1.0	0.24	ug/L	01/03/20 11:04			1
cis-1,2-Dichloroethene	1.0	U	1.0	0.22	ug/L	01/03/20 11:04			1
Chloroform	1.0	U	1.0	0.33	ug/L	01/03/20 11:04			1
1,2-Dichloroethane	1.0	U	1.0	0.43	ug/L	01/03/20 11:04			1
2-Butanone (MEK)	5.0	U	5.0	1.9	ug/L	01/03/20 11:04			1
1,1,1-Trichloroethane	1.0	U	1.0	0.24	ug/L	01/03/20 11:04			1
Carbon tetrachloride	1.0	U	1.0	0.21	ug/L	01/03/20 11:04			1
Trichloroethene	1.0	U	1.0	0.31	ug/L	01/03/20 11:04			1
Benzene	1.0	U	1.0	0.20	ug/L	01/03/20 11:04			1
Tetrachloroethene	1.0	U	1.0	0.25	ug/L	01/03/20 11:04			1
Toluene	1.0	U	1.0	0.38	ug/L	01/03/20 11:04			1
Chlorobenzene	1.0	U	1.0	0.38	ug/L	01/03/20 11:04			1
Ethylbenzene	1.0	U	1.0	0.30	ug/L	01/03/20 11:04			1
Xylenes, Total	2.0	U	2.0	0.65	ug/L	01/03/20 11:04			1
Methyl tert-butyl ether	1.0	U	1.0	0.47	ug/L	01/03/20 11:04			1
1,3-Dichlorobenzene	1.0	U	1.0	0.34	ug/L	01/03/20 11:04			1
1,4-Dichlorobenzene	1.0	U	1.0	0.33	ug/L	01/03/20 11:04			1
1,2-Dichlorobenzene	1.0	U	1.0	0.43	ug/L	01/03/20 11:04			1
1,4-Dioxane	50	U	50	28	ug/L	01/03/20 11:04			1
1,2,4-Trimethylbenzene	1.0	U	1.0	0.37	ug/L	01/03/20 11:04			1
1,3,5-Trimethylbenzene	1.0	U	1.0	0.33	ug/L	01/03/20 11:04			1
N-Propylbenzene	1.0	U	1.0	0.32	ug/L	01/03/20 11:04			1

Eurofins TestAmerica, Edison

# Client Sample Results

Client: AKRF Inc

Project/Site: Concord/Adelaar/EPR

Job ID: 460-200012-1

**Client Sample ID: TB-123119**

Date Collected: 12/31/19 00:00

Date Received: 01/02/20 16:00

**Lab Sample ID: 460-200012-8**

Matrix: Water

**Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	1.0	U	1.0	0.37	ug/L			01/03/20 11:04	1
tert-Butylbenzene	1.0	U	1.0	0.34	ug/L			01/03/20 11:04	1
n-Butylbenzene	1.0	U	1.0	0.32	ug/L			01/03/20 11:04	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
1,2-Dichloroethane-d4 (Surr)	97		74 - 132					01/03/20 11:04	1
Toluene-d8 (Surr)	108		80 - 120					01/03/20 11:04	1
4-Bromofluorobenzene	112		77 - 124					01/03/20 11:04	1
Dibromofluoromethane (Surr)	112		72 - 131					01/03/20 11:04	1

**Client Sample ID: FB-123119**

Date Collected: 12/31/19 16:00

Date Received: 01/02/20 16:00

**Lab Sample ID: 460-200012-9**

Matrix: Water

**Method: 8260C - Volatile Organic Compounds by GC/MS**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	1.0	U	1.0	0.24	ug/L			01/03/20 11:29	1
1,1-Dichloroethane	1.0	U	1.0	0.26	ug/L			01/03/20 11:29	1
1,1-Dichloroethene	1.0	U	1.0	0.26	ug/L			01/03/20 11:29	1
1,2,4-Trimethylbenzene	1.0	U	1.0	0.37	ug/L			01/03/20 11:29	1
1,2-Dichlorobenzene	1.0	U	1.0	0.43	ug/L			01/03/20 11:29	1
1,2-Dichloroethane	1.0	U	1.0	0.43	ug/L			01/03/20 11:29	1
1,3,5-Trimethylbenzene	1.0	U	1.0	0.33	ug/L			01/03/20 11:29	1
1,3-Dichlorobenzene	1.0	U	1.0	0.34	ug/L			01/03/20 11:29	1
1,4-Dichlorobenzene	1.0	U	1.0	0.33	ug/L			01/03/20 11:29	1
1,4-Dioxane	50	U	50	28	ug/L			01/03/20 11:29	1
2-Butanone (MEK)	5.0	U	5.0	1.9	ug/L			01/03/20 11:29	1
Acetone	5.0	U	5.0	4.4	ug/L			01/03/20 11:29	1
Benzene	1.0	U	1.0	0.20	ug/L			01/03/20 11:29	1
Carbon tetrachloride	1.0	U	1.0	0.21	ug/L			01/03/20 11:29	1
Chlorobenzene	1.0	U	1.0	0.38	ug/L			01/03/20 11:29	1
Chloroform	1.0	U	1.0	0.33	ug/L			01/03/20 11:29	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.22	ug/L			01/03/20 11:29	1
Ethylbenzene	1.0	U	1.0	0.30	ug/L			01/03/20 11:29	1
Methyl tert-butyl ether	1.0	U	1.0	0.47	ug/L			01/03/20 11:29	1
Methylene Chloride	1.0	U	1.0	0.32	ug/L			01/03/20 11:29	1
n-Butylbenzene	1.0	U	1.0	0.32	ug/L			01/03/20 11:29	1
N-Propylbenzene	1.0	U	1.0	0.32	ug/L			01/03/20 11:29	1
sec-Butylbenzene	1.0	U	1.0	0.37	ug/L			01/03/20 11:29	1
tert-Butylbenzene	1.0	U	1.0	0.34	ug/L			01/03/20 11:29	1
Tetrachloroethene	1.0	U	1.0	0.25	ug/L			01/03/20 11:29	1
Toluene	1.0	U	1.0	0.38	ug/L			01/03/20 11:29	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.24	ug/L			01/03/20 11:29	1
Trichloroethene	1.0	U	1.0	0.31	ug/L			01/03/20 11:29	1
Vinyl chloride	1.0	U	1.0	0.17	ug/L			01/03/20 11:29	1
Xylenes, Total	2.0	U	2.0	0.65	ug/L			01/03/20 11:29	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
1,2-Dichloroethane-d4 (Surr)	87		74 - 132					01/03/20 11:29	1
4-Bromofluorobenzene	99		77 - 124					01/03/20 11:29	1

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# Client Sample Results

Client: AKRF Inc

Project/Site: Concord/Adelaar/EPR

Job ID: 460-200012-1

**Client Sample ID: FB-123119****Lab Sample ID: 460-200012-9**

Date Collected: 12/31/19 16:00

Matrix: Water

Date Received: 01/02/20 16:00

**Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)**

Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
				01/03/20 11:29	01/03/20 11:29			
Dibromofluoromethane (Surr)	97		72 - 131					1
Toluene-d8 (Surr)	95		80 - 120					1

**Method: 8270D - Semivolatile Organic Compounds (GC/MS)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Methylphenol	10	U	10	0.67	ug/L		01/04/20 07:34	01/04/20 21:26	1
3 & 4 Methylphenol	10	U	10	0.64	ug/L		01/04/20 07:34	01/04/20 21:26	1
Acenaphthene	10	U	10	1.1	ug/L		01/04/20 07:34	01/04/20 21:26	1
Acenaphthylene	10	U	10	0.82	ug/L		01/04/20 07:34	01/04/20 21:26	1
Anthracene	10	U	10	0.63	ug/L		01/04/20 07:34	01/04/20 21:26	1
Benzo[a]anthracene	1.0	U	1.0	0.59	ug/L		01/04/20 07:34	01/04/20 21:26	1
Benzo[a]pyrene	1.0	U	1.0	0.41	ug/L		01/04/20 07:34	01/04/20 21:26	1
Benzo[b]fluoranthene	2.0	U	2.0	0.68	ug/L		01/04/20 07:34	01/04/20 21:26	1
Benzo[g,h,i]perylene	10	U	10	1.4	ug/L		01/04/20 07:34	01/04/20 21:26	1
Benzo[k]fluoranthene	1.0	U	1.0	0.67	ug/L		01/04/20 07:34	01/04/20 21:26	1
Chrysene	2.0	U	2.0	0.91	ug/L		01/04/20 07:34	01/04/20 21:26	1
Dibenz(a,h)anthracene	1.0	U	1.0	0.72	ug/L		01/04/20 07:34	01/04/20 21:26	1
Dibenzofuran	10	U	10	1.1	ug/L		01/04/20 07:34	01/04/20 21:26	1
Fluoranthene	10	U	10	0.84	ug/L		01/04/20 07:34	01/04/20 21:26	1
Fluorene	10	U	10	0.91	ug/L		01/04/20 07:34	01/04/20 21:26	1
Hexachlorobenzene	1.0	U	1.0	0.40	ug/L		01/04/20 07:34	01/04/20 21:26	1
Indeno[1,2,3-cd]pyrene	2.0	U	2.0	0.94	ug/L		01/04/20 07:34	01/04/20 21:26	1
Naphthalene	10	U	10	1.1	ug/L		01/04/20 07:34	01/04/20 21:26	1
Pentachlorophenol	20	U	20	1.4	ug/L		01/04/20 07:34	01/04/20 21:26	1
Phenanthrone	10	U	10	0.58	ug/L		01/04/20 07:34	01/04/20 21:26	1
Phenol	10	U	10	0.29	ug/L		01/04/20 07:34	01/04/20 21:26	1
Pyrene	10	U	10	1.6	ug/L		01/04/20 07:34	01/04/20 21:26	1

Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol (Surr)	94		26 - 139			01/04/20 07:34	01/04/20 21:26	1
2-Fluorobiphenyl	102		45 - 107			01/04/20 07:34	01/04/20 21:26	1
2-Fluorophenol (Surr)	61 *		25 - 58			01/04/20 07:34	01/04/20 21:26	1
Nitrobenzene-d5 (Surr)	115 *		51 - 108			01/04/20 07:34	01/04/20 21:26	1
Phenol-d5 (Surr)	44 *		14 - 39			01/04/20 07:34	01/04/20 21:26	1
Terphenyl-d14 (Surr)	123		40 - 148			01/04/20 07:34	01/04/20 21:26	1

**Method: 8081B - Organochlorine Pesticides (GC)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	0.020	U	0.020	0.0060	ug/L		01/03/20 15:33	01/06/20 16:24	1
4,4'-DDE	0.020	U	0.020	0.0020	ug/L		01/03/20 15:33	01/06/20 16:24	1
4,4'-DDT	0.020	U	0.020	0.0040	ug/L		01/03/20 15:33	01/06/20 16:24	1
Aldrin	0.020	U	0.020	0.0030	ug/L		01/03/20 15:33	01/06/20 16:24	1
alpha-BHC	0.020	U	0.020	0.0070	ug/L		01/03/20 15:33	01/06/20 16:24	1
beta-BHC	0.020	U	0.020	0.0040	ug/L		01/03/20 15:33	01/06/20 16:24	1
Chlordane (technical)	0.50	U	0.50	0.055	ug/L		01/03/20 15:33	01/06/20 16:24	1
cis-Chlordane	0.020	U	0.020	0.0020	ug/L		01/03/20 15:33	01/06/20 16:24	1
delta-BHC	0.020	U	0.020	0.0050	ug/L		01/03/20 15:33	01/06/20 16:24	1
Dieldrin	0.020	U	0.020	0.0030	ug/L		01/03/20 15:33	01/06/20 16:24	1
Endosulfan I	0.020	U	0.020	0.0020	ug/L		01/03/20 15:33	01/06/20 16:24	1
Endosulfan II	0.020	U	0.020	0.0040	ug/L		01/03/20 15:33	01/06/20 16:24	1

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# Client Sample Results

Client: AKRF Inc

Project/Site: Concord/Adelaar/EPR

Job ID: 460-200012-1

**Client Sample ID: FB-123119****Lab Sample ID: 460-200012-9**

Date Collected: 12/31/19 16:00

Matrix: Water

Date Received: 01/02/20 16:00

**Method: 8081B - Organochlorine Pesticides (GC) (Continued)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Endosulfan sulfate	0.020	U	0.020	0.0060	ug/L		01/03/20 15:33	01/06/20 16:24	1
Endrin	0.020	U	0.020	0.0040	ug/L		01/03/20 15:33	01/06/20 16:24	1
Endrin aldehyde	0.020	U	0.020	0.0080	ug/L		01/03/20 15:33	01/06/20 16:24	1
Endrin ketone	0.020	U	0.020	0.0080	ug/L		01/03/20 15:33	01/06/20 16:24	1
gamma-BHC (Lindane)	0.020	U	0.020	0.012	ug/L		01/03/20 15:33	01/06/20 16:24	1
Heptachlor	0.020	U	0.020	0.0030	ug/L		01/03/20 15:33	01/06/20 16:24	1
Heptachlor epoxide	0.020	U	0.020	0.0050	ug/L		01/03/20 15:33	01/06/20 16:24	1
Methoxychlor	0.020	U	0.020	0.0040	ug/L		01/03/20 15:33	01/06/20 16:24	1
Toxaphene	0.50	U	0.50	0.11	ug/L		01/03/20 15:33	01/06/20 16:24	1
<b>Surrogate</b>		<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>			<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
DCB Decachlorobiphenyl		45		10 - 150			01/03/20 15:33	01/06/20 16:24	1
DCB Decachlorobiphenyl		56		10 - 150			01/03/20 15:33	01/06/20 16:24	1
Tetrachloro-m-xylene		93		12 - 136			01/03/20 15:33	01/06/20 16:24	1
Tetrachloro-m-xylene		98		12 - 136			01/03/20 15:33	01/06/20 16:24	1

**Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor 1016	0.40	U	0.40	0.12	ug/L		01/03/20 15:39	01/07/20 02:11	1
Aroclor 1221	0.40	U	0.40	0.12	ug/L		01/03/20 15:39	01/07/20 02:11	1
Aroclor 1232	0.40	U	0.40	0.12	ug/L		01/03/20 15:39	01/07/20 02:11	1
Aroclor 1242	0.40	U	0.40	0.12	ug/L		01/03/20 15:39	01/07/20 02:11	1
Aroclor 1248	0.40	U	0.40	0.12	ug/L		01/03/20 15:39	01/07/20 02:11	1
Aroclor 1254	0.40	U	0.40	0.11	ug/L		01/03/20 15:39	01/07/20 02:11	1
Aroclor 1260	0.40	U	0.40	0.11	ug/L		01/03/20 15:39	01/07/20 02:11	1
Aroclor-1262	0.40	U	0.40	0.11	ug/L		01/03/20 15:39	01/07/20 02:11	1
Aroclor 1268	0.40	U	0.40	0.11	ug/L		01/03/20 15:39	01/07/20 02:11	1
Polychlorinated biphenyls, Total	0.40	U	0.40	0.12	ug/L		01/03/20 15:39	01/07/20 02:11	1
<b>Surrogate</b>		<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>			<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
DCB Decachlorobiphenyl		33		10 - 150			01/03/20 15:39	01/07/20 02:11	1
DCB Decachlorobiphenyl		38		10 - 150			01/03/20 15:39	01/07/20 02:11	1

**Method: 6020B - Metals (ICP/MS)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	2.0	U	2.0	0.73	ug/L		01/09/20 04:45	01/09/20 12:32	2
Barium	4.0	U	4.0	1.2	ug/L		01/09/20 04:45	01/09/20 12:32	2
Beryllium	0.80	U	0.80	0.25	ug/L		01/09/20 04:45	01/09/20 12:32	2
Cadmium	2.0	U	2.0	0.81	ug/L		01/09/20 04:45	01/09/20 12:32	2
Chromium	4.0	U	4.0	2.3	ug/L		01/09/20 04:45	01/09/20 12:32	2
Copper	4.0	U	4.0	2.0	ug/L		01/09/20 04:45	01/09/20 12:32	2
Lead	1.2	U	1.2	0.55	ug/L		01/09/20 04:45	01/09/20 12:32	2
Manganese	8.0	U	8.0	2.9	ug/L		01/09/20 04:45	01/09/20 12:32	2
Nickel	4.0	U	4.0	2.4	ug/L		01/09/20 04:45	01/09/20 12:32	2
Selenium	10.0	U	10.0	5.4	ug/L		01/09/20 04:45	01/09/20 12:32	2
Silver	2.0	U	2.0	0.59	ug/L		01/09/20 04:45	01/09/20 12:32	2
Zinc	16.0	U	16.0	11.1	ug/L		01/09/20 04:45	01/09/20 12:32	2

**Method: 7470A - Mercury (CVAA)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.20	U	0.20	0.12	ug/L		01/03/20 12:06	01/03/20 13:58	1

Eurofins TestAmerica, Edison

# Client Sample Results

Client: AKRF Inc

Project/Site: Concord/Adelaar/EPR

Job ID: 460-200012-1

**Client Sample ID: OU-3-MW-18-010320**

**Lab Sample ID: 460-200140-1**

**Matrix: Water**

Date Collected: 01/03/20 12:00

Date Received: 01/06/20 19:20

## Method: 6020B - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	2.8		2.0	0.73	ug/L		01/09/20 23:35	01/10/20 12:26	2
Barium	126		4.0	1.2	ug/L		01/09/20 23:35	01/10/20 12:26	2
Beryllium	0.32 J		0.80	0.25	ug/L		01/09/20 23:35	01/10/20 12:26	2
Cadmium	2.0 U		2.0	0.81	ug/L		01/09/20 23:35	01/10/20 12:26	2
Chromium	5.9		4.0	2.3	ug/L		01/09/20 23:35	01/10/20 12:26	2
Copper	15.0		4.0	2.0	ug/L		01/09/20 23:35	01/10/20 12:26	2
Lead	11.0		1.2	0.55	ug/L		01/09/20 23:35	01/10/20 12:26	2
Manganese	651		8.0	2.9	ug/L		01/09/20 23:35	01/10/20 12:26	2
Nickel	8.8		4.0	2.4	ug/L		01/09/20 23:35	01/10/20 12:26	2
Selenium	10.0 U		10.0	5.4	ug/L		01/09/20 23:35	01/10/20 12:26	2
Silver	2.0 U		2.0	0.59	ug/L		01/09/20 23:35	01/10/20 12:26	2
Zinc	21.9		16.0	11.1	ug/L		01/09/20 23:35	01/10/20 12:26	2

## Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.20	U		0.20	ug/L		01/07/20 11:29	01/07/20 14:13	1

# Surrogate Summary

Client: AKRF Inc

Job ID: 460-200012-1

Project/Site: Concord/Adelaar/EPR

## Method: 8260C - Volatile Organic Compounds by GC/MS

Matrix: Water

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)			
		DCA (74-132)	BFB (77-124)	DBFM (72-131)	TOL (80-120)
460-200012-1	OU-2-MW-1-123019	94	108	111	101
460-200012-1 MS	OU-2-MW-1-123019	83	104	96	92
460-200012-1 MSD	OU-2-MW-1-123019	85	100	102	93
460-200012-2	OU-2-MW-15-123019	90	106	103	101
460-200012-3	OU-2-MW-32-123019	84	98	100	93
460-200012-4	OU-2-MW-33-123019	107	119	118	115
460-200012-8	TB-123119	97	112	112	108
460-200012-9	FB-123119	87	99	97	95
LCS 460-666327/4	Lab Control Sample	96	111	107	102
MB 460-666327/9	Method Blank	93	107	108	102

### Surrogate Legend

DCA = 1,2-Dichloroethane-d4 (Surr)

BFB = 4-Bromofluorobenzene

DBFM = Dibromofluoromethane (Surr)

TOL = Toluene-d8 (Surr)

## Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Matrix: Water

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)					
		TBP (26-139)	FBP (45-107)	2FP (25-58)	NBZ (51-108)	PHL (14-39)	TPHL (40-148)
460-200012-1	OU-2-MW-1-123019	70	73	41	82	29	85
460-200012-1 MS	OU-2-MW-1-123019	61	65	38	71	25	75
460-200012-1 MSD	OU-2-MW-1-123019	66	68	40	73	26	76
460-200012-2	OU-2-MW-15-123019	99	105	63 *	118 *	45 *	126
460-200012-3	OU-2-MW-32-123019	100	110 *	65 *	122 *	47 *	124
460-200012-4	OU-2-MW-33-123019	89	93	58	109 *	42 *	113
460-200012-9	FB-123119	94	102	61 *	115 *	44 *	123
LCS 460-666424/2-A	Lab Control Sample	94	99	66 *	102	49 *	114
LCSD 460-666424/3-A	Lab Control Sample Dup	95	98	60 *	104	43 *	114
MB 460-666424/1-A	Method Blank	72	86	54	94	40 *	92

### Surrogate Legend

TBP = 2,4,6-Tribromophenol (Surr)

FBP = 2-Fluorobiphenyl

2FP = 2-Fluorophenol (Surr)

NBZ = Nitrobenzene-d5 (Surr)

PHL = Phenol-d5 (Surr)

TPHL = Terphenyl-d14 (Surr)

## Method: 8081B - Organochlorine Pesticides (GC)

Matrix: Water

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)			
		DCBP1 (10-150)	DCBP2 (10-150)	TCX1 (12-136)	TCX2 (12-136)
460-200012-1	OU-2-MW-1-123019	66	77	78	81
460-200012-1 MS	OU-2-MW-1-123019	66	73	75	78
460-200012-1 MSD	OU-2-MW-1-123019	55	61	70	75

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# Surrogate Summary

Client: AKRF Inc

Job ID: 460-200012-1

Project/Site: Concord/Adelaar/EPR

## Method: 8081B - Organochlorine Pesticides (GC) (Continued)

Matrix: Water

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)			
		DCBP1 (10-150)	DCBP2 (10-150)	TCX1 (12-136)	TCX2 (12-136)
460-200012-2	OU-2-MW-15-123019	74	86	89	85
460-200012-3	OU-2-MW-32-123019	35	37	77	75
460-200012-4	OU-2-MW-33-123019	109	118	131	131
460-200012-9	FB-123119	45	56	93	98
LCS 460-666393/2-A	Lab Control Sample	65	75	80	87
LCSD 460-666393/3-A	Lab Control Sample Dup	90	94	101	106
MB 460-666393/1-A	Method Blank	45	44	70	70

### Surrogate Legend

DCBP = DCB Decachlorobiphenyl

TCX = Tetrachloro-m-xylene

## Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Matrix: Water

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)	
		DCBP1 (10-150)	DCBP2 (10-150)
460-200012-1	OU-2-MW-1-123019	51	64
460-200012-1 MS	OU-2-MW-1-123019	64	79
460-200012-1 MSD	OU-2-MW-1-123019	78	98
460-200012-2	OU-2-MW-15-123019	50	53
460-200012-3	OU-2-MW-32-123019	26	32
460-200012-4	OU-2-MW-33-123019	77	85
460-200012-9	FB-123119	33	38
LCS 460-666395/2-A	Lab Control Sample	71	78
LCSD 460-666395/3-A	Lab Control Sample Dup	70	83
MB 460-666395/1-A	Method Blank	43	55

### Surrogate Legend

DCBP = DCB Decachlorobiphenyl

# QC Sample Results

Client: AKRF Inc

Project/Site: Concord/Adelaar/EPR

Job ID: 460-200012-1

## Method: 8260C - Volatile Organic Compounds by GC/MS

**Lab Sample ID: MB 460-666327/9**

**Matrix: Water**

**Analysis Batch: 666327**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
1,1-Dichloroethene	1.0	U	1.0	0.26	ug/L			01/03/20 09:22	1
1,1-Dichloroethane	1.0	U	1.0	0.26	ug/L			01/03/20 09:22	1
1,2-Dichloroethane	1.0	U	1.0	0.43	ug/L			01/03/20 09:22	1
1,1,1-Trichloroethane	1.0	U	1.0	0.24	ug/L			01/03/20 09:22	1
2-Butanone (MEK)	5.0	U	5.0	1.9	ug/L			01/03/20 09:22	1
Acetone	5.0	U	5.0	4.4	ug/L			01/03/20 09:22	1
Benzene	1.0	U	1.0	0.20	ug/L			01/03/20 09:22	1
Carbon tetrachloride	1.0	U	1.0	0.21	ug/L			01/03/20 09:22	1
Chloroform	1.0	U	1.0	0.33	ug/L			01/03/20 09:22	1
Chlorobenzene	1.0	U	1.0	0.38	ug/L			01/03/20 09:22	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.22	ug/L			01/03/20 09:22	1
Ethylbenzene	1.0	U	1.0	0.30	ug/L			01/03/20 09:22	1
Methylene Chloride	1.0	U	1.0	0.32	ug/L			01/03/20 09:22	1
Methyl tert-butyl ether	1.0	U	1.0	0.47	ug/L			01/03/20 09:22	1
1,3-Dichlorobenzene	1.0	U	1.0	0.34	ug/L			01/03/20 09:22	1
1,4-Dichlorobenzene	1.0	U	1.0	0.33	ug/L			01/03/20 09:22	1
1,2-Dichlorobenzene	1.0	U	1.0	0.43	ug/L			01/03/20 09:22	1
1,4-Dioxane	50	U	50	28	ug/L			01/03/20 09:22	1
1,2,4-Trimethylbenzene	1.0	U	1.0	0.37	ug/L			01/03/20 09:22	1
Tetrachloroethene	1.0	U	1.0	0.25	ug/L			01/03/20 09:22	1
1,3,5-Trimethylbenzene	1.0	U	1.0	0.33	ug/L			01/03/20 09:22	1
Toluene	1.0	U	1.0	0.38	ug/L			01/03/20 09:22	1
N-Propylbenzene	1.0	U	1.0	0.32	ug/L			01/03/20 09:22	1
sec-Butylbenzene	1.0	U	1.0	0.37	ug/L			01/03/20 09:22	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.24	ug/L			01/03/20 09:22	1
tert-Butylbenzene	1.0	U	1.0	0.34	ug/L			01/03/20 09:22	1
Trichloroethene	1.0	U	1.0	0.31	ug/L			01/03/20 09:22	1
n-Butylbenzene	1.0	U	1.0	0.32	ug/L			01/03/20 09:22	1
Vinyl chloride	1.0	U	1.0	0.17	ug/L			01/03/20 09:22	1
Xylenes, Total	2.0	U	2.0	0.65	ug/L			01/03/20 09:22	1

Surrogate	MB	MB	Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
1,2-Dichloroethane-d4 (Surr)	93		74 - 132		01/03/20 09:22	1
4-Bromofluorobenzene	107		77 - 124		01/03/20 09:22	1
Toluene-d8 (Surr)	102		80 - 120		01/03/20 09:22	1
Dibromofluoromethane (Surr)	108		72 - 131		01/03/20 09:22	1

**Lab Sample ID: LCS 460-666327/4**

**Matrix: Water**

**Analysis Batch: 666327**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**

Analyte	Spike Added	LC S	LC S	Unit	D	%Rec	Limits
		Result	Qualifier				
1,1-Dichloroethene	20.0	19.1		ug/L		96	74 - 123
1,1-Dichloroethane	20.0	16.6		ug/L		83	77 - 123
1,2-Dichloroethane	20.0	17.7		ug/L		89	76 - 121
1,1,1-Trichloroethane	20.0	18.9		ug/L		95	75 - 125
2-Butanone (MEK)	100	108		ug/L		108	64 - 120
Acetone	100	105		ug/L		105	39 - 150

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# QC Sample Results

Client: AKRF Inc

Project/Site: Concord/Adelaar/EPR

Job ID: 460-200012-1

## Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

**Lab Sample ID: LCS 460-666327/4**

**Matrix: Water**

**Analysis Batch: 666327**

**Client Sample ID: Lab Control Sample**

**Prep Type: Total/NA**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Benzene	20.0	22.3		ug/L		112	77 - 121
Carbon tetrachloride	20.0	17.7		ug/L		88	70 - 132
Chloroform	20.0	18.6		ug/L		93	80 - 120
Chlorobenzene	20.0	19.7		ug/L		99	80 - 120
cis-1,2-Dichloroethene	20.0	18.9		ug/L		94	80 - 120
Ethylbenzene	20.0	19.3		ug/L		96	80 - 120
Methylene Chloride	20.0	18.8		ug/L		94	77 - 123
m-Xylene & p-Xylene	20.0	19.8		ug/L		99	80 - 120
Methyl tert-butyl ether	20.0	16.8		ug/L		84	79 - 122
1,3-Dichlorobenzene	20.0	21.5		ug/L		107	80 - 120
1,4-Dichlorobenzene	20.0	21.1		ug/L		105	80 - 120
o-Xylene	20.0	19.9		ug/L		99	80 - 120
1,2-Dichlorobenzene	20.0	21.3		ug/L		106	80 - 120
1,4-Dioxane	400	432		ug/L		108	10 - 150
1,2,4-Trimethylbenzene	20.0	19.6		ug/L		98	78 - 122
Tetrachloroethene	20.0	21.7		ug/L		109	78 - 122
1,3,5-Trimethylbenzene	20.0	20.7		ug/L		103	80 - 120
Toluene	20.0	19.9		ug/L		100	80 - 120
N-Propylbenzene	20.0	20.3		ug/L		101	80 - 123
sec-Butylbenzene	20.0	20.1		ug/L		101	75 - 128
trans-1,2-Dichloroethene	20.0	19.5		ug/L		97	79 - 120
tert-Butylbenzene	20.0	20.0		ug/L		100	79 - 120
Trichloroethene	20.0	18.7		ug/L		93	77 - 120
n-Butylbenzene	20.0	20.1		ug/L		101	72 - 133
Vinyl chloride	20.0	18.1		ug/L		90	62 - 138

Surrogate	LCS	LCS	Limits
	%Recovery	Qualifier	
1,2-Dichloroethane-d4 (Surr)	96		74 - 132
4-Bromofluorobenzene	111		77 - 124
Toluene-d8 (Surr)	102		80 - 120
Dibromofluoromethane (Surr)	107		72 - 131

**Lab Sample ID: 460-200012-1 MS**

**Matrix: Water**

**Analysis Batch: 666327**

**Client Sample ID: OU-2-MW-1-123019**

**Prep Type: Total/NA**

Analyte	Sample	Sample	Spike	MS	MS	Unit	D	%Rec	Limits
	Result	Qualifier	Added	Result	Qualifier				
1,1,1-Trichloroethane	1.0	U	20.0	17.6		ug/L		88	75 - 125
1,1-Dichloroethane	1.0	U	20.0	18.1		ug/L		90	77 - 123
1,1-Dichloroethene	1.0	U	20.0	20.9		ug/L		105	74 - 123
1,2,4-Trimethylbenzene	47		20.0	61.5	*	ug/L		71	78 - 122
1,2-Dichlorobenzene	1.0	U	20.0	19.1		ug/L		95	80 - 120
1,2-Dichloroethane	1.0	U	20.0	15.8		ug/L		79	76 - 121
1,3,5-Trimethylbenzene	1.6		20.0	18.9		ug/L		86	80 - 120
1,3-Dichlorobenzene	1.0	U	20.0	19.6		ug/L		98	80 - 120
1,4-Dichlorobenzene	1.0	U	20.0	18.8		ug/L		94	80 - 120
1,4-Dioxane	50	U	400	358		ug/L		90	10 - 150
2-Butanone (MEK)	5.0	U	100	96.5		ug/L		96	64 - 120

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# QC Sample Results

Client: AKRF Inc

Project/Site: Concord/Adelaar/EPR

Job ID: 460-200012-1

## Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

**Lab Sample ID: 460-200012-1 MS**

**Matrix: Water**

**Analysis Batch: 666327**

**Client Sample ID: OU-2-MW-1-123019**

**Prep Type: Total/NA**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	Limits	
Acetone	5.0	U	100	88.7		ug/L	89	39 - 150		
Benzene	1.0	U	20.0	19.0		ug/L	95	77 - 121		
Carbon tetrachloride	1.0	U	20.0	16.6		ug/L	83	70 - 132		
Chlorobenzene	1.0	U	20.0	18.7		ug/L	93	80 - 120		
Chloroform	1.0	U	20.0	18.4		ug/L	92	80 - 120		
cis-1,2-Dichloroethene	1.0	U	20.0	19.7		ug/L	98	80 - 120		
Ethylbenzene	6.5		20.0	24.2		ug/L	88	80 - 120		
Methyl tert-butyl ether	1.0	U	20.0	17.6		ug/L	88	79 - 122		
Methylene Chloride	1.0	U	20.0	19.7		ug/L	99	77 - 123		
m-Xylene & p-Xylene	1.4		20.0	19.4		ug/L	90	80 - 120		
n-Butylbenzene	7.9		20.0	25.0		ug/L	86	72 - 133		
N-Propylbenzene	15		20.0	31.6		ug/L	82	80 - 123		
o-Xylene	1.0		20.0	19.4		ug/L	92	80 - 120		
sec-Butylbenzene	3.5		20.0	21.0		ug/L	87	75 - 128		
tert-Butylbenzene	1.0	U	20.0	17.6		ug/L	88	79 - 120		
Tetrachloroethene	1.0	U	20.0	21.1		ug/L	105	78 - 122		
Toluene	0.61	J	20.0	18.5		ug/L	89	80 - 120		
trans-1,2-Dichloroethene	1.0	U	20.0	20.6		ug/L	103	79 - 120		
Trichloroethene	1.0	U	20.0	17.9		ug/L	89	77 - 120		
Vinyl chloride	1.0	U	20.0	19.9		ug/L	100	62 - 138		
<hr/>										
Surrogate	MS %Recovery	MS Qualifier	MS Limits							
1,2-Dichloroethane-d4 (Surr)	83		74 - 132							
4-Bromofluorobenzene	104		77 - 124							
Dibromofluoromethane (Surr)	96		72 - 131							
Toluene-d8 (Surr)	92		80 - 120							

**Lab Sample ID: 460-200012-1 MSD**

**Matrix: Water**

**Analysis Batch: 666327**

**Client Sample ID: OU-2-MW-1-123019**

**Prep Type: Total/NA**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	Limits	RPD	Limit
1,1,1-Trichloroethane	1.0	U	20.0	18.9		ug/L	94	75 - 125		7	30
1,1-Dichloroethane	1.0	U	20.0	17.6		ug/L	88	77 - 123		3	30
1,1-Dichloroethene	1.0	U	20.0	21.7		ug/L	108	74 - 123		3	30
1,2,4-Trimethylbenzene	47		20.0	62.2 *		ug/L	74	78 - 122		1	30
1,2-Dichlorobenzene	1.0	U	20.0	19.4		ug/L	97	80 - 120		2	30
1,2-Dichloroethane	1.0	U	20.0	16.3		ug/L	82	76 - 121		3	30
1,3,5-Trimethylbenzene	1.6		20.0	19.2		ug/L	88	80 - 120		2	30
1,3-Dichlorobenzene	1.0	U	20.0	19.5		ug/L	98	80 - 120		0	30
1,4-Dichlorobenzene	1.0	U	20.0	18.9		ug/L	95	80 - 120		1	30
1,4-Dioxane	50	U	400	393		ug/L	98	10 - 150		9	30
2-Butanone (MEK)	5.0	U	100	100		ug/L	100	64 - 120		4	30
Acetone	5.0	U	100	96.9		ug/L	97	39 - 150		9	30
Benzene	1.0	U	20.0	18.2		ug/L	91	77 - 121		4	30
Carbon tetrachloride	1.0	U	20.0	17.9		ug/L	90	70 - 132		8	30
Chlorobenzene	1.0	U	20.0	18.6		ug/L	93	80 - 120		0	30
Chloroform	1.0	U	20.0	19.2		ug/L	96	80 - 120		4	30

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# QC Sample Results

Client: AKRF Inc

Project/Site: Concord/Adelaar/EPR

Job ID: 460-200012-1

## Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: 460-200012-1 MSD

Client Sample ID: OU-2-MW-1-123019

Matrix: Water

Prep Type: Total/NA

Analysis Batch: 666327

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec.	RPD	RPD Limit
cis-1,2-Dichloroethene	1.0	U	20.0	20.3	ug/L	101	80 - 120	3	30	
Ethylbenzene	6.5		20.0	24.6	ug/L	90	80 - 120	2	30	
Methyl tert-butyl ether	1.0	U	20.0	17.9	ug/L	89	79 - 122	2	30	
Methylene Chloride	1.0	U	20.0	20.6	ug/L	103	77 - 123	4	30	
m-Xylene & p-Xylene	1.4		20.0	19.7	ug/L	92	80 - 120	2	30	
n-Butylbenzene	7.9		20.0	25.4	ug/L	87	72 - 133	1	30	
N-Propylbenzene	15		20.0	31.9	ug/L	84	80 - 123	1	30	
o-Xylene	1.0		20.0	19.8	ug/L	94	80 - 120	2	30	
sec-Butylbenzene	3.5		20.0	21.7	ug/L	91	75 - 128	3	30	
tert-Butylbenzene	1.0	U	20.0	17.6	ug/L	88	79 - 120	0	30	
Tetrachloroethene	1.0	U	20.0	20.8	ug/L	104	78 - 122	1	30	
Toluene	0.61	J	20.0	19.3	ug/L	94	80 - 120	4	30	
trans-1,2-Dichloroethene	1.0	U	20.0	20.9	ug/L	105	79 - 120	2	30	
Trichloroethene	1.0	U	20.0	18.8	ug/L	94	77 - 120	5	30	
Vinyl chloride	1.0	U	20.0	20.4	ug/L	102	62 - 138	2	30	

Surrogate	MSD	MSD	Limits
	%Recovery	Qualifier	
1,2-Dichloroethane-d4 (Surr)	85		74 - 132
4-Bromofluorobenzene	100		77 - 124
Dibromofluoromethane (Surr)	102		72 - 131
Toluene-d8 (Surr)	93		80 - 120

## Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Lab Sample ID: MB 460-666424/1-A

Client Sample ID: Method Blank

Matrix: Water

Prep Type: Total/NA

Analysis Batch: 666470

Prep Batch: 666424

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Methylphenol	10	U	10	0.67	ug/L	01/04/20 07:34	01/05/20 00:35		1
3 & 4 Methylphenol	10	U	10	0.64	ug/L	01/04/20 07:34	01/05/20 00:35		1
Acenaphthene	10	U	10	1.1	ug/L	01/04/20 07:34	01/05/20 00:35		1
Acenaphthylene	10	U	10	0.82	ug/L	01/04/20 07:34	01/05/20 00:35		1
Anthracene	10	U	10	0.63	ug/L	01/04/20 07:34	01/05/20 00:35		1
Benzo[a]anthracene	1.0	U	1.0	0.59	ug/L	01/04/20 07:34	01/05/20 00:35		1
Benzo[a]pyrene	1.0	U	1.0	0.41	ug/L	01/04/20 07:34	01/05/20 00:35		1
Benzo[b]fluoranthene	2.0	U	2.0	0.68	ug/L	01/04/20 07:34	01/05/20 00:35		1
Benzo[g,h,i]perylene	10	U	10	1.4	ug/L	01/04/20 07:34	01/05/20 00:35		1
Benzo[k]fluoranthene	1.0	U	1.0	0.67	ug/L	01/04/20 07:34	01/05/20 00:35		1
Chrysene	2.0	U	2.0	0.91	ug/L	01/04/20 07:34	01/05/20 00:35		1
Dibenz(a,h)anthracene	1.0	U	1.0	0.72	ug/L	01/04/20 07:34	01/05/20 00:35		1
Dibenzofuran	10	U	10	1.1	ug/L	01/04/20 07:34	01/05/20 00:35		1
Fluoranthene	10	U	10	0.84	ug/L	01/04/20 07:34	01/05/20 00:35		1
Fluorene	10	U	10	0.91	ug/L	01/04/20 07:34	01/05/20 00:35		1
Hexachlorobenzene	1.0	U	1.0	0.40	ug/L	01/04/20 07:34	01/05/20 00:35		1
Indeno[1,2,3-cd]pyrene	2.0	U	2.0	0.94	ug/L	01/04/20 07:34	01/05/20 00:35		1
Naphthalene	10	U	10	1.1	ug/L	01/04/20 07:34	01/05/20 00:35		1
Pentachlorophenol	20	U	20	1.4	ug/L	01/04/20 07:34	01/05/20 00:35		1
Phenanthrene	10	U	10	0.58	ug/L	01/04/20 07:34	01/05/20 00:35		1

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# QC Sample Results

Client: AKRF Inc

Project/Site: Concord/Adelaar/EPR

Job ID: 460-200012-1

## Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 460-666424/1-A

Matrix: Water

Analysis Batch: 666470

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 666424

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Phenol	10	U	10	0.29	ug/L		01/04/20 07:34	01/05/20 00:35	1
Pyrene	10	U	10	1.6	ug/L		01/04/20 07:34	01/05/20 00:35	1
<b>Surrogate</b>									
2,4,6-Tribromophenol (Surr)	72		26 - 139				01/04/20 07:34	01/05/20 00:35	1
2-Fluorobiphenyl	86		45 - 107				01/04/20 07:34	01/05/20 00:35	1
2-Fluorophenol (Surr)	54		25 - 58				01/04/20 07:34	01/05/20 00:35	1
Nitrobenzene-d5 (Surr)	94		51 - 108				01/04/20 07:34	01/05/20 00:35	1
Phenol-d5 (Surr)	40 *		14 - 39				01/04/20 07:34	01/05/20 00:35	1
Terphenyl-d14 (Surr)	92		40 - 148				01/04/20 07:34	01/05/20 00:35	1

Lab Sample ID: LCS 460-666424/2-A

Matrix: Water

Analysis Batch: 666470

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 666424

Analyte	Spike	LCS	LCS	Unit	D	%Rec	Limits	%Rec.	
	Added	Result	Qualifier						
2-Methylphenol	80.0	57.6		ug/L		72	43 - 80		
Acenaphthene	80.0	75.4		ug/L		94	58 - 107		
Acenaphthylene	80.0	72.8		ug/L		91	61 - 106		
Anthracene	80.0	79.8		ug/L		100	70 - 118		
Benzo[a]anthracene	80.0	77.8		ug/L		97	73 - 119		
Benzo[a]pyrene	80.0	69.4		ug/L		87	76 - 125		
Benzo[b]fluoranthene	80.0	72.0		ug/L		90	78 - 123		
Benzo[g,h,i]perylene	80.0	80.1		ug/L		100	63 - 133		
Benzo[k]fluoranthene	80.0	76.3		ug/L		95	71 - 126		
Chrysene	80.0	88.2		ug/L		110	73 - 121		
Dibenz(a,h)anthracene	80.0	83.0		ug/L		104	59 - 136		
Dibenzofuran	80.0	74.0		ug/L		92	67 - 108		
Fluoranthene	80.0	75.4		ug/L		94	66 - 123		
Fluorene	80.0	71.2		ug/L		89	67 - 112		
Hexachlorobenzene	80.0	80.8		ug/L		101	63 - 125		
Indeno[1,2,3-cd]pyrene	80.0	79.1		ug/L		99	57 - 142		
Naphthalene	80.0	67.2		ug/L		84	51 - 98		
Pentachlorophenol	160	162		ug/L		101	54 - 120		
Phenanthrene	80.0	77.0		ug/L		96	70 - 117		
Phenol	80.0	34.5		ug/L		43	16 - 43		
Pyrene	80.0	78.7		ug/L		98	63 - 129		
<b>Surrogate</b>									
2,4,6-Tribromophenol (Surr)	94		26 - 139						
2-Fluorobiphenyl	99		45 - 107						
2-Fluorophenol (Surr)	66 *		25 - 58						
Nitrobenzene-d5 (Surr)	102		51 - 108						
Phenol-d5 (Surr)	49 *		14 - 39						
Terphenyl-d14 (Surr)	114		40 - 148						

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# QC Sample Results

Client: AKRF Inc

Project/Site: Concord/Adelaar/EPR

Job ID: 460-200012-1

## Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

**Lab Sample ID: LCSD 460-666424/3-A**
**Matrix: Water**
**Analysis Batch: 666470**
**Client Sample ID: Lab Control Sample Dup**
**Prep Type: Total/NA**
**Prep Batch: 666424**

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec.	RPD	RPD Limit
2-Methylphenol	80.0	54.2		ug/L		68	43 - 80	6	30
Acenaphthene	80.0	71.6		ug/L		89	58 - 107	5	30
Acenaphthylene	80.0	69.1		ug/L		86	61 - 106	5	30
Anthracene	80.0	74.1		ug/L		93	70 - 118	7	30
Benzo[a]anthracene	80.0	72.6		ug/L		91	73 - 119	7	30
Benzo[a]pyrene	80.0	66.4		ug/L		83	76 - 125	4	30
Benzo[b]fluoranthene	80.0	68.7		ug/L		86	78 - 123	5	30
Benzo[g,h,i]perylene	80.0	75.4		ug/L		94	63 - 133	6	30
Benzo[k]fluoranthene	80.0	73.7		ug/L		92	71 - 126	4	30
Chrysene	80.0	83.6		ug/L		104	73 - 121	5	30
Dibenz(a,h)anthracene	80.0	78.6		ug/L		98	59 - 136	5	30
Dibenzofuran	80.0	71.7		ug/L		90	67 - 108	3	30
Fluoranthene	80.0	70.1		ug/L		88	66 - 123	7	30
Fluorene	80.0	68.5		ug/L		86	67 - 112	4	30
Hexachlorobenzene	80.0	76.2		ug/L		95	63 - 125	6	30
Indeno[1,2,3-cd]pyrene	80.0	75.1		ug/L		94	57 - 142	5	30
Naphthalene	80.0	65.4		ug/L		82	51 - 98	3	30
Pentachlorophenol	160	144		ug/L		90	54 - 120	12	30
Phenanthenrene	80.0	72.4		ug/L		90	70 - 117	6	30
Phenol	80.0	32.8		ug/L		41	16 - 43	5	30
Pyrene	80.0	77.0		ug/L		96	63 - 129	2	30

**LCSD LCSD**

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
2,4,6-Tribromophenol (Surr)	95		26 - 139
2-Fluorobiphenyl	98		45 - 107
2-Fluorophenol (Surr)	60 *		25 - 58
Nitrobenzene-d5 (Surr)	104		51 - 108
Phenol-d5 (Surr)	43 *		14 - 39
Terphenyl-d14 (Surr)	114		40 - 148

**Lab Sample ID: 460-200012-1 MS**
**Matrix: Water**
**Analysis Batch: 666470**
**Client Sample ID: OU-2-MW-1-123019**
**Prep Type: Total/NA**
**Prep Batch: 666424**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec.
									Limits
2-Methylphenol	10	U	80.0	54.9		ug/L		69	43 - 80
Acenaphthene	10	U	80.0	75.9		ug/L		95	58 - 107
Acenaphthylene	10	U	80.0	74.2		ug/L		93	61 - 106
Anthracene	10	U	80.0	76.9		ug/L		96	70 - 118
Benzo[a]anthracene	1.0	U	80.0	77.9		ug/L		97	73 - 119
Benzo[a]pyrene	1.0	U	80.0	70.5		ug/L		88	76 - 125
Benzo[b]fluoranthene	2.0	U	80.0	69.9		ug/L		87	78 - 123
Benzo[g,h,i]perylene	10	U	80.0	82.7		ug/L		103	63 - 133
Benzo[k]fluoranthene	1.0	U	80.0	79.5		ug/L		99	71 - 126
Chrysene	2.0	U	80.0	89.5		ug/L		112	73 - 121
Dibenz(a,h)anthracene	1.0	U	80.0	84.0		ug/L		105	59 - 136
Dibenzofuran	10	U	80.0	75.6		ug/L		94	67 - 108
Fluoranthene	10	U	80.0	73.8		ug/L		92	66 - 123

Eurofins TestAmerica, Edison

# QC Sample Results

Client: AKRF Inc

Project/Site: Concord/Adelaar/EPR

Job ID: 460-200012-1

## Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

**Lab Sample ID: 460-200012-1 MS**

**Matrix: Water**

**Analysis Batch: 666470**

**Client Sample ID: OU-2-MW-1-123019**

**Prep Type: Total/NA**

**Prep Batch: 666424**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	Limits
Fluorene	10	U	80.0	71.7		ug/L	90	67 - 112	
Hexachlorobenzene	1.0	U	80.0	80.1		ug/L	100	63 - 125	
Indeno[1,2,3-cd]pyrene	2.0	U	80.0	82.8		ug/L	104	57 - 142	
Naphthalene	10	U	80.0	77.6		ug/L	97	51 - 98	
Pentachlorophenol	20	U	160	161		ug/L	101	54 - 120	
Phenanthrene	10	U	80.0	76.8		ug/L	96	70 - 117	
Phenol	10	U	80.0	28.3		ug/L	35	16 - 43	
Pyrene	10	U	80.0	80.0		ug/L	100	63 - 129	
<b>Surrogate</b>									
	<b>%Recovery</b>	<b>Qualifier</b>		<b>MS</b>	<b>MS</b>				
2,4,6-Tribromophenol (Surr)	61			26 - 139					
2-Fluorobiphenyl	65			45 - 107					
2-Fluorophenol (Surr)	38			25 - 58					
Nitrobenzene-d5 (Surr)	71			51 - 108					
Phenol-d5 (Surr)	25			14 - 39					
Terphenyl-d14 (Surr)	75			40 - 148					

**Lab Sample ID: 460-200012-1 MSD**

**Matrix: Water**

**Analysis Batch: 666470**

**Client Sample ID: OU-2-MW-1-123019**

**Prep Type: Total/NA**

**Prep Batch: 666424**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	Limits	RPD	Limit
2-Methylphenol	10	U	80.0	57.6		ug/L	72	43 - 80		5	30
Acenaphthene	10	U	80.0	79.1		ug/L	99	58 - 107		4	30
Acenaphthylene	10	U	80.0	77.7		ug/L	97	61 - 106		5	30
Anthracene	10	U	80.0	81.4		ug/L	102	70 - 118		6	30
Benzo[a]anthracene	1.0	U	80.0	77.5		ug/L	97	73 - 119		1	30
Benzo[a]pyrene	1.0	U	80.0	70.8		ug/L	88	76 - 125		0	30
Benzo[b]fluoranthene	2.0	U	80.0	71.9		ug/L	90	78 - 123		3	30
Benzo[g,h,i]perylene	10	U	80.0	83.8		ug/L	105	63 - 133		1	30
Benzo[k]fluoranthene	1.0	U	80.0	79.7		ug/L	100	71 - 126		0	30
Chrysene	2.0	U	80.0	89.7		ug/L	112	73 - 121		0	30
Dibenz(a,h)anthracene	1.0	U	80.0	85.2		ug/L	107	59 - 136		1	30
Dibenzofuran	10	U	80.0	78.3		ug/L	98	67 - 108		4	30
Fluoranthene	10	U	80.0	76.1		ug/L	95	66 - 123		3	30
Fluorene	10	U	80.0	74.6		ug/L	93	67 - 112		4	30
Hexachlorobenzene	1.0	U	80.0	82.0		ug/L	102	63 - 125		2	30
Indeno[1,2,3-cd]pyrene	2.0	U	80.0	80.3		ug/L	100	57 - 142		3	30
Naphthalene	10	U	80.0	80.3 *		ug/L	100	51 - 98		3	30
Pentachlorophenol	20	U	160	169		ug/L	106	54 - 120		5	30
Phenanthrene	10	U	80.0	79.1		ug/L	99	70 - 117		3	30
Phenol	10	U	80.0	30.8		ug/L	39	16 - 43		8	30
Pyrene	10	U	80.0	80.4		ug/L	100	63 - 129		0	30
<b>Surrogate</b>											
	<b>%Recovery</b>	<b>Qualifier</b>		<b>MSD</b>	<b>MSD</b>						
2,4,6-Tribromophenol (Surr)	66			26 - 139							
2-Fluorobiphenyl	68			45 - 107							
2-Fluorophenol (Surr)	40			25 - 58							

Eurofins TestAmerica, Edison

# QC Sample Results

Client: AKRF Inc  
Project/Site: Concord/Adelaar/EPR

Job ID: 460-200012-1

## Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

**Lab Sample ID:** 460-200012-1 MSD

**Matrix:** Water

**Analysis Batch:** 666470

**Client Sample ID:** OU-2-MW-1-123019

**Prep Type:** Total/NA

**Prep Batch:** 666424

Surrogate	MSD	MSD	%Recovery	Qualifier	Limits
Nitrobenzene-d5 (Surr)	73				51 - 108
Phenol-d5 (Surr)	26				14 - 39
Terphenyl-d14 (Surr)	76				40 - 148

## Method: 8081B - Organochlorine Pesticides (GC)

**Lab Sample ID:** MB 460-666393/1-A

**Matrix:** Water

**Analysis Batch:** 666613

**Client Sample ID:** Method Blank

**Prep Type:** Total/NA

**Prep Batch:** 666393

Analyte	MB	MB	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD			0.020	U	0.020	0.0060	ug/L		01/03/20 15:33	01/06/20 11:53	1
4,4'-DDD			0.020	U	0.020	0.0060	ug/L		01/03/20 15:33	01/06/20 11:53	1
4,4'-DDE			0.020	U	0.020	0.0020	ug/L		01/03/20 15:33	01/06/20 11:53	1
4,4'-DDE			0.020	U	0.020	0.0020	ug/L		01/03/20 15:33	01/06/20 11:53	1
4,4'-DDT			0.020	U	0.020	0.0040	ug/L		01/03/20 15:33	01/06/20 11:53	1
4,4'-DDT			0.020	U	0.020	0.0040	ug/L		01/03/20 15:33	01/06/20 11:53	1
Aldrin			0.020	U	0.020	0.0030	ug/L		01/03/20 15:33	01/06/20 11:53	1
Aldrin			0.020	U	0.020	0.0030	ug/L		01/03/20 15:33	01/06/20 11:53	1
alpha-BHC			0.020	U	0.020	0.0070	ug/L		01/03/20 15:33	01/06/20 11:53	1
alpha-BHC			0.020	U	0.020	0.0070	ug/L		01/03/20 15:33	01/06/20 11:53	1
beta-BHC			0.020	U	0.020	0.0040	ug/L		01/03/20 15:33	01/06/20 11:53	1
beta-BHC			0.020	U	0.020	0.0040	ug/L		01/03/20 15:33	01/06/20 11:53	1
Chlordane (technical)			0.50	U	0.50	0.055	ug/L		01/03/20 15:33	01/06/20 11:53	1
Chlordane (technical)			0.50	U	0.50	0.055	ug/L		01/03/20 15:33	01/06/20 11:53	1
cis-Chlordane			0.020	U	0.020	0.0020	ug/L		01/03/20 15:33	01/06/20 11:53	1
cis-Chlordane			0.020	U	0.020	0.0020	ug/L		01/03/20 15:33	01/06/20 11:53	1
delta-BHC			0.020	U	0.020	0.0050	ug/L		01/03/20 15:33	01/06/20 11:53	1
delta-BHC			0.020	U	0.020	0.0050	ug/L		01/03/20 15:33	01/06/20 11:53	1
Dieldrin			0.020	U	0.020	0.0030	ug/L		01/03/20 15:33	01/06/20 11:53	1
Dieldrin			0.020	U	0.020	0.0030	ug/L		01/03/20 15:33	01/06/20 11:53	1
Endosulfan I			0.020	U	0.020	0.0020	ug/L		01/03/20 15:33	01/06/20 11:53	1
Endosulfan I			0.020	U	0.020	0.0020	ug/L		01/03/20 15:33	01/06/20 11:53	1
Endosulfan II			0.020	U	0.020	0.0040	ug/L		01/03/20 15:33	01/06/20 11:53	1
Endosulfan II			0.020	U	0.020	0.0040	ug/L		01/03/20 15:33	01/06/20 11:53	1
Endosulfan sulfate			0.020	U	0.020	0.0060	ug/L		01/03/20 15:33	01/06/20 11:53	1
Endosulfan sulfate			0.020	U	0.020	0.0060	ug/L		01/03/20 15:33	01/06/20 11:53	1
Endrin			0.020	U	0.020	0.0040	ug/L		01/03/20 15:33	01/06/20 11:53	1
Endrin			0.020	U	0.020	0.0040	ug/L		01/03/20 15:33	01/06/20 11:53	1
Endrin aldehyde			0.020	U	0.020	0.0080	ug/L		01/03/20 15:33	01/06/20 11:53	1
Endrin aldehyde			0.020	U	0.020	0.0080	ug/L		01/03/20 15:33	01/06/20 11:53	1
Endrin ketone			0.020	U	0.020	0.0080	ug/L		01/03/20 15:33	01/06/20 11:53	1
Endrin ketone			0.020	U	0.020	0.0080	ug/L		01/03/20 15:33	01/06/20 11:53	1
gamma-BHC (Lindane)			0.020	U	0.020	0.012	ug/L		01/03/20 15:33	01/06/20 11:53	1
gamma-BHC (Lindane)			0.020	U	0.020	0.012	ug/L		01/03/20 15:33	01/06/20 11:53	1
Heptachlor			0.020	U	0.020	0.0030	ug/L		01/03/20 15:33	01/06/20 11:53	1
Heptachlor			0.020	U	0.020	0.0030	ug/L		01/03/20 15:33	01/06/20 11:53	1
Heptachlor epoxide			0.020	U	0.020	0.0050	ug/L		01/03/20 15:33	01/06/20 11:53	1
Heptachlor epoxide			0.020	U	0.020	0.0050	ug/L		01/03/20 15:33	01/06/20 11:53	1

Eurofins TestAmerica, Edison

# QC Sample Results

Client: AKRF Inc

Project/Site: Concord/Adelaar/EPR

Job ID: 460-200012-1

## Method: 8081B - Organochlorine Pesticides (GC) (Continued)

**Lab Sample ID: MB 460-666393/1-A**

**Matrix: Water**

**Analysis Batch: 666613**

**Client Sample ID: Method Blank**

**Prep Type: Total/NA**

**Prep Batch: 666393**

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier					Prepared	Analyzed	Dil Fac
Methoxychlor	0.020	U	0.020	0.0040	ug/L		01/03/20 15:33	01/06/20 11:53	1
Methoxychlor	0.020	U	0.020	0.0040	ug/L		01/03/20 15:33	01/06/20 11:53	1
Toxaphene	0.50	U	0.50	0.11	ug/L		01/03/20 15:33	01/06/20 11:53	1
Toxaphene	0.50	U	0.50	0.11	ug/L		01/03/20 15:33	01/06/20 11:53	1
Surrogate	MB	MB	%Recovery	Qualifier	Limits	D	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier					Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl	45		10 - 150				01/03/20 15:33	01/06/20 11:53	1
DCB Decachlorobiphenyl	44		10 - 150				01/03/20 15:33	01/06/20 11:53	1
Tetrachloro-m-xylene	70		12 - 136				01/03/20 15:33	01/06/20 11:53	1
Tetrachloro-m-xylene	70		12 - 136				01/03/20 15:33	01/06/20 11:53	1

**Lab Sample ID: LCS 460-666393/2-A**

**Matrix: Water**

**Analysis Batch: 666613**

**Client Sample ID: Lab Control Sample**

**Prep Type: Total/NA**

**Prep Batch: 666393**

Analyte	Spike Added	LCS	LCS	Unit	D	%Rec	Limits	%Rec.
		Result	Qualifier					
4,4'-DDD	0.800	0.639		ug/L		80	58 - 136	
4,4'-DDD	0.800	0.692		ug/L		86	58 - 136	
4,4'-DDE	0.800	0.632		ug/L		79	56 - 132	
4,4'-DDE	0.800	0.731		ug/L		91	56 - 132	
4,4'-DDT	0.800	0.624		ug/L		78	56 - 134	
4,4'-DDT	0.800	0.689		ug/L		86	56 - 134	
Aldrin	0.800	0.668		ug/L		84	52 - 125	
Aldrin	0.800	0.762		ug/L		95	52 - 125	
alpha-BHC	0.800	0.679		ug/L		85	57 - 133	
alpha-BHC	0.800	0.759		ug/L		95	57 - 133	
beta-BHC	0.800	0.694		ug/L		87	61 - 134	
beta-BHC	0.800	0.753		ug/L		94	61 - 134	
cis-Chlordane	0.800	0.643		ug/L		80	59 - 131	
cis-Chlordane	0.800	0.750		ug/L		94	59 - 131	
delta-BHC	0.800	0.600		ug/L		75	56 - 130	
delta-BHC	0.800	0.657		ug/L		82	56 - 130	
Dieldrin	0.800	0.636		ug/L		79	61 - 135	
Dieldrin	0.800	0.747		ug/L		93	61 - 135	
Endosulfan I	0.800	0.661		ug/L		83	61 - 134	
Endosulfan I	0.800	0.767		ug/L		96	61 - 134	
Endosulfan II	0.800	0.652		ug/L		82	61 - 133	
Endosulfan II	0.800	0.677		ug/L		85	61 - 133	
Endosulfan sulfate	0.800	0.683		ug/L		85	59 - 133	
Endosulfan sulfate	0.800	0.733		ug/L		92	59 - 133	
Endrin	0.800	0.684		ug/L		86	60 - 135	
Endrin	0.800	0.758		ug/L		95	60 - 135	
Endrin aldehyde	0.800	0.678		ug/L		85	59 - 130	
Endrin aldehyde	0.800	0.695		ug/L		87	59 - 130	
Endrin ketone	0.800	0.694		ug/L		87	60 - 137	
Endrin ketone	0.800	0.726		ug/L		91	60 - 137	
gamma-BHC (Lindane)	0.800	0.656		ug/L		82	59 - 131	
gamma-BHC (Lindane)	0.800	0.745		ug/L		93	59 - 131	

Eurofins TestAmerica, Edison

# QC Sample Results

Client: AKRF Inc

Project/Site: Concord/Adelaar/EPR

Job ID: 460-200012-1

## Method: 8081B - Organochlorine Pesticides (GC) (Continued)

**Lab Sample ID: LCS 460-666393/2-A**

**Matrix: Water**

**Analysis Batch: 666613**

**Client Sample ID: Lab Control Sample**

**Prep Type: Total/NA**

**Prep Batch: 666393**

**%Rec.**

**Limits**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Heptachlor	0.800	0.692		ug/L		86	54 - 126
Heptachlor	0.800	0.742		ug/L		93	54 - 126
Heptachlor epoxide	0.800	0.660		ug/L		83	60 - 130
Heptachlor epoxide	0.800	0.755		ug/L		94	60 - 130
Methoxychlor	0.800	0.740		ug/L		93	57 - 133
Methoxychlor	0.800	0.672		ug/L		84	57 - 133

Surrogate	LCS %Recovery	LCS Qualifier	Limits
DCB Decachlorobiphenyl	65		10 - 150
DCB Decachlorobiphenyl	75		10 - 150
Tetrachloro-m-xylene	80		12 - 136
Tetrachloro-m-xylene	87		12 - 136

**Lab Sample ID: LCSD 460-666393/3-A**

**Matrix: Water**

**Analysis Batch: 666613**

**Client Sample ID: Lab Control Sample Dup**

**Prep Type: Total/NA**

**Prep Batch: 666393**

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec.	RPD	RPD Limit
4,4'-DDD	0.800	0.894	*	ug/L		112	58 - 136	33	30
4,4'-DDD	0.800	0.813		ug/L		102	58 - 136	16	30
4,4'-DDE	0.800	0.886	*	ug/L		111	56 - 132	33	30
4,4'-DDE	0.800	0.830		ug/L		104	56 - 132	13	30
4,4'-DDT	0.800	0.883	*	ug/L		110	56 - 134	34	30
4,4'-DDT	0.800	0.821		ug/L		103	56 - 134	18	30
Aldrin	0.800	0.910	*	ug/L		114	52 - 125	31	30
Aldrin	0.800	0.909		ug/L		114	52 - 125	18	30
alpha-BHC	0.800	0.910		ug/L		114	57 - 133	29	30
alpha-BHC	0.800	0.910		ug/L		114	57 - 133	18	30
beta-BHC	0.800	0.922		ug/L		115	61 - 134	28	30
beta-BHC	0.800	0.890		ug/L		111	61 - 134	17	30
cis-Chlordane	0.800	0.878	*	ug/L		110	59 - 131	31	30
cis-Chlordane	0.800	0.857		ug/L		107	59 - 131	13	30
delta-BHC	0.800	0.805		ug/L		101	56 - 130	29	30
delta-BHC	0.800	0.775		ug/L		97	56 - 130	16	30
Dieldrin	0.800	0.877	*	ug/L		110	61 - 135	32	30
Dieldrin	0.800	0.859		ug/L		107	61 - 135	14	30
Endosulfan I	0.800	0.917	*	ug/L		115	61 - 134	32	30
Endosulfan I	0.800	0.883		ug/L		110	61 - 134	14	30
Endosulfan II	0.800	0.901	*	ug/L		113	61 - 133	32	30
Endosulfan II	0.800	0.810		ug/L		101	61 - 133	18	30
Endosulfan sulfate	0.800	0.862		ug/L		108	59 - 133	23	30
Endosulfan sulfate	0.800	0.915		ug/L		114	59 - 133	22	30
Endrin	0.800	0.932	*	ug/L		117	60 - 135	31	30
Endrin	0.800	0.896		ug/L		112	60 - 135	17	30
Endrin aldehyde	0.800	0.972	*	ug/L		122	59 - 130	36	30
Endrin aldehyde	0.800	0.841		ug/L		105	59 - 130	19	30
Endrin ketone	0.800	0.937		ug/L		117	60 - 137	30	30
Endrin ketone	0.800	0.904		ug/L		113	60 - 137	22	30

Eurofins TestAmerica, Edison

# QC Sample Results

Client: AKRF Inc

Project/Site: Concord/Adelaar/EPR

Job ID: 460-200012-1

## Method: 8081B - Organochlorine Pesticides (GC) (Continued)

**Lab Sample ID: LCSD 460-666393/3-A**

**Matrix: Water**

**Analysis Batch: 666613**

**Client Sample ID: Lab Control Sample Dup**

**Prep Type: Total/NA**

**Prep Batch: 666393**

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD RPD	Limit
gamma-BHC (Lindane)	0.800	0.873		ug/L		109	59 - 131	28	30
gamma-BHC (Lindane)	0.800	0.885		ug/L		111	59 - 131	17	30
Heptachlor	0.800	0.938		ug/L		117	54 - 126	30	30
Heptachlor	0.800	0.878		ug/L		110	54 - 126	17	30
Heptachlor epoxide	0.800	0.899	*	ug/L		112	60 - 130	31	30
Heptachlor epoxide	0.800	0.883		ug/L		110	60 - 130	16	30
Methoxychlor	0.800	0.970		ug/L		121	57 - 133	27	30
Methoxychlor	0.800	0.809		ug/L		101	57 - 133	19	30

Surrogate	LCSD	LCSD	Limits
	%Recovery	Qualifier	
DCB Decachlorobiphenyl	90		10 - 150
DCB Decachlorobiphenyl	94		10 - 150
Tetrachloro-m-xylene	101		12 - 136
Tetrachloro-m-xylene	106		12 - 136

**Lab Sample ID: 460-200012-1 MS**

**Matrix: Water**

**Analysis Batch: 666613**

**Client Sample ID: OU-2-MW-1-123019**

**Prep Type: Total/NA**

**Prep Batch: 666393**

Analyte	Sample	Sample	Spike	MS	MS	Unit	D	%Rec	%Rec.
	Result	Qualifier	Added	Result	Qualifier				
4,4'-DDD	0.020	U	0.800	0.779		ug/L		97	58 - 136
4,4'-DDD	0.020	U	0.800	0.797		ug/L		100	58 - 136
4,4'-DDE	0.020	U	0.800	0.717		ug/L		90	56 - 132
4,4'-DDE	0.020	U	0.800	0.747		ug/L		93	56 - 132
4,4'-DDT	0.020	U	0.800	0.664		ug/L		83	56 - 134
4,4'-DDT	0.020	U	0.800	0.735		ug/L		92	56 - 134
Aldrin	0.020	U	0.800	0.736		ug/L		92	52 - 125
Aldrin	0.020	U	0.800	0.763		ug/L		95	52 - 125
alpha-BHC	0.020	U	0.800	0.806		ug/L		101	57 - 133
alpha-BHC	0.020	U	0.800	0.756		ug/L		95	57 - 133
beta-BHC	0.020	U	0.800	0.743		ug/L		93	61 - 134
beta-BHC	0.020	U	0.800	0.783		ug/L		98	61 - 134
cis-Chlordane	0.020	U	0.800	0.743		ug/L		93	59 - 131
cis-Chlordane	0.020	U	0.800	0.768		ug/L		96	59 - 131
delta-BHC	0.020	U	0.800	0.741		ug/L		93	56 - 130
delta-BHC	0.020	U	0.800	0.711		ug/L		89	56 - 130
Dieldrin	0.020	U	0.800	0.744		ug/L		93	61 - 135
Dieldrin	0.020	U	0.800	0.791		ug/L		99	61 - 135
Endosulfan I	0.020	U	0.800	0.768		ug/L		96	61 - 134
Endosulfan I	0.020	U	0.800	0.790		ug/L		99	61 - 134
Endosulfan II	0.020	U	0.800	0.739		ug/L		92	61 - 133
Endosulfan II	0.020	U	0.800	0.749		ug/L		94	61 - 133
Endosulfan sulfate	0.020	U	0.800	0.800		ug/L		100	59 - 133
Endosulfan sulfate	0.020	U	0.800	0.892		ug/L		111	59 - 133
Endrin	0.020	U	0.800	0.801		ug/L		100	60 - 135
Endrin	0.020	U	0.800	0.823		ug/L		103	60 - 135
Endrin aldehyde	0.020	U	0.800	0.708		ug/L		88	59 - 130
Endrin aldehyde	0.020	U	0.800	0.754		ug/L		94	59 - 130

Eurofins TestAmerica, Edison

# QC Sample Results

Client: AKRF Inc

Project/Site: Concord/Adelaar/EPR

Job ID: 460-200012-1

## Method: 8081B - Organochlorine Pesticides (GC) (Continued)

**Lab Sample ID: 460-200012-1 MS**

**Matrix: Water**

**Analysis Batch: 666613**

**Client Sample ID: OU-2-MW-1-123019**

**Prep Type: Total/NA**

**Prep Batch: 666393**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec.	Limits	
Endrin ketone	0.020	U	0.800	0.766		ug/L	96	60 - 137			
Endrin ketone	0.020	U	0.800	0.827		ug/L	103	60 - 137			
gamma-BHC (Lindane)	0.020	U	0.800	0.764		ug/L	95	59 - 131			
gamma-BHC (Lindane)	0.020	U	0.800	0.747		ug/L	93	59 - 131			
Heptachlor	0.020	U	0.800	0.794		ug/L	99	54 - 126			
Heptachlor	0.020	U	0.800	0.745		ug/L	93	54 - 126			
Heptachlor epoxide	0.020	U	0.800	0.750		ug/L	94	60 - 130			
Heptachlor epoxide	0.020	U	0.800	0.781		ug/L	98	60 - 130			
Methoxychlor	0.020	U	0.800	0.799		ug/L	100	57 - 133			
Methoxychlor	0.020	U	0.800	0.814		ug/L	102	57 - 133			
<b>Surrogate</b>		<b>MS %Recovery</b>	<b>MS Qualifier</b>	<b>Limits</b>							
DCB Decachlorobiphenyl	66			10 - 150							
DCB Decachlorobiphenyl	73			10 - 150							
Tetrachloro-m-xylene	75			12 - 136							
Tetrachloro-m-xylene	78			12 - 136							

**Lab Sample ID: 460-200012-1 MSD**

**Matrix: Water**

**Analysis Batch: 666613**

**Client Sample ID: OU-2-MW-1-123019**

**Prep Type: Total/NA**

**Prep Batch: 666393**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec.	RPD	Limit
4,4'-DDD	0.020	U	0.800	0.734		ug/L	92	58 - 136		6	30
4,4'-DDD	0.020	U	0.800	0.746		ug/L	93	58 - 136		7	30
4,4'-DDE	0.020	U	0.800	0.654		ug/L	82	56 - 132		9	30
4,4'-DDE	0.020	U	0.800	0.705		ug/L	88	56 - 132		6	30
4,4'-DDT	0.020	U	0.800	0.643		ug/L	80	56 - 134		3	30
4,4'-DDT	0.020	U	0.800	0.688		ug/L	86	56 - 134		7	30
Aldrin	0.020	U	0.800	0.699		ug/L	87	52 - 125		5	30
Aldrin	0.020	U	0.800	0.756		ug/L	95	52 - 125		1	30
alpha-BHC	0.020	U	0.800	0.730		ug/L	91	57 - 133		10	30
alpha-BHC	0.020	U	0.800	0.771		ug/L	96	57 - 133		2	30
beta-BHC	0.020	U	0.800	0.694		ug/L	87	61 - 134		7	30
beta-BHC	0.020	U	0.800	0.800		ug/L	100	61 - 134		2	30
cis-Chlordane	0.020	U	0.800	0.741		ug/L	93	59 - 131		0	30
cis-Chlordane	0.020	U	0.800	0.759		ug/L	95	59 - 131		1	30
delta-BHC	0.020	U	0.800	0.671		ug/L	84	56 - 130		10	30
delta-BHC	0.020	U	0.800	0.706		ug/L	88	56 - 130		1	30
Dieldrin	0.020	U	0.800	0.725		ug/L	91	61 - 135		3	30
Dieldrin	0.020	U	0.800	0.762		ug/L	95	61 - 135		4	30
Endosulfan I	0.020	U	0.800	0.736		ug/L	92	61 - 134		4	30
Endosulfan I	0.020	U	0.800	0.778		ug/L	97	61 - 134		2	30
Endosulfan II	0.020	U	0.800	0.721		ug/L	90	61 - 133		2	30
Endosulfan II	0.020	U	0.800	0.712		ug/L	89	61 - 133		5	30
Endosulfan sulfate	0.020	U	0.800	0.783		ug/L	98	59 - 133		2	30
Endosulfan sulfate	0.020	U	0.800	0.837		ug/L	105	59 - 133		6	30
Endrin	0.020	U	0.800	0.784		ug/L	98	60 - 135		2	30
Endrin	0.020	U	0.800	0.789		ug/L	99	60 - 135		4	30

Eurofins TestAmerica, Edison

# QC Sample Results

Client: AKRF Inc

Job ID: 460-200012-1

Project/Site: Concord/Adelaar/EPR

## Method: 8081B - Organochlorine Pesticides (GC) (Continued)

Lab Sample ID: 460-200012-1 MSD

Client Sample ID: OU-2-MW-1-123019

Matrix: Water

Prep Type: Total/NA

Analysis Batch: 666613

Prep Batch: 666393

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec.	RPD Limit
Endrin aldehyde	0.020	U	0.800	0.704		ug/L	88	59 - 130	1 30
Endrin aldehyde	0.020	U	0.800	0.722		ug/L	90	59 - 130	4 30
Endrin ketone	0.020	U	0.800	0.789		ug/L	99	60 - 137	3 30
Endrin ketone	0.020	U	0.800	0.772		ug/L	97	60 - 137	7 30
gamma-BHC (Lindane)	0.020	U	0.800	0.694		ug/L	87	59 - 131	10 30
gamma-BHC (Lindane)	0.020	U	0.800	0.756		ug/L	95	59 - 131	1 30
Heptachlor	0.020	U	0.800	0.724		ug/L	91	54 - 126	9 30
Heptachlor	0.020	U	0.800	0.740		ug/L	93	54 - 126	1 30
Heptachlor epoxide	0.020	U	0.800	0.731		ug/L	91	60 - 130	3 30
Heptachlor epoxide	0.020	U	0.800	0.769		ug/L	96	60 - 130	2 30
Methoxychlor	0.020	U	0.800	0.758		ug/L	95	57 - 133	5 30
Methoxychlor	0.020	U	0.800	0.756		ug/L	94	57 - 133	7 30
Surrogate				MSD %Recovery	MSD Qualifier	Limits			
DCB Decachlorobiphenyl	55					10 - 150			
DCB Decachlorobiphenyl	61					10 - 150			
Tetrachloro-m-xylene	70					12 - 136			
Tetrachloro-m-xylene	75					12 - 136			

## Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Lab Sample ID: MB 460-666395/1-A

Client Sample ID: Method Blank

Matrix: Water

Prep Type: Total/NA

Analysis Batch: 666668

Prep Batch: 666395

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor 1016	0.40	U	0.40	0.12	ug/L		01/03/20 15:39	01/06/20 23:02	1
Aroclor 1016	0.40	U	0.40	0.12	ug/L		01/03/20 15:39	01/06/20 23:02	1
Aroclor 1221	0.40	U	0.40	0.12	ug/L		01/03/20 15:39	01/06/20 23:02	1
Aroclor 1221	0.40	U	0.40	0.12	ug/L		01/03/20 15:39	01/06/20 23:02	1
Aroclor 1232	0.40	U	0.40	0.12	ug/L		01/03/20 15:39	01/06/20 23:02	1
Aroclor 1232	0.40	U	0.40	0.12	ug/L		01/03/20 15:39	01/06/20 23:02	1
Aroclor 1242	0.40	U	0.40	0.12	ug/L		01/03/20 15:39	01/06/20 23:02	1
Aroclor 1242	0.40	U	0.40	0.12	ug/L		01/03/20 15:39	01/06/20 23:02	1
Aroclor 1248	0.40	U	0.40	0.12	ug/L		01/03/20 15:39	01/06/20 23:02	1
Aroclor 1248	0.40	U	0.40	0.12	ug/L		01/03/20 15:39	01/06/20 23:02	1
Aroclor 1254	0.40	U	0.40	0.11	ug/L		01/03/20 15:39	01/06/20 23:02	1
Aroclor 1254	0.40	U	0.40	0.11	ug/L		01/03/20 15:39	01/06/20 23:02	1
Aroclor 1260	0.40	U	0.40	0.11	ug/L		01/03/20 15:39	01/06/20 23:02	1
Aroclor 1260	0.40	U	0.40	0.11	ug/L		01/03/20 15:39	01/06/20 23:02	1
Aroclor-1262	0.40	U	0.40	0.11	ug/L		01/03/20 15:39	01/06/20 23:02	1
Aroclor-1262	0.40	U	0.40	0.11	ug/L		01/03/20 15:39	01/06/20 23:02	1
Aroclor 1268	0.40	U	0.40	0.11	ug/L		01/03/20 15:39	01/06/20 23:02	1
Aroclor 1268	0.40	U	0.40	0.11	ug/L		01/03/20 15:39	01/06/20 23:02	1
Polychlorinated biphenyls, Total	0.40	U	0.40	0.12	ug/L		01/03/20 15:39	01/06/20 23:02	1
Polychlorinated biphenyls, Total	0.40	U	0.40	0.12	ug/L		01/03/20 15:39	01/06/20 23:02	1

Eurofins TestAmerica, Edison

# QC Sample Results

Client: AKRF Inc

Job ID: 460-200012-1

Project/Site: Concord/Adelaar/EPR

## Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography (Continued)

**Lab Sample ID:** MB 460-666395/1-A

**Matrix:** Water

**Analysis Batch:** 666668

**Client Sample ID:** Method Blank

**Prep Type:** Total/NA

**Prep Batch:** 666395

Surrogate	MB		Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
DCB Decachlorobiphenyl	43		10 - 150	01/03/20 15:39	01/06/20 23:02	1
DCB Decachlorobiphenyl	55		10 - 150	01/03/20 15:39	01/06/20 23:02	1

**Lab Sample ID:** LCS 460-666395/2-A

**Matrix:** Water

**Analysis Batch:** 666668

**Client Sample ID:** Lab Control Sample

**Prep Type:** Total/NA

**Prep Batch:** 666395

Analyte	Spike		LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec.	Limits
	Added	Result							
Aroclor 1016	4.00	3.91	ug/L	98	78 - 150				
Aroclor 1016	4.00	3.62	ug/L	91	78 - 150				
Aroclor 1260	4.00	4.57	ug/L	114	80 - 150				
Aroclor 1260	4.00	4.02	ug/L	101	80 - 150				

**Surrogate**

Surrogate	%Recovery	Qualifier	Limits
DCB Decachlorobiphenyl	71		10 - 150
DCB Decachlorobiphenyl	78		10 - 150

**Lab Sample ID:** LCSD 460-666395/3-A

**Matrix:** Water

**Analysis Batch:** 666668

**Client Sample ID:** Lab Control Sample Dup

**Prep Type:** Total/NA

**Prep Batch:** 666395

Analyte	Spike		LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec.	RPD	Limit
	Added	Result								
Aroclor 1016	4.00	3.94	ug/L	98	78 - 150		1	30		
Aroclor 1016	4.00	3.87	ug/L	97	78 - 150		7	30		
Aroclor 1260	4.00	4.47	ug/L	112	80 - 150		2	30		
Aroclor 1260	4.00	4.38	ug/L	110	80 - 150		9	30		

Surrogate	%Recovery	Qualifier	Limits
DCB Decachlorobiphenyl	70		10 - 150
DCB Decachlorobiphenyl	83		10 - 150

**Lab Sample ID:** 460-200012-1 MS

**Matrix:** Water

**Analysis Batch:** 666668

**Client Sample ID:** OU-2-MW-1-123019

**Prep Type:** Total/NA

**Prep Batch:** 666395

Surrogate	MS		Limits
	%Recovery	Qualifier	
DCB Decachlorobiphenyl	64		10 - 150
DCB Decachlorobiphenyl	79		10 - 150

**Lab Sample ID:** 460-200012-1 MSD

**Matrix:** Water

**Analysis Batch:** 666668

**Client Sample ID:** OU-2-MW-1-123019

**Prep Type:** Total/NA

**Prep Batch:** 666395

Surrogate	MSD		Limits
	%Recovery	Qualifier	
DCB Decachlorobiphenyl	78		10 - 150
DCB Decachlorobiphenyl	98		10 - 150

# QC Sample Results

Client: AKRF Inc

Project/Site: Concord/Adelaar/EPR

Job ID: 460-200012-1

## Method: 6020B - Metals (ICP/MS)

Lab Sample ID: MB 460-667216/1-A ^2

Matrix: Water

Analysis Batch: 667328

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 667216

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Arsenic	2.0	U	2.0	0.73	ug/L		01/09/20 04:45	01/09/20 10:42	2
Barium	4.0	U	4.0	1.2	ug/L		01/09/20 04:45	01/09/20 10:42	2
Beryllium	0.80	U	0.80	0.25	ug/L		01/09/20 04:45	01/09/20 10:42	2
Cadmium	2.0	U	2.0	0.81	ug/L		01/09/20 04:45	01/09/20 10:42	2
Chromium	4.0	U	4.0	2.3	ug/L		01/09/20 04:45	01/09/20 10:42	2
Copper	4.0	U	4.0	2.0	ug/L		01/09/20 04:45	01/09/20 10:42	2
Lead	1.2	U	1.2	0.55	ug/L		01/09/20 04:45	01/09/20 10:42	2
Manganese	8.0	U	8.0	2.9	ug/L		01/09/20 04:45	01/09/20 10:42	2
Nickel	4.0	U	4.0	2.4	ug/L		01/09/20 04:45	01/09/20 10:42	2
Selenium	10.0	U	10.0	5.4	ug/L		01/09/20 04:45	01/09/20 10:42	2
Silver	2.0	U	2.0	0.59	ug/L		01/09/20 04:45	01/09/20 10:42	2
Zinc	16.0	U	16.0	11.1	ug/L		01/09/20 04:45	01/09/20 10:42	2

Lab Sample ID: LCS 460-667216/2-A ^2

Matrix: Water

Analysis Batch: 667328

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 667216

%Rec.

Analyte	Spike Added	LCS	LCS	Unit	D	%Rec	Limits	
		Result	Qualifier					
Arsenic	50.0	48.59		ug/L		97	80 - 120	
Barium	50.0	48.97		ug/L		98	80 - 120	
Beryllium	25.0	24.50		ug/L		98	80 - 120	
Cadmium	25.0	25.15		ug/L		101	80 - 120	
Chromium	50.0	50.91		ug/L		102	80 - 120	
Copper	50.0	52.43		ug/L		105	80 - 120	
Lead	25.0	24.42		ug/L		98	80 - 120	
Manganese	250	251.5		ug/L		101	80 - 120	
Nickel	50.0	51.81		ug/L		104	80 - 120	
Selenium	50.0	47.64		ug/L		95	80 - 120	
Silver	25.0	25.59		ug/L		102	80 - 120	
Zinc	250	247.1		ug/L		99	80 - 120	

Lab Sample ID: 460-200012-1 MS

Matrix: Water

Analysis Batch: 667328

Client Sample ID: OU-2-MW-1-123019

Prep Type: Total/NA

Prep Batch: 667216

%Rec.

Analyte	Sample Result	Sample Qualifier	Spike Added	MS	MS	Unit	D	%Rec	Limits
	Result	Qualifier	Added	Result	Qualifier				
Arsenic	3.2		50.0	55.06		ug/L		104	75 - 125
Barium	236		50.0	284.5	4	ug/L		98	75 - 125
Beryllium	0.80	U	25.0	24.78		ug/L		99	75 - 125
Cadmium	2.0	U	25.0	26.02		ug/L		104	75 - 125
Chromium	4.0	U	50.0	54.72		ug/L		109	75 - 125
Copper	4.1		50.0	57.01		ug/L		106	75 - 125
Lead	1.9		25.0	27.91		ug/L		104	75 - 125
Manganese	3130		250	3411	4	ug/L		113	75 - 125
Nickel	4.0	U	50.0	54.55		ug/L		109	75 - 125
Selenium	10.0	U	50.0	48.52		ug/L		97	75 - 125
Silver	2.0	U	25.0	25.80		ug/L		103	75 - 125
Zinc	16.0	U	250	262.2		ug/L		105	75 - 125

Eurofins TestAmerica, Edison

# QC Sample Results

Client: AKRF Inc

Project/Site: Concord/Adelaar/EPR

Job ID: 460-200012-1

## Method: 6020B - Metals (ICP/MS) (Continued)

**Lab Sample ID: 460-200012-1 DU**

**Matrix: Water**

**Analysis Batch: 667328**

**Client Sample ID: OU-2-MW-1-123019**

**Prep Type: Total/NA**

**Prep Batch: 667216**

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	Limit
Arsenic	3.2		2.69		ug/L		17	20
Barium	236		238.5		ug/L		1	20
Beryllium	0.80	U	0.80	U	ug/L		NC	20
Cadmium	2.0	U	2.0	U	ug/L		NC	20
Chromium	4.0	U	4.0	U	ug/L		NC	20
Copper	4.1		3.97	J	ug/L		3	20
Lead	1.9		1.99		ug/L		3	20
Manganese	3130		3163		ug/L		1	20
Nickel	4.0	U	4.0	U	ug/L		NC	20
Selenium	10.0	U	10.0	U	ug/L		NC	20
Silver	2.0	U	2.0	U	ug/L		NC	20
Zinc	16.0	U	16.0	U	ug/L		NC	20

**Lab Sample ID: MB 460-667466/1-A ^2**

**Matrix: Water**

**Analysis Batch: 667608**

**Client Sample ID: Method Blank**

**Prep Type: Total/NA**

**Prep Batch: 667466**

Analyte	MB		RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Arsenic	2.0	U	2.0	0.73	ug/L		01/09/20 23:35	01/10/20 11:09	2
Barium	4.0	U	4.0	1.2	ug/L		01/09/20 23:35	01/10/20 11:09	2
Beryllium	0.80	U	0.80	0.25	ug/L		01/09/20 23:35	01/10/20 11:09	2
Cadmium	2.0	U	2.0	0.81	ug/L		01/09/20 23:35	01/10/20 11:09	2
Chromium	4.0	U	4.0	2.3	ug/L		01/09/20 23:35	01/10/20 11:09	2
Copper	4.0	U	4.0	2.0	ug/L		01/09/20 23:35	01/10/20 11:09	2
Lead	1.2	U	1.2	0.55	ug/L		01/09/20 23:35	01/10/20 11:09	2
Manganese	8.0	U	8.0	2.9	ug/L		01/09/20 23:35	01/10/20 11:09	2
Nickel	4.0	U	4.0	2.4	ug/L		01/09/20 23:35	01/10/20 11:09	2
Selenium	10.0	U	10.0	5.4	ug/L		01/09/20 23:35	01/10/20 11:09	2
Silver	2.0	U	2.0	0.59	ug/L		01/09/20 23:35	01/10/20 11:09	2
Zinc	16.0	U	16.0	11.1	ug/L		01/09/20 23:35	01/10/20 11:09	2

**Lab Sample ID: LCS 460-667466/2-A ^2**

**Matrix: Water**

**Analysis Batch: 667608**

**Client Sample ID: Lab Control Sample**

**Prep Type: Total/NA**

**Prep Batch: 667466**

**%Rec.**

Analyte	Spike Added	LCS		Unit	D	%Rec	Limits
		Result	Qualifier				
Arsenic	50.0	50.31		ug/L		101	80 - 120
Barium	50.0	52.05		ug/L		104	80 - 120
Beryllium	25.0	23.73		ug/L		95	80 - 120
Cadmium	25.0	26.02		ug/L		104	80 - 120
Chromium	50.0	53.33		ug/L		107	80 - 120
Copper	50.0	55.47		ug/L		111	80 - 120
Lead	25.0	25.63		ug/L		103	80 - 120
Manganese	250	255.1		ug/L		102	80 - 120
Nickel	50.0	54.38		ug/L		109	80 - 120
Selenium	50.0	51.97		ug/L		104	80 - 120
Silver	25.0	26.51		ug/L		106	80 - 120
Zinc	250	257.3		ug/L		103	80 - 120

Eurofins TestAmerica, Edison

# QC Sample Results

Client: AKRF Inc  
Project/Site: Concord/Adelaar/EPR

Job ID: 460-200012-1

## Method: 6020B - Metals (ICP/MS) (Continued)

**Lab Sample ID: 460-200146-I-3-C MS ^2**

**Matrix: Water**

**Analysis Batch: 667608**

**Client Sample ID: Matrix Spike**

**Prep Type: Total/NA**

**Prep Batch: 667466**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec.	Limits
Arsenic	2.0	U	50.0	49.46		ug/L	99	75 - 125		
Barium	14.5		50.0	64.79		ug/L	101	75 - 125		
Beryllium	0.80	U	25.0	23.37		ug/L	93	75 - 125		
Cadmium	2.0	U	25.0	25.39		ug/L	102	75 - 125		
Chromium	2.5	J	50.0	52.18		ug/L	99	75 - 125		
Copper	4.0	U	50.0	52.15		ug/L	104	75 - 125		
Lead	1.2	U	25.0	25.12		ug/L	100	75 - 125		
Manganese	8.0	U	250	248.0		ug/L	99	75 - 125		
Nickel	4.0	U	50.0	51.96		ug/L	104	75 - 125		
Selenium	10.0	U	50.0	51.31		ug/L	103	75 - 125		
Silver	2.0	U	25.0	25.10		ug/L	100	75 - 125		
Zinc	16.0	U	250	249.9		ug/L	100	75 - 125		

**Lab Sample ID: 460-200146-I-3-B DU ^2**

**Matrix: Water**

**Analysis Batch: 667608**

**Client Sample ID: Duplicate**

**Prep Type: Total/NA**

**Prep Batch: 667466**

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	Limit
Arsenic	2.0	U	2.0	U	ug/L	NC	20	
Barium	14.5		13.47		ug/L	7	20	
Beryllium	0.80	U	0.80	U	ug/L	NC	20	
Cadmium	2.0	U	2.0	U	ug/L	NC	20	
Chromium	2.5	J	2.44	J	ug/L	3	20	
Copper	4.0	U	4.0	U	ug/L	NC	20	
Lead	1.2	U	1.2	U	ug/L	NC	20	
Manganese	8.0	U	8.0	U	ug/L	NC	20	
Nickel	4.0	U	4.0	U	ug/L	NC	20	
Selenium	10.0	U	10.0	U	ug/L	NC	20	
Silver	2.0	U	2.0	U	ug/L	NC	20	
Zinc	16.0	U	16.0	U	ug/L	NC	20	

## Method: 7470A - Mercury (CVAA)

**Lab Sample ID: MB 460-666375/1-A**

**Matrix: Water**

**Analysis Batch: 666401**

**Client Sample ID: Method Blank**

**Prep Type: Total/NA**

**Prep Batch: 666375**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.20	U	0.20	0.12	ug/L	01/03/20 12:06	01/03/20 13:17		1

**Lab Sample ID: LCS 460-666375/2-A**

**Matrix: Water**

**Analysis Batch: 666401**

**Client Sample ID: Lab Control Sample**

**Prep Type: Total/NA**

**Prep Batch: 666375**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec.	Limits
Mercury	1.00	1.00		ug/L	100	80 - 120		

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# QC Sample Results

Client: AKRF Inc

Project/Site: Concord/Adelaar/EPR

Job ID: 460-200012-1

## Method: 7470A - Mercury (CVAA) (Continued)

**Lab Sample ID: 460-200012-1 MS**

**Matrix: Water**

**Analysis Batch: 666401**

**Client Sample ID: OU-2-MW-1-123019**

**Prep Type: Total/NA**

**Prep Batch: 666375**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec.	Limits	
Mercury	0.20	U	1.00	1.00		ug/L	100	75 - 125		

**Lab Sample ID: 460-200012-1 DU**

**Matrix: Water**

**Analysis Batch: 666401**

**Client Sample ID: OU-2-MW-1-123019**

**Prep Type: Total/NA**

**Prep Batch: 666375**

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D		RPD	Limit
Mercury	0.20	U		0.20	U	ug/L	NC	20		

**Lab Sample ID: MB 460-666853/1-A**

**Matrix: Water**

**Analysis Batch: 666887**

**Client Sample ID: Method Blank**

**Prep Type: Total/NA**

**Prep Batch: 666853**

Analyte	MB Result	MB Qualifier		RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.20	U		0.20	0.12	ug/L	01/07/20 11:29	01/07/20 13:32		1

**Lab Sample ID: LCS 460-666853/2-A**

**Matrix: Water**

**Analysis Batch: 666887**

**Client Sample ID: Lab Control Sample**

**Prep Type: Total/NA**

**Prep Batch: 666853**

Analyte		Spike Added		LCS Result	LCS Qualifier	Unit	D	%Rec.	Limits	
Mercury		1.00		1.03		ug/L	103	80 - 120		

**Lab Sample ID: 460-199892-K-1-C MS**

**Matrix: Water**

**Analysis Batch: 666887**

**Client Sample ID: Matrix Spike**

**Prep Type: Total/NA**

**Prep Batch: 666853**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec.	Limits	
Mercury	0.20	U	1.00	1.05		ug/L	105	75 - 125		

**Lab Sample ID: 460-199892-K-1-B DU**

**Matrix: Water**

**Analysis Batch: 666887**

**Client Sample ID: Duplicate**

**Prep Type: Total/NA**

**Prep Batch: 666853**

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D		RPD	Limit
Mercury	0.20	U		0.20	U	ug/L	NC	20		

# QC Association Summary

Client: AKRF Inc

Project/Site: Concord/Adelaar/EPR

Job ID: 460-200012-1

## GC/MS VOA

### Analysis Batch: 666327

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-200012-1	OU-2-MW-1-123019	Total/NA	Water	8260C	
460-200012-2	OU-2-MW-15-123019	Total/NA	Water	8260C	
460-200012-3	OU-2-MW-32-123019	Total/NA	Water	8260C	
460-200012-4	OU-2-MW-33-123019	Total/NA	Water	8260C	
460-200012-8	TB-123119	Total/NA	Water	8260C	
460-200012-9	FB-123119	Total/NA	Water	8260C	
MB 460-666327/9	Method Blank	Total/NA	Water	8260C	
LCS 460-666327/4	Lab Control Sample	Total/NA	Water	8260C	
460-200012-1 MS	OU-2-MW-1-123019	Total/NA	Water	8260C	
460-200012-1 MSD	OU-2-MW-1-123019	Total/NA	Water	8260C	

## GC/MS Semi VOA

### Prep Batch: 666424

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-200012-1	OU-2-MW-1-123019	Total/NA	Water	3510C	
460-200012-2	OU-2-MW-15-123019	Total/NA	Water	3510C	
460-200012-3	OU-2-MW-32-123019	Total/NA	Water	3510C	
460-200012-4	OU-2-MW-33-123019	Total/NA	Water	3510C	
460-200012-9	FB-123119	Total/NA	Water	3510C	
MB 460-666424/1-A	Method Blank	Total/NA	Water	3510C	
LCS 460-666424/2-A	Lab Control Sample	Total/NA	Water	3510C	
LCSD 460-666424/3-A	Lab Control Sample Dup	Total/NA	Water	3510C	
460-200012-1 MS	OU-2-MW-1-123019	Total/NA	Water	3510C	
460-200012-1 MSD	OU-2-MW-1-123019	Total/NA	Water	3510C	

### Analysis Batch: 666470

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-200012-1	OU-2-MW-1-123019	Total/NA	Water	8270D	666424
460-200012-2	OU-2-MW-15-123019	Total/NA	Water	8270D	666424
460-200012-3	OU-2-MW-32-123019	Total/NA	Water	8270D	666424
460-200012-4	OU-2-MW-33-123019	Total/NA	Water	8270D	666424
460-200012-9	FB-123119	Total/NA	Water	8270D	666424
MB 460-666424/1-A	Method Blank	Total/NA	Water	8270D	666424
LCS 460-666424/2-A	Lab Control Sample	Total/NA	Water	8270D	666424
LCSD 460-666424/3-A	Lab Control Sample Dup	Total/NA	Water	8270D	666424
460-200012-1 MS	OU-2-MW-1-123019	Total/NA	Water	8270D	666424
460-200012-1 MSD	OU-2-MW-1-123019	Total/NA	Water	8270D	666424

## GC Semi VOA

### Prep Batch: 666393

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-200012-1	OU-2-MW-1-123019	Total/NA	Water	3510C	
460-200012-2	OU-2-MW-15-123019	Total/NA	Water	3510C	
460-200012-3	OU-2-MW-32-123019	Total/NA	Water	3510C	
460-200012-4	OU-2-MW-33-123019	Total/NA	Water	3510C	
460-200012-9	FB-123119	Total/NA	Water	3510C	
MB 460-666393/1-A	Method Blank	Total/NA	Water	3510C	
LCS 460-666393/2-A	Lab Control Sample	Total/NA	Water	3510C	
LCSD 460-666393/3-A	Lab Control Sample Dup	Total/NA	Water	3510C	
460-200012-1 MS	OU-2-MW-1-123019	Total/NA	Water	3510C	

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# QC Association Summary

Client: AKRF Inc

Project/Site: Concord/Adelaar/EPR

Job ID: 460-200012-1

## GC Semi VOA (Continued)

### Prep Batch: 666393 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-200012-1 MSD	OU-2-MW-1-123019	Total/NA	Water	3510C	

### Prep Batch: 666395

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-200012-1	OU-2-MW-1-123019	Total/NA	Water	3510C	
460-200012-2	OU-2-MW-15-123019	Total/NA	Water	3510C	
460-200012-3	OU-2-MW-32-123019	Total/NA	Water	3510C	
460-200012-4	OU-2-MW-33-123019	Total/NA	Water	3510C	
460-200012-9	FB-123119	Total/NA	Water	3510C	
MB 460-666395/1-A	Method Blank	Total/NA	Water	3510C	
LCS 460-666395/2-A	Lab Control Sample	Total/NA	Water	3510C	
LCSD 460-666395/3-A	Lab Control Sample Dup	Total/NA	Water	3510C	
460-200012-1 MS	OU-2-MW-1-123019	Total/NA	Water	3510C	
460-200012-1 MSD	OU-2-MW-1-123019	Total/NA	Water	3510C	

### Analysis Batch: 666613

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-200012-1	OU-2-MW-1-123019	Total/NA	Water	8081B	666393
460-200012-2	OU-2-MW-15-123019	Total/NA	Water	8081B	666393
460-200012-3	OU-2-MW-32-123019	Total/NA	Water	8081B	666393
460-200012-4	OU-2-MW-33-123019	Total/NA	Water	8081B	666393
460-200012-9	FB-123119	Total/NA	Water	8081B	666393
MB 460-666393/1-A	Method Blank	Total/NA	Water	8081B	666393
LCS 460-666393/2-A	Lab Control Sample	Total/NA	Water	8081B	666393
LCSD 460-666393/3-A	Lab Control Sample Dup	Total/NA	Water	8081B	666393
460-200012-1 MS	OU-2-MW-1-123019	Total/NA	Water	8081B	666393
460-200012-1 MSD	OU-2-MW-1-123019	Total/NA	Water	8081B	666393

### Analysis Batch: 666668

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-200012-1	OU-2-MW-1-123019	Total/NA	Water	8082A	666395
460-200012-2	OU-2-MW-15-123019	Total/NA	Water	8082A	666395
460-200012-3	OU-2-MW-32-123019	Total/NA	Water	8082A	666395
460-200012-4	OU-2-MW-33-123019	Total/NA	Water	8082A	666395
460-200012-9	FB-123119	Total/NA	Water	8082A	666395
MB 460-666395/1-A	Method Blank	Total/NA	Water	8082A	666395
LCS 460-666395/2-A	Lab Control Sample	Total/NA	Water	8082A	666395
LCSD 460-666395/3-A	Lab Control Sample Dup	Total/NA	Water	8082A	666395
460-200012-1 MS	OU-2-MW-1-123019	Total/NA	Water	8082A	666395
460-200012-1 MSD	OU-2-MW-1-123019	Total/NA	Water	8082A	666395

## Metals

### Prep Batch: 666375

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-200012-1	OU-2-MW-1-123019	Total/NA	Water	7470A	
460-200012-2	OU-2-MW-15-123019	Total/NA	Water	7470A	
460-200012-3	OU-2-MW-32-123019	Total/NA	Water	7470A	
460-200012-4	OU-2-MW-33-123019	Total/NA	Water	7470A	
460-200012-5	OU-3-MW-2-123119	Total/NA	Water	7470A	
460-200012-6	OU-3-MW-4-123119	Total/NA	Water	7470A	

# QC Association Summary

Client: AKRF Inc

Project/Site: Concord/Adelaar/EPR

Job ID: 460-200012-1

## Metals (Continued)

### Prep Batch: 666375 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-200012-7	OU-3-MW-14-123119	Total/NA	Water	7470A	
460-200012-9	FB-123119	Total/NA	Water	7470A	
MB 460-666375/1-A	Method Blank	Total/NA	Water	7470A	
LCS 460-666375/2-A	Lab Control Sample	Total/NA	Water	7470A	
460-200012-1 MS	OU-2-MW-1-123019	Total/NA	Water	7470A	
460-200012-1 DU	OU-2-MW-1-123019	Total/NA	Water	7470A	

### Analysis Batch: 666401

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-200012-1	OU-2-MW-1-123019	Total/NA	Water	7470A	666375
460-200012-2	OU-2-MW-15-123019	Total/NA	Water	7470A	666375
460-200012-3	OU-2-MW-32-123019	Total/NA	Water	7470A	666375
460-200012-4	OU-2-MW-33-123019	Total/NA	Water	7470A	666375
460-200012-5	OU-3-MW-2-123119	Total/NA	Water	7470A	666375
460-200012-6	OU-3-MW-4-123119	Total/NA	Water	7470A	666375
460-200012-7	OU-3-MW-14-123119	Total/NA	Water	7470A	666375
460-200012-9	FB-123119	Total/NA	Water	7470A	666375
MB 460-666375/1-A	Method Blank	Total/NA	Water	7470A	666375
LCS 460-666375/2-A	Lab Control Sample	Total/NA	Water	7470A	666375
460-200012-1 MS	OU-2-MW-1-123019	Total/NA	Water	7470A	666375
460-200012-1 DU	OU-2-MW-1-123019	Total/NA	Water	7470A	666375

### Prep Batch: 666853

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-200140-1	OU-3-MW-18-010320	Total/NA	Water	7470A	
MB 460-666853/1-A	Method Blank	Total/NA	Water	7470A	
LCS 460-666853/2-A	Lab Control Sample	Total/NA	Water	7470A	
460-199892-K-1-C MS	Matrix Spike	Total/NA	Water	7470A	
460-199892-K-1-B DU	Duplicate	Total/NA	Water	7470A	

### Analysis Batch: 666887

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-200140-1	OU-3-MW-18-010320	Total/NA	Water	7470A	666853
MB 460-666853/1-A	Method Blank	Total/NA	Water	7470A	666853
LCS 460-666853/2-A	Lab Control Sample	Total/NA	Water	7470A	666853
460-199892-K-1-C MS	Matrix Spike	Total/NA	Water	7470A	666853
460-199892-K-1-B DU	Duplicate	Total/NA	Water	7470A	666853

### Prep Batch: 667216

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-200012-1	OU-2-MW-1-123019	Total/NA	Water	3010A	
460-200012-2	OU-2-MW-15-123019	Total/NA	Water	3010A	
460-200012-3	OU-2-MW-32-123019	Total/NA	Water	3010A	
460-200012-4	OU-2-MW-33-123019	Total/NA	Water	3010A	
460-200012-5	OU-3-MW-2-123119	Total/NA	Water	3010A	
460-200012-6	OU-3-MW-4-123119	Total/NA	Water	3010A	
460-200012-7	OU-3-MW-14-123119	Total/NA	Water	3010A	
460-200012-9	FB-123119	Total/NA	Water	3010A	
MB 460-667216/1-A ^2	Method Blank	Total/NA	Water	3010A	
LCS 460-667216/2-A ^2	Lab Control Sample	Total/NA	Water	3010A	
460-200012-1 MS	OU-2-MW-1-123019	Total/NA	Water	3010A	

Eurofins TestAmerica, Edison

# QC Association Summary

Client: AKRF Inc

Project/Site: Concord/Adelaar/EPR

Job ID: 460-200012-1

## Metals (Continued)

### Prep Batch: 667216 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-200012-1 DU	OU-2-MW-1-123019	Total/NA	Water	3010A	

### Analysis Batch: 667328

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-200012-1	OU-2-MW-1-123019	Total/NA	Water	6020B	667216
460-200012-2	OU-2-MW-15-123019	Total/NA	Water	6020B	667216
460-200012-3	OU-2-MW-32-123019	Total/NA	Water	6020B	667216
460-200012-4	OU-2-MW-33-123019	Total/NA	Water	6020B	667216
460-200012-5	OU-3-MW-2-123119	Total/NA	Water	6020B	667216
460-200012-5	OU-3-MW-2-123119	Total/NA	Water	6020B	667216
460-200012-6	OU-3-MW-4-123119	Total/NA	Water	6020B	667216
460-200012-7	OU-3-MW-14-123119	Total/NA	Water	6020B	667216
460-200012-7	OU-3-MW-14-123119	Total/NA	Water	6020B	667216
460-200012-9	FB-123119	Total/NA	Water	6020B	667216
MB 460-667216/1-A ^2	Method Blank	Total/NA	Water	6020B	667216
LCS 460-667216/2-A ^2	Lab Control Sample	Total/NA	Water	6020B	667216
460-200012-1 MS	OU-2-MW-1-123019	Total/NA	Water	6020B	667216
460-200012-1 DU	OU-2-MW-1-123019	Total/NA	Water	6020B	667216

### Prep Batch: 667466

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-200140-1	OU-3-MW-18-010320	Total/NA	Water	3010A	
MB 460-667466/1-A ^2	Method Blank	Total/NA	Water	3010A	
LCS 460-667466/2-A ^2	Lab Control Sample	Total/NA	Water	3010A	
460-200146-I-3-C MS ^2	Matrix Spike	Total/NA	Water	3010A	
460-200146-I-3-B DU ^2	Duplicate	Total/NA	Water	3010A	

### Analysis Batch: 667608

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-200140-1	OU-3-MW-18-010320	Total/NA	Water	6020B	667466
MB 460-667466/1-A ^2	Method Blank	Total/NA	Water	6020B	667466
LCS 460-667466/2-A ^2	Lab Control Sample	Total/NA	Water	6020B	667466
460-200146-I-3-C MS ^2	Matrix Spike	Total/NA	Water	6020B	667466
460-200146-I-3-B DU ^2	Duplicate	Total/NA	Water	6020B	667466

# Lab Chronicle

Client: AKRF Inc  
Project/Site: Concord/Adelaar/EPR

Job ID: 460-200012-1

**Client Sample ID: OU-2-MW-1-123019**

**Lab Sample ID: 460-200012-1**

**Matrix: Water**

**Date Collected: 12/30/19 12:30**

**Date Received: 01/02/20 16:00**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	666327	01/03/20 14:52	CJM	TAL EDI
Total/NA	Prep	3510C			666424	01/04/20 07:34	DXD	TAL EDI
Total/NA	Analysis	8270D		1	666470	01/04/20 19:21	YAH	TAL EDI
Total/NA	Prep	3510C			666393	01/03/20 15:33	ATF	TAL EDI
Total/NA	Analysis	8081B		1	666613	01/06/20 15:21	JHP	TAL EDI
Total/NA	Prep	3510C			666395	01/03/20 15:39	ATF	TAL EDI
Total/NA	Analysis	8082A		1	666668	01/07/20 01:02	JHP	TAL EDI
Total/NA	Prep	3010A			667216	01/09/20 04:45	GMC	TAL EDI
Total/NA	Analysis	6020B		2	667328	01/09/20 10:54	MDC	TAL EDI
Total/NA	Prep	7470A			666375	01/03/20 12:06	RBS	TAL EDI
Total/NA	Analysis	7470A		1	666401	01/03/20 13:20	RBS	TAL EDI

**Client Sample ID: OU-2-MW-15-123019**

**Lab Sample ID: 460-200012-2**

**Matrix: Water**

**Date Collected: 12/30/19 10:55**

**Date Received: 01/02/20 16:00**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	666327	01/03/20 14:27	CJM	TAL EDI
Total/NA	Prep	3510C			666424	01/04/20 07:34	DXD	TAL EDI
Total/NA	Analysis	8270D		1	666470	01/04/20 20:24	YAH	TAL EDI
Total/NA	Prep	3510C			666393	01/03/20 15:33	ATF	TAL EDI
Total/NA	Analysis	8081B		1	666613	01/06/20 15:37	JHP	TAL EDI
Total/NA	Prep	3510C			666395	01/03/20 15:39	ATF	TAL EDI
Total/NA	Analysis	8082A		1	666668	01/07/20 01:20	JHP	TAL EDI
Total/NA	Prep	3010A			667216	01/09/20 04:45	GMC	TAL EDI
Total/NA	Analysis	6020B		2	667328	01/09/20 11:38	MDC	TAL EDI
Total/NA	Prep	7470A			666375	01/03/20 12:06	RBS	TAL EDI
Total/NA	Analysis	7470A		1	666401	01/03/20 13:44	RBS	TAL EDI

**Client Sample ID: OU-2-MW-32-123019**

**Lab Sample ID: 460-200012-3**

**Matrix: Water**

**Date Collected: 12/30/19 15:05**

**Date Received: 01/02/20 16:00**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	666327	01/03/20 14:02	CJM	TAL EDI
Total/NA	Prep	3510C			666424	01/04/20 07:34	DXD	TAL EDI
Total/NA	Analysis	8270D		1	666470	01/04/20 20:45	YAH	TAL EDI
Total/NA	Prep	3510C			666393	01/03/20 15:33	ATF	TAL EDI
Total/NA	Analysis	8081B		1	666613	01/06/20 15:52	JHP	TAL EDI
Total/NA	Prep	3510C			666395	01/03/20 15:39	ATF	TAL EDI
Total/NA	Analysis	8082A		1	666668	01/07/20 01:37	JHP	TAL EDI
Total/NA	Prep	3010A			667216	01/09/20 04:45	GMC	TAL EDI
Total/NA	Analysis	6020B		2	667328	01/09/20 11:40	MDC	TAL EDI
Total/NA	Prep	7470A			666375	01/03/20 12:06	RBS	TAL EDI
Total/NA	Analysis	7470A		1	666401	01/03/20 13:46	RBS	TAL EDI

Eurofins TestAmerica, Edison

# Lab Chronicle

Client: AKRF Inc  
Project/Site: Concord/Adelaar/EPR

Job ID: 460-200012-1

**Client Sample ID: OU-2-MW-33-123019**

**Lab Sample ID: 460-200012-4**

Matrix: Water

Date Collected: 12/30/19 08:55  
Date Received: 01/02/20 16:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	666327	01/03/20 13:36	CJM	TAL EDI
Total/NA	Prep	3510C			666424	01/04/20 07:34	DXD	TAL EDI
Total/NA	Analysis	8270D		1	666470	01/04/20 21:05	YAH	TAL EDI
Total/NA	Prep	3510C			666393	01/03/20 15:33	ATF	TAL EDI
Total/NA	Analysis	8081B		1	666613	01/06/20 16:08	JHP	TAL EDI
Total/NA	Prep	3510C			666395	01/03/20 15:39	ATF	TAL EDI
Total/NA	Analysis	8082A		1	666668	01/07/20 01:54	JHP	TAL EDI
Total/NA	Prep	3010A			667216	01/09/20 04:45	GMC	TAL EDI
Total/NA	Analysis	6020B		2	667328	01/09/20 11:43	MDC	TAL EDI
Total/NA	Prep	7470A			666375	01/03/20 12:06	RBS	TAL EDI
Total/NA	Analysis	7470A		1	666401	01/03/20 13:47	RBS	TAL EDI

**Client Sample ID: OU-3-MW-2-123119**

**Lab Sample ID: 460-200012-5**

Matrix: Water

Date Collected: 12/31/19 13:10  
Date Received: 01/02/20 16:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3010A			667216	01/09/20 04:45	GMC	TAL EDI
Total/NA	Analysis	6020B		2	667328	01/09/20 11:45	MDC	TAL EDI
Total/NA	Prep	3010A			667216	01/09/20 04:45	GMC	TAL EDI
Total/NA	Analysis	6020B		10	667328	01/09/20 11:54	MDC	TAL EDI
Total/NA	Prep	7470A			666375	01/03/20 12:06	RBS	TAL EDI
Total/NA	Analysis	7470A		1	666401	01/03/20 13:49	RBS	TAL EDI

**Client Sample ID: OU-3-MW-4-123119**

**Lab Sample ID: 460-200012-6**

Matrix: Water

Date Collected: 12/31/19 09:55  
Date Received: 01/02/20 16:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3010A			667216	01/09/20 04:45	GMC	TAL EDI
Total/NA	Analysis	6020B		2	667328	01/09/20 11:56	MDC	TAL EDI
Total/NA	Prep	7470A			666375	01/03/20 12:06	RBS	TAL EDI
Total/NA	Analysis	7470A		1	666401	01/03/20 13:51	RBS	TAL EDI

**Client Sample ID: OU-3-MW-14-123119**

**Lab Sample ID: 460-200012-7**

Matrix: Water

Date Collected: 12/31/19 15:15  
Date Received: 01/02/20 16:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3010A			667216	01/09/20 04:45	GMC	TAL EDI
Total/NA	Analysis	6020B		2	667328	01/09/20 12:42	MDC	TAL EDI
Total/NA	Prep	3010A			667216	01/09/20 04:45	GMC	TAL EDI
Total/NA	Analysis	6020B		10	667328	01/09/20 12:54	MDC	TAL EDI
Total/NA	Prep	7470A			666375	01/03/20 12:06	RBS	TAL EDI
Total/NA	Analysis	7470A		1	666401	01/03/20 13:53	RBS	TAL EDI

Eurofins TestAmerica, Edison

# Lab Chronicle

Client: AKRF Inc

Project/Site: Concord/Adelaar/EPR

Job ID: 460-200012-1

**Client Sample ID: TB-123119**

Date Collected: 12/31/19 00:00

Date Received: 01/02/20 16:00

**Lab Sample ID: 460-200012-8**

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	666327	01/03/20 11:04	CJM	TAL EDI

**Client Sample ID: FB-123119**

Date Collected: 12/31/19 16:00

Date Received: 01/02/20 16:00

**Lab Sample ID: 460-200012-9**

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	666327	01/03/20 11:29	CJM	TAL EDI
Total/NA	Prep	3510C			666424	01/04/20 07:34	DXD	TAL EDI
Total/NA	Analysis	8270D		1	666470	01/04/20 21:26	YAH	TAL EDI
Total/NA	Prep	3510C			666393	01/03/20 15:33	ATF	TAL EDI
Total/NA	Analysis	8081B		1	666613	01/06/20 16:24	JHP	TAL EDI
Total/NA	Prep	3510C			666395	01/03/20 15:39	ATF	TAL EDI
Total/NA	Analysis	8082A		1	666668	01/07/20 02:11	JHP	TAL EDI
Total/NA	Prep	3010A			667216	01/09/20 04:45	GMC	TAL EDI
Total/NA	Analysis	6020B		2	667328	01/09/20 12:32	MDC	TAL EDI
Total/NA	Prep	7470A			666375	01/03/20 12:06	RBS	TAL EDI
Total/NA	Analysis	7470A		1	666401	01/03/20 13:58	RBS	TAL EDI

**Client Sample ID: OU-3-MW-18-010320**

Date Collected: 01/03/20 12:00

Date Received: 01/06/20 19:20

**Lab Sample ID: 460-200140-1**

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3010A			667466	01/09/20 23:35	GAE	TAL EDI
Total/NA	Analysis	6020B		2	667608	01/10/20 12:26	MDC	TAL EDI
Total/NA	Prep	7470A			666853	01/07/20 11:29	RBS	TAL EDI
Total/NA	Analysis	7470A		1	666887	01/07/20 14:13	RBS	TAL EDI

## Laboratory References:

TAL EDI = Eurofins TestAmerica, Edison, 777 New Durham Road, Edison, NJ 08817, TEL (732)549-3900

# Accreditation/Certification Summary

Client: AKRF Inc

Project/Site: Concord/Adelaar/EPR

Job ID: 460-200012-1

## Laboratory: Eurofins TestAmerica, Edison

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	Identification Number	Expiration Date
New York	NELAP	11452	04-01-20
The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.			
Analysis Method 8082A	Prep Method 3510C	Matrix Water	Analyte Polychlorinated biphenyls, Total

# Method Summary

Client: AKRF Inc  
Project/Site: Concord/Adelaar/EPR

Job ID: 460-200012-1

Method	Method Description	Protocol	Laboratory
8260C	Volatile Organic Compounds by GC/MS	SW846	TAL EDI
8270D	Semivolatile Organic Compounds (GC/MS)	SW846	TAL EDI
8081B	Organochlorine Pesticides (GC)	SW846	TAL EDI
8082A	Polychlorinated Biphenyls (PCBs) by Gas Chromatography	SW846	TAL EDI
6020B	Metals (ICP/MS)	SW846	TAL EDI
7470A	Mercury (CVAA)	SW846	TAL EDI
3010A	Preparation, Total Metals	SW846	TAL EDI
3510C	Liquid-Liquid Extraction (Separatory Funnel)	SW846	TAL EDI
5030C	Purge and Trap	SW846	TAL EDI
7470A	Preparation, Mercury	SW846	TAL EDI

## Protocol References:

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

## Laboratory References:

TAL EDI = Eurofins TestAmerica, Edison, 777 New Durham Road, Edison, NJ 08817, TEL (732)549-3900

## Sample Summary

Client: AKRF Inc  
Project/Site: Concord/Adelaar/EPR

Job ID: 460-200012-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
460-200012-1	OU-2-MW-1-123019	Water	12/30/19 12:30	01/02/20 16:00	
460-200012-2	OU-2-MW-15-123019	Water	12/30/19 10:55	01/02/20 16:00	
460-200012-3	OU-2-MW-32-123019	Water	12/30/19 15:05	01/02/20 16:00	
460-200012-4	OU-2-MW-33-123019	Water	12/30/19 08:55	01/02/20 16:00	
460-200012-5	OU-3-MW-2-123119	Water	12/31/19 13:10	01/02/20 16:00	
460-200012-6	OU-3-MW-4-123119	Water	12/31/19 09:55	01/02/20 16:00	
460-200012-7	OU-3-MW-14-123119	Water	12/31/19 15:15	01/02/20 16:00	
460-200012-8	TB-123119	Water	12/31/19 00:00	01/02/20 16:00	
460-200012-9	FB-123119	Water	12/31/19 16:00	01/02/20 16:00	
460-200140-1	OU-3-MW-18-010320	Water	01/03/20 12:00	01/06/20 19:20	

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# Chain of Custody Record 410836 eurofins

Environment Testing  
TestAmerica

Address: \_\_\_\_\_

**Regulatory Program:**  DW  NPDES  RCRA  Other:

TAL-8210

Client Contact	Project Manager: <u>Brian Zeroff</u>	Site Contact: <u>Steve Schmidt</u>	Date: <u>12/13/19</u>
Company Name: <u>AIRF, Inc.</u>	Tel/Email: <u>bzruff@airf.com</u>	Lab Contact:	COC No: <u>7</u> of <u>1</u> COCs
Address: <u>440 Park Ave S</u>	<b>Analysis Turnaround Time</b>		
City/State/Zip: <u>NY NY 10016</u>	<input checked="" type="checkbox"/> CALENDAR DAYS	<input type="checkbox"/> WORKING DAYS	Sampler:
Phone: <u>203-246-1560</u>	TAT if different from Below		
Fax:	2 weeks		
Project Name: <u>Cancer / Asbestos / CCR</u>	1 week		
Site:	2 days		
P O # <u>40376</u>	1 day		

1 week

2 weeks

1 day

VOC  
SVOC  
PCB  
Pesticides  
Metals

Sample Specific Notes:

Sample Identification	Sample Date	Sample Time	Sample Type (C-Comp, G-Grab)	Matrix	# of Cont.	Filtered Sample (Y/N)
OU-2-MW-1-123019	12/3/19	12:30	G	G-W	10	Y
OU-2-MW-15-123019		10:55				X X X X X
OU-2-MW-32-123019		15:05				X X X X X
OU-2-MW-33-123019		8:55				X X X X X
OU-3-MW-2-123119		12:30				X
OU-3-MW-4-123119		9:55				X
OU-3-MW-14-123119		15:15				X
TR-123119		2/3/19				X
FB-123119		16:00	G	Ag	10	X X X X X

5-Day Rush

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Sample Identification	Sample Date	Sample Time	Sample Type (C-Comp, G-Grab)	Matrix	# of Cont.	Filtered Sample (Y/N)
OU-2-MW-1-123019	12/3/19	12:30	G	G-W	10	Y
OU-2-MW-15-123019		10:55				X X X X X
OU-2-MW-32-123019		15:05				X X X X X
OU-2-MW-33-123019		8:55				X X X X X
OU-3-MW-2-123119		12:30				X
OU-3-MW-4-123119		9:55				X
OU-3-MW-14-123119		15:15				X
TR-123119		2/3/19				X
FB-123119		16:00	G	Ag	10	X X X X X

5-Day Rush

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**Possession Used:** 12/20/2019 - 1/3, 5-7-19, 6-9-19  
**Possible Hazard Identification:**  
 Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the  
 Comments Section if the lab is to dispose of the sample.

Comments:  Non-Hazard  Flammable  Skin Irritant  Poison B  Unknown

Return to Client  Disposal by lab  Archive for \_\_\_\_\_ Months

Special Instructions/QC Requirements &amp; Comments:

**Keep SDG open** **Put 375, Cut B** **\* Perform mis/mst on OU-2-MW-1-123019**

Custody Seals Intact: <input type="checkbox"/> Yes <input type="checkbox"/> No	Custody Seal No.: <u>41CR2</u>	Cooler Temp. (°C): Obsd: <u>-17</u> Cond: <u>Therm ID No.: 17128/3:00</u>
Relinquished by: <u>JL</u>	Company: <u>41CR2</u>	Date/Time: <u>12/12/20</u> Received by: <u>JL</u> Company: <u>41CR2</u>
Relinquished by: <u>JL</u>	Company: <u>41CR2</u>	Date/Time: <u>12/16/20</u> Received by: <u>Dilly D</u> Company: <u>41CR2</u>
Reinquired by:	Company:	Date/Time:



460-200012 Chain of Custody

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**Eurofins TestAmerica liaison  
Receipt Temperature and pH Log**

Job Number: 200012

Number of Coolers:	IR Gun #		Cooler Temperatures					
	RAW	CORRECTED	RAW	CORRECTED	RAW	CORRECTED		
Cooler #1:	7.7 °C	7.8 °C	Cooler #4:	— °C	— °C	Cooler #7:	— °C	— °C
Cooler #2:	3.1 °C	3.4 °C	Cooler #5:	— °C	— °C	Cooler #8:	— °C	— °C
Cooler #3:	— °C	— °C	Cooler #6:	— °C	— °C	Cooler #9:	— °C	— °C

TALS Sample Number	Ammonia (pH<2)	COD (pH<2)	Nitrate (pH<2)	Metals * (pH<2)	Pest (pH<2)	EPH or QAM (pH 5-9)	Phenols (pH<2)	Sulfide (pH>9)	TKN (pH<2)	TOC (pH<2)	Total Cyanide (pH>9)	Total Phos (pH<2)	Other	Other
1			<2											
MS			<2											
DuP			<2											
2			<2											
3			<2											
4			<2											
5			<2											
6			<2											
7			<2											
9			<2											

If pH adjustments are required record the information below:

Sample No(s). adjusted:

Preservative Name/Conc.: \_\_\_\_\_ Volume of Preservative used (ml): \_\_\_\_\_

Lot # of Preservative(s): \_\_\_\_\_ Expiration Date: \_\_\_\_\_

The appropriate Project Manager and Department Manager should be notified about the samples which were pH adjusted.  
\* Samples for Metal analysis which are out of compliance must be acidified at least 24 hours prior to analysis.

1  
2  
3  
4  
5  
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7  
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9  
10  
11  
12  
13  
14  
15

## Chain of Custody Record 410837

eurofins

Environment Testing  
TestAmerica

Address: \_\_\_\_\_

Regulation Program:

DW    NPDES    RCRA    Other:

TAL-2010

Client Contact

Project Manager: Brian Zieff

Site Contact: Steve Schmidt

Date: 1/31/20

COC No:

1 of 1 COCs

Company Name: AICRP INC

Tell/Email: bzieff@aigrp.com

Lab Contact: Steve Schmidt

Date:

Carrier:

Address: 440 Park Ave S

Analysis Turnaround Time

For Lab Use Only:

Walk-in Client:

City/State/Zip: NY NY 10016

Lab Sampling:

Job / SDG No.: 400140

Phone: 203-246-1560

FAX:

Fax:

Project Name: Conn. Adelmar LPR

Site:

Site:

P O # 40376

Sample Identification

Sample Date	Sample Time	Sample Type (C-Comp, G-Grab)	Matrix	# of Cont.
<u>1/31/20</u>	<u>1200</u>	<u>G</u>	<u>air</u>	<u>1</u>

Filtered Sample (Y/N)  
Perform MS / MSD (Y/N)

Metals

Sample Specific Notes:

0W3 - MW-18 - D10320

X

**5-Day  
RUSH**

1



460-200140 Chain of Custody

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**Preservation Used:** Ice -210°C -125°C -45°C -50°C or 60°C

**Possible Hazard Identification:**  
Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample.

- Non-Hazard    Flammable    Skin Irritant    Poison B    Unknown

Return to Client

Disposal by Lab

Archive for \_\_\_\_\_ Months

### Special Instructions/QC Requirements & Comments:

Close SDG Part 34 Cat B

Custody Seals Intact:  Yes  No

Custody Seal No.: \_\_\_\_\_

Cooler Temp. (°C): Obs'd: \_\_\_\_\_ Corrd: \_\_\_\_\_ Therm ID No.: \_\_\_\_\_

Relinquished by: AICRP

Company: AICRP

Date/Time: 1/31/20

Received by:  

Company:  

Date/Time:  

Relinquished by:  

Company:  

Date/Time: 1/31/20

Received by:  

Company:  

Relinquished by: \_\_\_\_\_

Company: \_\_\_\_\_

Date/Time: \_\_\_\_\_

Received by: \_\_\_\_\_

Company: \_\_\_\_\_

2.6/2.9 T/R#11

1  
2  
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11  
12  
13  
14  
15

Eurofins TestAmerica Edison  
Receipt Temperature and pH Log

Page \_\_\_\_ of \_\_\_\_

Job Number:

20046

Number of Coolers: \_\_\_\_\_

IR Gun #

**Cooler Temperatures**

TALS Sample Number	Cooler #1: °C			Cooler #2: °C			Cooler #3: °C			Cooler #4: °C		
	RAW	Corrected	RAW	Corrected	RAW	Corrected	RAW	Corrected	RAW	Corrected	RAW	Corrected
1	26	26	8	8	8	8	8	8	8	8	8	8
2												
3												
4												
5												
6												
7												
8												
9												
10												
11												
12												
13												
14												
15												

	Ammonia (pH<2)	COD (pH<2)	Nitrate (pH<2)	Metals (pH<2)	Hardness (pH<2)	Pest (pH<2)	EPH or QAM (pH<2)	Phenols (pH<2)	Sulfide (pH>9)	TKN (pH<2)	TOC (pH<2)	Total Cyanide (pH<2)	Total Phos (pH<2)	Other Other
1														
2														
3														
4														
5														
6														
7														
8														
9														
10														
11														
12														
13														
14														
15														

If pH adjustments are required record the information below:

Sample No(s). adjusted: \_\_\_\_\_

Volume of Preservative used (ml): \_\_\_\_\_

Preservative Name/Conc.: \_\_\_\_\_

Lot # of Preservative(s): \_\_\_\_\_

Expiration Date: \_\_\_\_\_  
The appropriate Project Manager and Department Manager should be notified about the samples which were pH adjusted.

\* Samples for Metal analysis which are out of compliance must be acidified at least 24 hours prior to analysis.

## Login Sample Receipt Checklist

Client: AKRF Inc

Job Number: 460-200012-1

**Login Number:** 200012

**List Source:** Eurofins TestAmerica, Edison

**List Number:** 1

**Creator:** Jara, Kelly D

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

## Login Sample Receipt Checklist

Client: AKRF Inc

Job Number: 460-200012-1

**Login Number:** 200140

**List Source:** Eurofins TestAmerica, Edison

**List Number:** 1

**Creator:** DiGuardia, Joseph L

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

**DATA USABILITY SUMMARY REPORT – DUSR  
DATA VALIDATION SUMMARY**

**ORGANIC/INORGANIC ANALYSES**

**VOLATILES BY GC/MS  
SEMOVOLATILES BY GC/MS  
PESTICIDES/PCBs BY GC  
TOTAL METALS BY ICPMS/CV**

**For Groundwater Samples Collected  
November 23, 2020 and November 24, 2020  
Adelaar Concord  
Monticello, New York  
Project #40376  
Collected by AKRF, Inc.**

**SAMPLE DELIVERY GROUP NUMBER:  
460-223616-1  
BY EUROFINS TESTAMERICA EDISON - NJ (ELAP #11452)**

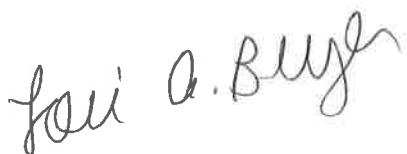
**SUBMITTED TO:**

**Mr. Bryan Zieroff  
AKRF, Inc.  
34 South Broadway, Suite 314  
White Plains, NY 10601**

**March 23, 2021**

**PREPARED BY:**

**Lori A. Beyer/President  
L.A.B. Validation Corp.  
14 West Point Drive  
East Northport, NY 11731**



**Concord/Adelaar EPR – Data Usability Summary Report (Data Validation):  
November 2020 Groundwater Sampling Event  
Volatile, Semivolatiles, Pesticides, PCBs, and Total TAL Metals.**

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- Sample Receipt
  
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  - 1.2 System Monitoring Compound (Surrogate) Recovery
  - 1.3 Matrix Spikes (MS), Matrix Spike Duplicates (MSD)
  - 1.4 Laboratory Control Sample/Laboratory Control Duplicate
  - 1.5 Blank Contamination
  - 1.6 GC/MS Instrument Performance Check (Tuning)
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**APPENDICES:**

- A. Chain of Custody Document and Sample Receipt Checklist
- B. Case Narrative
- C. Data Summary Form Is with Qualifications

**Introduction:**

A validation was performed on groundwater samples and the associated quality control samples (MS/MSD/Field Duplicate/Field Blank/Trip Blank) for organic/inorganic analysis for samples collected under chain of custody documentation by AKRF, Inc. and submitted to Eurofins TestAmerica Edison for subsequent analysis. This report contains the laboratory and validation results for the field samples itemized below. Analysis was performed in accordance with requested tests per the chain of custody document.

The samples were analyzed by Eurofins TestAmerica Edison, utilizing SW846 Methods and submitted under NYSDEC ASP Category B equivalent deliverable requirements for the associated analytical methodologies employed. The analytical testing for groundwater samples consisted of the Part 375 analyte lists for Volatile Organics, Semivolatile Organics, Pesticides, PCBs, and Total Metals.

The data was evaluated in accordance with EPA Region II National Functional Guidelines for Organic and Inorganic Data Review and EPA Region II SOPs for 8260, 8270, 8081, 8082 and Metals and in conjunction with the analytical methodologies for which the samples were analyzed, where applicable and relevant.

Sample ID	Lab ID	Analysis	Date Collected/Received
OU3-MW2_20201123	460-223616-1	Total Metals	11/23/2020 11/25/2020
OU3-MW14_20201123	460-223616-2	Total Metals	11/23/2020 11/25/2020
OU2-MW1_20201124 [Plus, MS/MSD]	460-223616-3	Volatiles, Semivolatiles, Pesticides, PCBs, Total Metals	11/24/2020 11/25/2020
OU2-MW32_20201124	460-223616-4	Volatiles, Semivolatiles, Pesticides, PCBs, Total Metals	11/24/2020 11/25/2020
OU2-MWX_20201124 [Field Duplicate of OU2-MW32_20201124]	460-223616-5	Volatiles, Semivolatiles, Pesticides, PCBs, Total Metals	11/24/2020 11/25/2020
OU2-MW15_20201124	460-223616-6	Volatiles, Semivolatiles, Pesticides, PCBs, Total Metals	11/24/2020 11/25/2020
FB_20201124	460-223616-7	Volatiles	11/24/2020 11/25/2020
TB_20201124	460-223616-8	Volatiles	11/24/2020 11/25/2020
OU3-MW4_20201124	460-223616-9	Total Metals	11/24/2020 11/25/2020
OU3-MW17_20201124	460-223616-10	Total Metals	11/24/2020 11/25/2020

**Data Qualifier Definitions:**

The following definitions provide brief explanations of the qualifiers assigned to results in the data review process.

**U -** The analyte was analyzed for but was not detected above the reported sample quantitation limit.

**J -** The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.

**UJ -** The analyte was analyzed for but was not detected. The reported quantitation limit is approximate and may be inaccurate or imprecise.

**R -** The data are unusable. The sample results are rejected due to serious deficiencies in meeting Quality Control (QC) criteria. The analyte may or may not be present in the sample.

**N -** The analysis indicates the presence of an analyte for which there is presumptive evidence to make a "tentative identification."

**NJ -** The analysis indicates the presence of an analyte that has been "tentatively identified" and the associated numerical value represents its approximate quantity.

**J+ -** The result is an estimated quantity, but the result may be biased high. (Equis Qualified, JK)

**J- -** The result is an estimated quantity, but the result may be biased low. (Equis Qualified, JL)

**D -** Analyte concentration is from diluted analysis.

**Sample Receipt:**

The Chain of Custody document indicates that the samples were received at Eurofins TestAmerica Laboratories via laboratory courier upon completion of the sampling events on November 25, 2020. Sample login notes were generated. The cooler temperature for the aqueous sample receipts were recorded upon receipt at Eurofins TestAmerica and determined to be acceptable (<6.0 degrees C) for the cooler (2.8 degrees C). The actual temperature is recorded on the chain of custody document in addition to the case narrative provided in Appendix B of this report.

No problems and/or discrepancies were noted, consequently, the integrity of the groundwater samples has been assumed to be good.

The data summary Form I's included in Appendix C and Equis deliverable includes all usable (qualified) and unusable (rejected) results for the samples identified above. The Form I's summarize the detailed narrative section of the report. All data validation qualifications have been reported on the Form I's and onto the excel spreadsheet for ease of review and verification.

**NOTE:**

L.A.B. Validation Corp. believes it is appropriate to note that the data validation criteria utilized for data evaluation is different than the method requirements utilized by the laboratory. Qualified data does not necessarily mean that the laboratory was non-compliant in the analysis that was performed.

**1.0 Volatile Organics by GC/MS SW846 Method 8260D**

The following method criteria were reviewed: holding times, SMCs, MS, MSD, LCS, Laboratory Spiked Blanks, Method Blanks, Tunes, Calibrations, Internal Standards, Target Component Identification, Quantitation, Reported Quantitation Limits and Overall System Performance. The Volatile results are valid and useable as noted within the following text:

**1.1 Holding Time**

The amount of an analyte in a sample can change with time due to chemical instability, degradation, volatilization, etc. If the technical holding time is exceeded, the data may not be considered valid. Those analytes detected in the samples whose holding time has been exceeded will be qualified as estimates, "J". The non-detects (sample quantitation limits) are required to be flagged as estimated, "J", or unusable, "R", if the holding times are grossly exceeded.

**Samples pertaining to this SDG were performed within the Method required holding times as well as the technical holding times for data validation of 14 days from collection to analysis for HCL preserved vials. No data validation qualifiers were required based upon holding time.**

### **1.2 System Monitoring Compound (Surrogate) Recovery**

All samples are spiked with surrogate compounds prior to sample analysis to evaluate overall laboratory performance and efficiency of the analytical technique. If the measure of surrogate concentrations is outside contract specification, qualifications are required to be applied to associated samples and analytes.

**Surrogate recoveries (%R) for Dibromofluoromethane, 1,2-Dichloroethane-d4, Toluene-d8 and 4-Bromofluorobenzene were found to be within acceptable limits for surrogate compounds for all analyses pertaining to this SDG.**

### **1.3 Matrix Spikes (MS)/ Matrix Spike Duplicates (MSD)**

The MS/MSD data are generated to determine the long-term precision and accuracy of the analytical method in various matrices and to demonstrate acceptable compound recovery by the laboratory at the time of sample analysis. The MS/MSD may be used in conjunction with other QC criteria for additional qualification of data.

**Site specific MS/MSD was performed on OU2-MW1\_20201124. Acetone recovered above in-house established limits in the MS (157%) and MSD (153%). Acetone was not detected in the parent sample. High recovery does not support any potential loss of detection and/or result bias. Based on professional judgment, no qualifications to the data were applied.**

**The National Functional Guidelines and EPA Region 2 SOPs state that “No qualifications to the data are necessary based on MS data alone.”**

### **1.4 Laboratory Control Sample/Laboratory Control Duplicate**

The LCS data for laboratory control samples (LCS) are generated to provide information on the accuracy of the analytical method and on the laboratory performance.

**LCS/Blank Spike was analyzed with the analytical sequence. Recovery values were acceptable for all spiked analytes.**

### **1.5 Blank Contamination**

Quality assurance (QA) blanks, i.e., method, trip and field blanks are prepared to identify any contamination which may have been introduced into the samples during sample preparation or field activity. Method blanks measure laboratory contamination. Trip blanks measure cross-contamination of samples during shipment. Field blanks measure cross-contamination of samples during field operations.

The following table was utilized to qualify target analyte results due to contamination. The largest value from all the associated blanks is required to be utilized:

Blank Type	Blank Result	Sample Result	Action for Samples
Method, Storage, field, Trip, Instrument	Detects	Not Detected	No qualification required
	<CRQL*	<CRQL*	Report CRQL value with a U
		>/= CRQL* and <2x the CRQL**	No qualification required
	>CRQL*	</= CRQL*	Report CRQL value with a U
		>/= CRQL* and </= blank concentration	Report blank value for sample concentration with a U
		>/= CRQL* and > blank concentration	No qualification required
	=CRQL*	</= CRQL*	Report CRQL value with a U
		>CRQL*	No qualification required
Gross Contamination**		Detects	Report blank value for sample concentration with a U

\*2x the CRQL for methylene chloride, 2-butanone, and acetone.

\*\*4x the CRQL for methylene chloride, 2-butanone, and acetone

\*\*\*Qualifications based on instrument blank results affect only the sample analyzed immediately after the sample that has target compounds that exceed the calibration range or non-target compounds that exceed 100 ug/L.

Below is a summary of the compounds in the sample and the associated qualifications that have been applied:

**A) Method Blank Contamination:**

**No target analytes were detected in the method blank associated with sample analysis.**

**B) Field Blank Contamination:**

**No target analytes were detected in FB\_20201124.**

**C) Trip Blank Contamination:**

**Target analytes were not detected in TB\_20201124.**

**1.6 GC/MS Instrument Performance Check**

Tuning and performance criteria are established to ensure adequate mass resolution, proper identification of compounds and to some degree, sufficient instrument sensitivity. These criteria are not sample specific. Instrument performance is determined using standard materials. Therefore, these criteria should be met in all circumstances. The Tuning standard for volatile organics is Bromofluorobenzene (BFB).

**Instrument performance was generated within acceptable limits and frequency for Bromofluorobenzene (BFB) for all analyses conducted for this SDG.**

### **1.7 Initial and Continuing Calibrations**

Satisfactory instrument calibration is established to ensure that the instrument can produce acceptable quantitative data. An initial calibration demonstrates that the instrument can produce acceptable performance at the beginning of an experimental sequence. The continuing calibration checks document that the instrument is giving satisfactory daily performance. Initial calibration verifications were acceptable.

#### **A) Response Factor GC/MS:**

The response factor measures the instrument's response to specific chemical compounds. The response factor for all compounds must be  $\geq 0.05$  in both initial and continuing calibrations. A value  $<0.05$  indicates a serious detection and quantitation problem (poor sensitivity). Analytes detected in the sample will be qualified as estimated, "J". All non-detects for that compound in the corresponding samples will be rejected, "R". Method 8260D allows for a minimum response factor of 0.1 for Acetone and 2-Butanone. Validation criteria allows response factor to be  $\geq 0.01$  for poor responders (Acetone, MEK, Carbon Disulfide, Chloroethane, Chloromethane, Cyclohexane, 1,2-Dibromoethane, Dichlorodifluoromethane, cis-1,2-Dichloroethene, 1,2-Dichloropropane, 1,2-Dibromo-3-chloropropane, Isopropylbenzene, Methyl Acetate, Methylene Chloride, Methylcyclohexane, MTBE, trans-1,2-Dichloroethene, 4-Methyl-2-Pentanone, 2-Hexanone, Trichlorofluoromethane, 1,1,2-Trichloro-1,2,2-Trifluoroethane).

**The response factors for the target analytes reported were found to be within acceptable limits ( $\geq 0.05$ ) and ( $\geq 0.01$  for poor responders) and minimum response criteria in Table 4 of Method 8260D, for the initial and continuing calibrations for all reported analytes.**

**B) Percent Relative Standard Deviation (%RSD) and Percent Difference (%D):** Percent RSD is calculated from the initial calibration and is used to indicate the stability of the specific compound response factor over increasing concentrations. Percent D compares the response factor of the continuing calibration check to the mean response factor (RRF) from the initial calibration. Percent D is a measure of the instrument's daily performance. Percent RSD must be  $<20\%$  and %D must be  $<20\%$ . A value outside of these limits indicates potential detection and quantitation errors. For these reasons, all positive results are flagged as estimated, "J" and non-detects are flagged "UJ". If %RSD and %D grossly exceed QC criteria, non-detect data may be qualified, "R", unusable. Additionally, in cases where the %RSD is  $>20\%$  and eliminating either the high or the low point of the curve does not restore the %RSD to less than or equal to 20% then positive results are qualified, "J". In cases where removal of either the low or high point restores the linearity, then only low or high-level results will be qualified, "J" in the portion of the curve where non-linearity exists. Closing CCV must meet 30% criteria. Poor responders must be  $\leq 40\%$ .

\*Method 8260D allows for several analytes to be outside requirements due to the large number of compounds.

**Initial Calibrations:** The initial calibrations provided and the %RSD were within acceptable limits (20%) and (40% for poor responders) for all reported compounds.

**Continuing Calibrations:** The continuing calibrations provided and the %D was within acceptable limits (20%) and (40% for poor responders) for all reported compounds.

### **1.8 Internal Standards**

Internal Standards (IS) performance criteria ensure that the GC/MS sensitivity and response are stable during every experimental run. The internal standard area count must not vary by more than a factor of 2 (-50% to +100%) from the associated continuing calibration standard. The retention time of the internal standard must not vary more than +/- 30 seconds from the associated continuing calibration standard. If the area count is outside the (-50% to +100%) range of the associated standard, all the positive results for compounds quantitated using that IS are qualified as estimated, "J", and all non-detects as "UJ", or "R" if there is a severe loss of sensitivity. If an internal standard retention time varies by more than 30 seconds, professional judgment will be used to determine either partial or total rejection of the data for that sample fraction.

Samples were spiked with the internal standards 1,4-Dioxane-d8, Chlorobenzene-d5, 1,4-Dichlorobenzene-d4, TBA-d9, 2-Butanone-d5 and Fluorobenzene prior to sample analysis. The area responses and retention time of each internal standard met QC criteria in all samples associated with this SDG.

### **1.9 Field Duplicates**

Field duplicate samples are collected and analyzed as an indication of overall precision. These results are expected to have more variability than laboratory duplicate samples. Acceptable RPD is 25%. Field Duplicate analysis was conducted on OU2-MW32\_20201124 as OU2-MWX\_20201124. Precision is acceptable for detected analytes 1,2,4-Trimethylbenzene, Acetone, MTBE and N-Propylbenzene.

### **1.10 Target Compound List Identification**

TCL compounds are identified on the GC/MS by using the analyte's relative retention time (RRT) and by comparison to the ion spectra obtained from known standards. For the results to be a positive hit, the sample peak must be within =/- 0.06RRT units of the standard compound and have an ion spectrum which has a ratio of the primary and secondary m/e intensities within 20% of that in the standard compound.

**GC/MS spectra met the qualitative criteria for identification. All retention times were within required specifications.**

**1.11 Compound Quantification and Reported Detection Limits**

GC/MS quantitative analysis is acceptable. Correct internal standards per SW846 and response factors were used to calculate final concentrations.

**As required, the laboratory reported “J” values between the reporting limits (RL) and Method Detection Limits (MDLs). This is consistent with common laboratory practices and a requirement of the National Environmental Laboratory Approval Program (NELAP).**

**Groundwater samples were analyzed undiluted. Sample chromatogram for OU2-MW1\_20201124 demonstrates elevated non-target analyte presence.**

**1.12 Overall System Performance**

Good resolution and chromatographic performance were observed.

Tentatively Identified Compounds (TICs) were not required.

**2.0 Semivolatile Organics by GC/MS SW846 Method 8270E**

The following method criteria were reviewed: holding times, Surrogates, MS, MSD, LCS, Blanks, Tunes, Calibrations, Internal Standards, Target Component Identification, Quantitation, Reported Quantitation Limits, and overall system performance. The Semivolatile results are valid and usable as noted within the following text:

**2.1 Holding Time**

The amount of an analyte in a sample can change with time due to chemical instability, degradation, volatilization, etc. If the technical holding time is exceeded, the data may not be considered valid. Those analytes detected in the samples whose holding time has been exceeded will be qualified as estimates, “J”. The non-detects (sample quantitation limits) are required to be flagged as estimated, “J”, or unusable, “R”, if the holding times are grossly exceeded.

**Samples were extracted and analyzed within the method required holding times and the technical holding times (7 days from collection to extraction for groundwater samples and 40 days from extraction to analysis) required for data validation.**

## **2.2 Surrogate Recovery**

All samples are spiked with surrogate compounds prior to sample preparation/extraction to evaluate overall laboratory performance and efficiency of the analytical technique. Additionally, the sample itself may produce effects due to such factors as interferences and high concentrations of analytes. Since the effects of the sample matrix are frequently outside the control of the laboratory and may present relatively unique problems, the evaluation of the data is dependent upon reextraction and/or reanalysis to confirm/negate laboratory error or matrix related problems. Discussion of surrogate recoveries that fell outside (above/below) QC guidelines is itemized below:

**Samples were spiked with six (6) surrogate standards at the sample extraction portion of analysis. Acceptable recoveries were observed.**

**Method allows for one (1) base neutral and one (1) acid recovery to be outside acceptance limits without requiring reextraction/reanalysis.**

## **2.3 Matrix Spikes (MS)/Matrix Spike Duplicates (MSD)**

The MS/MSD data are generated to determine the long-term precision and accuracy of the analytical method in various matrices.

**MS/MSD was conducted on OU2-MW1\_20201124. Acceptable recovery and RPD was obtained for all spiked compounds.**

**The National Functional Guidelines provide and allow for flexibility when qualifying the parent sample based on MS/MSD data.**

## **2.4 Laboratory Control Sample/Laboratory Control Duplicate**

The LCS data for laboratory control samples (LCS) are generated to provide information on the accuracy of the analytical method and on the laboratory performance.

**LCS/LCS Duplicate was extracted and analyzed for the analytical batch.**

**Recovery values were acceptable except for Pyrene (59%) in the LCS and Benzo (a) Anthracene (70%), Chrysene (69%) and Pyrene (53%) in the LCS Duplicate. Non-detects in all samples have been qualified, "UJ."**

## **2.5 Method Blanks**

Quality assurance (QA) blanks, i.e., method, trip and field blanks are prepared to identify any contamination which may have been introduced into the samples during sample preparation or field activity. Method blanks measure laboratory contamination. Field blanks measure cross-contamination of samples during field operations.

The following table was utilized to qualify target analyte results due to contamination. The largest value from all the associated blanks is required to be utilized:

For:	Flag Sample Result with a "U" when:	Report CRQL & Qualify "U" when:	No Qualification is Needed when:
Phthalates (common laboratory contaminants)	Sample Conc. is >CRQL, but </=5x blank value	Sample Conc. Is <CRQL and </=5x blank value	Sample Conc. is >CRQL and >5x blank value
Other Contaminants	Sample Conc. is >CRQL, but </=1x blank value	Sample Conc. Is <CRQL and </=1x blank value	Sample Conc. is >CRQL and >1x blank value

Below is a summary of the compounds in the sample and the associated qualification that have been applied:

**A) Method Blank Contamination:**

**Target analytes were not detected in the method blank.**

**B) Field Blank Contamination:**

**Field Blank analysis was not required for Semivolatiles. Semivolatile compounds were not detected in any field samples pertaining to these sampling events.**

**2.6 GC/MS Instrument Performance Check**

Tuning and performance criteria are established to ensure adequate mass resolution proper identification of compounds and to some degree, sufficient instrument sensitivity. These criteria are not sample specific. Instrument performance is determined using standard materials. Therefore, these criteria should be met in all circumstances. The Tuning standard for semivolatile organics is decafluorotriphenylphosphine (DFTPP).

**Instrument performance was generated within acceptable limits and frequency (once prior to ICAL for SW846 Method 8270E) for decafluorotriphenylphosphine (DFTPP) for all analyses.**

**2.7 Initial and Continuing Calibrations**

Satisfactory instrument calibration is established to ensure that the instrument can produce acceptable quantitative data. An initial calibration demonstrates that the instrument can give acceptable performance at the beginning of an experimental sequence. The continuing calibration checks document that the instrument is giving satisfactory daily performance.

**A) Response Factor GC/MS:**

The response factor measures the instrument's response to specific chemical compounds. The response factor for all compounds must be  $>/= 0.05$  in both initial and continuing calibrations. A value  $<0.05$  indicates a serious detection and quantitation problem (poor sensitivity). Analytes detected in the sample will be qualified as estimated, "J". All non-detects for that compound in the corresponding samples will be rejected, "R".

**The response factors for the target analytes reported were found to be within acceptable limits ( $>=0.05$ ), for the initial (average RRF) and continuing calibrations.**

B) Percent Relative Standard Deviation (%RSD) and Percent Difference (%D): Percent RSD is calculated from the initial calibration and is used to indicate the stability of the specific compound response factor over increasing concentrations. Percent D compares the response factor of the continuing calibration check to the mean response factor (RRF) from the initial calibration. Percent D is a measure of the instrument's daily performance. Percent RSD must be  $<20\%$  and %D must be  $<20\%$ . A value outside of these limits indicates potential detection and quantitation errors. For these reasons, all positive results are flagged as estimated, "J" and non-detects are flagged "UJ". If %RSD and %D grossly exceed QC criteria, non-detect data may be qualified, "R", unusable. Additionally, in cases where the %RSD is  $>30\%$  and eliminating either the high or the low point of the curve does not restore the %RSD to less than or equal to 20% then positive results are qualified, "J". In cases where removal of either the low or high point restores the linearity, then only low or high-level results will be qualified, "J" in the portion of the curve where non-linearity exists. Due to the large number of analytes in this method, it is expected for some analytes to fall outside acceptance criteria and the calibration is still considered valid. Acceptable Initial Calibration Verifications were performed ( $<30\%$ ).

**Initial Calibrations:** The initial calibrations provided and the %RSD were within acceptable limits (20%) for all reported compounds.

**Continuing Calibrations:** The continuing calibrations provided and the %D was within acceptable limits (20%) for all reported compounds with exceptions noted below:

**CCAL CBNAMS14 11/28/2020 – Pentachlorophenol – 22.1%; “UJ” non-detects in OU2-MW1\_20201124, OU2-MW32\_20201124 and OU2-MWX\_20201124.**

**CCAL CBNAMS18 11/30/2020 - Indeno [1,2,3-cd] pyrene – 32.6%, Dibenz (g,h,i) perylene – 32.0% and Benzo (g,h,i) perylene – 26.3%; “UJ” non-detects in OU2-MW15\_20201124.**

## **2.8 Internal Standards**

Internal Standards (IS) performance criteria ensure that the GC/MS sensitivity and response are stable during every experimental run. The internal standard area count must not vary by more than a factor of 2 (-50% to +100%) from the associated continuing calibration standard. The retention time of the internal standard must not vary more than +/-30 seconds from the associated continuing calibration standard. If

the area count is outside the (-50% to +100%) range of the associated standard, all the positive results for compounds quantitated using that IS are qualified as estimated, "J", and all non-detects as "UJ", or "R" if there is a severe loss of sensitivity.

If an internal standard retention time varies by more than 30 seconds, professional judgment will be used to determine either partial or total rejection of the data for that sample fraction.

**Area responses and retention times fell within established QC ranges for sample analysis.**

#### **2.9 Field Duplicates**

Field duplicate samples are collected and analyzed as an indication of overall precision. These results are expected to have more variability than laboratory duplicate samples. An acceptable RPD is 25%. Field duplicate analysis was conducted on OU2-MW32\_20201124 as OU2\_MWX\_20201124. Precision is acceptable. No target analytes were detected in either analysis.

#### **2.10 Target Compound List Identification**

TCL compounds are identified on the GC/MS by using the analyte's relative retention time (RRT) and by comparison to the ion spectra obtained from known standards. For the results to be a positive hit, the sample peak must be within =/- 0.06RRT units of the standard compound and have an ion spectrum which has a ratio of the primary and secondary m/e intensities within 20% of that in the standard compound.

**Mass spectra meet the qualitative criteria for identification.**

**Although Tentatively Identified Compounds (TICs) were not required, the sample chromatograms for OU2-MW1\_20201124 demonstrates early eluting non-target presence.**

#### **2.11 Compound Quantification and Reported Detection Limits**

GC/MS quantitative analysis is acceptable. Correct internal standards and response factors were used to calculate final concentrations.

**As required, the laboratory reported "J" values between the reporting limits (RL) and Method Detection Limits (MDLs). This is consistent with common laboratory practices and a requirement of the National Environmental Laboratory Approval Program (NELAP). Samples were analyzed undiluted. Groundwater samples were extracted by Method 3510C and extracted with an initial volume of 250mls and concentrated to 2ml final volume.**

## **2.12 Overall System Performance**

**Acceptable system performance was maintained throughout the analysis. All sample analysis was conducted without dilutions (250ml/2ml).**

## **3.0 Pesticides by GC SW846 Method 8081B, PCBs by SW846 Method 8082A**

The following method criteria were reviewed: holding times, Surrogates, MS, MSD, LCS, Blanks, Analytical Sequences, Calibrations, Target Component Identification, Quantitation, Reported Quantitation Limits, and overall system performance. The Pesticide and PCB results are valid and usable as noted within the following text:

### **3.1 Holding Time**

The amount of an analyte in a sample can change with time due to chemical instability, degradation, volatilization, etc. If the technical holding time is exceeded, the data may not be considered valid. Those analytes detected in the samples whose holding time has been exceeded will be qualified as estimates, "J". The non-detects (sample quantitation limits) are required to be flagged as estimated, "J", or unusable, "R", if the holding times are grossly exceeded.

**Samples were extracted and analyzed within the method required holding times and the technical holding times required for data validation (7 days for liquid samples) for extraction. Extracts were analyzed within forty (40) days in accordance with the analytical method requirements.**

### **3.2 Surrogate Recovery**

All samples are spiked with surrogate compounds prior to sample preparation/extraction to evaluate overall laboratory performance and efficiency of the analytical technique. Additionally, the sample itself may produce effects due to such factors as interferences and high concentrations of analytes. Since the effects of the sample matrix are frequently outside the control of the laboratory and may present relatively unique problems, the evaluation of the data is dependent upon reextraction and/or reanalysis to confirm/negate laboratory error or matrix related problems. No qualifications were applied if one of the spiked surrogates is above acceptance limits on one of the two columns. Discussion of surrogate recoveries that fell outside (above/below) QC guidelines is itemized below:

#### **Pesticides:**

**Acceptable surrogate recovery values for TCMX and DCB were observed for all analyses.**

#### **PCBs:**

**Acceptable surrogate recovery values for DCB were observed for all analyses. TCMX recovered below limits in the method blank on both columns (44%/42%). Validation criteria allows limits of 30-150%. No qualifiers were applied based on**

these outliers. Additionally, TCMX recovered above limits in the matrix spike analysis OU2-MW1-20201124 (138%/131%). Parent sample and MSD met acceptance criteria. No target PCBs were detected in this location. Elevated recovery does not support any potential loss of detection and/or result bias. Based on professional judgement, the data was not qualified.

### **3.3 Matrix Spikes (MS)/Matrix Spike Duplicates (MSD)**

The MS/MSD data are generated to determine the long-term precision and accuracy of the analytical method in various matrices.

The National Functional Guidelines indicate that MS/MSD data alone shall not be utilized to qualify sample data. MS/MSD was performed on OU2-MW1\_20201124. PCB Recovery values and RPD met acceptance criteria. RPD for Aldrin (37%) and heptachlor (36%) was above acceptance criteria. Based on professional judgment, the data was not qualified. Pesticide analytes recovered within limits in both the MS and MSD.

### **3.4 Laboratory Control Sample/Laboratory Control Duplicate**

The LCS data for laboratory control samples (LCS) are generated to provide information on the accuracy of the analytical method and on the laboratory performance.

**LCS/LCS Duplicates were analyzed for each analytical extraction batch for Pesticides and PCBs. Recovery values and RPD were acceptable for Pesticides and PCBs.**

### **3.5 Blanks**

Quality assurance (QA) blanks, i.e., method, instrument, trip, and field blanks are prepared to identify any contamination which may have been introduced into the samples during sample preparation or field activity. Method blanks measure laboratory contamination. Instrument blanks measure carryover for cross contamination. Field blanks measure cross-contamination of samples during field operations.

The following table was utilized to qualify target analyte results due to contamination. The largest value from all the associated blanks is required to be utilized:

For:	Flag Sample Result with a "U" when:	Report CRQL & Qualify "U" when:	No Qualification is Needed when:
Any Contaminant	Sample Conc. is >CRQL, but </=5x blank value	Sample Conc. Is <CRQL and </=5x blank value	Sample Conc. is >CRQL and >5x blank value

Extraction and Instrument blanks were performed at the appropriate frequency. Below is a summary of blank contamination:

**A) Method Blank Contamination:**

No target analytes were detected in the associated method blanks. No data validation qualifiers were required based upon method blank data.

**B) Field Blank Contamination:**

Field Blank analysis for Pesticides and PCBs was not required.

**3.6 Calibration Verification**

Initial and continuing calibration sequence was performed as required for individual and multi-component Pesticide and PCB standards. Acceptable DDT and Endrin breakdown percent difference (<20%) was observed. Acceptable retention times were obtained for all analysis and GC resolution is acceptable for both columns. Resolution check met criteria and performance evaluation mixture met acceptance criteria.

Linearity criteria for the initial standards have been satisfied for both columns as detailed below:

%RSD </= 20% for single component compounds except alpha-BHC and delta-BHC  
%RSD </=30% for Toxaphene peaks  
%RSD </= 30% for surrogates (TCMX and DCB)  
%RSD <20% for PCB aroclors

Continuing calibration verifications:

For Pesticide analysis, acceptable percent difference for any pesticide is 20% and for PCB analysis, the acceptable limit is 15%.

Calibrations met method requirements for Pesticide/PCBs on either Channel A or B.

**3.7 Field Duplicates**

Field duplicate samples are collected and analyzed as an indication of overall precision. These results are expected to have more variability than laboratory duplicate samples. An acceptable RPD is 25%. Field duplicate analysis was conducted on OU2-MW32\_20201124 as OU2\_MWX\_20201124. Precision is acceptable. No target Pesticide or PCB analytes were detected in either analysis.

**3.8 Target Compound Identification**

Qualitative criteria for compound identification have been established to minimize the number of false positives and false negatives. The retention times of all target analytes have been verified in the samples to that of the analyzed reference standards.

Acceptable DDT/Endrin breakdown was observed.

**Positive Pesticide and PCB sample results are compared and where %Difference >25% when quantitated on the two columns the qualifications below are applied. Sample chromatograms were reviewed for the presence of interference. The following qualifications were applied where neither column shows interference:**

<b>%Difference</b>	<b>Qualifier</b>
0-25%	None
26-70%	"J"
71-100%	"JN"
101-200% (no interference)	"R"
101-200% (interference detected) *	"JN"
>50% (Pesticide value is <CRQL)**	"U"
>201%	"R"

\*When the reported %D is 101-200%, but interference is determined on either column, the results shall be qualified, "JN"

\*\* When the reported pesticide value is lower than the CRQL, and the %D is >50%, raise the value to the CRQL and qualify "U", undetected.

Acceptable percent difference was obtained for all detected analytes in the LCS/LCS Duplicate/MS/MSD. No target compounds were detected in field groundwater samples.

### **3.9 Compound Quantification and Reported Detection Limits**

TCL compounds are identified on the GC by using the analyte's relative retention time (RRT) and by comparison to the primary column and the secondary confirmation column data. The laboratory reported the lower of the concentrations for primary/confirmatory column results as required.

Samples were analyzed undiluted. Samples were analyzed via the internal standard method using 1-Bromo-2-nitrobenzene. Acceptable area responses and retention time was observed for all samples.

### **3.10 Overall System Performance**

Acceptable system performance was maintained throughout the analysis of all samples. Good resolution and chromatographic performance were observed.

Groundwater samples were concentrated to 1ml for Pesticides and PCBs from an initial volume of 250mls by Method 3510C and concentrated to 1ml final volume. This is acceptable practice and method compliant. The laboratory reporting levels reflect the appropriate extraction concentration volumes.

#### **4.0 Metals by ICPMS/Cold Vapor SW846 Methods 6020B/7470A**

The following method criteria were reviewed: holding times, CRDL standards, calibration, blanks, MS, laboratory duplicates, LCS, interference check sample, ICPMS serial dilutions and sample results verification. Metals results are valid and usable with the appropriate qualifiers as noted in the following text:

##### **4.1 Holding Times**

The amount of an analyte in a sample can change with time due to chemical instability, degradation, volatilization, etc. If the technical holding time is exceeded, the data may not be considered valid. Those analytes detected in the samples whose holding time has been exceeded will be qualified as estimates, "J". The non-detects (sample quantitation limits) are required to be flagged as estimated, "J", or unusable, "R", if the holding times are grossly exceeded.

**Groundwater samples were digested and analyzed for Metals within the method required holding times and the technical holding times for data validation. No qualifications were applied based upon holding time criteria.**

##### **4.2 Calibration (ICV/CCV)**

Satisfactory instrument calibration is established to ensure that the instruments can produce acceptable quantitative data. An initial calibration demonstrates that the instruments can give acceptable performance at the beginning of an experimental sequence. The continuing calibration checks document that the instruments are giving satisfactory sequential performance and that the initial calibration is still valid.

**The ICPMS and Mercury instruments were calibrated utilizing a minimum of a four-point curve in addition to blanks at the beginning of each analytical run. The calibrations have been determined to be acceptable, yielding correlation coefficients of 0.995 or greater.**

**For ICPMS analysis, satisfactory instrument performance near the Contract Required Detection Limit (CRDL) was demonstrated by analyzing a CRDL standard at the beginning and end of the analytical run. The instruments were calibrated properly by analyzing the CRDL solution at the correct levels and analyzed at the required frequency at the beginning and end of each analytical run. All recoveries were within acceptable limits of 90-110 % for initial calibration pertaining to field samples. Continuing calibrations were within acceptable limits of 90-110% recovery of the true values for ICPMS and Mercury (80-120%) for all field samples. Acceptable low level ICV/CCV was analyzed. No qualifications were applied based upon ICV/CCV analysis.**

#### **4.3 Blanks**

Quality assurance (QA) blanks, i.e., method, field or preparation blanks are prepared to identify any contamination that may have been introduced into the samples during sample preparation or field activity. Preparation blanks measure laboratory contamination. Field blanks measure cross-contamination of samples during field operations.

All digestion/prep/ICB/CCB blanks were generated within acceptable limits yielding final concentrations less than the CRDL. CCB 460-743278/20 yielded low concentration of Beryllium (0.168 ug/L) and Lead (0.215 ug/L). The method blank also yielded low detections for these elements [ Beryllium – 0.169 ug/L and Lead – 0.188 ug/L]. The laboratory reported concentration of Beryllium were negated, “U” in OU2-MW2\_20201123, OU2-MW14\_20201123, OU2-MW1\_20201124, OU2-MW32\_20201124, OU2-MWX\_20201124 and OU2-MW15\_20201124. No qualifiers were required for Total Lead. No additional qualifications to the data were made based upon blank contamination.

#### **4.4 Spiked Sample Recovery**

The spike data are generated to determine the long terms precision and accuracy of the analytical method in various matrices.

*Aqueous spike recoveries are qualified based on the criteria below:*

**<30% - “R” all detects and non-detects**

**Between 30%-74% - results >/=MDL “J” and non-detects “UJ”**

**Between 126-150% - results >/=MDL “J” and**

**>150% - results >/= MDL “R”**

Aqueous MS/MSD was performed on OU2-MW1\_20201124. Acceptable recovery values were obtained where the sample concentration was >4x the spike level (Barium and Manganese). Acceptable post digestion spike was performed also yielding acceptable recovery values. No qualifications to the data were made based on MS/MSD data.

#### **4.5 Laboratory/Field Duplicates**

The laboratory uses duplicate sample determinations to demonstrate acceptable method precision at the time of analysis. Duplicate analyses are also performed to generate data to determine the long-term precision of the analytical method on various matrices.

**Laboratory Duplicates:**

**RPD >20% but <100% - J detected concentrations**

**RPD >/=100% - R all detected and non-detected concentrations**

**Laboratory duplicate of OU2-MW1\_20201124 resulted in acceptable RPD for all reported elements except for Zinc (29%). The laboratory reported concentration (6.3 ug/L) was qualified, "J" by the laboratory since detection is less than the reporting limit. No additional qualifiers are required based on this outlier.**

**Field Duplicates:**

**RPD >/=35% but <120% - qualify sample and duplicate results >/= CRQL "J"**  
**RPD >/= 120% - rejected sample and duplicate results >/= CRQL "R"**

**Field duplicate samples are collected and analyzed as an indication of overall precision. These results are expected to have more variability than laboratory duplicate samples. Field duplicate analysis was conducted on OU2-MW32\_20201124 as OU2\_MWX\_20201124. Precision is acceptable for detected metals.**

**4.6 Laboratory Control Sample**

The laboratory Control Sample (LCS) serves as a monitor of the overall performance of each step during the analysis, including the sample preparation. Aqueous and solid Laboratory Control samples shall be analyzed for each analyte utilizing the same sample preparation, analytical methods and QA/QC procedures as employed for the samples.

**The LCS was analyzed and reported for ICPMS and Mercury. Recoveries were within the acceptable limits for Metals analyses (80-120%).**

**4.7 Interference Check Sample**

The interference check sample (ICS) verifies the laboratory's interelement and background correction factors. The ICS consists of two solutions A and AB. Solution A consists of interference, and solution AB consists of the analytes mixed with interferents.

**SW846 Method 6020 requires solution A and solution AB to be analyzed separately. The recoveries for the ICPMS interference check sample were all within the acceptable limits of 80-120%. No data qualifications were made based upon ICS analysis.**

**4.8 ICPMS Serial Dilution**

The serial dilution of samples quantitated by ICP determines whether significant physical or chemical interferences exist due to sample matrix. An ICP serial dilution analysis must be performed on a sample for each group of samples with a similar matrix type and concentration, or for each Sample Delivery Group (SDG), whichever is more frequent.

**Acceptable ICPMS serial dilutions were performed at a 5-fold dilution as required by the method where the initial concentration is equal or greater than 50x MDL. All serial dilution analyses on OU2-MW1\_20201124 agrees within a 10% difference of the original determination after correction for dilution for all reported elements.**

**4.9 Sample Results Verification**

Analyte quantitation was generated in accordance with protocols. The raw data was verified and found within the linear range of each instrument used for quantitation. Raw data supplied corresponds with reported values. Verification of the calculations yielded reported results. Acceptable internal standard intensity was observed.

**4.10 Overall Assessment of Data**

The data generated were of acceptable quality. Results are usable at the concentrations presented in the validated spreadsheet and on the Form I's.

Reviewer's Signature Hai A. Beyer Date 03/23/2021

**Appendix A  
Case Narrative and  
Sample Receipt Checklist**

# Chain of Custody Record

 eurofins

Address:

Environment Testing  
TestAmerica

Client Contact			Site Contact: <u>SJEN</u>			Date: <u>1/21/20</u>	COC No. _____ of _____ COCs
Company Name: <u>AEGE INC</u>	Project Manager: <u>22-EE-FF</u>	Lab Contact: _____	Carrier: _____				
Address: <u>940 COMM SLE S</u>	Tel/Email: _____	Analysis Turnaround Time					
City/State/Zip: <u>NY 117-7433</u>	Phone: <u>603 517 7433</u>	<input type="checkbox"/> CALENDAR DAYS	<input type="checkbox"/> WORKING DAYS				
Fax: _____	Project Name: <u>RIEIS</u>	TAT if different from Below					
Site: _____	P.O. # <u>100376</u>	<input type="checkbox"/> 2 weeks	<input checked="" type="checkbox"/> STANDARD	<input type="checkbox"/> 1 week	<input type="checkbox"/> 2 days		
<b>5-Day RUSH</b>							
Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp. G=Grab)	Matrix	# of Cont.	Sample Specific Notes:	
QW2-MW2-2001003	1/20/20	10:15 G	GW	1	X		
QW3-MW3-2001003	1/20/20	11:00 J	J	1	X		
QW2-MW1-2001004	1/20/20	10:00 K	K	1	X		
QW2-MW2-2001004	1/20/20	10:00 L	L	1	X		
QW2-MW3-2001004	1/20/20	10:00 M	M	1	X		
QW2-MW1-2001004	1/20/20	10:00 N	N	1	X		
FB-2001004	1/20/20	6 U	U	1	X		
TB-2001004	1/20/20	5 G	G	1	X		
QW3-MW4-2001004	1/20/20	13:35 G	GW	1	X		
QW3-MW5-2001004	1/20/20	14:00 J	GW	1	X		
<b>ELMSFORD</b>							
QW2-MW2-2001005	1/20/20	10:15 G	GW	1	X		
QW3-MW3-2001005	1/20/20	11:00 J	J	1	X		
QW2-MW1-2001005	1/20/20	10:00 K	K	1	X		
QW2-MW2-2001005	1/20/20	10:00 L	L	1	X		
QW2-MW3-2001005	1/20/20	10:00 M	M	1	X		
FB-2001005	1/20/20	6 U	U	1	X		
TB-2001005	1/20/20	5 G	G	1	X		
QW3-MW4-2001005	1/20/20	13:35 G	GW	1	X		
QW3-MW5-2001005	1/20/20	14:00 J	GW	1	X		
<b>460-223616 Chain of Custody</b>							
Preservation Used: 1=Ice, 2=HCl, 3=HNO3, 4=H2SO4, 5=NaOH, 6=Other							
Possible Hazard Identification: Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample.							
<input type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison A <input type="checkbox"/> Unknown							
Special Instructions/QC Requirements & Comments: <b>C&amp;T C DISCUSSIONS</b>							
Custody Seals Intact: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		Custody Seal No.: <u>1111</u>					
Relinquished by: <u>John</u>		Company: <u>eurofins</u>		Date/Time: <u>1/20/20 10:15</u>	Received by: <u>CJ</u>	Company: <u>eurofins</u>	Cont'd: <u>ETI</u>
Relinquished by: <u>John</u>		Company: <u>eurofins</u>		Date/Time: <u>1/20/20 11:00</u>	Received by: <u>CJ</u>	Company: <u>eurofins</u>	Cont'd: <u>ETI</u>
Relinquished by: <u>John</u>		Company: <u>eurofins</u>		Date/Time: <u>1/20/20 10:00</u>	Received by: <u>CJ</u>	Company: <u>eurofins</u>	Cont'd: <u>ETI</u>
Relinquished by: <u>John</u>		Company: <u>eurofins</u>		Date/Time: <u>1/20/20 10:00</u>	Received by: <u>CJ</u>	Company: <u>eurofins</u>	Cont'd: <u>ETI</u>
Archive for _____ Months							

## Login Sample Receipt Checklist

Client: AKRF Inc

Job Number: 460-223616-1

**Login Number:** 223616

**List Source:** Eurofins TestAmerica, Edison

**List Number:** 1

**Creator:** DiGuardia, Joseph L

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

**L.A.B. Validation Corp, 14 West Point Drive, East Northport, NY 11731**

**Appendix B  
Case Narrative**

# CASE NARRATIVE

Client: AKRF Inc

Project: Adelaar Concord - Monticello, NY

Report Number: 460-223616-1

This case narrative is in the form of an exception report, where only the anomalies related to this report, method specific performance and/or QA/QC issues are discussed. If there are no issues to report, this narrative will include a statement that documents that there are no relevant data issues.

It should be noted that samples with elevated Reporting Limits (RLs) as a result of a dilution may not be able to satisfy customer reporting limits in some cases. Such increases in the RLs are unavoidable but acceptable consequence of sample dilution that enables quantification of target analytes or interferences which exceed the calibration range of the instrument.

Calculations are performed before rounding to avoid round-off errors in calculated results.

All holding times were met and proper preservation noted for the methods performed on these samples, unless otherwise detailed in the individual sections below.

## RECEIPT

The samples were received on 11/25/2020; the samples arrived in good condition, properly preserved and on ice. The temperature of the coolers at receipt was 2.8 C.

Note: All samples which require thermal preservation are considered acceptable if the arrival temperature is within 2C of the required temperature or method specified range. For samples with a specified temperature of 4C, samples with a temperature ranging from just above freezing temperature of water to 6C shall be acceptable. Samples that are hand delivered immediately following collection may not meet these criteria, however they will be deemed acceptable according to NELAC standards, if there is evidence that the chilling process has begun, such as arrival on ice, etc.

## VOLATILE ORGANIC COMPOUNDS (GC/MS)

Samples OU2-MW1\_20201124 (460-223616-3), OU2-MW32\_20201124 (460-223616-4), OU2-MWX\_20201124 (460-223616-5), OU2-MW15\_20201124 (460-223616-6), FB\_20201124 (460-223616-7) and TB\_20201124 (460-223616-8) were analyzed for Volatile Organic Compounds (GC/MS) in accordance with EPA SW-846 Method 8260D. The samples were analyzed on 11/29/2020.

Acetone failed the recovery criteria high for the MS of sample OU2-MW1\_20201124MS (460-223616-3) in batch 460-743266.

Acetone failed the recovery criteria high for the MSD of sample OU2-MW1\_20201124MSD (460-223616-3) in batch 460-743266.

Refer to the QC report for details.

No other difficulties were encountered during the Volatiles analysis.

All other quality control parameters were within the acceptance limits.

## SEMOVOLATILE ORGANIC COMPOUNDS (GC/MS)

Samples OU2-MW1\_20201124 (460-223616-3), OU2-MW32\_20201124 (460-223616-4), OU2-MWX\_20201124 (460-223616-5) and OU2-MW15\_20201124 (460-223616-6) were analyzed for semivolatile organic compounds (GC/MS) in accordance with EPA SW-846 Methods 8270E. The samples were prepared on 11/28/2020 and analyzed on 11/28/2020 and 12/01/2020.

The continuing calibration verification (CCV) analyzed in batch 460-742909 was outside the method criteria for the following analyte(s): Pentachlorophenol. A CCV standard at or below the reporting limit (RL) was analyzed with the affected samples and found to be acceptable. As indicated in the reference method, sample analysis may proceed; however, any detection for the affected analyte(s) is considered estimated.

The laboratory control sample (LCS) and/or lab control sample duplicate (LCSD) associated with preparation batch 460-743179 and analytical batch 460-742909 was outside acceptance criteria. Re-extraction and/or re-analysis could not be performed; therefore, the data have been reported. The batch matrix spike/matrix spike duplicate (MS/MSD) was within acceptance limits and may be used to evaluate matrix performance.

The continuing calibration verification (CCV) analyzed in batch 460-743314 was outside the method criteria for the following analyte(s): Indeno[1,2,3-cd]pyrene and Dibenz(a,h)anthracene. A CCV standard at or below the reporting limit (RL) was analyzed with the affected samples and found to be acceptable. As indicated in the reference method, sample analysis may proceed; however, any detection for the affected analyte(s) is considered estimated.

*not applicable to field samples*

*for 312312*

The continuing calibration verification (CCV) associated with batch 460-743549 recovered above the upper control limit for Indeno[1,2,3-cd]pyrene, Dibenz(a,h)anthracene and Benzo[g,h,i]perylene. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported.

No other difficulties were encountered during the semivolatiles analysis.

All other quality control parameters were within the acceptance limits.

#### **PESTICIDES**

Samples OU2-MW1\_20201124 (460-223616-3), OU2-MW32\_20201124 (460-223616-4), OU2-MWX\_20201124 (460-223616-5) and OU2-MW15\_20201124 (460-223616-6) were analyzed for Pesticides in accordance with EPA SW-846 Methods 8081B. The samples were prepared on 11/28/2020 and analyzed on 11/30/2020.

No difficulties were encountered during the pesticides analysis.

All quality control parameters were within the acceptance limits.

#### **POLYCHLORINATED BIPHENYLS (PCBS)**

Samples OU2-MW1\_20201124 (460-223616-3), OU2-MW32\_20201124 (460-223616-4), OU2-MWX\_20201124 (460-223616-5) and OU2-MW15\_20201124 (460-223616-6) were analyzed for polychlorinated biphenyls (PCBs) in accordance with EPA SW-846 Method 8082A. The samples were prepared on 11/28/2020 and analyzed on 11/30/2020 and 12/01/2020.

The surrogate Tetrachloro-m-xylene recovery for the blank associated with preparation batch 460-743183 and analytical batch 460-743489 was outside the upper control limits.

No other difficulties were encountered during the PCBs analysis.

All other quality control parameters were within the acceptance limits.

#### **TOTAL METALS (ICP/MS)**

Samples OU3-MW2\_20201123 (460-223616-1), OU3-MW14\_20201123 (460-223616-2), OU2-MW1\_20201124 (460-223616-3), OU2-MW32\_20201124 (460-223616-4), OU2-MWX\_20201124 (460-223616-5), OU2-MW15\_20201124 (460-223616-6), OU3-MW4\_20201124 (460-223616-9) and OU3-MW17\_20201124 (460-223616-10) were analyzed for Total Metals (ICP/MS) in accordance with EPA SW-846 Method 6020B. The samples were prepared on 11/28/2020 and analyzed on 11/29/2020.

The method blank for preparation batch 460-743171 and analytical batch 460-743278 contained Beryllium and Lead above the method detection limit. This target analyte concentration was less than half the reporting limit (1/2RL); therefore, re-extraction and re-analysis of samples was not performed.

Barium and Manganese failed the recovery criteria high for the MS of sample OU2-MW1\_20201124MS (460-223616-3) in batch 460-743278.

Zinc exceeded the RPD limit for the duplicate of sample OU2-MW1\_20201124DU (460-223616-3).

Refer to the QC report for details.

Samples OU3-MW2\_20201123 (460-223616-1)[5X] and OU3-MW4\_20201124 (460-223616-9)[5X] required dilution prior to analysis. The reporting limits have been adjusted accordingly.

No other difficulties were encountered during the Total Metals (ICP/MS) analysis.

All other quality control parameters were within the acceptance limits.

#### **TOTAL MERCURY**

Samples OU3-MW2\_20201123 (460-223616-1), OU3-MW14\_20201123 (460-223616-2), OU2-MW1\_20201124 (460-223616-3), OU2-MW32\_20201124 (460-223616-4), OU2-MWX\_20201124 (460-223616-5), OU2-MW15\_20201124 (460-223616-6), OU3-MW4\_20201124 (460-223616-9) and OU3-MW17\_20201124 (460-223616-10) were analyzed for total mercury in accordance with EPA SW-846 Methods 7470A. The samples were prepared and analyzed on 11/29/2020 and 11/30/2020.

No difficulties were encountered during the Hg analysis.

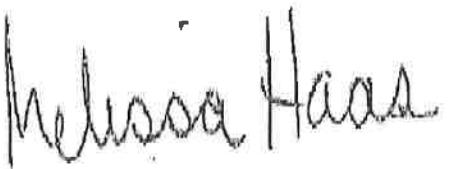
All quality control parameters were within the acceptance limits.

for 3123121

Job Number: 460-223616-1

Job Description: Adelaar Concord - Monticello, NY

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed within the body of this report. Release of the data contained in this sample data package and in the electronic data deliverable has been authorized by the Laboratory Manager or his/her designee, as verified by the following signature.



Approved for release.  
Melissa Haas  
Senior Project Manager  
12/2/2020 10:36 AM

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Melissa Haas

**Appendix C  
Data Summary Form I's  
With Qualifications**

FORM I  
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Edison Job No.: 460-223616-1  
 SDG No.:  
 Client Sample ID: OU2-MW1\_20201124 Lab Sample ID: 460-223616-3  
 Matrix: Water Lab File ID: T42562.D  
 Analysis Method: 8260D Date Collected: 11/24/2020 09:00  
 Sample wt/vol: 5 (mL) Date Analyzed: 11/29/2020 11:10  
 Soil Aliquot Vol: Dilution Factor: 1  
 Soil Extract Vol.: GC Column: DB-624 ID: 0.18 (mm)  
 % Moisture: Level: (low/med) Low  
 Analysis Batch No.: 743266 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	0.24
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.26
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.26
95-63-6	1,2,4-Trimethylbenzene	36		1.0	0.37
95-50-1	1,2-Dichlorobenzene	1.0	U	1.0	0.21
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.43
108-67-8	1,3,5-Trimethylbenzene	3.8		1.0	0.33
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0	0.34
106-46-7	1,4-Dichlorobenzene	1.0	U	1.0	0.33
123-91-1	1,4-Dioxane	50	U	50	28
78-93-3	2-Butanone (MEK)	5.0	U	5.0	1.9
67-64-1	Acetone	5.0	U	5.0	4.4
71-43-2	Benzene	0.44	J	1.0	0.20
56-23-5	Carbon tetrachloride	1.0	U	1.0	0.21
108-90-7	Chlorobenzene	1.0	U	1.0	0.38
67-66-3	Chloroform	1.0	U	1.0	0.33
156-59-2	cis-1,2-Dichloroethene	1.0	U	1.0	0.22
100-41-4	Ethylbenzene	5.6		1.0	0.30
1634-04-4	Methyl tert-butyl ether	0.65	J	1.0	0.22
75-09-2	Methylene Chloride	1.0	U	1.0	0.32
104-51-8	n-Butylbenzene	6.4		1.0	0.32
103-65-1	N-Propylbenzene	17		1.0	0.32
135-98-8	sec-Butylbenzene	3.3		1.0	0.37
98-06-6	tert-Butylbenzene	1.0	U	1.0	0.34
127-18-4	Tetrachloroethene	1.0	U	1.0	0.25
108-88-3	Toluene	0.72	J	1.0	0.38
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.24
79-01-6	Trichloroethene	1.0	U	1.0	0.31
75-01-4	Vinyl chloride	1.0	U	1.0	0.17
1330-20-7	Xylenes, Total	3.7		2.0	0.65

FORM I  
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Edison

Job No.: 460-223616-1

SDG No.:

Client Sample ID: OU2-MW32\_20201124

Lab Sample ID: 460-223616-4

Matrix: Water

Lab File ID: T42563.D

Analysis Method: 8260D

Date Collected: 11/24/2020 11:00

Sample wt/vol: 5 (mL)

Date Analyzed: 11/29/2020 11:34

Soil Aliquot Vol.:

Dilution Factor: 1

Soil Extract Vol.:

GC Column: DB-624 ID: 0.18 (mm)

% Moisture:

Level: (low/med) Low

Analysis Batch No.: 743266

Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	0.24
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.26
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.26
95-63-6	1,2,4-Trimethylbenzene	0.93	J	1.0	0.37
95-50-1	1,2-Dichlorobenzene	1.0	U	1.0	0.21
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.43
108-67-8	1,3,5-Trimethylbenzene	1.0	U	1.0	0.33
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0	0.34
106-46-7	1,4-Dichlorobenzene	1.0	U	1.0	0.33
123-91-1	1,4-Dioxane	50	U	50	28
78-93-3	2-Butanone (MEK)	5.0	U	5.0	1.9
67-64-1	Acetone	5.1		5.0	4.4
71-43-2	Benzene	1.0	U	1.0	0.20
56-23-5	Carbon tetrachloride	1.0	U	1.0	0.21
108-90-7	Chlorobenzene	1.0	U	1.0	0.38
67-66-3	Chloroform	1.0	U	1.0	0.33
156-59-2	cis-1,2-Dichloroethene	1.0	U	1.0	0.22
100-41-4	Ethylbenzene	1.0	U	1.0	0.30
1634-04-4	Methyl tert-butyl ether	2.0		1.0	0.22
75-09-2	Methylene Chloride	1.0	U	1.0	0.32
104-51-8	n-Butylbenzene	1.0	U	1.0	0.32
103-65-1	N-Propylbenzene	0.43	J	1.0	0.32
135-98-8	sec-Butylbenzene	1.0	U	1.0	0.37
98-06-6	tert-Butylbenzene	1.0	U	1.0	0.34
127-18-4	Tetrachloroethene	1.0	U	1.0	0.25
108-88-3	Toluene	1.0	U	1.0	0.38
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.24
79-01-6	Trichloroethene	1.0	U	1.0	0.31
75-01-4	Vinyl chloride	1.0	U	1.0	0.17
1330-20-7	Xylenes, Total	2.0	U	2.0	0.65

FORM I  
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Edison Job No.: 460-223616-1  
 SDG No.:  
 Client Sample ID: OU2-MWX\_20201124 Lab Sample ID: 460-223616-5  
 Matrix: Water OU2-MWX\_20201124 Lab File ID: T42564.D  
 Analysis Method: 8260D Date Collected: 11/24/2020 00:00  
 Sample wt/vol: 5 (mL) Date Analyzed: 11/29/2020 11:58  
 Soil Aliquot Vol: Dilution Factor: 1  
 Soil Extract Vol.: GC Column: DB-624 ID: 0.18 (mm)  
 % Moisture: Level: (low/med) Low  
 Analysis Batch No.: 743266 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	0.24
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.26
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.26
95-63-6	1,2,4-Trimethylbenzene	0.79	J	1.0	0.37
95-50-1	1,2-Dichlorobenzene	1.0	U	1.0	0.21
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.43
108-67-8	1,3,5-Trimethylbenzene	1.0	U	1.0	0.33
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0	0.34
106-46-7	1,4-Dichlorobenzene	1.0	U	1.0	0.33
123-91-1	1,4-Dioxane	50	U	50	28
78-93-3	2-Butanone (MEK)	5.0	U	5.0	1.9
67-64-1	Acetone	5.6		5.0	4.4
71-43-2	Benzene	1.0	U	1.0	0.20
56-23-5	Carbon tetrachloride	1.0	U	1.0	0.21
108-90-7	Chlorobenzene	1.0	U	1.0	0.38
67-66-3	Chloroform	1.0	U	1.0	0.33
156-59-2	cis-1,2-Dichloroethene	1.0	U	1.0	0.22
100-41-4	Ethylbenzene	1.0	U	1.0	0.30
1634-04-4	Methyl tert-butyl ether	2.2		1.0	0.22
75-09-2	Methylene Chloride	1.0	U	1.0	0.32
104-51-8	n-Butylbenzene	1.0	U	1.0	0.32
103-65-1	N-Propylbenzene	0.37	J	1.0	0.32
135-98-8	sec-Butylbenzene	1.0	U	1.0	0.37
98-06-6	tert-Butylbenzene	1.0	U	1.0	0.34
127-18-4	Tetrachloroethene	1.0	U	1.0	0.25
108-88-3	Toluene	1.0	U	1.0	0.38
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.24
79-01-6	Trichloroethene	1.0	U	1.0	0.31
75-01-4	Vinyl chloride	1.0	U	1.0	0.17
1330-20-7	Xylenes, Total	2.0	U	2.0	0.65

for 3125121

FORM I  
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Edison Job No.: 460-223616-1  
 SDG No.:  
 Client Sample ID: OU2-MW15\_20201124 Lab Sample ID: 460-223616-6  
 Matrix: Water Lab File ID: T42565.D  
 Analysis Method: 8260D Date Collected: 11/24/2020 12:30  
 Sample wt/vol: 5 (mL) Date Analyzed: 11/29/2020 12:22  
 Soil Aliquot Vol: Dilution Factor: 1  
 Soil Extract Vol.: GC Column: DB-624 ID: 0.18 (mm)  
 % Moisture: Level: (low/med) Low  
 Analysis Batch No.: 743266 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	0.24
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.26
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.26
95-63-6	1,2,4-Trimethylbenzene	0.37	J	1.0	0.37
95-50-1	1,2-Dichlorobenzene	1.0	U	1.0	0.21
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.43
108-67-8	1,3,5-Trimethylbenzene	1.0	U	1.0	0.33
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0	0.34
106-46-7	1,4-Dichlorobenzene	1.0	U	1.0	0.33
123-91-1	1,4-Dioxane	50	U	50	28
78-93-3	2-Butanone (MEK)	5.0	U	5.0	1.9
67-64-1	Acetone	5.0	U	5.0	4.4
71-43-2	Benzene	1.0	U	1.0	0.20
56-23-5	Carbon tetrachloride	1.0	U	1.0	0.21
108-90-7	Chlorobenzene	1.0	U	1.0	0.38
67-66-3	Chloroform	1.0	U	1.0	0.33
156-59-2	cis-1,2-Dichloroethene	1.0	U	1.0	0.22
100-41-4	Ethylbenzene	1.0	U	1.0	0.30
1634-04-4	Methyl tert-butyl ether	1.0	U	1.0	0.22
75-09-2	Methylene Chloride	1.0	U	1.0	0.32
104-51-8	n-Butylbenzene	1.0	U	1.0	0.32
103-65-1	N-Propylbenzene	1.0	U	1.0	0.32
135-98-8	sec-Butylbenzene	1.0	U	1.0	0.37
98-06-6	tert-Butylbenzene	1.0	U	1.0	0.34
127-18-4	Tetrachloroethene	1.0	U	1.0	0.25
108-88-3	Toluene	1.0	U	1.0	0.38
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.24
79-01-6	Trichloroethene	1.0	U	1.0	0.31
75-01-4	Vinyl chloride	1.0	U	1.0	0.17
1330-20-7	Xylenes, Total	2.0	U	2.0	0.65

FORM I  
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Edison

Job No.: 460-223616-1

SDG No.:

Client Sample ID: FB\_20201124

Lab Sample ID: 460-223616-7

Matrix: Water

Lab File ID: T42556.D

Analysis Method: 8260D

Date Collected: 11/24/2020 12:20

Sample wt/vol: 5 (mL)

Date Analyzed: 11/29/2020 08:48

Soil Aliquot Vol.:

Dilution Factor: 1

Soil Extract Vol.:

GC Column: DB-624 ID: 0.18 (mm)

% Moisture:

Level: (low/med) Low

Analysis Batch No.: 743266

Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	0.24
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.26
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.26
95-63-6	1,2,4-Trimethylbenzene	1.0	U	1.0	0.37
95-50-1	1,2-Dichlorobenzene	1.0	U	1.0	0.21
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.43
108-67-8	1,3,5-Trimethylbenzene	1.0	U	1.0	0.33
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0	0.34
106-46-7	1,4-Dichlorobenzene	1.0	U	1.0	0.33
123-91-1	1,4-Dioxane	50	U	50	28
78-93-3	2-Butanone (MEK)	5.0	U	5.0	1.9
67-64-1	Acetone	5.0	U	5.0	4.4
71-43-2	Benzene	1.0	U	1.0	0.20
56-23-5	Carbon tetrachloride	1.0	U	1.0	0.21
108-90-7	Chlorobenzene	1.0	U	1.0	0.38
67-66-3	Chloroform	1.0	U	1.0	0.33
156-59-2	cis-1,2-Dichloroethene	1.0	U	1.0	0.22
100-41-4	Ethylbenzene	1.0	U	1.0	0.30
1634-04-4	Methyl tert-butyl ether	1.0	U	1.0	0.22
75-09-2	Methylene Chloride	1.0	U	1.0	0.32
104-51-8	n-Butylbenzene	1.0	U	1.0	0.32
103-65-1	N-Propylbenzene	1.0	U	1.0	0.32
135-98-8	sec-Butylbenzene	1.0	U	1.0	0.37
98-06-6	tert-Butylbenzene	1.0	U	1.0	0.34
127-18-4	Tetrachloroethene	1.0	U	1.0	0.25
108-88-3	Toluene	1.0	U	1.0	0.38
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.24
79-01-6	Trichloroethene	1.0	U	1.0	0.31
75-01-4	Vinyl chloride	1.0	U	1.0	0.17
1330-20-7	Xylenes, Total	2.0	U	2.0	0.65

FORM I  
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Edison Job No.: 460-223616-1  
 SDG No.:  
 Client Sample ID: TB\_20201124 Lab Sample ID: 460-223616-8  
 Matrix: Water Lab File ID: T42558.D  
 Analysis Method: 8260D Date Collected: 11/24/2020 12:25  
 Sample wt/vol: 5 (mL) Date Analyzed: 11/29/2020 09:28  
 Soil Aliquot Vol: Dilution Factor: 1  
 Soil Extract Vol.: GC Column: DB-624 ID: 0.18 (mm)  
 % Moisture: Level: (low/med) Low  
 Analysis Batch No.: 743266 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	0.24
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.26
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.26
95-63-6	1,2,4-Trimethylbenzene	1.0	U	1.0	0.37
95-50-1	1,2-Dichlorobenzene	1.0	U	1.0	0.21
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.43
108-67-8	1,3,5-Trimethylbenzene	1.0	U	1.0	0.33
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0	0.34
106-46-7	1,4-Dichlorobenzene	1.0	U	1.0	0.33
123-91-1	1,4-Dioxane	50	U	50	28
78-93-3	2-Butanone (MEK)	5.0	U	5.0	1.9
67-64-1	Acetone	5.0	U	5.0	4.4
71-43-2	Benzene	1.0	U	1.0	0.20
56-23-5	Carbon tetrachloride	1.0	U	1.0	0.21
108-90-7	Chlorobenzene	1.0	U	1.0	0.38
67-66-3	Chloroform	1.0	U	1.0	0.33
156-59-2	cis-1,2-Dichloroethene	1.0	U	1.0	0.22
100-41-4	Ethylbenzene	1.0	U	1.0	0.30
1634-04-4	Methyl tert-butyl ether	1.0	U	1.0	0.22
75-09-2	Methylene Chloride	1.0	U	1.0	0.32
104-51-8	n-Butylbenzene	1.0	U	1.0	0.32
103-65-1	N-Propylbenzene	1.0	U	1.0	0.32
135-98-8	sec-Butylbenzene	1.0	U	1.0	0.37
98-06-6	tert-Butylbenzene	1.0	U	1.0	0.34
127-18-4	Tetrachloroethene	1.0	U	1.0	0.25
108-88-3	Toluene	1.0	U	1.0	0.38
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.24
79-01-6	Trichloroethene	1.0	U	1.0	0.31
75-01-4	Vinyl chloride	1.0	U	1.0	0.17
1330-20-7	Xylenes, Total	2.0	U	2.0	0.65

FORM I  
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Edison Job No.: 460-223616-1  
 SDG No.:  
 Client Sample ID: OU2-MW1\_20201124 Lab Sample ID: 460-223616-3  
 Matrix: Water Lab File ID: N028857.d  
 Analysis Method: 8270E Date Collected: 11/24/2020 09:00  
 Extract. Method: 3510C Date Extracted: 11/28/2020 14:42  
 Sample wt/vol: 250 (mL) Date Analyzed: 11/28/2020 19:53  
 Con. Extract Vol.: 2 (mL) Dilution Factor: 1  
 Injection Volume: 5 (uL) Level: (low/med) Low  
 % Moisture: GPC Cleanup: (Y/N) N  
 Analysis Batch No.: 742909 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
95-48-7	2-Methylphenol	10	U	10	0.67
15831-10-4	3 & 4 Methylphenol	10	U	10	0.64
83-32-9	Acenaphthene	10	U	10	1.1
208-96-8	Acenaphthylene	10	U	10	0.82
120-12-7	Anthracene	10	U	10	1.3
56-55-3	Benzo[a]anthracene	1.0	U * UJ	1.0	0.59
50-32-8	Benzo[a]pyrene	1.0	U	1.0	0.41
205-99-2	Benzo[b]fluoranthene	2.0	U	2.0	0.68
191-24-2	Benzo[g,h,i]perylene	10	U	10	0.70
207-08-9	Benzo[k]fluoranthene	1.0	U	1.0	0.67
218-01-9	Chrysene	10	U * UJ	10	0.91
53-70-3	Dibenz(a,h)anthracene	1.0	U	1.0	0.72
132-64-9	Dibenzofuran	10	U	10	1.1
206-44-0	Fluoranthene	10	U	10	0.84
86-73-7	Fluorene	10	U	10	0.91
118-74-1	Hexachlorobenzene	1.0	U	1.0	0.40
193-39-5	Indeno[1,2,3-cd]pyrene	2.0	U	2.0	0.94
91-20-3	Naphthalene	4.7		2.0	0.54
87-86-5	Pentachlorophenol	30	U * UJ	30	1.4
85-01-8	Phenanthrene	10	U	10	1.3
108-95-2	Phenol	10	U	10	0.29
129-00-0	Pyrene	10	U * UJ	10	1.6

CAS NO.	SURROGATE	%REC	Q	LIMITS
118-79-6	2,4,6-Tribromophenol (Surr)	107		36-159
321-60-8	2-Fluorobiphenyl	61		42-127
367-12-4	2-Fluorophenol (Surr)	35		18-72
4165-60-0	Nitrobenzene-d5 (Surr)	55		46-137
4165-62-2	Phenol-d5 (Surr)	21		10-50
1718-51-0	Terphenyl-d14 (Surr)	68		39-150

FORM I  
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Edison Job No.: 460-223616-1  
 SDG No.:  
 Client Sample ID: OU2-MW32\_20201124 Lab Sample ID: 460-223616-4  
 Matrix: Water Lab File ID: N028860.d  
 Analysis Method: 8270E Date Collected: 11/24/2020 11:00  
 Extract. Method: 3510C Date Extracted: 11/28/2020 14:42  
 Sample wt/vol: 250 (mL) Date Analyzed: 11/28/2020 20:56  
 Con. Extract Vol.: 2 (mL) Dilution Factor: 1  
 Injection Volume: 5 (uL) Level: (low/med) Low  
 % Moisture: GPC Cleanup: (Y/N) N  
 Analysis Batch No.: 742909 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
95-48-7	2-Methylphenol	10	U	10	0.67
15831-10-4	3 & 4 Methylphenol	10	U	10	0.64
83-32-9	Acenaphthene	10	U	10	1.1
208-96-8	Acenaphthylene	10	U	10	0.82
120-12-7	Anthracene	10	U	10	1.3
56-55-3	Benzo[a]anthracene	1.0	U* UJ	1.0	0.59
50-32-8	Benzo[a]pyrene	1.0	U	1.0	0.41
205-99-2	Benzo[b]fluoranthene	2.0	U	2.0	0.68
191-24-2	Benzo[g, h, i]perylene	10	U	10	0.70
207-08-9	Benzo[k]fluoranthene	1.0	U	1.0	0.67
218-01-9	Chrysene	10	U* UJ	10	0.91
53-70-3	Dibenz(a, h)anthracene	1.0	U	1.0	0.72
132-64-9	Dibenzofuran	10	U	10	1.1
206-44-0	Fluoranthene	10	U	10	0.84
86-73-7	Fluorene	10	U	10	0.91
118-74-1	Hexachlorobenzene	1.0	U	1.0	0.40
193-39-5	Indeno[1, 2, 3-cd]pyrene	2.0	U	2.0	0.94
91-20-3	Naphthalene	2.0	U	2.0	0.54
87-86-5	Pentachlorophenol	30	U* UJ	30	1.4
85-01-8	Phenanthrene	10	U	10	1.3
108-95-2	Phenol	10	U	10	0.29
129-00-0	Pyrene	10	U* UJ	10	1.6

CAS NO.	SURROGATE	%REC	Q	LIMITS
118-79-6	2, 4, 6-Tribromophenol (Surr)	87		36-159
321-60-8	2-Fluorobiphenyl	61		42-127
367-12-4	2-Fluorophenol (Surr)	36		18-72
4165-60-0	Nitrobenzene-d5 (Surr)	78		46-137
4165-62-2	Phenol-d5 (Surr)	24		10-50
1718-51-0	Terphenyl-d14 (Surr)	72		39-150

for 3123/M

FORM I  
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Edison

Job No.: 460-223616-1

SDG No.:

Client Sample ID: OU2-MWX\_20201124

Lab Sample ID: 460-223616-5

Matrix: Water

*OU2-MWX-20201124*

Lab File ID: N028861.d

Analysis Method: 8270E

Date Collected: 11/24/2020 00:00

Extract. Method: 3510C

Date Extracted: 11/28/2020 14:42

Sample wt/vol: 250 (mL)

Date Analyzed: 11/28/2020 21:17

Con. Extract Vol.: 2 (mL)

Dilution Factor: 1

Injection Volume: 5 (uL)

Level: (low/med) Low

% Moisture:

GPC Cleanup: (Y/N) N

Analysis Batch No.: 742909

Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
95-48-7	2-Methylphenol	10	U	10	0.67
15831-10-4	3 & 4 Methylphenol	10	U	10	0.64
83-32-9	Acenaphthene	10	U	10	1.1
208-96-8	Acenaphthylene	10	U	10	0.82
120-12-7	Anthracene	10	U	10	1.3
56-55-3	Benzo[a]anthracene	1.0	<i>U* UJ</i>	1.0	0.59
50-32-8	Benzo[a]pyrene	1.0	U	1.0	0.41
205-99-2	Benzo[b]fluoranthene	2.0	U	2.0	0.68
191-24-2	Benzo[g,h,i]perylene	10	U	10	0.70
207-08-9	Benzo[k]fluoranthene	1.0	U	1.0	0.67
218-01-9	Chrysene	10	<i>U* UJ</i>	10	0.91
53-70-3	Dibenz(a,h)anthracene	1.0	U	1.0	0.72
132-64-9	Dibenzofuran	10	U	10	1.1
206-44-0	Fluoranthene	10	U	10	0.84
86-73-7	Fluorene	10	U	10	0.91
118-74-1	Hexachlorobenzene	1.0	U	1.0	0.40
193-39-5	Indeno[1,2,3-cd]pyrene	2.0	U	2.0	0.94
91-20-3	Naphthalene	2.0	U	2.0	0.54
87-86-5	Pentachlorophenol	30	<i>U* UJ</i>	30	1.4
85-01-8	Phenanthrene	10	U	10	1.3
108-95-2	Phenol	10	U	10	0.29
129-00-0	Pyrene	10	<i>U* UJ</i>	10	1.6

CAS NO.	SURROGATE	%REC	Q	LIMITS
118-79-6	2,4,6-Tribromophenol (Surr)	58		36-159
321-60-8	2-Fluorobiphenyl	82		42-127
367-12-4	2-Fluorophenol (Surr)	28		18-72
4165-60-0	Nitrobenzene-d5 (Surr)	101		46-137
4165-62-2	Phenol-d5 (Surr)	20		10-50
1718-51-0	Terphenyl-d14 (Surr)	79		39-150

FORM I  
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Edison Job No.: 460-223616-1  
 SDG No.:  
 Client Sample ID: OU2-MW15\_20201124 Lab Sample ID: 460-223616-6  
 Matrix: Water Lab File ID: P093882.D  
 Analysis Method: 8270E Date Collected: 11/24/2020 12:30  
 Extract. Method: 3510C Date Extracted: 11/28/2020 14:42  
 Sample wt/vol: 250 (mL) Date Analyzed: 12/01/2020 01:20  
 Con. Extract Vol.: 2 (mL) Dilution Factor: 1  
 Injection Volume: 5 (uL) Level: (low/med) Low  
 % Moisture: GPC Cleanup: (Y/N) N  
 Analysis Batch No.: 743549 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
95-48-7	2-Methylphenol	10	U	10	0.67
15831-10-4	3 & 4 Methylphenol	10	U	10	0.64
83-32-9	Acenaphthene	10	U	10	1.1
208-96-8	Acenaphthylene	10	U	10	0.82
120-12-7	Anthracene	10	U	10	1.3
56-55-3	Benzo[a]anthracene	1.0	U* UJ	1.0	0.59
50-32-8	Benzo[a]pyrene	1.0	U	1.0	0.41
205-99-2	Benzo[b]fluoranthene	2.0	U	2.0	0.68
191-24-2	Benzo[g,h,i]perylene	10	U* UJ	10	0.70
207-08-9	Benzo[k]fluoranthene	1.0	U	1.0	0.67
218-01-9	Chrysene	10	U* UJ	10	0.91
53-70-3	Dibenz(a,h)anthracene	1.0	U* UJ	1.0	0.72
132-64-9	Dibenzofuran	10	U	10	1.1
206-44-0	Fluoranthene	10	U	10	0.84
86-73-7	Fluorene	10	U	10	0.91
118-74-1	Hexachlorobenzene	1.0	U	1.0	0.40
193-39-5	Indeno[1,2,3-cd]pyrene	2.0	U* UJ	2.0	0.94
91-20-3	Naphthalene	2.0	U	2.0	0.54
87-86-5	Pentachlorophenol	30	U	30	1.4
85-01-8	Phenanthrene	10	U	10	1.3
108-95-2	Phenol	10	U	10	0.29
129-00-0	Pyrene	10	U* UJ	10	1.6

CAS NO.	SURROGATE	%REC	Q	LIMITS
118-79-6	2,4,6-Tribromophenol (Surr)	131		36-159
321-60-8	2-Fluorobiphenyl	116		42-127
367-12-4	2-Fluorophenol (Surr)	35		18-72
4165-60-0	Nitrobenzene-d5 (Surr)	65		46-137
4165-62-2	Phenol-d5 (Surr)	16		10-50
1718-51-0	Terphenyl-d14 (Surr)	92		39-150

for 3123121

FORM I  
PESTICIDES ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Edison Job No.: 460-223616-1  
 SDG No.:  
 Client Sample ID: OU2-MW1\_20201124 Lab Sample ID: 460-223616-3  
 Matrix: Water Lab File ID: PEST0023098.D  
 Analysis Method: 8081B Date Collected: 11/24/2020 09:00  
 Extraction Method: 3510C Date Extracted: 11/28/2020 14:50  
 Sample wt/vol: 250 (mL) Date Analyzed: 11/30/2020 11:41  
 Con. Extract Vol.: 1 (mL) Dilution Factor: 1  
 Injection Volume: 1 (uL) GC Column: Rtx-CLP ID: 0.53 (mm)  
 % Moisture:  GPC Cleanup: (Y/N) N  
 Analysis Batch No.: 743339 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
72-54-8	4,4'-DDD	0.020	U	0.020	0.0060
72-55-9	4,4'-DDE	0.020	U	0.020	0.0020
50-29-3	4,4'-DDT	0.020	U	0.020	0.0040
309-00-2	Aldrin	0.020	U	0.020	0.0030
319-84-6	alpha-BHC	0.020	U	0.020	0.0070
319-85-7	beta-BHC	0.020	U	0.020	0.0040
12789-03-6	Chlordane (technical)	0.50	U	0.50	0.055
5103-71-9	cis-Chlordane	0.020	U	0.020	0.0020
319-86-8	delta-BHC	0.020	U	0.020	0.0050
60-57-1	Dieldrin	0.020	U	0.020	0.0030
959-98-8	Endosulfan I	0.020	U	0.020	0.0020
33213-65-9	Endosulfan II	0.020	U	0.020	0.0040
1031-07-8	Endosulfan sulfate	0.020	U	0.020	0.0060
72-20-8	Endrin	0.020	U	0.020	0.0040
7421-93-4	Endrin aldehyde	0.020	U	0.020	0.0080
53494-70-5	Endrin ketone	0.020	U	0.020	0.0080
58-89-9	gamma-BHC (Lindane)	0.020	U	0.020	0.012
76-44-8	Heptachlor	0.020	U	0.020	0.0030
1024-57-3	Heptachlor epoxide	0.020	U	0.020	0.0050
72-43-5	Methoxychlor	0.020	U	0.020	0.0040
8001-35-2	Toxaphene	0.50	U	0.50	0.11

CAS NO.	SURROGATE	%REC	Q	LIMITS
2051-24-3	DCB Decachlorobiphenyl	63		10-132
877-09-8	Tetrachloro-m-xylene	78		10-150

FORM I  
PESTICIDES ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Edison      Job No.: 460-223616-1  
 SDG No.:  
 Client Sample ID: OU2-MW32\_20201124      Lab Sample ID: 460-223616-4  
 Matrix: Water      Lab File ID: PEST0023099.D  
 Analysis Method: 8081B      Date Collected: 11/24/2020 11:00  
 Extraction Method: 3510C      Date Extracted: 11/28/2020 14:50  
 Sample wt/vol: 250 (mL)      Date Analyzed: 11/30/2020 11:54  
 Con. Extract Vol.: 1 (mL)      Dilution Factor: 1  
 Injection Volume: 1 (uL)      GC Column: Rtx-CLP      ID: 0.53 (mm)  
 % Moisture:      GPC Cleanup: (Y/N) N  
 Analysis Batch No.: 743339      Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
72-54-8	4,4'-DDD	0.020	U	0.020	0.0060
72-55-9	4,4'-DDE	0.020	U	0.020	0.0020
50-29-3	4,4'-DDT	0.020	U	0.020	0.0040
309-00-2	Aldrin	0.020	U	0.020	0.0030
319-84-6	alpha-BHC	0.020	U	0.020	0.0070
319-85-7	beta-BHC	0.020	U	0.020	0.0040
12789-03-6	Chlordane (technical)	0.50	U	0.50	0.055
5103-71-9	cis-Chlordane	0.020	U	0.020	0.0020
319-86-8	delta-BHC	0.020	U	0.020	0.0050
60-57-1	Dieldrin	0.020	U	0.020	0.0030
959-98-8	Endosulfan I	0.020	U	0.020	0.0020
33213-65-9	Endosulfan II	0.020	U	0.020	0.0040
1031-07-8	Endosulfan sulfate	0.020	U	0.020	0.0060
72-20-8	Endrin	0.020	U	0.020	0.0040
7421-93-4	Endrin aldehyde	0.020	U	0.020	0.0080
53494-70-5	Endrin ketone	0.020	U	0.020	0.0080
58-89-9	gamma-BHC (Lindane)	0.020	U	0.020	0.012
76-44-8	Heptachlor	0.020	U	0.020	0.0030
1024-57-3	Heptachlor epoxide	0.020	U	0.020	0.0050
72-43-5	Methoxychlor	0.020	U	0.020	0.0040
8001-35-2	Toxaphene	0.50	U	0.50	0.11

CAS NO.	SURROGATE	%REC	Q	LIMITS
2051-24-3	DCB Decachlorobiphenyl	48		10-132
877-09-8	Tetrachloro-m-xylene	77		10-150

FORM I  
PESTICIDES ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Edison Job No.: 460-223616-1  
 SDG No.:  
 Client Sample ID: OU2-MWX 20201124 Lab Sample ID: 460-223616-5  
 Matrix: Water OU2-MWX - 2020/12/4 Lab File ID: PEST0023100.D  
 Analysis Method: 8081B Date Collected: 11/24/2020 00:00  
 Extraction Method: 3510C Date Extracted: 11/28/2020 14:50  
 Sample wt/vol: 250 (mL) Date Analyzed: 11/30/2020 12:06  
 Con. Extract Vol.: 1 (mL) Dilution Factor: 1  
 Injection Volume: 1 (uL) GC Column: Rtx-CLP ID: 0.53 (mm)  
 % Moisture: GPC Cleanup: (Y/N) N  
 Analysis Batch No.: 743339 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
72-54-8	4,4'-DDD	0.020	U	0.020	0.0060
72-55-9	4,4'-DDE	0.020	U	0.020	0.0020
50-29-3	4,4'-DDT	0.020	U	0.020	0.0040
309-00-2	Aldrin	0.020	U	0.020	0.0030
319-84-6	alpha-BHC	0.020	U	0.020	0.0070
319-85-7	beta-BHC	0.020	U	0.020	0.0040
12789-03-6	Chlordane (technical)	0.50	U	0.50	0.055
5103-71-9	cis-Chlordane	0.020	U	0.020	0.0020
319-86-8	delta-BHC	0.020	U	0.020	0.0050
60-57-1	Dieldrin	0.020	U	0.020	0.0030
959-98-8	Endosulfan I	0.020	U	0.020	0.0020
33213-65-9	Endosulfan II	0.020	U	0.020	0.0040
1031-07-8	Endosulfan sulfate	0.020	U	0.020	0.0060
72-20-8	Endrin	0.020	U	0.020	0.0040
7421-93-4	Endrin aldehyde	0.020	U	0.020	0.0080
53494-70-5	Endrin ketone	0.020	U	0.020	0.0080
58-89-9	gamma-BHC (Lindane)	0.020	U	0.020	0.012
76-44-8	Heptachlor	0.020	U	0.020	0.0030
1024-57-3	Heptachlor epoxide	0.020	U	0.020	0.0050
72-43-5	Methoxychlor	0.020	U	0.020	0.0040
8001-35-2	Toxaphene	0.50	U	0.50	0.11

CAS NO.	SURROGATE	%REC	Q	LIMITS
2051-24-3	DCB Decachlorobiphenyl	57		10-132
877-09-8	Tetrachloro-m-xylene	84		10-150

FORM I  
PESTICIDES ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Edison

Job No.: 460-223616-1

SDG No.:

Client Sample ID: OU2-MW15\_20201124

Lab Sample ID: 460-223616-6

Matrix: Water

Lab File ID: PEST0023101.D

Analysis Method: 8081B

Date Collected: 11/24/2020 12:30

Extraction Method: 3510C

Date Extracted: 11/28/2020 14:50

Sample wt/vol: 250 (mL)

Date Analyzed: 11/30/2020 12:18

Con. Extract Vol.: 1 (mL)

Dilution Factor: 1

Injection Volume: 1 (uL)

GC Column: Rtx-CLP ID: 0.53 (mm)

% Moisture:

GPC Cleanup: (Y/N) N

Analysis Batch No.: 743339

Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
72-54-8	4,4'-DDD	0.020	U	0.020	0.0060
72-55-9	4,4'-DDE	0.020	U	0.020	0.0020
50-29-3	4,4'-DDT	0.020	U	0.020	0.0040
309-00-2	Aldrin	0.020	U	0.020	0.0030
319-84-6	alpha-BHC	0.020	U	0.020	0.0070
319-85-7	beta-BHC	0.020	U	0.020	0.0040
12789-03-6	Chlordane (technical)	0.50	U	0.50	0.055
5103-71-9	cis-Chlordane	0.020	U	0.020	0.0020
319-86-8	delta-BHC	0.020	U	0.020	0.0050
60-57-1	Dieldrin	0.020	U	0.020	0.0030
959-98-8	Endosulfan I	0.020	U	0.020	0.0020
33213-65-9	Endosulfan II	0.020	U	0.020	0.0040
1031-07-8	Endosulfan sulfate	0.020	U	0.020	0.0060
72-20-8	Endrin	0.020	U	0.020	0.0040
7421-93-4	Endrin aldehyde	0.020	U	0.020	0.0080
53494-70-5	Endrin ketone	0.020	U	0.020	0.0080
58-89-9	gamma-BHC (Lindane)	0.020	U	0.020	0.012
76-44-8	Heptachlor	0.020	U	0.020	0.0030
1024-57-3	Heptachlor epoxide	0.020	U	0.020	0.0050
72-43-5	Methoxychlor	0.020	U	0.020	0.0040
8001-35-2	Toxaphene	0.50	U	0.50	0.11

CAS NO.	SURROGATE	%REC	Q	LIMITS
2051-24-3	DCB Decachlorobiphenyl	80		10-132
877-09-8	Tetrachloro-m-xylene	88		10-150

FORM I  
PCBS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Edison Job No.: 460-223616-1  
SDG No.:  
Client Sample ID: OU2-MW1\_20201124 Lab Sample ID: 460-223616-3  
Matrix: Water Lab File ID: 14F0008262.D  
Analysis Method: 8082A Date Collected: 11/24/2020 09:00  
Extraction Method: 3510C Date Extracted: 11/28/2020 14:57  
Sample wt/vol: 250 (mL) Date Analyzed: 11/30/2020 23:34  
Con. Extract Vol.: 1 (mL) Dilution Factor: 1  
Injection Volume: 1 (uL) GC Column: CLP-2 ID: 0.53 (mm)  
% Moisture: GPC Cleanup: (Y/N) N  
Analysis Batch No.: 743489 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
12674-11-2	Aroclor 1016	0.40	U	0.40	0.12
11104-28-2	Aroclor 1221	0.40	U	0.40	0.12
11141-16-5	Aroclor 1232	0.40	U	0.40	0.12
53469-21-9	Aroclor 1242	0.40	U	0.40	0.12
12672-29-6	Aroclor 1248	0.40	U	0.40	0.12
11097-69-1	Aroclor 1254	0.40	U	0.40	0.11
11096-82-5	Aroclor 1260	0.40	U	0.40	0.11
37324-23-5	Aroclor-1262	0.40	U	0.40	0.11
11100-14-4	Aroclor 1268	0.40	U	0.40	0.11
1336-36-3	Polychlorinated biphenyls, Total	0.40	U	0.40	0.12

CAS NO.	SURROGATE	%REC	Q	LIMITS
2051-24-3	DCB Decachlorobiphenyl	69		10-150
877-09-8	Tetrachloro-m-xylene	78		48-125

FORM I  
PCBS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Edison Job No.: 460-223616-1  
SDG No.:  
Client Sample ID: OU2-MW32\_20201124 Lab Sample ID: 460-223616-4  
Matrix: Water Lab File ID: 14F0008263.D  
Analysis Method: 8082A Date Collected: 11/24/2020 11:00  
Extraction Method: 3510C Date Extracted: 11/28/2020 14:57  
Sample wt/vol: 250 (mL) Date Analyzed: 11/30/2020 23:51  
Con. Extract Vol.: 1 (mL) Dilution Factor: 1  
Injection Volume: 1 (uL) GC Column: CLP-2 ID: 0.53 (mm)  
% Moisture: GPC Cleanup: (Y/N) N  
Analysis Batch No.: 743489 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
12674-11-2	Aroclor 1016	0.40	U	0.40	0.12
11104-28-2	Aroclor 1221	0.40	U	0.40	0.12
11141-16-5	Aroclor 1232	0.40	U	0.40	0.12
53469-21-9	Aroclor 1242	0.40	U	0.40	0.12
12672-29-6	Aroclor 1248	0.40	U	0.40	0.12
11097-69-1	Aroclor 1254	0.40	U	0.40	0.11
11096-82-5	Aroclor 1260	0.40	U	0.40	0.11
37324-23-5	Aroclor-1262	0.40	U	0.40	0.11
11100-14-4	Aroclor 1268	0.40	U	0.40	0.11
1336-36-3	Polychlorinated biphenyls, Total	0.40	U	0.40	0.12

CAS NO.	SURROGATE	%REC	Q	LIMITS
2051-24-3	DCB Decachlorobiphenyl	57		10-150
877-09-8	Tetrachloro-m-xylene	88		48-125

FORM I  
PCBS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Edison

Job No.: 460-223616-1

SDG No.:

Client Sample ID: OU2-MWX\_20201124

Lab Sample ID: 460-223616-5

Matrix: Water

*OU2-MW32.20201124*

Lab File ID: 14F0008264.D

Analysis Method: 8082A

Date Collected: 11/24/2020 00:00

Extraction Method: 3510C

Date Extracted: 11/28/2020 14:57

Sample wt/vol: 250 (mL)

Date Analyzed: 12/01/2020 00:07

Con. Extract Vol.: 1 (mL)

Dilution Factor: 1

Injection Volume: 1 (uL)

GC Column: CLP-2 ID: 0.53 (mm)

% Moisture:

GPC Cleanup: (Y/N) N

Analysis Batch No.: 743489

Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
12674-11-2	Aroclor 1016	0.40	U	0.40	0.12
11104-28-2	Aroclor 1221	0.40	U	0.40	0.12
11141-16-5	Aroclor 1232	0.40	U	0.40	0.12
53469-21-9	Aroclor 1242	0.40	U	0.40	0.12
12672-29-6	Aroclor 1248	0.40	U	0.40	0.12
11097-69-1	Aroclor 1254	0.40	U	0.40	0.11
11096-82-5	Aroclor 1260	0.40	U	0.40	0.11
37324-23-5	Aroclor-1262	0.40	U	0.40	0.11
11100-14-4	Aroclor 1268	0.40	U	0.40	0.11
1336-36-3	Polychlorinated biphenyls, Total	0.40	U	0.40	0.12

CAS NO.	SURROGATE	%REC	Q	LIMITS
2051-24-3	DCB Decachlorobiphenyl	54		10-150
877-09-8	Tetrachloro-m-xylene	76		48-125

FORM I  
PCBS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Edison Job No.: 460-223616-1  
 SDG No.:  
 Client Sample ID: OU2-MW15\_20201124 Lab Sample ID: 460-223616-6  
 Matrix: Water Lab File ID: 14F0008265.D  
 Analysis Method: 8082A Date Collected: 11/24/2020 12:30  
 Extraction Method: 3510C Date Extracted: 11/28/2020 14:57  
 Sample wt/vol: 250 (mL) Date Analyzed: 12/01/2020 00:24  
 Con. Extract Vol.: 1 (mL) Dilution Factor: 1  
 Injection Volume: 1 (uL) GC Column: CLP-2 ID: 0.53 (mm)  
 % Moisture: GPC Cleanup: (Y/N) N  
 Analysis Batch No.: 743489 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
12674-11-2	Aroclor 1016	0.40	U	0.40	0.12
11104-28-2	Aroclor 1221	0.40	U	0.40	0.12
11141-16-5	Aroclor 1232	0.40	U	0.40	0.12
53469-21-9	Aroclor 1242	0.40	U	0.40	0.12
12672-29-6	Aroclor 1248	0.40	U	0.40	0.12
11097-69-1	Aroclor 1254	0.40	U	0.40	0.11
11096-82-5	Aroclor 1260	0.40	U	0.40	0.11
37324-23-5	Aroclor-1262	0.40	U	0.40	0.11
11100-14-4	Aroclor 1268	0.40	U	0.40	0.11
1336-36-3	Polychlorinated biphenyls, Total	0.40	U	0.40	0.12

CAS NO.	SURROGATE	%REC	Q	LIMITS
2051-24-3	DCB Decachlorobiphenyl	74		10-150
877-09-8	Tetrachloro-m-xylene	92		48-125

1A-IN  
INORGANIC ANALYSIS DATA SHEET  
METALS

Client Sample ID: OU3-MW2\_20201123

Lab Sample ID: 460-223616-1

Lab Name: Eurofins TestAmerica, Edison

Job No.: 460-223616-1

SDG ID.:

Matrix: Water

Date Sampled: 11/23/2020 12:15

Reporting Basis: WET

Date Received: 11/25/2020 18:00

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7440-38-2	Arsenic	1.2	2.0	0.89	ug/L	J		1	6020B
7440-39-3	Barium	286	4.0	0.91	ug/L			1	6020B
7440-41-7	Beryllium	0.80 <del>0.15</del>	0.80	0.098	ug/L	J	B U	1	6020B
7440-43-9	Cadmium	0.22	2.0	0.16	ug/L	J		1	6020B
7440-47-3	Chromium	4.0	4.0	0.69	ug/L			1	6020B
7440-50-8	Copper	6.8	4.0	2.5	ug/L			1	6020B
7439-92-1	Lead	3.1	1.2	0.11	ug/L		P	1	6020B
7439-96-5	Manganese	15400	40.0	5.6	ug/L			5	6020B
7440-02-0	Nickel	5.5	4.0	0.45	ug/L			1	6020B
7782-49-2	Selenium	2.5	2.5	0.46	ug/L	U		1	6020B
7440-22-4	Silver	2.0	2.0	0.19	ug/L	U		1	6020B
7440-66-6	Zinc	23.7	16.0	5.1	ug/L			1	6020B
7439-97-6	Mercury	0.20	0.20	0.091	ug/L	U		1	7470A

for 3/23/2021

IA-IN  
INORGANIC ANALYSIS DATA SHEET  
METALS

Client Sample ID: OU3-MW14\_20201123 Lab Sample ID: 460-223616-2  
 Lab Name: Eurofins TestAmerica, Edison Job No.: 460-223616-1  
 SDG ID.:  
 Matrix: Water Date Sampled: 11/23/2020 14:00  
 Reporting Basis: WET Date Received: 11/25/2020 18:00

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7440-38-2	Arsenic	35.1	2.0	0.89	ug/L			1	6020B
7440-39-3	Barium	245	4.0	0.91	ug/L			1	6020B
7440-41-7	Beryllium	0.80	0.16	0.098	ug/L	J	B U	1	6020B
7440-43-9	Cadmium	2.0	2.0	0.16	ug/L	U		1	6020B
7440-47-3	Chromium	2.9	4.0	0.69	ug/L	J		1	6020B
7440-50-8	Copper	7.8	4.0	2.5	ug/L			1	6020B
7439-92-1	Lead	5.2	1.2	0.11	ug/L		B	1	6020B
7439-96-5	Manganese	9770	8.0	1.1	ug/L			1	6020B
7440-02-0	Nickel	3.6	4.0	0.45	ug/L	J		1	6020B
7782-49-2	Selenium	2.5	2.5	0.46	ug/L	U		1	6020B
7440-22-4	Silver	2.0	2.0	0.19	ug/L	U		1	6020B
7440-66-6	Zinc	23.3	16.0	5.1	ug/L			1	6020B
7439-97-6	Mercury	0.20	0.20	0.091	ug/L	U		1	7470A

for 3/23/21

1A-IN  
INORGANIC ANALYSIS DATA SHEET  
METALS

Client Sample ID: OU2-MW1\_20201124      Lab Sample ID: 460-223616-3  
 Lab Name: Eurofins TestAmerica, Edison      Job No.: 460-223616-1  
 SDG ID.:  
 Matrix: Water      Date Sampled: 11/24/2020 09:00  
 Reporting Basis: WET      Date Received: 11/25/2020 18:00

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7440-38-2	Arsenic	1.6	2.0	0.89	ug/L	J		1	6020B
7440-39-3	Barium	294	4.0	0.91	ug/L			1	6020B
7440-41-7	Beryllium	0.80 <del>0.13</del>	0.80	0.098	ug/L		B U	1	6020B
7440-43-9	Cadmium	2.0	2.0	0.16	ug/L	U		1	6020B
7440-47-3	Chromium	1.0	4.0	0.69	ug/L	J		1	6020B
7440-50-8	Copper	4.0	4.0	2.5	ug/L	U		1	6020B
7439-92-1	Lead	1.3	1.2	0.11	ug/L		-B	1	6020B
7439-96-5	Manganese	4560	8.0	1.1	ug/L			1	6020B
7440-02-0	Nickel	4.0	4.0	0.45	ug/L	U		1	6020B
7782-49-2	Selenium	2.5	2.5	0.46	ug/L	U		1	6020B
7440-22-4	Silver	2.0	2.0	0.19	ug/L	U		1	6020B
7440-66-6	Zinc	6.3	16.0	5.1	ug/L	J		1	6020B
7439-97-6	Mercury	0.20	0.20	0.091	ug/L	U		1	7470A

for 31211

1A-IN  
INORGANIC ANALYSIS DATA SHEET  
METALS

Client Sample ID: OU2-MW32\_20201124

Lab Sample ID: 460-223616-4

Lab Name: Eurofins TestAmerica, Edison

Job No.: 460-223616-1

SDG ID.:

Matrix: Water

Date Sampled: 11/24/2020 11:00

Reporting Basis: WET

Date Received: 11/25/2020 18:00

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7440-38-2	Arsenic	62.7	2.0	0.89	ug/L			1	6020B
7440-39-3	Barium	673	4.0	0.91	ug/L			1	6020B
7440-41-7	Beryllium	0.80 <del>0.39</del>	0.80	0.098	ug/L	J	B U	1	6020B
7440-43-9	Cadmium	2.0	2.0	0.16	ug/L	U		1	6020B
7440-47-3	Chromium	7.9	4.0	0.69	ug/L			1	6020B
7440-50-8	Copper	16.4	4.0	2.5	ug/L			1	6020B
7439-92-1	Lead	22.8	1.2	0.11	ug/L		X B	1	6020B
7439-96-5	Manganese	4210	8.0	1.1	ug/L			1	6020B
7440-02-0	Nickel	10.2	4.0	0.45	ug/L			1	6020B
7782-49-2	Selenium	2.5	2.5	0.46	ug/L	U		1	6020B
7440-22-4	Silver	2.0	2.0	0.19	ug/L	U		1	6020B
7440-66-6	Zinc	32.2	16.0	5.1	ug/L			1	6020B
7439-97-6	Mercury	0.20	0.20	0.091	ug/L	U		1	7470A

for 3/23/21

IA-IN  
INORGANIC ANALYSIS DATA SHEET  
METALS

Client Sample ID: OU2-MWX\_20201124 **OU2-MW32-20201124** Lab Sample ID: 460-223616-5  
 Lab Name: Eurofins TestAmerica, Edison Job No.: 460-223616-1  
 SDG ID.:  
 Matrix: Water Date Sampled: 11/24/2020 00:00  
 Reporting Basis: WET Date Received: 11/25/2020 18:00

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7440-38-2	Arsenic	76.9	2.0	0.89	ug/L			1	6020B
7440-39-3	Barium	716	4.0	0.91	ug/L			1	6020B
7440-41-7	Beryllium	0.80 <del>0.40</del>	0.80	0.098	ug/L	J	B U	1	6020B
7440-43-9	Cadmium	2.0	2.0	0.16	ug/L	U		1	6020B
7440-47-3	Chromium	7.3	4.0	0.69	ug/L			1	6020B
7440-50-8	Copper	18.4	4.0	2.5	ug/L			1	6020B
7439-92-1	Lead	21.0	1.2	0.11	ug/L		B	1	6020B
7439-96-5	Manganese	5170	8.0	1.1	ug/L			1	6020B
7440-02-0	Nickel	9.8	4.0	0.45	ug/L			1	6020B
7782-49-2	Selenium	2.5	2.5	0.46	ug/L	U		1	6020B
7440-22-4	Silver	2.0	2.0	0.19	ug/L	U		1	6020B
7440-66-6	Zinc	33.7	16.0	5.1	ug/L			1	6020B
7439-97-6	Mercury	0.20	0.20	0.091	ug/L	U		1	7470A

for  
3/23/21

1A-IN  
INORGANIC ANALYSIS DATA SHEET  
METALS

Client Sample ID: OU2-MW15\_20201124 Lab Sample ID: 460-223616-6  
 Lab Name: Eurofins TestAmerica, Edison Job No.: 460-223616-1  
 SDG ID.:  
 Matrix: Water Date Sampled: 11/24/2020 12:30  
 Reporting Basis: WET Date Received: 11/25/2020 18:00

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7440-38-2	Arsenic	4.6	2.0	0.89	ug/L			1	6020B
7440-39-3	Barium	193	4.0	0.91	ug/L			1	6020B
7440-41-7	Beryllium	0.80	0.098	0.80	ug/L	J	B U	1	6020B
7440-43-9	Cadmium	0.33	2.0	0.16	ug/L	J		1	6020B
7440-47-3	Chromium	2.0	4.0	0.69	ug/L	J		1	6020B
7440-50-8	Copper	2.5	4.0	2.5	ug/L	J		1	6020B
7439-92-1	Lead	1.6	1.2	0.11	ug/L		B	1	6020B
7439-96-5	Manganese	1530	8.0	1.1	ug/L			1	6020B
7440-02-0	Nickel	2.4	4.0	0.45	ug/L	J		1	6020B
7782-49-2	Selenium	2.5	2.5	0.46	ug/L	U		1	6020B
7440-22-4	Silver	2.0	2.0	0.19	ug/L	U		1	6020B
7440-66-6	Zinc	13.1	16.0	5.1	ug/L	J		1	6020B
7439-97-6	Mercury	0.20	0.20	0.091	ug/L	U		1	7470A

for 3/23/21

1A-IN  
INORGANIC ANALYSIS DATA SHEET  
METALS

Client Sample ID: OU3-MW4\_20201124      Lab Sample ID: 460-223616-9  
 Lab Name: Eurofins TestAmerica, Edison      Job No.: 460-223616-1  
 SDG ID.:  
 Matrix: Water      Date Sampled: 11/24/2020 13:35  
 Reporting Basis: WET      Date Received: 11/25/2020 18:00

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7440-38-2	Arsenic	6.5	2.0	0.89	ug/L			1	6020B
7440-39-3	Barium	271	4.0	0.91	ug/L			1	6020B
7440-41-7	Beryllium	0.80	0.80	0.098	ug/L	U		1	6020B
7440-43-9	Cadmium	2.0	2.0	0.16	ug/L	U		1	6020B
7440-47-3	Chromium	1.4	4.0	0.69	ug/L	J		1	6020B
7440-50-8	Copper	3.2	4.0	2.5	ug/L	J		1	6020B
7439-92-1	Lead	4.0	1.2	0.11	ug/L		P	1	6020B
7439-96-5	Manganese	34500	40.0	5.6	ug/L			5	6020B
7440-02-0	Nickel	0.75	4.0	0.45	ug/L	J		1	6020B
7782-49-2	Selenium	2.5	2.5	0.46	ug/L	U		1	6020B
7440-22-4	Silver	2.0	2.0	0.19	ug/L	U		1	6020B
7440-66-6	Zinc	94.6	16.0	5.1	ug/L			1	6020B
7439-97-6	Mercury	0.20	0.20	0.091	ug/L	U		1	7470A

for 3/23/21

1A-IN  
INORGANIC ANALYSIS DATA SHEET  
METALS

Client Sample ID: OU3-MW17\_20201124 Lab Sample ID: 460-223616-10  
 Lab Name: Eurofins TestAmerica, Edison Job No.: 460-223616-1  
 SDG ID.:  
 Matrix: Water Date Sampled: 11/24/2020 14:40  
 Reporting Basis: WET Date Received: 11/25/2020 18:00

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7440-38-2	Arsenic	2.0	2.0	0.89	ug/L	U		1	6020B
7440-39-3	Barium	136	4.0	0.91	ug/L			1	6020B
7440-41-7	Beryllium	0.80	0.80	0.098	ug/L	U		1	6020B
7440-43-9	Cadmium	2.0	2.0	0.16	ug/L	U		1	6020B
7440-47-3	Chromium	1.5	4.0	0.69	ug/L	J		1	6020B
7440-50-8	Copper	4.0	4.0	2.5	ug/L	U		1	6020B
7439-92-1	Lead	2.0	1.2	0.11	ug/L		B	1	6020B
7439-96-5	Manganese	352	8.0	1.1	ug/L			1	6020B
7440-02-0	Nickel	2.0	4.0	0.45	ug/L	J		1	6020B
7782-49-2	Selenium	2.5	2.5	0.46	ug/L	U		1	6020B
7440-22-4	Silver	2.0	2.0	0.19	ug/L	U		1	6020B
7440-66-6	Zinc	7.0	16.0	5.1	ug/L	J		1	6020B
7439-97-6	Mercury	0.20	0.20	0.091	ug/L	U		1	7470A

for 312312

## **APPENDIX C**



**Enclosure 2**  
**NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION**  
**Site Management Periodic Review Report Notice**  
**Institutional and Engineering Controls Certification Form**



**Site No.** C353014

**Site Details**

**Box 1**

**Site Name** Adelaar

Site Address: Concord Road      Zip Code: 12751  
City/Town: Kiamesha Lake  
County: Sullivan  
Site Acreage: 12.534

Reporting Period: April 28, 2020 to April 28, 2021

YES    NO

1. Is the information above correct?

If NO, include handwritten above or on a separate sheet.

2. Has some or all of the site property been sold, subdivided, merged, or undergone a tax map amendment during this Reporting Period?

3. Has there been any change of use at the site during this Reporting Period (see 6NYCRR 375-1.11(d))?

4. Have any federal, state, and/or local permits (e.g., building, discharge) been issued for or at the property during this Reporting Period?

**If you answered YES to questions 2 thru 4, include documentation or evidence that documentation has been previously submitted with this certification form.**

5. Is the site currently undergoing development?

**Box 2**

YES    NO

6. Is the current site use consistent with the use(s) listed below?

7. Are all ICs in place and functioning as designed?

**IF THE ANSWER TO EITHER QUESTION 6 OR 7 IS NO, sign and date below and DO NOT COMPLETE THE REST OF THIS FORM. Otherwise continue.**

**A Corrective Measures Work Plan must be submitted along with this form to address these issues.**

Signature of Owner, Remedial Party or Designated Representative

Date

**Box 2A**

8. Has any new information revealed that assumptions made in the Qualitative Exposure Assessment regarding offsite contamination are no longer valid?

YES      NO  
     

**If you answered YES to question 8, include documentation or evidence that documentation has been previously submitted with this certification form.**

9. Are the assumptions in the Qualitative Exposure Assessment still valid?  
(The Qualitative Exposure Assessment must be certified every five years)

**If you answered NO to question 9, the Periodic Review Report must include an updated Qualitative Exposure Assessment based on the new assumptions.**

**SITE NO. C353014****Box 3****Description of Institutional Controls**

<u>Parcel</u>	<u>Owner</u>	<u>Institutional Control</u>
<b>15-1-14.4</b>	EPR Concord II, L.P.	Ground Water Use Restriction Landuse Restriction Building Use Restriction Monitoring Plan Site Management Plan IC/EC Plan
		The controlled property may be used for Restricted Residential as described in 6 NYCRR Part 375-1.8(g)(2)(ii), Commercial as described in 6 NYCRR Part 375-1.8(g)(2)(iii) and Industrial as described in 6 NYCRR Part 375-1.8(g)(2)(iv). The controlled property is not to be used for Residential purposes as define in 6 NYCRR Part 375-1.8(g)(2)(i).
		The use of groundwater beneath the property is prohibited without necessary water quality treatment as determined by the NYSDOH or Sullivan County Department of Health, and prior written notification and permission from the Department.
		All future development of the controlled property must be conducted in accordance with the Department-approved Site Management Plan.
		Reporting of required site monitoring to the Department as outlined in the Site Management Plan. This includes an annual site-wide inspection to assess basic site conditions; inspection of the cover system at OU-2; and groundwater monitoring at OU-2 and OU-3.
<b>15-1-50.1</b>	EPR Concord II, L.P.	Ground Water Use Restriction Landuse Restriction Building Use Restriction Monitoring Plan Site Management Plan IC/EC Plan
		The controlled property may be used for Restricted Residential as described in 6 NYCRR Part 375-1.8(g)(2)(ii), Commercial as described in 6 NYCRR Part 375-1.8(g)(2)(iii) and Industrial as described in 6 NYCRR Part 375-1.8(g)(2)(iv). The controlled property is not to be used for Residential purposes as define in 6 NYCRR Part 375-1.8(g)(2)(i).
		The use of groundwater beneath the property is prohibited without necessary water quality treatment as determined by the NYSDOH or Sullivan County Department of Health, and prior written notification and permission from the Department.
		All future development of the controlled property must be conducted in accordance with the Department-approved Site Management Plan.
		Reporting of required site monitoring to the Department as outlined in the Site Management Plan. This includes an annual site-wide inspection to assess basic site conditions; inspection of the cover system at OU-2; and groundwater monitoring at OU-2 and OU-3.
<b>15-1-50.2</b>	EPR Concord II, L.P.	Ground Water Use Restriction Landuse Restriction Building Use Restriction Monitoring Plan Site Management Plan IC/EC Plan
		The controlled property may be used for Restricted Residential as described in 6 NYCRR Part 375-1.8(g)(2)(ii), Commercial as described in 6 NYCRR Part 375-1.8(g)(2)(iii) and Industrial as described in 6 NYCRR Part 375-1.8(g)(2)(iv). The controlled property is not to be used for Residential purposes as define in 6 NYCRR Part 375-1.8(g)(2)(i).
		The use of groundwater beneath the property is prohibited without necessary water quality treatment as determined by the NYSDOH or Sullivan County Department of Health, and prior written notification and

permission from the Department.

All future development of the controlled property must be conducted in accordance with the Department-approved Site Management Plan.

Reporting of required site monitoring to the Department as outlined in the Site Management Plan. This includes an annual site-wide inspection to assess basic site conditions; inspection of the cover system at OU-2; and groundwater monitoring at OU-2 and OU-3.

**Box 4**

**Description of Engineering Controls**

<u>Parcel</u>	<u>Engineering Control</u>
<b>15-1-14.4</b>	Monitoring Wells
<b>15-1-50.1</b>	Cover System Monitoring Wells
<b>15-1-50.2</b>	Monitoring Wells

A cover system is in place at OU-2 over the consolidated landfill area in the southern portion of the site. The cover system consists of a minimum 12 inches of clean soil placed over an orange demarcation layer. The cover system is in place only on a portion of tax lot 15-1-50.1.

**Periodic Review Report (PRR) Certification Statements**

1. I certify by checking "YES" below that:

- a) the Periodic Review report and all attachments were prepared under the direction of, and reviewed by, the party making the Engineering Control certification;
- b) to the best of my knowledge and belief, the work and conclusions described in this certification are in accordance with the requirements of the site remedial program, and generally accepted engineering practices; and the information presented is accurate and compete.

YES      NO

2. For each Engineering control listed in Box 4, I certify by checking "YES" below that all of the following statements are true:

- (a) The Engineering Control(s) employed at this site is unchanged since the date that the Control was put in-place, or was last approved by the Department;
- (b) nothing has occurred that would impair the ability of such Control, to protect public health and the environment;
- (c) access to the site will continue to be provided to the Department, to evaluate the remedy, including access to evaluate the continued maintenance of this Control;
- (d) nothing has occurred that would constitute a violation or failure to comply with the Site Management Plan for this Control; and
- (e) if a financial assurance mechanism is required by the oversight document for the site, the mechanism remains valid and sufficient for its intended purpose established in the document.

YES      NO

**IF THE ANSWER TO QUESTION 2 IS NO, sign and date below and  
DO NOT COMPLETE THE REST OF THIS FORM. Otherwise continue.**

**A Corrective Measures Work Plan must be submitted along with this form to address these issues.**

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Signature of Owner, Remedial Party or Designated Representative

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Date

IC CERTIFICATIONS  
SITE NO. C353014

Box 6

**SITE OWNER OR DESIGNATED REPRESENTATIVE SIGNATURE**

I certify that all information and statements in Boxes 1,2, and 3 are true. I understand that a false statement made herein is punishable as a Class "A" misdemeanor, pursuant to Section 210.45 of the Penal Law.

I Craig L. Evans at 909 Walnut, Suite 200, Kansas City, MO 64106,  
print name print business address

am certifying as Vice President of EPR TRS Holdings, Inc. (Owner or Remedial Party)  
general partner of EPR Concord II, L.P.

for the Site named in the Site Details Section of this form.

Craig L. Evans

Signature of Owner, Remedial Party, or Designated Representative  
Rendering Certification

April 28, 2021

Date

## EC CERTIFICATIONS

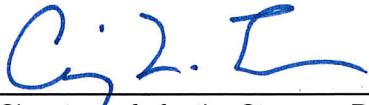
Box 7

### Signature

I certify that all information in Boxes 4 and 5 are true. I understand that a false statement made herein is punishable as a Class "A" misdemeanor, pursuant to Section 210.45 of the Penal Law.

I Craig L. Evans at 909 Walnut, Suite 200, Kansas City, MO 64106,  
print name print business address

am certifying as a for the Vice President of EPR TRS Holdings, Inc.,  
general partner of EPR Concord II, L.P.(Owner or Remedial Party)



Signature of , for the Owner or Remedial Party,  
Rendering Certification

Stamp  
(Required for PE)

April 28, 2021

Date