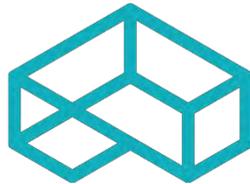


**INTERIM MEASURES POST CONSTRUCTION REPORT  
SOLID WASTE MANAGEMENT UNIT 50  
ELLIOTT DITCH REACH 3 ISOLATED SOIL REMEDIATION  
(ADDENDUM TO VFC DOCUMENT NO. 83273855)**

**ARCONIC LAFAYETTE, LLC  
3131 EAST MAIN STREET  
LAFAYETTE, INDIANA 47905**

**PREPARED FOR:**



**ARCONIC**

**ARCONIC CORP.**

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**CEC PROJECT 315-052.0013**

**JANUARY 2023**



**Civil & Environmental Consultants, Inc.**

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## 1.0 INTRODUCTION

This Post Construction Report (PCR) has been prepared to document the isolated soil remediation in Reach 3 of Elliott Ditch performed as part of the Interim Measures Project (IM Project) at Solid Waste Management Unit (SWMU) 50, also known as Outfall 001/Elliott Ditch/Wea Creek, situated roughly 1-mile south of the Arconic Lafayette LLC Facility (Facility) property located at 3131 East Main Street, Lafayette, Indiana. These activities were performed per the *RCRA Corrective Action Interim Measures Work Plan* (IMWP) for Elliott Ditch Reaches 1-3 Sediment and Isolated Soil Remediation, prepared by Civil & Environmental Consultants, Inc. (CEC), and dated June 2020. The IMWP was approved by the Indiana Department of Environmental Management (IDEM), Office of Land Quality (OLQ) via letter dated June 10, 2021, and risk-based approval was provided by the U.S. Environmental Protection Agency (EPA), Region 5, via letter dated May 25, 2021. The risk-based remedial objective (RBRO) for this IM Project is 1.0 milligram per kilogram (mg/Kg). The IMWP can be found on the IDEM Virtual File Cabinet (VFC) as Document Number 83144797.

This PCR is an addendum to the January 2022 PCR that documented other IM Project activities in Reaches 1-3 of Elliott Ditch, part of SWMU 50. The previous PCR can be found on the IDEM VFC as Document Number 83273855.

## 1.2 ELLIOTT DITCH REACH 3 DESCRIPTION AND LOCATION

Elliott Ditch is a tributary to Wea Creek, which is a tributary to the Wabash River, just downstream of Lafayette, Indiana. Please refer to **Figure 1** and **Figure 2** for the location of Elliott Ditch, its associated streams, and the location of this portion of the IM Project. The ditch is identified as a regulated drain until the 9<sup>th</sup> Street crossing, slightly more than 1.60 miles downstream of Facility Outfall 001. The Tippecanoe Country Drainage board maintains the regulated drains within the county, subject to Indiana Code (IC) 36-9-27. Regulated drains include an easement that typically extends 75-feet (ft) from the top of each bank. These easements are intended to provide access for maintenance activities to support proper functionality of the drain.

Elliott Ditch receives wastewater and storm water discharges from local, industrial sources some of which are monitored under the National Pollution Discharge Elimination System. (NPDES). Part of the flow to Elliott Ditch includes receiving water from a NPDES permitted outfall (Outfall 001) of the Facility. Water from Outfall 001 discharges to Elliott Ditch approximately 1-mile south of the Facility. Discharge from the outfall includes treated sanitary and industrial process water, as well as storm water. The distance from Outfall 001 to the Elliott Ditch and Wea Creek confluence is 4.1 miles and to the Wabash River and Wea Creek confluence is 7.5 miles.

This PCR addendum highlights the remediation work performed on residential and municipal properties in Reach 3 along Elliott Ditch. Reach 3 begins at the South 18<sup>th</sup> Street bridge crossing over Elliott Ditch and extends just downstream of the Duke Energy substation, roughly 1.59 miles from Arconic Outfall 001. Reach 3 has a relatively straight channel with only minor meandering. The channel gradient is about 8-ft/mile and is deeply incised with steep ditch banks. The soil subject of this IM Project was an overbank deposit on the north side of Elliott Ditch extending from the 18<sup>th</sup> Street bridge downstream approximately 700-ft. Six private properties are present within this area. In this PCR, referenced properties are referred to as Subject Property 1 through Subject Property 6. Distances from the South 18<sup>th</sup> Street bridge crossing to where the subject property begins is provided below.

<b>Subject Property No.</b>	<b>Distance from S. 18<sup>th</sup> Street Bridge</b>
Subject Property 1	Adjacent to S. 18 <sup>th</sup> Street
Subject Property 2	215-ft, southwest
Subject Property 3	245-ft, southwest
Subject Property 4	430-ft, southwest
Subject Property 5	585-ft, southwest
Subject Property 6	705-ft, southwest

### **1.3 REACHES 1-3 2021 REMEDIAL ACTIVITIES**

Arconic’s contractor performed a majority of the IM Project in the summer of 2021. This work included sediment and isolated soil cleanup in Reaches 1 and 2 as well as sediment located on

Duke Energy's property in Reach 3. The remedy included the excavation and offsite disposal of PCB-impacted soil and sediment. Disturbed areas were restored to pre-IM Project conditions using native materials. The remediation of the isolated soil in Reach 3, located on the north bank of Elliott Ditch as described above, was postponed until 2022 as additional Access & Use Agreements (Agreements) were required from the affected property owners prior to proceeding.

## **2.0 REMEDIATION ACTIVITIES**

This portion of the IM Project commenced in mid-September 2022 and was completed in the beginning of November 2022. CEC provided observation of O6 Environmental, LLC (O6ENV), the remedial contractor selected by Arconic to perform this portion of the IM Project. CEC personnel observed the daily activities of O6ENV and provided notes in the form of Daily Reports as discussed in **Section 3.1**. The below sections highlight the major activities associated with the remedial effort.

### **2.1 PRE-PROJECT PERMITTING**

In addition to the permits discussed in the previous PCR, Arconic obtained a new IDEM Construction General Stormwater Permit (CGSP; Permit # INRA10475) for the isolated soil remediation in Reach 3. The CGSP was reviewed and approved by the City of Lafayette (CoL), as the MS4, prior to submission of a Notice of Intent to IDEM. Since completion of the project, the success criteria of the CGSP has been achieved by Arconic and the Notice of Termination has been accepted.

### **2.2 MOBILIZATION AND SITE PREPARATION**

O6ENV mobilized personnel and equipment to Reach 3 of Elliott Ditch on September 20, 2022, to commence site preparation activities. Site preparation started with a review of the health and safety plan, project plans, and work/schedule sequencing. Clearing, grubbing, and installing erosion and sedimentation controls were included in site preparation efforts. Erosion and sedimentation controls included roughly 800-ft of straw wattles installed between the remedial excavation and Elliott Ditch. The wattles were staked into place and silt fencing was installed near the temporary soil staging area. Additionally, a construction entrance was installed along the southern side of Windmill Drive, perpendicular to Elliott Ditch. A traction mat road was constructed and ran north-south from Windmill Drive to Elliott Ditch to provide access for mechanical equipment and haul trucks. Lastly, O6ENV removed residential fences and other structures to provide access to the remediation footprint, as necessary.

O6ENV contracted R.W. Gross & Associates, Inc. (R.W. Gross) to establish survey control. R.W. Gross performed a pre-construction survey and demarcated the extents of the excavation using wooden stakes. Additionally, subsurface utility locating was performed by Ground Penetrating Radar Systems, LLC (GPRS), a third-party contractor, to demarcate the underground utilities in and around the excavation footprint.

TNT Tree Services (TNT) performed select tree clearing during this mobilization to facilitate access to the remedial footprint in Reach 3. A bat habitat survey was performed by an appropriately licensed CEC Biologist in advance of tree removal activities. One tree potentially suitable for bat habitat was demarcated and was not disturbed during this portion of the IM Project. In general, trees and shrubs were cut via chainsaw approximately two inches (in.) above the ground surface. The stump and root balls within the remedial footprint were left in place for removal during the remedial excavation, if necessary. Grasses outside the remedial footprint were mowed down using a brush hog. The cleared trees and shrubs were chipped and disposed of offsite. Please refer to **Figure 2** for a map of the IM Project that depicts the approximate extent of clearing efforts.

### **2.3 PCB-IMPACTED SOIL REMOVAL AND MANAGEMENT**

Isolated areas with soil containing total PCB concentrations greater than the RBRO (1.0 mg/Kg) were targeted for excavation and offsite disposal. Based on soil analytical testing performed during previous assessments, the soil in targeted areas had total PCB concentrations of less than 50 mg/Kg and was managed as non-TSCA. Soil excavation activities began along the eastern excavation boundary, adjacent to S 18th Street, and continued west. The soil was mechanically excavated to depths as defined in the IMWP. Excavated soil was transported via skid steer to a temporary stockpile area near the center of the excavation footprint and adjacent to the traction mat road. In most instances, the remedial contractor depleted the soil stockpile daily for offsite disposal. If soil stockpiling was required overnight, the temporary stockpile area was bermed on all sides with straw wattles and covered with plastic sheeting that was weighted down. The material that was placed in the temporary stockpile was loaded with mechanical equipment directly into haul trucks situated on the traction mat road. The side-rails of the haul trucks were cleaned

of any loose soil, as necessary, prior to mobilizing onto the public road. Lastly, the haul truck operator would tarp the load prior to leaving the site to protect against material displacement during transport.

Disposal of excavated soil was managed under Republic Number 31442126865 for non-amended material originally prepared for and used during the execution of other IM Project activities in Reaches 1 – 3 performed in 2021. Republic was re-notified 15 days prior to the first shipment of material from this portion of the IM Project. Each load was transported under an industrial waste disposal manifest to Republic’s Walnut Creek Landfill, a Subtitle D facility located at 2701 N. State Road 39, Frankfort, Indiana 46041. The landfill weighed each loaded haul truck and provided the weights to O6ENV on a daily basis. In total, 1,653.09 tons of non-TSCA soil was transported offsite for disposal from Reach 3. The disposal summary by load, recertification of the waste profile, the 15-day notification, and manifests have been included in **Appendix II**. A weight summary of soil hauled offsite for disposal by date can be found in **Table 1**.

## **2.4 PRECIPITATION MANAGEMENT**

This portion of the IM Project was only subject to appreciable precipitation on October 25, 2022, which occurred after soil excavation and backfilling was complete and restoration activities remained. As such, there were no open excavations and potential for precipitation to be in contact with PCB-impacted soil. Therefore, precipitation did not require collection and subsequent wastewater treatment for discharge back into Elliott Ditch. In addition, O6ENV did not generate wastewater as part of heavy equipment decontamination activities, as discussed in **Section 2.5**.

## **2.5 BACKFILLING**

Isolated soil areas were backfilled with borrow material consisting of well graded, natural soils in accordance the requirements set forth in the IMWP. The borrow soil was procured from Purdy Materials (Purdy) in Lafayette, Indiana, who provided a clean certification statement. Geotechnical analysis was performed on the backfill to confirm its adherence to the IM Project

specifications. The clean certification statement and geotechnical analysis report have been provided in **Appendix III**.

The excavation areas were restored to grade such that drainage patterns remained similar as they were pre-excavation. The borrow soil was excavated from its source location at Purdy and placed into haul trucks and transported to the Site. The borrow material was temporarily stockpiled along the access road and transported via skid-steer. Once placed, the material was spread to establish loose lifts not exceeding 9-in. Placement occurred in a manner such that equipment did not come in direct contact with completed excavation bottoms. Backfill materials were compacted to a minimum of 90-percent of maximum dry weight according to ASTM D-698 (Standard Proctor Test) using mechanical equipment. In-situ density testing was performed by Patriot Engineering and Environmental, Inc. (Patriot) to confirm that the compaction specification was achieved. The density testing reports from Patriot are included in **Appendix III**.

## **2.6 EXCAVATION EQUIPMENT MANAGEMENT**

Heavy equipment and tools were decontaminated prior to performing backfill operations. The primary means of decontamination involved gross removal (i.e., removal of potentially impacted soil with hand tools) and proper disposal of the removed material with other remediation waste. Heavy equipment and tools that were in contact with potentially impacted soil were also wiped with diesel dampened rags in accordance with 40 CFR 761.79 Decontamination Standards and Procedures. The spent diesel rags were managed with other remediation waste. O6ENV did not generate decontamination water by implementing this process.

## **2.7 SITE RESTORATION**

The topsoil used to complete the backfilling process was procured from Purdy in Lafayette, Indiana. Prior to delivery to the site, the topsoil was analyzed for grain size, total organic carbon, and pH. Results for the topsoil testing and clean certification statement are provided in **Appendix III**. Upon arrival to the site, the topsoil was placed over the cohesive backfill and a 3-inch, loose lift was established prior to sod installation. Topsoil was spread to tie into existing

grade of undisturbed areas and restore the topography to pre-excavation conditions. Additionally, ruts and localized depressions created during the remedial effort were graded and covered with a loose lift of topsoil.

Fertilizer was applied to the topsoil prior to sod placement to compensate for the low organic content. The installation contractor, Exterior View Inc., accepted delivery of the sod on pallets from Purdy after the fertilizer had been successfully applied to the topsoil. The sod was installed starting at the disturbed areas furthest from the access road and working back. The sod was rolled into place to cover the placed fill and tied into the surrounding, undisturbed areas. After installation, O6ENV watered the sod daily for one week. Quarterly sod maintenance will be performed by Exterior View, Inc. beginning in 2023 for one year to assist in establishing the sod. Finally, O6ENV reinstalled removed fencing and reestablished the removed structures.

## **2.8 DEMOBILIZATION**

O6ENV personnel demobilized from the Site immediately following revegetation and watering activities. Equipment, materials, and supplies were also demobilized from the site including the security fencing and IM Project signage. The site was restored to conditions like those that existed prior to performing this phase of the IM Project.

## **2.9 SURVEYING**

Pre-project, post-excavation, and post-backfill surveying was conducted by R.W. Gross. Survey exhibits are provided in **Appendix I**. The final as-built survey was used to confirm the extents and estimate the volume of the placed backfill, estimate the volume of the placed topsoil, as well as to document the conditions immediately following the IM Project.

## **2.10 DEVIATIONS FROM IM WORK PLAN**

The IM Project was conducted in accordance with the approved IM Work Plan with the exception of the following deviation that was communicated to U.S. EPA, Region 5 on October 17, 2022,

via conference call and documented in an October 18, 2022, e-mail from CEC to U.S. EPA, Region 5:

- Over-excavation and resampling activities were performed iteratively in grids ED-R3SL-026 through ED-R3SL-029 due to failed confirmation sample results (i.e., three times following the initial excavation). Additionally, sidewall sample ED-R3SL-SW005 was over-excavated and resampled three times. Confirmation sampling was performed as described in **Section 3.2**. Each over-excavation included the removal of an additional 1.5-ft of soil in the failed grid bottoms prior to resampling. Likewise, the failed sidewall was over-excavated approximately 6-in. each time prior to resampling. Failed confirmation sampling results following over-excavation ranged from 1.1 to 2.6 mg/Kg, total PCBs. After the third iteration of over-excavation and resampling, the overall excavation depth in grids ED-R3SL-026 through ED-R3SL-029 was approximately 5.5 to 6-ft bg.
- The observed soil beyond 4-ft was fill-like, comprised of gravel (1 to 6-inch diameter throughout), sand, and some clay. This area could have been subjected to anthropogenic activities associated with the construction and maintenance of the 18<sup>th</sup> Street bridge crossing over Elliott Ditch and the presence of a sewer main. Activities such as these could be the source of the observed fill material impacted with low-level PCBs. A test pit was advanced to 10-ft bg in ED-R3SL-026 and native soil was confirmed at 9 to 9.5-ft bg.
- Following advancement of the test pit in ED-R3SL-026, Arconic reached out U.S. EPA, Region 5 to discuss field observations, the failed confirmation sample results, and the next steps. Arconic explained that additional excavation may result in destabilizing the upgradient side slope of the excavation and would further impede on private property resulting in damage and potential tree(s) removal. Without additional controls, personnel would not be able to enter the excavation to perform the TSCA composite sampling procedure described in the IMWP. Arconic recommended an alternative approach to excavate each of the remaining grids:
  - Excavate each of the subject grids to the extent practicable and to approximately 10-ft bg, slightly below the observed transition from fill-material to native soil;
  - Dispose of the excavated fill material along with other PCB-impacted soil generated during this phase of the IM Project;
  - Collect a final confirmation sample of the soil present at the bottom of each grid bottom following excavation to approximately 10-ft bg. The final confirmation sample from each grid was to be collected by compositing soil collected in the excavator bucket from the bottom of the excavation; and,
  - Immediately backfill each grid following confirmation sample collection and prior to preceding to the next grid location in order to reduce the potential for slope failure.

Finally, the fourth sidewall sample collected from SW005 slightly exceeded the RBRO at 1.1 mg/Kg; as such, Arconic proposed to suspend additional excavation along the side wall so as to not further damage private property. U.S. EPA, Region 5 ultimately agreed to the approach and Arconic provided an email to memorialize the discussion (email provided in **Appendix VI**).

- Arconic proceeded with excavating, sampling, and backfilling grids ED-R3SL-026 through ED-R3SL-029. Composite samples were collected from the excavator bucket within each of the aforementioned grids. Total PCB sample results associated with ED-R3SL-027 and ED-R3SL-028 were reported less than the RBRO (see sample IDs ED-R3SL-027-4 and ED-R3SL-028-4 in **Table 2**). Total PCB sample results associated with ED-R3SL-026 and ED-R3SL-029 were reported slightly above the RBRO at 2.6 and 1.4 mg/Kg, respectively (see sample IDs ED-R3SL-026-4 and ED-R3SL-029-4 in **Table 2**).

### 3.0 CONSTRUCTION OBSERVATION AND CONFIRMATION SAMPLING

Construction quality assurance was provided during the execution of this portion of the IM Project. Provided in the following subsections are descriptions of the specific efforts that were taken to confirm that this portion IM Project was conducted according to the IMWP.

#### 3.1 FIELD OBSERVATION/DOCUMENTATION

CEC provided observation of O6ENV during the execution of this portion of the IM Project. CEC personnel observed the daily activities of O6ENV and provided notes in the form of Daily Reports. The Daily Reports included descriptions of work activities performed, summary of pertinent discussions, documentation of decisions, agreements or changes that were made, excavation and confirmation sampling progress, analytical results, and photographs that were collected. Copies of the Daily Reports are provided in **Appendix IV**.

#### 3.2 CONFIRMATION SAMPLING

Once excavation activities achieved the planned horizontal and vertical extents, confirmation samples were collected in accordance with the IMWP to assess if the RBRO was achieved (i.e., 1.0 mg/Kg total PCBs). Excavation bottom confirmation samples were collected at the approximate center from each 5-foot by 5-foot grid cell arranged within a 15-foot by 15-foot decision unit (DU), resulting in 9 discrete samples collected from a DU that were composited into one representative sample. The sidewall confirmation samples were collected from the approximate center of each 5-foot wide by excavation depth tall grid cell aligned along the excavation sidewalls and 9 grid cells (45-ft) in length, resulting in 9 discrete samples collected from a sidewall DU that were composited into one representative sample. The total PCBs analytical testing results, reported on a dry-weight basis, for the composite sample from each decision unit were compared to the RBRO. If the RBRO was exceeded in a DU, additional excavation and resampling was performed. If over-excavation was required in a bottom DU, an additional 8 to 12-in. of soil was removed from the DU and confirmation sampling was conducted. Similarly, if over-excavation was required along a sidewall DU, an additional 6 to 12-in. of soil

was removed prior to confirmation sampling. **Section 6.3** of the PCR submitted in January 2022 describes the confirmation sampling process in more detail.

A total of 139 confirmation samples (plus duplicate samples) were submitted and analyzed for PCBs via U.S. EPA Method 8082 following sample preparation Method 3540/3541 Soxhlet extraction, by Eurofins. A summary of the confirmation sampling analytical results, including duplicates, and equipment blanks can be found in **Table 2 and Table 3**, respectively. As identified in **Table 2**, samples that are highlighted in red indicate an exceedance of the RBRO. The analytical reports associated with these results are provided in **Appendix V**. **Figure 3** depicts the sample grids in Reach 3.

The following sample nomenclature was utilized for soil bottom and sidewall samples:

- i. Bottom Excavation: ED-R3SL-[#] where,
  1. R3 = Reach 3
  2. SL indicates soil sample
  3. [#] refers to the DU number assigned by the sampling team
- ii. Sidewall: ED-R3SL-SW[#] where,
  1. R3 = Reach 3
  2. SL indicates soil sample
  3. Side Wall [#] refers to the DU number assigned by the sampling team

Over-excavation sample results are denoted with a -1, -2, -3, etc. designation (i.e., first over-excavation, second over-excavation, third over-excavation, etc.).

The total PCB analytical testing results for the composite sample from each DU were compared to the RBRO of 1.0 mg/Kg. Confirmation samples met the RBRO with the exception of the results discussed in **Section 2.10**.

#### 4.0 PROJECT CERTIFICATION

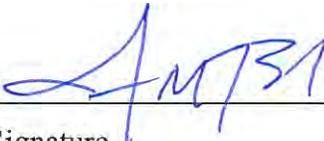
I certify that, to the best of my knowledge, after thorough investigation, the information contained in or accompanying this certification is true, accurate, and complete.

Mr. J. Matthew Bruck

Name

Civil & Environmental Consultants, Inc.

Organization

  
Signature

11700141

IN PE License Number



---

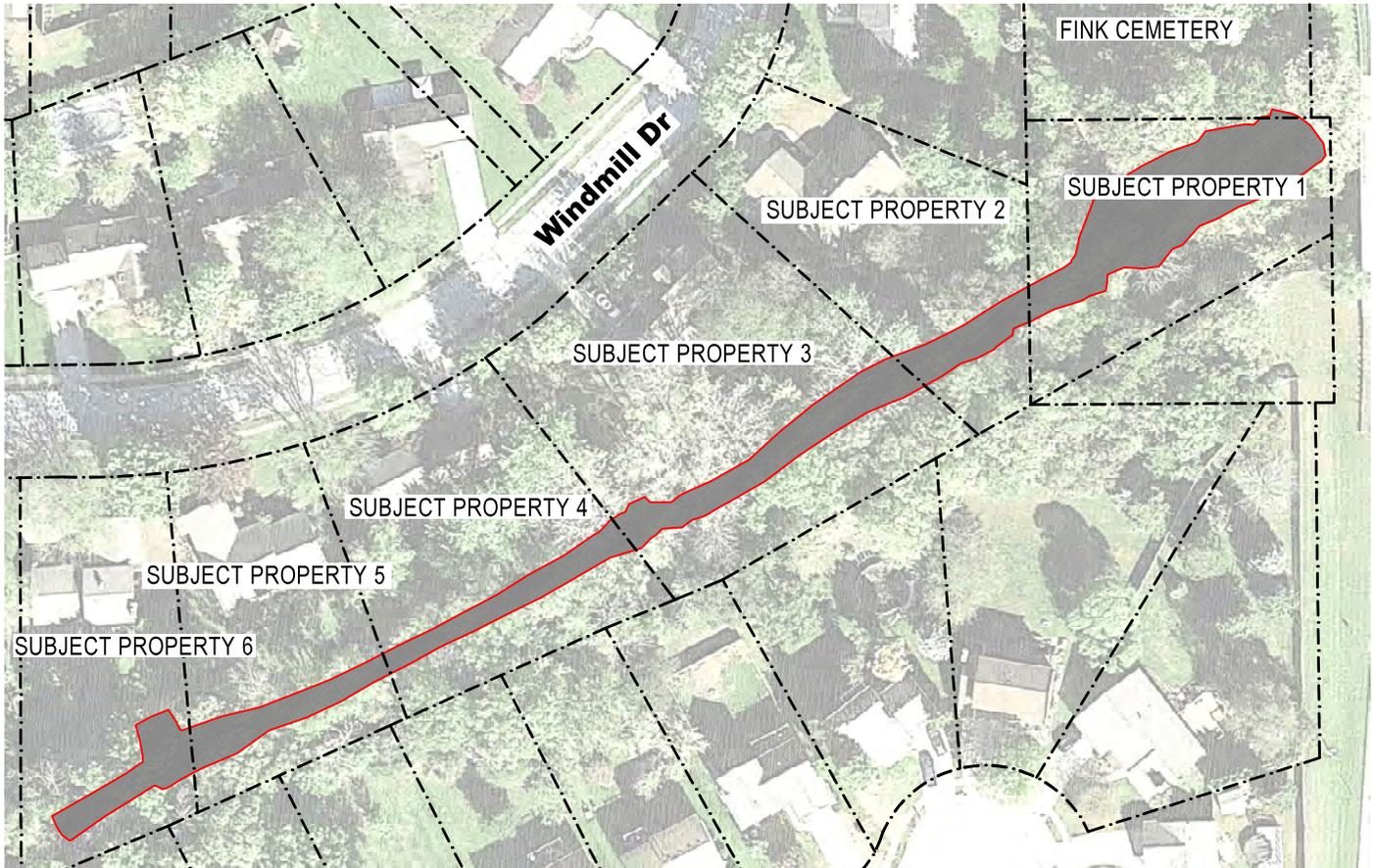
**APPENDIX I**  
**PROFESSIONAL SURVEY EXHIBITS**

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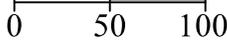
# ARCONIC LAFAYETTE OPERATIONS

## ELLIOTT DITCH - REACH 3

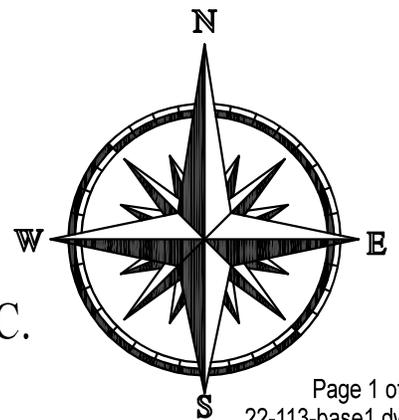
### AREAS OF EXCAVATION



SCALE: 1"=100'



- EXCAVATED AREA



DATE OF REPORT: December 28, 2022

**R.W. GROSS & ASSOCIATES, INC.**

420 COLUMBIA STREET, SUITE 100

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# ARCONIC LAFAYETTE OPERATIONS

## ELLIOTT DITCH - REACH 3

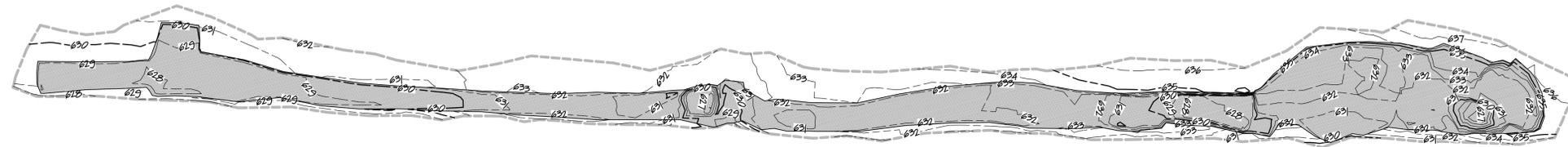
### EXCAVATION AND TOPOGRAPHY



**SITE MAP**  
SCALE: 1"=300'



**EXISTING TOPOGRAPHY**



**EXCAVATION**

TOTAL EXCAVATED AREA = 15,953 Square Ft  
TOTAL EXPORTED VOLUME = 1,093 Cubic Yds



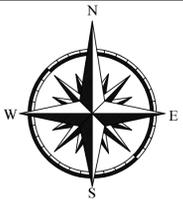
**FINAL TOPOGRAPHY**

BACKFILL TO SUBGRADE = 804 Cubic Yds  
SUBGRADE TO FINAL SURFACE = 289 Cubic Yds



**LEGEND**

- XXX --- GROUND CONTOUR
- █ EXCAVATED AREA
- - - - - LIMITS OF MAPPED AREA



**R. W. GROSS & ASSOCIATES, INC.**

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ELLIOTT DITCH - REACH 3 - EXCAVATION AND TOPO

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PHONE: (765) 742-0101  
FAX: (765) 742-7223

V100



*Robert Wm. Gross*  
Robert Wm. Gross, R.L.S. No. 880043

I AFFIRM, UNDER THE PENALTIES FOR PERJURY, THAT I HAVE TAKEN REASONABLE CARE TO REDACT EACH SOCIAL SECURITY NUMBER IN THIS DOCUMENT, UNLESS REQUIRED BY LAW, AND THIS INSTRUMENT WAS PREPARED BY: R.W. GROSS AND ASSOCIATES, INC.

DRAWING NAME	22-113-base01.dwg
DATE	December 28, 2022
DRAWN BY	G. Bell
CHECKED BY	RWG
SHEET	EXCAVATION AND TOPO
SHEET No.	V100

THESE PLANS ARE VOID UNLESS SIGNED AND DATED. PLAN HOLDER IS RESPONSIBLE FOR VERIFYING THAT THIS SET OF PLANS CONFORMS WITH THE ORIGINAL APPROVED AND SIGNED PLANS FROM ALL REGULATORY AGENCIES.

---

**APPENDIX II**  
**NON-TSCA DISPOSAL DOCUMENTATION**

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**Non-TSCA Material Offsite Disposal Summary by Load**  
 Elliott Ditch Reach 3 Isolated Soil Interim Measures Post Construction Report  
 Arconic Lafayette Operations, Lafayette, Indiana

Shipping Date	Disposal Date	Manifest Number	Disposal Weight (Tons)
9/27/2022	9/27/2022	1	18.23
9/27/2022	9/27/2022	2	18.84
9/28/2022	9/28/2022	3	20.08
9/28/2022	9/28/2022	4	22.32
9/28/2022	9/28/2022	5	23.07
9/29/2022	9/29/2022	6	24.76
9/29/2022	9/29/2022	7	24.47
9/29/2022	9/29/2022	8	26.57
9/29/2022	9/29/2022	9	26.66
9/30/2022	9/30/2022	10	25.21
9/30/2022	9/30/2022	11	25.99
9/30/2022	9/30/2022	12	23.00
9/30/2022	9/30/2022	13	22.82
9/30/2022	9/30/2022	14	25.03
9/30/2022	9/30/2022	15	26.00
9/30/2022	9/30/2022	16	23.66
10/3/2022	10/3/2022	17	22.15
10/3/2022	10/3/2022	18	21.31
10/3/2022	10/3/2022	19	22.98
10/3/2022	10/3/2022	20	23.83
10/3/2022	10/3/2022	21	25.33
10/3/2022	10/3/2022	22	25.02
10/3/2022	10/3/2022	23	18.78
10/3/2022	10/3/2022	24	19.35
10/3/2022	10/4/2022	25	22.42
10/3/2022	10/4/2022	26	23.15
10/4/2022	10/4/2022	27	18.93
10/4/2022	10/4/2022	28	19.04
10/4/2022	10/4/2022	29	22.17
10/4/2022	10/4/2022	30	21.88
10/4/2022	10/4/2022	31	21.52
10/4/2022	10/4/2022	32	21.37
10/4/2022	10/4/2022	33	21.53
10/4/2022	10/4/2022	34	22.87
10/5/2022	10/5/2022	35	20.02
10/5/2022	10/5/2022	36	22.29
10/5/2022	10/5/2022	37	19.85
10/5/2022	10/5/2022	38	19.84
10/5/2022	10/5/2022	39	23.99
10/5/2022	10/5/2022	40	24.01
10/5/2022	10/5/2022	41	21.26
10/5/2022	10/5/2022	42	17.47
10/6/2022	10/6/2022	43	25.12

**Non-TSCA Material Offsite Disposal Summary by Load**  
 Elliott Ditch Reach 3 Isolated Soil Interim Measures Post Construction Report  
 Arconic Lafayette Operations, Lafayette, Indiana

<b>Shipping Date</b>	<b>Disposal Date</b>	<b>Manifest Number</b>	<b>Disposal Weight (Tons)</b>
10/6/2022	10/6/2022	44	22.49
10/6/2022	10/6/2022	45	26.13
10/6/2022	10/6/2022	46	20.93
10/6/2022	10/6/2022	47	23.47
10/6/2022	10/6/2022	48	17.97
10/6/2022	10/6/2022	49	21.72
10/7/2022	10/7/2022	50	20.93
10/7/2022	10/7/2022	51	17.64
10/7/2022	10/7/2022	52	21.63
10/7/2022	10/7/2022	53	19.03
10/7/2022	10/7/2022	54	21.15
10/7/2022	10/7/2022	55	22.37
10/7/2022	10/7/2022	56	23.08
10/7/2022	10/7/2022	57	21.63
10/10/2022	10/10/2022	58	18.18
10/10/2022	10/10/2022	59	16.70
10/10/2022	10/10/2022	60	22.18
10/10/2022	10/10/2022	61	19.38
10/10/2022	10/10/2022	62	22.24
10/10/2022	10/10/2022	63	21.64
10/10/2022	10/10/2022	64	25.28
10/10/2022	10/10/2022	65	22.31
10/11/2022	10/11/2022	66	19.44
10/11/2022	10/11/2022	67	21.76
10/11/2022	10/11/2022	68	24.45
10/11/2022	10/11/2022	69	23.43
10/11/2022	10/11/2022	70	23.39
10/11/2022	10/11/2022	71	21.97
10/11/2022	10/11/2022	72	10.52
10/12/2022	10/12/2022	73	27.99
10/13/2022	10/13/2022	74	24.36
10/14/2022	10/14/2022	75	7.40
10/18/2022	10/18/2022	76	16.11

# Special Waste Profile - Recertification



Disposal Facility: 3144 Walnut Creek Landfill IN

Waste Profile #: 31442126865

Sales Rep #: 765

## I. Generator Information

Generator Name: Arconic Lafayette LLC

Generator Site Address: 3131 E Main Street

City: Lafayette County: Tippecanoe State: Indiana Zip: 47905

State ID/Reg No: NA State Approval/Waste Code: NA NAICS: NA

Generator Mailing Address  (if different)

City: County: State: --Select State-- Zip:

Generator Contact Name: Travis Catlin Email: travis.catlin@arconic.com

Phone Number: 765-237-1809 Ext: Fax Number:

## II. Waste Stream Information

Name of Waste: PCB remediation waste soil and sediment from Elliott Ditch Cleanup Project

Check Section 1 or 2 below

1.  There has been a change in the characteristics of the waste stream due to the following:
- a. Change of a raw material used in the waste generating process.
  - b. Change in the waste generating process itself.
  - c. Change in a physical characteristic of the waste.
  - d. New information has been documented concerning the human health effects of exposure to the waste.

*If any of these changes have occurred, a new profile sheet must be completed, and new analysis and/or SDS must be provided as appropriate.*

2.  There have been no changes that would alter the physical characteristics of the special waste stream.  
Updated analytical may be required.

## III. Representative Sample Certification

No Sample Taken

Sample Taken Type of Sample --Select Sample Type--

Is the representative sample collected to prepare this profile and laboratory analysis, collected in accordance with U.S. EPA 40 CFR 261.20(c) guidelines or equivalent?  Yes  No

Sample Date: Sample ID Numbers:

## IV. Certification

*I hereby certify that I have knowledge about the waste material being offered for disposal ("Waste") and have the requisite authority to bind the Generator to the information contained in this Special Waste Profile ("Profile"). I further certify that to the best of my knowledge and belief, the information contained herein is a true, complete and accurate description of the Waste and all known or suspected hazards have been disclosed. All Analytical Results/Safety Data Sheets submitted are truthful and complete and are representative of the Waste.*

*I further certify that by utilizing this Profile, neither myself nor any other employee or representative of the company identified below ("Company") will deliver for disposal or attempt to deliver for disposal any Waste that: (i) is classified as toxic waste, hazardous waste or infectious waste; (ii) that does not conform to this Profile; or (iii) that this Disposal Facility is prohibiting from accepting by law. I shall immediately give written notice of any change or condition pertaining to the Waste not provided herein. Our Company hereby agrees to fully indemnify this Disposal Facility against any damages resulting from this Profile or Certification being inaccurate or untrue.*

*I understand that by attaching an electronic signature, I am signing this document and Company consents to complete this transaction and receive all related communications electronically, and agrees this document will be binding as though it had been physically signed. A printout of this Profile may be accepted with the same authority as the original.*

Travis Catlin

Authorized Representative Name  
(Printed)

Environmental Manager

Title  
(Printed)

Arconic Lafayette LLC

Company Name



Authorized Representative Signature

31-Aug-2022

Date

## Rickford O'Brien, Jenny

---

**To:** Welch, Garrett; DSchoen@republicservices.com  
**Cc:** Caleb Tufts; Keegan Andrews; Bruck, Matt; Robert Prezbindowski  
(Robert.Prezbindowski@arconic.com)  
**Subject:** RE: Approval/Renewal 3144 21 26865 Arconic Lafayette LLC

---

**From:** Welch, Garrett  
**Sent:** Tuesday, September 20, 2022 10:09 AM  
**To:** DSchoen@republicservices.com  
**Cc:** Caleb Tufts <caleb.tufts@o6env.com>; Keegan Andrews <keegan.andrews@o6env.com>; Bruck, Matt <mbruck@cecinc.com>; Rickford O'Brien, Jenny <jrickfordobrien@cecinc.com>; Robert Prezbindowski (Robert.Prezbindowski@arconic.com) <robert.prezbindowski@arconic.com>  
**Subject:** RE: Approval/Renewal 3144 21 26865 Arconic Lafayette LLC

Good morning, Damon,

On behalf of Arconic Lafayette LLC, this e-mail is to confirm that O6 Environmental's notification provided on September 1, 2022, (see below) satisfies the minimum 15-day advanced notice requirement to Republic – Walnut Creek related to the disposal of PCB bulk remediation waste associated with the Elliott Ditch Cleanup Project. It is estimated that 2,100 tons of bulk PCB remediation waste will be sent to this landfill and that the highest concentration of total PCBs quantified in the subject waste is 12.7 mg/Kg (dry weight basis).

Should you have any questions, please feel free to contact me.

Thank you.

**Garrett A. Welch, L.P.G.\*** | *Project Manager*  
Civil & Environmental Consultants, Inc.  
2704 Cherokee Farm Way, Suite 101, Knoxville, TN 37920  
**direct** 865.340.4914 **office** 865.977.9997 **mobile** 865.440.1655  
[www.cecinc.com](http://www.cecinc.com)

\*Licensed Professional Geologist in Tennessee & Indiana

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**REPUBLIC SERVICES**

**NON-HAZARDOUS SPECIAL WASTE & ASBESTOS MANIFEST**

If waste is asbestos waste, complete Sections I, II, III and IV

If waste is **NOT** asbestos waste, complete Sections I, II and III

**I. GENERATOR (Generator completes Ia-s)**

a. Generator's US EPA ID Number NA		b. Manifest Document Number 1		c. Page 1 of 1	
d. Generator's Information: <b>Arconic Lafayette LLC</b> 3131 E Main St Lafayette, IN 47905 Contact: Travis Catlin Phone: 765-237-1809 County: Tippecanoe			e. Billing Information: <b>O6 Environmental LLC</b> 6311 Bartmer Industrial Dr St. Louis, MO 63130 Contact: Caleb Tufts Phone: 765-654-8144 TRUX 333448		
Generator site location (if different): i. Site Location: N/A			j. Phone No: NA		
k. Waste Profile #	l. Exp. Date	m. Waste Shipping Name and Description	n. Containers		p. Unit Wt/Vol
			No.	Type	o. Total Quantity
3144 21 26865	8/30/2023	PCB Remediation Waste Soil and Sediment (Elliott Ditch Clean Up Project)	1	TRK	
GENERATOR'S CERTIFICATION: I hereby certify that the above named material is not a hazardous waste as defined by 40 CFR 261 or any applicable state law, has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulations; AND, if this waste is a treatment residue of a previously restricted hazardous waste subject to the Land Disposal Restrictions. I certify and warrant that the waste has been treated in accordance with the requirements of 40 CFR 268 and is no longer a hazardous waste as defined by 40 CFR 261.					
X Caleb S. Tufts, Agent for Arconic		X		X	
q. Generator Authorized Agent Name (Print)		r. Signature		s. Date	

**II. TRANSPORTER (Generator completes IIa-b and Transporter completes IIc-e)**

a. Transporter's Name and Address: Fox Hauling 2887 IN-25 Lafayette, IN 47905 Phone: 765-742-5002		
c. Driver Name (Print)	d. Signature	e. Date
DALE TARTAR		Sept 27 - 2022

**III. DESTINATION (Generator complete III a-c and Destination Site completes III d-g)**

a. Disposal Facility and Site Address: <b>Walnut Creek Landfill</b> 2701 North State Road 39 Frankfort, IN 46041 b. Phone: 765-659-8144		c. US-EPA Number - N/A 12-03	d. Discrepancy Indication Space:
I hereby certify that the above named material has been accepted and to the best of my knowledge the foregoing is true and accurate.			
e. Name of Authorized Agent (Print)	f. Signature	g. Date	18.23
WRT		9-27-22	

**IV. ASBESTOS (Generator completes IV a-f and Operator complete IVg-i)**

a. Operator's Name and Address: <b>THIS SECTION IS NOT APPLICABLE (NOT ASBESTOS)</b>		c. Responsible Agency Name and Address: <b>THIS SECTION IS NOT APPLICABLE (NOT ASBESTOS)</b>	
b. Phone:			
e. Special Handling Instructions and Additional Information:			
f. <input type="checkbox"/> Friable <input type="checkbox"/> Non-Friable <input type="checkbox"/> Both 0% Friable 0% Non-Friable			
OPERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked and labeled and are in all respects in proper condition for transport by highway according to applicable international and national governmental regulations.			
g. Operator's Name and Title (Print)	h. Signature	i. Date	
*Operator refers to the company which owns, leases, operates, controls, or supervises the facility being demolished or renovated, or the demolition or renovation operation or both			



# NON-HAZARDOUS SPECIAL WASTE & ASBESTOS MANIFEST

If waste is asbestos waste, complete Sections I, II, III and IV

If waste is **NOT** asbestos waste, complete Sections I, II and III

## I. GENERATOR (Generator completes Ia-s)

a. Generator's US EPA ID Number NA		b. Manifest Document Number 2		c. Page 1 of 1	
d. Generator's Information: <b>Arconic Lafayette LLC</b> 3131 E Main St Lafayette, IN 47905 Contact: Travis Catlin Phone: 765-237-1809 County: Tippecanoe			e. Billing Information: <b>O6 Environmental LLC</b> 6311 Bartmer Industrial Dr St. Louis, MO 63130 Contact: Caleb Tufts Phone: 765-654-8144 TRUX 333448		
Generator site location (if different): i. Site Location: N/A			j. Phone No: NA		
k. Waste Profile #	l. Exp. Date	m. Waste Shipping Name and Description	n. Containers		p. Unit
3144 21 26865	8/30/2023	PCB Remediation Waste Soil and Sediment (Elliott Ditch Clean Up Project)	No.	Type	Wt/Vol
			1	TRK	
GENERATOR'S CERTIFICATION: I hereby certify that the above named material is not a hazardous waste as defined by 40 CFR 261 or any applicable state law, has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulations; AND, if this waste is a treatment residue of a previously restricted hazardous waste subject to the Land Disposal Restrictions. I certify and warrant that the waste has been treated in accordance with the requirements of 40 CFR 268 and is no longer a hazardous waste as defined by 40 CFR 261.					
X Caleb S. Tufts, Agent for Arconic		X		X	
g. Generator Authorized Agent Name (Print)		r. Signature		s. Date	

## II. TRANSPORTER (Generator completes IIa-b and Transporter completes IIc-e)

a. Transporter's Name and Address: Fox Hauling 2887 IN-25 Lafayette, IN 47905 Phone: 765-742-5002		
c. Driver Name (Print) Noah Cadwallader	d. Signature 	e. Date Sept 27 2022

## III. DESTINATION (Generator complete III a-c and Destination Site completes III d-g)

a. Disposal Facility and Site Address: Walnut Creek Landfill 2701 North State Road 39 Frankfort, IN 46041 b. Phone: 765-659-8144		c. US-EPA Number - N/A 12-03	d. Discrepancy Indication Space:
I hereby certify that the above named material has been accepted and to the best of my knowledge the foregoing is true and accurate.			
e. Name of Authorized Agent (Print) RP	f. Signature 	g. Date 9-27-22	18.84

## IV. ASBESTOS (Generator completes IV a-f and Operator complete IVg-i)

a. Operator's Name and Address: <b>THIS SECTION IS NOT APPLICABLE (NOT ASBESTOS)</b>		c. Responsible Agency Name and Address: <b>THIS SECTION IS NOT APPLICABLE (NOT ASBESTOS)</b>	
b. Phone			
e. Special Handling Instructions and Additional Information:			
f. <input type="checkbox"/> Frangible <input type="checkbox"/> Non-Frangible <input type="checkbox"/> Both 0% Frangible 0% Non-Frangible			
OPERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked and labeled and are in all respects in proper condition for transport by highway according to applicable international and national governmental regulations.			
g. Operator's Name and Title (Print)		h. Signature	
		i. Date	
*Operator refers to the company which owns, leases, operates, controls, or supervises the facility being demolished or renovated, or the demolition or renovation operation or both			



# NON-HAZARDOUS SPECIAL WASTE & ASBESTOS MANIFEST

If waste is asbestos waste, complete Sections I, II, III and IV

If waste is **NOT** asbestos waste, complete Sections I, II and III

75F

## I. GENERATOR (Generator completes Ia-s)

a. Generator's US EPA ID Number NA		b. Manifest Document Number 3		c. Page 1 of 1	
d. Generator's Information: <b>Arconic Lafayette LLC</b> 3131 E Main St Lafayette, IN 47905 Contact: Travis Catlin Phone: 765-237-1809 County: Tippecanoe			e. Billing Information: <b>O6 Environmental LLC</b> 6311 Bartmer Industrial Dr St. Louis, MO 63130 Contact: Caleb Tufts Phone: 765-654-8144 TRUX 333448		
Generator site location (if different): i. Site Location: N/A			j. Phone No: NA		
k. Waste Profile #	l. Exp. Date	m. Waste Shipping Name and Description	n. Containers No.	Type	o. Total Quantity
3144 21 26865	8/30/2023	PCB Remediation Waste Soil and Sediment (Elliott Ditch Clean Up Project)	1	TRK	
GENERATOR'S CERTIFICATION: I hereby certify that the above named material is not a hazardous waste as defined by 40 CFR 261 or any applicable state law, has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulations; AND, if this waste is a treatment residue of a previously restricted hazardous waste subject to the Land Disposal Restrictions. I certify and warrant that the waste has been treated in accordance with the requirements of 40 CFR 268 and is no longer a hazardous waste as defined by 40 CFR 261.					
X Caleb S. Tufts, Agent for Arconic		X		X 9/28/22	
q. Generator Authorized Agent Name (Print)		r. Signature		s. Date	

## II. TRANSPORTER (Generator completes IIa-b and Transporter completes IIc-e)

a. Transporter's Name and Address: Fox Hauling 2887 IN-25 Lafayette, IN 47905 Phone: 765-742-5002			F 75		
c. Driver Name (Print) 		d. Signature 		e. Date 9/28/22	

## III. DESTINATION (Generator completes III a-c and Destination Site completes III d-g)

a. Disposal Facility and Site Address: <b>Walnut Creek Landfill</b> 2701 North State Road 39 Frankfort, IN 46041		c. US-EPA Number - N/A 12-03	d. Discrepancy Indication Space:
I hereby certify that the above named material has been accepted and to the best of my knowledge the foregoing is true and accurate.			
e. Name of Authorized Agent (Print) 		f. Signature 	g. Date 9-28-22 <span style="border: 1px solid black; border-radius: 50%; padding: 2px;">20.08</span>

## IV. ASBESTOS (Generator completes IV a-f and Operator complete IVg-i)

a. Operator's Name and Address: <b>THIS SECTION IS NOT APPLICABLE (NOT ASBESTOS)</b>		c. Responsible Agency Name and Address: <b>THIS SECTION IS NOT APPLICABLE (NOT ASBESTOS)</b>	
b. Phone:			
e. Special Handling Instructions and Additional Information:			
f. <input type="checkbox"/> Friable <input type="checkbox"/> Non-Friable <input type="checkbox"/> Both <input type="checkbox"/> 0% Friable <input type="checkbox"/> 0% Non-Friable			
OPERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked and labeled and are in all respects in proper condition for transport by highway according to applicable international and national governmental regulations.			
g. Operator's Name and Title (Print)		h. Signature	
		i. Date	
*Operator refers to the company which owns, leases, operates, controls, or supervises the facility being demolished or renovated, or the demolition or renovation operation or both			



### NON-HAZARDOUS SPECIAL WASTE & ASBESTOS MANIFEST

If waste is asbestos waste, complete Sections I, II, III and IV  
 If waste is **NOT** asbestos waste, complete Sections I, II and III

75F

**I. GENERATOR** (Generator completes Ia-s)

a. Generator's US EPA ID Number NA		b. Manifest Document Number 4		c. Page 1 of 1	
d. Generator's Information: <b>Arconic Lafayette LLC</b> 3131 E Main St Lafayette, IN 47905 Contact: Travis Catlin Phone: 765-237-1809 County: Tippecanoe			e. Billing Information: <b>O6 Environmental LLC</b> 6311 Bartmer Industrial Dr St. Louis, MO 63130 Contact: Caleb Tufts Phone: 765-654-8144 TRUX 333448		
Generator site location (if different): i. Site Location: N/A			j. Phone No: NA		
k. Waste Profile #	l. Exp. Date	m. Waste Shipping Name and Description	n. Containers No.	n. Containers Type	o. Total Quantity
3144 21 26865	8/30/2023	PCB Remediation Waste Soil and Sediment (Elliott Ditch Clean Up Project)	1	TRK	
GENERATOR'S CERTIFICATION: I hereby certify that the above named material is not a hazardous waste as defined by 40 CFR 261 or any applicable state law, has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulations; AND, if this waste is a treatment residue of a previously restricted hazardous waste subject to the Land Disposal Restrictions. I certify and warrant that the waste has been treated in accordance with the requirements of 40 CFR 268 and is no longer a hazardous waste as defined by 40 CFR 261.					
X Caleb S. Tufts, Agent for Arconic		X		X 9/28/22	
q. Generator Authorized Agent Name (Print)		r. Signature		s. Date	

**II. TRANSPORTER** (Generator completes IIa-b and Transporter completes IIc-e)

a. Transporter's Name and Address: Fox Hauling 2887 IN-25 Lafayette, IN 47905 Phone: 765-742-5002		
c. Driver Name (Print) 		d. Signature 
e. Date 9/28/22		

**III. DESTINATION** (Generator complete III a-c and Destination Site completes III d-g)

a. Disposal Facility and Site Address: <b>Walnut Creek Landfill</b> 2701 North State Road 39 Frankfort, IN 46041 b. Phone: 765-659-8144		c. US-EPA Number - N/A 12-03	d. Discrepancy Indication Space:
I hereby certify that the above named material has been accepted and to the best of my knowledge the foregoing is true and accurate.			
e. Name of Authorized Agent (Print) 		f. Signature 	g. Date 9-28-22 22.32

**IV. ASBESTOS** (Generator completes IV a-f and Operator complete IVg-i)

a. Operator's Name and Address: <b>THIS SECTION IS NOT APPLICABLE (NOT ASBESTOS)</b>		c. Responsible Agency Name and Address: <b>THIS SECTION IS NOT APPLICABLE (NOT ASBESTOS)</b>	
b. Phone			
e. Special Handling Instructions and Additional Information:			
f. <input type="checkbox"/> Friable <input type="checkbox"/> Non-Friable <input type="checkbox"/> Both 0% Friable 0% Non-Friable			
OPERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked and labeled and are in accordance with conditions for transport by highway according to applicable international and national governmental regulations.			
g. Signature		i. Date	



# NON-HAZARDOUS SPECIAL WASTE & ASBESTOS MANIFEST

If waste is asbestos waste, complete Sections I, II, III and IV

If waste is **NOT** asbestos waste, complete Sections I, II and III

75F

## I. GENERATOR (Generator completes Ia-s)

a. Generator's US EPA ID Number NA		b. Manifest Document Number 5		c. Page 1 of 1	
d. Generator's Information: <b>Arconic Lafayette LLC</b> 3131 E Main St Lafayette, IN 47905 Contact: Travis Catlin Phone: 765-237-1809 County: Tippecanoe			e. Billing Information: <b>O6 Environmental LLC</b> 6311 Bartmer Industrial Dr St. Louis, MO 63130 Contact: Caleb Tufts Phone: 765-654-8144 TRUX 333448		
Generator site location (if different): i. Site Location: N/A			j. Phone No: NA		
k. Waste Profile #	l. Exp. Date	m. Waste Shipping Name and Description	n. Containers No.	n. Containers Type	o. Total Quantity
3144 21 26865	8/30/2023	PCB Remediation Waste Soil and Sediment (Elliott Ditch Clean Up Project)	1	TRK	
p. Unit Wt/Vol					

GENERATOR'S CERTIFICATION: I hereby certify that the above named material is not a hazardous waste as defined by 40 CFR 261 or any applicable state law, has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulations; AND, if this waste is a treatment residue of a previously restricted hazardous waste subject to the Land Disposal Restrictions. I certify and warrant that the waste has been treated in accordance with the requirements of 40 CFR 268 and is no longer a hazardous waste as defined by 40 CFR 261.

X	Caleb S. Tufts, Agent for Arconic	X		X	9/28/22
q. Generator Authorized Agent Name (Print)	Tyler Bundren	r. Signature		s. Date	9/28/22

## II. TRANSPORTER (Generator completes IIa-b and Transporter completes IIc-e)

a. Transporter's Name and Address: Fox Hauling 2887 IN-25 Lafayette, IN 47905 Phone: 765-742-5002			75F		
c. Driver Name (Print)	d. Signature	e. Date			
John Wilkman		9/28/22			

## III. DESTINATION (Generator complete III a-c and Destination Site completes III d-g)

a. Disposal Facility and Site Address: Walnut Creek Landfill 2701 North State Road 39 Frankfort, IN 46041 b. Phone: 765-659-8144		c. US-EPA Number - N/A 12-03	d. Discrepancy Indication Space:
--	--	---------------------------------	----------------------------------

I hereby certify that the above named material has been accepted and to the best of my knowledge the foregoing is true and accurate.

e. Name of Authorized Agent (Print)	f. Signature	g. Date
RL		9-28-22

## IV. ASBESTOS (Generator completes IV a-f and Operator complete IV g-i)

a. Operator's Name and Address: <b>THIS SECTION IS NOT APPLICABLE (NOT ASBESTOS)</b>	c. Responsible Agency Name and Address: <b>THIS SECTION IS NOT APPLICABLE (NOT ASBESTOS)</b>
b. Phone:	
e. Special Handling Instructions and Additional Information:	
f. <input type="checkbox"/> Friable <input type="checkbox"/> Non-Friable <input type="checkbox"/> Both 0% Friable 0% Non-Friable	
OPERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked and labeled and are in all respects in proper condition for transport by highway according to applicable international and national governmental regulations.	
g. Operator's Name and Title (Print)	i. Date
h. Signature	

\*Operator refers to the company which owns, leases, operates, controls, or supervises the facility being demolished or renovated, or the demolition or renovation operation or both



### NON-HAZARDOUS SPECIAL WASTE & ASBESTOS MANIFEST

If waste is asbestos waste, complete Sections I, II, III and IV

If waste is **NOT** asbestos waste, complete Sections I, II and III

32c

**I. GENERATOR** (Generator completes Ia-s)

a. Generator's US EPA ID Number NA		b. Manifest Document Number 6		c. Page 1 of 1	
d. Generator's Information: <b>Arconic Lafayette LLC</b> 3131 E Main St Lafayette, IN 47905 Contact: Travis Catlin Phone: 765-237-1809 County: Tippecanoe			e. Billing Information: <b>O6 Environmental LLC</b> 6311 Bartmer Industrial Dr St. Louis, MO 63130 Contact: Caleb Tufts Phone: 765-654-8144 TRUX 333448		
Generator site location (if different): i. Site Location: N/A			j. Phone No: NA		
k. Waste Profile #	l. Exp. Date	m. Waste Shipping Name and Description	n. Containers No. Type	o. Total Quantity	p. Unit Wt/Vol
3144 21 26865	8/30/2023	PCB Remediation Waste Soil and Sediment (Elliott Ditch Clean Up Project)	1 TRK		
GENERATOR'S CERTIFICATION: I hereby certify that the above named material is not a hazardous waste as defined by 40 CFR 261 or any applicable state law, has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulations; AND, if this waste is a treatment residue of a previously restricted hazardous waste subject to the Land Disposal Restrictions. I certify and warrant that the waste has been treated in accordance with the requirements of 40 CFR 268 and is no longer a hazardous waste as defined by 40 CFR 261.					
X Caleb S. Tufts, Agent for Arconic		X		X 9/29/22	
q. Generator Authorized Agent Name (Print) Tyler Bundren		r. Signature		s. Date 9/29/22	

**II. TRANSPORTER** (Generator completes IIa-b and Transporter completes IIc-e)

a. Transporter's Name and Address: Fox Hauling 2887 IN-25 Lafayette, IN 47905 Phone: 765-742-5002		
		9/29/22
c. Driver Name (Print) John Wilkerson	d. Signature	e. Date 9/29/22

**III. DESTINATION** (Generator complete III a-c and Destination Site completes III d-g)

a. Disposal Facility and Site Address: <b>Walnut Creek Landfill</b> 2701 North State Road 39 Frankfort, IN 46041 b. Phone: 765-659-8144		c. US-EPA Number - N/A 12-03	d. Discrepancy Indication Space:
I hereby certify that the above named material has been accepted and to the best of my knowledge the foregoing is true and accurate.			
e. Name of Authorized Agent (Print)	f. Signature	g. Date 9-29-22 24.76	

**IV. ASBESTOS** (Generator completes IV a-f and Operator complete IVg-i)

a. Operator's Name and Address: <b>THIS SECTION IS NOT APPLICABLE (NOT ASBESTOS)</b>		c. Responsible Agency Name and Address: <b>THIS SECTION IS NOT APPLICABLE (NOT ASBESTOS)</b>	
b. Phone:			
e. Special Handling Instructions and Additional Information:			
f. <input type="checkbox"/> Friable <input type="checkbox"/> Non-Friable <input type="checkbox"/> Both 0% Friable 0% Non-Friable			
OPERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked and labeled and are in all respects in proper condition for transport by highway according to applicable international and national governmental regulations.			
g. Operator's Name and Title (Print)		i. Date	
*Operator refers to the company which owns, leases, operates, controls, or supervises the facility being demolished or renovated, or the demolition or renovation operation or both			



# NON-HAZARDOUS SPECIAL WASTE & ASBESTOS MANIFEST

If waste is asbestos waste, complete Sections I, II, III and IV  
If waste is NOT asbestos waste, complete Sections I, II and III

320

## I. GENERATOR (Generator completes Ia-s)

a. Generator's US EPA ID Number NA		b. Manifest Document Number 7		c. Page 1 of 1	
d. Generator's Information: <b>Arconic Lafayette LLC</b> 3131 E Main St Lafayette, IN 47905 Contact: Travis Catlin Phone: 765-237-1809 County: Tippecanoe			e. Billing Information: <b>O6 Environmental LLC</b> 6311 Bartmer Industrial Dr St. Louis, MO 63130 Contact: Caleb Tufts Phone: 765-654-8144 TRUX 333448		
Generator site location (if different): i. Site Location: N/A			j. Phone No: NA		
k. Waste Profile #	l. Exp. Date	m. Waste Shipping Name and Description	n. Containers No.	Type	o. Total Quantity
3144 21 26865	8/30/2023	PCB Remediation Waste Soil and Sediment (Elliott Ditch Clean Up Project)	1	TRK	
GENERATOR'S CERTIFICATION: I hereby certify that the above named material is not a hazardous waste as defined by 40 CFR 261 or any applicable state law, has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulations; AND, if this waste is a treatment residue of a previously restricted hazardous waste subject to the Land Disposal Restrictions. I certify and warrant that the waste has been treated in accordance with the requirements of 40 CFR 268 and is no longer a hazardous waste as defined by 40 CFR 261.					
X Caleb S. Tufts, Agent for Arconic		X		X	
q. Generator Authorized Agent Name (Print) Tyler Bundren		r. Signature 		s. Date 9/28/2022	

## II. TRANSPORTER (Generator completes IIa-b and Transporter completes IIc-e)

a. Transporter's Name and Address: Fox Hauling 2887 IN-25 Lafayette, IN 47905 Phone: 765-742-5002			320		
c. Driver Name (Print) John Wilderman		d. Signature 		e. Date 9/29/22	

## III. DESTINATION (Generator completes III a-c and Destination Site completes III d-g)

a. Disposal Facility and Site Address: Walnut Creek Landfill 2701 North State Road 39 Frankfort, IN 46041 b. Phone: 765-659-8144		c. US-EPA Number - N/A 12-03	d. Discrepancy Indication Space:
I hereby certify that the above named material has been accepted and to the best of my knowledge the foregoing is true and accurate.			
e. Name of Authorized Agent (Print) RJ		f. Signature RJ	
		g. Date 9-29-22 24.47	

## IV. ASBESTOS (Generator completes IV a-f and Operator completes IVg-i)

a. Operator's Name and Address: <b>THIS SECTION IS NOT APPLICABLE (NOT ASBESTOS)</b>		c. Responsible Agency Name and Address: <b>THIS SECTION IS NOT APPLICABLE (NOT ASBESTOS)</b>	
b. Phone:			
e. Special Handling Instructions and Additional Information:			
f. <input type="checkbox"/> Friable <input type="checkbox"/> Non-Friable <input type="checkbox"/> Both 0% Friable 0% Non-Friable			
OPERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked and labeled and are in all respects in proper condition for transport by highway according to applicable international and national governmental regulations.			
g. Operator's Name and Title (Print)		h. Signature	
		i. Date	
*Operator refers to the company which owns, leases, operates, controls, or supervises the facility being demolished or renovated, or the demolition or renovation operation or both			



# NON-HAZARDOUS SPECIAL WASTE & ASBESTOS MANIFEST

If waste is asbestos waste, complete Sections I, II, III and IV

If waste is **NOT** asbestos waste, complete Sections I, II and III

320

## I. GENERATOR (Generator completes Ia-s)

a. Generator's US EPA ID Number NA		b. Manifest Document Number 8		c. Page 1 of 1	
d. Generator's Information: <b>Arconic Lafayette LLC</b> 3131 E Main St Lafayette, IN 47905 Contact: Travis Catlin Phone: 765-237-1809 County: Tippecanoe			e. Billing Information: <b>O6 Environmental LLC</b> 6311 Bartmer Industrial Dr St. Louis, MO 63130 Contact: Caleb Tufts Phone: 765-654-8144 TRUX 333448		
Generator site location (if different): i. Site Location: N/A			j. Phone No: NA		
k. Waste Profile #	l. Exp. Date	m. Waste Shipping Name and Description	n. Containers		p. Unit
			No.	Type	Wt/Vol
3144 21 26865	8/30/2023	PCB Remediation Waste Soil and Sediment (Elliott Ditch Clean Up Project)	1	TRK	
GENERATOR'S CERTIFICATION: I hereby certify that the above named material is not a hazardous waste as defined by 40 CFR 261 or any applicable state law, has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulations; AND, if this waste is a treatment residue of a previously restricted hazardous waste subject to the Land Disposal Restrictions. I certify and warrant that the waste has been treated in accordance with the requirements of 40 CFR 268 and is no longer a hazardous waste as defined by 40 CFR 261.					
X Caleb S. Tufts, Agent for Arconic		X		X 9/29/2022	
q. Generator Authorized Agent Name (Print) Tyler Bundren		r. Signature 		s. Date	

## II. TRANSPORTER (Generator completes IIa-b and Transporter completes IIc-e)

a. Transporter's Name and Address: Fox Hauling 2887 IN-25 Lafayette, IN 47905 Phone: 765-742-5002			320		
c. Driver Name (Print) John Wilkman		d. Signature 		e. Date 9/29/22	

## III. DESTINATION (Generator complete III a-c and Destination Site completes III d-g)

a. Disposal Facility and Site Address: Walnut Creek Landfill 2701 North State Road 39 Frankfort, IN 46041 b. Phone: 765-659-8144		c. US-EPA Number - N/A 12-03	d. Discrepancy Indication Space:
I hereby certify that the above named material has been accepted and to the best of my knowledge the foregoing is true and accurate.			
e. Name of Authorized Agent (Print) W		f. Signature W	
		g. Date 9-29-22 26.57	

## IV. ASBESTOS (Generator completes IV a-f and Operator complete IV g-i)

a. Operator's Name and Address: <b>THIS SECTION IS NOT APPLICABLE (NOT ASBESTOS)</b>		c. Responsible Agency Name and Address: <b>THIS SECTION IS NOT APPLICABLE (NOT ASBESTOS)</b>	
b. Phone:			
e. Special Handling Instructions and Additional Information:			
f. <input type="checkbox"/> Frangible <input type="checkbox"/> Non-Frangible <input type="checkbox"/> Both <input type="checkbox"/> 0% Frangible <input type="checkbox"/> 0% Non-Frangible			
OPERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked and labeled and are in all respects in proper condition for transport by highway according to applicable international and national governmental regulations.			
g. Operator's Name and Title (Print)		h. Signature	
		i. Date	
*Operator refers to the company which owns, leases, operates, controls, or supervises the facility being demolished or renovated, or the demolition or renovation operation or both			



# NON-HAZARDOUS SPECIAL WASTE & ASBESTOS MANIFEST

If waste is asbestos waste, complete Sections I, II, III and IV

If waste is **NOT** asbestos waste, complete Sections I, II and III

320

## I. GENERATOR (Generator completes Ia-s)

a. Generator's US EPA ID Number NA		b. Manifest Document Number 9		c. Page 1 of 1	
d. Generator's Information: <b>Arconic Lafayette LLC</b> 3131 E Main St Lafayette, IN 47905 Contact: Travis Catlin Phone: 765-237-1809 County: Tippecanoe			e. Billing Information: <b>O6 Environmental LLC</b> 6311 Bartmer Industrial Dr St. Louis, MO 63130 Contact: Caleb Tufts Phone: 765-654-8144 TRUX 333448		
Generator site location (if different): i. Site Location: N/A			j. Phone No: NA		
k. Waste Profile #	l. Exp. Date	m. Waste Shipping Name and Description	n. Containers No.	n. Containers Type	o. Total Quantity
3144 21 26865	8/30/2023	PCB Remediation Waste Soil and Sediment (Elliott Ditch Clean Up Project)	1	TRK	
p. Unit Wt/Vol					
GENERATOR'S CERTIFICATION: I hereby certify that the above named material is not a hazardous waste as defined by 40 CFR 261 or any applicable state law, has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulations; AND, if this waste is a treatment residue of a previously restricted hazardous waste subject to the Land Disposal Restrictions. I certify and warrant that the waste has been treated in accordance with the requirements of 40 CFR 268 and is no longer a hazardous waste as defined by 40 CFR 261.					
X Caleb S. Tufts, Agent for Arconic		X		X	
q. Generator Authorized Agent Name (Print) Tyler Burden		r. Signature 		s. Date 9/29/2022	

## II. TRANSPORTER (Generator completes IIa-b and Transporter completes IIc-e)

a. Transporter's Name and Address: Fox Hauling 2887 IN-25 Lafayette, IN 47905 Phone: 765-742-5002			
c. Driver Name (Print) John Wildman		d. Signature 	e. Date 9/29/22

## III. DESTINATION (Generator complete III a-c and Destination Site completes III d-g)

a. Disposal Facility and Site Address: Walnut Creek Landfill 2701 North State Road 39 Frankfort, IN 46041 b. Phone: 765-659-8144		c. US-EPA Number - N/A 12-03	d. Discrepancy Indication Space:
I hereby certify that the above named material has been accepted and to the best of my knowledge the foregoing is true and accurate.			
e. Name of Authorized Agent (Print) RL		f. Signature 	g. Date 9-29-22

## IV. ASBESTOS (Generator completes IV a-f and Operator complete IVg-i)

a. Operator's Name and Address: <b>THIS SECTION IS NOT APPLICABLE (NOT ASBESTOS)</b>		c. Responsible Agency Name and Address: <b>THIS SECTION IS NOT APPLICABLE (NOT ASBESTOS)</b>	
b. Phone:			
e. Special Handling Instructions and Additional Information:			
f. <input type="checkbox"/> Friable <input type="checkbox"/> Non-Friable <input type="checkbox"/> Both 0% Friable 0% Non-Friable			
OPERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked and labeled and are in all respects in proper condition for transport by highway according to applicable international and national governmental regulations.			
g. Operator's Name and Title (Print)		h. Signature	
		i. Date	

\*Operator refers to the company which owns, leases, operates, controls, or supervises the facility being demolished or renovated, or the demolition or renovation operation or both



### NON-HAZARDOUS SPECIAL WASTE & ASBESTOS MANIFEST

If waste is asbestos waste, complete Sections I, II, III and IV  
 If waste is **NOT** asbestos waste, complete Sections I, II and III

32c

**I. GENERATOR** (Generator completes Ia-s)

a. Generator's US EPA ID Number NA		b. Manifest Document Number 10		c. Page 1 of 1	
d. Generator's Information: <b>Arconic Lafayette LLC</b> 3131 E Main St Lafayette, IN 47905 Contact: Travis Catlin Phone: 765-237-1809 County: Tippecanoe			e. Billing Information: <b>O6 Environmental LLC</b> 6311 Bartmer Industrial Dr St. Louis, MO 63130 Contact: Caleb Tufts Phone: 765-654-8144 TRUX 333448		
Generator site location (if different): i. Site Location: N/A			j. Phone No: NA		
k. Waste Profile #	l. Exp. Date	m. Waste Shipping Name and Description	n. Containers No.	n. Containers Type	o. Total Quantity
3144 21 26865	8/30/2023	PCB Remediation Waste Soil and Sediment (Elliott Ditch Clean Up Project)	1	TRK	
GENERATOR'S CERTIFICATION: I hereby certify that the above named material is not a hazardous waste as defined by 40 CFR 261 or any applicable state law, has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulations; AND, if this waste is a treatment residue of a previously restricted hazardous waste subject to the Land Disposal Restrictions. I certify and warrant that the waste has been treated in accordance with the requirements of 40 CFR 268 and is no longer a hazardous waste as defined by 40 CFR 261.					
X Caleb S. Tufts, Agent for Arconic		X		X 9-30-22	
q. Generator Authorized Agent Name (Print) Tyler Bundren		r. Signature 		s. Date 9/20/22	

**II. TRANSPORTER** (Generator completes IIa-b and Transporter completes IIc-e)

a. Transporter's Name and Address: Fox Hauling 2887 IN-25 Lafayette, IN 47905 Phone: 765-742-5002			32c		
c. Driver Name (Print) 		d. Signature 		e. Date 9/30/22	

**III. DESTINATION** (Generator complete III a-c and Destination Site completes III d-g)

a. Disposal Facility and Site Address: Walnut Creek Landfill 2701 North State Road 39 Frankfort, IN 46041 b. Phone: 765-659-8144		c. US-EPA Number - N/A 12-03	d. Discrepancy Indication Space:		
I hereby certify that the above named material has been accepted and to the best of my knowledge the foregoing is true and accurate.					
e. Name of Authorized Agent (Print) 		f. Signature 		g. Date 9-30-22 25.21	

**IV. ASBESTOS** (Generator completes IV a-f and Operator complete IVg-i)

a. Operator's Name and Address: <b>THIS SECTION IS NOT APPLICABLE (NOT ASBESTOS)</b>		c. Responsible Agency Name and Address: <b>THIS SECTION IS NOT APPLICABLE (NOT ASBESTOS)</b>			
b. Phone:					
e. Special Handling Instructions and Additional Information:					
f. <input type="checkbox"/> Friable <input type="checkbox"/> Non-Friable <input type="checkbox"/> Both 0% Friable 0% Non-Friable					
OPERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked and labeled and are in all respects in proper condition for transport by highway according to applicable international and national governmental regulations.					
g. Operator's Name and Title (Print)		h. Signature		i. Date	
*Operator refers to the company which owns, leases, operates, controls, or supervises the facility being demolished or renovated, or the demolition or renovation operation or both					



# NON-HAZARDOUS SPECIAL WASTE & ASBESTOS MANIFEST

If waste is asbestos waste, complete Sections I, II, III and IV

If waste is **NOT** asbestos waste, complete Sections I, II and III

32C

## I. GENERATOR (Generator completes Ia-s)

a. Generator's US EPA ID Number NA		b. Manifest Document Number 11		c. Page 1 of 1	
d. Generator's Information: <b>Arconic Lafayette LLC</b> 3131 E Main St Lafayette, IN 47905 Contact: Travis Catlin Phone: 765-237-1809 County: Tippecanoe			e. Billing Information: <b>O6 Environmental LLC</b> 6311 Bartmer Industrial Dr St. Louis, MO 63130 Contact: Caleb Tufts Phone: 765-654-8144 TRUX 333448		
Generator site location (if different): i. Site Location: N/A			j. Phone No: NA		
k. Waste Profile #	l. Exp. Date	m. Waste Shipping Name and Description	n. Containers		p. Unit Wt/Vol
			No.	Type	o. Total Quantity
3144 21 26865	8/30/2023	PCB Remediation Waste Soil and Sediment (Elliott Ditch Clean Up Project)	1	TRK	
GENERATOR'S CERTIFICATION: I hereby certify that the above named material is not a hazardous waste as defined by 40 CFR 261 or any applicable state law, has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulations; AND, if this waste is a treatment residue of a previously restricted hazardous waste subject to the Land Disposal Restrictions. I certify and warrant that the waste has been treated in accordance with the requirements of 40 CFR 268 and is no longer a hazardous waste as defined by 40 CFR 261.					
X Caleb S. Tufts, Agent for Arconic		X		X	
q. Generator Authorized Agent Name (Print) Tyler Burden		r. Signature 		s. Date 9/30/2022	

## II. TRANSPORTER (Generator completes IIa-b and Transporter completes IIc-e)

a. Transporter's Name and Address: Fox Hauling 2887 IN-25 Lafayette, IN 47905 Phone: 765-742-5002			32C		
c. Driver Name (Print) John Wildman		d. Signature 		e. Date 9/30/22	

## III. DESTINATION (Generator complete III a-c and Destination Site completes III d-g)

a. Disposal Facility and Site Address: Walnut Creek Landfill 2701 North State Road 39 Frankfort, IN 46041 b. Phone: 765-659-8144		c. US-EPA Number - N/A 12-03	d. Discrepancy Indication Space:
I hereby certify that the above named material has been accepted and to the best of my knowledge the foregoing is true and accurate.			
e. Name of Authorized Agent (Print) u		f. Signature u	
		g. Date 9-30-22 25.99	

## IV. ASBESTOS (Generator completes IV a-f and Operator complete IVg-i)

a. Operator's Name and Address: <b>THIS SECTION IS NOT APPLICABLE (NOT ASBESTOS)</b>		c. Responsible Agency Name and Address: <b>THIS SECTION IS NOT APPLICABLE (NOT ASBESTOS)</b>	
b. Phone:			
e. Special Handling Instructions and Additional Information:			
f. <input type="checkbox"/> Friable <input type="checkbox"/> Non-Friable <input type="checkbox"/> Both 0% Friable 0% Non-Friable			
OPERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked and labeled and are in all respects in proper condition for transport by highway according to applicable international and national governmental regulations.			
g. Operator's Name and Title (Print)		h. Signature	
		i. Date	

\*Operator refers to the company which owns, leases, operates, controls, or supervises the facility being demolished or renovated, or the demolition or renovation operation or both



### NON-HAZARDOUS SPECIAL WASTE & ASBESTOS MANIFEST

If waste is asbestos waste, complete Sections I, II, III and IV  
 If waste is **NOT** asbestos waste, complete Sections I, II and III

76F

**I. GENERATOR** (Generator completes Ia-s)

a. Generator's US EPA ID Number NA		b. Manifest Document Number 12		c. Page 1 of 1		
d. Generator's Information: <b>Arconic Lafayette LLC</b> 3131 E Main St Lafayette, IN 47905 Contact: Travis Catlin Phone: 765-237-1809 County: Tippecanoe			e. Billing Information: <b>O6 Environmental LLC</b> 6311 Bartmer Industrial Dr St. Louis, MO 63130 Contact: Caleb Tufts Phone: 765-654-8144 TRUX 333448			
Generator site location (if different): i. Site Location: N/A			j. Phone No: NA			
k. Waste Profile #	l. Exp. Date	m. Waste Shipping Name and Description	n. Containers No.	n. Containers Type	o. Total Quantity	p. Unit Wt/Vol
3144 21 26865	8/30/2023	PCB Remediation Waste Soil and Sediment (Elliott Ditch Clean Up Project)	1	TRK		
GENERATOR'S CERTIFICATION: I hereby certify that the above named material is not a hazardous waste as defined by 40 CFR 261 or any applicable state law, has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulations; AND, if this waste is a treatment residue of a previously restricted hazardous waste subject to the Land Disposal Restrictions. I certify and warrant that the waste has been treated in accordance with the requirements of 40 CFR 268 and is no longer a hazardous waste as defined by 40 CFR 261.						
X Caleb S. Tufts, Agent for Arconic		X		X		
q. Generator Authorized Agent Name (Print) Tyler Bundren		r. Signature 		s. Date 9/30/2022		

**II. TRANSPORTER** (Generator completes IIa-b and Transporter completes IIc-e)

a. Transporter's Name and Address: Fox Hauling 2887 IN-25 Lafayette, IN 47905 Phone: 765-742-5002		
c. Driver Name (Print) Noah Cadwallader	d. Signature 	e. Date 9-30-2022

**III. DESTINATION** (Generator complete III a-c and Destination Site completes III d-g)

a. Disposal Facility and Site Address: Walnut Creek Landfill 2701 North State Road 39 Frankfort, IN 46041 b. Phone: 765-659-8144		c. US-EPA Number - N/A 12-03	d. Discrepancy Indication Space:
I hereby certify that the above named material has been accepted and to the best of my knowledge the foregoing is true and accurate.			
e. Name of Authorized Agent (Print) M	f. Signature 	g. Date 9-30-22 23.00	

**IV. ASBESTOS** (Generator completes IV a-f and Operator complete IVg-i)

a. Operator's Name and Address: <b>THIS SECTION IS NOT APPLICABLE (NOT ASBESTOS)</b>		c. Responsible Agency Name and Address: <b>THIS SECTION IS NOT APPLICABLE (NOT ASBESTOS)</b>	
b. Phone:			
e. Special Handling Instructions and Additional Information:			
f. <input type="checkbox"/> Friable <input type="checkbox"/> Non-Friable <input type="checkbox"/> Both 0% Friable 0% Non-Friable			
OPERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked and labeled and are in all respects in proper condition for transport by highway according to applicable international and national governmental regulations.			
g. Operator's Name and Title (Print)		i. Date	
h. Signature		i. Date	

\*Operator refers to the company which owns, leases, operates, controls, or supervises the facility being demolished or renovated, or the demolition or renovation operation or both



### NON-HAZARDOUS SPECIAL WASTE & ASBESTOS MANIFEST

If waste is asbestos waste, complete Sections I, II, III and IV

If waste is **NOT** asbestos waste, complete Sections I, II and III

80F

**I. GENERATOR** (Generator completes Ia-s)

a. Generator's US EPA ID Number NA		b. Manifest Document Number 13		c. Page 1 of 1	
d. Generator's Information: <b>Arconic Lafayette LLC</b> 3131 E Main St Lafayette, IN 47905 Contact: Travis Catlin Phone: 765-237-1809 County: Tippecanoe			e. Billing Information: <b>O6 Environmental LLC</b> 6311 Bartmer Industrial Dr St. Louis, MO 63130 Contact: Caleb Tufts Phone: 765-654-8144 TRUX 333448		
Generator site location (if different): i. Site Location: N/A			j. Phone No: NA		
k. Waste Profile #	l. Exp. Date	m. Waste Shipping Name and Description	n. Containers No.	n. Containers Type	o. Total Quantity
3144 21 26865	8/30/2023	PCB Remediation Waste Soil and Sediment (Elliott Ditch Clean Up Project)	1	TRK	
p. Unit Wt/Vol					
GENERATOR'S CERTIFICATION: I hereby certify that the above named material is not a hazardous waste as defined by 40 CFR 261 or any applicable state law, has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulations; AND, if this waste is a treatment residue of a previously restricted hazardous waste subject to the Land Disposal Restrictions. I certify and warrant that the waste has been treated in accordance with the requirements of 40 CFR 268 and is no longer a hazardous waste as defined by 40 CFR 261.					
X Caleb S. Tufts, Agent for Arconic		X		X	
q. Generator Authorized Agent Name (Print) Tyler Bundren		r. Signature 		s. Date 9/30/2022	

**II. TRANSPORTER** (Generator completes IIa-b and Transporter completes IIc-e)

a. Transporter's Name and Address: Fox Hauling 2887 IN-25 Lafayette, IN 47905 Phone: 765-742-5002		
c. Driver Name (Print) WS	d. Signature 	e. Date 9-30-22

**III. DESTINATION** (Generator complete III a-c and Destination Site completes III d-g)

a. Disposal Facility and Site Address: Walnut Creek Landfill 2701 North State Road 39 Frankfort, IN 46041 b. Phone: 765-659-8144		c. US-EPA Number - N/A 12-03	d. Discrepancy Indication Space:
I hereby certify that the above named material has been accepted and to the best of my knowledge the foregoing is true and accurate.			
e. Name of Authorized Agent (Print) Jon Smith	f. Signature 	g. Date 9-30-22	(22.82)

**IV. ASBESTOS** (Generator completes IV a-f and Operator complete IVg-i)

a. Operator's Name and Address: <b>THIS SECTION IS NOT APPLICABLE (NOT ASBESTOS)</b>	c. Responsible Agency Name and Address: <b>THIS SECTION IS NOT APPLICABLE (NOT ASBESTOS)</b>
b. Phone:	
e. Special Handling Instructions and Additional Information:	
f. <input type="checkbox"/> Friable <input type="checkbox"/> Non-Friable <input type="checkbox"/> Both 0% Friable 0% Non-Friable	
OPERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked and labeled and are in all respects in proper condition for transport by highway according to applicable international and national governmental regulations.	
g. Operator's Name and Title (Print)	i. Date
*Operator refers to the company which owns, leases, operates, controls, or supervises the facility being demolished or renovated, or the demolition or renovation operation or both	



# NON-HAZARDOUS SPECIAL WASTE & ASBESTOS MANIFEST

If waste is asbestos waste, complete Sections I, II, III and IV

If waste is **NOT** asbestos waste, complete Sections I, II and III

32C

## I. GENERATOR (Generator completes Ia-s)

a. Generator's US EPA ID Number NA		b. Manifest Document Number 14		c. Page 1 of 1	
d. Generator's Information: <b>Arconic Lafayette LLC</b> 3131 E Main St Lafayette, IN 47905 Contact: Travis Catlin Phone: 765-237-1809 County: Tippecanoe			e. Billing Information: <b>O6 Environmental LLC</b> 6311 Bartmer Industrial Dr St. Louis, MO 63130 Contact: Caleb Tufts Phone: 765-654-8144 TRUX 333448		
Generator site location (if different): i. Site Location: N/A			j. Phone No: NA		
k. Waste Profile #	l. Exp. Date	m. Waste Shipping Name and Description	n. Containers No.	Type	o. Total Quantity
3144 21 26865	8/30/2023	PCB Remediation Waste Soil and Sediment (Elliott Ditch Clean Up Project)	1	TRK	
p. Unit Wt/Vol					
GENERATOR'S CERTIFICATION: I hereby certify that the above named material is not a hazardous waste as defined by 40 CFR 261 or any applicable state law, has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulations; AND, if this waste is a treatment residue of a previously restricted hazardous waste subject to the Land Disposal Restrictions. I certify and warrant that the waste has been treated in accordance with the requirements of 40 CFR 268 and is no longer a hazardous waste as defined by 40 CFR 261.					
X Caleb S. Tufts, Agent for Arconic		X		X	
q. Generator Authorized Agent Name (Print) Tyler Burden		r. Signature 		s. Date 9/30/2022	

## II. TRANSPORTER (Generator completes IIa-b and Transporter completes IIc-e)

a. Transporter's Name and Address: Fox Hauling 2887 IN-25 Lafayette, IN 47905 Phone: 765-742-5002			32C		
c. Driver Name (Print) 	d. Signature 		e. Date 9/30/22		

## III. DESTINATION (Generator complete III a-c and Destination Site completes III d-g)

a. Disposal Facility and Site Address: Walnut Creek Landfill 2701 North State Road 39 Frankfort, IN 46041 b. Phone: 765-659-8144		c. US-EPA Number - N/A 12-03	d. Discrepancy Indication Space:		
I hereby certify that the above named material has been accepted and to the best of my knowledge the foregoing is true and accurate.					
e. Name of Authorized Agent (Print) RJ		f. Signature 		g. Date 9-30-22 25.03	

## IV. ASBESTOS (Generator completes IV a-f and Operator complete IVg-i)

a. Operator's Name and Address: <b>THIS SECTION IS NOT APPLICABLE (NOT ASBESTOS)</b>		c. Responsible Agency Name and Address: <b>THIS SECTION IS NOT APPLICABLE (NOT ASBESTOS)</b>			
b. Phone:					
e. Special Handling Instructions and Additional Information:					
f. <input type="checkbox"/> Friable <input type="checkbox"/> Non-Friable <input type="checkbox"/> Both 0% Friable 0% Non-Friable					
OPERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked and labeled and are in all respects in proper condition for transport by highway according to applicable international and national governmental regulations.					
g. Operator's Name and Title (Print)		h. Signature		i. Date	
*Operator refers to the company which owns, leases, operates, controls, or supervises the facility being demolished or renovated, or the demolition or renovation operation or both					



# NON-HAZARDOUS SPECIAL WASTE & ASBESTOS MANIFEST

If waste is asbestos waste, complete Sections I, II, III and IV

If waste is **NOT** asbestos waste, complete Sections I, II and III

32C

## I. GENERATOR (Generator completes Ia-s)

a. Generator's US EPA ID Number NA		b. Manifest Document Number 15		c. Page 1 of 1	
d. Generator's Information: <b>Arconic Lafayette LLC</b> 3131 E Main St Lafayette, IN 47905 Contact: Travis Catlin Phone: 765-237-1809 County: Tippecanoe			e. Billing Information: <b>O6 Environmental LLC</b> 6311 Bartmer Industrial Dr St. Louis, MO 63130 Contact: Caleb Tufts Phone: 765-654-8144 TRUX 333448		
Generator site location (if different): i. Site Location: N/A			j. Phone No: NA		
k. Waste Profile #	l. Exp. Date	m. Waste Shipping Name and Description	n. Containers No.	Type	o. Total Quantity
3144 21 26865	8/30/2023	PCB Remediation Waste Soil and Sediment (Elliott Ditch Clean Up Project)	1	TRK	
p. Unit Wt/Vol					
GENERATOR'S CERTIFICATION: I hereby certify that the above named material is not a hazardous waste as defined by 40 CFR 261 or any applicable state law, has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulations; AND, if this waste is a treatment residue of a previously restricted hazardous waste subject to the Land Disposal Restrictions. I certify and warrant that the waste has been treated in accordance with the requirements of 40 CFR 268 and is no longer a hazardous waste as defined by 40 CFR 261.					
X Caleb S. Tufts, Agent for Arconic		X		X	
q. Generator Authorized Agent Name (Print) Tyler Bundren		r. Signature 		s. Date 9/30/2022	

## II. TRANSPORTER (Generator completes IIa-b and Transporter completes IIc-e)

a. Transporter's Name and Address: Fox Hauling 2887 IN-25 Lafayette, IN 47905 Phone: 765-742-5002			32C		
c. Driver Name (Print) 		d. Signature 		e. Date 9/30/22	

## III. DESTINATION (Generator complete III a-c and Destination Site completes III d-g)

a. Disposal Facility and Site Address: Walnut Creek Landfill 2701 North State Road 39 Frankfort, IN 46041 b. Phone: 765-659-8144		c. US-EPA Number - N/A 12-03	d. Discrepancy Indication Space:
I hereby certify that the above named material has been accepted and to the best of my knowledge the foregoing is true and accurate.			
e. Name of Authorized Agent (Print) 		f. Signature 	
		g. Date 9-30-22 26.00	

## IV. ASBESTOS (Generator completes IV a-f and Operator complete IVg-i)

a. Operator's Name and Address: <b>THIS SECTION IS NOT APPLICABLE (NOT ASBESTOS)</b>		c. Responsible Agency Name and Address: <b>THIS SECTION IS NOT APPLICABLE (NOT ASBESTOS)</b>	
b. Phone:			
e. Special Handling Instructions and Additional Information:			
f. <input type="checkbox"/> Friable <input type="checkbox"/> Non-Friable <input type="checkbox"/> Both 0% Friable 0% Non-Friable			
OPERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked and labeled and are in all respects in proper condition for transport by highway according to applicable international and national governmental regulations.			
g. Operator's Name and Title (Print)		h. Signature	
		i. Date	
*Operator refers to the company which owns, leases, operates, controls, or supervises the facility being demolished or renovated, or the demolition or renovation operation or both			



# NON-HAZARDOUS SPECIAL WASTE & ASBESTOS MANIFEST

If waste is asbestos waste, complete Sections I, II, III and IV  
If waste is **NOT** asbestos waste, complete Sections I, II and III

32C

### I. GENERATOR (Generator completes Ia-s)

a. Generator's US EPA ID Number NA		b. Manifest Document Number 14		c. Page 1 of 1	
d. Generator's Information: <b>Arconic Lafayette LLC</b> 3131 E Main St Lafayette, IN 47905 Contact: Travis Catlin Phone: 765-237-1809 County: Tippecanoe			e. Billing Information: <b>O6 Environmental LLC</b> 6311 Bartmer Industrial Dr St. Louis, MO 63130 Contact: Caleb Tufts Phone: 765-654-8144 TRUX 333448		
Generator site location (if different): i. Site Location: N/A			j. Phone No: NA		
k. Waste Profile # 3144 21 26865	l. Exp. Date 8/30/2023	m. Waste Shipping Name and Description PCB Remediation Waste Soil and Sediment (Elliott Ditch Clean Up Project)	n. Containers No. 1 Type TRK	o. Total Quantity	p. Unit Wt/Vol
GENERATOR'S CERTIFICATION: I hereby certify that the above named material is not a hazardous waste as defined by 40 CFR 261 or any applicable state law, has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulations; AND, if this waste is a treatment residue of a previously restricted hazardous waste subject to the Land Disposal Restrictions. I certify and warrant that the waste has been treated in accordance with the requirements of 40 CFR 268 and is no longer a hazardous waste as defined by 40 CFR 261.					
X Caleb S. Tufts, Agent for Arconic		X		X	
q. Generator Authorized Agent Name (Print) Tyler Bundren		r. Signature 		s. Date 9/30/2022	

### II. TRANSPORTER (Generator completes IIa-b and Transporter completes IIc-e)

a. Transporter's Name and Address: Fox Hauling 2887 IN-25 Lafayette, IN 47905 Phone: 765-742-5002			
c. Driver Name (Print) 		d. Signature 	e. Date 9/30/22

### III. DESTINATION (Generator completes III a-c and Destination Site completes III d-g)

a. Disposal Facility and Site Address: Walnut Creek Landfill 2701 North State Road 39 Frankfort, IN 46041 b. Phone: 765-659-8144		c. US-EPA Number - N/A 12-03	d. Discrepancy Indication Space:
I hereby certify that the above named material has been accepted and to the best of my knowledge the foregoing is true and accurate.			
e. Name of Authorized Agent (Print) 		f. Signature 	g. Date 9-30-22 23.66

### IV. ASBESTOS (Generator completes IV a-f and Operator complete IVg-i)

a. Operator's Name and Address: <b>THIS SECTION IS NOT APPLICABLE (NOT ASBESTOS)</b>		c. Responsible Agency Name and Address: <b>THIS SECTION IS NOT APPLICABLE (NOT ASBESTOS)</b>	
b. Phone:			
e. Special Handling Instructions and Additional Information:			
f. <input type="checkbox"/> Friable <input type="checkbox"/> Non-Friable <input type="checkbox"/> Both <input type="checkbox"/> 0% Friable <input type="checkbox"/> 0% Non-Friable			
OPERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked and labeled and are in all respects in proper condition for transport by highway according to applicable international and national governmental regulations.			
g. Operator's Name and Title (Print)		h. Signature	
		i. Date	

\*Operator refers to the company which owns, leases, operates, controls, or supervises the facility being demolished or renovated, or the demolition or renovation operation or both



# NON-HAZARDOUS SPECIAL WASTE & ASBESTOS MANIFEST

If waste is asbestos waste, complete Sections I, II, III and IV

If waste is **NOT** asbestos waste, complete Sections I, II and III

2M

## I. GENERATOR (Generator completes Ia-s)

a. Generator's US EPA ID Number NA		b. Manifest Document Number 17		c. Page 1 of 1	
d. Generator's Information: <b>Arconic Lafayette LLC</b> 3131 E Main St Lafayette, IN 47905 Contact: Travis Catlin Phone: 765-237-1809 County: Tippecanoe			e. Billing Information: <b>O6 Environmental LLC</b> 6311 Bartmer Industrial Dr St. Louis, MO 63130 Contact: Caleb Tufts Phone: 765-654-8144 TRUX 333448		
Generator site location (if different): i. Site Location: N/A			j. Phone No: NA		
k. Waste Profile #	l. Exp. Date	m. Waste Shipping Name and Description	n. Containers No.	Type	o. Total Quantity
3144 21 26865	8/30/2023	PCB Remediation Waste Soil and Sediment (Elliott Ditch Clean Up Project)	1	TRK	
GENERATOR'S CERTIFICATION: I hereby certify that the above named material is not a hazardous waste as defined by 40 CFR 261 or any applicable state law, has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulations; AND, if this waste is a treatment residue of a previously restricted hazardous waste subject to the Land Disposal Restrictions. I certify and warrant that the waste has been treated in accordance with the requirements of 40 CFR 268 and is no longer a hazardous waste as defined by 40 CFR 261.					
X Caleb S. Tufts, Agent for Arconic		X		X 10-3-22	
q. Generator Authorized Agent Name (Print) Tyler Burdren		r. Signature 		s. Date 10/3/22	

## II. TRANSPORTER (Generator completes IIa-b and Transporter completes IIc-e)

a. Transporter's Name and Address: Fox Hauling 2887 IN-25 Lafayette, IN 47905 Phone: 765-742-5002		
c. Driver Name (Print) Mark W. KESLER	d. Signature 	e. Date 3 OCT 22

## III. DESTINATION (Generator complete III a-c and Destination Site completes III d-g)

a. Disposal Facility and Site Address: <b>Walnut Creek Landfill</b> 2701 North State Road 39 Frankfort, IN 46041 b. Phone: 765-659-8144		c. US-EPA Number - N/A 12-03	d. Discrepancy Indication Space:
I hereby certify that the above named material has been accepted and to the best of my knowledge the foregoing is true and accurate.			
e. Name of Authorized Agent (Print) mf	f. Signature w	g. Date 10-3-22 22.15	

## IV. ASBESTOS (Generator completes IV a-f and Operator complete IVg-i)

a. Operator's Name and Address <b>THIS SECTION IS NOT APPLICABLE (NOT ASBESTOS)</b>		c. Responsible Agency Name and Address <b>THIS SECTION IS NOT APPLICABLE (NOT ASBESTOS)</b>	
b. Phone <b>THIS SECTION IS NOT APPLICABLE (NOT ASBESTOS)</b>			
e. Special Handling Instructions and Additional Information:			
f. <input type="checkbox"/> Friable <input type="checkbox"/> Non-Friable <input type="checkbox"/> Both 0% Friable 0% Non-Friable			
OPERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked and labeled and are in all respects in proper condition for transport by highway according to applicable international and national governmental regulations.			
g. Operator's Name and Title (Print)		h. Signature	
		i. Date	
*Operator refers to the company which owns, leases, operates, controls, or supervises the facility being demolished or renovated, or the demolition or renovation operation or both			



# NON-HAZARDOUS SPECIAL WASTE & ASBESTOS MANIFEST

If waste is asbestos waste, complete Sections I, II, III and IV

If waste is **NOT** asbestos waste, complete Sections I, II and III

1 m

## I. GENERATOR (Generator completes Ia-s)

a. Generator's US EPA ID Number NA		b. Manifest Document Number 18		c. Page 1 of 1	
d. Generator's Information: <b>Arconic Lafayette LLC</b> 3131 E Main St Lafayette, IN 47905 Contact: Travis Catlin Phone: 765-237-1809 County: Tippecanoe			e. Billing Information: <b>O6 Environmental LLC</b> 6311 Bartmer Industrial Dr St. Louis, MO 63130 Contact: Caleb Tufts Phone: 765-654-8144 TRUX 333448		
Generator site location (if different): i. Site Location: N/A			j. Phone No: NA		
k. Waste Profile #	l. Exp. Date	m. Waste Shipping Name and Description	n. Containers No.	n. Containers Type	o. Total Quantity
3144 21 26865	8/30/2023	PCB Remediation Waste Soil and Sediment (Elliott Ditch Clean Up Project)	1	TRK	
GENERATOR'S CERTIFICATION: I hereby certify that the above named material is not a hazardous waste as defined by 40 CFR 261 or any applicable state law, has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulations; AND, if this waste is a treatment residue of a previously restricted hazardous waste subject to the Land Disposal Restrictions. I certify and warrant that the waste has been treated in accordance with the requirements of 40 CFR 268 and is no longer a hazardous waste as defined by 40 CFR 261.					
X Caleb S. Tufts, Agent for Arconic		X		X	
q. Generator Authorized Agent Name (Print) Tyler Bundren		r. Signature 		s. Date 10/3/22	

## II. TRANSPORTER (Generator completes IIa-b and Transporter completes IIc-e)

a. Transporter's Name and Address: Fox Hauling 2887 IN-25 Lafayette, IN 47905 Phone: 765-742-5002		
c. Driver Name (Print) Amity Miller	d. Signature 	e. Date 10/3/22

## III. DESTINATION (Generator complete III a-c and Destination Site completes III d-g)

a. Disposal Facility and Site Address: Walnut Creek Landfill 2701 North State Road 39 Frankfort, IN 46041 b. Phone: 765-659-8144		c. US-EPA Number - N/A 12-03	d. Discrepancy Indication Space:
I hereby certify that the above named material has been accepted and to the best of my knowledge the foregoing is true and accurate.			
e. Name of Authorized Agent (Print) 		f. Signature 	g. Date 10-3-22 21.31

## IV. ASBESTOS (Generator completes IV a-f and Operator complete IVg-i)

a. Operator's Name and Address: <b>THIS SECTION IS NOT APPLICABLE (NOT ASBESTOS)</b>		c. Responsible Agency Name and Address: <b>THIS SECTION IS NOT APPLICABLE (NOT ASBESTOS)</b>	
b. Phone: <b>THIS SECTION IS NOT APPLICABLE (NOT ASBESTOS)</b>			
e. Special Handling Instructions and Additional Information: f. <input type="checkbox"/> Friable <input type="checkbox"/> Non-Friable <input type="checkbox"/> Both 0% Friable 0% Non-Friable			
OPERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked and labeled and are in all respects in proper condition for transport by highway according to applicable international and national governmental regulations.			
g. Operator's Name and Title (Print)		h. Signature	
		i. Date	
*Operator refers to the company which owns, leases, operates, controls, or supervises the facility being demolished or renovated, or the demolition or renovation operation or both			



# NON-HAZARDOUS SPECIAL WASTE & ASBESTOS MANIFEST

If waste is asbestos waste, complete Sections I, II, III and IV

If waste is **NOT** asbestos waste, complete Sections I, II and III

## I. GENERATOR (Generator completes Ia-s)

2M

a. Generator's US EPA ID Number NA		b. Manifest Document Number 19		c. Page 1 of 1	
d. Generator's Information: <b>Arconic Lafayette LLC</b> 3131 E Main St Lafayette, IN 47905 Contact: Travis Catlin Phone: 765-237-1809 County: Tippecanoe			e. Billing Information: <b>O6 Environmental LLC</b> 6311 Bartmer Industrial Dr St. Louis, MO 63130 Contact: Caleb Tufts Phone: 765-654-8144 TRUX 333448		
Generator site location (if different): i. Site Location: N/A			j. Phone No: NA		
k. Waste Profile #	l. Exp. Date	m. Waste Shipping Name and Description	n. Containers No.	Type	o. Total Quantity
3144 21 26865	8/30/2023	PCB Remediation Waste Soil and Sediment (Elliott Ditch Clean Up Project)	1	TRK	
p. Unit Wt/Vol					
GENERATOR'S CERTIFICATION: I hereby certify that the above named material is not a hazardous waste as defined by 40 CFR 261 or any applicable state law, has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulations; AND, if this waste is a treatment residue of a previously restricted hazardous waste subject to the Land Disposal Restrictions. I certify and warrant that the waste has been treated in accordance with the requirements of 40 CFR 268 and is no longer a hazardous waste as defined by 40 CFR 261.					
X Caleb S. Tufts, Agent for Arconic		X		X	
q. Generator Authorized Agent Name (Print) Tyler Bundren		r. Signature 		s. Date 10/31/2022	

## II. TRANSPORTER (Generator completes IIa-b and Transporter completes IIc-e)

a. Transporter's Name and Address: Fox Hauling 2887 IN-25 Lafayette, IN 47905 Phone: 765-742-5002		
c. Driver Name (Print) Mark Keisor	d. Signature 	e. Date 3 Oct 22

## III. DESTINATION (Generator complete III a-c and Destination Site completes III d-g)

a. Disposal Facility and Site Address: Walnut Creek Landfill 2701 North State Road 39 Frankfort, IN 46041 b. Phone: 765-659-8144		c. US-EPA Number - N/A 12-03	d. Discrepancy Indication Space:
I hereby certify that the above named material has been accepted and to the best of my knowledge the foregoing is true and accurate.			
e. Name of Authorized Agent (Print) 	f. Signature 	g. Date 10-3-22 22.98	

## IV. ASBESTOS (Generator completes IV a-f and Operator complete IVg-i)

a. Operator's Name and Address: <b>THIS SECTION IS NOT APPLICABLE (NOT ASBESTOS)</b>	c. Responsible Agency Name and Address: <b>THIS SECTION IS NOT APPLICABLE (NOT ASBESTOS)</b>
b. Phone:	
e. Special Handling Instructions and Additional Information:	
f. <input type="checkbox"/> Friable <input type="checkbox"/> Non-Friable <input type="checkbox"/> Both 0% Friable 0% Non-Friable	
OPERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked and labeled and are in all respects in proper condition for transport by highway according to applicable international and national governmental regulations.	
g. Operator's Name and Title (Print)	i. Date
h. Signature	

\*Operator refers to the company which owns, leases, operates, controls, or supervises the facility being demolished or renovated, or the demolition or renovation operation or both



# NON-HAZARDOUS SPECIAL WASTE & ASBESTOS MANIFEST

If waste is asbestos waste, complete Sections I, II, III and IV

If waste is **NOT** asbestos waste, complete Sections I, II and III

IM

## I. GENERATOR (Generator completes Ia-s)

a. Generator's US EPA ID Number NA		b. Manifest Document Number 20		c. Page 1 of 1	
d. Generator's Information: <b>Arconic Lafayette LLC</b> 3131 E Main St Lafayette, IN 47905 Contact: Travis Catlin Phone: 765-237-1809 County: Tippecanoe			e. Billing Information: <b>O6 Environmental LLC</b> 6311 Bartmer Industrial Dr St. Louis, MO 63130 Contact: Caleb Tufts Phone: 765-654-8144 TRUX 333448		
Generator site location (if different): i. Site Location: N/A			j. Phone No: NA		
k. Waste Profile #	l. Exp. Date	m. Waste Shipping Name and Description	n. Containers No.	Type	o. Total Quantity
3144 21 26865	8/30/2023	PCB Remediation Waste Soil and Sediment (Elliott Ditch Clean Up Project)	1	TRK	
p. Unit Wt/Vol					
GENERATOR'S CERTIFICATION: I hereby certify that the above named material is not a hazardous waste as defined by 40 CFR 261 or any applicable state law, has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulations; AND, if this waste is a treatment residue of a previously restricted hazardous waste subject to the Land Disposal Restrictions. I certify and warrant that the waste has been treated in accordance with the requirements of 40 CFR 268 and is no longer a hazardous waste as defined by 40 CFR 261.					
X Caleb S. Tufts, Agent for Arconic		X		X	
q. Generator Authorized Agent Name (Print) Tyler Burden		r. Signature 		s. Date 10/3/2022	

## II. TRANSPORTER (Generator completes IIa-b and Transporter completes IIc-e)

a. Transporter's Name and Address: Fox Hauling 2887 IN-25 Lafayette, IN 47905 Phone: 765-742-5002		
c. Driver Name (Print) Amity Miller	d. Signature 	e. Date 10/3/2022

## III. DESTINATION (Generator complete III a-c and Destination Site completes III d-g)

a. Disposal Facility and Site Address: Walnut Creek Landfill 2701 North State Road 39 Frankfort, IN 46041 b. Phone: 765-659-8144		c. US-EPA Number - N/A 12-03	d. Discrepancy Indication Space:
I hereby certify that the above named material has been accepted and to the best of my knowledge the foregoing is true and accurate.			
e. Name of Authorized Agent (Print) w		f. Signature L	g. Date 10-3-22 2383

## IV. ASBESTOS (Generator completes IV a-f and Operator complete IVg-i)

a. Operator's Name and Address THIS SECTION IS NOT APPLICABLE (NOT ASBESTOS)		c. Responsible Agency Name and Address THIS SECTION IS NOT APPLICABLE (NOT ASBESTOS)	
b. Phone			
e. Special Handling Instructions and Additional Information:			
f. <input type="checkbox"/> Friable <input type="checkbox"/> Non-Friable <input type="checkbox"/> Both 0% Friable 0% Non-Friable			
OPERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked and labeled and are in all respects in proper condition for transport by highway according to applicable international and national governmental regulations.			
g. Operator's Name and Title (Print)		h. Signature	
		i. Date	
*Operator refers to the company which owns, leases, operates, controls, or supervises the facility being demolished or renovated, or the demolition or renovation operation or both			



# NON-HAZARDOUS SPECIAL WASTE & ASBESTOS MANIFEST

If waste is asbestos waste, complete Sections I, II, III and IV

If waste is **NOT** asbestos waste, complete Sections I, II and III

21

## I. GENERATOR (Generator completes Ia-s)

a. Generator's US EPA ID Number NA		b. Manifest Document Number 21		c. Page 1 of 1	
d. Generator's Information: <b>Arconic Lafayette LLC</b> 3131 E Main St Lafayette, IN 47905 Contact: Travis Catlin Phone: 765-237-1809 County: Tippecanoe			e. Billing Information: <b>O6 Environmental LLC</b> 6311 Bartmer Industrial Dr St. Louis, MO 63130 Contact: Caleb Tufts Phone: 765-654-8144 TRUX 333448		
Generator site location (if different): i. Site Location: N/A			j. Phone No: NA		
k. Waste Profile #	l. Exp. Date	m. Waste Shipping Name and Description	n. Containers No.	o. Total Quantity	p. Unit Wt/Vol
3144 21 26865	8/30/2023	PCB Remediation Waste Soil and Sediment (Elliott Ditch Clean Up Project)	1	TRK	
GENERATOR'S CERTIFICATION: I hereby certify that the above named material is not a hazardous waste as defined by 40 CFR 261 or any applicable state law, has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulations; AND, if this waste is a treatment residue of a previously restricted hazardous waste subject to the Land Disposal Restrictions. I certify and warrant that the waste has been treated in accordance with the requirements of 40 CFR 268 and is no longer a hazardous waste as defined by 40 CFR 261.					
X Caleb S. Tufts, Agent for Arconic		X		X 10/3/2022	
q. Generator Authorized Agent Name (Print) Tyler Burden		r. Signature 		s. Date	

## II. TRANSPORTER (Generator completes IIa-b and Transporter completes IIc-e)

a. Transporter's Name and Address: Fox Hauling 2887 IN-25 Lafayette, IN 47905 Phone: 765-742-5002		
c. Driver Name (Print) MARK KEISLER	d. Signature 	e. Date 3 Oct 22

## III. DESTINATION (Generator complete III a-c and Destination Site completes III d-g)

a. Disposal Facility and Site Address: Walnut Creek Landfill 2701 North State Road 39 Frankfort, IN 46041 b. Phone: 765-659-8144		c. US-EPA Number - N/A 12-03	d. Discrepancy Indication Space:
I hereby certify that the above named material has been accepted and to the best of my knowledge the foregoing is true and accurate.			
e. Name of Authorized Agent (Print) W	f. Signature 	g. Date 10-3-22 25.33	

## IV. ASBESTOS (Generator completes IV a-f and Operator complete IVg-i)

a. Operator's Name and Address: <b>THIS SECTION IS NOT APPLICABLE (NOT ASBESTOS)</b>		c. Responsible Agency Name and Address: <b>THIS SECTION IS NOT APPLICABLE (NOT ASBESTOS)</b>	
b. Phone: <b>THIS SECTION IS NOT APPLICABLE (NOT ASBESTOS)</b>			
e. Special Handling Instructions and Additional Information:			
f. <input type="checkbox"/> Friable <input type="checkbox"/> Non-Friable <input type="checkbox"/> Both 0% Friable 0% Non-Friable			
OPERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked and labeled and are in all respects in proper condition for transport by highway according to applicable international and national governmental regulations.			
g. Operator's Name and Title (Print)		h. Signature	
		i. Date	
*Operator refers to the company which owns, leases, operates, controls, or supervises the facility being demolished or renovated, or the demolition or renovation operation or both			



# NON-HAZARDOUS SPECIAL WASTE & ASBESTOS MANIFEST

If waste is asbestos waste, complete Sections I, II, III and IV  
 If waste is **NOT** asbestos waste, complete Sections I, II and III

IM

## I. GENERATOR (Generator completes Ia-s)

a. Generator's US EPA ID Number NA		b. Manifest Document Number 22		c. Page 1 of 1	
d. Generator's Information: <b>Arconic Lafayette LLC</b> 3131 E Main St Lafayette, IN 47905 Contact: Travis Catlin Phone: 765-237-1809 County: Tippecanoe			e. Billing Information: <b>O6 Environmental LLC</b> 6311 Bartmer Industrial Dr St. Louis, MO 63130 Contact: Caleb Tufts Phone: 765-654-8144 TRUX 333448		
Generator site location (if different): i. Site Location: N/A			j. Phone No: NA		
k. Waste Profile #	l. Exp. Date	m. Waste Shipping Name and Description	n. Containers No.	Type	o. Total Quantity
3144 21 26865	8/30/2023	PCB Remediation Waste Soil and Sediment (Elliott Ditch Clean Up Project)	1	TRK	
GENERATOR'S CERTIFICATION: I hereby certify that the above named material is not a hazardous waste as defined by 40 CFR 261 or any applicable state law, has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulations; AND, if this waste is a treatment residue of a previously restricted hazardous waste subject to the Land Disposal Restrictions. I certify and warrant that the waste has been treated in accordance with the requirements of 40 CFR 268 and is no longer a hazardous waste as defined by 40 CFR 261.					
X Caleb S. Tufts, Agent for Arconic		X	X 10/3/2022		
q. Generator Authorized Agent Name (Print) Tyler Burden		r. Signature <i>TLB</i>	s. Date		

## II. TRANSPORTER (Generator completes IIa-b and Transporter completes IIc-e)

a. Transporter's Name and Address: Fox Hauling 2887 IN-25 Lafayette, IN 47905 Phone: 765-742-5002		
c. Driver Name (Print) Amity Miller	d. Signature Amity Miller	e. Date 10/3/2022

## III. DESTINATION (Generator complete III a-c and Destination Site completes III d-g)

a. Disposal Facility and Site Address: Walnut Creek Landfill 2701 North State Road 39 Frankfort, IN 46041 b. Phone: 765-659-8144		c. US-EPA Number - N/A 12-03	d. Discrepancy Indication Space:
I hereby certify that the above named material has been accepted and to the best of my knowledge the foregoing is true and accurate.			
e. Name of Authorized Agent (Print) <i>u</i>	f. Signature <i>u</i>	g. Date 10-3-22	25.02

## IV. ASBESTOS (Generator completes IV a-f and Operator complete IVg-i)

a. Operator's Name and Address THIS SECTION IS NOT APPLICABLE (NOT ASBESTOS)		c. Responsible Agency Name and Address: THIS SECTION IS NOT APPLICABLE (NOT ASBESTOS)	
b. Phone:			
e. Special Handling Instructions and Additional Information:			
f. <input type="checkbox"/> Friable <input type="checkbox"/> Non-Friable <input type="checkbox"/> Both 0% Friable 0% Non-Friable			
OPERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked and labeled and are in all respects in proper condition for transport by highway according to applicable international and national governmental regulations.			
g. Operator's Name and Title (Print)		i. Date	
*Operator refers to the company which owns, leases, operates, controls, or supervises the facility being demolished or renovated, or the demolition or renovation operation or both			



# NON-HAZARDOUS SPECIAL WASTE & ASBESTOS MANIFEST

If waste is asbestos waste, complete Sections I, II, III and IV

If waste is **NOT** asbestos waste, complete Sections I, II and III

2m

## I. GENERATOR (Generator completes Ia-s)

a. Generator's US EPA ID Number NA		b. Manifest Document Number 23		c. Page 1 of 1	
d. Generator's Information: <b>Arconic Lafayette LLC</b> 3131 E Main St Lafayette, IN 47905 Contact: Travis Catlin Phone: 765-237-1809 County: Tippecanoe			e. Billing Information: <b>O6 Environmental LLC</b> 6311 Bartmer Industrial Dr St. Louis, MO 63130 Contact: Caleb Tufts Phone: 765-654-8144 TRUX 333448		
Generator site location (if different): i. Site Location: N/A			j. Phone No: NA		
k. Waste Profile #	l. Exp. Date	m. Waste Shipping Name and Description	n. Containers No. Type		p. Unit Wt/Vol
3144 21 26865	8/30/2023	PCB Remediation Waste Soil and Sediment (Elliott Ditch Clean Up Project)	1	TRK	
GENERATOR'S CERTIFICATION: I hereby certify that the above named material is not a hazardous waste as defined by 40 CFR 261 or any applicable state law, has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulations; AND, if this waste is a treatment residue of a previously restricted hazardous waste subject to the Land Disposal Restrictions. I certify and warrant that the waste has been treated in accordance with the requirements of 40 CFR 268 and is no longer a hazardous waste as defined by 40 CFR 261.					
X Caleb S. Tufts, Agent for Arconic		X		X	
q. Generator Authorized Agent Name (Print) Tyler Bundren		r. Signature 		s. Date 10/3/22	

## II. TRANSPORTER (Generator completes IIa-b and Transporter completes IIc-e)

a. Transporter's Name and Address: Fox Hauling 2887 IN-25 Lafayette, IN 47905 Phone: 765-742-5002			
c. Driver Name (Print) Mark - KESW		d. Signature 	e. Date 3 OCT 22

## III. DESTINATION (Generator complete III a-c and Destination Site completes IIId-g)

a. Disposal Facility and Site Address: <b>Walnut Creek Landfill</b> 2701 North State Road 39 Frankfort, IN 46041 b. Phone: 765-659-8144		c. US-EPA Number - N/A 12-03	d. Discrepancy Indication Space:
I hereby certify that the above named material has been accepted and to the best of my knowledge the foregoing is true and accurate.			
e. Name of Authorized Agent (Print) URE		f. Signature 	g. Date 10-3-22 (18.78)

## IV. ASBESTOS (Generator completes IV a-f and Operator complete IVg-i)

a. Operator's Name and Address: <b>THIS SECTION IS NOT APPLICABLE (NOT ASBESTOS)</b>		c. Responsible Agency Name and Address: <b>THIS SECTION IS NOT APPLICABLE (NOT ASBESTOS)</b>	
b. Phone: <b>THIS SECTION IS NOT APPLICABLE (NOT ASBESTOS)</b>			
e. Special Handling Instructions and Additional Information:			
f. <input type="checkbox"/> Friable <input type="checkbox"/> Non-Friable <input type="checkbox"/> Both 0% Friable 0% Non-Friable			
OPERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked and labeled and are in all respects in proper condition for transport by highway according to applicable international and national governmental regulations.			
g. Operator's Name and Title (Print)		h. Signature	
		i. Date	
*Operator refers to the company which owns, leases, operates, controls, or supervises the facility being demolished or renovated, or the demolition or renovation operation or both			



### NON-HAZARDOUS SPECIAL WASTE & ASBESTOS MANIFEST

If waste is asbestos waste, complete Sections I, II, III and IV  
 If waste is **NOT** asbestos waste, complete Sections I, II and III

1M

**I. GENERATOR** (Generator completes Ia-s)

a. Generator's US EPA ID Number NA		b. Manifest Document Number 24		c. Page 1 of 1	
d. Generator's Information: <b>Arconic Lafayette LLC</b> 3131 E Main St Lafayette, IN 47905 Contact: Travis Catlin Phone: 765-237-1809 County: Tippecanoe			e. Billing Information: <b>O6 Environmental LLC</b> 6311 Bartmer Industrial Dr St. Louis, MO 63130 Contact: Caleb Tufts Phone: 765-654-8144 TRUX 333448		
Generator site location (if different): i. Site Location: N/A			j. Phone No: NA		
k. Waste Profile #	l. Exp. Date	m. Waste Shipping Name and Description	n. Containers No.	Type	o. Total Quantity
3144 21 26865	8/30/2023	PCB Remediation Waste Soil and Sediment (Elliott Ditch Clean Up Project)	1	TRK	
p. Unit Wt/Vol					
GENERATOR'S CERTIFICATION: I hereby certify that the above named material is not a hazardous waste as defined by 40 CFR 261 or any applicable state law, has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulations; AND, if this waste is a treatment residue of a previously restricted hazardous waste subject to the Land Disposal Restrictions. I certify and warrant that the waste has been treated in accordance with the requirements of 40 CFR 268 and is no longer a hazardous waste as defined by 40 CFR 261.					
X Caleb S. Tufts, Agent for Arconic		X		X	
q. Generator Authorized Agent Name (Print) Tyler Burdren		r. Signature 		s. Date 10/3/2022	

**II. TRANSPORTER** (Generator completes IIa-b and Transporter completes IIc-e)

a. Transporter's Name and Address: Fox Hauling 2887 IN-25 Lafayette, IN 47905 Phone: 765-742-5002		
c. Driver Name (Print) Amity Miller	d. Signature 	e. Date 10/3/2022

**III. DESTINATION** (Generator complete III a-c and Destination Site completes III d-g)

a. Disposal Facility and Site Address: Walnut Creek Landfill 2701 North State Road 39 Frankfort, IN 46041 b. Phone: 765-659-8144		c. US-EPA Number - N/A 12-03	d. Discrepancy Indication Space:
I hereby certify that the above named material has been accepted and to the best of my knowledge the foregoing is true and accurate.			
e. Name of Authorized Agent (Print) RJ	f. Signature 	g. Date 10-3-22	19.35

**IV. ASBESTOS** (Generator completes IV a-f and Operator complete IVg-i)

a. Operator's Name and Address: <b>THIS SECTION IS NOT APPLICABLE (NOT ASBESTOS)</b>		c. Responsible Agency Name and Address: <b>THIS SECTION IS NOT APPLICABLE (NOT ASBESTOS)</b>	
b. Phone:			
e. Special Handling Instructions and Additional Information:			
f. <input type="checkbox"/> Friable <input type="checkbox"/> Non-Friable <input type="checkbox"/> Both 0% Friable 0% Non-Friable			
OPERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked and labeled and are in all respects in proper condition for transport by highway according to applicable international and national governmental regulations.			
g. Operator's Name and Title (Print)		h. Signature	
		i. Date	
*Operator refers to the company which owns, leases, operates, controls, or supervises the facility being demolished or renovated, or the demolition or renovation operation or both			



### NON-HAZARDOUS SPECIAL WASTE & ASBESTOS MANIFEST

If waste is asbestos waste, complete Sections I, II, III and IV  
 If waste is **NOT** asbestos waste, complete Sections I, II and III

2M

**I. GENERATOR** (Generator completes Ia-s)

a. Generator's US EPA ID Number NA		b. Manifest Document Number 25		c. Page 1 of 1	
d. Generator's Information: <b>Arconic Lafayette LLC</b> 3131 E Main St Lafayette, IN 47905 Contact: Travis Catlin Phone: 765-237-1809 County: Tippecanoe			e. Billing Information: <b>O6 Environmental LLC</b> 6311 Bartmer Industrial Dr St. Louis, MO 63130 Contact: Caleb Tufts Phone: 765-654-8144 TRUX 333448		
Generator site location (if different): i. Site Location: N/A			j. Phone No: NA		
k. Waste Profile #	l. Exp. Date	m. Waste Shipping Name and Description	n. Containers No.	n. Containers Type	o. Total Quantity
3144 21 26865	8/30/2023	PCB Remediation Waste Soil and Sediment (Elliott Ditch Clean Up Project)	1	TRK	
GENERATOR'S CERTIFICATION: I hereby certify that the above named material is not a hazardous waste as defined by 40 CFR 261 or any applicable state law, has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulations; AND, if this waste is a treatment residue of a previously restricted hazardous waste subject to the Land Disposal Restrictions. I certify and warrant that the waste has been treated in accordance with the requirements of 40 CFR 268 and is no longer a hazardous waste as defined by 40 CFR 261.					
X Caleb S. Tufts, Agent for Arconic		X		X	
q. Generator Authorized Agent Name (Print) Tyler Burden		r. Signature 		s. Date 10/3/2022	

**II. TRANSPORTER** (Generator completes IIa-b and Transporter completes IIc-e)

a. Transporter's Name and Address: Fox Hauling 2887 IN-25 Lafayette, IN 47905 Phone: 765-742-5002		
c. Driver Name (Print) Mark W. Keiser	d. Signature 	e. Date 3 OCT 22

**III. DESTINATION** (Generator complete III a-c and Destination Site completes III d-g)

a. Disposal Facility and Site Address: <b>Walnut Creek Landfill</b> 2701 North State Road 39 Frankfort, IN 46041		b. Phone: 765-659-8144	c. US-EPA Number - N/A 12-03	d. Discrepancy Indication Space:
I hereby certify that the above named material has been accepted and to the best of my knowledge the foregoing is true and accurate.				
e. Name of Authorized Agent (Print) 		f. Signature 		g. Date 10-9-22 22:42

**IV. ASBESTOS** (Generator completes IV a-f and Operator complete IVg-i)

a. Operator's Name and Address: <b>THIS SECTION IS NOT APPLICABLE (NOT ASBESTOS)</b>		c. Responsible Agency Name and Address: <b>THIS SECTION IS NOT APPLICABLE (NOT ASBESTOS)</b>	
b. Phone:			
e. Special Handling Instructions and Additional Information:			
f. <input type="checkbox"/> Friable <input type="checkbox"/> Non-Friable <input type="checkbox"/> Both 0% Friable 0% Non-Friable			
OPERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked and labeled and are in all respects in proper condition for transport by highway according to applicable international and national governmental regulations.			
g. Operator's Name and Title (Print)		h. Signature	
		i. Date	
*Operator refers to the company which owns, leases, operates, controls, or supervises the facility being demolished or renovated, or the demolition or renovation operation or both			



### NON-HAZARDOUS SPECIAL WASTE & ASBESTOS MANIFEST

If waste is asbestos waste, complete Sections I, II, III and IV

If waste is **NOT** asbestos waste, complete Sections I, II and III

1M

**I. GENERATOR** (Generator completes Ia-s)

a. Generator's US EPA ID Number NA		b. Manifest Document Number 26		c. Page 1 of 1	
d. Generator's Information: <b>Arconic Lafayette LLC</b> 3131 E Main St Lafayette, IN 47905 Contact: Travis Catlin Phone: 765-237-1809 County: Tippecanoe			e. Billing Information: <b>O6 Environmental LLC</b> 6311 Bartmer Industrial Dr St. Louis, MO 63130 Contact: Caleb Tufts Phone: 765-654-8144 TRUX 333448		
Generator site location (if different): i. Site Location: N/A			j. Phone No: NA		
k. Waste Profile #	l. Exp. Date	m. Waste Shipping Name and Description	n. Containers No.	o. Total Quantity	p. Unit Wt/Vol
3144 21 26865	8/30/2023	PCB Remediation Waste Soil and Sediment (Elliott Ditch Clean Up Project)	1	TRK	
GENERATOR'S CERTIFICATION: I hereby certify that the above named material is not a hazardous waste as defined by 40 CFR 261 or any applicable state law, has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulations; AND, if this waste is a treatment residue of a previously restricted hazardous waste subject to the Land Disposal Restrictions. I certify and warrant that the waste has been treated in accordance with the requirements of 40 CFR 268 and is no longer a hazardous waste as defined by 40 CFR 261.					
X Caleb S. Tufts, Agent for Arconic		X		X 10/3/2022	
q. Generator Authorized Agent Name (Print) Tyler Burdren		r. Signature 		s. Date	

**II. TRANSPORTER** (Generator completes IIa-b and Transporter completes IIc-e)

a. Transporter's Name and Address: Fox Hauling 2887 IN-25 Lafayette, IN 47905 Phone: 765-742-5002		
c. Driver Name (Print) Amity Miller	d. Signature 	e. Date 10/4/2022

**III. DESTINATION** (Generator complete III a-c and Destination Site completes III d-g)

a. Disposal Facility and Site Address: Walnut Creek Landfill 2701 North State Road 39 Frankfort, IN 46041 b. Phone: 765-659-8144		c. US-EPA Number - N/A 12-03	d. Discrepancy Indication Space:
I hereby certify that the above named material has been accepted and to the best of my knowledge the foregoing is true and accurate.			
e. Name of Authorized Agent (Print) 		f. Signature 	g. Date 10-4-22 23.15

**IV. ASBESTOS** (Generator completes IV a-f and Operator complete IVg-i)

a. Operator's Name and Address: <b>THIS SECTION IS NOT APPLICABLE (NOT ASBESTOS)</b>		c. Responsible Agency Name and Address: <b>THIS SECTION IS NOT APPLICABLE (NOT ASBESTOS)</b>	
b. Phone			
e. Special Handling Instructions and Additional Information:			
f. <input type="checkbox"/> Friable <input type="checkbox"/> Non-Friable <input type="checkbox"/> Both 0% Friable 0% Non-Friable			
OPERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked and labeled and are in all respects in proper condition for transport by highway according to applicable international and national governmental regulations.			
g. Operator's Name and Title (Print)		h. Signature	
		i. Date	
*Operator refers to the company which owns, leases, operates, controls, or supervises the facility being demolished or renovated, or the demolition or renovation operation or both			



# NON-HAZARDOUS SPECIAL WASTE & ASBESTOS MANIFEST

If waste is asbestos waste, complete Sections I, II, III and IV

If waste is **NOT** asbestos waste, complete Sections I, II and III

2m

## I. GENERATOR (Generator completes Ia-s)

a. Generator's US EPA ID Number NA		b. Manifest Document Number 27		c. Page 1 of 1	
d. Generator's Information: <b>Arconic Lafayette LLC</b> 3131 E Main St Lafayette, IN 47905 Contact: Travis Catlin Phone: 765-237-1809 County: Tippecanoe			e. Billing Information: <b>O6 Environmental LLC</b> 6311 Bartmer Industrial Dr St. Louis, MO 63130 Contact: Caleb Tufts Phone: 765-654-8144 TRUX 333448		
Generator site location (if different): i. Site Location: N/A			j. Phone No: NA		
k. Waste Profile #	l. Exp. Date	m. Waste Shipping Name and Description	n. Containers No. Type	o. Total Quantity	p. Unit Wt/Vol
3144 21 26865	8/30/2023	PCB Remediation Waste Soil and Sediment (Elliott Ditch Clean Up Project)	1 TRK		
GENERATOR'S CERTIFICATION: I hereby certify that the above named material is not a hazardous waste as defined by 40 CFR 261 or any applicable state law, has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulations; AND, if this waste is a treatment residue of a previously restricted hazardous waste subject to the Land Disposal Restrictions. I certify and warrant that the waste has been treated in accordance with the requirements of 40 CFR 268 and is no longer a hazardous waste as defined by 40 CFR 261.					
X Caleb S. Tufts, Agent for Arconic		X		X 10-4-22	
q. Generator Authorized Agent Name (Print) Tyler Burdren		r. Signature 		s. Date 10/4/22	

## II. TRANSPORTER (Generator completes IIa-b and Transporter completes IIc-e)

a. Transporter's Name and Address: Fox Hauling 2887 IN-25 Lafayette, IN 47905 Phone: 765-742-5002			
c. Driver Name (Print) Mark Keisur		d. Signature 	e. Date 11 Oct 22

## III. DESTINATION (Generator complete III a-c and Destination Site completes III d-g)

a. Disposal Facility and Site Address: Walnut Creek Landfill 2701 North State Road 39 Frankfort, IN 46041 b. Phone: 765-659-8144		c. US-EPA Number - N/A 12-03	d. Discrepancy Indication Space:
I hereby certify that the above named material has been accepted and to the best of my knowledge the foregoing is true and accurate.			
e. Name of Authorized Agent (Print) 		f. Signature 	g. Date 10-4-22 18.93

## IV. ASBESTOS (Generator completes IV a-f and Operator complete IVg-i)

a. Operator's Name and Address: <b>THIS SECTION IS NOT APPLICABLE (NOT ASBESTOS)</b>		c. Responsible Agency Name and Address: <b>THIS SECTION IS NOT APPLICABLE (NOT ASBESTOS)</b>	
b. Phone:			
e. Special Handling Instructions and Additional Information:			
f. <input type="checkbox"/> Friable <input type="checkbox"/> Non-Friable <input type="checkbox"/> Both 0% Friable 0% Non-Friable			
OPERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked and labeled and are in all respects in proper condition for transport by highway according to applicable international and national governmental regulations.			
g. Operator's Name and Title (Print)		h. Signature	
		i. Date	
*Operator refers to the company which owns, leases, operates, controls, or supervises the facility being demolished or renovated, or the demolition or renovation operation or both			



### NON-HAZARDOUS SPECIAL WASTE & ASBESTOS MANIFEST

If waste is asbestos waste, complete Sections I, II, III and IV  
 If waste is **NOT** asbestos waste, complete Sections I, II and III

IM

**I. GENERATOR** (Generator completes Ia-s)

a. Generator's US EPA ID Number NA		b. Manifest Document Number 28		c. Page 1 of 1	
d. Generator's Information: <b>Arconic Lafayette LLC</b> 3131 E Main St Lafayette, IN 47905 Contact: Travis Catlin Phone: 765-237-1809 County: Tippecanoe			e. Billing Information: <b>O6 Environmental LLC</b> 6311 Bartmer Industrial Dr St. Louis, MO 63130 Contact: Caleb Tufts Phone: 765-654-8144 TRUX 333448		
Generator site location (if different): i. Site Location: N/A			j. Phone No: NA		
k. Waste Profile #	l. Exp. Date	m. Waste Shipping Name and Description	n. Containers No. Type		o. Total Quantity
3144 21 26865	8/30/2023	PCB Remediation Waste Soil and Sediment (Elliott Ditch Clean Up Project)	1	TRK	
p. Unit Wt/Vol					
GENERATOR'S CERTIFICATION: I hereby certify that the above named material is not a hazardous waste as defined by 40 CFR 261 or any applicable state law, has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulations; AND, if this waste is a treatment residue of a previously restricted hazardous waste subject to the Land Disposal Restrictions. I certify and warrant that the waste has been treated in accordance with the requirements of 40 CFR 268 and is no longer a hazardous waste as defined by 40 CFR 261.					
X Caleb S. Tufts, Agent for Arconic		X		X	
q. Generator Authorized Agent Name (Print) Tyler Burdren		r. Signature 		s. Date 10/4/2022	

**II. TRANSPORTER** (Generator completes IIa-b and Transporter completes IIc-e)

a. Transporter's Name and Address: Fox Hauling 2887 IN-25 Lafayette, IN 47905 Phone: 765-742-5002		
c. Driver Name (Print) Amity Miller	d. Signature Amity Miller	e. Date 10/4/2022

**III. DESTINATION** (Generator complete III a-c and Destination Site completes III d-g)

a. Disposal Facility and Site Address: Walnut Creek Landfill 2701 North State Road 39 Frankfort, IN 46041 b. Phone: 765-659-8144		c. US-EPA Number - N/A 12-03	d. Discrepancy Indication Space:
I hereby certify that the above named material has been accepted and to the best of my knowledge the foregoing is true and accurate.			
e. Name of Authorized Agent (Print) 	f. Signature 	g. Date 10-4-22 19.04	

**IV. ASBESTOS** (Generator completes IV a-f and Operator complete IVg-i)

a. Operator's Name and Address: <b>THIS SECTION IS NOT APPLICABLE (NOT ASBESTOS)</b>		c. Responsible Agency Name and Address: <b>THIS SECTION IS NOT APPLICABLE (NOT ASBESTOS)</b>	
b. Phone:			
e. Special Handling Instructions and Additional Information:			
f. <input type="checkbox"/> Friable <input type="checkbox"/> Non-Friable <input type="checkbox"/> Both 0% Friable 0% Non-Friable			
OPERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked and labeled and are in all respects in proper condition for transport by highway according to applicable international and national governmental regulations.			
g. Operator's Name and Title (Print)		h. Signature	
		i. Date	
*Operator refers to the company which owns, leases, operates, controls, or supervises the facility being demolished or renovated, or the demolition or renovation operation or both			



# NON-HAZARDOUS SPECIAL WASTE & ASBESTOS MANIFEST

If waste is asbestos waste, complete Sections I, II, III and IV

If waste is **NOT** asbestos waste, complete Sections I, II and III

## I. GENERATOR (Generator completes Ia-s)

a. Generator's US EPA ID Number NA		b. Manifest Document Number 29		c. Page 1 of 1	
d. Generator's Information: <b>Arconic Lafayette LLC</b> 3131 E Main St Lafayette, IN 47905 Contact: Travis Catlin Phone: 765-237-1809 County: Tippecanoe			e. Billing Information: <b>O6 Environmental LLC</b> 6311 Bartmer Industrial Dr St. Louis, MO 63130 Contact: Caleb Tufts Phone: 765-654-8144 TRUX 333448		
Generator site location (if different): i. Site Location: N/A			j. Phone No: NA		
k. Waste Profile #	l. Exp. Date	m. Waste Shipping Name and Description	n. Containers		p. Unit Wt/Vol
			No.	Type	o. Total Quantity
3144 21 26865	8/30/2023	PCB Remediation Waste Soil and Sediment (Elliott Ditch Clean Up Project)	1	TRK	

GENERATOR'S CERTIFICATION: I hereby certify that the above named material is not a hazardous waste as defined by 40 CFR 261 or any applicable state law, has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulations; AND, if this waste is a treatment residue of a previously restricted hazardous waste subject to the Land Disposal Restrictions. I certify and warrant that the waste has been treated in accordance with the requirements of 40 CFR 268 and is no longer a hazardous waste as defined by 40 CFR 261.

X	Caleb S. Tufts, Agent for Arconic	X		X
q. Generator Authorized Agent Name (Print)	Tyler Burdren	r. Signature		s. Date

## II. TRANSPORTER (Generator completes IIa-b and Transporter completes IIc-e)

a. Transporter's Name and Address:  
Fox Hauling  
2887 IN-25  
Lafayette, IN 47905  
Phone: 765-742-5002

c. Driver Name (Print)	d. Signature	e. Date
Mark W. K.../K...		11 OCT 22

## III. DESTINATION (Generator complete III a-c and Destination Site completes III d-g)

a. Disposal Facility and Site Address: <b>Walnut Creek Landfill</b> 2701 North State Road 39 Frankfort, IN 46041 b. Phone: 765-659-8144	c. US-EPA Number - N/A 12-03	d. Discrepancy Indication Space:
---	------------------------------------	----------------------------------

I hereby certify that the above named material has been accepted and to the best of my knowledge the foregoing is true and accurate.

e. Name of Authorized Agent (Print)	f. Signature	g. Date
		10-4-22 22.17

## IV. ASBESTOS (Generator completes IV a-f and Operator complete IVg-i)

a. Operator's Name and Address: <b>THIS SECTION IS NOT APPLICABLE (NOT ASBESTOS)</b>	c. Responsible Agency Name and Address: <b>THIS SECTION IS NOT APPLICABLE (NOT ASBESTOS)</b>
b. Phone:	
e. Special Handling Instructions and Additional Information:	
f. <input type="checkbox"/> Friable <input type="checkbox"/> Non-Friable <input type="checkbox"/> Both 0% Friable 0% Non-Friable	
OPERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked and labeled and are in all respects in proper condition for transport by highway according to applicable international and national governmental regulations.	
g. Operator's Name and Title (Print)	i. Date
h. Signature	

\*Operator refers to the company which owns, leases, operates, controls, or supervises the facility being demolished or renovated, or the demolition or renovation operation or both



# NON-HAZARDOUS SPECIAL WASTE & ASBESTOS MANIFEST

If waste is asbestos waste, complete Sections I, II, III and IV  
If waste is **NOT** asbestos waste, complete Sections I, II and III

Im

### I. GENERATOR (Generator completes Ia-s)

a. Generator's US EPA ID Number NA		b. Manifest Document Number 30		c. Page 1 of 1	
d. Generator's Information: <b>Arconic Lafayette LLC</b> 3131 E Main St Lafayette, IN 47905 Contact: Travis Catlin Phone: 765-237-1809 County: Tippecanoe			e. Billing Information: <b>O6 Environmental LLC</b> 6311 Bartmer Industrial Dr St. Louis, MO 63130 Contact: Caleb Tufts Phone: 765-654-8144 TRUX 333448		
Generator site location (if different): i. Site Location; N/A			j. Phone No: NA		
k. Waste Profile #	l. Exp. Date	m. Waste Shipping Name and Description	n. Containers		o. Total Quantity
3144 21 26865	8/30/2023	PCB Remediation Waste Soil and Sediment (Elliott Ditch Clean Up Project)	No.	Type	p. Unit Wt/Vol
			1	TRK	
GENERATOR'S CERTIFICATION: I hereby certify that the above named material is not a hazardous waste as defined by 40 CFR 261 or any applicable state law, has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulations; AND, if this waste is a treatment residue of a previously restricted hazardous waste subject to the Land Disposal Restrictions. I certify and warrant that the waste has been treated in accordance with the requirements of 40 CFR 268 and is no longer a hazardous waste as defined by 40 CFR 261.					
X Caleb S. Tufts, Agent for Arconic		X		X 10-4-22	
q. Generator Authorized Agent Name (Print) Tyler Burdren		r. Signature 		s. Date 10-4-22	

### II. TRANSPORTER (Generator completes IIa-b and Transporter completes IIc-e)

a. Transporter's Name and Address: Fox Hauling 2887 IN-25 Lafayette, IN 47905 Phone: 765-742-5002		
c. Driver Name (Print) Amity miller	d. Signature 	e. Date 10-4-22

### III. DESTINATION (Generator complete III a-c and Destination Site completes III d-g)

a. Disposal Facility and Site Address: Walnut Creek Landfill 2701 North State Road 39 Frankfort, IN 46041 b. Phone: 765-659-8144		c. US-EPA Number - N/A 12-03	d. Discrepancy Indication Space:
I hereby certify that the above named material has been accepted and to the best of my knowledge the foregoing is true and accurate.			
e. Name of Authorized Agent (Print) 		f. Signature 	g. Date 10-4-22 21.88

### IV. ASBESTOS (Generator completes IV a-f and Operator complete IVg-i)

a. Operator's Name and Address: <b>THIS SECTION IS NOT APPLICABLE (NOT ASBESTOS)</b>		c. Responsible Agency Name and Address: <b>THIS SECTION IS NOT APPLICABLE (NOT ASBESTOS)</b>	
b. Phone:			
e. Special Handling Instructions and Additional Information:			
f. <input type="checkbox"/> Frangible <input type="checkbox"/> Non-Frangible <input type="checkbox"/> Both <input type="checkbox"/> 0% Frangible <input type="checkbox"/> 0% Non-Frangible			
OPERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked and labeled and are in all respects in proper condition for transport by highway according to applicable international and national governmental regulations.			
g. Operator's Name and Title (Print)		h. Signature	
		i. Date	

\*Operator refers to the company which owns, leases, operates, controls, or supervises the facility being demolished or renovated, or the demolition or renovation operation or both



# NON-HAZARDOUS SPECIAL WASTE & ASBESTOS MANIFEST

If waste is asbestos waste, complete Sections I, II, III and IV

If waste is NOT asbestos waste, complete Sections I, II and III

2m

## I. GENERATOR (Generator completes Ia-s)

a. Generator's US EPA ID Number NA		b. Manifest Document Number 31		c. Page 1 of 1	
d. Generator's Information: <b>Arconic Lafayette LLC</b> 3131 E Main St Lafayette, IN 47905 Contact: Travis Catlin Phone: 765-237-1809 County: Tippecanoe			e. Billing Information: <b>O6 Environmental LLC</b> 6311 Bartmer Industrial Dr St. Louis, MO 63130 Contact: Caleb Tufts Phone: 765-654-8144 TRUX 333448		
Generator site location (if different): i. Site Location: N/A			j. Phone No: NA		
k. Waste Profile # 3144 21 26865	l. Exp. Date 8/30/2023	m. Waste Shipping Name and Description PCB Remediation Waste Soil and Sediment (Elliott Ditch Clean Up Project)	n. Containers No. Type 1 TRK		o. Total Quantity
p. Unit Wt/Vol					

GENERATOR'S CERTIFICATION: I hereby certify that the above named material is not a hazardous waste as defined by 40 CFR 261 or any applicable state law, has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulations; AND, if this waste is a treatment residue of a previously restricted hazardous waste subject to the Land Disposal Restrictions, I certify and warrant that the waste has been treated in accordance with the requirements of 40 CFR 268 and is no longer a hazardous waste as defined by 40 CFR 261.

X Caleb S. Tufts, Agent for Arconic	X	X 10-4-22
q. Generator Authorized Agent Name (Print) Tyler Burden	r. Signature 	s. Date 10-4-22

## II. TRANSPORTER (Generator completes IIa-b and Transporter completes IIc-e)

a. Transporter's Name and Address: Fox Hauling 2887 IN-25 Lafayette, IN 47905 Phone: 765-742-5002		
c. Driver Name (Print) Mark Keiser	d. Signature 	e. Date 10-4-22

## III. DESTINATION (Generator complete III a-c and Destination Site completes III d-g)

a. Disposal Facility and Site Address: <b>Walnut Creek Landfill</b> 2701 North State Road 39 Frankfort, IN 46041 b. Phone: 765-659-8144		c. US-EPA Number - N/A 12-03	d. Discrepancy Indication Space:
I hereby certify that the above named material has been accepted and to the best of my knowledge the foregoing is true and accurate.			
e. Name of Authorized Agent (Print) w		f. Signature L	g. Date 10-4-22 21.52

## IV. ASBESTOS (Generator completes IV a-f and Operator complete IVg-i)

a. Operator's Name and Address: <b>THIS SECTION IS NOT APPLICABLE (NOT ASBESTOS)</b>		c. Responsible Agency Name and Address: <b>THIS SECTION IS NOT APPLICABLE (NOT ASBESTOS)</b>	
b. Phone:			
g. Special Handling Instructions and Additional Information:			
f. <input type="checkbox"/> Frangible <input type="checkbox"/> Non-Frangible <input type="checkbox"/> Both 0% Frangible 0% Non-Frangible			
OPERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked and labeled and are in all respects in proper condition for transport by highway according to applicable international and national governmental regulations.			
g. Operator's Name and Title (Print)		h. Signature	
		i. Date	

\*Operator refers to the company which owns, leases, operates, controls, or supervises the facility being demolished or renovated, or the demolition or renovation operation or both



TR 646 MYM

### NON-HAZARDOUS SPECIAL WASTE & ASBESTOS MANIFEST

If waste is asbestos waste, complete Sections I, II, III and IV

If waste is **NOT** asbestos waste, complete Sections I, II and III

lm

#### I. GENERATOR (Generator completes Ia-s)

a. Generator's US EPA ID Number NA		b. Manifest Document Number 32		c. Page 1 of 1	
d. Generator's Information: <b>Arconic Lafayette LLC</b> 3131 E Main St Lafayette, IN 47905 Contact: Travis Catlin Phone: 765-237-1809 County: Tippecanoe			e. Billing Information: <b>O6 Environmental LLC</b> 6311 Bartmer Industrial Dr St. Louis, MO 63130 Contact: Caleb Tufts Phone: 765-654-8144 TRUX 333448		
Generator site location (if different): i. Site Location: N/A			j. Phone No: NA		
k. Waste Profile #	l. Exp. Date	m. Waste Shipping Name and Description	n. Containers No.	Type	o. Total Quantity
3144 21 26865	8/30/2023	PCB Remediation Waste Soil and Sediment (Elliott Ditch Clean Up Project)	1	TRK	
p. Unit Wt/Vol					
GENERATOR'S CERTIFICATION: I hereby certify that the above named material is not a hazardous waste as defined by 40 CFR 261 or any applicable state law, has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulations; AND, if this waste is a treatment residue of a previously restricted hazardous waste subject to the Land Disposal Restrictions. I certify and warrant that the waste has been treated in accordance with the requirements of 40 CFR 268 and is no longer a hazardous waste as defined by 40 CFR 261.					
X	Caleb S. Tufts, Agent for Arconic		X	X	
q. Generator Authorized Agent Name (Print)	Tyler Bundren		r. Signature	s. Date 10-4-22	

#### II. TRANSPORTER (Generator completes IIa-b and Transporter completes IIc-e)

a. Transporter's Name and Address: Fox Hauling 2887 IN-25 Lafayette, IN 47905 Phone: 765-742-5002		
c. Driver Name (Print)	d. Signature	e. Date
Amity Miller	Amity Miller	10-4-22

#### III. DESTINATION (Generator complete III a-c and Destination Site completes III d-g)

a. Disposal Facility and Site Address: Walnut Creek Landfill 2701 North State Road 39 Frankfort, IN 46041 b. Phone: 765-659-8144		c. US-EPA Number - N/A 12-03	d. Discrepancy Indication Space:
I hereby certify that the above named material has been accepted and to the best of my knowledge the foregoing is true and accurate.			
e. Name of Authorized Agent (Print)	f. Signature	g. Date	
		10-4-22 21.37	

#### IV. ASBESTOS (Generator completes IV a-f and Operator complete IVg-i)

a. Operator's Name and Address. <b>THIS SECTION IS NOT APPLICABLE (NOT ASBESTOS)</b>	c. Responsible Agency Name and Address. <b>THIS SECTION IS NOT APPLICABLE (NOT ASBESTOS)</b>
b. Phone:	
e. Special Handling Instructions and Additional Information:	
f. <input type="checkbox"/> Friable <input type="checkbox"/> Non-Friable <input type="checkbox"/> Both 0% Friable 0% Non-Friable	
OPERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked and labeled and are in all respects in proper condition for transport by highway according to applicable international and national governmental regulations.	
g. Operator's Name and Title (Print)	i. Date
h. Signature	

\*Operator refers to the company which owns, leases, operates, controls, or supervises the facility being demolished or renovated, or the demolition or renovation operation or both



# NON-HAZARDOUS SPECIAL WASTE & ASBESTOS MANIFEST

If waste is asbestos waste, complete Sections I, II, III and IV  
If waste is **NOT** asbestos waste, complete Sections I, II and III

2m

## I. GENERATOR (Generator completes Ia-s)

a. Generator's US EPA ID Number NA		b. Manifest Document Number 33		c. Page 1 of 1	
d. Generator's Information: <b>Arconic Lafayette LLC</b> 3131 E Main St Lafayette, IN 47905 Contact: Travis Catlin Phone: 765-237-1809 County: Tippecanoe			e. Billing Information: <b>O6 Environmental LLC</b> 6311 Bartmer Industrial Dr St. Louis, MO 63130 Contact: Caleb Tufts Phone: 765-654-8144 TRUX 333448		
Generator site location (if different): i. Site Location: N/A			j. Phone No: NA		
k. Waste Profile #	l. Exp. Date	m. Waste Shipping Name and Description	n. Containers		p. Unit Wt/Vol
3144 21 26865	8/30/2023	PCB Remediation Waste Soil and Sediment (Elliott Ditch Clean Up Project)	No. 1	Type TRK	o. Total Quantity
GENERATOR'S CERTIFICATION: I hereby certify that the above named material is not a hazardous waste as defined by 40 CFR 261 or any applicable state law, has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulations: AND, if this waste is a treatment residue of a previously restricted hazardous waste subject to the Land Disposal Restrictions. I certify and warrant that the waste has been treated in accordance with the requirements of 40 CFR 268 and is no longer a hazardous waste as defined by 40 CFR 261.					
X Caleb S. Tufts, Agent for Arconic		X		X 10-4-22	
q. Generator Authorized Agent Name (Print) Caleb S. Tufts		r. Signature 		s. Date 10-4-22	

## II. TRANSPORTER (Generator completes IIa-b and Transporter completes IIc-e)

a. Transporter's Name and Address: Fox Hauling 2887 IN-25 Lafayette, IN 47905 Phone: 765-742-5002			
c. Driver Name (Print) Mark K. Kiser		d. Signature 	e. Date 10-4-22

## III. DESTINATION (Generator complete III a-c and Destination Site completes III d-g)

a. Disposal Facility and Site Address: Walnut Creek Landfill 2701 North State Road 39 Frankfort, IN 46041 b. Phone: 765-659-8144		c. US-EPA Number - N/A 12-03	d. Discrepancy Indication Space:
I hereby certify that the above named material has been accepted and to the best of my knowledge the foregoing is true and accurate.			
e. Name of Authorized Agent (Print) Caleb S. Tufts		f. Signature 	g. Date 10-4-22

21.53

## IV. ASBESTOS (Generator completes IV a-f and Operator complete IVg-i)

a. Operator's Name and Address: THIS SECTION IS NOT APPLICABLE (NOT ASBESTOS)		c. Responsible Agency Name and Address: THIS SECTION IS NOT APPLICABLE (NOT ASBESTOS)	
e. Special Handling Instructions and Additional Information:			
f. <input type="checkbox"/> Friable <input type="checkbox"/> Non-Friable <input type="checkbox"/> Both <input type="checkbox"/> 0% Friable <input type="checkbox"/> 0% Non-Friable			
OPERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked and labeled and are in all respects in proper condition for transport by highway according to applicable international and national governmental regulations.			
g. Operator's Name and Title (Print)		h. Signature	
		i. Date	

\*Operator refers to the company which owns, leases, operates, controls, or supervises the facility being demolished or renovated, or the demolition or renovation operation or both



# NON-HAZARDOUS SPECIAL WASTE & ASBESTOS MANIFEST

If waste is asbestos waste, complete Sections I, II, III and IV

If waste is **NOT** asbestos waste, complete Sections I, II and III

IM

## I. GENERATOR (Generator completes Ia-s)

a. Generator's US EPA ID Number NA		b. Manifest Document Number 34		c. Page 1 of 1	
d. Generator's Information: <b>Arconic Lafayette LLC</b> 3131 E Main St Lafayette, IN 47905 Contact: Travis Catlin Phone: 765-237-1809 County: Tippecanoe			e. Billing Information: <b>O6 Environmental LLC</b> 6311 Bartmer Industrial Dr St. Louis, MO 63130 Contact: Caleb Tufts Phone: 765-654-8144 TRUX 333448		
Generator site location (if different): i. Site Location: N/A			j. Phone No: NA		
k. Waste Profile #	l. Exp. Date	m. Waste Shipping Name and Description	n. Containers		p. Unit Wt/Vol
3144 21 26865	8/30/2023	PCB Remediation Waste Soil and Sediment (Elliott Ditch Clean Up Project)	No. 1	Type TRK	o. Total Quantity

GENERATOR'S CERTIFICATION: I hereby certify that the above named material is not a hazardous waste as defined by 40 CFR 261 or any applicable state law, has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulations; AND, if this waste is a treatment residue of a previously restricted hazardous waste subject to the Land Disposal Restrictions. I certify and warrant that the waste has been treated in accordance with the requirements of 40 CFR 268 and is no longer a hazardous waste as defined by 40 CFR 261.

X	Caleb S. Tufts, Agent for Arconic	X		X
q. Generator Authorized Agent Name (Print)	Tyler Bundren	r. Signature		s. Date 10/4/2022

## II. TRANSPORTER (Generator completes IIa-b and Transporter completes IIc-e)

a. Transporter's Name and Address: Fox Hauling 2887 IN-25 Lafayette, IN 47905 Phone: 765-742-5002		
c. Driver Name (Print)	d. Signature	e. Date
Amity Miller	Amity Miller	10-4-2022

## III. DESTINATION (Generator complete III a-c and Destination Site completes III d-g)

a. Disposal Facility and Site Address: <b>Walnut Creek Landfill</b> 2701 North State Road 39 Frankfort, IN 46041 b. Phone: 765-659-8144		c. US-EPA Number - N/A 12-03	d. Discrepancy Indication Space:
I hereby certify that the above named material has been accepted and to the best of my knowledge the foregoing is true and accurate.			
e. Name of Authorized Agent (Print)	f. Signature	g. Date	
		10-4-22	22.87

## IV. ASBESTOS (Generator completes IV a-f and Operator complete IV g-i)

a. Operator's Name and Address: <b>THIS SECTION IS NOT APPLICABLE (NOT ASBESTOS)</b>		c. Responsible Agency Name and Address: <b>THIS SECTION IS NOT APPLICABLE (NOT ASBESTOS)</b>	
b. Phone:			
e. Special Handling Instructions and Additional Information:			
f. <input type="checkbox"/> Frangible <input type="checkbox"/> Non-Frangible <input type="checkbox"/> Both 0% Frangible 0% Non-Frangible			
OPERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked and labeled and are in all respects in proper condition for transport by highway according to applicable international and national governmental regulations.			
g. Operator's Name and Title (Print)	h. Signature	i. Date	

\*Operator refers to the company which owns, leases, operates, controls, or supervises the facility being demolished or renovated, or the demolition or renovation operation or both



# NON-HAZARDOUS SPECIAL WASTE & ASBESTOS MANIFEST

If waste is asbestos waste, complete Sections I, II, III and IV

2m

If waste is **NOT** asbestos waste, complete Sections I, II and III

## I. GENERATOR (Generator completes Ia-s)

a. Generator's US EPA ID Number NA		b. Manifest Document Number 35		c. Page 1 of 1	
d. Generator's Information: <b>Arconic Lafayette LLC</b> 3131 E Main St Lafayette, IN 47905 Contact: Travis Catlin Phone: 765-237-1809 County: Tippecanoe			e. Billing Information: <b>O6 Environmental LLC</b> 6311 Bartmer Industrial Dr St. Louis, MO 63130 Contact: Caleb Tufts Phone: 765-654-8144 TRUX 333448		
Generator site location (if different): i. Site Location: N/A			j. Phone No: NA		
k. Waste Profile #	l. Exp. Date	m. Waste Shipping Name and Description	n. Containers No. Type	o. Total Quantity	p. Unit Wt/Vol
3144 21 26865	8/30/2023	PCB Remediation Waste Soil and Sediment (Elliott Ditch Clean Up Project)	1 TRK		
GENERATOR'S CERTIFICATION: I hereby certify that the above named material is not a hazardous waste as defined by 40 CFR 261 or any applicable state law, has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulations; AND, if this waste is a treatment residue of a previously restricted hazardous waste subject to the Land Disposal Restrictions. I certify and warrant that the waste has been treated in accordance with the requirements of 40 CFR 268 and is no longer a hazardous waste as defined by 40 CFR 261.					
X Caleb S. Tufts, Agent for Arconic		X		X	
q. Generator Authorized Agent Name (Print) Caleb S. Tufts		r. Signature 		s. Date 10-5-22	

## II. TRANSPORTER (Generator completes IIa-b and Transporter completes IIc-e)

a. Transporter's Name and Address: Fox Hauling 2887 IN-25 Lafayette, IN 47905 Phone: 765-742-5002		
c. Driver Name (Print) 		d. Signature 
		e. Date 5 OCT 22

## III. DESTINATION (Generator complete III a-c and Destination Site completes III d-g)

a. Disposal Facility and Site Address: <b>Walnut Creek Landfill</b> 2701 North State Road 39 Frankfort, IN 46041 b. Phone: 765-659-8144		c. US-EPA Number - N/A 12-03	d. Discrepancy Indication Space:
I hereby certify that the above named material has been accepted and to the best of my knowledge the foregoing is true and accurate.			
e. Name of Authorized Agent (Print) w		f. Signature w	g. Date 10-5-22 20.02

## IV. ASBESTOS (Generator completes IV a-f and Operator complete IVg-i)

a. Operator's Name and Address: THIS SECTION IS NOT APPLICABLE (NOT ASBESTOS)		c. Responsible Agency Name and Address: THIS SECTION IS NOT APPLICABLE (NOT ASBESTOS)	
b. Phone:			
e. Special Handling Instructions and Additional Information:			
f. <input type="checkbox"/> Friable <input type="checkbox"/> Non-Friable <input type="checkbox"/> Both 0% Friable 0% Non-Friable			
OPERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked and labeled and are in all respects in proper condition for transport by highway according to applicable international and national governmental regulations.			
g. Operator's Name and Title (Print)		h. Signature	
		i. Date	
*Operator refers to the company which owns, leases, operates, controls, or supervises the facility being demolished or renovated, or the demolition or renovation operation or both			



### NON-HAZARDOUS SPECIAL WASTE & ASBESTOS MANIFEST

If waste is asbestos waste, complete Sections I, II, III and IV  
 If waste is NOT asbestos waste, complete Sections I, II and III

IM

**I. GENERATOR** (Generator completes Ia-s)

a. Generator's US EPA ID Number NA		b. Manifest Document Number 36		c. Page 1 of 1	
d. Generator's Information: <b>Arconic Lafayette LLC</b> 3131 E Main St Lafayette, IN 47905 Contact: Travis Catlin Phone: 765-237-1809 County: Tippecanoe			e. Billing Information: <b>O6 Environmental LLC</b> 6311 Bartmer Industrial Dr St. Louis, MO 63130 Contact: Caleb Tufts Phone: 765-654-8144 TRUX 333448		
Generator site location (if different): i. Site Location: N/A			j. Phone No: NA		
k. Waste Profile #	l. Exp. Date	m. Waste Shipping Name and Description	n. Containers No.	Type	o. Total Quantity
3144 21 26865	8/30/2023	<b>PCB Remediation Waste Soil and Sediment (Elliott Ditch Clean Up Project)</b>	1	TRK	
GENERATOR'S CERTIFICATION: I hereby certify that the above named material is not a hazardous waste as defined by 40 CFR 261 or any applicable state law, has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulations; AND, if this waste is a treatment residue of a previously restricted hazardous waste subject to the Land Disposal Restrictions. I certify and warrant that the waste has been treated in accordance with the requirements of 40 CFR 268 and is no longer a hazardous waste as defined by 40 CFR 261.					
X Caleb S. Tufts, Agent for Arconic		X		X	
q. Generator Authorized Agent Name (Print) Tyler Burden		r. Signature 		s. Date 10/5/2022	

**II. TRANSPORTER** (Generator completes IIa-b and Transporter completes IIc-e)

a. Transporter's Name and Address: Fox Hauling 2887 IN-25 Lafayette, IN 47905 Phone: 765-742-5002		
c. Driver Name (Print) Amity Miller	d. Signature 	e. Date 10-5-2022

**III. DESTINATION** (Generator complete III a-c and Destination Site completes III d-g)

a. Disposal Facility and Site Address: <b>Walnut Creek Landfill</b> 2701 North State Road 39 Frankfort, IN 46041 b. Phone: 765-659-8144	c. US-EPA Number – N/A 12-03	d. Discrepancy Indication Space:
I hereby certify that the above named material has been accepted and to the best of my knowledge the foregoing is true and accurate.		
e. Name of Authorized Agent (Print) 	f. Signature 	g. Date 10-5-22 22.29

**IV. ASBESTOS** (Generator completes IV a-f and Operator complete IVg-i)

a. Operator's Name and Address: <b>THIS SECTION IS NOT APPLICABLE (NOT ASBESTOS)</b>	c. Responsible Agency Name and Address: <b>THIS SECTION IS NOT APPLICABLE (NOT ASBESTOS)</b>
b. Phone:	
e. Special Handling Instructions and Additional Information:	
f. <input type="checkbox"/> Friable <input type="checkbox"/> Non-Friable <input type="checkbox"/> Both 0% Friable 0% Non-Friable	
OPERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked and labeled and are in all respects in proper condition for transport by highway according to applicable international and national governmental regulations.	
g. Operator's Name and Title (Print)	i. Date
h. Signature	
*Operator refers to the company which owns, leases, operates, controls, or supervises the facility being demolished or renovated, or the demolition or renovation operation or both	



### NON-HAZARDOUS SPECIAL WASTE & ASBESTOS MANIFEST

If waste is asbestos waste, complete Sections I, II, III and IV  
 If waste is NOT asbestos waste, complete Sections I, II and III

2M

**I. GENERATOR** (Generator completes Ia-s)

a. Generator's US EPA ID Number NA		b. Manifest Document Number 37		c. Page 1 of 1	
d. Generator's Information: <b>Arconic Lafayette LLC</b> 3131 E Main St Lafayette, IN 47905 Contact: Travis Catlin Phone: 765-237-1809 County: Tippecanoe			e. Billing Information: <b>O6 Environmental LLC</b> 6311 Bartmer Industrial Dr St. Louis, MO 63130 Contact: Caleb Tufts Phone: 765-654-8144 TRUX 333448		
Generator site location (if different): i. Site Location: N/A			j. Phone No: NA		
k. Waste Profile #	l. Exp. Date	m. Waste Shipping Name and Description	n. Containers No.	Type	o. Total Quantity
3144 21 26865	8/30/2023	PCB Remediation Waste Soil and Sediment (Elliott Ditch Clean Up Project)	1	TRK	
GENERATOR'S CERTIFICATION: I hereby certify that the above named material is not a hazardous waste as defined by 40 CFR 261 or any applicable state law, has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulations; AND, if this waste is a treatment residue of a previously restricted hazardous waste subject to the Land Disposal Restrictions. I certify and warrant that the waste has been treated in accordance with the requirements of 40 CFR 268 and is no longer a hazardous waste as defined by 40 CFR 261.					
X Caleb S. Tufts, Agent for Arconic		X		X	
q. Generator Authorized Agent Name (Print) Tyler Sundren		r. Signature 		s. Date 10/5/2022	

**II. TRANSPORTER** (Generator completes IIa-b and Transporter completes IIc-e)

a. Transporter's Name and Address: Fox Hauling 2887 IN-25 Lafayette, IN 47905 Phone: 765-742-5002		
c. Driver Name (Print) Mark W. Keiser	d. Signature 	e. Date 5 OCT 22

**III. DESTINATION** (Generator complete III a-c and Destination Site completes IIId-g)

a. Disposal Facility and Site Address: Walnut Creek Landfill 2701 North State Road 39 Frankfort, IN 46041 b. Phone: 765-659-8144	c. US-EPA Number - N/A 12-03	d. Discrepancy Indication Space:
I hereby certify that the above named material has been accepted and to the best of my knowledge the foregoing is true and accurate.		
e. Name of Authorized Agent (Print) MJ	f. Signature 	g. Date 10-5-22 19.85

**IV. ASBESTOS** (Generator completes IV a-f and Operator complete IVg-i)

a. Operator's Name and Address: THIS SECTION IS NOT APPLICABLE (NOT ASBESTOS)	c. Responsible Agency Name and Address: THIS SECTION IS NOT APPLICABLE (NOT ASBESTOS)
b. Phone:	
e. Special Handling Instructions and Additional Information:	
f. <input type="checkbox"/> Friable <input type="checkbox"/> Non-Friable <input type="checkbox"/> Both 0% Friable 0% Non-Friable	
OPERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked and labeled and are in all respects in proper condition for transport by highway according to applicable international and national governmental regulations.	
g. Operator's Name and Title (Print)	i. Date
*Operator refers to the company which owns, leases, operates, controls, or supervises the facility being demolished or renovated, or the demolition or renovation operation or both	



### NON-HAZARDOUS SPECIAL WASTE & ASBESTOS MANIFEST

If waste is asbestos waste, complete Sections I, II, III and IV  
 If waste is **NOT** asbestos waste, complete Sections I, II and III

1M

**I. GENERATOR** (Generator completes Ia-s)

a. Generator's US EPA ID Number NA		b. Manifest Document Number 38		c. Page 1 of 1	
d. Generator's Information: <b>Arconic Lafayette LLC</b> 3131 E Main St Lafayette, IN 47905 Contact: Travis Catlin Phone: 765-237-1809 County: Tippecanoe			e. Billing Information: <b>O6 Environmental LLC</b> 6311 Bartmer Industrial Dr St. Louis, MO 63130 Contact: Caleb Tufts Phone: 765-654-8144 TRUX 333448		
Generator site location (if different): i. Site Location: N/A			j. Phone No: NA		
k. Waste Profile #	l. Exp. Date	m. Waste Shipping Name and Description	n. Containers No.	Type	o. Total Quantity
3144 21 26865	8/30/2023	PCB Remediation Waste Soil and Sediment (Elliott Ditch Clean Up Project)	1	TRK	
GENERATOR'S CERTIFICATION: I hereby certify that the above named material is not a hazardous waste as defined by 40 CFR 261 or any applicable state law, has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulations; AND, if this waste is a treatment residue of a previously restricted hazardous waste subject to the Land Disposal Restrictions. I certify and warrant that the waste has been treated in accordance with the requirements of 40 CFR 268 and is no longer a hazardous waste as defined by 40 CFR 261.					
X Caleb S. Tufts, Agent for Arconic		X		X	
q. Generator Authorized Agent Name (Print) Tyler Bundren		r. Signature 		s. Date 10/5/2022	

**II. TRANSPORTER** (Generator completes IIa-b and Transporter completes IIc-e)

a. Transporter's Name and Address: Fox Hauling 2887 IN-25 Lafayette, IN 47905 Phone: 765-742-5002		
c. Driver Name (Print) Amity Miller	d. Signature 	e. Date 10-5-2022

**III. DESTINATION** (Generator complete III a-c and Destination Site completes III d-g)

a. Disposal Facility and Site Address: <b>Walnut Creek Landfill</b> 2701 North State Road 39 Frankfort, IN 46041 b. Phone: 765-659-8144		c. US-EPA Number – N/A 12-03	d. Discrepancy Indication Space:
I hereby certify that the above named material has been accepted and to the best of my knowledge the foregoing is true and accurate.			
e. Name of Authorized Agent (Print) 		f. Signature 	g. Date 10-5-22 19.84

**IV. ASBESTOS** (Generator completes IV a-f and Operator complete IVg-i)

a. Operator's Name and Address: THIS SECTION IS NOT APPLICABLE (NOT ASBESTOS)		c. Responsible Agency Name and Address: THIS SECTION IS NOT APPLICABLE (NOT ASBESTOS)	
b. Phone:			
e. Special Handling Instructions and Additional Information:			
f. <input type="checkbox"/> Friable <input type="checkbox"/> Non-Friable <input type="checkbox"/> Both 0% Friable 0% Non-Friable			
OPERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked and labeled and are in all respects in proper condition for transport by highway according to applicable international and national governmental regulations.			
g. Operator's Name and Title (Print)		h. Signature	
		i. Date	
*Operator refers to the company which owns, leases, operates, controls, or supervises the facility being demolished or renovated, or the demolition or renovation operation or both			



### NON-HAZARDOUS SPECIAL WASTE & ASBESTOS MANIFEST

If waste is asbestos waste, complete Sections I, II, III and IV  
 If waste is NOT asbestos waste, complete Sections I, II and III

2m

**I. GENERATOR** (Generator completes Ia-s)

a. Generator's US EPA ID Number NA		b. Manifest Document Number 39		c. Page 1 of 1	
d. Generator's Information: <b>Arconic Lafayette LLC</b> 3131 E Main St Lafayette, IN 47905 Contact: Travis Catlin Phone: 765-237-1809 County: Tippecanoe			e. Billing Information: <b>O6 Environmental LLC</b> 6311 Bartmer Industrial Dr St. Louis, MO 63130 Contact: Caleb Tufts Phone: 765-654-8144 TRUX 333448		
Generator site location (if different): i. Site Location: N/A			j. Phone No: NA		
k. Waste Profile #	l. Exp. Date	m. Waste Shipping Name and Description	n. Containers No. Type		o. Total Quantity
3144 21 26865	8/30/2023	PCB Remediation Waste Soil and Sediment (Elliott Ditch Clean Up Project)	1	TRK	
GENERATOR'S CERTIFICATION: I hereby certify that the above named material is not a hazardous waste as defined by 40 CFR 261 or any applicable state law, has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulations; AND, if this waste is a treatment residue of a previously restricted hazardous waste subject to the Land Disposal Restrictions. I certify and warrant that the waste has been treated in accordance with the requirements of 40 CFR 268 and is no longer a hazardous waste as defined by 40 CFR 261.					
X Caleb S. Tufts, Agent for Arconic		X	X		
q. Generator Authorized Agent Name (Print) Tyler Burden		r. Signature <i>[Signature]</i>		s. Date 10-5-22	

**II. TRANSPORTER** (Generator completes IIa-b and Transporter completes IIc-e)

a. Transporter's Name and Address: Fox Hauling 2887 IN-25 Lafayette, IN 47905 Phone: 765-742-5002		
c. Driver Name (Print) Mark KESWZ	d. Signature <i>[Signature]</i>	e. Date 5 OCT 22

**III. DESTINATION** (Generator complete III a-c and Destination Site completes III d-g)

a. Disposal Facility and Site Address: <b>Walnut Creek Landfill</b> 2701 North State Road 39 Frankfort, IN 46041 b. Phone: 765-659-8144		c. US-EPA Number - N/A 12-03	d. Discrepancy Indication Space:
I hereby certify that the above named material has been accepted and to the best of my knowledge the foregoing is true and accurate.			
e. Name of Authorized Agent (Print) <i>[Signature]</i>	f. Signature <i>[Signature]</i>	g. Date 10-5-22 23.99	

**IV. ASBESTOS** (Generator completes IV a-f and Operator complete IVg-i)

a. Operator's Name and Address: <b>THIS SECTION IS NOT APPLICABLE (NOT ASBESTOS)</b>		c. Responsible Agency Name and Address: <b>THIS SECTION IS NOT APPLICABLE (NOT ASBESTOS)</b>	
b. Phone:			
e. Special Handling Instructions and Additional Information:			
f. <input type="checkbox"/> Friable <input type="checkbox"/> Non-Friable <input type="checkbox"/> Both <input type="checkbox"/> 0% Friable <input type="checkbox"/> 0% Non-Friable			
OPERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked and labeled and are in all respects in proper condition for transport by highway according to applicable international and national governmental regulations.			
g. Operator's Name and Title (Print)		h. Signature	
		i. Date	
*Operator refers to the company which owns, leases, operates, controls, or supervises the facility being demolished or renovated, or the demolition or renovation operation or both			



### NON-HAZARDOUS SPECIAL WASTE & ASBESTOS MANIFEST

If waste is asbestos waste, complete Sections I, II, III and IV  
 If waste is NOT asbestos waste, complete Sections I, II and III

IM

**I. GENERATOR** (Generator completes Ia-s)

a. Generator's US EPA ID Number NA		b. Manifest Document Number 40		c. Page 1 of 1	
d. Generator's Information: <b>Arconic Lafayette LLC</b> 3131 E Main St Lafayette, IN 47905 Contact: Travis Catlin Phone: 765-237-1809 County: Tippecanoe			e. Billing Information: <b>O6 Environmental LLC</b> 6311 Bartmer Industrial Dr St. Louis, MO 63130 Contact: Caleb Tufts Phone: 765-654-8144 TRUX 333448		
Generator site location (if different): i. Site Location: N/A			j. Phone No: NA		
k. Waste Profile #	l. Exp. Date	m. Waste Shipping Name and Description	n. Containers No.	n. Containers Type	o. Total Quantity
3144 21 26865	8/30/2023	PCB Remediation Waste Soil and Sediment (Elliott Ditch Clean Up Project)	1	TRK	

GENERATOR'S CERTIFICATION: I hereby certify that the above named material is not a hazardous waste as defined by 40 CFR 261 or any applicable state law, has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulations; AND, if this waste is a treatment residue of a previously restricted hazardous waste subject to the Land Disposal Restrictions. I certify and warrant that the waste has been treated in accordance with the requirements of 40 CFR 268 and is no longer a hazardous waste as defined by 40 CFR 261.

<input checked="" type="checkbox"/> Caleb S. Tufts, Agent for Arconic	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
q. Generator Authorized Agent Name (Print) Tyler Burdick	r. Signature <i>[Signature]</i>	s. Date 10/5/2022

**II. TRANSPORTER** (Generator completes IIa-b and Transporter completes IIc-e)

a. Transporter's Name and Address: Fox Hauling 2887 IN-25 Lafayette, IN 47905 Phone: 765-742-5002		
c. Driver Name (Print) Amity Miller	d. Signature <i>[Signature]</i>	e. Date 10-5-2022

**III. DESTINATION** (Generator complete III a-c and Destination Site completes III d-g)

a. Disposal Facility and Site Address: <b>Walnut Creek Landfill</b> 2701 North State Road 39 Frankfort, IN 46041 b. Phone: 765-659-8144		c. US-EPA Number - N/A 12-03	d. Discrepancy Indication Space:
I hereby certify that the above named material has been accepted and to the best of my knowledge the foregoing is true and accurate.			
e. Name of Authorized Agent (Print) <i>[Signature]</i>	f. Signature <i>[Signature]</i>	g. Date 10-5-22 24.01	

**IV. ASBESTOS** (Generator completes IV a-f and Operator complete IVg-i)

a. Operator's Name and Address: <b>THIS SECTION IS NOT APPLICABLE (NOT ASBESTOS)</b>	c. Responsible Agency Name and Address: <b>THIS SECTION IS NOT APPLICABLE (NOT ASBESTOS)</b>
b. Phone:	
e. Special Handling Instructions and Additional Information:	
f. <input type="checkbox"/> Friable <input type="checkbox"/> Non-Friable <input type="checkbox"/> Both 0% Friable 0% Non-Friable	
OPERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked and labeled and are in all respects in proper condition for transport by highway according to applicable international and national governmental regulations.	
g. Operator's Name and Title (Print)	i. Date
*Operator refers to the company which owns, leases, operates, controls, or supervises the facility being demolished or renovated, or the demolition or renovation operation or both	



# NON-HAZARDOUS SPECIAL WASTE & ASBESTOS MANIFEST

If waste is asbestos waste, complete Sections I, II, III and IV  
 If waste is **NOT** asbestos waste, complete Sections I, II and III

2m

## I. GENERATOR (Generator completes Ia-s)

a. Generator's US EPA ID Number NA		b. Manifest Document Number 41		c. Page 1 of 1	
d. Generator's Information: <b>Arconic Lafayette LLC</b> 3131 E Main St Lafayette, IN 47905 Contact: Travis Catlin Phone: 765-237-1809 County: Tippecanoe			e. Billing Information: <b>O6 Environmental LLC</b> 6311 Bartmer Industrial Dr St. Louis, MO 63130 Contact: Caleb Tufts Phone: 765-654-8144 TRUX 333448		
Generator site location (if different): i. Site Location: N/A			j. Phone No: NA		
k. Waste Profile #	l. Exp. Date	m. Waste Shipping Name and Description	n. Containers No. Type		o. Total Quantity
3144 21 26865	8/30/2023	PCB Remediation Waste Soil and Sediment (Elliott Ditch Clean Up Project)	1	TRK	
GENERATOR'S CERTIFICATION: I hereby certify that the above named material is not a hazardous waste as defined by 40 CFR 261 or any applicable state law, has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulations; AND, if this waste is a treatment residue of a previously restricted hazardous waste subject to the Land Disposal Restrictions. I certify and warrant that the waste has been treated in accordance with the requirements of 40 CFR 268 and is no longer a hazardous waste as defined by 40 CFR 261.					
X Caleb S. Tufts, Agent for Arconic		X		X	
q. Generator Authorized Agent Name (Print) Tyler Burdick		r. Signature 		s. Date 10/5/22	

## II. TRANSPORTER (Generator completes IIa-b and Transporter completes IIc-e)

a. Transporter's Name and Address: Fox Hauling 2887 IN-25 Lafayette, IN 47905 Phone: 765-742-5002		
c. Driver Name (Print) MARK W KEISER	d. Signature 	e. Date 5 OCT 22

## III. DESTINATION (Generator complete III a-c and Destination Site completes III d-g)

a. Disposal Facility and Site Address: <b>Walnut Creek Landfill</b> 2701 North State Road 39 Frankfort, IN 46041 b. Phone: 765-659-8144		c. US-EPA Number - N/A 12-03	d. Discrepancy Indication Space:
I hereby certify that the above named material has been accepted and to the best of my knowledge the foregoing is true and accurate.			
e. Name of Authorized Agent (Print) 	f. Signature 	g. Date 10-5-22 21.26	

## IV. ASBESTOS (Generator completes IV a-f and Operator complete IVg-i)

a. Operator's Name and Address: <b>THIS SECTION IS NOT APPLICABLE (NOT ASBESTOS)</b>	c. Responsible Agency Name and Address: <b>THIS SECTION IS NOT APPLICABLE (NOT ASBESTOS)</b>
b. Phone:	
e. Special Handling Instructions and Additional Information:	
f. <input type="checkbox"/> Friable <input type="checkbox"/> Non-Friable <input type="checkbox"/> Both 0% Friable 0% Non-Friable	
OPERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked and labeled and are in all respects in proper condition for transport by highway according to applicable international and national governmental regulations.	
g. Operator's Name and Title (Print)	i. Date
h. Signature	

\*Operator refers to the company which owns, leases, operates, controls, or supervises the facility being demolished or renovated, or the demolition or renovation operation or both



### NON-HAZARDOUS SPECIAL WASTE & ASBESTOS MANIFEST

If waste is asbestos waste, complete Sections I, II, III and IV  
 If waste is **NOT** asbestos waste, complete Sections I, II and III

1M

#### I. GENERATOR (Generator completes Ia-s)

a. Generator's US EPA ID Number NA		b. Manifest Document Number 42		c. Page 1 of 1	
d. Generator's Information: <b>Arconic Lafayette LLC</b> 3131 E Main St Lafayette, IN 47905 Contact: Travis Catlin Phone: 765-237-1809 County: Tippecanoe			e. Billing Information: <b>O6 Environmental LLC</b> 6311 Bartmer Industrial Dr St. Louis, MO 63130 Contact: Caleb Tufts Phone: 765-654-8144 TRUX 333448		
Generator site location (if different): i. Site Location: N/A			j. Phone No: NA		
k. Waste Profile #	l. Exp. Date	m. Waste Shipping Name and Description	n. Containers No. Type	o. Total Quantity	p. Unit Wt/Vol
3144 21 26865	8/30/2023	PCB Remediation Waste Soil and Sediment (Elliott Ditch Clean Up Project)	1 TRK		
GENERATOR'S CERTIFICATION: I hereby certify that the above named material is not a hazardous waste as defined by 40 CFR 261 or any applicable state law, has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulations; AND, if this waste is a treatment residue of a previously restricted hazardous waste subject to the Land Disposal Restrictions. I certify and warrant that the waste has been treated in accordance with the requirements of 40 CFR 268 and is no longer a hazardous waste as defined by 40 CFR 261.					
X Caleb S. Tufts, Agent for Arconic		X		X	
q. Generator Authorized Agent Name (Print) Tyler Burdren		r. Signature 		s. Date 10/5/2022	

#### II. TRANSPORTER (Generator completes IIa-b and Transporter completes IIc-e)

a. Transporter's Name and Address: Fox Hauling 2887 IN-25 Lafayette, IN 47905 Phone: 765-742-5002		
c. Driver Name (Print) Amity Miller	d. Signature 	e. Date 10-5-2022

#### III. DESTINATION (Generator complete III a-c and Destination Site completes III d-g)

a. Disposal Facility and Site Address: Walnut Creek Landfill 2701 North State Road 39 Frankfort, IN 46041 b. Phone: 765-659-8144		c. US-EPA Number - N/A 12-03	d. Discrepancy Indication Space:
I hereby certify that the above named material has been accepted and to the best of my knowledge the foregoing is true and accurate.			
e. Name of Authorized Agent (Print) w	f. Signature w	g. Date 10-5-22 17:47	

#### IV. ASBESTOS (Generator completes IV a-f and Operator complete IVg-i)

a. Operator's Name and Address: THIS SECTION IS NOT APPLICABLE (NOT ASBESTOS)		c. Responsible Agency Name and Address: THIS SECTION IS NOT APPLICABLE (NOT ASBESTOS)	
b. Phone:			
e. Special Handling Instructions and Additional Information:			
f. <input type="checkbox"/> Friable <input type="checkbox"/> Non-Friable <input type="checkbox"/> Both 0% Friable 0% Non-Friable			
OPERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked and labeled and are in all respects in proper condition for transport by highway according to applicable international and national governmental regulations.			
g. Operator's Name and Title (Print)		h. Signature	
		i. Date	
*Operator refers to the company which owns, leases, operates, controls, or supervises the facility being demolished or renovated, or the demolition or renovation operation or both			



### NON-HAZARDOUS SPECIAL WASTE & ASBESTOS MANIFEST

If waste is asbestos waste, complete Sections I, II, III and IV  
 If waste is **NOT** asbestos waste, complete Sections I, II and III

#1

#### I. GENERATOR (Generator completes I a-s)

a. Generator's US EPA ID Number NA		b. Manifest Document Number 43		c. Page 1 of 1	
d. Generator's Information: Arconic Lafayette LLC 3131 E Main St Lafayette, IN 47905 Contact: Travis Catlin Phone: 765-237-1809 County: Tippecanoe			e. Billing Information: O6 Environmental LLC 6311 Bartmer Industrial Dr St. Louis, MO 63130 Contact: Caleb Tufts Phone: 765-654-8144 TRUX 333448		
Generator site location (if different): i. Site Location: N/A			j. Phone No: NA		
k. Waste Profile #	l. Exp. Date	m. Waste Shipping Name and Description	n. Containers No. Type		p. Unit Wt/Vol
3144 21 26865	8/30/2023	PCB Remediation Waste Soil and Sediment (Elliott Ditch Clean Up Project)	1	TRK	
GENERATOR'S CERTIFICATION: I hereby certify that the above named material is not a hazardous waste as defined by 40 CFR 261 or any applicable state law, has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulations; AND, if this waste is a treatment residue of a previously restricted hazardous waste subject to the Land Disposal Restrictions. I certify and warrant that the waste has been treated in accordance with the requirements of 40 CFR 268 and is no longer a hazardous waste as defined by 40 CFR 261.					
X Caleb S. Tufts, Agent for Arconic		X		X 10-6-22	
q. Generator Authorized Agent Name (Print) Tyler Burdick		r. Signature 		s. Date 10/6/22	

#### II. TRANSPORTER (Generator completes II a-b and Transporter completes II c-e)

a. Transporter's Name and Address: Fox Hauling 2887 IN-25 Lafayette, IN 47905 Phone: 765-742-5002		
c. Driver Name (Print) Amity miller	d. Signature 	e. Date 10-6-22

#### III. DESTINATION (Generator complete III a-c and Destination Site completes III d-g)

a. Disposal Facility and Site Address: Walnut Creek Landfill 2701 North State Road 39 Frankfort, IN 46041 b. Phone: 765-659-8144		c. US-EPA Number - N/A 12-03	d. Discrepancy Indication Space:
I hereby certify that the above named material has been accepted and to the best of my knowledge the foregoing is true and accurate.			
e. Name of Authorized Agent (Print) 	f. Signature 	g. Date 10-6-22 25.12	

#### IV. ASBESTOS (Generator completes IV a-f and Operator complete IV g-i)

a. Operator's Name and Address: THIS SECTION IS NOT APPLICABLE (NOT ASBESTOS)		c. Responsible Agency Name and Address: THIS SECTION IS NOT APPLICABLE (NOT ASBESTOS)	
b. Phone:			
e. Special Handling Instructions and Additional Information:			
f. <input type="checkbox"/> Friable <input type="checkbox"/> Non-Friable <input type="checkbox"/> Both 0% Friable 0% Non-Friable			
OPERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked and labeled and are in all respects in proper condition for transport by highway according to applicable international and national governmental regulations.			
g. Operator's Name and Title (Print)		i. Date	
*Operator refers to the company which owns, leases, operates, controls, or supervises the facility being demolished or renovated, or the demolition or renovation operation or both			



# NON-HAZARDOUS SPECIAL WASTE & ASBESTOS MANIFEST

If waste is asbestos waste, complete Sections I, II, III and IV

If waste is **NOT** asbestos waste, complete Sections I, II and III

81F

## I. GENERATOR (Generator completes Ia-s)

a. Generator's US EPA ID Number NA		b. Manifest Document Number 44		c. Page 1 of 1	
d. Generator's Information: <b>Arconic Lafayette LLC</b> 3131 E Main St Lafayette, IN 47905 Contact: Travis Catlin Phone: 765-237-1809 County: Tippecanoe			e. Billing Information: <b>O6 Environmental LLC</b> 6311 Bartmer Industrial Dr St. Louis, MO 63130 Contact: Caleb Tufts Phone: 765-654-8144 TRUX 333448		
Generator site location (if different): i. Site Location: N/A			j. Phone No: NA		
k. Waste Profile #	l. Exp. Date	m. Waste Shipping Name and Description	n. Containers No.	Type	o. Total Quantity
3144 21 26865	8/30/2023	PCB Remediation Waste Soil and Sediment (Elliott Ditch Clean Up Project)	1	TRK	
p. Unit Wt/Vol					
GENERATOR'S CERTIFICATION: I hereby certify that the above named material is not a hazardous waste as defined by 40 CFR 261 or any applicable state law, has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulations; AND, if this waste is a treatment residue of a previously restricted hazardous waste subject to the Land Disposal Restrictions. I certify and warrant that the waste has been treated in accordance with the requirements of 40 CFR 268 and is no longer a hazardous waste as defined by 40 CFR 261.					
X Caleb S. Tufts, Agent for Arconic		X		X	
q. Generator Authorized Agent Name (Print) Tyler Bundren		r. Signature 		s. Date 10-6-22	

## II. TRANSPORTER (Generator completes IIa-b and Transporter completes IIc-e)

a. Transporter's Name and Address: Fox Hauling 2887 IN-25 Lafayette, IN 47905 Phone: 765-742-5002		
c. Driver Name (Print) DALE TARTER	d. Signature 	e. Date 10-6-22

## III. DESTINATION (Generator complete III a-c and Destination Site completes III d-g)

a. Disposal Facility and Site Address: Walnut Creek Landfill 2701 North State Road 39 Frankfort, IN 46041 b. Phone: 765-659-8144		c. US-EPA Number - N/A 12-03	d. Discrepancy Indication Space:
I hereby certify that the above named material has been accepted and to the best of my knowledge the foregoing is true and accurate.			
e. Name of Authorized Agent (Print) 	f. Signature 	g. Date 10-6-22 22.49	

## IV. ASBESTOS (Generator completes IV a-f and Operator complete IVg-i)

a. Operator's Name and Address: <b>THIS SECTION IS NOT APPLICABLE (NOT ASBESTOS)</b>		c. Responsible Agency Name and Address: <b>THIS SECTION IS NOT APPLICABLE (NOT ASBESTOS)</b>	
b. Phone:			
e. Special Handling Instructions and Additional Information:			
f. <input type="checkbox"/> Frangible <input type="checkbox"/> Non-Frangible <input type="checkbox"/> Both <input type="checkbox"/> 0% Frangible <input type="checkbox"/> 0% Non-Frangible			
OPERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked and labeled and are in all respects in proper condition for transport by highway according to applicable international and national governmental regulations.			
g. Operator's Name and Title (Print)		i. Date	
h. Signature		i. Date	
*Operator refers to the company which owns, leases, operates, controls, or supervises the facility being demolished or renovated, or the demolition or renovation operation or both.			



# NON-HAZARDOUS SPECIAL WASTE & ASBESTOS MANIFEST

If waste is asbestos waste, complete Sections I, II, III and IV

If waste is **NOT** asbestos waste, complete Sections I, II and III

1m

## I. GENERATOR (Generator completes Ia-s)

a. Generator's US EPA ID Number NA		b. Manifest Document Number 45		c. Page 1 of 1	
d. Generator's Information: <b>Arconic Lafayette LLC</b> 3131 E Main St Lafayette, IN 47905 Contact: Travis Catlin Phone: 765-237-1809 County: Tippecanoe			e. Billing Information: <b>O6 Environmental LLC</b> 6311 Bartmer Industrial Dr St. Louis, MO 63130 Contact: Caleb Tufts Phone: 765-654-8144 TRUX 333448		
Generator site location (if different): i. Site Location: N/A			j. Phone No: NA		
k. Waste Profile #	l. Exp. Date	m. Waste Shipping Name and Description	n. Containers		o. Total Quantity
			No.	Type	p. Unit Wt/Vol
3144 21 26865	8/30/2023	PCB Remediation Waste Soil and Sediment (Elliott Ditch Clean Up Project)	1	TRK	
GENERATOR'S CERTIFICATION: I hereby certify that the above named material is not a hazardous waste as defined by 40 CFR 261 or any applicable state law, has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulations; AND, if this waste is a treatment residue of a previously restricted hazardous waste subject to the Land Disposal Restrictions. I certify and warrant that the waste has been treated in accordance with the requirements of 40 CFR 268 and is no longer a hazardous waste as defined by 40 CFR 261.					
X Caleb S. Tufts, Agent for Arconic		X		X	
q. Generator Authorized Agent Name (Print) Tyler Burdren		r. Signature 		s. Date 10-6-22	

## II. TRANSPORTER (Generator completes IIa-b and Transporter completes IIc-e)

a. Transporter's Name and Address: Fox Hauling 2887 IN-25 Lafayette, IN 47905 Phone: 765-742-5002		
c. Driver Name (Print) Amity Miller	d. Signature 	e. Date 10-6-22

## III. DESTINATION (Generator complete III a-c and Destination Site completes III d-g)

a. Disposal Facility and Site Address: <b>Walnut Creek Landfill</b> 2701 North State Road 39 Frankfort, IN 46041 b. Phone: 765-659-8144		c. US-EPA Number - N/A 12-03	d. Discrepancy Indication Space:
I hereby certify that the above named material has been accepted and to the best of my knowledge the foregoing is true and accurate.			
e. Name of Authorized Agent (Print) 	f. Signature 	g. Date 10-6-22 26.13	

## IV. ASBESTOS (Generator completes IV a-f and Operator complete IV g-i)

a. Operator's Name and Address: <b>THIS SECTION IS NOT APPLICABLE (NOT ASBESTOS)</b>		c. Responsible Agency Name and Address: <b>THIS SECTION IS NOT APPLICABLE (NOT ASBESTOS)</b>	
b. Phone:			
e. Special Handling Instructions and Additional Information:			
f. <input type="checkbox"/> Friable <input type="checkbox"/> Non-Friable <input type="checkbox"/> Both <input type="checkbox"/> 0% Friable <input type="checkbox"/> 0% Non-Friable			
OPERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked and labeled and are in all respects in proper condition for transport by highway according to applicable international and national governmental regulations.			
g. Operator's Name and Title (Print)	h. Signature	i. Date	
*Operator refers to the company which owns, leases, operates, controls, or supervises the facility being demolished or renovated, or the demolition or renovation operation or both			



### NON-HAZARDOUS SPECIAL WASTE & ASBESTOS MANIFEST

If waste is asbestos waste, complete Sections I, II, III and IV

If waste is **NOT** asbestos waste, complete Sections I, II and III

81F

#### I. GENERATOR (Generator completes Ia-s)

a. Generator's US EPA ID Number NA		b. Manifest Document Number 46		c. Page 1 of 1	
d. Generator's Information: <b>Arconic Lafayette LLC</b> 3131 E Main St Lafayette, IN 47905 Contact: Travis Catlin Phone: 765-237-1809 County: Tippecanoe			e. Billing Information: <b>O6 Environmental LLC</b> 6311 Bartmer Industrial Dr St. Louis, MO 63130 Contact: Caleb Tufts Phone: 765-654-8144 TRUX 333448		
Generator site location (if different): i. Site Location: N/A			j. Phone No: NA		
k. Waste Profile #	l. Exp. Date	m. Waste Shipping Name and Description	n. Containers		p. Unit
			No.	Type	Wt/Vol
3144 21 26865	8/30/2023	PCB Remediation Waste Soil and Sediment (Elliott Ditch Clean Up Project)	1	TRK	
GENERATOR'S CERTIFICATION: I hereby certify that the above named material is not a hazardous waste as defined by 40 CFR 261 or any applicable state law, has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulations; AND, if this waste is a treatment residue of a previously restricted hazardous waste subject to the Land Disposal Restrictions. I certify and warrant that the waste has been treated in accordance with the requirements of 40 CFR 268 and is no longer a hazardous waste as defined by 40 CFR 261.					
X Caleb S. Tufts, Agent for Arconic		X		X 10-6-22	
q. Generator Authorized Agent Name (Print) Tyler Sundern		r. Signature 		s. Date 10/6/22	

#### II. TRANSPORTER (Generator completes IIa-b and Transporter completes IIc-e)

a. Transporter's Name and Address: Fox Hauling 2887 IN-25 Lafayette, IN 47905 Phone: 765-742-5002		
c. Driver Name (Print) 		d. Signature 
		e. Date 10-6-22

#### III. DESTINATION (Generator complete III a-c and Destination Site completes III d-g)

a. Disposal Facility and Site Address: Walnut Creek Landfill 2701 North State Road 39 Frankfort, IN 46041 b. Phone: 765-659-8144		c. US-EPA Number - N/A 12-03	d. Discrepancy Indication Space:
I hereby certify that the above named material has been accepted and to the best of my knowledge the foregoing is true and accurate.			
e. Name of Authorized Agent (Print) DALE TARTAR		f. Signature 	g. Date 10-6-22 20.93

#### IV. ASBESTOS (Generator completes IV a-f and Operator complete IVg-l)

b. Operator's Name and Address: <b>THIS SECTION IS NOT APPLICABLE (NOT ASBESTOS)</b>		c. Responsible Agency Name and Address: <b>THIS SECTION IS NOT APPLICABLE (NOT ASBESTOS)</b>	
e. Special Handling Instructions and Additional Information: f. <input type="checkbox"/> Friable <input type="checkbox"/> Non-Friable <input type="checkbox"/> Both <input type="checkbox"/> 0% Friable <input type="checkbox"/> 0% Non-Friable			
OPERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked and labeled and are in all respects in proper condition for transport by highway according to applicable international and national governmental regulations.			
g. Operator's Name and Title (Print)		h. Signature	
		i. Date	
*Operator refers to the company which owns, leases, operates, controls, or supervises the facility being demolished or renovated, or the demolition or renovation operation or both			



# NON-HAZARDOUS SPECIAL WASTE & ASBESTOS MANIFEST

If waste is asbestos waste, complete Sections I, II, III and IV

If waste is **NOT** asbestos waste, complete Sections I, II and III

IM

## I. GENERATOR (Generator completes Ia-s)

a. Generator's US EPA ID Number NA		b. Manifest Document Number 47		c. Page 1 of 1	
d. Generator's Information: <b>Arconic Lafayette LLC</b> 3131 E Main St Lafayette, IN 47905 Contact: Travis Catlin Phone: 765-237-1809 County: Tippecanoe			e. Billing Information: <b>O6 Environmental LLC</b> 6311 Bartmer Industrial Dr St. Louis, MO 63130 Contact: Caleb Tufts Phone: 765-654-8144 TRUX 333448		
Generator site location (if different): i. Site Location: N/A			j. Phone No: NA		
k. Waste Profile #	l. Exp. Date	m. Waste Shipping Name and Description	n. Containers No.	n. Containers Type	o. Total Quantity
3144 21 26865	8/30/2023	PCB Remediation Waste Soil and Sediment (Elliott Ditch Clean Up Project)	1	TRK	
GENERATOR'S CERTIFICATION: I hereby certify that the above named material is not a hazardous waste as defined by 40 CFR 261 or any applicable state law, has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulations; AND, if this waste is a treatment residue of a previously restricted hazardous waste subject to the Land Disposal Restrictions. I certify and warrant that the waste has been treated in accordance with the requirements of 40 CFR 268 and is no longer a hazardous waste as defined by 40 CFR 261.					
X Caleb S. Tufts, Agent for Arconic		X		X	
q. Generator Authorized Agent Name (Print) Tyler Burdon		r. Signature 		s. Date 10/6/2022	

## II. TRANSPORTER (Generator completes IIa-b and Transporter completes IIc-e)

a. Transporter's Name and Address: Fox Hauling 2887 IN-25 Lafayette, IN 47905 Phone: 765-742-5002		
c. Driver Name (Print) Amity Miller	d. Signature 	e. Date 10-6-2022

## III. DESTINATION (Generator complete III a-c and Destination Site completes III d-g)

a. Disposal Facility and Site Address: <b>Walnut Creek Landfill</b> 2701 North State Road 39 Frankfort, IN 46041 b. Phone: 765-659-8144		c. US-EPA Number - N/A 12-03	d. Discrepancy Indication Space:
I hereby certify that the above named material has been accepted and to the best of my knowledge the foregoing is true and accurate.			
e. Name of Authorized Agent (Print) w		f. Signature L	g. Date 10-6-22 23.47

## IV. ASBESTOS (Generator completes IV a-f and Operator complete IVg-i)

a. Operator's Name and Address: <b>THIS SECTION IS NOT APPLICABLE (NOT ASBESTOS)</b>		c. Responsible Agency Name and Address: <b>THIS SECTION IS NOT APPLICABLE (NOT ASBESTOS)</b>	
b. Phone:			
e. Special Handling Instructions and Additional Information:			
f. <input type="checkbox"/> Friable <input type="checkbox"/> Non-Friable <input type="checkbox"/> Both 0% Friable 0% Non-Friable			
OPERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked and labeled and are in all respects in proper condition for transport by highway according to applicable international and national governmental regulations.			
g. Operator's Name and Title (Print)		h. Signature	
		i. Date	
*Operator refers to the company which owns, leases, operates, controls, or supervises the facility being demolished or renovated, or the demolition or renovation operation or both			



**NON-HAZARDOUS SPECIAL WASTE & ASBESTOS MANIFEST**

If waste is asbestos waste, complete Sections I, II, III and IV  
 If waste is **NOT** asbestos waste, complete Sections I, II and III

81 F

**I. GENERATOR** (Generator completes Ia-s)

a. Generator's US EPA ID Number NA		b. Manifest Document Number 48		c. Page 1 of 1	
d. Generator's Information: <b>Arconic Lafayette LLC</b> 3131 E Main St Lafayette, IN 47905 Contact: Travis Catlin Phone: 765-237-1809 County: Tippecanoe			e. Billing Information: <b>O6 Environmental LLC</b> 6311 Bartmer Industrial Dr St. Louis, MO 63130 Contact: Caleb Tufts Phone: 765-654-8144 TRUX 333448		
Generator site location (if different): i. Site Location: N/A			j. Phone No: NA		
k. Waste Profile #	l. Exp. Date	m. Waste Shipping Name and Description	n. Containers No.	n. Containers Type	o. Total Quantity
3144 21 26865	8/30/2023	PCB Remediation Waste Soil and Sediment (Elliott Ditch Clean Up Project)	1	TRK	
GENERATOR'S CERTIFICATION: I hereby certify that the above named material is not a hazardous waste as defined by 40 CFR 261 or any applicable state law, has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulations; AND, if this waste is a treatment residue of a previously restricted hazardous waste subject to the Land Disposal Restrictions. I certify and warrant that the waste has been treated in accordance with the requirements of 40 CFR 268 and is no longer a hazardous waste as defined by 40 CFR 261.					
X Caleb S. Tufts, Agent for Arconic		X		X	
q. Generator Authorized Agent Name (Print) Tyler Burdren		r. Signature		s. Date 10-6-22	

**II. TRANSPORTER** (Generator completes IIa-b and Transporter completes IIc-e)

a. Transporter's Name and Address: Fox Hauling 2887 IN-25 Lafayette, IN 47905 Phone: 765-742-5002		
c. Driver Name (Print) DALE TARTAR	d. Signature	e. Date 10-6-22

**III. DESTINATION** (Generator complete III a-c and Destination Site completes III d-g)

a. Disposal Facility and Site Address: Walnut Creek Landfill 2701 North State Road 39 Frankfort, IN 46041 b. Phone: 765-659-8144		c. US-EPA Number - N/A 12-03	d. Discrepancy Indication Space:
I hereby certify that the above named material has been accepted and to the best of my knowledge the foregoing is true and accurate.			
e. Name of Authorized Agent (Print)	f. Signature	g. Date 10-6-22 17.97	

**IV. ASBESTOS** (Generator completes IV a-f and Operator complete IVg-i)

b. Operator's Name and Address: <b>THIS SECTION IS NOT APPLICABLE (NOT ASBESTOS)</b>		c. Responsible Agency Name and Address: <b>THIS SECTION IS NOT APPLICABLE (NOT ASBESTOS)</b>	
e. Special Handling Instructions and Additional Information:			
f. <input type="checkbox"/> Friable <input type="checkbox"/> Non-Friable <input type="checkbox"/> Both 0% Friable 0% Non-Friable			
OPERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked and labeled and are in all respects in proper condition for transport by highway according to applicable international and national governmental regulations.			
g. Operator's Name and Title (Print)		h. Signature	
		i. Date	

\*Operator refers to the company which owns, leases, operates, controls, or supervises the facility being demolished or renovated, or the demolition or renovation operation or both



### NON-HAZARDOUS SPECIAL WASTE & ASBESTOS MANIFEST

If waste is asbestos waste, complete Sections I, II, III and IV

If waste is **NOT** asbestos waste, complete Sections I, II and III

Im

#### I. GENERATOR (Generator completes Ia-s)

a. Generator's US EPA ID Number NA		b. Manifest Document Number 49		c. Page 1 of 1	
d. Generator's Information: <b>Arconic Lafayette LLC</b> 3131 E Main St Lafayette, IN 47905 Contact: Travis Catlin Phone: 765-237-1809 County: Tippecanoe			e. Billing Information: <b>O6 Environmental LLC</b> 6311 Bartmer Industrial Dr St. Louis, MO 63130 Contact: Caleb Tufts Phone: 765-654-8144 TRUX 333448		
Generator site location (if different): i. Site Location: N/A			j. Phone No: NA		
k. Waste Profile #	l. Exp. Date	m. Waste Shipping Name and Description	n. Containers No.	n. Containers Type	o. Total Quantity
3144 21 26865	8/30/2023	PCB Remediation Waste Soil and Sediment (Elliott Ditch Clean Up Project)	1	TRK	
GENERATOR'S CERTIFICATION: I hereby certify that the above named material is not a hazardous waste as defined by 40 CFR 261 or any applicable state law, has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulations; AND, if this waste is a treatment residue of a previously restricted hazardous waste subject to the Land Disposal Restrictions. I certify and warrant that the waste has been treated in accordance with the requirements of 40 CFR 268 and is no longer a hazardous waste as defined by 40 CFR 261.					
X Caleb S. Tufts, Agent for Arconic		X		X	
q. Generator Authorized Agent Name (Print) <u>Tyler Burdman</u>		r. Signature		s. Date <u>10-6-22</u>	

#### II. TRANSPORTER (Generator completes IIa-b and Transporter completes IIc-e)

a. Transporter's Name and Address: Fox Hauling 2887 IN-25 Lafayette, IN 47905 Phone: 765-742-5002		
c. Driver Name (Print) <u>Amity Miller</u>	d. Signature 	e. Date <u>10-6-22</u>

#### III. DESTINATION (Generator complete III a-c and Destination Site completes III d-g)

a. Disposal Facility and Site Address: <b>Walnut Creek Landfill</b> 2701 North State Road 39 Frankfort, IN 46041 b. Phone: 765-659-8144		c. US-EPA Number - N/A  12-03	d. Discrepancy Indication Space:
I hereby certify that the above named material has been accepted and to the best of my knowledge the foregoing is true and accurate.			
e. Name of Authorized Agent (Print) <u>W</u>	f. Signature <u>W</u>	g. Date <u>10-6-22</u> <u>21.72</u>	

#### IV. ASBESTOS (Generator completes IV a-f and Operator complete IVg-i)

a. Operator's Name and Address: <b>THIS SECTION IS NOT APPLICABLE (NOT ASBESTOS)</b>		c. Responsible Agency Name and Address: <b>THIS SECTION IS NOT APPLICABLE (NOT ASBESTOS)</b>	
b. Phone:			
e. Special Handling Instructions and Additional Information:			
f. <input type="checkbox"/> Friable <input type="checkbox"/> Non-Friable <input type="checkbox"/> Both    0% Friable    0% Non-Friable			
OPERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked and labeled and are in all respects in proper condition for transport by highway according to applicable international and national governmental regulations.			
g. Operator's Name and Title (Print)		i. Date	
h. Signature		i. Date	

\*Operator refers to the company which owns, leases, operates, controls, or supervises the facility being demolished or renovated, or the demolition or renovation operation or both



# NON-HAZARDOUS SPECIAL WASTE & ASBESTOS MANIFEST

If waste is asbestos waste, complete Sections I, II, III and IV

If waste is **NOT** asbestos waste, complete Sections I, II and III

## I. GENERATOR (Generator completes Ia-s)

1 M

a. Generator's US EPA ID Number NA		b. Manifest Document Number 50		c. Page 1 of 1		
d. Generator's Information: <b>Arconic Lafayette LLC</b> 3131 E Main St Lafayette, IN 47905 Contact: Travis Catlin Phone: 765-237-1809 County: Tippecanoe			e. Billing Information: <b>O6 Environmental LLC</b> 6311 Bartmer Industrial Dr St. Louis, MO 63130 Contact: Caleb Tufts Phone: 765-654-8144 TRUX 333448			
Generator site location (if different): i. Site Location: N/A			j. Phone No: NA			
k. Waste Profile #	l. Exp. Date	m. Waste Shipping Name and Description	n. Containers No.	n. Containers Type	o. Total Quantity	p. Unit Wt/Vol
3144 21 26865	8/30/2023	PCB Remediation Waste Soil and Sediment (Elliott Ditch Clean Up Project)	1	TRK		
GENERATOR'S CERTIFICATION: I hereby certify that the above named material is not a hazardous waste as defined by 40 CFR 261 or any applicable state law, has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulations; AND, if this waste is a treatment residue of a previously restricted hazardous waste subject to the Land Disposal Restrictions. I certify and warrant that the waste has been treated in accordance with the requirements of 40 CFR 268 and is no longer a hazardous waste as defined by 40 CFR 261.						
X Caleb S. Tufts, Agent for Arconic		X		X 10-7-22		
q. Generator Authorized Agent Name (Print) Tyler Burdick		r. Signature 		s. Date 10/7/22		

## II. TRANSPORTER (Generator completes IIa-b and Transporter completes IIc-e)

a. Transporter's Name and Address: Fox Hauling 2887 IN-25 Lafayette, IN 47905 Phone: 765-742-5002		
c. Driver Name (Print) Amity Miller	d. Signature 	e. Date 10-7-2022

## III. DESTINATION (Generator complete III a-c and Destination Site completes III d-g)

a. Disposal Facility and Site Address: <b>Walnut Creek Landfill</b> 2701 North State Road 39 Frankfort, IN 46041 b. Phone: 765-659-8144		c. US-EPA Number - N/A 12-03	d. Discrepancy Indication Space:
I hereby certify that the above named material has been accepted and to the best of my knowledge the foregoing is true and accurate.			
e. Name of Authorized Agent (Print) 	f. Signature 	g. Date 10-7-22 20.93	

## IV. ASBESTOS (Generator completes IV a-f and Operator complete IVg-i)

a. Operator's Name and Address: <b>THIS SECTION IS NOT APPLICABLE (NOT ASBESTOS)</b>		c. Responsible Agency Name and Address: <b>THIS SECTION IS NOT APPLICABLE (NOT ASBESTOS)</b>	
b. Phone:			
e. Special Handling Instructions and Additional Information:			
f. <input type="checkbox"/> Friable <input type="checkbox"/> Non-Friable <input type="checkbox"/> Both <input type="checkbox"/> 0% Friable <input type="checkbox"/> 0% Non-Friable			
OPERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked and labeled and are in all respects in proper condition for transport by highway according to applicable international and national governmental regulations.			
g. Operator's Name and Title (Print)	h. Signature	i. Date	
*Operator refers to the company which owns, leases, operates, controls, or supervises the facility being demolished or renovated, or the demolition or renovation operation or both			



# NON-HAZARDOUS SPECIAL WASTE & ASBESTOS MANIFEST

If waste is asbestos waste, complete Sections I, II, III and IV

If waste is **NOT** asbestos waste, complete Sections I, II and III

75F

## I. GENERATOR (Generator completes Ia-s)

a. Generator's US EPA ID Number NA		b. Manifest Document Number 51		c. Page 1 of 1	
d. Generator's Information: <b>Arconic Lafayette LLC</b> 3131 E Main St Lafayette, IN 47905 Contact: Travis Catlin Phone: 765-237-1809 County: Tippecanoe			e. Billing Information: <b>O6 Environmental LLC</b> 6311 Bartmer Industrial Dr St. Louis, MO 63130 Contact: Caleb Tufts Phone: 765-654-8144 TRUX 333448		
Generator site location (if different): i. Site Location: N/A			j. Phone No: NA		
k. Waste Profile #	l. Exp. Date	m. Waste Shipping Name and Description	n. Containers		p. Unit
			No.	Type	Wt/Vol
3144 21 26865	8/30/2023	PCB Remediation Waste Soil and Sediment (Elliott Ditch Clean Up Project)	1	TRK	
GENERATOR'S CERTIFICATION: I hereby certify that the above named material is not a hazardous waste as defined by 40 CFR 261 or any applicable state law, has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulations; AND, if this waste is a treatment residue of a previously restricted hazardous waste subject to the Land Disposal Restrictions. I certify and warrant that the waste has been treated in accordance with the requirements of 40 CFR 268 and is no longer a hazardous waste as defined by 40 CFR 261.					
X Caleb S. Tufts, Agent for Arconic		X		X 10-7-22	
q. Generator Authorized Agent Name (Print) <u>Tyler Bundren</u>		r. Signature		s. Date 10/7/22	

## II. TRANSPORTER (Generator completes IIa-b and Transporter completes IIc-e)

a. Transporter's Name and Address: Fox Hauling 2887 IN-25 Lafayette, IN 47905 Phone: 765-742-5002		
<u>Robin Cochran</u>		10-7-22
c. Driver Name (Print)	d. Signature	e. Date

## III. DESTINATION (Generator complete III a-c and Destination Site completes III d-g)

a. Disposal Facility and Site Address: <b>Walnut Creek Landfill</b> 2701 North State Road 39 Frankfort, IN 46041 b. Phone: 765-659-8144		c. US-EPA Number - N/A 12-03	d. Discrepancy Indication Space:
I hereby certify that the above named material has been accepted and to the best of my knowledge the foregoing is true and accurate.			
		10-7-22 17.64	
e. Name of Authorized Agent (Print)	f. Signature	g. Date	

## IV. ASBESTOS (Generator completes IV a-f and Operator complete IVg-i)

a. Operator's Name and Address: <b>THIS SECTION IS NOT APPLICABLE (NOT ASBESTOS)</b>		c. Responsible Agency Name and Address: <b>THIS SECTION IS NOT APPLICABLE (NOT ASBESTOS)</b>	
b. Phone:			
e. Special Handling Instructions and Additional Information:			
f. <input type="checkbox"/> Friable <input type="checkbox"/> Non-Friable <input type="checkbox"/> Both 0% Friable 0% Non-Friable			
OPERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked and labeled and are in all respects in proper condition for transport by highway according to applicable international and national governmental regulations.			
g. Operator's Name and Title (Print)		i. Date	
h. Signature		i. Date	
*Operator refers to the company which owns, leases, operates, controls, or supervises the facility being demolished or renovated, or the demolition or renovation operation or both			



# NON-HAZARDOUS SPECIAL WASTE & ASBESTOS MANIFEST

If waste is asbestos waste, complete Sections I, II, III and IV  
If waste is **NOT** asbestos waste, complete Sections I, II and III

1m

## I. GENERATOR (Generator completes Ia-s)

a. Generator's US EPA ID Number NA		b. Manifest Document Number 52		c. Page 1 of 1	
d. Generator's Information: <b>Arconic Lafayette LLC</b> 3131 E Main St Lafayette, IN 47905 Contact: Travis Catlin Phone: 765-237-1809 County: Tippecanoe			e. Billing Information: <b>O6 Environmental LLC</b> 6311 Bartmer Industrial Dr St. Louis, MO 63130 Contact: Caleb Tufts Phone: 765-654-8144 TRUX 333448		
Generator site location (if different): i. Site Location: N/A			j. Phone No: NA		
k. Waste Profile #	l. Exp. Date	m. Waste Shipping Name and Description	n. Containers No.	n. Containers Type	o. Total Quantity
3144 21 26865	8/30/2023	PCB Remediation Waste Soil and Sediment (Elliott Ditch Clean Up Project)	1	TRK	
p. Unit Wt/Vol					

GENERATOR'S CERTIFICATION: I hereby certify that the above named material is not a hazardous waste as defined by 40 CFR 261 or any applicable state law, has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulations; AND, if this waste is a treatment residue of a previously restricted hazardous waste subject to the Land Disposal Restrictions. I certify and warrant that the waste has been treated in accordance with the requirements of 40 CFR 268 and is no longer a hazardous waste as defined by 40 CFR 261.

X	Caleb S. Tufts, Agent for Arconic	X		X
q. Generator Authorized Agent Name (Print)	Tyler Bundren	r. Signature		s. Date
				10-7-22

## II. TRANSPORTER (Generator completes IIa-b and Transporter completes IIc-e)

a. Transporter's Name and Address: Fox Hauling 2887 IN-25 Lafayette, IN 47905 Phone: 765-742-5002		
c. Driver Name (Print)	d. Signature	e. Date
Amity Miller		10-7-22

## III. DESTINATION (Generator complete III a-c and Destination Site completes III d-g)

a. Disposal Facility and Site Address: <b>Walnut Creek Landfill</b> 2701 North State Road 39 Frankfort, IN 46041 b. Phone: 765-659-8144		c. US-EPA Number - N/A 12-03	d. Discrepancy Indication Space:
I hereby certify that the above named material has been accepted and to the best of my knowledge the foregoing is true and accurate.			
e. Name of Authorized Agent (Print)	f. Signature	g. Date	
		10-7-22	21.63

## IV. ASBESTOS (Generator completes IV a-f and Operator complete IVg-i)

a. Operator's Name and Address: THIS SECTION IS NOT APPLICABLE (NOT ASBESTOS)		c. Responsible Agency Name and Address: THIS SECTION IS NOT APPLICABLE (NOT ASBESTOS)	
b. Phone:			
e. Special Handling Instructions and Additional Information:			
f. <input type="checkbox"/> Friable <input type="checkbox"/> Non-Friable Both 0% Friable 0% Non-Friable			
OPERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked and labeled and are in all respects in proper condition for transport by highway according to applicable international and national governmental regulations.			
g. Operator's Name and Title (Print)	h. Signature	i. Date	
*Operator refers to the company which owns, leases, operates, controls, or supervises the facility being demolished or renovated, or the demolition or renovation operation or both			



# NON-HAZARDOUS SPECIAL WASTE & ASBESTOS MANIFEST

If waste is asbestos waste, complete Sections I, II, III and IV  
If waste is **NOT** asbestos waste, complete Sections I, II and III

75F

## I. GENERATOR (Generator completes Ia-s)

a. Generator's US EPA ID Number NA		b. Manifest Document Number 53		c. Page 1 of 1	
d. Generator's Information: <b>Arconic Lafayette LLC</b> 3131 E Main St Lafayette, IN 47905 Contact: Travis Catlin Phone: 765-237-1809 County: Tippecanoe			e. Billing Information: <b>O6 Environmental LLC</b> 6311 Bartmer Industrial Dr St. Louis, MO 63130 Contact: Caleb Tufts Phone: 765-654-8144 TRUX 333448		
Generator site location (if different): i. Site Location: N/A			j. Phone No: NA		
k. Waste Profile #	l. Exp. Date	m. Waste Shipping Name and Description	n. Containers No.	Type	o. Total Quantity
3144 21 26865	8/30/2023	PCB Remediation Waste Soil and Sediment (Elliott Ditch Clean Up Project)	1	TRK	
p. Unit Wt/Vol					

GENERATOR'S CERTIFICATION: I hereby certify that the above named material is not a hazardous waste as defined by 40 CFR 261 or any applicable state law, has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulations; AND, if this waste is a treatment residue of a previously restricted hazardous waste subject to the Land Disposal Restrictions. I certify and warrant that the waste has been treated in accordance with the requirements of 40 CFR 268 and is no longer a hazardous waste as defined by 40 CFR 261.

X	Caleb S. Tufts, Agent for Arconic	X		X	
q. Generator Authorized Agent Name (Print)	Tyler Burden	r. Signature		s. Date	10/7/2022

## II. TRANSPORTER (Generator completes IIa-b and Transporter completes IIc-e)

a. Transporter's Name and Address:  
Fox Hauling  
2887 IN-25  
Lafayette, IN 47905  
Phone: 765-742-5002

c. Driver Name (Print)	Robin Cochran	d. Signature		e. Date	10-7-22
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## III. DESTINATION (Generator complete III a-c and Destination Site completes III d-g)

a. Disposal Facility and Site Address: Walnut Creek Landfill 2701 North State Road 39 Frankfort, IN 46041 b. Phone: 765-659-8144	c. US-EPA Number - N/A 12-03	d. Discrepancy Indication Space:
--	------------------------------------	----------------------------------

I hereby certify that the above named material has been accepted and to the best of my knowledge the foregoing is true and accurate.

e. Name of Authorized Agent (Print)	f. Signature	g. Date
		10-7-22 19.03

## IV. ASBESTOS (Generator completes IV a-f and Operator complete IVg-i)

a. Operator's Name and Address: THIS SECTION IS NOT APPLICABLE (NOT ASBESTOS)	c. Responsible Agency Name and Address: THIS SECTION IS NOT APPLICABLE (NOT ASBESTOS)
b. Phone:	
e. Special Handling Instructions and Additional Information: f. <input type="checkbox"/> Friable <input type="checkbox"/> Non-Friable <input type="checkbox"/> Both 0% Friable 0% Non-Friable	
OPERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked and labeled and are in all respects in proper condition for transport by highway according to applicable international and national governmental regulations.	
g. Operator's Name and Title (Print)	h. Signature
	i. Date

\*Operator refers to the company which owns, leases, operates, controls, or supervises the facility being demolished or renovated, or the demolition or renovation operation or both



# NON-HAZARDOUS SPECIAL WASTE & ASBESTOS MANIFEST

If waste is asbestos waste, complete Sections I, II, III and IV

If waste is **NOT** asbestos waste, complete Sections I, II and III

## I. GENERATOR (Generator completes Ia-s)

a. Generator's US EPA ID Number NA	b. Manifest Document Number 54	c. Page 1 of 1
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d. Generator's Information: <b>Arconic Lafayette LLC</b> 3131 E Main St Lafayette, IN 47905 Contact: Travis Catlin Phone: 765-237-1809 County: Tippecanoe	e. Billing Information: <b>O6 Environmental LLC</b> 6311 Bartmer Industrial Dr St. Louis, MO 63130 Contact: Caleb Tufts Phone: 765-654-8144 TRUX 333448
---	---

Generator site location (if different): i. Site Location: N/A	j. Phone No: NA
--	-----------------

k. Waste Profile #	l. Exp. Date	m. Waste Shipping Name and Description	n. Containers		o. Total Quantity	p. Unit Wt/Vol
			No.	Type		
3144 21 26865	8/30/2023	PCB Remediation Waste Soil and Sediment (Elliott Ditch Clean Up Project)	1	TRK		

GENERATOR'S CERTIFICATION: I hereby certify that the above named material is not a hazardous waste as defined by 40 CFR 261 or any applicable state law, has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulations; AND, if this waste is a treatment residue of a previously restricted hazardous waste subject to the Land Disposal Restrictions. I certify and warrant that the waste has been treated in accordance with the requirements of 40 CFR 268 and is no longer a hazardous waste as defined by 40 CFR 261.

X Caleb S. Tufts, Agent for Arconic	X	X 10-7-22
q. Generator Authorized Agent Name (Print)	r. Signature	s. Date 10/7/22

## II. TRANSPORTER (Generator completes IIa-b and Transporter completes IIc-e)

a. Transporter's Name and Address: Fox Hauling 2887 IN-25 Lafayette, IN 47905 Phone: 765-742-5002
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c. Driver Name (Print) Amity Miller	d. Signature 	e. Date 10-7-22
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## III. DESTINATION (Generator complete III a-c and Destination Site completes III d-g)

a. Disposal Facility and Site Address: Walnut Creek Landfill 2701 North State Road 39 Frankfort, IN 46041 b. Phone: 765-659-8144	c. US-EPA Number - N/A 12-03	d. Discrepancy Indication Space:
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I hereby certify that the above named material has been accepted and to the best of my knowledge the foregoing is true and accurate.

e. Name of Authorized Agent (Print) 	f. Signature 	g. Date 10-7-22	21.15
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## IV. ASBESTOS (Generator completes IV a-f and Operator complete IVg-i)

a. Operator's Name and Address: THIS SECTION IS NOT APPLICABLE (NOT ASBESTOS)	c. Responsible Agency Name and Address: THIS SECTION IS NOT APPLICABLE (NOT ASBESTOS)
--	--

e. Special Handling Instructions and Additional Information:  
f.  Friable  Non-Friable  Both  0% Friable  0% Non-Friable

OPERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked and labeled and are in all respects in proper condition for transport by highway according to applicable international and national governmental regulations.

g. Operator's Name and Title (Print)	h. Signature	i. Date
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\*Operator refers to the company which owns, leases, operates, controls, or supervises the facility being demolished or renovated, or the demolition or renovation operation or both



### NON-HAZARDOUS SPECIAL WASTE & ASBESTOS MANIFEST

If waste is asbestos waste, complete Sections I, II, III and IV

If waste is **NOT** asbestos waste, complete Sections I, II and III

75F

#### I. GENERATOR (Generator completes Ia-s)

a. Generator's US EPA ID Number <b>NA</b>		b. Manifest Document Number <b>55</b>		c. Page 1 of <b>1</b>	
d. Generator's Information: <b>Arconic Lafayette LLC</b> <b>3131 E Main St</b> <b>Lafayette, IN 47905</b> <b>Contact: Travis Catlin</b> <b>Phone: 765-237-1809</b> <b>County: Tippecanoe</b>			e. Billing Information: <b>O6 Environmental LLC</b> <b>6311 Bartmer Industrial Dr</b> <b>St. Louis, MO 63130</b> <b>Contact: Caleb Tufts</b> <b>Phone: 765-654-8144</b> <b>TRUX 333448</b>		
Generator site location (if different): i. Site Location: <b>N/A</b>			j. Phone No: <b>NA</b>		
k. Waste Profile #	l. Exp. Date	m. Waste Shipping Name and Description	n. Containers No.	n. Containers Type	o. Total Quantity
<b>3144 21 26865</b>	<b>8/30/2023</b>	<b>PCB Remediation Waste Soil and Sediment (Elliott Ditch Clean Up Project)</b>	<b>1</b>	<b>TRK</b>	
p. Unit Wt/Vol					

GENERATOR'S CERTIFICATION: I hereby certify that the above named material is not a hazardous waste as defined by 40 CFR 261 or any applicable state law, has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulations; AND, if this waste is a treatment residue of a previously restricted hazardous waste subject to the Land Disposal Restrictions. I certify and warrant that the waste has been treated in accordance with the requirements of 40 CFR 268 and is no longer a hazardous waste as defined by 40 CFR 261.

X	Caleb S. Tufts, Agent for Arconic	X		X	10-7-22
q. Generator Authorized Agent Name (Print)	<b>Tyler Bundren</b>	r. Signature		s. Date	<b>10/7/22</b>

#### II. TRANSPORTER (Generator completes IIa-b and Transporter completes IIc-e)

a. Transporter's Name and Address: <b>Fox Hauling</b> <b>2887 IN-25</b> <b>Lafayette, IN 47905</b> <b>Phone: 765-742-5002</b>		
c. Driver Name (Print)	d. Signature	e. Date
<b>Robin Cochran</b>		<b>10-7-22</b>

#### III. DESTINATION (Generator complete III a-c and Destination Site completes III d-g)

a. Disposal Facility and Site Address: <b>Walnut Creek Landfill</b> <b>2701 North State Road 39</b> <b>Frankfort, IN 46041</b> <b>b. Phone: 765-659-8144</b>		c. US-EPA Number - <b>N/A</b> <b>12-03</b>	d. Discrepancy Indication Space:
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I hereby certify that the above named material has been accepted and to the best of my knowledge the foregoing is true and accurate.

e. Name of Authorized Agent (Print)	f. Signature	g. Date
<b>wf</b>		<b>10-7-22 22.37</b>

#### IV. ASBESTOS (Generator completes IV a-f and Operator complete IVg-i)

a. Operator's Name and Address: <b>THIS SECTION IS NOT APPLICABLE (NOT ASBESTOS)</b>		c. Responsible Agency Name and Address: <b>THIS SECTION IS NOT APPLICABLE (NOT ASBESTOS)</b>	
b. Phone:			
e. Special Handling Instructions and Additional Information:			
f. <input type="checkbox"/> Friable <input type="checkbox"/> Non-Friable <input type="checkbox"/> Both <input type="checkbox"/> 0% Friable <input type="checkbox"/> 0% Non-Friable			
OPERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked and labeled and are in all respects in proper condition for transport by highway according to applicable international and national governmental regulations.			
g. Operator's Name and Title (Print)	h. Signature	i. Date	
*Operator refers to the company which owns, leases, operates, controls, or supervises the facility being demolished or renovated, or the demolition or renovation operation or both			



### NON-HAZARDOUS SPECIAL WASTE & ASBESTOS MANIFEST

If waste is asbestos waste, complete Sections I, II, III and IV  
 If waste is NOT asbestos waste, complete Sections I, II and III

lm

#### I. GENERATOR (Generator completes Ia-s)

a. Generator's US EPA ID Number NA		b. Manifest Document Number 56		c. Page 1 of 1	
d. Generator's Information: <b>Arconic Lafayette LLC</b> 3131 E Main St Lafayette, IN 47905 Contact: Travis Catlin Phone: 765-237-1809 County: Tippecanoe			e. Billing Information: <b>O6 Environmental LLC</b> 6311 Bartmer Industrial Dr St. Louis, MO 63130 Contact: Caleb Tufts Phone: 765-654-8144 TRUX 333448		
Generator site location (if different): i. Site Location: N/A			j. Phone No: NA		
k. Waste Profile #	l. Exp. Date	m. Waste Shipping Name and Description	n. Containers		p. Unit Wt/Vol
3144 21 26865	8/30/2023	PCB Remediation Waste Soil and Sediment (Elliott Ditch Clean Up Project)	No. 1	Type TRK	o. Total Quantity

GENERATOR'S CERTIFICATION: I hereby certify that the above named material is not a hazardous waste as defined by 40 CFR 261 or any applicable state law, has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulations; AND, if this waste is a treatment residue of a previously restricted hazardous waste subject to the Land Disposal Restrictions. I certify and warrant that the waste has been treated in accordance with the requirements of 40 CFR 268 and is no longer a hazardous waste as defined by 40 CFR 261.

X Caleb S. Tufts, Agent for Arconic	X	X 10-7-22
q. Generator Authorized Agent Name (Print) Tyler Burdren	r. Signature 	s. Date 10-7-22

#### II. TRANSPORTER (Generator completes IIa-b and Transporter completes IIc-e)

a. Transporter's Name and Address:  
 Fox Hauling  
 2887 IN-25  
 Lafayette, IN 47905  
 Phone: 765-742-5002

c. Driver Name (Print) Amity Miller	d. Signature 	e. Date 10-7-22
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#### III. DESTINATION (Generator complete III a-c and Destination Site completes IIId-g)

a. Disposal Facility and Site Address: <b>Walnut Creek Landfill</b> 2701 North State Road 39 Frankfort, IN 46041 b. Phone: 765-659-8144	c. US-EPA Number - N/A 12-03	d. Discrepancy Indication Space:
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I hereby certify that the above named material has been accepted and to the best of my knowledge the foregoing is true and accurate.

e. Name of Authorized Agent (Print) 	f. Signature 	g. Date 10-7-22	23.08
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#### IV. ASBESTOS (Generator completes IV a-f and Operator complete IVg-i)

a. Operator's Name and Address: THIS SECTION IS NOT APPLICABLE (NOT ASBESTOS)	b. Phone:	c. Responsible Agency Name and Address: THIS SECTION IS NOT APPLICABLE (NOT ASBESTOS)
e. Special Handling Instructions and Additional Information:		
f. <input type="checkbox"/> Friable <input type="checkbox"/> Non-Friable <input type="checkbox"/> Both 0% Friable 0% Non-Friable		
OPERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked and labeled and are in all respects in proper condition for transport by highway according to applicable international and national governmental regulations.		
g. Operator's Name and Title (Print)	h. Signature	i. Date
*Operator refers to the company which owns, leases, operates, controls, or supervises the facility being demolished or renovated, or the demolition or renovation operation or both		



### NON-HAZARDOUS SPECIAL WASTE & ASBESTOS MANIFEST

If waste is asbestos waste, complete Sections I, II, III and IV  
 If waste is **NOT** asbestos waste, complete Sections I, II and III

75<sup>F</sup>

#### I. GENERATOR (Generator completes Ia-s)

a. Generator's US EPA ID Number NA		b. Manifest Document Number 57		c. Page 1 of 1	
d. Generator's Information: <b>Arconic Lafayette LLC</b> 3131 E Main St Lafayette, IN 47905 Contact: Travis Catlin Phone: 765-237-1809 County: Tippecanoe			e. Billing Information: <b>O6 Environmental LLC</b> 6311 Bartmer Industrial Dr St. Louis, MO 63130 Contact: Caleb Tufts Phone: 765-654-8144 TRUX 333448		
Generator site location (if different): i. Site Location: N/A			j. Phone No: NA		
k. Waste Profile # 3144 21 26865	l. Exp. Date 8/30/2023	m. Waste Shipping Name and Description PCB Remediation Waste Soil and Sediment (Elliott Ditch Clean Up Project)	n. Containers No. Type 1 TRK	o. Total Quantity	p. Unit Wt/Vol

GENERATOR'S CERTIFICATION: I hereby certify that the above named material is not a hazardous waste as defined by 40 CFR 261 or any applicable state law, has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulations; AND, if this waste is a treatment residue of a previously restricted hazardous waste subject to the Land Disposal Restrictions. I certify and warrant that the waste has been treated in accordance with the requirements of 40 CFR 268 and is no longer a hazardous waste as defined by 40 CFR 261.

X Caleb S. Tufts, Agent for Arconic	X	X 10-7-22
q. Generator Authorized Agent Name (Print) Tyler Bundren	r. Signature 	s. Date 10/7/22

#### II. TRANSPORTER (Generator completes IIa-b and Transporter completes IIc-e)

a. Transporter's Name and Address: Fox Hauling 2887 IN-25 Lafayette, IN 47905 Phone: 765-742-5002		
c. Driver Name (Print) Robin Cochran	d. Signature 	e. Date 10-7-22

#### III. DESTINATION (Generator complete III a-c and Destination Site completes IIId-g)

a. Disposal Facility and Site Address: Walnut Creek Landfill 2701 North State Road 39 Frankfort, IN 46041 b. Phone: 765-659-8144		c. US-EPA Number - N/A 12-03	d. Discrepancy Indication Space:
I hereby certify that the above named material has been accepted and to the best of my knowledge the foregoing is true and accurate.			
e. Name of Authorized Agent (Print) 		f. Signature 	g. Date 10-7-22 21.63

#### IV. ASBESTOS (Generator completes IV a-f and Operator complete IVg-i)

a. Operator's Name and Address: THIS SECTION IS NOT APPLICABLE (NOT ASBESTOS)		c. Responsible Agency Name and Address: THIS SECTION IS NOT APPLICABLE (NOT ASBESTOS)	
b. Phone:			
e. Special Handling Instructions and Additional Information:			
f. <input type="checkbox"/> Friable <input type="checkbox"/> Non-Friable <input type="checkbox"/> Both 0% Friable 0% Non-Friable			
OPERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked and labeled and are in all respects in proper condition for transport by highway according to applicable international and national governmental regulations.			
g. Operator's Name and Title (Print)		h. Signature	
		i. Date	
*Operator refers to the company which owns, leases, operates, controls, or supervises the facility being demolished or renovated, or the demolition or renovation operation or both			



# NON-HAZARDOUS SPECIAL WASTE & ASBESTOS MANIFEST

If waste is asbestos waste, complete Sections I, II, III and IV  
 If waste is **NOT** asbestos waste, complete Sections I, II and III

lm

## I. GENERATOR (Generator completes Ia-s)

a. Generator's US EPA ID Number NA		b. Manifest Document Number 58		c. Page 1 of 1	
d. Generator's Information: <b>Arconic Lafayette LLC</b> 3131 E Main St Lafayette, IN 47905 Contact: Travis Catlin Phone: 765-237-1809 County: Tippecanoe			e. Billing Information: <b>O6 Environmental LLC</b> 6311 Bartmer Industrial Dr St. Louis, MO 63130 Contact: Caleb Tufts Phone: 765-654-8144 TRUX 333448		
Generator site location (if different): i. Site Location: N/A			j. Phone No: NA		
k. Waste Profile # 3144 21 26865	l. Exp. Date 8/30/2023	m. Waste Shipping Name and Description PCB Remediation Waste Soil and Sediment (Elliott Ditch Clean Up Project)	n. Containers No. 1 Type TRK	o. Total Quantity	p. Unit Wt/Vol

GENERATOR'S CERTIFICATION: I hereby certify that the above named material is not a hazardous waste as defined by 40 CFR 261 or any applicable state law, has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulations; AND, if this waste is a treatment residue of a previously restricted hazardous waste subject to the Land Disposal Restrictions. I certify and warrant that the waste has been treated in accordance with the requirements of 40 CFR 268 and is no longer a hazardous waste as defined by 40 CFR 261.

X Caleb S. Tufts, Agent for Arconic	X	X 10-10-22
q. Generator Authorized Agent Name (Print) Tyler Burden	r. Signature 	s. Date 10/10/22

## II. TRANSPORTER (Generator completes IIa-b and Transporter completes IIc-e)

a. Transporter's Name and Address:  
 Fox Hauling  
 2887 IN-25  
 Lafayette, IN 47905  
 Phone: 765-742-5002

c. Driver Name (Print) Amity Miller	d. Signature 	e. Date 10/10/22
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## III. DESTINATION (Generator complete III a-c and Destination Site completes III d-g)

a. Disposal Facility and Site Address: Walnut Creek Landfill 2701 North State Road 39 Frankfort, IN 46041 b. Phone: 765-659-8144	c. US-EPA Number - N/A 12-03	d. Discrepancy Indication Space:
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I hereby certify that the above named material has been accepted and to the best of my knowledge the foregoing is true and accurate.

e. Name of Authorized Agent (Print) 	f. Signature 	g. Date 10-10-22 18:18
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## IV. ASBESTOS (Generator completes IV a-f and Operator completes IVg-i)

a. Operator's Name and Address: THIS SECTION IS NOT APPLICABLE (NOT ASBESTOS)	c. Responsible Agency Name and Address: THIS SECTION IS NOT APPLICABLE (NOT ASBESTOS)
b. Phone:	
e. Special Handling Instructions and Additional Information:	
f. <input type="checkbox"/> Friable <input type="checkbox"/> Non-Friable <input type="checkbox"/> Both 0% Friable 0% Non-Friable	
OPERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked and labeled and are in all respects in proper condition for transport by highway according to applicable international and national governmental regulations.	
g. Operator's Name and Title (Print)	i. Date
h. Signature	

\*Operator refers to the company which owns, leases, operates, controls, or supervises the facility being demolished or renovated, or the demolition or renovation operation or both



### NON-HAZARDOUS SPECIAL WASTE & ASBESTOS MANIFEST

If waste is asbestos waste, complete Sections I, II, III and IV  
 If waste is **NOT** asbestos waste, complete Sections I, II and III

65W

#### I. GENERATOR (Generator completes Ia-s)

a. Generator's US EPA ID Number NA		b. Manifest Document Number 59		c. Page 1 of 1	
d. Generator's Information: <b>Arconic Lafayette LLC</b> 3131 E Main St Lafayette, IN 47905 Contact: Travis Catlin Phone: 765-237-1809 County: Tippecanoe			e. Billing Information: <b>O6 Environmental LLC</b> 6311 Bartmer Industrial Dr St. Louis, MO 63130 Contact: Caleb Tufts Phone: 765-654-8144 TRUX 333448		
Generator site location (if different): i. Site Location: N/A			j. Phone No: NA		
k. Waste Profile #	l. Exp. Date	m. Waste Shipping Name and Description	n. Containers No.	Type	o. Total Quantity
3144 21 26865	8/30/2023	PCB Remediation Waste Soil and Sediment (Elliott Ditch Clean Up Project)	1	TRK	
p. Unit Wt/Vol					

GENERATOR'S CERTIFICATION: I hereby certify that the above named material is not a hazardous waste as defined by 40 CFR 261 or any applicable state law, has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulations; AND, if this waste is a treatment residue of a previously restricted hazardous waste subject to the Land Disposal Restrictions. I certify and warrant that the waste has been treated in accordance with the requirements of 40 CFR 268 and is no longer a hazardous waste as defined by 40 CFR 261.

X Caleb S. Tufts, Agent for Arconic	X	X 10-10-22
q. Generator Authorized Agent Name (Print) Tyler Bundren	r. Signature	s. Date 10/10/22

#### II. TRANSPORTER (Generator completes IIa-b and Transporter completes IIc-e)

a. Transporter's Name and Address:  
 Fox Hauling  
 2887 IN-25  
 Lafayette, IN 47905  
 Phone: 765-742-5002

c. Driver Name (Print) Thomas Miller	d. Signature	e. Date 10-10-22
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#### III. DESTINATION (Generator complete III a-c and Destination Site completes III d-g)

a. Disposal Facility and Site Address: <b>Walnut Creek Landfill</b> 2701 North State Road 39 Frankfort, IN 46041 b. Phone: 765-659-8144	c. US-EPA Number - N/A 12-03	d. Discrepancy Indication Space:
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I hereby certify that the above named material has been accepted and to the best of my knowledge the foregoing is true and accurate.

e. Name of Authorized Agent (Print)	f. Signature	g. Date 10-10-22 16.70
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#### IV. ASBESTOS (Generator completes IV a-f and Operator complete IVg-i)

a. Operator's Name and Address: THIS SECTION IS NOT APPLICABLE (NOT ASBESTOS)	c. Responsible Agency Name and Address: THIS SECTION IS NOT APPLICABLE (NOT ASBESTOS)
b. Phone:	
e. Special Handling Instructions and Additional Information:	
f. <input type="checkbox"/> Friable <input type="checkbox"/> Non-Friable <input type="checkbox"/> Both 0% Friable 0% Non-Friable	
OPERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked and labeled and are in all respects in proper condition for transport by highway according to applicable international and national governmental regulations.	
g. Operator's Name and Title (Print)	i. Date
h. Signature	

\*Operator refers to the company which owns, leases, operates, controls, or supervises the facility being demolished or renovated, or the demolition or renovation operation or both



# NON-HAZARDOUS SPECIAL WASTE & ASBESTOS MANIFEST

If waste is asbestos waste, complete Sections I, II, III and IV  
 If waste is **NOT** asbestos waste, complete Sections I, II and III

1m

## I. GENERATOR (Generator completes Ia-s)

a. Generator's US EPA ID Number NA		b. Manifest Document Number 60		c. Page 1 of 1	
d. Generator's Information: <b>Arconic Lafayette LLC</b> 3131 E Main St Lafayette, IN 47905 Contact: Travis Catlin Phone: 765-237-1809 County: Tippecanoe			e. Billing Information: <b>O6 Environmental LLC</b> 6311 Bartmer Industrial Dr St. Louis, MO 63130 Contact: Caleb Tufts Phone: 765-654-8144 TRUX 333448		
Generator site location (if different): i. Site Location: N/A			j. Phone No: NA		
k. Waste Profile #	l. Exp. Date	m. Waste Shipping Name and Description	n. Containers		o. Total Quantity
3144 21 26865	8/30/2023	PCB Remediation Waste Soil and Sediment (Elliott Ditch Clean Up Project)	No. 1	Type TRK	
GENERATOR'S CERTIFICATION: I hereby certify that the above named material is not a hazardous waste as defined by 40 CFR 261 or any applicable state law, has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulations; AND, if this waste is a treatment residue of a previously restricted hazardous waste subject to the Land Disposal Restrictions. I certify and warrant that the waste has been treated in accordance with the requirements of 40 CFR 268 and is no longer a hazardous waste as defined by 40 CFR 261.					
X Caleb S. Tufts, Agent for Arconic		X		X 10-10-22	
q. Generator Authorized Agent Name (Print) Tyler Bundren		r. Signature 		s. Date 10/10/22	

## II. TRANSPORTER (Generator completes IIa-b and Transporter completes IIc-e)

a. Transporter's Name and Address: Fox Hauling 2887 IN-25 Lafayette, IN 47905 Phone: 765-742-5002		
c. Driver Name (Print) Amity Miller	d. Signature 	e. Date 10-10-22

## III. DESTINATION (Generator complete III a-c and Destination Site completes IIId-g)

a. Disposal Facility and Site Address: <b>Walnut Creek Landfill</b> 2701 North State Road 39 Frankfort, IN 46041 b. Phone: 765-659-8144		c. US-EPA Number - N/A 12-03	d. Discrepancy Indication Space:
I hereby certify that the above named material has been accepted and to the best of my knowledge the foregoing is true and accurate.			
e. Name of Authorized Agent (Print) WJ		f. Signature 	g. Date 10-10-22 22.18

## IV. ASBESTOS (Generator completes IV a-f and Operator complete IVg-i)

a. Operator's Name and Address: THIS SECTION IS NOT APPLICABLE (NOT ASBESTOS)		c. Responsible Agency Name and Address: THIS SECTION IS NOT APPLICABLE (NOT ASBESTOS)	
b. Phone:			
e. Special Handling Instructions and Additional Information:			
f. <input type="checkbox"/> Friable <input type="checkbox"/> Non-Friable Both 0% Friable 0% Non-Friable			
OPERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked and labeled and are in all respects in proper condition for transport by highway according to applicable international and national governmental regulations.			
g. Operator's Name and Title (Print)		h. Signature	
		i. Date	
*Operator refers to the company which owns, leases, operates, controls, or supervises the facility being demolished or renovated, or the demolition or renovation operation or both			



NON-HAZARDOUS SPECIAL WASTE & ASBESTOS MANIFEST

If waste is asbestos waste, complete Sections I, II, III and IV
If waste is NOT asbestos waste, complete Sections I, II and III

65W

I. GENERATOR (Generator completes Ia-s)

Form I: Generator information including EPA ID Number (NA), Manifest Document Number (61), Generator's Information (Arconic Lafayette LLC), Billing Information (O6 Environmental LLC), and Waste Profile # (3144 21 26865).

Generator's Certification and Agent Information: Caleb S. Tufts, Agent for Arconic, signed by Tyler Burdren on 10/10/22.

II. TRANSPORTER (Generator completes IIa-b and Transporter completes IIc-e)

Form II: Transporter information including Name and Address (Fox Hauling), Driver Name (Tom Miller), and Signature/Date.

III. DESTINATION (Generator complete III a-c and Destination Site completes III d-g)

Form III: Disposal Facility and Site Address (Walnut Creek Landfill), US-EPA Number (12-03), and Agent Information.

IV. ASBESTOS (Generator completes IV a-f and Operator complete IVg-i)

Form IV: Asbestos handling information, including Operator's Name and Address, and Special Handling Instructions.



NON-HAZARDOUS SPECIAL WASTE & ASBESTOS MANIFEST

If waste is asbestos waste, complete Sections I, II, III and IV
If waste is NOT asbestos waste, complete Sections I, II and III

lm

I. GENERATOR (Generator completes Ia-s)

Form I: Generator information including EPA ID Number (NA), Manifest Document Number (62), Generator's Information (Arconic Lafayette LLC), Billing Information (O6 Environmental LLC), and Waste Profile # (3144 21 26865).

Generator's Certification and Agent Information: Caleb S. Tufts, Agent for Arconic, signed by Tyler Bundren on 10/10/22.

II. TRANSPORTER (Generator completes IIa-b and Transporter completes IIc-e)

Form II: Transporter information including Name and Address (Fox Hauling), Driver Name (Amity Miller), Signature, and Date (10-10-22).

III. DESTINATION (Generator complete III a-c and Destination Site completes III d-g)

Form III: Disposal Facility and Site Address (Walnut Creek Landfill), US-EPA Number (12-03), and Discrepancy Indication Space.

Certification statement: I hereby certify that the above named material has been accepted and to the best of my knowledge the foregoing is true and accurate.

Form IV: ASBESTOS information, including Operator's Name and Address, Responsible Agency Name and Address, and Special Handling Instructions.

\*Operator refers to the company which owns, leases, operates, controls, or supervises the facility being demolished or renovated, or the demolition or renovation operation or both



**NON-HAZARDOUS SPECIAL WASTE & ASBESTOS MANIFEST**

If waste is asbestos waste, complete Sections I, II, III and IV  
 If waste is **NOT** asbestos waste, complete Sections I, II and III

65W

**I. GENERATOR** (Generator completes Ia-s)

a. Generator's US EPA ID Number NA		b. Manifest Document Number 63		c. Page 1 of 1	
d. Generator's Information: <b>Arconic Lafayette LLC</b> 3131 E Main St Lafayette, IN 47905 Contact: Travis Catlin Phone: 765-237-1809 County: Tippecanoe			e. Billing Information: <b>O6 Environmental LLC</b> 6311 Bartmer Industrial Dr St. Louis, MO 63130 Contact: Caleb Tufts Phone: 765-654-8144 TRUX 333448		
Generator site location (if different): i. Site Location: N/A			j. Phone No: NA		
k. Waste Profile #	l. Exp. Date	m. Waste Shipping Name and Description	n. Containers No. Type		o. Total Quantity
3144 21 26865	8/30/2023	PCB Remediation Waste Soil and Sediment (Elliott Ditch Clean Up Project)	1	TRK	
p. Unit Wt/Vol					

GENERATOR'S CERTIFICATION: I hereby certify that the above named material is not a hazardous waste as defined by 40 CFR 261 or any applicable state law, has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulations; AND, if this waste is a treatment residue of a previously restricted hazardous waste subject to the Land Disposal Restrictions. I certify and warrant that the waste has been treated in accordance with the requirements of 40 CFR 268 and is no longer a hazardous waste as defined by 40 CFR 261.

X Caleb S. Tufts, Agent for Arconic	X <i>[Signature]</i>	X 10-10-22
q. Generator Authorized Agent Name (Print) Tyler Bundren	r. Signature <i>[Signature]</i>	s. Date 10/10/22

**II. TRANSPORTER** (Generator completes IIa-b and Transporter completes IIc-e)

a. Transporter's Name and Address:  
 Fox Hauling  
 2887 IN-25  
 Lafayette, IN 47905  
 Phone: 765-742-5002

c. Driver Name (Print) Tom Miller	d. Signature <i>[Signature]</i>	e. Date 10-10-22
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**III. DESTINATION** (Generator complete III a-c and Destination Site completes IIId-g)

a. Disposal Facility and Site Address: <b>Walnut Creek Landfill</b> 2701 North State Road 39 Frankfort, IN 46041 b. Phone: 765-659-8144	c. US-EPA Number - N/A 12-03	d. Discrepancy Indication Space:
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I hereby certify that the above named material has been accepted and to the best of my knowledge the foregoing is true and accurate.

e. Name of Authorized Agent (Print) <i>[Signature]</i>	f. Signature <i>[Signature]</i>	g. Date 10-10-22	21.64
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**IV. ASBESTOS** (Generator completes IV a-f and Operator complete IVg-i)

a. Operator's Name and Address: THIS SECTION IS NOT APPLICABLE (NOT ASBESTOS)	c. Responsible Agency Name and Address: THIS SECTION IS NOT APPLICABLE (NOT ASBESTOS)
b. Phone:	
e. Special Handling Instructions and Additional Information:	
f. <input type="checkbox"/> Friable <input type="checkbox"/> Non-Friable <input type="checkbox"/> Both 0% Friable 0% Non-Friable	
OPERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked and labeled and are in all respects in proper condition for transport by highway according to applicable international and national governmental regulations.	
g. Operator's Name and Title (Print)	i. Date
*Operator refers to the company which owns, leases, operates, controls, or supervises the facility being demolished or renovated, or the demolition or renovation operation or both	



# NON-HAZARDOUS SPECIAL WASTE & ASBESTOS MANIFEST

If waste is asbestos waste, complete Sections I, II, III and IV  
If waste is **NOT** asbestos waste, complete Sections I, II and III

1/M

## I. GENERATOR (Generator completes Ia-s)

a. Generator's US EPA ID Number NA		b. Manifest Document Number 64		c. Page 1 of 1	
d. Generator's Information: <b>Arconic Lafayette LLC</b> 3131 E Main St Lafayette, IN 47905 Contact: Travis Catlin Phone: 765-237-1809 County: Tippecanoe			e. Billing Information: <b>O6 Environmental LLC</b> 6311 Bartmer Industrial Dr St. Louis, MO 63130 Contact: Caleb Tufts Phone: 765-654-8144 TRUX 333448		
Generator site location (if different): i. Site Location: N/A			j. Phone No: NA		
k. Waste Profile # 3144 21 26865	l. Exp. Date 8/30/2023	m. Waste Shipping Name and Description PCB Remediation Waste Soil and Sediment (Elliott Ditch Clean Up Project)	n. Containers No. Type 1 TRK	o. Total Quantity	p. Unit Wt/Vol

GENERATOR'S CERTIFICATION: I hereby certify that the above named material is not a hazardous waste as defined by 40 CFR 261 or any applicable state law, has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulations; AND, if this waste is a treatment residue of a previously restricted hazardous waste subject to the Land Disposal Restrictions. I certify and warrant that the waste has been treated in accordance with the requirements of 40 CFR 268 and is no longer a hazardous waste as defined by 40 CFR 261.

X Caleb S. Tufts, Agent for Arconic	X	X 10-10-22
q. Generator Authorized Agent Name (Print) Tyler Burden	r. Signature 	s. Date 10/10/22

## II. TRANSPORTER (Generator completes IIa-b and Transporter completes IIc-e)

a. Transporter's Name and Address: Fox Hauling 2887 IN-25 Lafayette, IN 47905 Phone: 765-742-5002		
c. Driver Name (Print) Amity Miller	d. Signature 	e. Date 10-10-22

## III. DESTINATION (Generator complete III a-c and Destination Site completes III d-g)

a. Disposal Facility and Site Address: Walnut Creek Landfill 2701 North State Road 39 Frankfort, IN 46041 b. Phone: 765-659-8144		c. US-EPA Number - N/A 12-03	d. Discrepancy Indication Space:
I hereby certify that the above named material has been accepted and to the best of my knowledge the foregoing is true and accurate.			
e. Name of Authorized Agent (Print) RZ	f. Signature 	g. Date 10-10-22	25.28

## IV. ASBESTOS (Generator completes IV a-f and Operator complete IVg-i)

a. Operator's Name and Address: THIS SECTION IS NOT APPLICABLE (NOT ASBESTOS)		c. Responsible Agency Name and Address: THIS SECTION IS NOT APPLICABLE (NOT ASBESTOS)	
b. Phone:			
e. Special Handling Instructions and Additional Information:			
f. <input type="checkbox"/> Friable <input type="checkbox"/> Non-Friable <input type="checkbox"/> Both 0% Friable 0% Non-Friable			
OPERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked and labeled and are in all respects in proper condition for transport by highway according to applicable international and national governmental regulations.			
g. Operator's Name and Title (Print)	h. Signature	i. Date	
*Operator refers to the company which owns, leases, operates, controls, or supervises the facility being demolished or renovated, or the demolition or renovation operation or both			



**NON-HAZARDOUS SPECIAL WASTE & ASBESTOS MANIFEST**

If waste is asbestos waste, complete Sections I, II, III and IV  
 If waste is **NOT** asbestos waste, complete Sections I, II and III

65w

**I. GENERATOR** (Generator completes Ia-s)

a. Generator's US EPA ID Number NA		b. Manifest Document Number 65		c. Page 1 of 1	
d. Generator's Information: <b>Arconic Lafayette LLC</b> 3131 E Main St Lafayette, IN 47905 Contact: Travis Catlin Phone: 765-237-1809 County: Tippecanoe			e. Billing Information: <b>O6 Environmental LLC</b> 6311 Bartmer Industrial Dr St. Louis, MO 63130 Contact: Caleb Tufts Phone: 765-654-8144 TRUX 333448		
Generator site location (if different): i. Site Location: N/A			j. Phone No: NA		
k. Waste Profile #	l. Exp. Date	m. Waste Shipping Name and Description	n. Containers No.	n. Containers Type	o. Total Quantity
3144 21 26865	8/30/2023	PCB Remediation Waste Soil and Sediment (Elliott Ditch Clean Up Project)	1	TRK	
GENERATOR'S CERTIFICATION: I hereby certify that the above named material is not a hazardous waste as defined by 40 CFR 261 or any applicable state law, has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulations; AND, if this waste is a treatment residue of a previously restricted hazardous waste subject to the Land Disposal Restrictions. I certify and warrant that the waste has been treated in accordance with the requirements of 40 CFR 268 and is no longer a hazardous waste as defined by 40 CFR 261.					
X Caleb S. Tufts, Agent for Arconic		X		X	
q. Generator Authorized Agent Name (Print) Caleb S. Tufts		r. Signature 		s. Date 10/10/22	

**II. TRANSPORTER** (Generator completes IIa-b and Transporter completes IIc-e)

a. Transporter's Name and Address: Fox Hauling 2887 IN-25 Lafayette, IN 47905 Phone: 765-742-5002		
c. Driver Name (Print) Tom Miller	d. Signature 	e. Date 10-10-22

**III. DESTINATION** (Generator complete III a-c and Destination Site completes III d-g)

a. Disposal Facility and Site Address: <b>Walnut Creek Landfill</b> 2701 North State Road 39 Frankfort, IN 46041 b. Phone: 765-659-8144		c. US-EPA Number - N/A 12-03	d. Discrepancy Indication Space:
I hereby certify that the above named material has been accepted and to the best of my knowledge the foregoing is true and accurate.			
e. Name of Authorized Agent (Print) Tom Miller		f. Signature 	g. Date 10-10-22

**IV. ASBESTOS** (Generator completes IV a-f and Operator complete IVg-i)

a. Operator's Name and Address: <b>THIS SECTION IS NOT APPLICABLE (NOT ASBESTOS)</b>		c. Responsible Agency Name and Address: <b>THIS SECTION IS NOT APPLICABLE (NOT ASBESTOS)</b>	
b. Phone:			
e. Special Handling Instructions and Additional Information:			
f. <input type="checkbox"/> Friable <input type="checkbox"/> Non-Friable <input type="checkbox"/> Both 0% Friable 0% Non-Friable			
OPERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked and labeled and are in all respects in proper condition for transport by highway according to applicable international and national governmental regulations.			
g. Operator's Name and Title (Print)		h. Signature	
		i. Date	

\*Operator refers to the company which owns, leases, operates, controls, or supervises the facility being demolished or renovated, or the demolition or renovation operation or both



**NON-HAZARDOUS SPECIAL WASTE & ASBESTOS MANIFEST**

If waste is asbestos waste, complete Sections I, II, III and IV

If waste is **NOT** asbestos waste, complete Sections I, II and III

lm

**I. GENERATOR** (Generator completes Ia-s)

a. Generator's US EPA ID Number NA		b. Manifest Document Number 666		c. Page 1 of 1	
d. Generator's Information: <b>Arconic Lafayette LLC</b> 3131 E Main St Lafayette, IN 47905 Contact: Travis Catlin Phone: 765-237-1809 County: Tippecanoe			e. Billing Information: <b>O6 Environmental LLC</b> 6311 Bartmer Industrial Dr St. Louis, MO 63130 Contact: Caleb Tufts Phone: 765-654-8144 TRUX 333448		
Generator site location (if different): i. Site Location: N/A			j. Phone No: NA		
k. Waste Profile #	l. Exp. Date	m. Waste Shipping Name and Description	n. Containers No. Type		o. Total Quantity
3144 21 26865	8/30/2023	PCB Remediation Waste Soil and Sediment (Elliott Ditch Clean Up Project)	1	TRK	
GENERATOR'S CERTIFICATION: I hereby certify that the above named material is not a hazardous waste as defined by 40 CFR 261 or any applicable state law, has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulations; AND, if this waste is a treatment residue of a previously restricted hazardous waste subject to the Land Disposal Restrictions. I certify and warrant that the waste has been treated in accordance with the requirements of 40 CFR 268 and is no longer a hazardous waste as defined by 40 CFR 261.					
X Caleb S. Tufts, Agent for Arconic		X		X 10-11-22	
q. Generator Authorized Agent Name (Print) Tyler Burdun		r. Signature 		s. Date 10/11/22	

**II. TRANSPORTER** (Generator completes IIa-b and Transporter completes IIc-e)

a. Transporter's Name and Address: Fox Hauling 2887 IN-25 Lafayette, IN 47905 Phone: 765-742-5002		
c. Driver Name (Print) Amity Miller	d. Signature 	e. Date 10-11-22

**III. DESTINATION** (Generator complete III a-c and Destination Site completes III d-g)

a. Disposal Facility and Site Address: <b>Walnut Creek Landfill</b> 2701 North State Road 39 Frankfort, IN 46041 b. Phone: 765-659-8144		c. US-EPA Number - N/A 12-03	d. Discrepancy Indication Space:
I hereby certify that the above named material has been accepted and to the best of my knowledge the foregoing is true and accurate.			
e. Name of Authorized Agent (Print) WJ	f. Signature 	g. Date 10-11-22 19.44	

**IV. ASBESTOS** (Generator completes IV a-f and Operator complete IVg-i)

a. Operator's Name and Address: THIS SECTION IS NOT APPLICABLE (NOT ASBESTOS)		c. Responsible Agency Name and Address: THIS SECTION IS NOT APPLICABLE (NOT ASBESTOS)	
b. Phone:			
e. Special Handling Instructions and Additional Information:			
f. <input type="checkbox"/> Friable <input type="checkbox"/> Non-Friable <input type="checkbox"/> Both <input type="checkbox"/> 0% Friable <input type="checkbox"/> 0% Non-Friable			
OPERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked and labeled and are in all respects in proper condition for transport by highway according to applicable international and national governmental regulations.			
g. Operator's Name and Title (Print)		i. Date	
*Operator refers to the company which owns, leases, operates, controls, or supervises the facility being demolished or renovated, or the demolition or renovation operation or both			



**NON-HAZARDOUS SPECIAL WASTE & ASBESTOS MANIFEST**

If waste is asbestos waste, complete Sections I, II, III and IV  
 If waste is **NOT** asbestos waste, complete Sections I, II and III

65W

**I. GENERATOR** (Generator completes Ia-s)

a. Generator's US EPA ID Number NA		b. Manifest Document Number 67		c. Page 1 of 1	
d. Generator's Information: <b>Arconic Lafayette LLC</b> 3131 E Main St Lafayette, IN 47905 Contact: Travis Catlin Phone: 765-237-1809 County: Tippecanoe			e. Billing Information: <b>O6 Environmental LLC</b> 6311 Bartmer Industrial Dr St. Louis, MO 63130 Contact: Caleb Tufts Phone: 765-654-8144 TRUX 333448		
Generator site location (if different): i. Site Location: N/A			j. Phone No: NA		
k. Waste Profile #	l. Exp. Date	m. Waste Shipping Name and Description	n. Containers		p. Unit Wt/Vol
			No.	Type	o. Total Quantity
3144 21 26865	8/30/2023	PCB Remediation Waste Soil and Sediment (Elliott Ditch Clean Up Project)	1	TRK	
GENERATOR'S CERTIFICATION: I hereby certify that the above named material is not a hazardous waste as defined by 40 CFR 261 or any applicable state law, has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulations; AND, if this waste is a treatment residue of a previously restricted hazardous waste subject to the Land Disposal Restrictions. I certify and warrant that the waste has been treated in accordance with the requirements of 40 CFR 268 and is no longer a hazardous waste as defined by 40 CFR 261.					
X Caleb S. Tufts, Agent for Arconic		X		X 10-11-22	
q. Generator Authorized Agent Name (Print) Tyler Bundren		r. Signature		s. Date 10/11/22	

**II. TRANSPORTER** (Generator completes IIa-b and Transporter completes IIc-e)

a. Transporter's Name and Address: Fox Hauling 2887 IN-25 Lafayette, IN 47905 Phone: 765-742-5002		
c. Driver Name (Print) Tom Miller	d. Signature	e. Date 10-11-22

**III. DESTINATION** (Generator complete III a-c and Destination Site completes IIId-g)

a. Disposal Facility and Site Address: <b>Walnut Creek Landfill</b> 2701 North State Road 39 Frankfort, IN 46041 b. Phone: 765-659-8144		c. US-EPA Number - N/A 12-03	d. Discrepancy Indication Space:
I hereby certify that the above named material has been accepted and to the best of my knowledge the foregoing is true and accurate.			
e. Name of Authorized Agent (Print)		f. Signature	g. Date 10-11-22 21.76

**IV. ASBESTOS** (Generator completes IV a-f and Operator complete IVg-i)

a. Operator's Name and Address: THIS SECTION IS NOT APPLICABLE (NOT ASBESTOS)		c. Responsible Agency Name and Address: THIS SECTION IS NOT APPLICABLE (NOT ASBESTOS)	
b. Phone:			
e. Special Handling Instructions and Additional Information:			
f. <input type="checkbox"/> Friable <input type="checkbox"/> Non-Friable <input type="checkbox"/> Both 0% Friable 0% Non-Friable			
OPERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked and labeled and are in all respects in proper condition for transport by highway according to applicable international and national governmental regulations.			
g. Operator's Name and Title (Print)		h. Signature	
		i. Date	
*Operator refers to the company which owns, leases, operates, controls, or supervises the facility being demolished or renovated, or the demolition or renovation operation or both			



# NON-HAZARDOUS SPECIAL WASTE & ASBESTOS MANIFEST

If waste is asbestos waste, complete Sections I, II, III and IV  
If waste is **NOT** asbestos waste, complete Sections I, II and III

IM

## I. GENERATOR (Generator completes Ia-s)

a. Generator's US EPA ID Number NA		b. Manifest Document Number 68		c. Page 1 of 1		
d. Generator's Information: <b>Arconic Lafayette LLC</b> 3131 E Main St Lafayette, IN 47905 Contact: Travis Catlin Phone: 765-237-1809 County: Tippecanoe			e. Billing Information: <b>O6 Environmental LLC</b> 6311 Bartmer Industrial Dr St. Louis, MO 63130 Contact: Caleb Tufts Phone: 765-654-8144 TRUX 333448			
Generator site location (if different): i. Site Location: N/A						
j. Phone No: NA						
k. Waste Profile #	l. Exp. Date	m. Waste Shipping Name and Description	n. Containers No.	n. Containers Type	o. Total Quantity	p. Unit Wt/Vol
3144 21 26865	8/30/2023	PCB Remediation Waste Soil and Sediment (Elliott Ditch Clean Up Project)	1	TRK		

GENERATOR'S CERTIFICATION: I hereby certify that the above named material is not a hazardous waste as defined by 40 CFR 261 or any applicable state law, has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulations; AND, if this waste is a treatment residue of a previously restricted hazardous waste subject to the Land Disposal Restrictions. I certify and warrant that the waste has been treated in accordance with the requirements of 40 CFR 268 and is no longer a hazardous waste as defined by 40 CFR 261.

X	Caleb S. Tufts, Agent for Arconic	X		X	10-11-22
q. Generator Authorized Agent Name (Print)	Tyler Bundren	r. Signature	<i>[Signature]</i>	s. Date	10/11/22

## II. TRANSPORTER (Generator completes IIa-b and Transporter completes IIc-e)

a. Transporter's Name and Address:  
Fox Hauling  
2887 IN-25  
Lafayette, IN 47905  
Phone: 765-742-5002

c. Driver Name (Print)	d. Signature	e. Date
Amity Miller	Amity Miller	10-11-22

## III. DESTINATION (Generator complete III a-c and Destination Site completes III d-g)

a. Disposal Facility and Site Address: <b>Walnut Creek Landfill</b> 2701 North State Road 39 Frankfort, IN 46041 b. Phone: 765-659-8144	c. US-EPA Number - N/A 12-03	d. Discrepancy Indication Space:
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I hereby certify that the above named material has been accepted and to the best of my knowledge the foregoing is true and accurate.

e. Name of Authorized Agent (Print)	f. Signature	g. Date
	<i>[Signature]</i>	10-11-22

## IV. ASBESTOS (Generator completes IV a-f and Operator complete IVg-i)

a. Operator's Name and Address: <b>THIS SECTION IS NOT APPLICABLE (NOT ASBESTOS)</b>	b. Phone:	c. Responsible Agency Name and Address: <b>THIS SECTION IS NOT APPLICABLE (NOT ASBESTOS)</b>
e. Special Handling Instructions and Additional Information: f. <input type="checkbox"/> Friable <input type="checkbox"/> Non-Friable <input type="checkbox"/> Both 0% Friable 0% Non-Friable		
OPERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked and labeled and are in all respects in proper condition for transport by highway according to applicable international and national governmental regulations.		
g. Operator's Name and Title (Print)	h. Signature	i. Date

\*Operator refers to the company which owns, leases, operates, controls, or supervises the facility being demolished or renovated, or the demolition or renovation operation or both



### NON-HAZARDOUS SPECIAL WASTE & ASBESTOS MANIFEST

If waste is asbestos waste, complete Sections I, II, III and IV  
If waste is **NOT** asbestos waste, complete Sections I, II and III

65W

#### I. GENERATOR (Generator completes Ia-s)

a. Generator's US EPA ID Number NA		b. Manifest Document Number 69		c. Page 1 of 1	
d. Generator's Information: <b>Arconic Lafayette LLC</b> 3131 E Main St Lafayette, IN 47905 Contact: Travis Catlin Phone: 765-237-1809 County: Tippecanoe			e. Billing Information: <b>O6 Environmental LLC</b> 6311 Bartmer Industrial Dr St. Louis, MO 63130 Contact: Caleb Tufts Phone: 765-654-8144 TRUX 333448		
Generator site location (if different): i. Site Location: N/A			j. Phone No: NA		
k. Waste Profile #	l. Exp. Date	m. Waste Shipping Name and Description	n. Containers No.	Type	o. Total Quantity
3144 21 26865	8/30/2023	PCB Remediation Waste Soil and Sediment (Elliott Ditch Clean Up Project)	1	TRK	
p. Unit Wt/Vol					
GENERATOR'S CERTIFICATION: I hereby certify that the above named material is not a hazardous waste as defined by 40 CFR 261 or any applicable state law, has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulations; AND, if this waste is a treatment residue of a previously restricted hazardous waste subject to the Land Disposal Restrictions. I certify and warrant that the waste has been treated in accordance with the requirements of 40 CFR 268 and is no longer a hazardous waste as defined by 40 CFR 261.					
X Caleb S. Tufts, Agent for Arconic		X		X 10-11-22	
q. Generator Authorized Agent Name (Print) Tyler Bundren		r. Signature 		s. Date 10/11/22	

#### II. TRANSPORTER (Generator completes IIa-b and Transporter completes IIc-e)

a. Transporter's Name and Address: Fox Hauling 2887 IN-25 Lafayette, IN 47905 Phone: 765-742-5002		
c. Driver Name (Print) Tom Miller	d. Signature 	e. Date 10-11-22

#### III. DESTINATION (Generator complete III a-c and Destination Site completes III d-g)

a. Disposal Facility and Site Address: Walnut Creek Landfill 2701 North State Road 39 Frankfort, IN 46041 b. Phone: 765-659-8144		c. US-EPA Number - N/A 12-03	d. Discrepancy Indication Space:
I hereby certify that the above named material has been accepted and to the best of my knowledge the foregoing is true and accurate.			
e. Name of Authorized Agent (Print) 		f. Signature 	g. Date 10-11-22 23.43

#### IV. ASBESTOS (Generator completes IV a-f and Operator complete IVg-i)

a. Operator's Name and Address: THIS SECTION IS NOT APPLICABLE (NOT ASBESTOS)	c. Responsible Agency Name and Address: THIS SECTION IS NOT APPLICABLE (NOT ASBESTOS)
b. Phone:	
e. Special Handling Instructions and Additional Information:	
f. <input type="checkbox"/> Friable <input type="checkbox"/> Non-Friable <input type="checkbox"/> Both 0% Friable 0% Non-Friable	
OPERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked and labeled and are in all respects in proper condition for transport by highway according to applicable international and national governmental regulations.	
g. Operator's Name and Title (Print)	i. Date
h. Signature	
*Operator refers to the company which owns, leases, operates, controls, or supervises the facility being demolished or renovated, or the demolition or renovation operation or both	



### NON-HAZARDOUS SPECIAL WASTE & ASBESTOS MANIFEST

If waste is asbestos waste, complete Sections I, II, III and IV  
 If waste is NOT asbestos waste, complete Sections I, II and III

lm

#### I. GENERATOR (Generator completes Ia-s)

a. Generator's US EPA ID Number NA		b. Manifest Document Number 70		c. Page 1 of 1	
d. Generator's Information: <b>Arconic Lafayette LLC</b> 3131 E Main St Lafayette, IN 47905 Contact: Travis Catlin Phone: 765-237-1809 County: Tippecanoe			e. Billing Information: <b>O6 Environmental LLC</b> 6311 Bartmer Industrial Dr St. Louis, MO 63130 Contact: Caleb Tufts Phone: 765-654-8144 TRUX 333448		
Generator site location (if different): i. Site Location: N/A			j. Phone No: NA		
k. Waste Profile #	l. Exp. Date	m. Waste Shipping Name and Description	n. Containers No.	n. Containers Type	o. Total Quantity
3144 21 26865	8/30/2023	PCB Remediation Waste Soil and Sediment (Elliott Ditch Clean Up Project)	1	TRK	
GENERATOR'S CERTIFICATION: I hereby certify that the above named material is not a hazardous waste as defined by 40 CFR 261 or any applicable state law, has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulations; AND, if this waste is a treatment residue of a previously restricted hazardous waste subject to the Land Disposal Restrictions. I certify and warrant that the waste has been treated in accordance with the requirements of 40 CFR 268 and is no longer a hazardous waste as defined by 40 CFR 261.					
X Caleb S. Tufts, Agent for Arconic		X		X 10-11-22	
q. Generator Authorized Agent Name (Print) Tyler Burdren		r. Signature		s. Date 10-11-22	

#### II. TRANSPORTER (Generator completes IIa-b and Transporter completes IIc-e)

a. Transporter's Name and Address: Fox Hauling 2887 IN-25 Lafayette, IN 47905 Phone: 765-742-5002		
c. Driver Name (Print) Amity Miller	d. Signature 	e. Date 10-11-22

#### III. DESTINATION (Generator complete III a-c and Destination Site completes III d-g)

a. Disposal Facility and Site Address: <b>Walnut Creek Landfill</b> 2701 North State Road 39 Frankfort, IN 46041 b. Phone: 765-659-8144		c. US-EPA Number - N/A 12-03	d. Discrepancy Indication Space:
I hereby certify that the above named material has been accepted and to the best of my knowledge the foregoing is true and accurate.			
e. Name of Authorized Agent (Print)		f. Signature 	g. Date 10-11-22
			23.39

#### IV. ASBESTOS (Generator completes IV a-f and Operator complete IV g-i)

a. Operator's Name and Address: <b>THIS SECTION IS NOT APPLICABLE (NOT ASBESTOS)</b>		c. Responsible Agency Name and Address: <b>THIS SECTION IS NOT APPLICABLE (NOT ASBESTOS)</b>	
b. Phone:			
e. Special Handling Instructions and Additional Information:			
f. <input type="checkbox"/> Friable <input type="checkbox"/> Non-Friable Both 0% Friable 0% Non-Friable			
OPERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked and labeled and are in all respects in proper condition for transport by highway according to applicable international and national governmental regulations.			
g. Operator's Name and Title (Print)		h. Signature	
		i. Date	
*Operator refers to the company which owns, leases, operates, controls, or supervises the facility being demolished or renovated, or the demolition or renovation operation or both			



# NON-HAZARDOUS SPECIAL WASTE & ASBESTOS MANIFEST

If waste is asbestos waste, complete Sections I, II, III and IV  
If waste is **NOT** asbestos waste, complete Sections I, II and III

65W

## I. GENERATOR (Generator completes Ia-s)

a. Generator's US EPA ID Number NA		b. Manifest Document Number 71		c. Page 1 of 1	
d. Generator's Information: <b>Arconic Lafayette LLC</b> 3131 E Main St Lafayette, IN 47905 Contact: Travis Catlin Phone: 765-237-1809 County: Tippecanoe			e. Billing Information: <b>O6 Environmental LLC</b> 6311 Bartmer Industrial Dr St. Louis, MO 63130 Contact: Caleb Tufts Phone: 765-654-8144 TRUX 333448		
Generator site location (if different): i. Site Location: N/A			j. Phone No: NA		
k. Waste Profile #	l. Exp. Date	m. Waste Shipping Name and Description	n. Containers No.	Type	o. Total Quantity
3144 21 26865	8/30/2023	PCB Remediation Waste Soil and Sediment (Elliott Ditch Clean Up Project)	1	TRK	
p. Unit Wt/Vol					

GENERATOR'S CERTIFICATION: I hereby certify that the above named material is not a hazardous waste as defined by 40 CFR 261 or any applicable state law, has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulations; AND, if this waste is a treatment residue of a previously restricted hazardous waste subject to the Land Disposal Restrictions. I certify and warrant that the waste has been treated in accordance with the requirements of 40 CFR 268 and is no longer a hazardous waste as defined by 40 CFR 261.

X Caleb S. Tufts, Agent for Arconic	X	X 10-11-22
q. Generator Authorized Agent Name (Print) Tyler Bundren	r. Signature 	s. Date 10-11-22

## II. TRANSPORTER (Generator completes IIa-b and Transporter completes IIc-e)

a. Transporter's Name and Address: Fox Hauling 2887 IN-25 Lafayette, IN 47905 Phone: 765-742-5002		
c. Driver Name (Print) Tommaso	d. Signature 	e. Date 10-11-22

## III. DESTINATION (Generator complete III a-c and Destination Site completes III d-g)

a. Disposal Facility and Site Address: Walnut Creek Landfill 2701 North State Road 39 Frankfort, IN 46041 b. Phone: 765-659-8144		c. US-EPA Number - N/A 12-03	d. Discrepancy Indication Space:
I hereby certify that the above named material has been accepted and to the best of my knowledge the foregoing is true and accurate.			
e. Name of Authorized Agent (Print) w	f. Signature w	g. Date 10-11-22	21.95

## IV. ASBESTOS (Generator completes IV a-f and Operator complete IV g-i)

a. Operator's Name and Address: THIS SECTION IS NOT APPLICABLE (NOT ASBESTOS)		c. Responsible Agency Name and Address: THIS SECTION IS NOT APPLICABLE (NOT ASBESTOS)	
b. Phone:			
e. Special Handling Instructions and Additional Information:			
f. <input type="checkbox"/> Friable <input type="checkbox"/> Non-Friable <input type="checkbox"/> Both 0% Friable 0% Non-Friable			
OPERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked and labeled and are in all respects in proper condition for transport by highway according to applicable international and national governmental regulations.			
g. Operator's Name and Title (Print)	h. Signature	i. Date	
*Operator refers to the company which owns, leases, operates, controls, or supervises the facility being demolished or renovated, or the demolition or renovation operation or both			



### NON-HAZARDOUS SPECIAL WASTE & ASBESTOS MANIFEST

If waste is asbestos waste, complete Sections I, II, III and IV  
 If waste is **NOT** asbestos waste, complete Sections I, II and III

Im

#### I. GENERATOR (Generator completes Ia-s)

a. Generator's US EPA ID Number <b>NA</b>		b. Manifest Document Number <b>92</b>		c. Page 1 of <b>1</b>	
d. Generator's Information: <b>Arconic Lafayette LLC</b> <b>3131 E Main St</b> <b>Lafayette, IN 47905</b> <b>Contact: Travis Catlin</b> <b>Phone: 765-237-1809</b> <b>County: Tippecanoe</b>			e. Billing Information: <b>O6 Environmental LLC</b> <b>6311 Bartmer Industrial Dr</b> <b>St. Louis, MO 63130</b> <b>Contact: Caleb Tufts</b> <b>Phone: 765-654-8144</b> <b>TRUX 333448</b>		
Generator site location (if different): i. Site Location: <b>N/A</b>			j. Phone No: <b>NA</b>		
k. Waste Profile #	l. Exp. Date	m. Waste Shipping Name and Description	n. Containers No.	Type	o. Total Quantity
<b>3144 21 26865</b>	<b>8/30/2023</b>	<b>PCB Remediation Waste Soil and Sediment (Elliott Ditch Clean Up Project)</b>	<b>1</b>	<b>TRK</b>	
p. Unit Wt/Vol					

GENERATOR'S CERTIFICATION: I hereby certify that the above named material is not a hazardous waste as defined by 40 CFR 261 or any applicable state law, has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulations; AND, if this waste is a treatment residue of a previously restricted hazardous waste subject to the Land Disposal Restrictions. I certify and warrant that the waste has been treated in accordance with the requirements of 40 CFR 268 and is no longer a hazardous waste as defined by 40 CFR 261.

X Caleb S. Tufts, Agent for Arconic	X	X 10-11-22
q. Generator Authorized Agent Name (Print) <b>Tyler Burden</b>	r. Signature	s. Date <b>10-11-22</b>

#### II. TRANSPORTER (Generator completes IIa-b and Transporter completes IIc-e)

a. Transporter's Name and Address: <b>Fox Hauling</b> <b>2887 IN-25</b> <b>Lafayette, IN 47905</b> <b>Phone: 765-742-5002</b>		
c. Driver Name (Print) <b>Anity Miller</b>	d. Signature	e. Date <b>10-11-22</b>

#### III. DESTINATION (Generator complete III a-c and Destination Site completes III d-g)

a. Disposal Facility and Site Address: <b>Walnut Creek Landfill</b> <b>2701 North State Road 39</b> <b>Frankfort, IN 46041</b> <b>b. Phone: 765-659-8144</b>		c. US-EPA Number - <b>N/A</b> <b>12-03</b>	d. Discrepancy Indication Space:
--	--	--	----------------------------------

I hereby certify that the above named material has been accepted and to the best of my knowledge the foregoing is true and accurate.

e. Name of Authorized Agent (Print)	f. Signature	g. Date <b>10-11-22</b>
-------------------------------------	--------------	-------------------------

#### IV. ASBESTOS (Generator completes IV a-f and Operator complete IVg-i)

a. Operator's Name and Address: <b>THIS SECTION IS NOT APPLICABLE (NOT ASBESTOS)</b>		c. Responsible Agency Name and Address: <b>THIS SECTION IS NOT APPLICABLE (NOT ASBESTOS)</b>	
b. Phone:			
e. Special Handling Instructions and Additional Information:			
f. <input type="checkbox"/> Friable <input type="checkbox"/> Non-Friable <input type="checkbox"/> Both <input type="checkbox"/> 0% Friable <input type="checkbox"/> 0% Non-Friable			
OPERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked and labeled and are in all respects in proper condition for transport by highway according to applicable international and national governmental regulations.			
g. Operator's Name and Title (Print)	h. Signature	i. Date	

\*Operator refers to the company which owns, leases, operates, controls, or supervises the facility being demolished or renovated, or the demolition or renovation operation or both



# NON-HAZARDOUS SPECIAL WASTE & ASBESTOS MANIFEST

If waste is asbestos waste, complete Sections I, II, III and IV

If waste is **NOT** asbestos waste, complete Sections I, II and III

1/1

## I. GENERATOR (Generator completes Ia-s)

a. Generator's US EPA ID Number NA		b. Manifest Document Number 73		c. Page 1 of 1	
d. Generator's Information: <b>Arconic Lafayette LLC</b> 3131 E Main St Lafayette, IN 47905 Contact: Travis Catlin Phone: 765-237-1809 County: Tippecanoe			e. Billing Information: <b>O6 Environmental LLC</b> 6311 Bartmer Industrial Dr St. Louis, MO 63130 Contact: Caleb Tufts Phone: 765-654-8144 TRUX 333448		
Generator site location (if different): i. Site Location: N/A			j. Phone No: NA		
k. Waste Profile #	l. Exp. Date	m. Waste Shipping Name and Description	n. Containers No.	Type	o. Total Quantity
3144 21 26865	8/30/2023	PCB Remediation Waste Soil and Sediment (Elliott Ditch Clean Up Project)	1	TRK	
p. Unit Wt/Vol					

GENERATOR'S CERTIFICATION: I hereby certify that the above named material is not a hazardous waste as defined by 40 CFR 261 or any applicable state law, has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulations; AND, if this waste is a treatment residue of a previously restricted hazardous waste subject to the Land Disposal Restrictions. I certify and warrant that the waste has been treated in accordance with the requirements of 40 CFR 268 and is no longer a hazardous waste as defined by 40 CFR 261.

X Caleb S. Tufts, Agent for Arconic	X	X 10/12/22
q. Generator Authorized Agent Name (Print) Tyler Burdren	r. Signature 	s. Date 10/12/22

## II. TRANSPORTER (Generator completes IIa-b and Transporter completes IIc-e)

a. Transporter's Name and Address: Fox Hauling 2887 IN-25 Lafayette, IN 47905 Phone: 765-742-5002		
c. Driver Name (Print) Amity miller	d. Signature 	e. Date 10-12-22

## III. DESTINATION (Generator complete III a-c and Destination Site completes III d-g)

a. Disposal Facility and Site Address: Walnut Creek Landfill 2701 North State Road 39 Frankfort, IN 46041 b. Phone: 765-659-8144		c. US-EPA Number - N/A 12-03	d. Discrepancy Indication Space:
--	--	------------------------------------	----------------------------------

I hereby certify that the above named material has been accepted and to the best of my knowledge the foregoing is true and accurate.

e. Name of Authorized Agent (Print) 	f. Signature 	g. Date 10-12-22 27.99
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## IV. ASBESTOS (Generator completes IV a-f and Operator complete IV g-i)

a. Operator's Name and Address: THIS SECTION IS NOT APPLICABLE (NOT ASBESTOS)		c. Responsible Agency Name and Address: THIS SECTION IS NOT APPLICABLE (NOT ASBESTOS)	
b. Phone:			
e. Special Handling Instructions and Additional Information:			
f. <input type="checkbox"/> Friable <input type="checkbox"/> Non-Friable Both 0% Friable 0% Non-Friable			
OPERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked and labeled and are in all respects in proper condition for transport by highway according to applicable international and national governmental regulations.			
g. Operator's Name and Title (Print)	h. Signature	i. Date	

\*Operator refers to the company which owns, leases, operates, controls, or supervises the facility being demolished or renovated, or the demolition or renovation operation or both



# NON-HAZARDOUS SPECIAL WASTE & ASBESTOS MANIFEST

If waste is asbestos waste, complete Sections I, II, III and IV  
 If waste is **NOT** asbestos waste, complete Sections I, II and III

65W

## I. GENERATOR (Generator completes Ia-s)

a. Generator's US EPA ID Number NA		b. Manifest Document Number 74		c. Page 1 of 1	
d. Generator's Information: <b>Arconic Lafayette LLC</b> 3131 E Main St Lafayette, IN 47905 Contact: Travis Catlin Phone: 765-237-1809 County: Tippecanoe			e. Billing Information: <b>O6 Environmental LLC</b> 6311 Bartmer Industrial Dr St. Louis, MO 63130 Contact: Caleb Tufts Phone: 765-654-8144 TRUX 333448		
Generator site location (if different): i. Site Location: N/A			j. Phone No: NA		
k. Waste Profile # 3144 21 26865	l. Exp. Date 8/30/2023	m. Waste Shipping Name and Description PCB Remediation Waste Soil and Sediment (Elliott Ditch Clean Up Project)	n. Containers No. Type 1 TRK	o. Total Quantity	p. Unit Wt/Vol

GENERATOR'S CERTIFICATION: I hereby certify that the above named material is not a hazardous waste as defined by 40 CFR 261 or any applicable state law, has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulations; AND, if this waste is a treatment residue of a previously restricted hazardous waste subject to the Land Disposal Restrictions. I certify and warrant that the waste has been treated in accordance with the requirements of 40 CFR 268 and is no longer a hazardous waste as defined by 40 CFR 261.

X Caleb S. Tufts, Agent for Arconic	X	X 10-13-22
q. Generator Authorized Agent Name (Print) Tyler Bundren	r. Signature 	s. Date 10/13/22

## II. TRANSPORTER (Generator completes IIa-b and Transporter completes IIc-e)

a. Transporter's Name and Address: Fox Hauling 2887 IN-25 Lafayette, IN 47905 Phone: 765-742-5002		
c. Driver Name (Print) Tom Miller	d. Signature 	e. Date 10-13-22

## III. DESTINATION (Generator complete III a-c and Destination Site completes III d-g)

a. Disposal Facility and Site Address: Walnut Creek Landfill 2701 North State Road 39 Frankfort, IN 46041 b. Phone: 765-659-8144		c. US-EPA Number - N/A 12-03	d. Discrepancy Indication Space:
--	--	------------------------------------	----------------------------------

I hereby certify that the above named material has been accepted and to the best of my knowledge the foregoing is true and accurate.

e. Name of Authorized Agent (Print) 	f. Signature 	g. Date 10-13-22	24.36
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## IV. ASBESTOS (Generator completes IV a-f and Operator complete IV g-i)

a. Operator's Name and Address: THIS SECTION IS NOT APPLICABLE (NOT ASBESTOS)	c. Responsible Agency Name and Address: THIS SECTION IS NOT APPLICABLE (NOT ASBESTOS)
b. Phone:	
e. Special Handling Instructions and Additional Information: f. <input type="checkbox"/> Friable <input type="checkbox"/> Non-Friable <input type="checkbox"/> Both 0% Friable 0% Non-Friable	
OPERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked and labeled and are in all respects in proper condition for transport by highway according to applicable international and national governmental regulations.	
g. Operator's Name and Title (Print)	h. Signature
i. Date	

\*Operator refers to the company which owns, leases, operates, controls, or supervises the facility being demolished or renovated, or the demolition or renovation operation or both



### NON-HAZARDOUS SPECIAL WASTE & ASBESTOS MANIFEST

If waste is asbestos waste, complete Sections I, II, III and IV  
 If waste is **NOT** asbestos waste, complete Sections I, II and III

65 W

#### I. GENERATOR (Generator completes Ia-s)

a. Generator's US EPA ID Number <b>NA</b>		b. Manifest Document Number <b>75</b>		c. Page 1 of <b>1</b>	
d. Generator's Information: <b>Arconic Lafayette LLC 3131 E Main St Lafayette, IN 47905 Contact: Travis Catlin Phone: 765-237-1809 County: Tippecanoe</b>			e. Billing Information: <b>O6 Environmental LLC 6311 Bartmer Industrial Dr St. Louis, MO 63130 Contact: Caleb Tufts Phone: 765-654-8144 TRUX 333448</b>		
Generator site location (if different): i. Site Location: <b>N/A</b>			j. Phone No: <b>NA</b>		
k. Waste Profile #	l. Exp. Date	m. Waste Shipping Name and Description	n. Containers No.	Type	o. Total Quantity
<b>3144 21 26865</b>	<b>8/30/2023</b>	<b>PCB Remediation Waste Soil and Sediment (Elliott Ditch Clean Up Project)</b>	<b>1</b>	<b>TRK</b>	
p. Unit Wt/Vol					
GENERATOR'S CERTIFICATION: I hereby certify that the above named material is not a hazardous waste as defined by 40 CFR 261 or any applicable state law, has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulations; AND, if this waste is a treatment residue of a previously restricted hazardous waste subject to the Land Disposal Restrictions. I certify and warrant that the waste has been treated in accordance with the requirements of 40 CFR 268 and is no longer a hazardous waste as defined by 40 CFR 261.					
X Caleb S. Tufts, Agent for Arconic		X		X <b>10-14-22</b>	
q. Generator Authorized Agent Name (Print) <b>Tyler Budren</b>		r. Signature 		s. Date <b>10/14/22</b>	

#### II. TRANSPORTER (Generator completes IIa-b and Transporter completes IIc-e)

a. Transporter's Name and Address: <b>Fox Hauling 2887 IN-25 Lafayette, IN 47905 Phone: 765-742-5002</b>		
c. Driver Name (Print) <b>Tom Miller</b>	d. Signature 	e. Date <b>10-14-22</b>

#### III. DESTINATION (Generator complete III a-c and Destination Site completes III d-g)

a. Disposal Facility and Site Address: <b>Walnut Creek Landfill 2701 North State Road 39 Frankfort, IN 46041 b. Phone: 765-659-8144</b>		c. US-EPA Number - <b>N/A</b> <b>12-03</b>	d. Discrepancy Indication Space:
I hereby certify that the above named material has been accepted and to the best of my knowledge the foregoing is true and accurate.			
e. Name of Authorized Agent (Print) <b>WJ</b>	f. Signature 	g. Date <b>10-14-22</b>	<b>7.40</b>

#### IV. ASBESTOS (Generator completes IV a-f and Operator completes IVg-i)

a. Operator's Name and Address: <b>THIS SECTION IS NOT APPLICABLE (NOT ASBESTOS)</b>		c. Responsible Agency Name and Address: <b>THIS SECTION IS NOT APPLICABLE (NOT ASBESTOS)</b>	
b. Phone:			
e. Special Handling Instructions and Additional Information:			
f. <input type="checkbox"/> Friable <input type="checkbox"/> Non-Friable <input type="checkbox"/> Both <input type="checkbox"/> 0% Friable <input type="checkbox"/> 0% Non-Friable			
OPERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked and labeled and are in all respects in proper condition for transport by highway according to applicable international and national governmental regulations.			
g. Operator's Name and Title (Print)		h. Signature	
		i. Date	
*Operator refers to the company which owns, leases, operates, controls, or supervises the facility being demolished or renovated, or the demolition or renovation operation or both			



# NON-HAZARDOUS SPECIAL WASTE & ASBESTOS MANIFEST

If waste is asbestos waste, complete Sections I, II, III and IV  
If waste is **NOT** asbestos waste, complete Sections I, II and III

## I. GENERATOR (Generator completes Ia-s)

a. Generator's US EPA ID Number NA		b. Manifest Document Number IM 76		c. Page 1 of 1		
d. Generator's Information: <b>Arconic Lafayette LLC</b> 3131 E Main St Lafayette, IN 47905 Contact: Travis Catlin Phone: 765-237-1809 County: Tippecanoe			e. Billing Information: <b>O6 Environmental LLC</b> 6311 Bartmer Industrial Dr St. Louis, MO 63130 Contact: Caleb Tufts Phone: 765-654-8144 TRUX 333448			
Generator site location (if different): i. Site Location: N/A						
j. Phone No: NA						
k. Waste Profile #	l. Exp. Date	m. Waste Shipping Name and Description	n. Containers No.	n. Containers Type	o. Total Quantity	p. Unit Wt/Vol
3144 21 26865	8/30/2023	PCB Remediation Waste Soil and Sediment (Elliott Ditch Clean Up Project)	1	TRK		

GENERATOR'S CERTIFICATION: I hereby certify that the above named material is not a hazardous waste as defined by 40 CFR 261 or any applicable state law, has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulations; AND, if this waste is a treatment residue of a previously restricted hazardous waste subject to the Land Disposal Restrictions. I certify and warrant that the waste has been treated in accordance with the requirements of 40 CFR 268 and is no longer a hazardous waste as defined by 40 CFR 261.

X	Caleb S. Tufts, Agent for Arconic	X		X	10/18/22
q. Generator Authorized Agent Name (Print)	Tyler Burdren	r. Signature		s. Date	10-18-22

## II. TRANSPORTER (Generator completes IIa-b and Transporter completes IIc-e)

a. Transporter's Name and Address: Fox Hauling 2887 IN-25 Lafayette, IN 47905 Phone: 765-742-5002		
c. Driver Name (Print)	d. Signature	e. Date
Amity Miller		10-18-22

## III. DESTINATION (Generator complete III a-c and Destination Site completes IIId-g)

a. Disposal Facility and Site Address: Walnut Creek Landfill 2701 North State Road 39 Frankfort, IN 46041 b. Phone: 765-659-8144		c. US-EPA Number - N/A 12-03	d. Discrepancy Indication Space:
--	--	------------------------------------	----------------------------------

I hereby certify that the above named material has been accepted and to the best of my knowledge the foregoing is true and accurate.

e. Name of Authorized Agent (Print)	f. Signature	g. Date
		10-18-22

## IV. ASBESTOS (Generator completes IV a-f and Operator complete IVg-i)

a. Operator's Name and Address: <b>THIS SECTION IS NOT APPLICABLE (NOT ASBESTOS)</b>		c. Responsible Agency Name and Address: <b>THIS SECTION IS NOT APPLICABLE (NOT ASBESTOS)</b>	
e. Special Handling Instructions and Additional Information: f. <input type="checkbox"/> Friable <input type="checkbox"/> Non-Friable Both 0% Friable 0% Non-Friable			
OPERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked and labeled and are in all respects in proper condition for transport by highway according to applicable international and national governmental regulations.			
g. Operator's Name and Title (Print)	h. Signature	i. Date	
*Operator refers to the company which owns, leases, operates, controls, or supervises the facility being demolished or renovated, or the demolition or renovation operation or both			

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**APPENDIX III**  
**BACKFILL SOIL AND TOPSOIL DOCUMENTATION**

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October 10, 2022

To Whom It May Concern:  
In Reference to: Product #62 Fill Dirt

Purdy Materials (Aggregates) is an INDOT CAPP certified aggregate producer. Purdy Materials Source #2109 is listed as a category GS subcategory B sand and gravel plant. We are located at 1505 E 510 S Lafayette, IN 47909.

Purdy Fill Dirt is not an INDOT product. However, this letter certifies the above source can provide with consistency, the named product (Fill Dirt) without foreign objects, debris, or no known hazardous materials. Purdy Fill Dirt is most similar to borrow material.

Purdy Fill Dirt may contain a limited amount of clay.

If you have further questions, please feel free to call telephone number 765-474-9611 (Scale House), or either of the numbers listed below.

Sincerely,  
Deb Cates  
Purdy Materials  
Quality Control  
Lab 765-878-4366  
Mobile 765-337-5535

October 10, 2022

To Whom It May Concern:  
In Reference to: Product #963 Top Soil

Purdy Materials (Aggregates) is an INDOT CAPP certified aggregate producer. Purdy Materials Source #2109 is listed as a category GS subcategory B sand and gravel plant. We are located at 1505 E 510 S Lafayette, IN 47909.

Purdy Top Soil is not an INDOT product. However, this letter certifies the above source can provide with consistency, the named product (Top Soil) without foreign objects, debris, or no known hazardous materials.

If you have further questions, please feel free to call telephone number 765-474-9611 (Scale House), or either of the numbers listed below.

Sincerely,  
Deb Cates  
Purdy Materials  
Quality Control  
Lab 765-878-4366  
Mobile 765-337-5535



TO:

Mr. Keegan Andrews

O6 Environmental, LLC

6311 Bartmer Industrial Drive

St. Louis, MO 63130

RE:

Project: Arconic Elliot Ditch Reach 3 – PO# 16551

Patriot Project No.: 22-1561-06C

Date: October 13, 2022

Report Number: 001

Submitted herewith are results of construction materials testing and observation services provided for the referenced project. Those services included:

Date	Service	Location/Description/Remarks
	Loss of Ignition	Backfill (SS422) & Topsoil (SS423) Samples
	Particle Size Distribution Analysis	Backfill (SS422) & Topsoil (SS423) Samples
	Atterberg Limits	Topsoil (SS423) Sample
	As Received Moisture	Backfill (SS422) Sample

Please refer to the attached report sheets for additional details. We appreciate the opportunity to be of service to you on this project. If you have any questions, please call us.

Respectfully submitted,

**Patriot Engineering and Environmental, Inc.**



Jeffrey M. McCloud  
Senior Project Manager



Adam Kain  
Branch Manager

Copies: client [keegan.andrews@o6env.com](mailto:keegan.andrews@o6env.com)  
[gwelch@cecinc.com](mailto:gwelch@cecinc.com)



**PATRIOT ENGINEERING  
and ENVIRONMENTAL, INC.**  
717 Farabee Court, Suite C  
Lafayette, IN 47905  
(765) 447-4477 FAX: (765) 447-4045

**Laboratory Determination of Water Content  
ASTM D 2216**

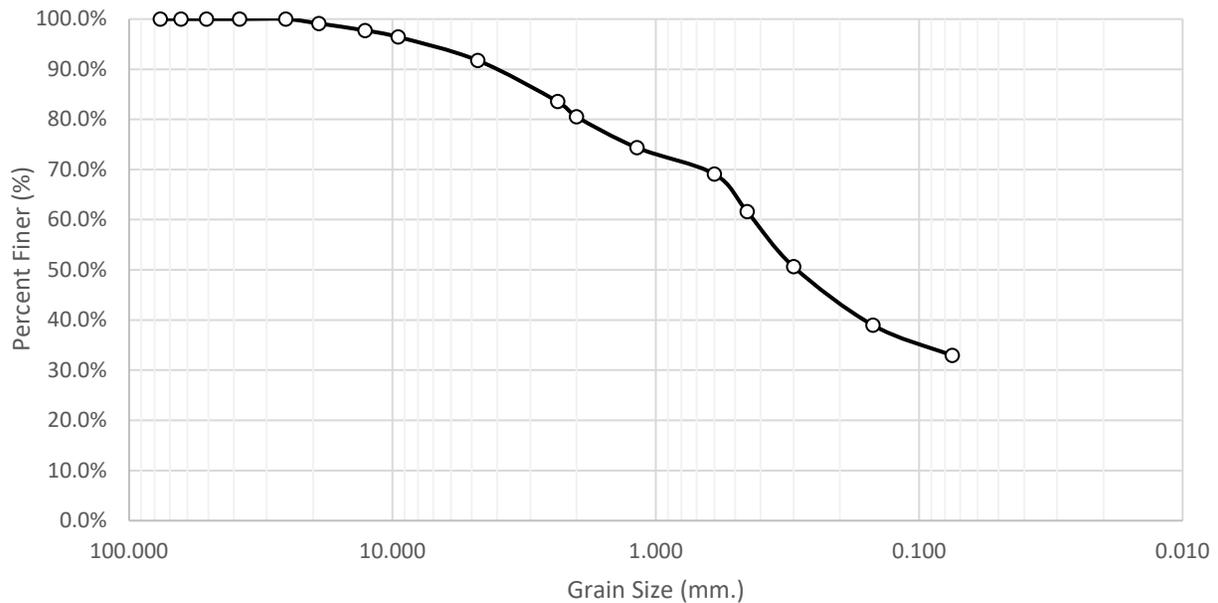
Original  
 Amended

Project Name: Arconic Elliot Ditch Reach 3 - PO# 16551 Client: 06 Environmental,LLV  
 Project Number: 22-1561-06C  
 Date Received: 10/7/2022 Sampled By: Client  
 Date Tested: 10/7/2022 Tested By: Bridget Buchanan

Sample ID	Location	Tare ID	Tare Weight (g)	Wet Wt. + Tare (g)	Dry Wt. + Tare (g)	Wt. of Water (g)	Wt. of Dry Sample (g)	Moisture Content (%)
SS22-0422		3	113.90	291.20	277.30	13.90	163.40	8.5

Remarks: \_\_\_\_\_  
 \_\_\_\_\_

## Particle Size Distribution Report



% + 3"	Percent (%) Gravel		Percent (%) Sand			Percent (%) Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	0.9	7.4	11.2	18.9	28.7	32.9	

Sieve Size	Percent (%) Finer	Specification Requirements
3"	100.0	
2 1/2"	100.0	
2"	100.0	
1 1/2"	100.0	
1"	100.0	
3/4"	99.1	
1/2"	97.7	
3/8"	96.4	
#4	91.8	
#8	83.5	
#10	80.5	
#16	74.4	
#30	69.1	
#40	61.6	
#50	50.6	
#100	39.0	
#200	32.9	

Material Description			
Silty Clayey Sand trace gravel (SS422)-			
Atterberg Limits			
PL =	NP	LL =	NP
		PI =	NV
Coefficients			
D90	4.2366	D85	2.7822
D60	0.4283	D50	0.2921
D30	0.0684	D15	0.0342
D10	0.0228	Cu	18.7925
Cc	0.4789		
Classification			
USCS		SC	
AASHTO			

**Sample Number:** SS22-045    **Sample Source:** Patriot Engineering Backyard    **Date:** 10/11/2022



**Project:** Arconic Elliot Ditch Reach 3-#PO 16  
**Number:** 22-1561-06C  
**Client:** 06 Environmental, LLC

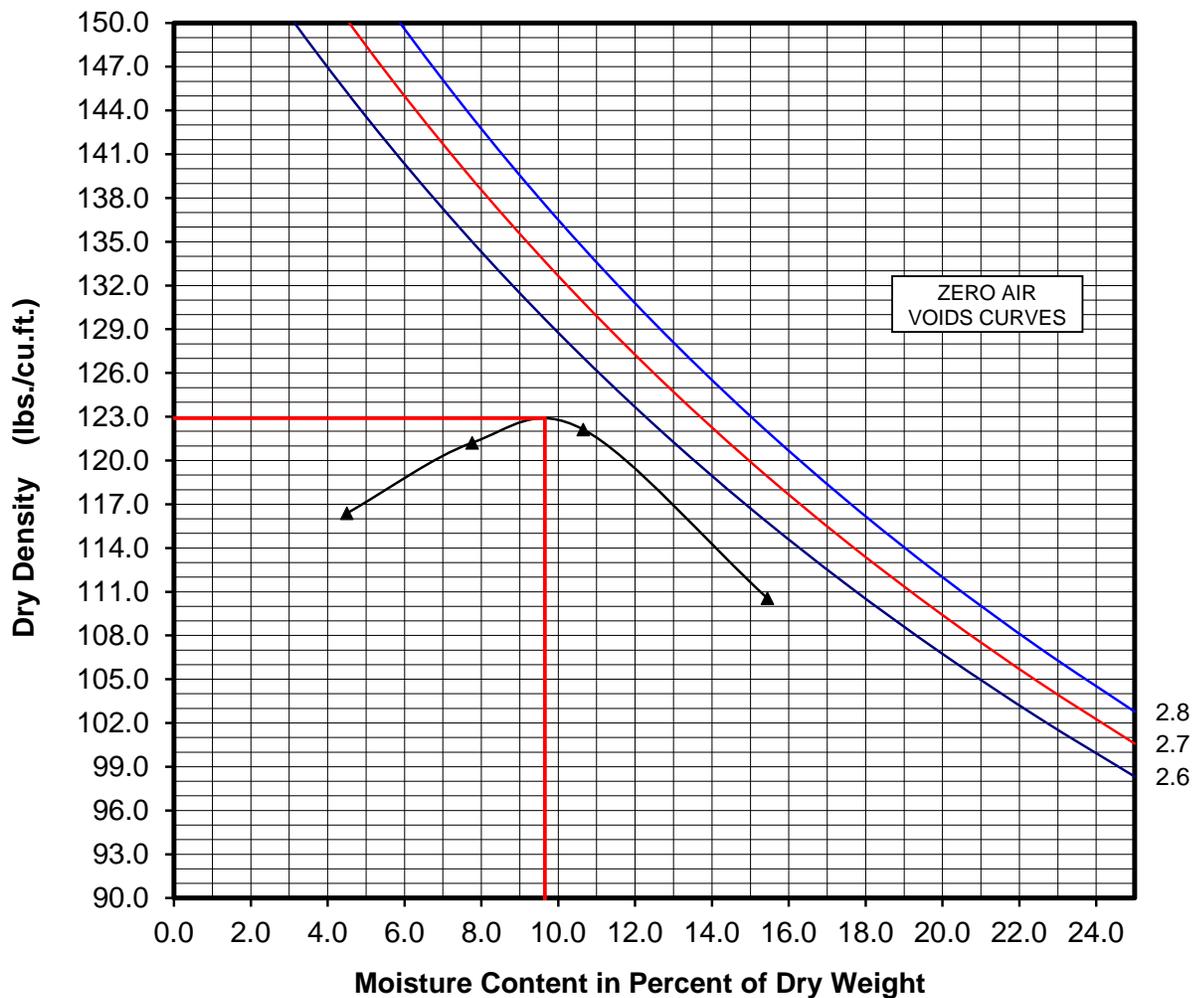


**Moisture-Density (Proctor)**

ASTM D698 - 12e2, AASHTO T99 (17) Standard  
ASTM D1557 - 12e1, AASHTO T180 (17) Modified

Original  Amended

Project Name: <u>Arconic Elliot Ditch Reach 3 - PO #16551</u>		Client: <u>06 Environmental, LLC</u>
Project Number: <u>22-1561-06C</u>	Sampled By: <u>Client</u>	
Date Received: <u>10/7/2022</u>	Tested By: <u>Bridget Buchanan</u>	
Date Tested: <u>10/11/2022</u>	Sample Source: <u>Purdy Materials</u>	
Sample Number: <u>SS22-0422</u>	Proctor Type: <u>Standard</u>	



Maximum Dry Density: <u>122.9</u> pcf	Optimum Moisture Content: <u>9.7%</u>
Upsize Correction MDD: <u>#DIV/0!</u> pcf	
Sample Description: <u>Silty Clayey Sand trace gravel</u>	
Test Method: <u>B</u>	



**PATRIOT ENGINEERING  
and ENVIRONMENTAL, INC.**

717 Farabee Court, Suite C  
Lafayette, IN 47905  
(765) 447-4477 FAX: (765) 447-4045

**Atterberg Limits**  
ASTM D4318

Original  
 Amended

Project Name: Arconic Elliot Ditch Reach 3 Client: 06 Environmental,LLC  
PO #16551

Project Number: 22-1561-06C Sampled By: Client

Date Received: 10/7/2022 Tested By: Bridget Buchanan

Date Tested: 10/11/2022 Source: Purdy Materials

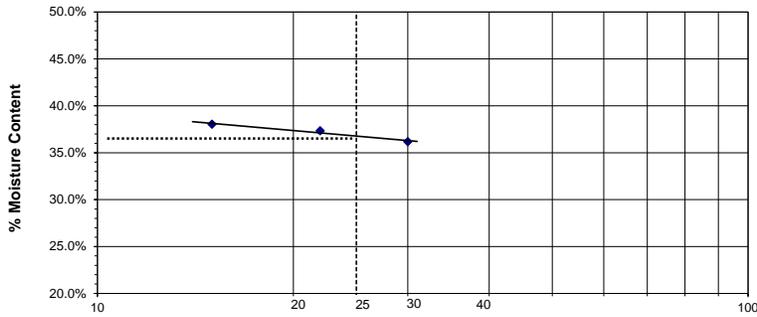
Sample Number: SS22-0423

Delivered MC		Plastic Limit		Liquid Limit		
Tare #	1	36	37	78	16	34
Wet + tare	297.5	22.80	22.20	26.60	24.10	23.30
Dry + tare	275.4	21.10	20.60	23.20	21.30	20.60
tare wgt	88.2	13.80	13.60	13.80	13.80	13.50
water wgt	22.1	1.70	1.60	3.40	2.80	2.70
dry wgt	187.2	7.30	7.00	9.40	7.50	7.10
MC	11.8%	23.29%	22.86%	36.17%	37.33%	38.03%
		Average	23.07%	Blows	30	22

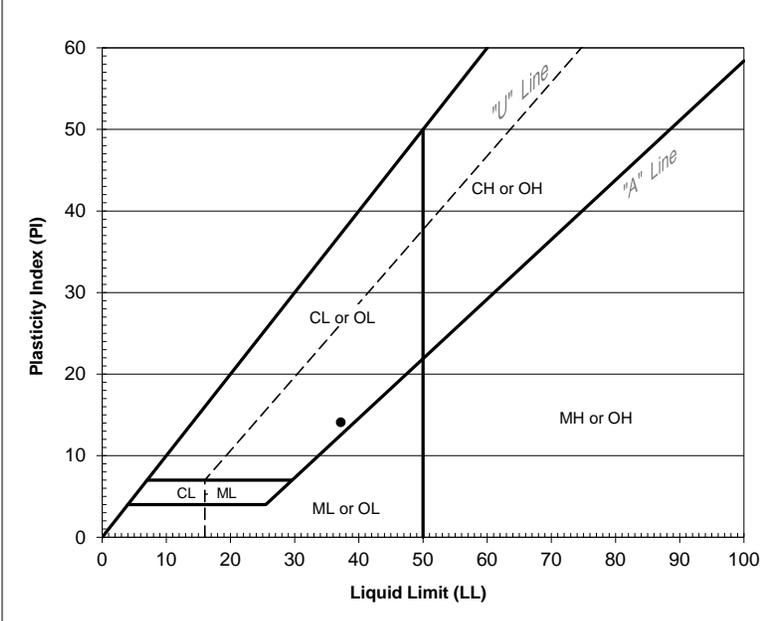
Liquid Limit 37 Plastic Limit 23 Plastic Index 14

USCS Classification: \_\_\_\_\_

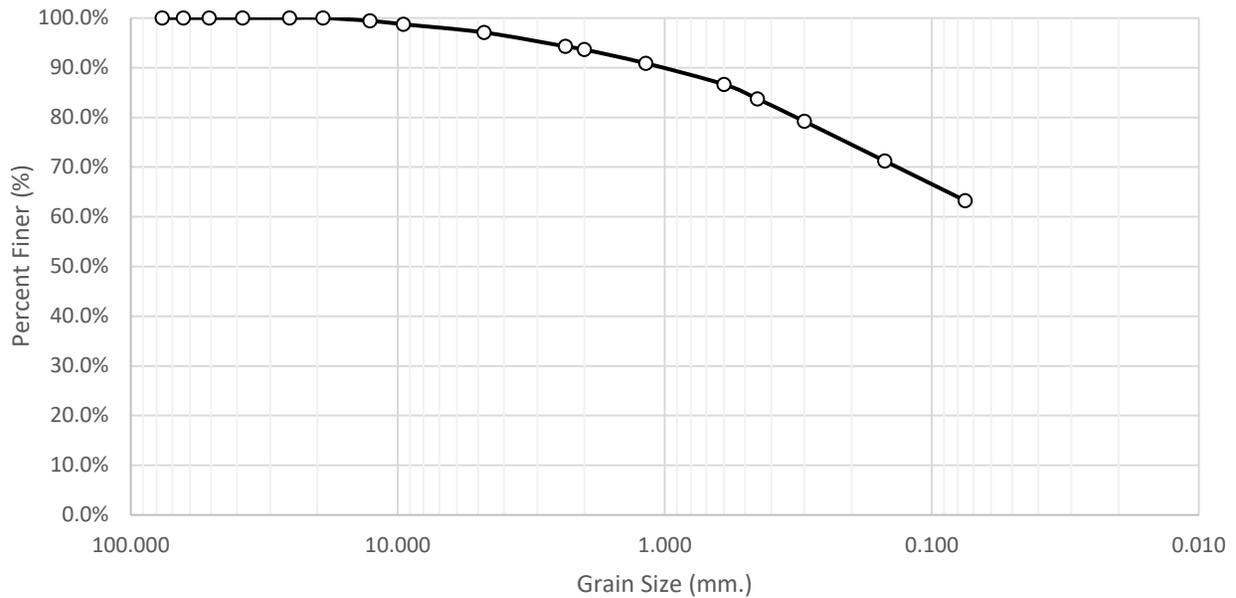
**Liquid Limit**



**Atterberg Limits Plasticity Chart**



### Particle Size Distribution Report



% + 3"	Percent (%) Gravel		Percent (%) Sand			Percent (%) Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	0.0	2.9	3.4	9.9	20.5	63.3	

Sieve Size	Percent (%) Finer	Specification Requirements
3"	100.0	
2 1/2"	100.0	
2"	100.0	
1 1/2"	100.0	
1"	100.0	
3/4"	100.0	
1/2"	99.4	
3/8"	98.7	
#4	97.1	
#8	94.3	
#10	93.7	
#16	90.9	
#30	86.7	
#40	83.7	
#50	79.2	
#100	71.2	
#200	63.3	

<u>Material Description</u>			
Brown, SandyLean Clay, (SS423)			
<u>Atterberg Limits</u>			
PL =	23	LL =	37.00
		PI =	14
<u>Coefficients</u>			
D90	1.0571	D85	0.5147
D60	0.0711	D50	0.0593
D30	0.0356	D15	0.0178
D10	0.0119	Cu	6.0000
Cc	1.5000		
<u>Classification</u>			
USCS		CL	
AASHTO			

**Sample Number:** SS22-046    **Sample Source:** Purdy Materials    **Date:** 10/11/2022



<b>Project:</b> Arconic Elliot Ditch Reach 3 PO#16551
<b>Number:</b> 22-1561-06C
<b>Client:</b> 06 Environmental, LLC



## LOSS ON IGNITION (LOI)

ASTM D2974

Test Method "A"

Original       Amended

Client:	06 Environmental, LLC		
Project Name:	Arconic Elliott Ditch	Sampled By:	A. Kain
Project Number:	22-1561-06C	Tested By:	T. Cruea
Date Received:	10/10/2022	Checked By:	J. Rogers
Date @ 110°C:	10/10/2022	Date @ 455°C:	10/11/2022

Boring No.	Sample No.	Tare No.	Tare Wt. (g)	Dry+Tare Wt. (g)	Dry Weight (g)	Ash+Tare Wt. (g)	Ash Weight (g)	Organic Content (%)
	422	9	34.45	79.82	45.37	79.45	45.00	0.8
	423	10	38.95	81.77	42.82	80.61	41.66	2.7









TO:

Mr. Keegan Andrews

O6 Environmental, LLC

6311 Bartmer Industrial Drive

St. Louis, MO 63130

RE:

Project: Arconic Elliot Ditch Reach 3 – PO# 16551

Patriot Project No.: 22-1561-06C

Date: October 26, 2022

Report Number: 003

Submitted herewith are results of construction materials testing and observation services provided for the referenced project performed on October 17, 2022. Those services included:

Date	Service	Location/Description/Remarks
10/17/22	Field Density Testing	Various locations. Results exceed 90 percent ASTM D698 Standard Proctor dry density.

Please refer to the attached report sheets for additional details. We appreciate the opportunity to be of service to you on this project. If you have any questions, please call us.

Respectfully submitted,

**Patriot Engineering and Environmental, Inc.**



Jeffrey M. McCloud  
Senior Project Manager



Adam Kain  
Branch Manager

Copies:          client          [keegan.andrews@o6env.com](mailto:keegan.andrews@o6env.com)  
[gwelch@cecinc.com](mailto:gwelch@cecinc.com)



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**APPENDIX IV  
DAILY REPORTS**

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**PROJECT INFORMATION**

<b>PROJECT NAME:</b> Elliott Ditch Reach 3 Isolated Soil Remediation	
<b>LOCATION:</b> Reach 3	<b>CEC PROJECT:</b> 315-052
<b>PLANS AND SPECIFICATIONS BY:</b> CEC, Inc.	<b>WEATHER:</b> Clear, 89F

**PERSONNEL**

<b>CEC FIELD REPRESENTATIVE:</b> J. O'Brien	<b>CEC PROJECT MANAGER:</b> Matt Bruck
<b>CLIENT:</b> Arconic Lafayette, LLC	<b>CLIENT CONTACT:</b> Robert Prezbindowski
<b>GENERAL CONTRACTOR:</b> O6 Environmental, LLC	<b>SITE SUPERINTENDENT:</b> Keegan Andrews

**THIS REPORT INCLUDES:**

<input type="checkbox"/> TEST RESULTS	<input checked="" type="checkbox"/> PHOTOGRAPHS	<input type="checkbox"/> SKETCH	<input type="checkbox"/> ATTACHMENTS
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**EQUIPMENT ONSITE:**

<u>Skid-steer:</u> CAT 289D
<u>Miscellaneous Equipment:</u> <ul style="list-style-type: none"><li>• Track mats for access road</li></ul>

**MATERIAL DELIVERED ONSITE:**

<ul style="list-style-type: none"><li>• Skid-steer at attachments</li><li>• Track mats for access road</li></ul>
--

**OBSERVATIONS:**

<u>Site personnel includes:</u> <ul style="list-style-type: none"><li>• CEC<ul style="list-style-type: none"><li>○ Jenny O'Brien</li></ul></li><li>• O6ENV<ul style="list-style-type: none"><li>○ Keegan Andrews</li><li>○ Elvis Armstrong</li><li>○ Tyler Bundren</li></ul></li><li>• TNT Tree Clearing<ul style="list-style-type: none"><li>○ Todd Tucker</li></ul></li><li>• GRPS (Private Utility Locator)</li></ul>
--

**DAILY FIELD OBSERVATION REPORT  
CIVIL & ENVIRONMENTAL CONSULTANTS, INC.**

PAGE 2 OF 4

DATE: 9/20/2022

REPORT NO: 001

Onsite Activities:

- O6ENV and CEC personnel arrive at Crestview Community Church parking lot at 0700.
  - Crestview Community Church agreed to allow parking and truck staging in the back area of their parking lot.
- Morning health and safety meeting held prior to commencing the day's project activities. Health & Safety Plan was reviewed and discussed. All personnel signed the HASP.
- CEC and O6ENV review project plans and work/schedule sequencing.
- O6ENV accepted delivery of the access road track mats and skid steer.
- TNT Tree Services arrived onsite and walked the site with O6ENV and CEC. Trees were marked for removal.
- CEC and O6ENV discussed the trees that were to be removed with the property owners (Subject Properties 1 thru 6). See the meeting and discussions for more information.
- Private utility subcontractor, GRPS, arrived onsite to complete utility locating.
- O6ENV laid down the track mats for the access road.
- TNT mobilized tree removal equipment.
- O6ENV began the wooden fence removal of Subject Property 4. O6ENV constructed a chain link fence inside the fence to secure the backyard prior to removing the fence posts.
- Brush-hogging completed by TNT on Subject Properties 1 and 2.
- All personnel offsite at 1700.

Excavation: Not completed.

Transportation of non-TSCA regulated material (PCB <50 ppm) for offsite disposal: Not Completed

- Off-site Disposal:

<b>Non-TSCA Regulated</b>	<b>Daily</b>	<b>To Date</b>
<b>Material Transported (tons)</b>	0	0
<b>Truckloads</b>	0	0

Backfill: Not Completed

Sampling: Not Completed

Laboratory Reports: None

**CONTRACT LINE ITEMS PERFORMED:**

- B1-4 Mobilization
- B1-5 Site Preparation
  - B1-5.3 – Utility Locating (Private)
  - B1-5.3 – Clearing and Grubbing
  - B1-5.7 – Installation of temporary access road
  - B1-5.8 – Site Security Measures
  - B1-5.11 – Removal of Existing Wooden Fencing

**COMMUNICATION:**

**DAILY FIELD OBSERVATION REPORT  
CIVIL & ENVIRONMENTAL CONSULTANTS, INC.**

PAGE 3 OF 4

DATE: 9/20/2022

REPORT NO: 001

**MEETINGS / DISCUSSIONS:**

- Subject Property 5: CEC and O6ENV discussed the trees that were to be removed with the property owner.
- Subject Property 3: CEC and O6ENV discussed the access road location, the tree that would potentially be removed, and the project sequencing with the property owner. An additional meeting will be required once the excavation area is staked.
- Subject Property 2: The property owners, CEC, and O6ENV discussed the trees that were to be removed. An additional discussion will be required once the excavation area is staked.
- Subject Property 6: The property owner, CEC, and O6ENV discussed the trees that were to be removed and the removal of items in the shed. An additional discussion will be required once the excavation area is staked.

**UNEXPECTED, UNUSUAL, OR NONCONFORMING OBSERVATIONS:** None

NOTICE: Our firm's professionals are represented on site solely to observe operations of the contractor identified, to form opinions about the adequacy of those operations, and to report those opinions to our client. The presence and activities of our field representative do not relieve the contractor from its obligation to meet contractual requirements. The contractor retains sole responsibility for site safety and the methods, operations, and sequences of construction.

**PHOTOGRAPHS**



Photograph 1 – Temporary fencing installed at Subject Property 4.

**DAILY FIELD OBSERVATION REPORT  
CIVIL & ENVIRONMENTAL CONSULTANTS, INC.**

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Photograph 2 – Brush hogging Subject Property 1.



**DAILY FIELD OBSERVATION REPORT**  
**CIVIL & ENVIRONMENTAL CONSULTANTS, INC.**  
2704 Cherokee Farm Way, Suite 101  
Knoxville, Tennessee 37920  
P: (865) 977-9997 F: (865) 977-9919

PAGE 1 OF 4
DATE: 9/21/2022
REPORT NO: 002

**PROJECT INFORMATION**

<b>PROJECT NAME:</b> Elliott Ditch Reach 3 Isolated Soil Remediation	
<b>LOCATION:</b> Reach 3	<b>CEC PROJECT:</b> 315-052
<b>PLANS AND SPECIFICATIONS BY:</b> CEC, Inc.	<b>WEATHER:</b> Clear, 89F

**PERSONNEL**

<b>CEC FIELD REPRESENTATIVE:</b> J. O'Brien	<b>CEC PROJECT MANAGER:</b> Matt Bruck
<b>CLIENT:</b> Arconic Lafayette, LLC	<b>CLIENT CONTACT:</b> Robert Prezbindowski
<b>GENERAL CONTRACTOR:</b> O6 Environmental, LLC	<b>SITE SUPERINTENDENT:</b> Keegan Andrews

**THIS REPORT INCLUDES:**

<input type="checkbox"/> TEST RESULTS	<input checked="" type="checkbox"/> PHOTOGRAPHS	<input type="checkbox"/> SKETCH	<input type="checkbox"/> ATTACHMENTS
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**EQUIPMENT ONSITE:**

<u>Skid-steer:</u> CAT 289D
<u>Miscellaneous Equipment:</u> <ul style="list-style-type: none"><li>• Track Mats for access road.</li></ul>

**MATERIAL DELIVERED ONSITE:**

<ul style="list-style-type: none"><li>• Additional track mats</li></ul>
---

**OBSERVATIONS:**

<u>Site personnel includes:</u> <ul style="list-style-type: none"><li>• CEC<ul style="list-style-type: none"><li>○ Jenny O'Brien</li></ul></li><li>• O6ENV<ul style="list-style-type: none"><li>○ Keegan Andrews</li><li>○ Elvis Armstrong</li><li>○ Tyler Bundren</li></ul></li><li>• TNT Tree Clearing (TNT)<ul style="list-style-type: none"><li>○ Todd Tucker</li></ul></li></ul>
---

**DAILY FIELD OBSERVATION REPORT  
CIVIL & ENVIRONMENTAL CONSULTANTS, INC.**

PAGE 2 OF 4
DATE: 9/21/2022
REPORT NO: 002

Onsite Activities:

- All personnel arrive at Crestview Community Church parking lot at 0700.
- Morning health and safety meeting held prior to commencing the day's project activities. Bad weather protocol was discussed.
- TNT arrived onsite around 0830.
- O6ENV continued wooden fence removal on Subject Property 4.
- TNT continued Brush-hogging activities on Subject Properties 3 thru 6.
- CEC and O6ENV discussed the trees that were to be removed with the property owners of Subject Property 5 and Subject Property 6. See the meeting and discussions for more information.
- O6ENV demolished the shed on Subject Property 5.
- O6ENV removed the metal and wooden fence on Subject Property 6 and constructed a chain link fence to secure the backyard. The shed was relocated to another portion of the property.
- TNT began tree clearing using an excavator.
- CEC discussed the moving of the shed located on Subject Property 4, and the possibility of replacing the shed with the property owners.
- All personnel offsite at 1700.

Excavation: Not completed.

Transportation of non-TSCA regulated material (PCB <50 ppm) for offsite disposal: Not Completed

- Off-site Disposal:

<b>Non-TSCA Regulated</b>	<b>Daily</b>	<b>To Date</b>
<b>Material Transported (tons)</b>	0	0
<b>Truckloads</b>	0	0

Backfill: Not Completed

Sampling: Not Completed

Laboratory Reports: None

**CONTRACT LINE ITEMS PERFORMED:**

- B1-5 Site Preparation
  - B1-5.3 – Clearing and Grubbing
  - B1-5.7 – Installation of temporary access road
  - B1-5.8 – Site Security Measures
  - B1-5.9 – Removal of Existing Chain Link Fencing
  - B1-5.10 – Relocation of Shed
  - B1-5.12 – Demolition and Disposal of Shed
  - B1-5.11 – Removal of Existing Wooden Fencing

**COMMUNICATION:**

**MEETINGS / DISCUSSIONS:**

- Subject Property 5: Property owner, CEC and O6ENV discussed the trees and brush that were to be removed.

**DAILY FIELD OBSERVATION REPORT  
CIVIL & ENVIRONMENTAL CONSULTANTS, INC.**

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DATE: 9/21/2022

REPORT NO: 002

- Subject Property 6: Property owners, CEC, and O6ENV discussed the trees that were to be removed and the removal of the fence.
- Subject Property 4: Property owners and CEC discussed the potential damage to the shed upon relocating. CEC explained that the shed will be replaced if damaged. The property owner stated that the shed could be demolished, and they will find a replacement option.

**UNEXPECTED, UNUSUAL, OR NONCONFORMING OBSERVATIONS:** None

NOTICE: Our firm's professionals are represented on site solely to observe operations of the contractor identified, to form opinions about the adequacy of those operations, and to report those opinions to our client. The presence and activities of our field representative do not relieve the contractor from its obligation to meet contractual requirements. The contractor retains sole responsibility for site safety and the methods, operations, and sequences of construction.

**PHOTOGRAPHS**



Photograph 1 - Brush hogging on Subject Property 3

**DAILY FIELD OBSERVATION REPORT  
CIVIL & ENVIRONMENTAL CONSULTANTS, INC.**

PAGE 4 OF 4
DATE: 9/21/2022
REPORT NO: 002



Photograph 2 – TNT removing trees via excavator.



Photograph 3 – Demolition of shed on Subject Property 5



**PROJECT INFORMATION**

<b>PROJECT NAME:</b> Elliott Ditch Reach 3 Isolated Soil Remediation	
<b>LOCATION:</b> Reach 3	<b>CEC PROJECT:</b> 315-052
<b>PLANS AND SPECIFICATIONS BY:</b> CEC, Inc.	<b>WEATHER:</b> Clear, 65F

**PERSONNEL**

<b>CEC FIELD REPRESENTATIVE:</b> J. O'Brien	<b>CEC PROJECT MANAGER:</b> Matt Bruck
<b>CLIENT:</b> Arconic Lafayette, LLC	<b>CLIENT CONTACT:</b> Robert Prezbindowski
<b>GENERAL CONTRACTOR:</b> O6 Environmental, LLC	<b>SITE SUPERINTENDENT:</b> Keegan Andrews

**THIS REPORT INCLUDES:**

<input type="checkbox"/> TEST RESULTS	<input checked="" type="checkbox"/> PHOTOGRAPHS	<input type="checkbox"/> SKETCH	<input type="checkbox"/> ATTACHMENTS
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**EQUIPMENT ONSITE:**

<u>Skid-steer:</u> CAT 289D
<u>Miscellaneous Equipment:</u> <ul style="list-style-type: none"><li>• Track Mats for access road.</li></ul>

**MATERIAL DELIVERED ONSITE:**

<ul style="list-style-type: none"><li>• None</li></ul>
--

**OBSERVATIONS:**

<u>Site personnel includes:</u> <ul style="list-style-type: none"><li>• CEC<ul style="list-style-type: none"><li>○ Jenny O'Brien</li></ul></li><li>• O6ENV<ul style="list-style-type: none"><li>○ Keegan Andrews</li><li>○ Elvis Armstrong</li><li>○ Tyler Bundren</li></ul></li><li>• TNT Tree Clearing<ul style="list-style-type: none"><li>○ Todd Tucker and his employees</li></ul></li><li>• Chastain &amp; Associates</li><li>• R.W. Gross</li></ul>
--

**DAILY FIELD OBSERVATION REPORT  
CIVIL & ENVIRONMENTAL CONSULTANTS, INC.**

PAGE 2 OF 4
DATE: 9/22/2022
REPORT NO: 003

**Onsite Activities:**

- All personnel arrive at Crestview Community Church parking lot at 0730.
- Morning health and safety meeting held prior to commencing the day's project activities. Worker safety around tree clearing was discussed.
- TNT Tree Clearing arrived onsite around 0900.
- The shed on Subject Property 4 was demolished.
- O6ENV installed the project signs and posted warning signs for trucks entering roadway.
- TNT began tree clearing and mulching, utilizing a lift, stump grinder, mulcher and truck, and excavator.
- TNT loaded out the wood debris from the sheds that were demolished and trees for disposal.
- Surveying subcontractor Chastain Surveying (Chastain) arrived onsite around 1300 to begin survey. Per O6ENV, R.W. Gross will perform project survey needs moving forward.
- CEC discussed the trees that were to be removed with the property owner of Subject Property 2. See the meeting and discussions for more information.
- Surveying subcontractor R.W. Gross arrived onsite around 1600 to complete an informal site walk prior to performing survey work on September 23, 2022.
- All personnel offsite around 1700.

Excavation: Not completed.

Transportation of non-TSCA regulated material (PCB <50 ppm) for offsite disposal: Not Completed

- Off-site Disposal:

<b>Non-TSCA Regulated</b>	<b>Daily</b>	<b>To Date</b>
<b>Material Transported (tons)</b>	0	0
<b>Truckloads</b>	0	0

Backfill: Not Completed

Sampling: Not Completed

Laboratory Reports: None

**CONTRACT LINE ITEMS PERFORMED:**

- B1-5 Site Preparation
  - B1-5.1 – Construct and Install Project Signage
  - B1-5.3 – Clearing and Grubbing
  - B1-5.11 – Removal of Existing Wooden Fence at Subject Property 4.
  - B1-5.12 – Demolition and Disposal of Shed at Subject Property 5.
- B1-9 Surveying
  - B1-9.1 – Establish Survey Control
  - B1-9.2 – Pre-Project Survey

**COMMUNICATION:**

**MEETINGS / DISCUSSIONS:**

# DAILY FIELD OBSERVATION REPORT CIVIL & ENVIRONMENTAL CONSULTANTS, INC.

PAGE 3 OF 4

DATE: 9/22/2022

REPORT NO: 003

- Subject Property 2: The property owner was informed that the three pine trees on the property were in the excavation and required removed.

**UNEXPECTED, UNUSUAL, OR NONCONFORMING OBSERVATIONS:** None

NOTICE: Our firm's professionals are represented on site solely to observe operations of the contractor identified, to form opinions about the adequacy of those operations, and to report those opinions to our client. The presence and activities of our field representative do not relieve the contractor from its obligation to meet contractual requirements. The contractor retains sole responsibility for site safety and the methods, operations, and sequences of construction.

## PHOTOGRAPHS



Photograph 1 – Project signage

**DAILY FIELD OBSERVATION REPORT  
CIVIL & ENVIRONMENTAL CONSULTANTS, INC.**

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DATE: 9/22/2022
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Photograph 2 – TNT performing stump grinding of large stumps



**DAILY FIELD OBSERVATION REPORT**  
**CIVIL & ENVIRONMENTAL CONSULTANTS, INC.**  
 2704 Cherokee Farm Way, Suite 101  
 Knoxville, Tennessee 37920  
 P: (865) 977-9997 F: (865) 977-9919

PAGE 1 OF 4
DATE: 9/23/2022
REPORT NO: 004

**PROJECT INFORMATION**

<b>PROJECT NAME:</b> Elliott Ditch Reach 3 Isolated Soil Remediation	
<b>LOCATION:</b> Reach 3	<b>CEC PROJECT:</b> 315-052
<b>PLANS AND SPECIFICATIONS BY:</b> CEC, Inc.	<b>WEATHER:</b> Cloudy, 65F

**PERSONNEL**

<b>CEC FIELD REPRESENTATIVE:</b> J. O'Brien	<b>CEC PROJECT MANAGER:</b> Matt Bruck
<b>CLIENT:</b> Arconic Lafayette, LLC	<b>CLIENT CONTACT:</b> Robert Prezbindowski
<b>GENERAL CONTRACTOR:</b> O6 Environmental, LLC	<b>SITE SUPERINTENDENT:</b> Keegan Andrews

**THIS REPORT INCLUDES:**

TEST RESULTS     
  PHOTOGRAPHS     
  SKETCH     
  ATTACHMENTS

**EQUIPMENT ONSITE:**

Skid-steer: CAT 289D

Miscellaneous Equipment:

- Track Mats for access road.

**MATERIAL DELIVERED ONSITE:**

- None

**OBSERVATIONS:**

Site personnel includes:

- CEC
  - Jenny O'Brien
- O6ENV
  - Elvis Armstrong
  - Tyler Bundren
- TNT Tree Clearing
  - Todd Tucker and his employees
- R.W. Gross

**DAILY FIELD OBSERVATION REPORT  
CIVIL & ENVIRONMENTAL CONSULTANTS, INC.**

PAGE 2 OF 4
DATE: 9/23/2022
REPORT NO: 004

**Onsite Activities:**

- All O6ENV and CEC personnel arrive at Crestview Community Church parking lot at 0730.
- Morning health and safety meeting held prior to commencing the day's project activities. Worker safety around the tree clearing equipment was discussed.
- Subcontractor R.W. Gross (surveying) arrived onsite around 0800 to set control points, delineate remediation boundary, and develop pre-project survey.
- TNT Tree Clearing arrived onsite around 0800. TNT continued tree clearing and mulching, utilizing a lift, stump grinder, mulcher and truck, and excavator.
- TNT loaded out the wood debris from the trees for offsite disposal.
- All personnel offsite at 1700.

Excavation: Not completed.

Transportation of non-TSCA regulated material (PCB <50 ppm) for offsite disposal: Not Completed

- Off-site Disposal:

Non-TSCA Regulated	Daily	To Date
Material Transported (tons)	0	0
Truckloads	0	0

Backfill: Not Completed

Sampling: Not Completed

Laboratory Reports: None

**CONTRACT LINE ITEMS PERFORMED:**

- B1-5 Site Preparation
  - B1-5.3 – Clearing and Grubbing
- B1-9 Surveying
  - B1-9.1 – Establishment of Survey Control
  - B1-9.2 – Pre-Project Survey

**COMMUNICATION:**

**MEETINGS / DISCUSSIONS:**

- None of note.

**UNEXPECTED, UNUSUAL, OR NONCONFORMING OBSERVATIONS:** None

NOTICE: Our firm's professionals are represented on site solely to observe operations of the contractor identified, to form opinions about the adequacy of those operations, and to report those opinions to our client. The presence and activities of our field representative do not relieve the contractor from its obligation to meet contractual requirements. The contractor retains sole responsibility for site safety and the methods, operations, and sequences of construction.

**DAILY FIELD OBSERVATION REPORT  
CIVIL & ENVIRONMENTAL CONSULTANTS, INC.**

PAGE 3 OF 4
DATE: 9/23/2022
REPORT NO: 004

**PHOTOGRAPHS**



Photograph 1 – TNT tree removal

**DAILY FIELD OBSERVATION REPORT  
CIVIL & ENVIRONMENTAL CONSULTANTS, INC.**

PAGE 4 OF 4
DATE: 9/23/2022
REPORT NO: 004



Photograph 2 – TNT tree removal



**DAILY FIELD OBSERVATION REPORT**  
**CIVIL & ENVIRONMENTAL CONSULTANTS, INC.**  
2704 Cherokee Farm Way, Suite 101  
Knoxville, Tennessee 37920  
P: (865) 977-9997 F: (865) 977-9919

PAGE 1 OF 3
DATE: 9/24/2022
REPORT NO: 005

**PROJECT INFORMATION**

<b>PROJECT NAME:</b> Elliott Ditch Reach 3 Isolated Soil Remediation	
<b>LOCATION:</b> Reach 3	<b>CEC PROJECT:</b> 315-052
<b>PLANS AND SPECIFICATIONS BY:</b> CEC, Inc.	<b>WEATHER:</b> Clear, 70F

**PERSONNEL**

<b>CEC FIELD REPRESENTATIVE:</b> J. O'Brien	<b>CEC PROJECT MANAGER:</b> Matt Bruck
<b>CLIENT:</b> Arconic Lafayette, LLC	<b>CLIENT CONTACT:</b> Robert Prezbindowski
<b>GENERAL CONTRACTOR:</b> O6 Environmental, LLC	<b>SITE SUPERINTENDENT:</b> Keegan Andrews

**THIS REPORT INCLUDES:**

<input type="checkbox"/> TEST RESULTS	<input checked="" type="checkbox"/> PHOTOGRAPHS	<input type="checkbox"/> SKETCH	<input type="checkbox"/> ATTACHMENTS
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**EQUIPMENT ONSITE:**

<u>Skid-steer:</u> CAT 289D
<u>Miscellaneous Equipment:</u> <ul style="list-style-type: none"><li>• Track Mats for access road.</li></ul>

**MATERIAL DELIVERED ONSITE:**

<ul style="list-style-type: none"><li>• None</li></ul>
--

**OBSERVATIONS:**

<u>Site personnel includes:</u> <ul style="list-style-type: none"><li>• CEC<ul style="list-style-type: none"><li>○ Jenny O'Brien</li></ul></li><li>• O6ENV<ul style="list-style-type: none"><li>○ Elvis Armstrong</li><li>○ Tyler Bundren</li></ul></li><li>• TNT Tree Clearing</li></ul> <u>Onsite Activities:</u> <ul style="list-style-type: none"><li>• All O6ENV and CEC personnel arrive at the worksite 0800.</li></ul>
---

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- Morning health and safety meeting held prior to commencing the day's project activities. Worker safety around the tree clearing equipment was discussed.
- TNT Tree Clearing arrived onsite around 0800. TNT finished tree clearing and mulching, utilizing a lift, stump grinder, mulcher and truck, and excavator.
- TNT loaded out the wood debris from the trees for disposal.
- All personnel offsite around 1400.

Excavation: Not completed.

Transportation of non-TSCA regulated material (PCB <50 ppm) for offsite disposal: Not Completed

- Off-site Disposal:

Non-TSCA Regulated	Daily	To Date
Material Transported (tons)	0	0
Truckloads	0	0

Backfill: Not Completed

Sampling: Not Completed

Laboratory Reports: None

**CONTRACT LINE ITEMS PERFORMED:**

- B1-5 Site Preparation
  - B1-5.3 – Clearing and Grubbing

**COMMUNICATION:**

**MEETINGS / DISCUSSIONS:**

- None of note.

**UNEXPECTED, UNUSUAL, OR NONCONFORMING OBSERVATIONS:** None

NOTICE: Our firm's professionals are represented on site solely to observe operations of the contractor identified, to form opinions about the adequacy of those operations, and to report those opinions to our client. The presence and activities of our field representative do not relieve the contractor from its obligation to meet contractual requirements. The contractor retains sole responsibility for site safety and the methods, operations, and sequences of construction.

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**PHOTOGRAPHS**



Photograph 1 – TNT tree removal



Photograph 2 – TNT performing stump grinding



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DATE: 9/26/2022
REPORT NO: 006

**PROJECT INFORMATION**

<b>PROJECT NAME:</b> Elliott Ditch Reach 3 Isolated Soil Remediation	
<b>LOCATION:</b> Reach 3	<b>CEC PROJECT:</b> 315-052
<b>PLANS AND SPECIFICATIONS BY:</b> CEC, Inc.	<b>WEATHER:</b> Clear, 65F

**PERSONNEL**

<b>CEC FIELD REPRESENTATIVE:</b> J. O'Brien	<b>CEC PROJECT MANAGER:</b> Matt Bruck
<b>CLIENT:</b> Arconic Lafayette, LLC	<b>CLIENT CONTACT:</b> Robert Prezbindowski
<b>GENERAL CONTRACTOR:</b> O6 Environmental, LLC	<b>SITE SUPERINTENDENT:</b> Tyler Bundren

**THIS REPORT INCLUDES:**

<input type="checkbox"/> TEST RESULTS	<input checked="" type="checkbox"/> PHOTOGRAPHS	<input type="checkbox"/> SKETCH	<input type="checkbox"/> ATTACHMENTS
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**EQUIPMENT ONSITE:**

<u>Skid-steer:</u> CAT 289D <u>Excavator:</u> CAT 320 <u>Miscellaneous Equipment:</u> <ul style="list-style-type: none"><li>• Track mats for access road.</li></ul>
---

**MATERIAL DELIVERED ONSITE:**

<ul style="list-style-type: none"><li>• None.</li></ul>
---

**OBSERVATIONS:**

<u>Site personnel includes:</u> <ul style="list-style-type: none"><li>• CEC<ul style="list-style-type: none"><li>○ Jenny O'Brien</li></ul></li><li>• O6ENV<ul style="list-style-type: none"><li>○ Elvis Armstrong</li><li>○ Tyler Bundren</li><li>○ Nick Brucato</li><li>○ David Bottos</li></ul></li></ul>
---

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Onsite Activities:

- All O6ENV and CEC personnel arrive at Crestview Community Church parking lot at 0700.
- Morning health and safety meeting held prior to commencing the day's project activities. Nick Brucato and David Bottos sign the HASP. Worker safety during excavation and appropriate PPE were discussed.
- O6ENV completed daily equipment inspections.
- The temporary fencing at Subject Property 6 was adjusted based upon the excavation footprint.
- Indiana 811 public utility locate completed in advance of excavation activities.
- O6ENV accepted delivery of the excavator that will be utilized to excavate material and load haul trucks. O6ENV's proposal included the use of two excavators; however, O6ENV has elected to modify their means and methods.
- O6ENV began excavation in Subject Property 1 (approximately 1,800 sq. feet). Excavated material was temporarily staged near the haul road entrance for loading. Dump trucks were unavailable for load out for disposal at Republic's Walnut Creek Landfill.
- O6ENV prepared the excavation bottoms and sidewalls for sampling. CEC collected the samples noted below. Samples were picked up by the courier. Additional samples collected after courier pick up availability and will be submitted to the laboratory on 9/27. Samples stored on ice and under chain of custody protocol.
- O6ENV installed approximately 300 feet of temporary fencing (snow fence) to provide site security.
- O6ENV covered excavated material with plastic material prior to departing the site. Erosion control measures installed around the perimeter of the stored material.
- All personnel offsite around 1715.

Excavation: Approximately 1,800 square feet of Subject Property 1 excavated to 1.5 feet below grade.

Transportation of non-TSCA regulated material (PCB <50 ppm) for offsite disposal: Not Completed

- Off-site Disposal:

<b>Non-TSCA Regulated</b>	<b>Daily</b>	<b>To Date</b>
<b>Material Transported (tons)</b>	0	0
<b>Truckloads</b>	0	0

Backfill: Not Completed

Sampling:

- Excavation Bottoms:
  - ED-R3SL-001 through ED-R3SL-007
- Sidewalls:
  - ED-R3SL-SW001

Laboratory Reports: None

**CONTRACT LINE ITEMS PERFORMED:**

- B1-5 Site Preparation
  - B1-5.3 – Utility Locating (Public)
  - B1-5.8 – Site Security Measures
- B1-6 Excavation, Management, and Disposal of Impacted Soil
  - B1-6.1 – Excavation of Impacted Soil
  - B1-6.2 - Staging/Stockpiling of Excavated Material

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**COMMUNICATION:**

**MEETINGS / DISCUSSIONS:**

- CEC discussed the staging of excavated material with O6ENV. O6ENV agreed to minimize the amount of staged material to the extent practical. O6ENV also understands that staged material must be covered and secured with erosion controls around the perimeter. O6ENV will work to obtain the appropriate number of haul trucks to allow for efficient disposal of excavated materials.

**UNEXPECTED, UNUSUAL, OR NONCONFORMING OBSERVATIONS: None**

NOTICE: Our firm's professionals are represented on site solely to observe operations of the contractor identified, to form opinions about the adequacy of those operations, and to report those opinions to our client. The presence and activities of our field representative do not relieve the contractor from its obligation to meet contractual requirements. The contractor retains sole responsibility for site safety and the methods, operations, and sequences of construction.

**PHOTOGRAPHS**



Photograph 1 – Excavation of targeted soil.

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Photograph 2 – Site security temporary fencing



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DATE: 9/27/2022
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**PROJECT INFORMATION**

<b>PROJECT NAME:</b> Elliott Ditch Reach 3 Isolated Soil Remediation	
<b>LOCATION:</b> Reach 3	<b>CEC PROJECT:</b> 315-052
<b>PLANS AND SPECIFICATIONS BY:</b> CEC, Inc.	<b>WEATHER:</b> Clear, 65F

**PERSONNEL**

<b>CEC FIELD REPRESENTATIVE:</b> J. O'Brien	<b>CEC PROJECT MANAGER:</b> Matt Bruck
<b>CLIENT:</b> Arconic Lafayette, LLC	<b>CLIENT CONTACT:</b> Robert Prezbindowski
<b>GENERAL CONTRACTOR:</b> O6 Environmental, LLC	<b>SITE SUPERINTENDENT:</b> Tyler Bundren

**THIS REPORT INCLUDES:**

<input type="checkbox"/> TEST RESULTS	<input checked="" type="checkbox"/> PHOTOGRAPHS	<input type="checkbox"/> SKETCH	<input type="checkbox"/> ATTACHMENTS
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**EQUIPMENT ONSITE:**

<u>Skid-steer:</u> CAT 289D <u>Excavator:</u> CAT 320 <u>Miscellaneous Equipment:</u> <ul style="list-style-type: none"><li>• Track mats for access road.</li></ul>
---

**MATERIAL DELIVERED ONSITE:**

<ul style="list-style-type: none"><li>• None.</li></ul>
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**OBSERVATIONS:**

<u>Site personnel includes:</u> <ul style="list-style-type: none"><li>• CEC<ul style="list-style-type: none"><li>○ Jenny O'Brien</li></ul></li><li>• O6ENV<ul style="list-style-type: none"><li>○ Elvis Armstrong</li><li>○ Tyler Bundren</li><li>○ Nick Brucato</li><li>○ David Bottos</li></ul></li></ul>
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Onsite Activities:

- All O6ENV and CEC personnel arrive at Crestview Community Church parking lot at 0700.
- Morning health and safety meeting held prior to commencing the day's project activities. Worker safety during working around equipment was discussed.
- O6ENV completed daily equipment inspections.
- James Butcher from the Tippecanoe County Surveyor's Office came to site to review the trees in the county easement that the county had interest in removing. CEC walked with James around the site and discussed the tree cutting occurring during the project activities. See the Meetings/Discussion section for more information.
- O6ENV continued excavation in Subject Property 1 (approximately 2,475 sq. feet). Excavated material was temporarily staged near the haul road entrance for offsite disposal.
- O6ENV began loading dump trucks for offsite disposal at Republic's Walnut Creek Landfill. Each dump truck was supplied a signed disposal manifest signed by O6ENV.. Prior to exiting the site, each dump truck was required to tarp (i.e., mechanically). All dump truck loads were inspected prior to leaving the site to ensure the loaded material was properly loaded and material was well contained.
  - Total loads for the day: 2
- O6ENV prepared the excavation bottoms and sidewalls for sampling. CEC collected the samples noted below. Samples were picked up by the courier.
- O6ENV posted required permits (i.e. City of Lafayette Site Permit, City of Lafayette Right of Way Permit, and IDNR Construction in a Floodway Permit) near the IM Project Signage.
- O6ENV completed installation of temporary fencing (snow fence) to provide site security.
- O6ENV covered all temporarily stored excavated material with plastic sheeting prior to departing the site. O6ENV also required to install erosion control around the stored material.
- All personnel offsite around 1615.

Excavation: Approximately 2,475 square feet of Subject Property 1 excavated.

Transportation of non-TSCA regulated material (PCB <50 ppm) for offsite disposal:

- Off-site Disposal:

<b>Non-TSCA Regulated</b>	<b>Daily</b>	<b>To Date</b>
<b>Material Transported (tons)</b>	37.07	37.07
<b>Truckloads</b>	2	2

Backfill: Not Completed

Sampling:

- Excavation Bottoms:
  - ED-R3SL-008 through ED-R3SL-011
- Sidewalls:
  - ED-R3SL-SW002

Laboratory Reports: None

**CONTRACT LINE ITEMS PERFORMED:**

- B1-5 Site Preparation
  - B1-5.8 – Site Security Measures
- B1-6 Excavation, Management, and Disposal of Impacted Soil

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- B1-6.1 – Excavation of Impacted Soil
- B1-6.2 – Staging/Stockpiling of Excavated Material
- B1-6.3 – Load out of Excavated Material
- B1-6.5 – Transportation of Impacted Material (RCRA Subtitle D Landfill)
- B1-6.6 – Disposal of Impacted Material (RCRA Subtitle D Landfill)

**COMMUNICATION:**

**MEETINGS / DISCUSSIONS:**

- CEC and James Butcher from the Tippecanoe County Surveyor’s Office discussed if it was feasible for tree cutters to come into the job site and remove dead/fallen trees from the county’s easement. CEC indicated that the cutting of trees could not impact the project schedule, could not occur in open excavations, and all disposal must be handled by the County. CEC also confirmed that formal notification would be sent to the property owners explaining that this additional tree clearing is being performed by the County.

**UNEXPECTED, UNUSUAL, OR NONCONFORMING OBSERVATIONS:** None.

NOTICE: Our firm’s professionals are represented on site solely to observe operations of the contractor identified, to form opinions about the adequacy of those operations, and to report those opinions to our client. The presence and activities of our field representative do not relieve the contractor from its obligation to meet contractual requirements. The contractor retains sole responsibility for site safety and the methods, operations, and sequences of construction.

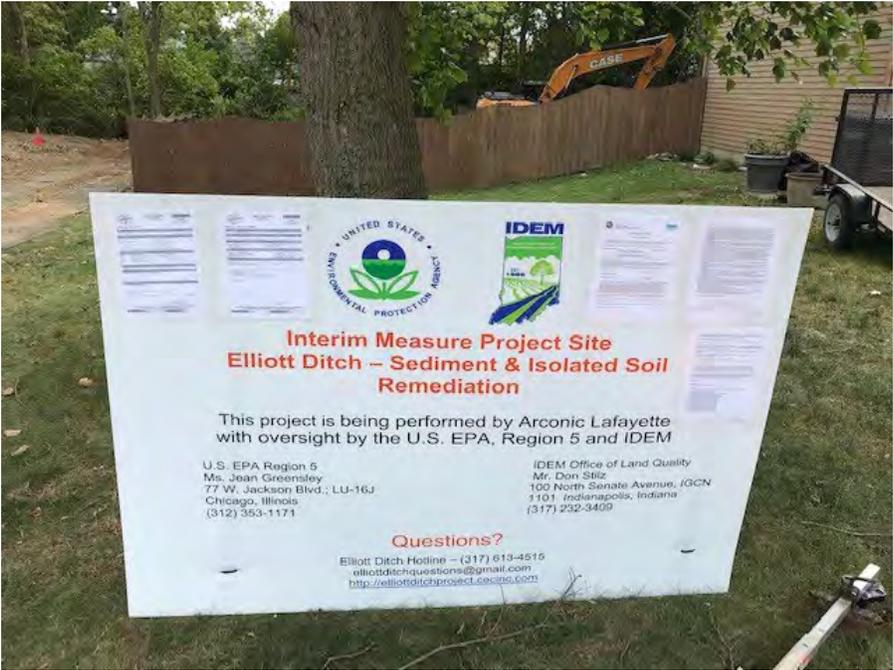
**PHOTOGRAPHS**



Photograph 1 – Load out of excavated material.

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Photograph 2 – Posted permits attached to the IM Project signage.



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DATE: 9/28/2022
REPORT NO: 008

### PROJECT INFORMATION

<b>PROJECT NAME:</b> Elliott Ditch Reach 3 Isolated Soil Remediation	
<b>LOCATION:</b> Reach 3	<b>CEC PROJECT:</b> 315-052
<b>PLANS AND SPECIFICATIONS BY:</b> CEC, Inc.	<b>WEATHER:</b> Cloudy, 65F

### PERSONNEL

<b>CEC FIELD REPRESENTATIVE:</b> J. O'Brien	<b>CEC PROJECT MANAGER:</b> Matt Bruck
<b>CLIENT:</b> Arconic Lafayette, LLC	<b>CLIENT CONTACT:</b> Robert Prezbindowski
<b>GENERAL CONTRACTOR:</b> O6 Environmental, LLC	<b>SITE SUPERINTENDENT:</b> Tyler Bundren

### THIS REPORT INCLUDES:

<input checked="" type="checkbox"/> TEST RESULTS	<input checked="" type="checkbox"/> PHOTOGRAPHS	<input type="checkbox"/> SKETCH	<input type="checkbox"/> ATTACHMENTS
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### EQUIPMENT ONSITE:

<u>Skid-steer:</u> CAT 289D
<u>Excavator:</u> CAT 320
<u>Miscellaneous Equipment:</u> <ul style="list-style-type: none"><li>• Track Mats for access road.</li></ul>

### MATERIAL DELIVERED ONSITE:

<ul style="list-style-type: none"><li>• 500 feet of straw wattles for erosion control.</li></ul>
--

### OBSERVATIONS:

<u>Site personnel includes:</u> <ul style="list-style-type: none"><li>• CEC<ul style="list-style-type: none"><li>○ Jenny O'Brien</li></ul></li><li>• O6ENV<ul style="list-style-type: none"><li>○ Elvis Armstrong</li><li>○ Tyler Bundren</li><li>○ Nick Brucato</li><li>○ David Bottos</li></ul></li></ul>
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Onsite Activities:

- All O6ENV and CEC personnel arrive at Crestview Community Church parking lot at 0700.
- Morning health and safety meeting held prior to commencing the day's project activities. Discussion included the proper protocol for loading trucks.
- O6ENV completed daily equipment inspections.
- O6ENV posted truck traffic signs on Ortman Lane.
- O6ENV accepted delivery of straw wattles for erosion control.
- O6ENV continued excavation in the Subject Property 1 (approximately 3,150 sq. feet). Excavated material was temporarily staged for truck loading.
- O6ENV began loading dump trucks for offsite disposal at Republic's Walnut Creek Landfill. Each dump truck was supplied a disposal manifest signed by O6ENV. Prior to exiting the site, each dump truck was required to tarp (i.e., mechanically). All dump truck loads were inspected prior to leaving the site to ensure the loaded material was properly loaded and material was well contained.
  - Total loads for the day: 3
- O6ENV prepared the excavation bottoms and sidewalls for sampling. CEC collected the samples noted below. Samples were picked up by the courier.
- O6ENV covered all temporarily stored excavated material with plastic sheeting prior to departing the site. Straw wattles were placed around the stockpile.
- All personnel offsite around 1700.

Excavation: Approximately 2,475 square feet of Subject Property 1 excavated.

Transportation of non-TSCA regulated material (PCB <50 ppm) for offsite disposal:

- Off-site Disposal:

<b>Non-TSCA Regulated</b>	<b>Daily</b>	<b>To Date</b>
<b>Material Transported (tons)</b>	65.47	102.54
<b>Truckloads</b>	3	5

Backfill: Not Completed

Sampling:

- Excavation Bottoms:
  - ED-R3SL-012
  - ED-R3SL-013
  - ED-R3SL-014
- Sidewalls:
  - None

Laboratory Reports: See the analytical results and updated sampling figure included in Report # 010 (9/30/2022).

The following samples exceeded the RBRO Limit:

- ED-R3SL-001
- ED-R3SL-002
- ED-R3SL-003
- ED-R3SL-004
- ED-R3SL-007
- ED-R3SL-008
- ED-R3SL-010

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**CONTRACT LINE ITEMS PERFORMED:**

- B1-6 Excavation, Management, and Disposal of Impacted Soil
  - B1-6.1 – Excavation of Impacted Soil
  - B1-6.2 – Staging/Stockpiling of Excavated Material
  - B1-6.3 – Load out of Excavated Material
  - B1-6.5 – Transportation of Impacted Material (RCRA Subtitle D Landfill)
  - B1-6.6 – Disposal of Impacted Material (RCRA Subtitle D Landfill)

**COMMUNICATION:**

- MEETINGS / DISCUSSIONS:**
- O6ENV and CEC had a weekly update call to discuss project activities. O6ENV to schedule the necessary entrance inspections in accordance with the City of Lafayette Right of Way Permit.

**UNEXPECTED, UNUSUAL, OR NONCONFORMING OBSERVATIONS:** O6ENV continues to work towards securing additional trucks in order to increase daily production and maintain the project schedule. CEC has requested that O6ENV provide an update as to how the low production will be remedied.

**NOTICE:** Our firm’s professionals are represented on site solely to observe operations of the contractor identified, to form opinions about the adequacy of those operations, and to report those opinions to our client. The presence and activities of our field representative do not relieve the contractor from its obligation to meet contractual requirements. The contractor retains sole responsibility for site safety and the methods, operations, and sequences of construction.

**PHOTOGRAPHS**



Photograph 1 – Tarped haul truck exiting the haul road.

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Photograph 2: Hauling notification signage.



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DATE: 9/29/2022
REPORT NO: 009

**PROJECT INFORMATION**

<b>PROJECT NAME:</b> Elliott Ditch Reach 3 Isolated Soil Remediation	
<b>LOCATION:</b> Reach 3	<b>CEC PROJECT:</b> 315-052
<b>PLANS AND SPECIFICATIONS BY:</b> CEC, Inc.	<b>WEATHER:</b> Cloudy, low 60s

**PERSONNEL**

<b>CEC FIELD REPRESENTATIVE:</b> J. O'Brien	<b>CEC PROJECT MANAGER:</b> Matt Bruck
<b>CLIENT:</b> Arconic Lafayette, LLC	<b>CLIENT CONTACT:</b> Robert Prezbindowski
<b>GENERAL CONTRACTOR:</b> O6 Environmental, LLC	<b>SITE SUPERINTENDENT:</b> Keegan Andrews

**THIS REPORT INCLUDES:**

<input checked="" type="checkbox"/> TEST RESULTS	<input checked="" type="checkbox"/> PHOTOGRAPHS	<input type="checkbox"/> SKETCH	<input type="checkbox"/> ATTACHMENTS
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**EQUIPMENT ONSITE:**

<u>Skid-steer:</u> CAT 289D <u>Excavator:</u> CAT 320 <u>Miscellaneous Equipment:</u> <ul style="list-style-type: none"><li>• Track Mats for access road.</li></ul>
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**MATERIAL DELIVERED ONSITE:**

<ul style="list-style-type: none"><li>• None.</li></ul>
---

**OBSERVATIONS:**

<u>Site personnel includes:</u> <ul style="list-style-type: none"><li>• CEC<ul style="list-style-type: none"><li>○ Jenny O'Brien</li></ul></li><li>• O6ENV<ul style="list-style-type: none"><li>○ Elvis Armstrong</li><li>○ Tyler Bundren</li><li>○ Nick Brucato</li><li>○ David Bottos</li></ul></li></ul>
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Onsite Activities:

- All O6ENV and CEC personnel arrive at Crestview Community Church parking lot at 0700.
- Morning health and safety meeting held prior to commencing the day's project activities.
- O6ENV completed daily equipment inspections.
- O6ENV posted truck traffic signs on Ortman Lane.
- O6ENV and CEC marked out the sample grids that exceeded the RBRO and require over excavation on Subject Property 1.
- O6ENV completed over-excavation on Subject Property 1 in the grids where samples exceeded the RBRO. Excavated material was temporarily staged for truck loading.
- O6ENV began loading dump trucks for offsite disposal at Republic's Walnut Creek Landfill. Each dump truck was supplied a disposal manifest signed by O6ENV. Prior to exiting the site, each dump truck was required to tarp (i.e., mechanically). All dump truck loads were inspected prior to leaving the site to ensure the loaded material was properly loaded and material was well contained.
  - Total loads for the day: 4
- O6ENV prepared the excavation bottoms and sidewalls for sampling. CEC collected the samples noted below. Samples were picked up by the courier and delivered to Eurofins, Chicago.
- Tyler Bundren completed the weekly erosion and sedimentation control inspection. No deficiencies were noted.
- O6ENV covered all temporarily stored excavated material with plastic sheeting prior to departing the site. Straw wattles were placed around the stockpile.
- All personnel offsite around 1715.

Excavation: Over-excavation of grids that exceeded the RBRO Limit.

Transportation of non-TSCA regulated material (PCB <50 ppm) for offsite disposal:

- Off-site Disposal:

<b>Non-TSCA Regulated</b>	<b>Daily</b>	<b>To Date</b>
<b>Material Transported (tons)</b>	102.4	204.94
<b>Truckloads</b>	4	9

Backfill: Not Completed

Sampling:

- Excavation Bottoms:
  - ED-R3SL-001-1 through ED-R3SL-004-1
  - ED-R3SL-007-1
  - ED-R3SL-008-1
  - ED-R3SL-010-1
- Sidewalls:
  - ED-R3SL-SW001-1

Laboratory Reports: See the analytical results and updated sampling figure included in Report # 010 (9/30/2022).

No samples exceeded the RBRO Limit

**CONTRACT LINE ITEMS PERFORMED:**

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- B1-6 Excavation, Management, and Disposal of Impacted Soil
  - B1-6.1 – Excavation of Impacted Soil
  - B1-6.2 – Staging/Stockpiling of Excavated Material
  - B1-6.3 – Load out of Excavated Material
  - B1-6.5 – Transportation of Impacted Material (RCRA Subtitle D Landfill)
  - B1-6.6 – Disposal of Impacted Material (RCRA Subtitle D Landfill)
- B1-8 Erosion and Sediment Control
  - B1-8.1 – Inspections

**COMMUNICATION:**

**MEETINGS / DISCUSSIONS:**

- None of note.

**UNEXPECTED, UNUSUAL, OR NONCONFORMING OBSERVATIONS:** O6ENV continues to work towards securing additional trucks in order to increase daily production and maintain the project schedule. CEC has requested that O6ENV provide an update as to how the low production will be remedied.

NOTICE: Our firm's professionals are represented on site solely to observe operations of the contractor identified, to form opinions about the adequacy of those operations, and to report those opinions to our client. The presence and activities of our field representative do not relieve the contractor from its obligation to meet contractual requirements. The contractor retains sole responsibility for site safety and the methods, operations, and sequences of construction.

**PHOTOGRAPHS**



Photograph 1 – Marking of sampling grids.

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Photograph 2 – Over excavation being performed on Subject Property 1.



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DATE: 9/30/2022
REPORT NO: 010

**PROJECT INFORMATION**

<b>PROJECT NAME:</b> Elliott Ditch Reach 3 Isolated Soil Remediation	
<b>LOCATION:</b> Reach 3	<b>CEC PROJECT:</b> 315-052
<b>PLANS AND SPECIFICATIONS BY:</b> CEC, Inc.	<b>WEATHER:</b> Cloudy, low 60s

**PERSONNEL**

<b>CEC FIELD REPRESENTATIVE:</b> J. O'Brien	<b>CEC PROJECT MANAGER:</b> Matt Bruck
<b>CLIENT:</b> Arconic Lafayette, LLC	<b>CLIENT CONTACT:</b> Robert Prezbindowski
<b>GENERAL CONTRACTOR:</b> O6 Environmental, LLC	<b>SITE SUPERINTENDENT:</b> Keegan Andrews

**THIS REPORT INCLUDES:**

<input checked="" type="checkbox"/> TEST RESULTS	<input checked="" type="checkbox"/> PHOTOGRAPHS	<input checked="" type="checkbox"/> SKETCH	<input type="checkbox"/> ATTACHMENTS
--	---	--	--------------------------------------

**EQUIPMENT ONSITE:**

<u>Skid-steer:</u> CAT 289D <u>Excavator:</u> CAT 320 <u>Miscellaneous Equipment:</u> <ul style="list-style-type: none"><li>• Track Mats for access road.</li></ul>
---

**MATERIAL DELIVERED ONSITE:**

<ul style="list-style-type: none"><li>• None.</li></ul>
---

**OBSERVATIONS:**

<u>Site personnel includes:</u> <ul style="list-style-type: none"><li>• CEC<ul style="list-style-type: none"><li>○ Jenny O'Brien</li></ul></li><li>• O6ENV<ul style="list-style-type: none"><li>○ Elvis Armstrong</li><li>○ Tyler Bundren</li><li>○ Nick Brucato</li><li>○ David Bottos</li></ul></li></ul>
---

**DAILY FIELD OBSERVATION REPORT  
CIVIL & ENVIRONMENTAL CONSULTANTS, INC.**

PAGE 2 OF 4
DATE: 9/30/2022
REPORT NO: 010

Onsite Activities:

- All O6ENV and CEC personnel arrive at Crestview Community Church parking lot at 0700.
- Morning health and safety meeting held prior to commencing the day's project activities.
- O6ENV completed daily equipment inspections.
- O6ENV posted truck traffic signs on Ortman Lane.
- O6ENV continued excavation on Subject Property 1. Excavated material was temporarily staged for truck loading.
- O6ENV began loading dump trucks for offsite disposal at Republic's Walnut Creek Landfill. Each dump truck was supplied a disposal manifest signed by O6ENV. Prior to exiting the site, each dump truck was required to tarp (i.e., mechanically). All dump truck loads were inspected prior to leaving the site to ensure the loaded material was properly loaded and material was well contained.
  - Total loads for the day: 7
- O6ENV prepared the excavation bottoms and sidewalls for sampling. CEC collected the samples noted below. Samples were picked up by the courier and delivered to Eurofins, Chicago.
- O6ENV installed sediment control (straw wattles) in excavation areas and low-lying areas with potential of runoff.
- O6ENV covered all temporarily stored excavated material with plastic sheeting prior to departing the site. Straw wattles were placed around the stockpile.
- All personnel offsite around 1600.

Excavation: Approximately 5,175 square feet of Subject Property 1 excavated.

Transportation of non-TSCA regulated material (PCB <50 ppm) for offsite disposal:

- Off-site Disposal:

<b>Non-TSCA Regulated</b>	<b>Daily</b>	<b>To Date</b>
<b>Material Transported (tons)</b>	171	375.94
<b>Truckloads</b>	7	16

Backfill: Not Completed

Sampling:

- Excavation Bottoms:
  - ED-R3SL-014
  - ED-R3SL-016 through ED-R3SL-19
  - ED-R3SL-021
  - ED-R3SL-022
- Sidewalls:
  - ED-R3SL-SW003

Laboratory Reports: Analytical results and updated sampling figure are attached.

The following samples exceeded the RBRO Limit:

- ED-R3SL-SW001-1
- ED-R3SL-001-1
- ED-R3SL-002-1
- ED-R3SL-003-1
- ED-R3SL-004-1

**DAILY FIELD OBSERVATION REPORT  
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**CONTRACT LINE ITEMS PERFORMED:**

- B1-6 Excavation, Management, and Disposal of Impacted Soil
  - B1-6.1 – Excavation of Impacted Soil
  - B1-6.2 – Staging/Stockpiling of Excavated Material
  - B1-6.3 – Load out of Excavated Material
  - B1-6.5 – Transportation of Impacted Material (RCRA Subtitle D Landfill)
  - B1-6.6 – Disposal of Impacted Material (RCRA Subtitle D Landfill)

**COMMUNICATION:**

- MEETINGS / DISCUSSIONS:**
- None of note.

**UNEXPECTED, UNUSUAL, OR NONCONFORMING OBSERVATIONS:** O6ENV continues to work towards securing additional trucks in order to increase daily production and maintain the project schedule. CEC has requested that O6ENV provide an update as to how the low production will be remedied.

NOTICE: Our firm’s professionals are represented on site solely to observe operations of the contractor identified, to form opinions about the adequacy of those operations, and to report those opinions to our client. The presence and activities of our field representative do not relieve the contractor from its obligation to meet contractual requirements. The contractor retains sole responsibility for site safety and the methods, operations, and sequences of construction.

**PHOTOGRAPHS**



Photograph 1 – Load out of excavated material.

**DAILY FIELD OBSERVATION REPORT  
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Photograph 2 – Straw wattles installed in open excavations.

**Excavation Confirmation Sampling PCB Analytical Results**

Elliott Ditch - Reach 3 Soil

Arconic Lafayette Operations, Lafayette, Indiana

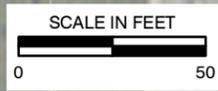
Type	Sample ID	Sample Date	Over - Excavation	PCB Aroclor (mg/Kg)						Total PCBs (mg/Kg)	
				1016	1221	1232	1242	1248	1254		1260
BE	ED-R3SL-001	9/26/2022	-	ND	ND	ND	ND	10	ND	ND	<b>10</b>
BE	ED-R3SL-DUP001 (ED-R3SL-001)	9/26/2022	-	ND	ND	ND	ND	12	ND	ND	<b>12</b>
BE	ED-R3SL-001-1	9/29/2022	1	ND	ND	ND	ND	5.5	ND	ND	<b>5.5</b>
BE	ED-R3SL-002	9/26/2022	-	ND	ND	ND	ND	6.3	ND	ND	<b>6.3</b>
BE	ED-R3SL-002-1	9/29/2022	1	ND	ND	ND	ND	11	ND	ND	<b>11</b>
SW	ED-R3SL-SW001	9/26/2022	-	ND	ND	ND	ND	1.9	ND	ND	<b>1.9</b>
SW	ED-R3SL-SW001-1	9/29/2022	1	ND	ND	ND	ND	3.2	ND	ND	<b>3.2</b>
BE	ED-R3SL-003	9/26/2022	-	ND	ND	ND	ND	1.6	ND	ND	<b>1.6</b>
BE	ED-R3SL-003-1	9/29/2022	1	ND	ND	ND	ND	2.6	ND	ND	<b>2.6</b>
BE	ED-R3SL-004	9/26/2022	-	ND	ND	ND	ND	4.4	ND	ND	<b>4.4</b>
BE	ED-R3SL-004-1	9/29/2022	1	ND	ND	ND	ND	13	ND	ND	<b>13</b>
BE	ED-R3SL-DUP002 (ED-R3SL-004-01)	9/29/2022	1	ND	ND	ND	ND	10	ND	ND	<b>10</b>
BE	ED-R3SL-005	9/26/2022	-	ND	ND	ND	ND	1	ND	ND	<b>1</b>
BE	ED-R3SL-006	9/26/2022	-	ND	ND	ND	ND	0.53	ND	ND	<b>0.53</b>
BE	ED-R3SL-007	9/26/2022	-	ND	ND	ND	ND	1.3	ND	ND	<b>1.3</b>
BE	ED-R3SL-007-1	9/29/2022	1	ND	ND	ND	ND	ND	ND	ND	<b>ND</b>
BE	ED-R3SL-008	9/27/2022	-	ND	ND	ND	ND	1.8	ND	ND	<b>1.8</b>
BE	ED-R3SL-008-1	9/29/2022	1	ND	ND	ND	ND	ND	ND	ND	<b>ND</b>
BE	ED-R3SL-009	9/27/2022	-	ND	ND	ND	ND	ND	ND	ND	<b>ND</b>
BE	ED-R3SL-010	9/27/2022	-	ND	ND	ND	ND	1.2	ND	ND	<b>1.2</b>
BE	ED-R3SL-010-1	9/29/2022	1	ND	ND	ND	ND	0.57	ND	ND	<b>0.57</b>
BE	ED-R3SL-011	9/27/2022	-	ND	ND	ND	ND	0.45	ND	ND	<b>0.45</b>
SW	ED-R3SL-SW002	9/27/2022	-	ND	ND	ND	ND	0.44	ND	ND	<b>0.44</b>
BE	ED-R3SL-012	9/28/2022	-	ND	ND	ND	ND	0.34	ND	ND	<b>0.34</b>
BE	ED-R3SL-013	9/28/2022	-	ND	ND	ND	ND	ND	ND	ND	<b>ND</b>
BE	ED-R3SL-015	9/28/2022	-	ND	ND	ND	ND	0.68	ND	ND	<b>0.68</b>

DRAFT

**Notes:**  
 Sample ID with "SW" indicates Sidewall Sample  
 ND = constituent detected below the laboratory RL of 0.5 mg/Kg  
 Red indicates an exceedance of 1.0 mg/Kg RBRO



NORTH



P:\10-000\315-052-GIS\Maps\F3 Soil Sampling Figures\_Trimble\315-052 Elliott Ditch Sampling Grid Reach 3.mxd 10/3/2022 9:42 AM (jwall)

- LEGEND**
- Remediation Footprint
  - DU Boundaries
  - Parcel Boundaries

**NOTE**  
 Laboratory Analytical Results through 9/29

**REFERENCE**  
 State of Indiana Best Available Orthophotography  
<https://imagery.gis.in.gov/arcgis/services/Imagery/BestAvailable/ImageServer>.  
 ACCESSED 10/3/2022



**Civil & Environmental Consultants, Inc.**

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ARCONIC LAFAYETTE LLC  
 ISOLATED SOIL REMEDIATION  
 ELLIOT DITCH - REACH 3  
 LAFAYETTE, INDIANA

REACH 3  
 SAMPLING GRIDS

DRAWN BY:	DRAFT	CHECKED BY:	DRAFT
DATE:	October 03, 2022	SCALE:	1" = 49'
APPROVED BY:	DRAFT*	PROJECT NO:	315-052
			FIGURE NO: <b>1</b>



**DAILY FIELD OBSERVATION REPORT**  
**CIVIL & ENVIRONMENTAL CONSULTANTS, INC.**  
2704 Cherokee Farm Way, Suite 101  
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PAGE 1 OF 4
DATE: 10/3/2022
REPORT NO: 011

**PROJECT INFORMATION**

<b>PROJECT NAME:</b> Elliott Ditch Reach 3 Isolated Soil Remediation	
<b>LOCATION:</b> Reach 3	<b>CEC PROJECT:</b> 315-052
<b>PLANS AND SPECIFICATIONS BY:</b> CEC, Inc.	<b>WEATHER:</b> Clear, mid 60s F

**PERSONNEL**

<b>CEC FIELD REPRESENTATIVE:</b> G. Welch	<b>CEC PROJECT MANAGER:</b> Matt Bruck
<b>CLIENT:</b> Arconic Lafayette, LLC	<b>CLIENT CONTACT:</b> Robert Prezbindowski
<b>GENERAL CONTRACTOR:</b> O6 Environmental, LLC	<b>SITE SUPERINTENDENT:</b> Keegan Andrews

**THIS REPORT INCLUDES:**

<input type="checkbox"/> TEST RESULTS	<input checked="" type="checkbox"/> PHOTOGRAPHS	<input type="checkbox"/> SKETCH	<input type="checkbox"/> ATTACHMENTS
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**EQUIPMENT ONSITE:**

<u>Skid-steer:</u> CAT 289D <u>Excavator:</u> CAT 320 <u>Miscellaneous Equipment:</u> <ul style="list-style-type: none"><li>• Track Mats for access road.</li></ul>
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**MATERIAL DELIVERED ONSITE:**

<ul style="list-style-type: none"><li>• None.</li></ul>
---

**OBSERVATIONS:**

<u>Site personnel includes:</u> <ul style="list-style-type: none"><li>• CEC<ul style="list-style-type: none"><li>○ Garrett Welch</li></ul></li><li>• O6ENV<ul style="list-style-type: none"><li>○ Keegan Andrews</li><li>○ Elvis Armstrong</li><li>○ Tyler Bundren</li><li>○ Nick Brucato</li><li>○ David Bottos</li></ul></li></ul>
--

**DAILY FIELD OBSERVATION REPORT  
CIVIL & ENVIRONMENTAL CONSULTANTS, INC.**

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DATE: 10/3/2022
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Onsite Activities:

- All O6ENV and CEC personnel arrive at Crestview Community Church parking lot at 0700.
- Morning health and safety meeting held prior to commencing the day's project activities. The team discussed observations from last week and how to overcome complacency on the job site.
- O6ENV completed daily equipment inspections.
- O6ENV posted truck traffic signs on Ortman Lane.
- O6ENV continued excavation on Subject Property 1 and Subject Property 2. Excavated material was temporarily staged for truck loading. Two dedicated haul trucks were provided from the hauling contractor.
- Keegan Andrews with O6ENV arrived onsite around 0915.
- O6ENV began loading dump trucks for offsite disposal at Republic's Walnut Creek Landfill. Each dump truck was supplied a disposal manifest signed by O6ENV. Prior to exiting the site, each dump truck was required to tarp (i.e., mechanically). All dump truck loads were inspected prior to leaving the site to ensure the loaded material was properly loaded and material was well contained.
  - Total loads for the day: 8
  - Final two loads (loads 9 and 10) will be temporarily stored within the haul trucks for disposal on 10/4. The loads will be maintained under bill of lading and weighed by the haul trucking contractor. The haul truck operators were also provided a disposal manifest. O6ENV to provide the bill of lading, weight ticket, and manifest to CEC.
- O6ENV prepared the excavation bottoms and sidewalls for sampling. CEC collected the samples noted below. Samples were picked up by the courier and delivered to Eurofins, Chicago.
- O6ENV installed sediment control (straw wattles) along the Elliott Ditch bank.
- MaCallister CAT onsite to repair skid-steer tracks at 1530.
- O6ENV covered all temporarily stored excavated material with plastic sheeting prior to departing the site. Straw wattles were placed around the stockpile.
- All personnel offsite off-site 1700.

Excavation: Approximately 6,750 square feet excavate in Subject Property 1 and 2.

Transportation of non-TSCA regulated material (PCB <50 ppm) for offsite disposal:

- Off-site Disposal:

<b>Non-TSCA Regulated</b>	<b>Daily</b>	<b>To Date</b>
<b>Material Transported (tons)</b>	178.75	555.4
<b>Truckloads</b>	8	24

Backfill: Not Completed

Sampling:

- Excavation Bottoms:
  - ED-R3SL-020
  - ED-R3SL-023 through ED-R3SL-030
- Sidewalls:
  - ED-R3SL-SW004

Laboratory Reports: Sample results were delayed and will be reported on 10/4/2022. See the analytical results and updated sampling figure that will be included in Report # 015 (10/7/2022) at the end of the week.

The following samples exceeded the RBRO Limit:

**DAILY FIELD OBSERVATION REPORT  
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DATE: 10/3/2022

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**CONTRACT LINE ITEMS PERFORMED:**

- B1-6 Excavation, Management, and Disposal of Impacted Soil
  - B1-6.1 – Excavation of Impacted Soil
  - B1-6.2 – Staging/Stockpiling of Excavated Material
  - B1-6.3 – Load out of Excavated Material
  - B1-6.5 – Transportation of Impacted Material (RCRA Subtitle D Landfill)
  - B1-6.6 – Disposal of Impacted Material (RCRA Subtitle D Landfill)

**COMMUNICATION:**

**MEETINGS / DISCUSSIONS:**

- GW requested for silt fencing to be installed in proximity to the staging area near the City of Lafayette storm water infrastructure (Right Descending Bank).
- GW inquired with O6ENV regarding the Right of Way Inspection. KA indicated that he has left three messages and will stop by the City office tomorrow (10/4).

**UNEXPECTED, UNUSUAL, OR NONCONFORMING OBSERVATIONS:**

- Skid-steer tracks required replacement.

NOTICE: Our firm's professionals are represented on site solely to observe operations of the contractor identified, to form opinions about the adequacy of those operations, and to report those opinions to our client. The presence and activities of our field representative do not relieve the contractor from its obligation to meet contractual requirements. The contractor retains sole responsibility for site safety and the methods, operations, and sequences of construction.

**PHOTOGRAPHS**



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CIVIL & ENVIRONMENTAL CONSULTANTS, INC.**

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DATE: 10/3/2022
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Photograph 1 – Excavation bottom on Subject Property 2. Straw waddles installed along Elliott Ditch (view facing west).



Photograph 2 – Active excavation at the transition between Subject Property 1 and 2 (view facing west).



Photograph 3 – Straw wattle installed following excavation activities (view facing southeast).



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PAGE 1 OF 4
DATE: 10/4/2022
REPORT NO: 012

**PROJECT INFORMATION**

<b>PROJECT NAME:</b> Elliott Ditch Reach 3 Isolated Soil Remediation	
<b>LOCATION:</b> Reach 3	<b>CEC PROJECT:</b> 315-052
<b>PLANS AND SPECIFICATIONS BY:</b> CEC, Inc.	<b>WEATHER:</b> Clear, mid 60s F

**PERSONNEL**

<b>CEC FIELD REPRESENTATIVE:</b> G. Welch	<b>CEC PROJECT MANAGER:</b> Matt Bruck
<b>CLIENT:</b> Arconic Lafayette, LLC	<b>CLIENT CONTACT:</b> Robert Prezbindowski
<b>GENERAL CONTRACTOR:</b> O6 Environmental, LLC	<b>SITE SUPERINTENDENT:</b> Keegan Andrews

**THIS REPORT INCLUDES:**

<input checked="" type="checkbox"/> TEST RESULTS	<input checked="" type="checkbox"/> PHOTOGRAPHS	<input type="checkbox"/> SKETCH	<input type="checkbox"/> ATTACHMENTS
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**EQUIPMENT ONSITE:**

<u>Skid-steer:</u> CAT 289D <u>Excavator:</u> CAT 320 <u>Miscellaneous Equipment:</u> <ul style="list-style-type: none"><li>• Track mats for access road</li></ul>
--

**MATERIAL DELIVERED ONSITE:**

<ul style="list-style-type: none"><li>• None</li></ul>
--

**OBSERVATIONS:**

<u>Site personnel includes:</u> <ul style="list-style-type: none"><li>• CEC<ul style="list-style-type: none"><li>○ Garrett Welch</li></ul></li><li>• O6ENV<ul style="list-style-type: none"><li>○ Caleb Tufts</li><li>○ Keegan Andrews</li><li>○ Elvis Armstrong</li><li>○ Tyler Bundren</li><li>○ Nick Brucato</li><li>○ David Bottos</li></ul></li></ul>
--

**DAILY FIELD OBSERVATION REPORT  
CIVIL & ENVIRONMENTAL CONSULTANTS, INC.**

PAGE 2 OF 4
DATE: 10/4/2022
REPORT NO: 012

Onsite Activities:

- All O6ENV and CEC personnel arrive at Crestview Community Church parking lot at 0700.
- Caleb Tuff with O6ENV arrived onsite around 1330.
- Morning health and safety meeting held prior to commencing the day's project activities. The team discussed dust suppression and keeping the job site organized and clean.
- O6ENV completed daily equipment inspections.
- O6ENV posted truck traffic signs on Ortman Lane.
- O6ENV continued excavation on Subject Property 2 and Subject Property 3. Excavated material was temporarily staged for truck loading.
- Two dedicated haul trucks were provided by the hauling subcontractor for today's activities. O6ENV loaded the dump trucks for offsite disposal at Republic's Walnut Creek Landfill. Each dump truck was supplied a disposal manifest signed by O6ENV. Prior to exiting the site, each dump truck was required to tarp (i.e., mechanically). All dump truck loads were inspected prior to leaving the site to ensure the loaded material was properly loaded and material was well contained.
  - Total loads for the day: 10
- O6ENV prepared the excavation bottoms and sidewalls for sampling. CEC collected the samples noted below. Samples were picked up by the courier and delivered to Eurofins, Chicago.
- O6ENV installed sediment control (straw wattles) along the Elliott Ditch bank. Additionally, silt fencing was installed between the soil staging area and Elliott Ditch.
- O6ENV covered all temporarily stored excavated material with plastic sheeting prior to departing the site. Straw wattles were placed around the stockpile.
- All personnel offsite off-site at 1700.

Excavation: Approximately 8,550 square feet has been excavated in Subject Property 1 through 3.

Transportation of non-TSCA regulated material (PCB <50 ppm) for offsite disposal:

- Off-site Disposal:

<b>Non-TSCA Regulated</b>	<b>Daily</b>	<b>To Date</b>
<b>Material Transported (tons)</b>	214.88	770.28
<b>Truckloads</b>	10	34

Backfill: Not Completed

Sampling:

- Excavation Bottoms:
  - ED-R3SL-031 through ED-R3SL-038
- Sidewalls:
  - ED-R3SL-SW005
  - ED-R3SL-SW006

Laboratory Reports: See the analytical results table and updated sampling results figure that will be included with Report # 015 that will be provided on 10/7/2022.

The following samples exceeded the RBRO Limit:

- ED-R3SL-014
- ED-R3SL-023
- ED-R3SL-025 through ED-R3SL-030

**DAILY FIELD OBSERVATION REPORT  
CIVIL & ENVIRONMENTAL CONSULTANTS, INC.**

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DATE: 10/4/2022

REPORT NO: 012

**CONTRACT LINE ITEMS PERFORMED:**

- B1-6 Excavation, Management, and Disposal of Impacted Soil
  - B1-6.1 – Excavation of Impacted Soil
  - B1-6.2 – Staging/Stockpiling of Excavated Material
  - B1-6.3 – Load out of Excavated Material
  - B1-6.5 – Transportation of Impacted Material (RCRA Subtitle D Landfill)
  - B1-6.6 – Disposal of Impacted Material (RCRA Subtitle D Landfill)

**COMMUNICATION:**

**MEETINGS / DISCUSSIONS:**

- GW, CT, and KA performed a site walk to discuss outstanding items that require O6ENV's attention. Points of discussion included:
  - Sod installation footprint by property;
  - Use of a Water Buffalo for dust suppression;
  - Installation of a sediment catch bag within the storm sewer inlet structure along Windmill Drive; and,
  - Installation of silt fence along Elliott Ditch near the soil staging area.

**UNEXPECTED, UNUSUAL, OR NONCONFORMING OBSERVATIONS:**

- None.

NOTICE: Our firm's professionals are represented on site solely to observe operations of the contractor identified, to form opinions about the adequacy of those operations, and to report those opinions to our client. The presence and activities of our field representative do not relieve the contractor from its obligation to meet contractual requirements. The contractor retains sole responsibility for site safety and the methods, operations, and sequences of construction.

**PHOTOGRAPHS**



Photograph 1 – Excavation on Subject Property 3 (view facing west).

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Photograph 2 – Silt fencing installation between the soil staging area and Elliott Ditch.



Photograph 3 – Plastic sheeting over the soil staging area with erosion control installed to the north.



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DATE: 10/5/2022
REPORT NO: 013

**PROJECT INFORMATION**

<b>PROJECT NAME:</b> Elliott Ditch Reach 3 Isolated Soil Remediation	
<b>LOCATION:</b> Reach 3	<b>CEC PROJECT:</b> 315-052
<b>PLANS AND SPECIFICATIONS BY:</b> CEC, Inc.	<b>WEATHER:</b> Clear, low 70s F

**PERSONNEL**

<b>CEC FIELD REPRESENTATIVE:</b> G. Welch	<b>CEC PROJECT MANAGER:</b> Matt Bruck
<b>CLIENT:</b> Arconic Lafayette, LLC	<b>CLIENT CONTACT:</b> Robert Prezbindowski
<b>GENERAL CONTRACTOR:</b> O6 Environmental, LLC	<b>SITE SUPERINTENDENT:</b> Keegan Andrews

**THIS REPORT INCLUDES:**

<input checked="" type="checkbox"/> TEST RESULTS	<input checked="" type="checkbox"/> PHOTOGRAPHS	<input type="checkbox"/> SKETCH	<input type="checkbox"/> ATTACHMENTS
--	---	---------------------------------	--------------------------------------

**EQUIPMENT ONSITE:**

<u>Skid-steer:</u> CAT 289D <u>Excavator:</u> CAT 320 <u>Miscellaneous Equipment:</u> <ul style="list-style-type: none"><li>• Track Mats for access road</li><li>• Water buffalo.</li></ul>
---

**MATERIAL DELIVERED ONSITE:**

<ul style="list-style-type: none"><li>• None.</li></ul>
---

**OBSERVATIONS:**

<u>Site personnel includes:</u> <ul style="list-style-type: none"><li>• CEC<ul style="list-style-type: none"><li>○ Garrett Welch</li></ul></li><li>• O6ENV<ul style="list-style-type: none"><li>○ Caleb Tufts</li><li>○ Elvis Armstrong</li><li>○ Tyler Bundren</li><li>○ Nick Brucato</li></ul></li></ul>
--

**DAILY FIELD OBSERVATION REPORT  
CIVIL & ENVIRONMENTAL CONSULTANTS, INC.**

PAGE 2 OF 4
DATE: 10/5/2022
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- David Bottos

Onsite Activities:

- All O6ENV and CEC personnel arrive at Crestview Community Church parking lot at 0700.
- Morning health and safety meeting held prior to commencing the day's project activities. O6ENV to remind the haul truck drivers of children playing in the neighborhood and the need to proceed with caution.
- O6ENV completed daily equipment inspections.
- O6ENV posted truck traffic signs on Ortman Lane.
- O6ENV continued excavation on Subject Property 3 and over-excavation in grids that exceeded the RBRO in Subject Property 1 and 2. Excavated material was temporarily staged for truck loading.
- Two dedicated haul trucks were provided by the hauling subcontractor for today's activities. O6ENV loaded the dump trucks for offsite disposal at Republic's Walnut Creek Landfill. Each dump truck was supplied a disposal manifest signed by O6ENV. Prior to exiting the site, each dump truck was required to tarp (i.e., mechanically). All dump truck loads were inspected prior to leaving the site to ensure the loaded material was properly loaded and material was well contained.
  - Total loads for the day: 8
- O6ENV prepared the excavation bottoms and sidewalls for sampling. CEC collected the samples noted below. Samples were picked up by the courier and delivered to Eurofins, Chicago.
- CAT onsite to re-attach the flat edge plate onto the excavator bucket and service the excavator.
- O6ENV covered all temporarily stored excavated material with plastic sheeting prior to departing the site. Straw wattles were placed around the stockpile.
- All personnel offsite off-site 1700.

Excavation: Approximately 9,900 square feet excavated in Subject Property 1 through 3.

Transportation of non-TSCA regulated material (PCB <50 ppm) for offsite disposal:

- Off-site Disposal:

<b>Non-TSCA Regulated</b>	<b>Daily</b>	<b>To Date</b>
<b>Material Transported (tons)</b>	168.73	939.01
<b>Truckloads</b>	8	42

Backfill: Not Completed

Sampling:

- Excavation Bottoms:
  - ED-R3SL-039 through ED-R3SL-044
  - ED-R3SL-001-2
  - ED-R3SL-002-2
- Sidewalls:
  - ED-R3SL-SW007 through ED-R3SL-SW009
  - ED-R3SL-SW001-2

Laboratory Reports: See the analytical results table and updated sampling results figure that will be included with Report # 015 that will be provided on 10/7/2022.

The following samples exceeded the RBRO Limit:

- ED-R3SL-036
- ED-R3SL-SW005 and ED-R3SL-SW006

**DAILY FIELD OBSERVATION REPORT  
CIVIL & ENVIRONMENTAL CONSULTANTS, INC.**

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DATE: 10/5/2022

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**CONTRACT LINE ITEMS PERFORMED:**

- B1-6 Excavation, Management, and Disposal of Impacted Soil
  - B1-6.1 – Excavation of Impacted Soil
  - B1-6.2 – Staging/Stockpiling of Excavated Material
  - B1-6.3 – Load out of Excavated Material
  - B1-6.5 – Transportation of Impacted Material (RCRA Subtitle D Landfill)
  - B1-6.6 – Disposal of Impacted Material (RCRA Subtitle D Landfill)

**COMMUNICATION:**

**MEETINGS / DISCUSSIONS:**

- Weekly progress call with O6, CEC, and Arconic.

**UNEXPECTED, UNUSUAL, OR NONCONFORMING OBSERVATIONS:**

- The flat-edge plate had to be re-attached to the excavator bucket.

NOTICE: Our firm's professionals are represented on site solely to observe operations of the contractor identified, to form opinions about the adequacy of those operations, and to report those opinions to our client. The presence and activities of our field representative do not relieve the contractor from its obligation to meet contractual requirements. The contractor retains sole responsibility for site safety and the methods, operations, and sequences of construction.

**PHOTOGRAPHS**



Photograph 1 – Active reexcavation on Subject Property 1 (view facing east).

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**DAILY FIELD OBSERVATION REPORT**  
**CIVIL & ENVIRONMENTAL CONSULTANTS, INC.**  
2704 Cherokee Farm Way, Suite 101  
Knoxville, Tennessee 37920  
P: (865) 977-9997 F: (865) 977-9919

PAGE 1 OF 4
DATE: 10/6/2022
REPORT NO: 014

**PROJECT INFORMATION**

<b>PROJECT NAME:</b> Elliott Ditch Reach 3 Isolated Soil Remediation	
<b>LOCATION:</b> Reach 3	<b>CEC PROJECT:</b> 315-052
<b>PLANS AND SPECIFICATIONS BY:</b> CEC, Inc.	<b>WEATHER:</b> Light precipitation, high upper 50s F

**PERSONNEL**

<b>CEC FIELD REPRESENTATIVE:</b> G. Welch	<b>CEC PROJECT MANAGER:</b> Matt Bruck
<b>CLIENT:</b> Arconic Lafayette, LLC	<b>CLIENT CONTACT:</b> Robert Prezbindowski
<b>GENERAL CONTRACTOR:</b> O6 Environmental, LLC	<b>SITE SUPERINTENDENT:</b> Keegan Andrews

**THIS REPORT INCLUDES:**

<input checked="" type="checkbox"/> TEST RESULTS	<input checked="" type="checkbox"/> PHOTOGRAPHS	<input type="checkbox"/> SKETCH	<input type="checkbox"/> ATTACHMENTS
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**EQUIPMENT ONSITE:**

<u>Skid-steer:</u> CAT 289D <u>Excavator:</u> CAT 320 <u>Miscellaneous Equipment:</u> <ul style="list-style-type: none"><li>• Track Mats for access road.</li><li>• Water buffalo.</li></ul>
--

**MATERIAL DELIVERED ONSITE:**

<ul style="list-style-type: none"><li>• None.</li></ul>
---

**OBSERVATIONS:**

<u>Site personnel includes:</u> <ul style="list-style-type: none"><li>• CEC<ul style="list-style-type: none"><li>○ Garrett Welch</li></ul></li><li>• O6ENV<ul style="list-style-type: none"><li>○ Elvis Armstrong</li><li>○ Tyler Bundren</li><li>○ Nick Brucato</li><li>○ David Bottos</li></ul></li></ul>
---

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Onsite Activities:

- All O6ENV and CEC personnel arrive at Crestview Community Church parking lot at 0700.
- Morning health and safety meeting held prior to commencing the day's project activities. The team discussed the need for dust suppression and being proactive in implementing dust control. Also, with light morning precipitation, walking across wet surfaces was discussed.
- O6ENV completed daily equipment inspections.
- O6ENV posted truck traffic signs on Ortman Lane.
- O6ENV completed over-excavation in grids that exceeded the RBRO in Subject Property 1 and 2 and began excavation in Subject Property 6. Excavated material was temporarily staged for truck loading.
- The playset on Subject Property 6 was covered with plastic sheeting in advance of excavation activities.
- Dust control was implemented, as appropriate. O6ENV secured permission to fill the water buffalo at Crestview Community Church.
- Two dedicated haul trucks were provided by the hauling subcontractor for today's activities. O6ENV loaded the dump trucks for offsite disposal at Republic's Walnut Creek Landfill. Each dump truck was supplied a disposal manifest signed by O6ENV. Prior to exiting the site, each dump truck was required to tarp (i.e., mechanically). All dump truck loads were inspected prior to leaving the site to ensure the loaded material was properly loaded and material was well contained.
  - Total loads for the day: 7
- O6ENV prepared the excavation bottoms and sidewalls for sampling. CEC collected the samples noted below. Samples were picked up by the courier and delivered to Eurofins, Chicago.
- CAT onsite to service the mechanical issues with the skid steer around 1200. CAT offsite around 1330.
- GW requests for O6ENV to sweep haul road maps and clean Windmill Drive where mud was present from the haul trucks.
- O6ENV covered all temporarily stored excavated material with plastic sheeting prior to departing the site. Straw wattles were placed around the stockpile.
- All personnel offsite off-site 1700.

Excavation: Approximately 10,350 square feet excavated in Subject Property 1 through 3 and Property 6.

Transportation of non-TSCA regulated material (PCB <50 ppm) for offsite disposal:

- Off-site Disposal:

<b>Non-TSCA Regulated</b>	<b>Daily</b>	<b>To Date</b>
<b>Material Transported (tons)</b>	157.83	1,096.84
<b>Truckloads</b>	7	49

Backfill: Not Completed

Sampling:

- Excavation Bottoms:
  - ED-R3SL-003-2
  - ED-R3SL-004-2
  - ED-R3SL-014-1
  - ED-R3SL-023-1
  - ED-R3SL-025-1 through ED-R3SL-030-1
  - ED-R3SL-036-1
- Sidewalls:
  - ED-R3SL-SW005-1

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DATE: 10/6/2022

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- ED-R3SL-SW006-1

Laboratory Reports: See the analytical results table and updated sampling results figure that will be included with Report # 015 that will be provided on 10/7/2022.

The following samples exceeded the RBRO Limit:

- ED-R3SL-044
- ED-R3SL-SW001-2

**CONTRACT LINE ITEMS PERFORMED:**

- B1-6 Excavation, Management, and Disposal of Impacted Soil
  - B1-6.1 – Excavation of Impacted Soil
  - B1-6.2 – Staging/Stockpiling of Excavated Material
  - B1-6.3 – Load out of Excavated Material
  - B1-6.5 – Transportation of Impacted Material (RCRA Subtitle D Landfill)
  - B1-6.6 – Disposal of Impacted Material (RCRA Subtitle D Landfill)

**COMMUNICATION:**

**MEETINGS / DISCUSSIONS:**

- GW confirmed that the weekly SWPPP inspection was performed by O6ENV.

**UNEXPECTED, UNUSUAL, OR NONCONFORMING OBSERVATIONS:**

- The skid steer had mechanical issues and required repair by a CAT service technician.

NOTICE: Our firm's professionals are represented on site solely to observe operations of the contractor identified, to form opinions about the adequacy of those operations, and to report those opinions to our client. The presence and activities of our field representative do not relieve the contractor from its obligation to meet contractual requirements. The contractor retains sole responsibility for site safety and the methods, operations, and sequences of construction.

**DAILY FIELD OBSERVATION REPORT  
CIVIL & ENVIRONMENTAL CONSULTANTS, INC.**

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**PHOTOGRAPHS**



Photograph 1 – Water buffalo onsite for dust suppression.



Photograph 2 – Loading of haul trucks following excavation activities.



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DATE: 10/7/2022
REPORT NO: 015

**PROJECT INFORMATION**

<b>PROJECT NAME:</b> Elliott Ditch Reach 3 Isolated Soil Remediation	
<b>LOCATION:</b> Reach 3	<b>CEC PROJECT:</b> 315-052
<b>PLANS AND SPECIFICATIONS BY:</b> CEC, Inc.	<b>WEATHER:</b> Clear, high upper 50s F

**PERSONNEL**

<b>CEC FIELD REPRESENTATIVE:</b> G. Welch	<b>CEC PROJECT MANAGER:</b> Matt Bruck
<b>CLIENT:</b> Arconic Lafayette, LLC	<b>CLIENT CONTACT:</b> Robert Prezbindowski
<b>GENERAL CONTRACTOR:</b> O6 Environmental, LLC	<b>SITE SUPERINTENDENT:</b> Keegan Andrews

**THIS REPORT INCLUDES:**

<input checked="" type="checkbox"/> TEST RESULTS	<input checked="" type="checkbox"/> PHOTOGRAPHS	<input checked="" type="checkbox"/> SKETCH	<input type="checkbox"/> ATTACHMENTS
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**EQUIPMENT ONSITE:**

<u>Skid-steer:</u> CAT 289D <u>Excavator:</u> CAT 320 <u>Miscellaneous Equipment:</u> <ul style="list-style-type: none"><li>• Track mats for access road.</li><li>• Water buffalo.</li></ul>
--

**MATERIAL DELIVERED ONSITE:**

<ul style="list-style-type: none"><li>• None.</li></ul>
---

**OBSERVATIONS:**

<u>Site personnel includes:</u> <ul style="list-style-type: none"><li>• CEC<ul style="list-style-type: none"><li>○ Garrett Welch</li></ul></li><li>• O6ENV<ul style="list-style-type: none"><li>○ Elvis Armstrong</li><li>○ Tyler Bundren</li><li>○ Nick Brucato</li><li>○ David Bottos</li></ul></li></ul>
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**DAILY FIELD OBSERVATION REPORT  
CIVIL & ENVIRONMENTAL CONSULTANTS, INC.**

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Onsite Activities:

- All O6ENV and CEC personnel arrive at Crestview Community Church parking lot at 0700.
- Morning health and safety meeting held prior to commencing the day's project activities. The team discussed the importance of taking your time today and not rushing in advance of the weekend.
- O6ENV completed daily equipment inspections.
- O6ENV posted truck traffic signs on Ortman Lane.
- O6ENV completed over-excavation in grids that exceeded the RBRO in Subject Property 1 and 2 and continued excavation activities in Subject Property 6. Excavated material was temporarily staged for truck loading.
- The playset on Subject Property 6 was covered with plastic sheeting in advance of excavation activities.
- Dust control was implemented, as appropriate. O6ENV secured permission to fill the water buffalo at Crestview Community Church.
- Two dedicated haul trucks were provided by the hauling subcontractor for today's activities. O6ENV loaded the dump trucks for offsite disposal at Republic's Walnut Creek Landfill. Each dump truck was supplied a disposal manifest signed by O6ENV. Prior to exiting the site, each dump truck was required to tarp (i.e., mechanically). All dump truck loads were inspected prior to leaving the site to ensure the loaded material was properly loaded and material was well contained.
  - Total loads for the day: 8
- O6ENV prepared the excavation bottoms and sidewalls for sampling. CEC collected the samples noted below. Samples were picked up by the courier and delivered to Eurofins, Chicago.
- O6ENV covered all temporarily stored excavated material with plastic sheeting prior to departing the site. Straw wattles were placed around the stockpile. The site was secured for the weekend.
- All personnel offsite off-site 1700.

Excavation: Approximately 12,600 square feet excavated in Subject Property 1 through 3, and Property 6.

Transportation of non-TSCA regulated material (PCB <50 ppm) for offsite disposal:

- Off-site Disposal:

<b>Non-TSCA Regulated</b>	<b>Daily</b>	<b>To Date</b>
<b>Material Transported (tons)</b>	167.46	1,264.30
<b>Truckloads</b>	8	57

Backfill: Not Completed

Sampling:

- Excavation Bottoms:
  - ED-R3SL-044-1
  - ED-R3SL-045
  - ED-R3SL-060 through ED-R3SL-070
- Sidewalls:
  - ED-R3SL-SW001-3
  - ED-R3SL-SW017 through ED-R3SL-SW019

Laboratory Reports: See the analytical results table and updated sampling results figure attached to this report.

The following samples exceeded the RBRO Limit:

- ED-R3SL-003-2
- ED-R3SL-025-1 through ED-R3SL-030-1
- ED-R3SL-SW005-1 & ED-R3SL-SW006-1

**DAILY FIELD OBSERVATION REPORT  
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**CONTRACT LINE ITEMS PERFORMED:**

- B1-6 Excavation, Management, and Disposal of Impacted Soil
  - B1-6.1 – Excavation of Impacted Soil
  - B1-6.2 – Staging/Stockpiling of Excavated Material
  - B1-6.3 – Load out of Excavated Material
  - B1-6.5 – Transportation of Impacted Material (RCRA Subtitle D Landfill)
  - B1-6.6 – Disposal of Impacted Material (RCRA Subtitle D Landfill)

**COMMUNICATION:**

**MEETINGS / DISCUSSIONS:**

- GW contacted Subject Property 5's owner regarding several broken tree limbs caused by operation of the excavator. GW explained that the tree limbs would be remove the week of October 10, 2022.

**UNEXPECTED, UNUSUAL, OR NONCONFORMING OBSERVATIONS:**

- None.

NOTICE: Our firm's professionals are represented on site solely to observe operations of the contractor identified, to form opinions about the adequacy of those operations, and to report those opinions to our client. The presence and activities of our field representative do not relieve the contractor from its obligation to meet contractual requirements. The contractor retains sole responsibility for site safety and the methods, operations, and sequences of construction.

**PHOTOGRAPHS**



Photograph 1 – Excavation activities on Subject Property 6.

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Photograph 2 – View facing west of Subject Property 6 following excavation activities.



Photograph 2 – Excavation on Subject Property 6 near the former location of the property shed.

**Excavation Confirmation Sampling PCB Analytical Results**

Elliott Ditch - Reach 3 Soil

Arconic Lafayette Operations, Lafayette, Indiana

Type	Sample ID	Sample Date	Over - Excavation	PCB Aroclor (mg/Kg)						Total PCBs (mg/Kg)	
				1016	1221	1232	1242	1248	1254		1260
BE	ED-R3SL-001	9/26/2022	-	ND	ND	ND	ND	10	ND	ND	<b>10</b>
BE	ED-R3SL-DUP001 (ED-R3SL-001)	9/26/2022	-	ND	ND	ND	ND	12	ND	ND	<b>12</b>
BE	ED-R3SL-001-1	9/29/2022	1	ND	ND	ND	ND	5.5	ND	ND	<b>5.5</b>
BE	ED-R3SL-001-2	10/5/2022	2	ND	ND	ND	ND	0.93	ND	ND	<b>0.93</b>
BE	ED-R3SL-002	9/26/2022	-	ND	ND	ND	ND	6.3	ND	ND	<b>6.3</b>
BE	ED-R3SL-002-1	9/29/2022	1	ND	ND	ND	ND	11	ND	ND	<b>11</b>
BE	ED-R3SL-002-2	10/5/2022	2	ND	ND	ND	ND	0.47	ND	ND	<b>0.47</b>
BE	ED-R3SL-003	9/26/2022	-	ND	ND	ND	ND	1.6	ND	ND	<b>1.6</b>
BE	ED-R3SL-003-1	9/29/2022	1	ND	ND	ND	ND	2.6	ND	ND	<b>2.6</b>
BE	ED-R3SL-003-2	10/6/2022	2	ND	ND	ND	ND	1.1	ND	ND	<b>1.1</b>
BE	ED-R3SL-004	9/26/2022	-	ND	ND	ND	ND	4.4	ND	ND	<b>4.4</b>
BE	ED-R3SL-004-1	9/29/2022	1	ND	ND	ND	ND	13	ND	ND	<b>13</b>
BE	ED-R3SL-DUP002 (ED-R3SL-004-1)	9/29/2022	1	ND	ND	ND	ND	10	ND	ND	<b>10</b>
BE	ED-R3SL-004-2	10/6/2022	2	ND	ND	ND	ND	ND	ND	ND	<b>ND</b>
BE	ED-R3SL-DUP004 (ED-R3SL-004-2)	10/6/2022	2	ND	ND	ND	ND	ND	ND	ND	<b>ND</b>
BE	ED-R3SL-005	9/26/2022	-	ND	ND	ND	ND	1.0	ND	ND	<b>1.0</b>
BE	ED-R3SL-006	9/26/2022	-	ND	ND	ND	ND	0.53	ND	ND	<b>0.53</b>
BE	ED-R3SL-007	9/26/2022	-	ND	ND	ND	ND	1.3	ND	ND	<b>1.3</b>
BE	ED-R3SL-007-1	9/29/2022	1	ND	ND	ND	ND	ND	ND	ND	<b>ND</b>
BE	ED-R3SL-008	9/27/2022	-	ND	ND	ND	ND	1.8	ND	ND	<b>1.8</b>
BE	ED-R3SL-008-1	9/29/2022	1	ND	ND	ND	ND	ND	ND	ND	<b>ND</b>
BE	ED-R3SL-009	9/27/2022	-	ND	ND	ND	ND	ND	ND	ND	<b>ND</b>
BE	ED-R3SL-010	9/27/2022	-	ND	ND	ND	ND	1.2	ND	ND	<b>1.2</b>
BE	ED-R3SL-010-1	9/29/2022	1	ND	ND	ND	ND	0.57	ND	ND	<b>0.57</b>
BE	ED-R3SL-011	9/27/2022	-	ND	ND	ND	ND	0.45	ND	ND	<b>0.45</b>
BE	ED-R3SL-012	9/28/2022	-	ND	ND	ND	ND	0.34	ND	ND	<b>0.34</b>
BE	ED-R3SL-013	9/28/2022	-	ND	ND	ND	ND	ND	ND	ND	<b>ND</b>
BE	ED-R3SL-014	9/30/2022	-	ND	ND	ND	ND	1.5	ND	ND	<b>1.5</b>
BE	ED-R3SL-014-1	10/6/2022	1	ND	ND	ND	ND	ND	ND	ND	<b>ND</b>
BE	ED-R3SL-015	9/28/2022	-	ND	ND	ND	ND	0.68	ND	ND	<b>0.68</b>
BE	ED-R3SL-016	9/30/2022	-	ND	ND	ND	ND	0.38	ND	ND	<b>0.38</b>
BE	ED-R3SL-017	9/30/2022	-	ND	ND	ND	ND	ND	ND	ND	<b>ND</b>
BE	ED-R3SL-018	9/30/2022	-	ND	ND	ND	ND	0.67	ND	ND	<b>0.67</b>
BE	ED-R3SL-019	9/30/2022	-	ND	ND	ND	ND	0.29	ND	ND	<b>0.29</b>
BE	ED-R3SL-020	10/3/2022	-	ND	ND	ND	ND	0.37	ND	ND	<b>0.37</b>
BE	ED-R3SL-021	9/30/2022	-	ND	ND	ND	ND	0.43	ND	ND	<b>0.43</b>
BE	ED-R3SL-022	9/30/2022	-	ND	ND	ND	ND	ND	ND	ND	<b>ND</b>
BE	ED-R3SL-023	10/3/2022	-	ND	ND	ND	ND	2.8	ND	ND	<b>2.8</b>
BE	ED-R3SL-023-1	10/6/2022	1	ND	ND	ND	ND	0.29	ND	ND	<b>0.29</b>
BE	ED-R3SL-024	10/3/2022	-	ND	ND	ND	ND	0.63	ND	ND	<b>0.63</b>
BE	ED-R3SL-025	10/3/2022	-	ND	ND	ND	ND	4.8	ND	ND	<b>4.8</b>
BE	ED-R3SL-025-1	10/6/2022	1	ND	ND	ND	ND	1.2	ND	ND	<b>1.2</b>
BE	ED-R3SL-026	10/3/2022	-	ND	ND	ND	ND	3.9	ND	ND	<b>3.9</b>
BE	ED-R3SL-026-1	10/6/2022	1	ND	ND	ND	ND	1.5	ND	ND	<b>1.5</b>
BE	ED-R3SL-027	10/3/2022	-	ND	ND	ND	ND	2.0	ND	ND	<b>2.0</b>
BE	ED-R3SL-027-1	10/6/2022	1	ND	ND	ND	ND	1.4	ND	ND	<b>1.4</b>
BE	ED-R3SL-028	10/3/2022	-	ND	ND	ND	ND	1.6	ND	ND	<b>1.6</b>
BE	ED-R3SL-028-1	10/6/2022	1	ND	ND	ND	ND	1.6	ND	ND	<b>1.6</b>
BE	ED-R3SL-029	10/3/2022	-	ND	ND	ND	ND	1.6	ND	ND	<b>1.6</b>
BE	ED-R3SL-029-1	10/6/2022	1	ND	ND	ND	ND	2.6	ND	ND	<b>2.6</b>
BE	ED-R3SL-030	10/3/2022	-	ND	ND	ND	ND	9.0	ND	ND	<b>9.0</b>
BE	ED-R3SL-030-1	10/6/2022	1	ND	ND	ND	ND	2.3	ND	ND	<b>2.3</b>
BE	ED-R3SL-031	10/4/2022	-	ND	ND	ND	ND	0.29	ND	ND	<b>0.29</b>
BE	ED-R3SL-DUP003 (ED-R3SL-031)	10/4/2022	-	ND	ND	ND	ND	0.35	ND	ND	<b>0.35</b>
BE	ED-R3SL-032	10/4/2022	-	ND	ND	ND	ND	0.27	ND	ND	<b>0.27</b>
BE	ED-R3SL-033	10/4/2022	-	ND	ND	ND	ND	0.42	ND	ND	<b>0.42</b>

**Notes:**

Sample ID with "SW" indicates Sidewall Sample  
 ND = constituent detected below the laboratory RL of 0.5 mg/Kg  
 Red indicates an exceedance of 1.0 mg/Kg RBRO

**Excavation Confirmation Sampling PCB Analytical Results**

Elliott Ditch - Reach 3 Soil

Arconic Lafayette Operations, Lafayette, Indiana

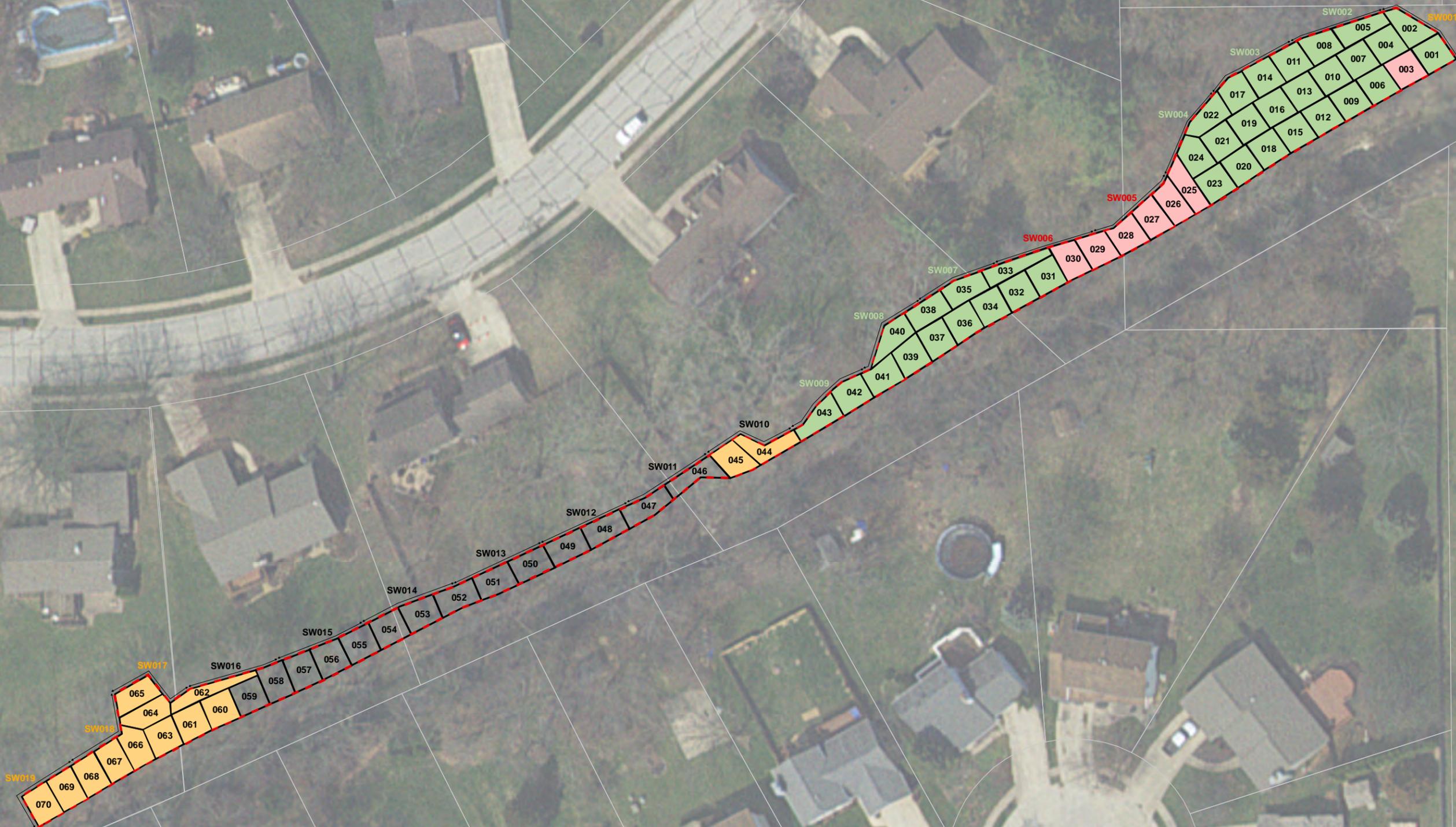
Type	Sample ID	Sample Date	Over - Excavation	PCB Aroclor (mg/Kg)						Total PCBs (mg/Kg)	
				1016	1221	1232	1242	1248	1254		1260
BE	ED-R3SL-034	10/4/2022	-	ND	ND	ND	ND	0.49	ND	ND	<b>0.49</b>
BE	ED-R3SL-035	10/4/2022	-	ND	ND	ND	ND	0.41	ND	ND	<b>0.41</b>
BE	ED-R3SL-036	10/4/2022	-	ND	ND	ND	ND	3.1	ND	ND	<b>3.1</b>
BE	ED-R3SL-036-1	10/6/2022	1	ND	ND	ND	ND	ND	ND	ND	<b>ND</b>
BE	ED-R3SL-037	10/4/2022	-	ND	ND	ND	ND	0.61	ND	ND	<b>0.61</b>
BE	ED-R3SL-038	10/4/2022	-	ND	ND	ND	ND	0.25	ND	ND	<b>0.25</b>
BE	ED-R3SL-039	10/5/2022	-	ND	ND	ND	ND	0.33	ND	ND	<b>0.33</b>
BE	ED-R3SL-040	10/5/2022	-	ND	ND	ND	ND	0.20	ND	ND	<b>0.20</b>
BE	ED-R3SL-041	10/5/2022	-	ND	ND	ND	ND	0.21	ND	ND	<b>0.21</b>
BE	ED-R3SL-042	10/5/2022	-	ND	ND	ND	ND	0.60	ND	ND	<b>0.6</b>
BE	ED-R3SL-043	10/5/2022	-	ND	ND	ND	ND	ND	ND	ND	<b>ND</b>
BE	ED-R3SL-044	10/5/2022	-	ND	ND	ND	ND	3.6	ND	ND	<b>3.6</b>
SW	ED-R3SL-SW001	9/26/2022	-	ND	ND	ND	ND	1.9	ND	ND	<b>1.9</b>
SW	ED-R3SL-SW001-1	9/29/2022	1	ND	ND	ND	ND	3.2	ND	ND	<b>3.2</b>
SW	ED-R3SL-SW001-2	10/5/2022	2	ND	ND	ND	ND	1.4	ND	ND	<b>1.4</b>
SW	ED-R3SL-SW002	9/27/2022	-	ND	ND	ND	ND	0.44	ND	ND	<b>0.44</b>
SW	ED-R3SL-SW003	9/30/2022	-	ND	ND	ND	ND	0.30	ND	ND	<b>0.30</b>
SW	ED-R3SL-SW004	10/3/2022	-	ND	ND	ND	ND	0.79	ND	ND	<b>0.79</b>
SW	ED-R3SL-SW005	10/4/2022	-	ND	ND	ND	ND	1.3	ND	ND	<b>1.3</b>
SW	ED-R3SL-SW005-1	10/6/2022	1	ND	ND	ND	ND	2.5	ND	ND	<b>2.5</b>
SW	ED-R3SL-SW006	10/4/2022	-	ND	ND	ND	ND	1.3	ND	ND	<b>1.3</b>
SW	ED-R3SL-SW006-1	10/6/2022	1	ND	ND	ND	ND	2.4	ND	ND	<b>2.4</b>
SW	ED-R3SL-SW007	10/5/2022	-	ND	ND	ND	ND	0.18	ND	ND	<b>0.18</b>
SW	ED-R3SL-SW008	10/5/2022	-	ND	ND	ND	ND	0.20	ND	ND	<b>0.20</b>
SW	ED-R3SL-SW009	10/5/2022	-	ND	ND	ND	ND	ND	ND	ND	<b>ND</b>

**Notes:**

Sample ID with "SW" indicates Sidewall Sample  
 ND = constituent detected below the laboratory RL of 0.5 mg/Kg  
 Red indicates an exceedance of 1.0 mg/Kg RBRO



NORTH



P:\310-000\315-052\GIS\Maps\F3 Soil Sampling Figures\_Trimble\315-052 Elliott Ditch Sampling Grid Reach 3.mxd 10/7/2022 17:12 PM (jrickford@brien)

**LEGEND**

<span style="display: inline-block; width: 15px; height: 10px; background-color: orange; border: 1px solid black;"></span>	Pending Sample Results
<span style="display: inline-block; width: 15px; height: 10px; background-color: pink; border: 1px solid black;"></span>	Sample Results > 1.0 mg/kg PCB
<span style="display: inline-block; width: 15px; height: 10px; background-color: lightgreen; border: 1px solid black;"></span>	Sample Results < 1.0 mg/kg PCB
<span style="display: inline-block; width: 15px; height: 10px; border: 2px dashed red;"></span>	Remediation Footprint
<span style="display: inline-block; width: 15px; height: 10px; border: 1px solid black;"></span>	DU Boundaries
<span style="display: inline-block; width: 15px; height: 10px; border: 1px solid gray;"></span>	Parcel Boundaries

**NOTE**  
Laboratory Analytical Results through 10/6

**REFERENCE**  
State of Indiana Best Available Orthophotography  
<https://imagery.gis.in.gov/arcgis/services/Imagery/BestAvailable/ImageServer>  
ACCESSED 10/9/2022



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[www.cecinc.com](http://www.cecinc.com)

ARCONIC LAFAYETTE LLC  
ISOLATED SOIL REMEDIATION  
ELLIOT DITCH - REACH 3  
LAFAYETTE, INDIANA

**REACH 3  
CONFIRMATION SAMPLING RESULTS**

DRAWN BY:	DRAFT	CHECKED BY:	DRAFT	APPROVED BY:	DRAFT*	FIGURE NO:	<b>1</b>
DATE:	October 09, 2022	SCALE:	1" = 50'	PROJECT NO:	315-052		



**DAILY FIELD OBSERVATION REPORT**  
**CIVIL & ENVIRONMENTAL CONSULTANTS, INC.**  
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REPORT NO: 016

**PROJECT INFORMATION**

<b>PROJECT NAME:</b> Elliott Ditch Reach 3 Isolated Soil Remediation	
<b>LOCATION:</b> Reach 3	<b>CEC PROJECT:</b> 315-052
<b>PLANS AND SPECIFICATIONS BY:</b> CEC, Inc.	<b>WEATHER:</b> Clear, low 70s F

**PERSONNEL**

<b>CEC FIELD REPRESENTATIVE:</b> G. Welch	<b>CEC PROJECT MANAGER:</b> Matt Bruck
<b>CLIENT:</b> Arconic Lafayette, LLC	<b>CLIENT CONTACT:</b> Robert Prezbindowski
<b>GENERAL CONTRACTOR:</b> O6 Environmental, LLC	<b>SITE SUPERINTENDENT:</b> Keegan Andrews

**THIS REPORT INCLUDES:**

<input checked="" type="checkbox"/> TEST RESULTS	<input checked="" type="checkbox"/> PHOTOGRAPHS	<input type="checkbox"/> SKETCH	<input type="checkbox"/> ATTACHMENTS
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**EQUIPMENT ONSITE:**

<u>Skid-steer:</u> CAT 289D <u>Excavator:</u> CAT 320 <u>Miscellaneous Equipment:</u> <ul style="list-style-type: none"><li>• Track mats for access road.</li><li>• Water buffalo.</li></ul>
--

**MATERIAL DELIVERED ONSITE:**

<ul style="list-style-type: none"><li>• None.</li></ul>
---

**OBSERVATIONS:**

<u>Site personnel includes:</u> <ul style="list-style-type: none"><li>• CEC<ul style="list-style-type: none"><li>○ Garrett Welch</li></ul></li><li>• O6ENV<ul style="list-style-type: none"><li>○ Elvis Armstrong</li><li>○ Tyler Bundren</li><li>○ Nick Brucato</li><li>○ David Bottos</li></ul></li></ul>
---

**DAILY FIELD OBSERVATION REPORT  
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Onsite Activities:

- All O6ENV and CEC personnel arrive at Crestview Community Church parking lot at 0700.
- Morning health and safety meeting held prior to commencing the day's project activities. The team discussed that today is a federal holiday and more children and residents may be around. As such, increased awareness is required when driving on Windmill Drive or operating heavy equipment.
- O6ENV completed daily equipment inspections.
- O6ENV posted truck traffic signs on Ortman Lane.
- O6ENV completed over-excavation in grids that exceeded the RBRO in Subject Property 1 and 2 and continued excavation activities in Subject Properties 4, 5, and 6. Excavated material was temporarily staged for truck loading.
- Dust control was implemented, as appropriate. O6ENV secured permission to fill the water buffalo at Crestview Community Church.
- Two dedicated haul trucks were provided by the hauling subcontractor for today's activities. O6ENV loaded the dump trucks for offsite disposal at Republic's Walnut Creek Landfill. Each dump truck was supplied a disposal manifest signed by O6ENV. Prior to exiting the site, each dump truck was required to tarp (i.e., mechanically). All dump truck loads were inspected prior to leaving the site to ensure the loaded material was properly loaded and material was well contained.
  - Total loads for the day: 8
- O6ENV prepared the excavation bottoms and sidewalls for sampling. CEC collected the samples noted below. Samples were picked up by the courier and delivered to Eurofins, Chicago.
- O6ENV covered all temporarily stored excavated material with plastic sheeting prior to departing the site. Straw wattles were placed around the stockpile. O6ENV also repaired snow fence and staked straw wattles to secure the work area.
- All personnel offsite off-site 1700.

Excavation: Approximately 12,375 square feet excavated in Subject Property 1 through 3, and Properties 4, 5 and 6.

Transportation of non-TSCA regulated material (PCB <50 ppm) for offsite disposal:

- Off-site Disposal:

<b>Non-TSCA Regulated</b>	<b>Daily</b>	<b>To Date</b>
<b>Material Transported (tons)</b>	167.91	1,432.21
<b>Truckloads</b>	8	65

Backfill: Not Completed

Sampling:

- Excavation Bottoms:
  - ED-R3SL-003-3
  - ED-R3SL-025-2 through ED-R3SL-030-2
  - ED-R3SL-057 through ED-R3SL-059
- Sidewalls:
  - ED-R3SL-SW005-2
  - ED-R3SL-SW006-2
  - ED-R3SL-SW016

Laboratory Reports: See the analytical results table and updated sampling results figure that will be included with Report # 020 that will be provided on 10/14/2022.

The following samples exceeded the RBRO Limit:

- ED-R3SL-SW001-3

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CIVIL & ENVIRONMENTAL CONSULTANTS, INC.**

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**CONTRACT LINE ITEMS PERFORMED:**

- B1-6 Excavation, Management, and Disposal of Impacted Soil
  - B1-6.1 – Excavation of Impacted Soil
  - B1-6.2 – Staging/Stockpiling of Excavated Material
  - B1-6.3 – Load out of Excavated Material
  - B1-6.5 – Transportation of Impacted Material (RCRA Subtitle D Landfill)
  - B1-6.6 – Disposal of Impacted Material (RCRA Subtitle D Landfill)

**COMMUNICATION:**

- MEETINGS / DISCUSSIONS:**
- None.

- UNEXPECTED, UNUSUAL, OR NONCONFORMING OBSERVATIONS:**
- None.

NOTICE: Our firm’s professionals are represented on site solely to observe operations of the contractor identified, to form opinions about the adequacy of those operations, and to report those opinions to our client. The presence and activities of our field representative do not relieve the contractor from its obligation to meet contractual requirements. The contractor retains sole responsibility for site safety and the methods, operations, and sequences of construction.

**PHOTOGRAPHS**



Photograph 1 – Over excavation of Grid 003. View facing west. No excavation performed to the south (toward Elliott Ditch) due to the presence of shot-crete and rip-rap installed overtop of the bank.

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Photograph 2 – View facing west of Subject Property 6 following over-excavation activities.



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**PROJECT INFORMATION**

<b>PROJECT NAME:</b> Elliott Ditch Reach 3 Isolated Soil Remediation	
<b>LOCATION:</b> Reach 3	<b>CEC PROJECT:</b> 315-052
<b>PLANS AND SPECIFICATIONS BY:</b> CEC, Inc.	<b>WEATHER:</b> Rain, upper 50s F

**PERSONNEL**

<b>CEC FIELD REPRESENTATIVE:</b> G. Welch	<b>CEC PROJECT MANAGER:</b> Matt Bruck
<b>CLIENT:</b> Arconic Lafayette, LLC	<b>CLIENT CONTACT:</b> Robert Prezbindowski
<b>GENERAL CONTRACTOR:</b> O6 Environmental, LLC	<b>SITE SUPERINTENDENT:</b> Keegan Andrews

**THIS REPORT INCLUDES:**

<input checked="" type="checkbox"/> TEST RESULTS	<input checked="" type="checkbox"/> PHOTOGRAPHS	<input type="checkbox"/> SKETCH	<input type="checkbox"/> ATTACHMENTS
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**EQUIPMENT ONSITE:**

<u>Skid-steer:</u> CAT 289D <u>Excavator:</u> CAT 320 <u>Miscellaneous Equipment:</u> <ul style="list-style-type: none"><li>• Track mats for access road.</li><li>• Water buffalo.</li></ul>
--

**MATERIAL DELIVERED ONSITE:**

<ul style="list-style-type: none"><li>• None.</li></ul>
---

**OBSERVATIONS:**

<u>Site personnel includes:</u> <ul style="list-style-type: none"><li>• CEC<ul style="list-style-type: none"><li>○ Garrett Welch</li></ul></li><li>• O6ENV<ul style="list-style-type: none"><li>○ Elvis Armstrong</li><li>○ Tyler Bundren</li><li>○ Nick Brucato</li><li>○ David Bottos</li></ul></li></ul>
---

**DAILY FIELD OBSERVATION REPORT  
CIVIL & ENVIRONMENTAL CONSULTANTS, INC.**

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Onsite Activities:

- All O6ENV and CEC personnel arrive at Crestview Community Church parking lot at 0700.
- Morning health and safety meeting held prior to commencing the day's project activities. The team discussed the weather forecast (rain). Personnel to maintain the haul road and use three points of contact when climbing equipment.
- O6ENV completed daily equipment inspections.
- O6ENV posted truck traffic signs on Ortman Lane.
- O6ENV completed over-excavation in grids that exceeded the RBRO in Subject Property 1 and continued excavation activities in Subject Properties 4. Excavated material was temporarily staged for truck loading.
- Dust control was implemented, as appropriate. O6ENV secured permission to fill the water buffalo at Crestview Community Church.
- Two dedicated haul trucks were provided by the hauling subcontractor for today's activities. O6ENV loaded the dump trucks for offsite disposal at Republic's Walnut Creek Landfill. Each dump truck was supplied a disposal manifest signed by O6ENV. Prior to exiting the site, each dump truck was required to tarp (i.e., mechanically). All dump truck loads were inspected prior to leaving the site to ensure the loaded material was properly loaded and material was well contained.
  - Total loads for the day: 7
- O6ENV prepared the excavation bottoms and sidewalls for sampling. CEC collected the samples noted below. Samples were picked up by the courier and delivered to Eurofins, Chicago.
- Excavation activities complete on all Subject Properties. Pending analytical results, over-excavation will be performed as necessary. All soil loaded and disposed of off-site; no soil staging required.
- All personnel offsite off-site 1445.

Excavation: Approximately 15,750 square feet excavated in Subject Properties 1 thru 6.

Transportation of non-TSCA regulated material (PCB <50 ppm) for offsite disposal:

- Off-site Disposal:

<b>Non-TSCA Regulated</b>	<b>Daily</b>	<b>To Date</b>
<b>Material Transported (tons)</b>	144.96	1,577.17
<b>Truckloads</b>	7	72

Backfill: Not Completed

Sampling:

- Excavation Bottoms:
  - ED-R3SL-046 through ED-R3SL-056
- Sidewalls:
  - ED-R3SL-SW001-4
  - ED-R3SL-SW0010 through ED-R3SL-SW015

Laboratory Reports: See the analytical results table and updated sampling results figure that will be included with Report # 020 that will be provided on 10/14/2022.

The following samples exceeded the RBRO Limit:

- Excavation Bottoms:
  - ED-R3SL-026-2 through ED-R3SL-029-2
  - ED-R3SL-003-3
- Sidewalls:

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- ED-R3SL-SW005-2

**CONTRACT LINE ITEMS PERFORMED:**

- B1-6 Excavation, Management, and Disposal of Impacted Soil
  - B1-6.1 – Excavation of Impacted Soil
  - B1-6.2 – Staging/Stockpiling of Excavated Material
  - B1-6.3 – Load out of Excavated Material
  - B1-6.5 – Transportation of Impacted Material (RCRA Subtitle D Landfill)
  - B1-6.6 – Disposal of Impacted Material (RCRA Subtitle D Landfill)

**COMMUNICATION:**

**MEETINGS / DISCUSSIONS:**

- Nothing to report.

**UNEXPECTED, UNUSUAL, OR NONCONFORMING OBSERVATIONS:**

- None.

NOTICE: Our firm's professionals are represented on site solely to observe operations of the contractor identified, to form opinions about the adequacy of those operations, and to report those opinions to our client. The presence and activities of our field representative do not relieve the contractor from its obligation to meet contractual requirements. The contractor retains sole responsibility for site safety and the methods, operations, and sequences of construction.

**PHOTOGRAPHS**



Photograph 1 – Soil excavation near the soil staging area (view facing east).

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Photograph 2 – Soil depleted following today’s excavation activities. Additional excavation will be performed pending failing analytical results.



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**PROJECT INFORMATION**

<b>PROJECT NAME:</b> Elliott Ditch Reach 3 Isolated Soil Remediation	
<b>LOCATION:</b> Reach 3	<b>CEC PROJECT:</b> 315-052
<b>PLANS AND SPECIFICATIONS BY:</b> CEC, Inc.	<b>WEATHER:</b> Rain, upper 50s F

**PERSONNEL**

<b>CEC FIELD REPRESENTATIVE:</b> G. Welch	<b>CEC PROJECT MANAGER:</b> Matt Bruck
<b>CLIENT:</b> Arconic Lafayette, LLC	<b>CLIENT CONTACT:</b> Robert Prezbindowski
<b>GENERAL CONTRACTOR:</b> O6 Environmental, LLC	<b>SITE SUPERINTENDENT:</b> Keegan Andrews

**THIS REPORT INCLUDES:**

<input checked="" type="checkbox"/> TEST RESULTS	<input checked="" type="checkbox"/> PHOTOGRAPHS	<input type="checkbox"/> SKETCH	<input type="checkbox"/> ATTACHMENTS
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**EQUIPMENT ONSITE:**

<u>Skid-steer:</u> CAT 289D, CAT 299D (2x) <u>Excavator:</u> CAT 320 <u>Miscellaneous Equipment:</u> <ul style="list-style-type: none"><li>• Track mats for access road.</li><li>• Water buffalo.</li></ul>
---

**MATERIAL DELIVERED ONSITE:**

<ul style="list-style-type: none"><li>• None.</li></ul>
---

**OBSERVATIONS:**

<u>Site personnel includes:</u> <ul style="list-style-type: none"><li>• CEC<ul style="list-style-type: none"><li>○ Garrett Welch</li></ul></li><li>• O6ENV<ul style="list-style-type: none"><li>○ Elvis Armstrong</li><li>○ Tyler Bundren</li><li>○ Nick Brucato</li><li>○ David Bottos</li></ul></li></ul>
---

**DAILY FIELD OBSERVATION REPORT  
CIVIL & ENVIRONMENTAL CONSULTANTS, INC.**

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Onsite Activities:

- All O6ENV and CEC personnel arrive at Crestview Community Church parking lot at 0700.
- Morning health and safety meeting held prior to commencing the day’s project activities. The team discussed the weather forecast (rain) and the lightning shutdown procedure.
- O6ENV completed daily equipment inspections.
- O6ENV posted truck traffic signs on Ortman Lane.
- O6ENV completed over-excavation in grids that exceeded the RBRO in Subject Property 1 and 2.
- Dust control was implemented, as appropriate. O6ENV secured permission to fill the water buffalo at Crestview Community Church.
- Two dedicated haul trucks were provided by the hauling subcontractor for today’s activities. O6ENV loaded the dump trucks for offsite disposal at Republic’s Walnut Creek Landfill. Each dump truck was supplied a disposal manifest signed by O6ENV. Prior to exiting the site, each dump truck was required to tarp (i.e., mechanically). All dump truck loads were inspected prior to leaving the site to ensure the loaded material was properly loaded and material was well contained.
  - Total loads for the day: 1
- O6ENV prepared the excavation bottoms and sidewalls for sampling. CEC collected the samples noted below. Samples were picked up by the courier and delivered to Eurofins, Chicago.
- Excavation activities complete on all Subject Properties. Pending analytical results, over-excavation will be performed as necessary. All soil loaded and disposed of off-site; no soil staging required.
- O6ENV began backfilling activities. Backfill soil sourced from Purdy Materials in Lafayette, Indiana. Fox Hauling provided two dedicated haul trucks to deliver the backfill soil to the site.
- Backfill soil was placed within passing grids near the project access road. Once placed, O6ENV utilized three skid-steers to transport the backfill soil to backfill the excavation. Excavation activities commenced on Subject Property 1 and Subject Property 6. Backfilling will progress from both directions toward the project access road (from east to west, and west to east). Total backfill brought onsite is provided below.
- All personnel offsite off-site 1700.

Excavation: Over-excavation in grids that exceeded the RBRO in Subject Property 1 and 2.

Transportation of non-TSCA regulated material (PCB <50 ppm) for offsite disposal:

- Off-site Disposal:

<b>Non-TSCA Regulated</b>	<b>Daily</b>	<b>To Date</b>
<b>Material Transported (tons)</b>	27.99	1,605.16
<b>Truckloads</b>	1	73

Backfill:

<b>Material</b>	<b>Daily</b>	<b>To Date</b>
<b>Backfill Soil</b>		
<i>Material Delivered (Tons)</i>	364.02	364.02
<i>Truckloads</i>	18	18
<b>Topsoil</b>		
<i>Material Delivered (Tons)</i>	0	0
<i>Truckloads</i>	0	0

Sampling:

- Excavation Bottoms:
  - ED-R3SL-026-3 through ED-R3SL-029-3

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- ED-R3SL-003-4
- Sidewalls:
  - ED-R3SL-SW005-3

Laboratory Reports: See the analytical results table and updated sampling results figure that will be included with Report # 020 that will be provided on 10/14/2022.

The following samples exceeded the RBRO Limit:

- ED-R3SL-SW014
- ED-R3SL-046

**CONTRACT LINE ITEMS PERFORMED:**

- B1-6 Excavation, Management, and Disposal of Impacted Soil
  - B1-6.1 – Excavation of Impacted Soil
  - B1-6.2 – Staging/Stockpiling of Excavated Material
  - B1-6.3 – Load out of Excavated Material
  - B1-6.5 – Transportation of Impacted Material (RCRA Subtitle D Landfill)
  - B1-6.6 – Disposal of Impacted Material (RCRA Subtitle D Landfill)
- B1-7 Restoration
  - B1-7.1.1 - Purchase, Transportation, and Delivery of Backfill Soil
  - B1-7.1.2 – Grade and Compact Excavation

**COMMUNICATION:**

**MEETINGS / DISCUSSIONS:**

- GW met the Subject Property Owners 2, 3, 5, and 6 to discuss additional tree clearing. CEC to provide an estimated appraisal value to each owner. GW also emailed Subject Property Owner 1 to notify the owner that additional tree clearing may be required.

**UNEXPECTED, UNUSUAL, OR NONCONFORMING OBSERVATIONS:**

- Due to precipitation, mud was being tracked on to Windmill Drive. CEC requested for O6ENV to clean the access road mats and Windmill Drive with the skid steer broom.

NOTICE: Our firm's professionals are represented on site solely to observe operations of the contractor identified, to form opinions about the adequacy of those operations, and to report those opinions to our client. The presence and activities of our field representative do not relieve the contractor from its obligation to meet contractual requirements. The contractor retains sole responsibility for site safety and the methods, operations, and sequences of construction.

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**PHOTOGRAPHS**



Photograph 1 – Backfill in progress on Subject Property 6 (view facing west)



Photograph 2 – Backfill delivery to the Site.

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CIVIL & ENVIRONMENTAL CONSULTANTS, INC.**

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Photograph 3 – Skid-steer with street sweeper attachment cleaning the Windmill Drive entrance.



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DATE: 10/13/2022
REPORT NO: 019

### PROJECT INFORMATION

<b>PROJECT NAME:</b> Elliott Ditch Reach 3 Isolated Soil Remediation	
<b>LOCATION:</b> Reach 3	<b>CEC PROJECT:</b> 315-052
<b>PLANS AND SPECIFICATIONS BY:</b> CEC, Inc.	<b>WEATHER:</b> Clear, upper 50s F

### PERSONNEL

<b>CEC FIELD REPRESENTATIVE:</b> G. Welch	<b>CEC PROJECT MANAGER:</b> Matt Bruck
<b>CLIENT:</b> Arconic Lafayette, LLC	<b>CLIENT CONTACT:</b> Robert Prezbindowski
<b>GENERAL CONTRACTOR:</b> O6 Environmental, LLC	<b>SITE SUPERINTENDENT:</b> Keegan Andrews

### THIS REPORT INCLUDES:

<input checked="" type="checkbox"/> TEST RESULTS	<input checked="" type="checkbox"/> PHOTOGRAPHS	<input type="checkbox"/> SKETCH	<input type="checkbox"/> ATTACHMENTS
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### EQUIPMENT ONSITE:

<u>Skid-steer:</u> CAT 289D, CAT 299D (2x) <u>Excavator:</u> CAT 320 <u>Miscellaneous Equipment:</u> <ul style="list-style-type: none"><li>• Track mats for access road.</li><li>• Water buffalo.</li></ul>
---

### MATERIAL DELIVERED ONSITE:

<ul style="list-style-type: none"><li>• Additional traction mats</li><li>• Backfill soil</li></ul>
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### OBSERVATIONS:

<u>Site personnel includes:</u> <ul style="list-style-type: none"><li>• CEC<ul style="list-style-type: none"><li>○ Garrett Welch</li></ul></li><li>• O6ENV<ul style="list-style-type: none"><li>○ Elvis Armstrong</li><li>○ Tyler Bundren</li><li>○ Nick Brucato</li><li>○ David Bottos</li></ul></li></ul>
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**DAILY FIELD OBSERVATION REPORT  
CIVIL & ENVIRONMENTAL CONSULTANTS, INC.**

PAGE 2 OF 4
DATE: 10/13/2022
REPORT NO: 019

**Onsite Activities:**

- All O6ENV and CEC personnel arrive at Crestview Community Church parking lot at 0730. Start time delayed to allow for suitable daylight.
- Morning health and safety meeting held prior to commencing the day's project activities. The team discussed operating the skid steers in close proximity to one another.
- O6ENV completed daily equipment inspections.
- O6ENV posted truck traffic signs on Ortman Lane.
- O6ENV completed over-excavation in grids that exceeded the RBRO in Subject Property 3 and 4.
- Dust control was implemented, as appropriate. O6ENV secured permission to fill the water buffalo at Crestview Community Church.
- Two dedicated haul trucks were provided by the hauling subcontractor for today's activities. O6ENV loaded the dump trucks for offsite disposal at Republic's Walnut Creek Landfill. Each dump truck was supplied a disposal manifest signed by O6ENV. Prior to exiting the site, each dump truck was required to tarp (i.e., mechanically). All dump truck loads were inspected prior to leaving the site to ensure the loaded material was properly loaded and material was well contained.
  - Total loads for the day: 1
- O6ENV prepared the excavation bottoms and sidewalls for sampling. CEC collected the samples noted below. Samples were picked up by the courier and delivered to Eurofins, Chicago.
- Excavation activities complete on all Subject Properties. Pending analytical results, over-excavation will be performed as necessary. All soil loaded and disposed of off-site; no soil staging required.
- Todd Tucker with TNT visited the site to review trees that may be cleared in advance of sod installation (pending property owner approval).
- Sodding contractor visits the site to review restoration areas.
- O6ENV continued backfilling activities. Backfill soil sourced from Purdy Materials in Lafayette, Indiana. Fox Hauling provided two dedicated haul trucks to deliver the backfill soil to the site.
- Backfill soil was placed within passing grids near the project access road for temporary staging. Once placed, O6ENV utilized three skid-steers to transport the backfill soil to backfill the excavation. Excavation activities were performed on all Subject Properties. Total backfill brought onsite is provided below.
- Sodding contractor visits the site to review restoration areas.
- Maintenance activities associated with the access road performed by O6ENV. Additionally, O6ENV swept Windmill Drive with a broom attachment on a skid steer.
- All personnel offsite at 1730.

Excavation: Over-excavation in grids that exceeded the RBRO in Subject Property 3 and 4.

Transportation of non-TSCA regulated material (PCB <50 ppm) for offsite disposal:

- Off-site Disposal:

<b>Non-TSCA Regulated</b>	<b>Daily</b>	<b>To Date</b>
<b>Material Transported (tons)</b>	24.36	1,629.52
<b>Truckloads</b>	1	74

Backfill:

<b>Material</b>	<b>Daily</b>	<b>To Date</b>
<b>Backfill Soil</b>		
<i>Material Delivered (Tons)</i>	446.99	811.01
<i>Truckloads</i>	22	40
<b>Topsoil</b>		
<i>Material Delivered (Tons)</i>	0	0

**DAILY FIELD OBSERVATION REPORT  
CIVIL & ENVIRONMENTAL CONSULTANTS, INC.**

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<i>Truckloads</i>	0	0
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**Sampling:**

- ED-R3SL-SW014
- ED-R3SL-046
- Excavation Bottoms:

**Laboratory Reports:** See the analytical results table and updated sampling results figure that will be included with Report # 020 that will be provided on 10/14/2022.

The following samples exceeded the RBRO Limit:

- Excavation Bottoms:
  - ED-R3SL-026-3 through ED-R3SL-029-3
- Sidewalls:
  - ED-R3SL-SW005-3

**CONTRACT LINE ITEMS PERFORMED:**

- B1-6 Excavation, Management, and Disposal of Impacted Soil
  - B1-6.1 – Excavation of Impacted Soil
  - B1-6.3 – Load out of Excavated Material
  - B1-6.5 – Transportation of Impacted Material (RCRA Subtitle D Landfill)
  - B1-6.6 – Disposal of Impacted Material (RCRA Subtitle D Landfill)
- B1-7 Restoration
  - B1-7.1.1 - Purchase, Transportation, and Delivery of Backfill Soil
  - B1-7.1.2 – Grade and Compact Excavation

**COMMUNICATION:**

**MEETINGS / DISCUSSIONS:**

- GW met the Subject Property Owner 4 to discuss additional tree clearing.

**UNEXPECTED, UNUSUAL, OR NONCONFORMING OBSERVATIONS:**

- Continued maintenance for the access hall route is required by O6ENV.

NOTICE: Our firm's professionals are represented on site solely to observe operations of the contractor identified, to form opinions about the adequacy of those operations, and to report those opinions to our client. The presence and activities of our field representative do not relieve the contractor from its obligation to meet contractual requirements. The contractor retains sole responsibility for site safety and the methods, operations, and sequences of construction.

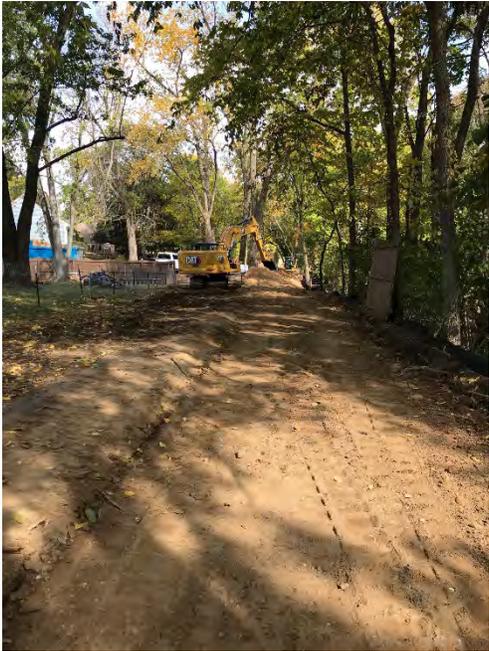
**PHOTOGRAPHS**

**DAILY FIELD OBSERVATION REPORT  
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Photograph 1 – Backfill in progress on Subject Property 6 (view facing west)



Photograph 2 – Backfill in progress on Subject Property 4 (view facing east)



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**CIVIL & ENVIRONMENTAL CONSULTANTS, INC.**  
2704 Cherokee Farm Way, Suite 101  
Knoxville, Tennessee 37920  
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PAGE 1 OF 3
DATE: 10/14/2022
REPORT NO: 020

**PROJECT INFORMATION**

<b>PROJECT NAME:</b> Elliott Ditch Reach 3 Isolated Soil Remediation	
<b>LOCATION:</b> Reach 3	<b>CEC PROJECT:</b> 315-052
<b>PLANS AND SPECIFICATIONS BY:</b> CEC, Inc.	<b>WEATHER:</b> Clear, upper 50s F

**PERSONNEL**

<b>CEC FIELD REPRESENTATIVE:</b> G. Welch/ J. Smith	<b>CEC PROJECT MANAGER:</b> Matt Bruck
<b>CLIENT:</b> Arconic Lafayette, LLC	<b>CLIENT CONTACT:</b> Robert Prezbindowski
<b>GENERAL CONTRACTOR:</b> O6 Environmental, LLC	<b>SITE SUPERINTENDENT:</b> Keegan Andrews

**THIS REPORT INCLUDES:**

<input checked="" type="checkbox"/> TEST RESULTS	<input type="checkbox"/> PHOTOGRAPHS	<input checked="" type="checkbox"/> SKETCH	<input type="checkbox"/> ATTACHMENTS
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**EQUIPMENT ONSITE:**

<u>Skid-steer:</u> CAT 289D, CAT 299D (2x) <u>Excavator:</u> CAT 320 <u>Miscellaneous Equipment:</u> <ul style="list-style-type: none"><li>• Track mats for access road.</li><li>• Water buffalo.</li></ul>
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**MATERIAL DELIVERED ONSITE:**

<ul style="list-style-type: none"><li>• Backfill soil</li></ul>
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**OBSERVATIONS:**

<u>Site personnel includes:</u> <ul style="list-style-type: none"><li>• CEC<ul style="list-style-type: none"><li>○ Garrett Welch</li><li>○ Justin Smith</li></ul></li><li>• O6ENV<ul style="list-style-type: none"><li>○ Elvis Armstrong</li><li>○ Tyler Bundren</li><li>○ Nick Brucato</li><li>○ David Bottos</li></ul></li></ul>
--

**DAILY FIELD OBSERVATION REPORT  
CIVIL & ENVIRONMENTAL CONSULTANTS, INC.**

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Onsite Activities:

- All O6ENV and CEC personnel arrive at Crestview Community Church parking lot at 0730.
- Morning health and safety meeting held prior to commencing the day’s project activities. The team discussed the access road mats being slippery from mud and the need to keep up with cleaning them throughout the day.
- O6ENV completed daily equipment inspections.
- O6ENV posted truck traffic signs on Ortman Lane.
- O6ENV completed over-excavation in grids that exceeded the RBRO in Subject Property 1 (Grid 026).
- Dust control was implemented, as appropriate. O6ENV secured permission to fill the water buffalo at Crestview Community Church.
- Two dedicated haul trucks were provided by the hauling subcontractor for today’s activities. O6ENV loaded the dump trucks for offsite disposal at Republic’s Walnut Creek Landfill. Each dump truck was supplied a disposal manifest signed by O6ENV. Prior to exiting the site, each dump truck was required to tarp (i.e., mechanically). All dump truck loads were inspected prior to leaving the site to ensure the loaded material was properly loaded and material was well contained.
  - Total loads for the day: 1
- O6ENV prepared the excavation bottoms for sampling. CEC collected the samples noted below. J. Smith, with CEC, will deliver the sample to TestAmerica in Chicago.
- Excavation activities complete on all Subject Properties. Pending analytical results, over-excavation will be performed as necessary. All soil loaded and disposed of off-site; no soil staging required.
- Patriot Engineering onsite to perform compaction testing. Formal report to be provided.
- O6ENV continued backfilling activities. Backfill soil sourced from Purdy Materials in Lafayette, Indiana. Fox Hauling provided two dedicated haul trucks to deliver the backfill soil to the site.
- Backfill soil was placed within passing grids near the project access road for temporary staging. Once placed, O6ENV utilized three skid-steers to transport to the soil to the required areas. Total backfill brought onsite is provided below.
- Maintenance activities associated with the access road performed by O6ENV. Additionally, O6ENV swept Windmill Drive with a skid steer equipped with a broom attachment.
- CEC offsite at 1400. All others offsite at 1630.

Excavation: O6ENV completed over-excavation in grids that exceeded the RBRO in Subject Property 1.

Transportation of non-TSCA regulated material (PCB <50 ppm) for offsite disposal:

- Off-site Disposal:

<b>Non-TSCA Regulated</b>	<b>Daily</b>	<b>To Date</b>
<b>Material Transported (tons)</b>	7.4	1,636.92
<b>Truckloads</b>	1	75

Backfill:

<b>Material</b>	<b>Daily</b>	<b>To Date</b>
<b>Backfill Soil</b>		
<i>Material Delivered (Tons)</i>	412.06	1,223.07
<i>Truckloads</i>	20	60
<b>Topsoil</b>		
<i>Material Delivered (Tons)</i>	0	0
<i>Truckloads</i>	0	0

**DAILY FIELD OBSERVATION REPORT  
CIVIL & ENVIRONMENTAL CONSULTANTS, INC.**

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DATE: 10/14/2022

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**Sampling:**

- ED-R3SL-026-4

**Laboratory Reports:** See the analytical results table and updated sampling results figure attached to this daily report.

The following samples exceeded the RBRO Limit:

- Sidewalls: ED-R3SL-SW014-1

**CONTRACT LINE ITEMS PERFORMED:**

- B1-6 Excavation, Management, and Disposal of Impacted Soil
  - B1-6.1 – Excavation of Impacted Soil
  - B1-6.3 – Load out of Excavated Material
  - B1-6.5 – Transportation of Impacted Material (RCRA Subtitle D Landfill)
  - B1-6.6 – Disposal of Impacted Material (RCRA Subtitle D Landfill)
- B1-7 Restoration
  - B1-7.1.1 - Purchase, Transportation, and Delivery of Backfill Soil
  - B1-7.1.2 – Grade and Compact Excavation

**COMMUNICATION:**

**MEETINGS / DISCUSSIONS:**

- None.

**UNEXPECTED, UNUSUAL, OR NONCONFORMING OBSERVATIONS:**

- Continued maintenance for the access hall route is required by O6ENV.

NOTICE: Our firm's professionals are represented on site solely to observe operations of the contractor identified, to form opinions about the adequacy of those operations, and to report those opinions to our client. The presence and activities of our field representative do not relieve the contractor from its obligation to meet contractual requirements. The contractor retains sole responsibility for site safety and the methods, operations, and sequences of construction.



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**CIVIL & ENVIRONMENTAL CONSULTANTS, INC.**  
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DATE: 10/17/2022
REPORT NO: 021

**PROJECT INFORMATION**

<b>PROJECT NAME:</b> Elliott Ditch Reach 3 Isolated Soil Remediation	
<b>LOCATION:</b> Reach 3	<b>CEC PROJECT:</b> 315-052
<b>PLANS AND SPECIFICATIONS BY:</b> CEC, Inc.	<b>WEATHER:</b> Clear, middle 40s F

**PERSONNEL**

<b>CEC FIELD REPRESENTATIVE:</b> J. Smith	<b>CEC PROJECT MANAGER:</b> Matt Bruck
<b>CLIENT:</b> Arconic Lafayette, LLC	<b>CLIENT CONTACT:</b> Robert Prezbindowski
<b>GENERAL CONTRACTOR:</b> O6 Environmental, LLC	<b>SITE SUPERINTENDENT:</b> Keegan Andrews

**THIS REPORT INCLUDES:**

<input type="checkbox"/> TEST RESULTS	<input checked="" type="checkbox"/> PHOTOGRAPHS	<input checked="" type="checkbox"/> SKETCH	<input type="checkbox"/> ATTACHMENTS
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**EQUIPMENT ONSITE:**

<u>Skid-steer:</u> CAT 289D, CAT 299D (2x) <u>Excavator:</u> CAT 320 <u>Miscellaneous Equipment:</u> <ul style="list-style-type: none"><li>• Track mats for access road.</li><li>• Water buffalo.</li></ul>
---

**MATERIAL DELIVERED ONSITE:**

<ul style="list-style-type: none"><li>• None</li></ul>
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**OBSERVATIONS:**

<u>Site personnel includes:</u> <ul style="list-style-type: none"><li>• CEC<ul style="list-style-type: none"><li>○ Justin Smith</li></ul></li><li>• O6ENV<ul style="list-style-type: none"><li>○ Elvis Armstrong</li><li>○ Tyler Bundren</li><li>○ Nick Brucato</li><li>○ David Bottos</li></ul></li></ul>
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**DAILY FIELD OBSERVATION REPORT  
CIVIL & ENVIRONMENTAL CONSULTANTS, INC.**

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DATE: 10/17/2022
REPORT NO: 021

Onsite Activities:

- All O6ENV and CEC personnel arrive at Crestview Community Church parking lot at 0730.
- Morning health and safety meeting held prior to commencing the day's project activities. The team discussed the need to keep the access roads clean and proper PPE is maintained throughout the day.
- O6ENV completed daily equipment inspections.
- O6ENV posted truck traffic signs on Ortman Lane.
- O6ENV completed over-excavation along a sidewalk that exceeded the RBRO in Subject Property 4 (Sidewall SW014).
- Dust control was implemented, as appropriate. O6ENV secured permission to fill the water buffalo at Crestview Community Church.
- Haul truck services not available today.
- CEC collected the sample noted below. Courier picked up sample and delivered to Eurofins TestAmerica (Chicago).
- Excavation activities complete on all Subject Properties. Pending analytical results, over-excavation will be performed as necessary. Excavated soil was placed on plastic tarp and covered and will remain on-site overnight.
- R.W. Gross & Associates arrived on site to assist in grading backfill on Subject Properties 4, 5 and 6.
- Maintenance activities associated with the access road performed by O6ENV. Additionally, O6ENV swept Windmill Drive with a skid steer equipped with a broom attachment.
- CEC offsite at 1700. All others offsite at 1715.

Excavation: O6ENV completed over-excavation in grids that exceeded the RBRO in Subject Property 4.

Transportation of non-TSCA regulated material (PCB <50 ppm) for offsite disposal:

- Off-site Disposal:

<b>Non-TSCA Regulated</b>	<b>Daily</b>	<b>To Date</b>
<b>Material Transported (tons)</b>	0	1,636.92
<b>Truckloads</b>	0	75

Backfill:

<b>Material</b>	<b>Daily</b>	<b>To Date</b>
<b>Backfill Soil</b>		
<i>Material Delivered (Tons)</i>	0	1,123.09
<i>Truckloads</i>	0	60
<b>Topsoil</b>		
<i>Material Delivered (Tons)</i>	0	0
<i>Truckloads</i>	0	0

Sampling:

- ED-R3SL-SW14-2

Laboratory Reports: See the analytical results table and updated sampling results figure that will be included with Report # 025 that will be provided on 10/21/2022.

The following samples exceeded the RBRO Limit:

- Bottom: ED-R3SL-026-4

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CIVIL & ENVIRONMENTAL CONSULTANTS, INC.**

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**CONTRACT LINE ITEMS PERFORMED:**

- B1-6 Excavation, Management, and Disposal of Impacted Soil
  - B1-6.1 – Excavation of Impacted Soil
  - B1-6.3 – Load out of Excavated Material
  - B1-6.5 – Transportation of Impacted Material (RCRA Subtitle D Landfill)
  - B1-6.6 – Disposal of Impacted Material (RCRA Subtitle D Landfill)
- B1-7 Restoration
  - B1-7.1.1 - Purchase, Transportation, and Delivery of Backfill Soil
  - B1-7.1.2 – Grade and Compact Excavation
- B1-9 Surveying
  - B1-9.3 – Post Excavation/Post Backfill

**COMMUNICATION:**

**MEETINGS / DISCUSSIONS:**

- None.

**UNEXPECTED, UNUSUAL, OR NONCONFORMING OBSERVATIONS:**

- Continued maintenance for the access hall route is required by O6ENV.

NOTICE: Our firm's professionals are represented on site solely to observe operations of the contractor identified, to form opinions about the adequacy of those operations, and to report those opinions to our client. The presence and activities of our field representative do not relieve the contractor from its obligation to meet contractual requirements. The contractor retains sole responsibility for site safety and the methods, operations, and sequences of construction.

**PHOTOGRAPHS**



Photograph 1 – R.W. Gross & Associates installed survey stakes in advance of final backfill installation.



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**PROJECT INFORMATION**

<b>PROJECT NAME:</b> Elliott Ditch Reach 3 Isolated Soil Remediation	
<b>LOCATION:</b> Reach 3	<b>CEC PROJECT:</b> 315-052
<b>PLANS AND SPECIFICATIONS BY:</b> CEC, Inc.	<b>WEATHER:</b> Clear, middle 40s F

**PERSONNEL**

<b>CEC FIELD REPRESENTATIVE:</b> J. Smith	<b>CEC PROJECT MANAGER:</b> Matt Bruck
<b>CLIENT:</b> Arconic Lafayette, LLC	<b>CLIENT CONTACT:</b> Robert Prezbindowski
<b>GENERAL CONTRACTOR:</b> O6 Environmental, LLC	<b>SITE SUPERINTENDENT:</b> Keegan Andrews

**THIS REPORT INCLUDES:**

<input type="checkbox"/> TEST RESULTS	<input checked="" type="checkbox"/> PHOTOGRAPHS	<input checked="" type="checkbox"/> SKETCH	<input type="checkbox"/> ATTACHMENTS
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**EQUIPMENT ONSITE:**

<u>Skid-steer:</u> CAT 289D, CAT 299D (2x) <u>Excavator:</u> CAT 320 <u>Miscellaneous Equipment:</u> <ul style="list-style-type: none"><li>• Track mats for access road.</li><li>• Water buffalo.</li></ul>
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**MATERIAL DELIVERED ONSITE:**

<ul style="list-style-type: none"><li>• None</li></ul>
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**OBSERVATIONS:**

<u>Site personnel includes:</u> <ul style="list-style-type: none"><li>• CEC<ul style="list-style-type: none"><li>○ Justin Smith</li></ul></li><li>• O6ENV<ul style="list-style-type: none"><li>○ Elvis Armstrong</li><li>○ Tyler Bundren</li><li>○ Nick Brucato</li><li>○ David Bottos</li></ul></li></ul>
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**DAILY FIELD OBSERVATION REPORT  
CIVIL & ENVIRONMENTAL CONSULTANTS, INC.**

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DATE: 10/17/2022
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Onsite Activities:

- All O6ENV and CEC personnel arrive at Crestview Community Church parking lot at 0730.
- Morning health and safety meeting held prior to commencing the day's project activities. The team discussed the need to keep the access roads clean and proper PPE is maintained throughout the day.
- O6ENV completed daily equipment inspections.
- O6ENV posted truck traffic signs on Ortman Lane.
- O6ENV completed over-excavation along a sidewalk that exceeded the RBRO in Subject Property 4 (Sidewall SW014).
- Dust control was implemented, as appropriate. O6ENV secured permission to fill the water buffalo at Crestview Community Church.
- Haul truck services not available today.
- CEC collected the sample noted below. Courier picked up sample and delivered to Eurofins TestAmerica (Chicago).
- Excavation activities complete on all Subject Properties. Pending analytical results, over-excavation will be performed as necessary. Excavated soil was placed on plastic tarp and covered and will remain on-site overnight.
- R.W. Gross & Associates arrived on site to assist in grading backfill on Subject Properties 4, 5 and 6.
- Maintenance activities associated with the access road performed by O6ENV. Additionally, O6ENV swept Windmill Drive with a skid steer equipped with a broom attachment.
- All personnel offsite at 1715.

Excavation: O6ENV completed over-excavation in grids that exceeded the RBRO in Subject Property 4.

Transportation of non-TSCA regulated material (PCB <50 ppm) for offsite disposal:

- Off-site Disposal:

<b>Non-TSCA Regulated</b>	<b>Daily</b>	<b>To Date</b>
<b>Material Transported (tons)</b>	0	1,636.92
<b>Truckloads</b>	0	75

Backfill:

<b>Material</b>	<b>Daily</b>	<b>To Date</b>
<b>Backfill Soil</b>		
<i>Material Delivered (Tons)</i>	0	1,223.07
<i>Truckloads</i>	0	60
<b>Topsoil</b>		
<i>Material Delivered (Tons)</i>	0	0
<i>Truckloads</i>	0	0

Sampling:

- ED-R3SL-SW14-2

Laboratory Reports: See the analytical results table included with Report # 025 that will be provided on 10/21/2022.

The following samples exceeded the RBRO Limit:

- Bottom: ED-R3SL-026-4

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**CONTRACT LINE ITEMS PERFORMED:**

- B1-6 Excavation, Management, and Disposal of Impacted Soil
  - B1-6.1 – Excavation of Impacted Soil
  - B1-6.3 – Load out of Excavated Material
  - B1-6.5 – Transportation of Impacted Material (RCRA Subtitle D Landfill)
  - B1-6.6 – Disposal of Impacted Material (RCRA Subtitle D Landfill)
- B1-7 Restoration
  - B1-7.1.1 - Purchase, Transportation, and Delivery of Backfill Soil
  - B1-7.1.2 – Grade and Compact Excavation
- B1-9 Surveying
  - B1-9.3 – Post Excavation/Post Backfill

**COMMUNICATION:**

**MEETINGS / DISCUSSIONS:**

- None.

**UNEXPECTED, UNUSUAL, OR NONCONFORMING OBSERVATIONS:**

- Continued maintenance for the access hall route is required by O6ENV.

NOTICE: Our firm's professionals are represented on site solely to observe operations of the contractor identified, to form opinions about the adequacy of those operations, and to report those opinions to our client. The presence and activities of our field representative do not relieve the contractor from its obligation to meet contractual requirements. The contractor retains sole responsibility for site safety and the methods, operations, and sequences of construction.

**PHOTOGRAPHS**



Photograph 1 – R.W. Gross & Associates installed survey stakes in advance of final backfill installation.



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DATE: 10/19/2022
REPORT NO: 023

**PROJECT INFORMATION**

<b>PROJECT NAME:</b> Elliott Ditch Reach 3 Isolated Soil Remediation	
<b>LOCATION:</b> Reach 3	<b>CEC PROJECT:</b> 315-052
<b>PLANS AND SPECIFICATIONS BY:</b> CEC, Inc.	<b>WEATHER:</b> Clear, middle 40s F

**PERSONNEL**

<b>CEC FIELD REPRESENTATIVE:</b> Luis Torres Aguilera	<b>CEC PROJECT MANAGER:</b> Matt Bruck
<b>CLIENT:</b> Arconic Lafayette, LLC	<b>CLIENT CONTACT:</b> Robert Prezbindowski
<b>GENERAL CONTRACTOR:</b> O6 Environmental, LLC	<b>SITE SUPERINTENDENT:</b> Keegan Andrews

**THIS REPORT INCLUDES:**

<input type="checkbox"/> TEST RESULTS	<input checked="" type="checkbox"/> PHOTOGRAPHS	<input type="checkbox"/> SKETCH	<input type="checkbox"/> ATTACHMENTS
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**EQUIPMENT ONSITE:**

<u>Skid-steer:</u> CAT 289D, CAT 299D (2x) <u>Excavator:</u> CAT 320 (removed at the end of the day) <u>Miscellaneous Equipment:</u> <ul style="list-style-type: none"><li>• Track mats for access road.</li><li>• Water buffalo.</li></ul>
---

**MATERIAL DELIVERED ONSITE:**

<ul style="list-style-type: none"><li>• Topsoil</li></ul>
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**OBSERVATIONS:**

<u>Site personnel includes:</u> <ul style="list-style-type: none"><li>• CEC<ul style="list-style-type: none"><li>○ Luis Torres Aguilera</li></ul></li><li>• O6ENV<ul style="list-style-type: none"><li>○ Elvis Armstrong</li><li>○ Tyler Bundren</li><li>○ Nick Brucato</li><li>○ David Bottos</li></ul></li></ul>
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CIVIL & ENVIRONMENTAL CONSULTANTS, INC.**

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DATE: 10/19/2022
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- RW Gross (Surveyors) - Crew of three

Onsite Activities:

- All O6ENV and CEC personnel arrive at Crestview Community Church parking lot at 0730.
- Morning health and safety meeting held prior to commencing the day’s project activities.
- O6ENV completed daily equipment inspections.
- O6ENV posted truck traffic signs on Ortman Lane.
- Dust control was implemented, as appropriate.
- O6ENV continued topsoil activities. Topsoil sourced from Purdy Materials in Lafayette, Indiana. Fox Hauling provided one dedicated haul truck to deliver the topsoil to the site.
- O6ENV distributed the topsoil across the Site to pre-excitation elevations. O6ENV utilized three skid-steers to transport the topsoil to the required areas. Total topsoil brought onsite is provided below.
- R.W. Gross & Associates onsite to assist in confirming topsoil elevations had been achieved.
- Maintenance activities associated with the access road performed by O6ENV. Additionally, O6ENV swept Windmill Drive with a skid steer equipped with a broom attachment.
- Excavator was demobilized from the site today.
- CEC and all others offsite at 1700.

Excavation: No excavation activities occurred today

Transportation of non-TSCA regulated material (PCB <50 ppm) for offsite disposal:

- Off-site Disposal: No off-site disposal occurred today

<b>Non-TSCA Regulated</b>	<b>Daily</b>	<b>To Date</b>
<b>Material Transported (tons)</b>	0	1,653.03
<b>Truckloads</b>	0	76

Backfill:

<b>Material</b>	<b>Daily</b>	<b>To Date</b>
<b>Backfill Soil</b>		
<i>Material Delivered (Tons)</i>	0	1,407.92
<i>Truckloads</i>	0	69
<b>Topsoil</b>		
<i>Material Delivered (Tons)</i>	216.35	317.63
<i>Truckloads</i>	11	16

Sampling: No sampling occurred today.

Laboratory Reports: No analytical results were received.

**CONTRACT LINE ITEMS PERFORMED:**

- B1-8 Erosion and Sedimentation Control
  - B1-8.1 – Inspections
  - B1-8.2 – Purchase, Delivery, and Topsoil Placement
- B1-9 Surveying
  - B1-9.3: Post Excavation/Post Backfill

**DAILY FIELD OBSERVATION REPORT  
CIVIL & ENVIRONMENTAL CONSULTANTS, INC.**

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DATE: 10/19/2022
REPORT NO: 023

**COMMUNICATION:**

**MEETINGS / DISCUSSIONS:**

- None.

**UNEXPECTED, UNUSUAL, OR NONCONFORMING OBSERVATIONS:**

- None

NOTICE: Our firm’s professionals are represented on site solely to observe operations of the contractor identified, to form opinions about the adequacy of those operations, and to report those opinions to our client. The presence and activities of our field representative do not relieve the contractor from its obligation to meet contractual requirements. The contractor retains sole responsibility for site safety and the methods, operations, and sequences of construction.

**PHOTOGRAPHS**



Photograph 1 – O6ENV distributing the topsoil across the Site.

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Photograph 2 – R.W. Gross confirming topsoil elevations.



**DAILY FIELD OBSERVATION REPORT**  
**CIVIL & ENVIRONMENTAL CONSULTANTS, INC.**  
2704 Cherokee Farm Way, Suite 101  
Knoxville, Tennessee 37920  
P: (865) 977-9997 F: (865) 977-9919

PAGE 1 OF 3
DATE: 10/20/2022
REPORT NO: 024

**PROJECT INFORMATION**

<b>PROJECT NAME:</b> Elliott Ditch Reach 3 Isolated Soil Remediation	
<b>LOCATION:</b> Reach 3	<b>CEC PROJECT:</b> 315-052
<b>PLANS AND SPECIFICATIONS BY:</b> CEC, Inc.	<b>WEATHER:</b> Clear, middle 50s F

**PERSONNEL**

<b>CEC FIELD REPRESENTATIVE:</b> Luis Torres Aguilera	<b>CEC PROJECT MANAGER:</b> Matt Bruck
<b>CLIENT:</b> Arconic Lafayette, LLC	<b>CLIENT CONTACT:</b> Robert Prezbindowski
<b>GENERAL CONTRACTOR:</b> O6 Environmental, LLC	<b>SITE SUPERINTENDENT:</b> Keegan Andrews

**THIS REPORT INCLUDES:**

<input type="checkbox"/> TEST RESULTS	<input checked="" type="checkbox"/> PHOTOGRAPHS	<input checked="" type="checkbox"/> SKETCH	<input type="checkbox"/> ATTACHMENTS
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**EQUIPMENT ONSITE:**

Skid-steer: CAT 289D, CAT 299D (2x)
<u>Miscellaneous Equipment:</u> <ul style="list-style-type: none"><li>• Track mats for access road.</li><li>• Water buffalo.</li></ul>

**MATERIAL DELIVERED ONSITE:**

<ul style="list-style-type: none"><li>• None</li></ul>
--

**OBSERVATIONS:**

<u>Site personnel includes:</u> <ul style="list-style-type: none"><li>• CEC<ul style="list-style-type: none"><li>○ Luis Torres Aguilera</li></ul></li><li>• O6ENV<ul style="list-style-type: none"><li>○ Elvis Armstrong</li><li>○ Tyler Bundren</li><li>○ Nick Brucato</li><li>○ David Bottos</li></ul></li></ul>
--

**DAILY FIELD OBSERVATION REPORT  
CIVIL & ENVIRONMENTAL CONSULTANTS, INC.**

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**Onsite Activities:**

- All O6ENV and CEC personnel arrive at Crestview Community Church parking lot at 0730.
- Morning health and safety meeting held prior to commencing the day's project activities.
- O6ENV completed daily equipment inspections.
- O6ENV posted truck traffic signs on Ortman Lane.
- Dust control was implemented, as appropriate.
- O6ENV raked the topsoil for sod installation.
- CEC & O6ENV tagged fifteen trees for potential removal.
- O6ENV begins preparation to re-install the residential fences that were removed.
- Skid Steers CAT 299D & CAT289D removed from the Site.
- CEC and all others offsite at 1600.

Excavation: No excavation activities occurred today

Transportation of non-TSCA regulated material (PCB <50 ppm) for offsite disposal:

- Off-site Disposal: No off-site disposal occurred today

<b>Non-TSCA Regulated</b>	<b>Daily</b>	<b>To Date</b>
<b>Material Transported (tons)</b>	0	1,653.03
<b>Truckloads</b>	0	76

Backfill: No backfilling occurred today

<b>Material</b>	<b>Daily</b>	<b>To Date</b>
<b>Backfill Soil</b>		
<i>Material Delivered (Tons)</i>	0	1,407.92
<i>Truckloads</i>	0	69
<b>Topsoil</b>		
<i>Material Delivered (Tons)</i>	0	317.63
<i>Truckloads</i>	0	16

Sampling: No sampling occurred today.

Laboratory Reports: No analytical results were received.

**CONTRACT LINE ITEMS PERFORMED:**

- B1-7 Restoration
  - B1-7.5 – Installation of Removed Chain Link Fence at Subject Property 6
- B1-8 Erosion and Sedimentation Control
  - B1-8.1 – Inspections
  - B1-8.2 – Purchase, Delivery, and Topsoil Placement

**COMMUNICATION:**

**MEETINGS / DISCUSSIONS:**

- None.

**UNEXPECTED, UNUSUAL, OR NONCONFORMING OBSERVATIONS:**

**DAILY FIELD OBSERVATION REPORT  
CIVIL & ENVIRONMENTAL CONSULTANTS, INC.**

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- None

NOTICE: Our firm's professionals are represented on site solely to observe operations of the contractor identified, to form opinions about the adequacy of those operations, and to report those opinions to our client. The presence and activities of our field representative do not relieve the contractor from its obligation to meet contractual requirements. The contractor retains sole responsibility for site safety and the methods, operations, and sequences of construction.

**PHOTOGRAPHS**



Photograph 1 – O6ENV raking the topsoil in advance of sod.



**DAILY FIELD OBSERVATION REPORT**  
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P: (865) 977-9997 F: (865) 977-9919

PAGE 1 OF 3
DATE: 10/21/2022
REPORT NO: 025

**PROJECT INFORMATION**

<b>PROJECT NAME:</b> Elliott Ditch Reach 3 Isolated Soil Remediation	
<b>LOCATION:</b> Reach 3	<b>CEC PROJECT:</b> 315-052
<b>PLANS AND SPECIFICATIONS BY:</b> CEC, Inc.	<b>WEATHER:</b> Clear, middle 50s F

**PERSONNEL**

<b>CEC FIELD REPRESENTATIVE:</b> Luis Torres Aguilera	<b>CEC PROJECT MANAGER:</b> Matt Bruck
<b>CLIENT:</b> Arconic Lafayette, LLC	<b>CLIENT CONTACT:</b> Robert Prezbindowski
<b>GENERAL CONTRACTOR:</b> O6 Environmental, LLC	<b>SITE SUPERINTENDENT:</b> Keegan Andrews

**THIS REPORT INCLUDES:**

<input checked="" type="checkbox"/> TEST RESULTS	<input checked="" type="checkbox"/> PHOTOGRAPHS	<input type="checkbox"/> SKETCH	<input type="checkbox"/> ATTACHMENTS
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**EQUIPMENT ONSITE:**

<u>Skid-steer:</u> CAT 299D
<u>Miscellaneous Equipment:</u> <ul style="list-style-type: none"><li>• Track mats for access road.</li></ul>

**MATERIAL DELIVERED ONSITE:**

<ul style="list-style-type: none"><li>• None</li></ul>
--

**OBSERVATIONS:**

<u>Site personnel includes:</u> <ul style="list-style-type: none"><li>• CEC<ul style="list-style-type: none"><li>○ Luis Torres Aguilera</li></ul></li><li>• O6ENV<ul style="list-style-type: none"><li>○ Tyler Bundren</li></ul></li><li>• TNT Tree Service</li></ul>
---

**DAILY FIELD OBSERVATION REPORT  
CIVIL & ENVIRONMENTAL CONSULTANTS, INC.**

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DATE: 10/21/2022
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**Onsite Activities:**

- All O6ENV and CEC personnel arrive at the Site around 0900.
- Morning health and safety meeting held prior to commencing the day's project activities.
- O6ENV posted truck traffic signs on Ortman Lane.
- Dust control was implemented, as appropriate.
- O6ENV continue preparation to reinstall fences.
- TNT arrived around 1245 to start removing the fifteen trees that were identified and discussed with property owners. TNT-Tree removed 5 trees and completed the rest (10) on Saturday (10/22).
- CEC and all others offsite at 1600.

**Excavation:** No excavation activities occurred today

**Transportation of non-TSCA regulated material (PCB <50 ppm) for offsite disposal:**

- Off-site Disposal: No off-site disposal occurred today

<b>Non-TSCA Regulated</b>	<b>Daily</b>	<b>To Date</b>
<b>Material Transported (tons)</b>	0	1,653.03
<b>Truckloads</b>	0	76

**Backfill:** No backfilling occurred today

<b>Material</b>	<b>Daily</b>	<b>To Date</b>
<b>Backfill Soil</b>		
<i>Material Delivered (Tons)</i>	0	1,407.92
<i>Truckloads</i>	0	69
<b>Topsoil</b>		
<i>Material Delivered (Tons)</i>	0	317.63
<i>Truckloads</i>	0	16

**Sampling:** No sampling occurred today.

**Laboratory Reports:** Analytical results from samples collected on 10/18 were received today. See the analytical results table attached.

**CONTRACT LINE ITEMS PERFORMED:**

- B1-7 Restoration
  - B1-7.5 – Installation of Removed Chain Link Fence at Subject Property 6
- Additional tree clearing

**COMMUNICATION:**

**MEETINGS / DISCUSSIONS:**

- None.

**UNEXPECTED, UNUSUAL, OR NONCONFORMING OBSERVATIONS:**

- Continued maintenance for the access hall route is required by O6ENV.

NOTICE: Our firm's professionals are represented on site solely to observe operations of the contractor identified, to form opinions about the adequacy of those operations, and to report those opinions to our client. The presence and activities of our field representative do not relieve the

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contractor from its obligation to meet contractual requirements. The contractor retains sole responsibility for site safety and the methods, operations, and sequences of construction.

**PHOTOGRAPHS**



Photograph 1 – View tagged trees to be removed.



Photograph 2 – View of TNT-Tree removing trees at the west end of the project Site.

**Excavation Confirmation Sampling PCB Analytical Results**

Elliott Ditch - Reach 3 Soil

Arconic Lafayette Operations, Lafayette, Indiana

Type	Sample ID	Sample Date	Over - Excavation	PCB Aroclor (mg/Kg)						Total PCBs (mg/Kg)	
				1016	1221	1232	1242	1248	1254		1260
BE	ED-R3SL-001	9/26/2022	-	ND	ND	ND	ND	10	ND	ND	<b>10</b>
BE	ED-R3SL-DUP001 (ED-R3SL-001)	9/26/2022	-	ND	ND	ND	ND	12	ND	ND	<b>12</b>
BE	ED-R3SL-001-1	9/29/2022	1	ND	ND	ND	ND	5.5	ND	ND	<b>5.5</b>
BE	ED-R3SL-001-2	10/5/2022	2	ND	ND	ND	ND	0.93	ND	ND	<b>0.93</b>
BE	ED-R3SL-002	9/26/2022	-	ND	ND	ND	ND	6.3	ND	ND	<b>6.3</b>
BE	ED-R3SL-002-1	9/29/2022	1	ND	ND	ND	ND	11	ND	ND	<b>11</b>
BE	ED-R3SL-002-2	10/5/2022	2	ND	ND	ND	ND	0.47	ND	ND	<b>0.47</b>
BE	ED-R3SL-003	9/26/2022	-	ND	ND	ND	ND	1.6	ND	ND	<b>1.6</b>
BE	ED-R3SL-003-1	9/29/2022	1	ND	ND	ND	ND	2.6	ND	ND	<b>2.6</b>
BE	ED-R3SL-003-2	10/6/2022	2	ND	ND	ND	ND	1.1	ND	ND	<b>1.1</b>
BE	ED-R3SL-003-3	10/10/2022	3	ND	ND	ND	ND	1.3	ND	ND	<b>1.3</b>
BE	ED-R3SL-003-4	10/12/2022	4	ND	ND	ND	ND	ND	ND	ND	<b>ND</b>
BE	ED-R3SL-004	9/26/2022	-	ND	ND	ND	ND	4.4	ND	ND	<b>4.4</b>
BE	ED-R3SL-004-1	9/29/2022	1	ND	ND	ND	ND	13	ND	ND	<b>13</b>
BE	ED-R3SL-DUP002 (ED-R3SL-004-1)	9/29/2022	1	ND	ND	ND	ND	10	ND	ND	<b>10</b>
BE	ED-R3SL-004-2	10/6/2022	2	ND	ND	ND	ND	ND	ND	ND	<b>ND</b>
BE	ED-R3SL-DUP004 (ED-R3SL-004-2)	10/6/2022	2	ND	ND	ND	ND	ND	ND	ND	<b>ND</b>
BE	ED-R3SL-005	9/26/2022	-	ND	ND	ND	ND	1.0	ND	ND	<b>1.0</b>
BE	ED-R3SL-006	9/26/2022	-	ND	ND	ND	ND	0.53	ND	ND	<b>0.53</b>
BE	ED-R3SL-007	9/26/2022	-	ND	ND	ND	ND	1.3	ND	ND	<b>1.3</b>
BE	ED-R3SL-007-1	9/29/2022	1	ND	ND	ND	ND	ND	ND	ND	<b>ND</b>
BE	ED-R3SL-008	9/27/2022	-	ND	ND	ND	ND	1.8	ND	ND	<b>1.8</b>
BE	ED-R3SL-008-1	9/29/2022	1	ND	ND	ND	ND	ND	ND	ND	<b>ND</b>
BE	ED-R3SL-009	9/27/2022	-	ND	ND	ND	ND	ND	ND	ND	<b>ND</b>
BE	ED-R3SL-010	9/27/2022	-	ND	ND	ND	ND	1.2	ND	ND	<b>1.2</b>
BE	ED-R3SL-010-1	9/29/2022	1	ND	ND	ND	ND	0.57	ND	ND	<b>0.57</b>
BE	ED-R3SL-011	9/27/2022	-	ND	ND	ND	ND	0.45	ND	ND	<b>0.45</b>
BE	ED-R3SL-012	9/28/2022	-	ND	ND	ND	ND	0.34	ND	ND	<b>0.34</b>
BE	ED-R3SL-013	9/28/2022	-	ND	ND	ND	ND	ND	ND	ND	<b>ND</b>
BE	ED-R3SL-014	9/30/2022	-	ND	ND	ND	ND	1.5	ND	ND	<b>1.5</b>
BE	ED-R3SL-014-1	10/6/2022	1	ND	ND	ND	ND	ND	ND	ND	<b>ND</b>
BE	ED-R3SL-015	9/28/2022	-	ND	ND	ND	ND	0.68	ND	ND	<b>0.68</b>
BE	ED-R3SL-016	9/30/2022	-	ND	ND	ND	ND	0.38	ND	ND	<b>0.38</b>
BE	ED-R3SL-017	9/30/2022	-	ND	ND	ND	ND	ND	ND	ND	<b>ND</b>
BE	ED-R3SL-018	9/30/2022	-	ND	ND	ND	ND	0.67	ND	ND	<b>0.67</b>
BE	ED-R3SL-019	9/30/2022	-	ND	ND	ND	ND	0.29	ND	ND	<b>0.29</b>
BE	ED-R3SL-020	10/3/2022	-	ND	ND	ND	ND	0.37	ND	ND	<b>0.37</b>
BE	ED-R3SL-021	9/30/2022	-	ND	ND	ND	ND	0.43	ND	ND	<b>0.43</b>
BE	ED-R3SL-022	9/30/2022	-	ND	ND	ND	ND	ND	ND	ND	<b>ND</b>
BE	ED-R3SL-023	10/3/2022	-	ND	ND	ND	ND	2.8	ND	ND	<b>2.8</b>
BE	ED-R3SL-023-1	10/6/2022	1	ND	ND	ND	ND	0.29	ND	ND	<b>0.29</b>
BE	ED-R3SL-024	10/3/2022	-	ND	ND	ND	ND	0.63	ND	ND	<b>0.63</b>
BE	ED-R3SL-025	10/3/2022	-	ND	ND	ND	ND	4.8	ND	ND	<b>4.8</b>
BE	ED-R3SL-025-1	10/6/2022	1	ND	ND	ND	ND	1.2	ND	ND	<b>1.2</b>
BE	ED-R3SL-025-2	10/10/2022	2	ND	ND	ND	ND	1.0	ND	ND	<b>1.0</b>
BE	ED-R3SL-026	10/3/2022	-	ND	ND	ND	ND	3.9	ND	ND	<b>3.9</b>
BE	ED-R3SL-026-1	10/6/2022	1	ND	ND	ND	ND	1.5	ND	ND	<b>1.5</b>
BE	ED-R3SL-026-2	10/10/2022	2	ND	ND	ND	ND	1.5	ND	ND	<b>1.5</b>
BE	ED-R3SL-026-3	10/12/2022	3	ND	ND	ND	ND	2.4	ND	ND	<b>2.4</b>
BE	ED-R3SL-026-4	10/14/2022	4	ND	ND	ND	ND	2.6	ND	ND	<b>2.6</b>
BE	ED-R3SL-027	10/3/2022	-	ND	ND	ND	ND	2.0	ND	ND	<b>2.0</b>
BE	ED-R3SL-027-1	10/6/2022	1	ND	ND	ND	ND	1.4	ND	ND	<b>1.4</b>
BE	ED-R3SL-027-2	10/10/2022	2	ND	ND	ND	ND	1.4	ND	ND	<b>1.4</b>
BE	ED-R3SL-027-3	10/12/2022	3	ND	ND	ND	ND	2.4	ND	ND	<b>2.4</b>
BE	ED-R3SL-027-4	10/18/2022	4	ND	ND	ND	ND	0.57	ND	ND	<b>0.57</b>
BE	ED-R3SL-028	10/3/2022	-	ND	ND	ND	ND	1.6	ND	ND	<b>1.6</b>

**Notes:**

Sample ID with "SW" indicates Sidewall Sample  
 ND = constituent detected below the laboratory RL of 0.5 mg/Kg  
 Red indicates an exceedance of 1.0 mg/Kg RBRO

**Excavation Confirmation Sampling PCB Analytical Results**

Elliott Ditch - Reach 3 Soil

Arconic Lafayette Operations, Lafayette, Indiana

Type	Sample ID	Sample Date	Over - Excavation	PCB Aroclor (mg/Kg)						Total PCBs (mg/Kg)	
				1016	1221	1232	1242	1248	1254		1260
BE	ED-R3SL-028-1	10/6/2022	1	ND	ND	ND	ND	1.6	ND	ND	1.6
BE	ED-R3SL-028-2	10/10/2022	2	ND	ND	ND	ND	1.5	ND	ND	1.5
BE	ED-R3SL-028-3	10/12/2022	3	ND	ND	ND	ND	1.5	ND	ND	1.5
BE	ED-R3SL-028-4	10/18/2022	4	ND	ND	ND	ND	0.62	ND	ND	0.62
BE	ED-R3SL-029	10/3/2022	-	ND	ND	ND	ND	1.6	ND	ND	1.6
BE	ED-R3SL-029-1	10/6/2022	1	ND	ND	ND	ND	2.6	ND	ND	2.6
BE	ED-R3SL-029-2	10/10/2022	2	ND	ND	ND	ND	1.1	ND	ND	1.1
BE	ED-R3SL-029-3	10/12/2022	3	ND	ND	ND	ND	1.6	ND	ND	1.6
BE	ED-R3SL-029-4	10/18/2022	4	ND	ND	ND	ND	1.4	ND	ND	1.4
BE	ED-R3SL-030	10/3/2022	-	ND	ND	ND	ND	9.0	ND	ND	9.0
BE	ED-R3SL-030-1	10/6/2022	1	ND	ND	ND	ND	2.3	ND	ND	2.3
BE	ED-R3SL-030-2	10/10/2022	2	ND	ND	ND	ND	0.96	ND	ND	0.96
BE	ED-R3SL-031	10/4/2022	-	ND	ND	ND	ND	0.29	ND	ND	0.29
BE	ED-R3SL-DUP003 (ED-R3SL-031)	10/4/2022	-	ND	ND	ND	ND	0.35	ND	ND	0.35
BE	ED-R3SL-032	10/4/2022	-	ND	ND	ND	ND	0.27	ND	ND	0.27
BE	ED-R3SL-033	10/4/2022	-	ND	ND	ND	ND	0.42	ND	ND	0.42
BE	ED-R3SL-034	10/4/2022	-	ND	ND	ND	ND	0.49	ND	ND	0.49
BE	ED-R3SL-035	10/4/2022	-	ND	ND	ND	ND	0.41	ND	ND	0.41
BE	ED-R3SL-036	10/4/2022	-	ND	ND	ND	ND	3.1	ND	ND	3.1
BE	ED-R3SL-036-1	10/6/2022	1	ND	ND	ND	ND	ND	ND	ND	ND
BE	ED-R3SL-037	10/4/2022	-	ND	ND	ND	ND	0.61	ND	ND	0.61
BE	ED-R3SL-038	10/4/2022	-	ND	ND	ND	ND	0.25	ND	ND	0.25
BE	ED-R3SL-039	10/5/2022	-	ND	ND	ND	ND	0.33	ND	ND	0.33
BE	ED-R3SL-040	10/5/2022	-	ND	ND	ND	ND	0.20	ND	ND	0.20
BE	ED-R3SL-041	10/5/2022	-	ND	ND	ND	ND	0.21	ND	ND	0.21
BE	ED-R3SL-042	10/5/2022	-	ND	ND	ND	ND	0.60	ND	ND	0.6
BE	ED-R3SL-043	10/5/2022	-	ND	ND	ND	ND	ND	ND	ND	ND
BE	ED-R3SL-044	10/5/2022	-	ND	ND	ND	ND	3.6	ND	ND	3.6
BE	ED-R3SL-044-1	10/7/2022	1	ND	ND	ND	ND	0.40	ND	ND	0.40
BE	ED-R3SL-045	10/7/2022	-	ND	ND	ND	ND	0.68	ND	ND	0.68
BE	ED-R3SL-046	10/11/2022	-	ND	ND	ND	ND	1.2	ND	ND	1.2
BE	ED-R3SL-DUP007 (ED-R3SL-046)	10/11/2022	-	ND	ND	ND	ND	1.4	ND	ND	1.4
BE	ED-R3SL-046-1	10/13/2022	1	ND	ND	ND	ND	ND	ND	ND	ND
BE	ED-R3SL-047	10/11/2022	-	ND	ND	ND	ND	0.61	ND	ND	0.61
BE	ED-R3SL-048	10/11/2022	-	ND	ND	ND	ND	0.55	ND	ND	0.55
BE	ED-R3SL-049	10/11/2022	-	ND	ND	ND	ND	ND	ND	ND	ND
BE	ED-R3SL-050	10/11/2022	-	ND	ND	ND	ND	0.53	ND	ND	0.53
BE	ED-R3SL-051	10/11/2022	-	ND	ND	ND	ND	ND	ND	ND	ND
BE	ED-R3SL-052	10/11/2022	-	ND	ND	ND	ND	1.0	ND	ND	1.0
BE	ED-R3SL-053	10/11/2022	-	ND	ND	ND	ND	0.54	ND	ND	0.54
BE	ED-R3SL-054	10/11/2022	-	ND	ND	ND	ND	0.19	ND	ND	0.19
BE	ED-R3SL-055	10/11/2022	-	ND	ND	ND	ND	0.32	ND	ND	0.32
BE	ED-R3SL-056	10/11/2022	-	ND	ND	ND	ND	0.98	ND	ND	0.98
BE	ED-R3SL-DUP006 (ED-R3SL-056)	10/11/2022	-	ND	ND	ND	ND	0.63	ND	ND	0.63
BE	ED-R3SL-057	10/10/2022	-	ND	ND	ND	ND	0.40	ND	ND	0.40
BE	ED-R3SL-058	10/10/2022	-	ND	ND	ND	ND	0.21	ND	ND	0.21
BE	ED-R3SL-059	10/10/2022	-	ND	ND	ND	ND	0.20	ND	ND	0.20
BE	ED-R3SL-060	10/7/2022	-	ND	ND	ND	ND	ND	ND	ND	ND
BE	ED-R3SL-061	10/7/2022	-	ND	ND	ND	ND	ND	ND	ND	ND
BE	ED-R3SL-062	10/7/2022	-	ND	ND	ND	ND	ND	ND	ND	ND
BE	ED-R3SL-063	10/7/2022	-	ND	ND	ND	ND	ND	ND	ND	ND
BE	ED-R3SL-064	10/7/2022	-	ND	ND	ND	ND	ND	ND	ND	ND
BE	ED-R3SL-065	10/7/2022	-	ND	ND	ND	ND	ND	ND	ND	ND
BE	ED-R3SL-066	10/7/2022	-	ND	ND	ND	ND	ND	ND	ND	ND
BE	ED-R3SL-067	10/7/2022	-	ND	ND	ND	ND	ND	ND	ND	ND
BE	ED-R3SL-068	10/7/2022	-	ND	ND	ND	ND	ND	ND	ND	ND

**Notes:**

Sample ID with "SW" indicates Sidewall Sample  
 ND = constituent detected below the laboratory RL of 0.5 mg/Kg  
 Red indicates an exceedance of 1.0 mg/Kg RBRO

**Excavation Confirmation Sampling PCB Analytical Results**

Elliott Ditch - Reach 3 Soil

Arconic Lafayette Operations, Lafayette, Indiana

Type	Sample ID	Sample Date	Over - Excavation	PCB Aroclor (mg/Kg)						Total PCBs (mg/Kg)	
				1016	1221	1232	1242	1248	1254		1260
BE	ED-R3SL-DUP005 (ED-R3SL-068)	10/7/2022	-	ND	ND	ND	ND	0.29	ND	ND	<b>0.29</b>
BE	ED-R3SL-069	10/7/2022	-	ND	ND	ND	ND	0.77	ND	ND	<b>0.77</b>
BE	ED-R3SL-070	10/7/2022	-	ND	ND	ND	ND	ND	ND	ND	<b>ND</b>
SW	ED-R3SL-SW001	9/26/2022	-	ND	ND	ND	ND	1.9	ND	ND	<b>1.9</b>
SW	ED-R3SL-SW001-1	9/29/2022	1	ND	ND	ND	ND	3.2	ND	ND	<b>3.2</b>
SW	ED-R3SL-SW001-2	10/5/2022	2	ND	ND	ND	ND	1.4	ND	ND	<b>1.4</b>
SW	ED-R3SL-SW001-3	10/7/2022	3	ND	ND	ND	ND	2.8	ND	ND	<b>2.8</b>
SW	ED-R3SL-SW001-4	10/11/2022	4	ND	ND	ND	ND	0.69	ND	ND	<b>0.69</b>
SW	ED-R3SL-SW002	9/27/2022	-	ND	ND	ND	ND	0.44	ND	ND	<b>0.44</b>
SW	ED-R3SL-SW003	9/30/2022	-	ND	ND	ND	ND	0.30	ND	ND	<b>0.30</b>
SW	ED-R3SL-SW004	10/3/2022	-	ND	ND	ND	ND	0.79	ND	ND	<b>0.79</b>
SW	ED-R3SL-SW005	10/4/2022	-	ND	ND	ND	ND	1.3	ND	ND	<b>1.3</b>
SW	ED-R3SL-SW005-1	10/6/2022	1	ND	ND	ND	ND	2.5	ND	ND	<b>2.5</b>
SW	ED-R3SL-SW005-2	10/10/2022	2	ND	ND	ND	ND	1.2	ND	ND	<b>1.2</b>
SW	ED-R3SL-SW005-3	10/12/2022	3	ND	ND	ND	ND	1.1	ND	ND	<b>1.1</b>
SW	ED-R3SL-SW006	10/4/2022	-	ND	ND	ND	ND	1.3	ND	ND	<b>1.3</b>
SW	ED-R3SL-SW006-1	10/6/2022	1	ND	ND	ND	ND	2.4	ND	ND	<b>2.4</b>
SW	ED-R3SL-SW006-2	10/10/2022	2	ND	ND	ND	ND	0.58	ND	ND	<b>0.58</b>
SW	ED-R3SL-SW007	10/5/2022	-	ND	ND	ND	ND	0.18	ND	ND	<b>0.18</b>
SW	ED-R3SL-SW008	10/5/2022	-	ND	ND	ND	ND	0.20	ND	ND	<b>0.20</b>
SW	ED-R3SL-SW009	10/5/2022	-	ND	ND	ND	ND	ND	ND	ND	<b>ND</b>
SW	ED-R3SL-SW010	10/11/2022	-	ND	ND	ND	ND	0.77	ND	ND	<b>0.77</b>
SW	ED-R3SL-SW011	10/11/2022	-	ND	ND	ND	ND	0.25	ND	ND	<b>0.25</b>
SW	ED-R3SL-SW012	10/11/2022	-	ND	ND	ND	ND	0.28	ND	ND	<b>0.28</b>
SW	ED-R3SL-SW013	10/11/2022	-	ND	ND	ND	ND	0.62	ND	ND	<b>0.62</b>
SW	ED-R3SL-SW014	10/11/2022	-	ND	ND	ND	ND	5.2	ND	ND	<b>5.2</b>
SW	ED-R3SL-SW014-1	10/13/2022	1	ND	ND	ND	ND	1.1	ND	ND	<b>1.1</b>
SW	ED-R3SL-SW014-2	10/15/2022	2	ND	ND	ND	ND	1.3	ND	ND	<b>1.3</b>
SW	ED-R3SL-SW014-3	10/18/2022	3	ND	ND	ND	ND	ND	ND	ND	<b>ND</b>
SW	ED-R3SL-SW015	10/11/2022	-	ND	ND	ND	ND	0.19	ND	ND	<b>0.19</b>
SW	ED-R3SL-SW016	10/10/2022	-	ND	ND	ND	ND	ND	ND	ND	<b>ND</b>
SW	ED-R3SL-SW017	10/7/2022	-	ND	ND	ND	ND	ND	ND	ND	<b>ND</b>
SW	ED-R3SL-SW018	10/7/2022	-	ND	ND	ND	ND	ND	ND	ND	<b>ND</b>

**Notes:**

Sample ID with "SW" indicates Sidewall Sample  
 ND = constituent detected below the laboratory RL of 0.5 mg/Kg  
 Red indicates an exceedance of 1.0 mg/Kg RBRO



**DAILY FIELD OBSERVATION REPORT**  
**CIVIL & ENVIRONMENTAL CONSULTANTS, INC.**  
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P: (865) 977-9997 F: (865) 977-9919

PAGE 1 OF 3
DATE: 10/24/2022
REPORT NO: 026

**PROJECT INFORMATION**

<b>PROJECT NAME:</b> Elliott Ditch Reach 3 Isolated Soil Remediation	
<b>LOCATION:</b> Reach 3	<b>CEC PROJECT:</b> 315-052
<b>PLANS AND SPECIFICATIONS BY:</b> CEC, Inc.	<b>WEATHER:</b> Clear/partly cloudy, middle 70s F

**PERSONNEL**

<b>CEC FIELD REPRESENTATIVE:</b> Luis Torres Aguilera	<b>CEC PROJECT MANAGER:</b> Matt Bruck
<b>CLIENT:</b> Arconic Lafayette, LLC	<b>CLIENT CONTACT:</b> Robert Prezbindowski
<b>GENERAL CONTRACTOR:</b> O6 Environmental, LLC	<b>SITE SUPERINTENDENT:</b> Keegan Andrews

**THIS REPORT INCLUDES:**

<input type="checkbox"/> TEST RESULTS	<input checked="" type="checkbox"/> PHOTOGRAPHS	<input type="checkbox"/> SKETCH	<input type="checkbox"/> ATTACHMENTS
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**EQUIPMENT ONSITE:**

<u>Skid-steer:</u> CAT 299D3
<u>Miscellaneous Equipment:</u> <ul style="list-style-type: none"><li>• Track mats for access road.</li><li>• Rotary auger skid-steer attachment.</li></ul>

**MATERIAL DELIVERED ONSITE:**

<ul style="list-style-type: none"><li>• None</li></ul>
--

**OBSERVATIONS:**

<u>Site personnel includes:</u> <ul style="list-style-type: none"><li>• CEC<ul style="list-style-type: none"><li>○ Luis Torres Aguilera</li></ul></li><li>• O6ENV<ul style="list-style-type: none"><li>○ Tyler Bundren</li><li>○ Nick Brucato</li><li>○ David Bottos</li></ul></li><li>• TNT Tree Service</li></ul>
---

**DAILY FIELD OBSERVATION REPORT  
CIVIL & ENVIRONMENTAL CONSULTANTS, INC.**

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DATE: 10/24/2022
REPORT NO: 026

**Onsite Activities:**

- All O6ENV and CEC personnel arrive at Crestview Community Church parking lot at 0730.
- Morning health and safety meeting held prior to commencing the day's project activities.
- O6ENV completed daily equipment inspections.
- O6ENV procured materials for fence reconstruction.
- O6ENV began reinstalling fences at Subject Properties 4 and 6. Posts were installed via auger attached to a skid steer.
- CEC & O6ENV tagged an additional tree to removed from Subject Property 2. TNT Tree Service removes the trees.
- CEC and all others offsite at 1845.

Excavation: No excavation activities occurred today

Transportation of non-TSCA regulated material (PCB <50 ppm) for offsite disposal:

- Off-site Disposal: No off-site disposal occurred today

Non-TSCA Regulated	Daily	To Date
Material Transported (tons)	0	1,653.03
Truckloads	0	76

Backfill: No backfilling occurred today

Material	Daily	To Date
<b>Backfill Soil</b>		
<i>Material Delivered (Tons)</i>	0	1,407.92
<i>Truckloads</i>	0	69
<b>Topsoil</b>		
<i>Material Delivered (Tons)</i>	0	317.63
<i>Truckloads</i>	0	16

Sampling: No sampling occurred today.

Laboratory Reports: Not Applicable

**CONTRACT LINE ITEMS PERFORMED:**

- B1-7 Restoration
  - B1-7.5 - Installation of Removed Chain Link Fence at Subject Property 6
  - B1-7.8 - Installation of Removed Fencing at Subject Property 4
- Additional tree clearing

**COMMUNICATION:**

**MEETINGS / DISCUSSIONS:**

- None.

**UNEXPECTED, UNUSUAL, OR NONCONFORMING OBSERVATIONS:**

- None.

**DAILY FIELD OBSERVATION REPORT  
CIVIL & ENVIRONMENTAL CONSULTANTS, INC.**

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DATE: 10/24/2022

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NOTICE: Our firm's professionals are represented on site solely to observe operations of the contractor identified, to form opinions about the adequacy of those operations, and to report those opinions to our client. The presence and activities of our field representative do not relieve the contractor from its obligation to meet contractual requirements. The contractor retains sole responsibility for site safety and the methods, operations, and sequences of construction.

**PHOTOGRAPHS**



Photograph 1 – O6ENV reinstalling fence at 1333 Windmill Drive.



Photograph 2 – TNT Tree Service removing tree on Subject Property 2.



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PAGE 1 OF 3
DATE: 10/25/2022
REPORT NO: 027

**PROJECT INFORMATION**

<b>PROJECT NAME:</b> Elliott Ditch Reach 3 Isolated Soil Remediation	
<b>LOCATION:</b> Reach 3	<b>CEC PROJECT:</b> 315-052
<b>PLANS AND SPECIFICATIONS BY:</b> CEC, Inc.	<b>WEATHER:</b> partly cloudy/light rain (heavy in mid afternoon), middle 60s F

**PERSONNEL**

<b>CEC FIELD REPRESENTATIVE:</b> Luis Torres Aguilera	<b>CEC PROJECT MANAGER:</b> Matt Bruck
<b>CLIENT:</b> Arconic Lafayette, LLC	<b>CLIENT CONTACT:</b> Robert Prezbindowski
<b>GENERAL CONTRACTOR:</b> O6 Environmental, LLC	<b>SITE SUPERINTENDENT:</b> Keegan Andrews

**THIS REPORT INCLUDES:**

<input type="checkbox"/> TEST RESULTS	<input checked="" type="checkbox"/> PHOTOGRAPHS	<input type="checkbox"/> SKETCH	<input type="checkbox"/> ATTACHMENTS
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**EQUIPMENT ONSITE:**

<u>Skid-steer:</u> CAT 299D3
<u>Miscellaneous Equipment:</u> <ul style="list-style-type: none"><li>• Track mats for access road.</li><li>• Rotary Auger</li></ul>

**MATERIAL DELIVERED ONSITE:**

<ul style="list-style-type: none"><li>• None</li></ul>
--

**OBSERVATIONS:**

<u>Site personnel includes:</u> <ul style="list-style-type: none"><li>• CEC<ul style="list-style-type: none"><li>○ Luis Torres Aguilera</li></ul></li><li>• O6ENV<ul style="list-style-type: none"><li>○ Tyler Bundren</li><li>○ Nick Brucato</li><li>○ David Bottos</li></ul></li></ul>
--

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CIVIL & ENVIRONMENTAL CONSULTANTS, INC.**

PAGE 2 OF 3

DATE: 10/25/2022

REPORT NO: 027

**Onsite Activities:**

- All O6ENV and CEC personnel arrive at Crestview Community Church parking lot at 0730.
- Morning health and safety meeting held prior to commencing the day's project activities.
- O6ENV completed daily equipment inspections.
- O6ENV bought materials for fence reconstruction.
- O6ENV continues reinstalling fences at Subject Properties 4 and 6. Post are installed by using skid steer and auger.
- O6ENV returns auger to Caterpillar today.
- Traction mats and skid steer accessories demobilized from the site.
- CEC and all others offsite at 1630.

**Excavation:** No excavation activities occurred today

**Transportation of non-TSCA regulated material (PCB <50 ppm) for offsite disposal:**

- Off-site Disposal: No off-site disposal occurred today

<b>Non-TSCA Regulated</b>	<b>Daily</b>	<b>To Date</b>
<b>Material Transported (tons)</b>	0	1,653.03
<b>Truckloads</b>	0	76

**Backfill:** No backfilling occurred today

<b>Material</b>	<b>Daily</b>	<b>To Date</b>
<b>Backfill Soil</b>		
<i>Material Delivered (Tons)</i>	0	1,407.92
<i>Truckloads</i>	0	69
<b>Topsoil</b>		
<i>Material Delivered (Tons)</i>	0	317.63
<i>Truckloads</i>	0	16

**Sampling:** No sampling occurred today.

**Laboratory Reports:** Not Applicable

**CONTRACT LINE ITEMS PERFORMED:**

- B1-7 Restoration
  - B1-7.5 - Installation of Removed Chain Link Fence at Subject Property 6
  - B1-7.8 - Installation of Removed Fencing at Subject Property 4

**COMMUNICATION:**

**MEETINGS / DISCUSSIONS:**

- None.

**UNEXPECTED, UNUSUAL, OR NONCONFORMING OBSERVATIONS:**

- O6ENV discussed the fence reinstallation with Subject Property 6 owner. Specifically, the owner requested the chain link fence to be installed in a straight line, instead of its orientation prior to the pr

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CIVIL & ENVIRONMENTAL CONSULTANTS, INC.**

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DATE: 10/25/2022

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contractor from its obligation to meet contractual requirements. The contractor retains sole responsibility for site safety and the methods, operations, and sequences of construction.

**PHOTOGRAPHS**



Photograph 1 – O6ENV reinstalling fence at Subject Property 6.



Photograph 2 – O6ENV reinstalling fence at Subject Property 4.



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PAGE 1 OF 3
DATE: 10/26/2022
REPORT NO: 028

**PROJECT INFORMATION**

<b>PROJECT NAME:</b> Elliott Ditch Reach 3 Isolated Soil Remediation	
<b>LOCATION:</b> Reach 3	<b>CEC PROJECT:</b> 315-052
<b>PLANS AND SPECIFICATIONS BY:</b> CEC, Inc.	<b>WEATHER:</b> Partly Cloudy, middle 50s F

**PERSONNEL**

<b>CEC FIELD REPRESENTATIVE:</b> Justin Smith	<b>CEC PROJECT MANAGER:</b> Matt Bruck
<b>CLIENT:</b> Arconic Lafayette, LLC	<b>CLIENT CONTACT:</b> Robert Prezbindowski
<b>GENERAL CONTRACTOR:</b> O6 Environmental, LLC	<b>SITE SUPERINTENDENT:</b> Keegan Andrews

**THIS REPORT INCLUDES:**

<input type="checkbox"/> TEST RESULTS	<input checked="" type="checkbox"/> PHOTOGRAPHS	<input type="checkbox"/> SKETCH	<input type="checkbox"/> ATTACHMENTS
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**EQUIPMENT ONSITE:**

<u>Skid-steer:</u> CAT 299D3 <u>Miscellaneous Equipment:</u> <ul style="list-style-type: none"> <li>Track mats for access road.</li> </ul>
---

**MATERIAL DELIVERED ONSITE:**

<ul style="list-style-type: none"> <li>18 fence panels for Subject Property 4</li> </ul>
--

**OBSERVATIONS:**

<u>Site personnel includes:</u> <ul style="list-style-type: none"> <li>CEC           <ul style="list-style-type: none"> <li>Justin Smith</li> </ul> </li> <li>O6ENV           <ul style="list-style-type: none"> <li>Tyler Bundren</li> <li>Nick Brucato</li> <li>David Bottos</li> </ul> </li> </ul> <u>Onsite Activities:</u> <ul style="list-style-type: none"> <li>All O6ENV and CEC personnel arrive at Crestview Community Church parking lot at 0730.</li> <li>Morning health and safety meeting held prior to commencing the day's project activities.</li> </ul>
--

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CIVIL & ENVIRONMENTAL CONSULTANTS, INC.**

PAGE 2 OF 3
DATE: 10/26/2022
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- O6ENV completed daily equipment of skid-steer.
- O6ENV procured materials for fence reconstruction.
- O6ENV continues reinstalling the fence at Subject Property 4.
- CEC and all others offsite at 1730.

Excavation: No excavation activities occurred today

Transportation of non-TSCA regulated material (PCB <50 ppm) for offsite disposal:

- Off-site Disposal: No off-site disposal occurred today

Non-TSCA Regulated	Daily	To Date
Material Transported (tons)	0	1,653.03
Truckloads	0	76

Backfill: No backfilling occurred today

Material	Daily	To Date
<b>Backfill Soil</b>		
<i>Material Delivered (Tons)</i>	0	1,407.92
<i>Truckloads</i>	0	69
<b>Topsoil</b>		
<i>Material Delivered (Tons)</i>	0	317.63
<i>Truckloads</i>	0	16

Sampling: Sampling complete.

Laboratory Reports: Not Applicable.

**CONTRACT LINE ITEMS PERFORMED:**

- B1-7 Restoration
  - B1-7.8 - Installation of Removed Fencing at Subject Property 4

**COMMUNICATION:**

**MEETINGS / DISCUSSIONS:**

- None.

**UNEXPECTED, UNUSUAL, OR NONCONFORMING OBSERVATIONS:**

- Heavy precipitation event occurred the previous night causing some soil washout near the east corner of Subject Property 4. The fence post in close proximity remained stable. Storm water controls were present along Elliott Ditch. Due to precipitation, sodding installation delayed.
- O6ENV elected to purchase new fence panels for installation at Subject Property 4. O6ENV discussed new panels with the property owner prior to installation. O6ENV elected to proceed with new fence panels to increase the installation efficiency due to the condition of the old fence.

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**DAILY FIELD OBSERVATION REPORT  
CIVIL & ENVIRONMENTAL CONSULTANTS, INC.**

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DATE: 10/26/2022
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**PHOTOGRAPHS**



Photograph 1 – Soil Washout that occurred near Subject Property 4.



Photograph 2 – New Fence Panels installed along Subject Property 4.



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PAGE 1 OF 3
DATE: 10/27/2022
REPORT NO: 029

**PROJECT INFORMATION**

<b>PROJECT NAME:</b> Elliott Ditch Reach 3 Isolated Soil Remediation	
<b>LOCATION:</b> Reach 3	<b>CEC PROJECT:</b> 315-052
<b>PLANS AND SPECIFICATIONS BY:</b> CEC, Inc.	<b>WEATHER:</b> partly cloudy, middle 60s F

**PERSONNEL**

<b>CEC FIELD REPRESENTATIVE:</b> Justin Smith	<b>CEC PROJECT MANAGER:</b> Matt Bruck
<b>CLIENT:</b> Arconic Lafayette, LLC	<b>CLIENT CONTACT:</b> Robert Prezbindowski
<b>GENERAL CONTRACTOR:</b> O6 Environmental, LLC	<b>SITE SUPERINTENDENT:</b> Keegan Andrews

**THIS REPORT INCLUDES:**

<input type="checkbox"/> TEST RESULTS	<input checked="" type="checkbox"/> PHOTOGRAPHS	<input type="checkbox"/> SKETCH	<input type="checkbox"/> ATTACHMENTS
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**EQUIPMENT ONSITE:**

<u>Skid-steer:</u> CAT 299D3 <u>Miscellaneous Equipment:</u> <ul style="list-style-type: none"> <li>Track mats for access road.</li> </ul>
---

**MATERIAL DELIVERED ONSITE:**

<ul style="list-style-type: none"> <li>None.</li> </ul>
---

**OBSERVATIONS:**

<u>Site personnel includes:</u> <ul style="list-style-type: none"> <li>CEC           <ul style="list-style-type: none"> <li>Justin Smith</li> </ul> </li> <li>O6ENV           <ul style="list-style-type: none"> <li>Tyler Bundren</li> <li>Nick Brucato</li> <li>David Bottos</li> </ul> </li> </ul>
<u>Onsite Activities:</u> <ul style="list-style-type: none"> <li>All O6ENV and CEC personnel arrive at Crestview Community Church parking lot at 0730.</li> <li>Morning health and safety meeting held prior to commencing the day's project activities.</li> <li>O6ENV completed daily equipment of skid steer.</li> </ul>

**DAILY FIELD OBSERVATION REPORT  
CIVIL & ENVIRONMENTAL CONSULTANTS, INC.**

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DATE: 10/27/2022

REPORT NO: 029

- O6ENV continues reinstalling fences at Subject Properties 4 and 6.
- CEC and all others offsite at 1730.

Excavation: No excavation activities occurred today

Transportation of non-TSCA regulated material (PCB <50 ppm) for offsite disposal:

- Off-site Disposal: No off-site disposal occurred today

<b>Non-TSCA Regulated</b>	<b>Daily</b>	<b>To Date</b>
<b>Material Transported (tons)</b>	0	1,653.03
<b>Truckloads</b>	0	76

Backfill: No backfilling occurred today

<b>Material</b>	<b>Daily</b>	<b>To Date</b>
<b>Backfill Soil</b>		
<i>Material Delivered (Tons)</i>	0	1,407.92
<i>Truckloads</i>	0	69
<b>Topsoil</b>		
<i>Material Delivered (Tons)</i>	0	317.63
<i>Truckloads</i>	0	16

Sampling: Sampling complete.

Laboratory Reports: Not applicable.

**CONTRACT LINE ITEMS PERFORMED:**

- B1-7 Restoration
  - B1-7.5 - Installation of Removed Chain Link Fence at Subject Property 6
  - B1-7.8 - Installation of Removed Fencing at Subject Property 4

**COMMUNICATION:**

**MEETINGS / DISCUSSIONS:**

- Sodding activities have been delayed due to unsuitable subbase caused by precipitation on 10/26/2022.

**UNEXPECTED, UNUSUAL, OR NONCONFORMING OBSERVATIONS:**

- None.

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**DAILY FIELD OBSERVATION REPORT  
CIVIL & ENVIRONMENTAL CONSULTANTS, INC.**

PAGE 3 OF 3
DATE: 10/27/2022
REPORT NO: 029

**PHOTOGRAPHS**



Photograph 1 – 06ENV installing chain link fence on Subject Property 6.



Photograph 2 – 06ENV installing fence on subject Property 4.



**DAILY FIELD OBSERVATION REPORT**  
**CIVIL & ENVIRONMENTAL CONSULTANTS, INC.**  
2704 Cherokee Farm Way, Suite 101  
Knoxville, Tennessee 37920  
P: (865) 977-9997 F: (865) 977-9919

PAGE 1 OF 3
DATE: 10/28/2022
REPORT NO: 030

**PROJECT INFORMATION**

<b>PROJECT NAME:</b> Elliott Ditch Reach 3 Isolated Soil Remediation	
<b>LOCATION:</b> Reach 3	<b>CEC PROJECT:</b> 315-052
<b>PLANS AND SPECIFICATIONS BY:</b> CEC, Inc.	<b>WEATHER:</b> partly cloudy, high 60s F

**PERSONNEL**

<b>CEC FIELD REPRESENTATIVE:</b> Justin Smith	<b>CEC PROJECT MANAGER:</b> Matt Bruck
<b>CLIENT:</b> Arconic Lafayette, LLC	<b>CLIENT CONTACT:</b> Robert Prezbindowski
<b>GENERAL CONTRACTOR:</b> O6 Environmental, LLC	<b>SITE SUPERINTENDENT:</b> Keegan Andrews

**THIS REPORT INCLUDES:**

<input type="checkbox"/> TEST RESULTS	<input checked="" type="checkbox"/> PHOTOGRAPHS	<input type="checkbox"/> SKETCH	<input type="checkbox"/> ATTACHMENTS
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**EQUIPMENT ONSITE:**

<u>Skid-steer:</u> CAT 299D3
<u>Miscellaneous Equipment:</u> <ul style="list-style-type: none"><li>• Track mats for access road.</li></ul>

**MATERIAL DELIVERED ONSITE:**

<ul style="list-style-type: none"><li>• None</li></ul>
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**OBSERVATIONS:**

<u>Site personnel includes:</u> <ul style="list-style-type: none"><li>• CEC<ul style="list-style-type: none"><li>○ Justin Smith</li></ul></li><li>• O6ENV<ul style="list-style-type: none"><li>○ Tyler Bundren</li><li>○ Nick Brucato</li><li>○ David Bottos</li><li>○</li></ul></li></ul>
<u>Onsite Activities:</u> <ul style="list-style-type: none"><li>• All O6ENV and CEC personnel arrive at Crestview Community Church parking lot at 0730.</li><li>• Morning health and safety meeting held prior to commencing the day's project activities.</li></ul>

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- O6ENV completed daily equipment of skid steer.
- O6ENV continues reinstalling fences at Subject Properties 4 and 6.
- CEC and all others offsite at 1730.

Excavation: No excavation activities occurred today

Transportation of non-TSCA regulated material (PCB <50 ppm) for offsite disposal:

- Off-site Disposal: No off-site disposal occurred today

Non-TSCA Regulated	Daily	To Date
<b>Material Transported (tons)</b>	0	1,653.03
<b>Truckloads</b>	0	76

Backfill: No backfilling occurred today

Material	Daily	To Date
<b>Backfill Soil</b>		
<i>Material Delivered (Tons)</i>	0	1,407.92
<i>Truckloads</i>	0	69
<b>Topsoil</b>		
<i>Material Delivered (Tons)</i>	0	317.63
<i>Truckloads</i>	0	16

Sampling: Sampling complete.

Laboratory Reports: Not applicable.

**CONTRACT LINE ITEMS PERFORMED:**

- B1-7 Restoration
  - B1-7.5 - Installation of Removed Chain Link Fence at Subject Property 6
  - B1-7.8 - Installation of Removed Fencing at Subject Property 4

**COMMUNICATION:**

**MEETINGS / DISCUSSIONS:**

- Discussed with owners of Subject Property 4 and 6 that fencing installation was complete, but a small opening would be made so that the sodding contractor could enter the properties. Once sodding activities are complete, the fence would be fully restored.

**UNEXPECTED, UNUSUAL, OR NONCONFORMING OBSERVATIONS:**

- None.

NOTICE: Our firm's professionals are represented on site solely to observe operations of the contractor identified, to form opinions about the adequacy of those operations, and to report those opinions to our client. The presence and activities of our field representative do not relieve the contractor from its obligation to meet contractual requirements. The contractor retains sole responsibility for site safety and the methods, operations, and sequences of construction.

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**PHOTOGRAPHS**



Photograph 1 – O6ENV spray painting the fence on Subject Property 4.



Photograph 2 – O6ENV moving shed to its original position on Subject Property 6.

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**APPENDIX V**  
**LABORATORY ANALYTICAL RESULTS**

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## ANALYTICAL REPORT

Eurofins Chicago  
2417 Bond Street  
University Park, IL 60484  
Tel: (708)534-5200

Laboratory Job ID: 500-222850-1

Client Project/Site: Arconic - Elliot Ditch - Lafayette, IN

**For:**

Civil & Environmental Consultants Inc  
2704 Cherokee Farm Way  
Suite 101  
Knoxville, Tennessee 37920

Attn: Garrett Welch



*Authorized for release by:*

9/28/2022 11:01:34 AM

Robin Kintz, Project Manager II  
(708)534-5200

[Robin.Kintz@et.eurofinsus.com](mailto:Robin.Kintz@et.eurofinsus.com)

### LINKS

Review your project  
results through



Have a Question?



Visit us at:

[www.eurofinsus.com/Env](http://www.eurofinsus.com/Env)

The test results in this report meet all 2003 NELAC, 2009 TNI, and 2016 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.



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# Case Narrative

Client: Civil & Environmental Consultants Inc  
Project/Site: Arconic - Elliot Ditch - Lafayette, IN

Job ID: 500-222850-1

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## Job ID: 500-222850-1

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### Laboratory: Eurofins Chicago

#### Narrative

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#### Job Narrative 500-222850-1

#### Comments

No additional comments.

#### Receipt

The samples were received on 9/26/2022 3:11 PM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperature of the cooler at receipt was 3.0° C.

#### GC Semi VOA

Method 8082A: The surrogate recovery for DCB Decachlorobiphenyl was above the control limit in the following samples: ED-R3SL-002 (500-222850-3), ED-R3SL-002 (500-222850-3[MS]), (LCS 500-676447/2-A) and (MB 500-676447/1-A); however, the surrogate Tetrachloro-m-xylene was within control limits. The laboratory's SOP allows one surrogate to be outside acceptance limits; therefore, re-extraction was not performed. These results have been reported and qualified.

Method 8082A: Surrogate recovery for the following samples were outside control limits: ED-R3SL-001 (500-222850-1), ED-R3SL-DUP001 (500-222850-2), ED-R3SL-002 (500-222850-3[MSD]) and ED-R3SL-SW001 (500-222850-4). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Method 8082A: Due to the high concentration of <AffectedAnalytes>, the matrix spike / matrix spike duplicate (MS/MSD) for preparation batch 500-676447 and analytical batch 500-676708 could not effectively be evaluated for accuracy and precision. The associated laboratory control sample (LCS) met acceptance criteria.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

#### Metals

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

#### Organic Prep

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

# Detection Summary

Client: Civil & Environmental Consultants Inc  
Project/Site: Arconic - Elliot Ditch - Lafayette, IN

Job ID: 500-222850-1

## Client Sample ID: ED-R3SL-001

## Lab Sample ID: 500-222850-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
PCB-1248	10		1.7		mg/Kg	100	✳	8082A	Total/NA

## Client Sample ID: ED-R3SL-DUP001

## Lab Sample ID: 500-222850-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
PCB-1248	12		1.7		mg/Kg	100	✳	8082A	Total/NA

## Client Sample ID: ED-R3SL-002

## Lab Sample ID: 500-222850-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
PCB-1248	6.3		0.35		mg/Kg	20	✳	8082A	Total/NA

## Client Sample ID: ED-R3SL-SW001

## Lab Sample ID: 500-222850-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
PCB-1248	1.9		0.18		mg/Kg	10	✳	8082A	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins Chicago

# Method Summary

Client: Civil & Environmental Consultants Inc  
Project/Site: Arconic - Elliot Ditch - Lafayette, IN

Job ID: 500-222850-1

Method	Method Description	Protocol	Laboratory
8082A	Polychlorinated Biphenyls (PCBs) by Gas Chromatography	SW846	EET CHI
Moisture	Percent Moisture	EPA	EET CHI
3541	Automated Soxhlet Extraction	SW846	EET CHI

**Protocol References:**

EPA = US Environmental Protection Agency

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

**Laboratory References:**

EET CHI = Eurofins Chicago, 2417 Bond Street, University Park, IL 60484, TEL (708)534-5200



# Sample Summary

Client: Civil & Environmental Consultants Inc  
Project/Site: Arconic - Elliot Ditch - Lafayette, IN

Job ID: 500-222850-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
500-222850-1	ED-R3SL-001	Solid	09/26/22 13:30	09/26/22 15:11
500-222850-2	ED-R3SL-DUP001	Solid	09/26/22 00:00	09/26/22 15:11
500-222850-3	ED-R3SL-002	Solid	09/26/22 13:35	09/26/22 15:11
500-222850-4	ED-R3SL-SW001	Solid	09/26/22 13:40	09/26/22 15:11

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# Client Sample Results

Client: Civil & Environmental Consultants Inc  
 Project/Site: Arconic - Elliot Ditch - Lafayette, IN

Job ID: 500-222850-1

**Client Sample ID: ED-R3SL-001**

**Lab Sample ID: 500-222850-1**

Date Collected: 09/26/22 13:30

Matrix: Solid

Date Received: 09/26/22 15:11

Percent Solids: 94.2

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<1.7		1.7		mg/Kg	☼	09/26/22 15:50	09/28/22 09:58	100
PCB-1221	<1.7		1.7		mg/Kg	☼	09/26/22 15:50	09/28/22 09:58	100
PCB-1232	<1.7		1.7		mg/Kg	☼	09/26/22 15:50	09/28/22 09:58	100
PCB-1242	<1.7		1.7		mg/Kg	☼	09/26/22 15:50	09/28/22 09:58	100
<b>PCB-1248</b>	<b>10</b>		1.7		mg/Kg	☼	09/26/22 15:50	09/28/22 09:58	100
PCB-1254	<1.7		1.7		mg/Kg	☼	09/26/22 15:50	09/28/22 09:58	100
PCB-1260	<1.7		1.7		mg/Kg	☼	09/26/22 15:50	09/28/22 09:58	100

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	162	S1+	49 - 129	09/26/22 15:50	09/28/22 09:58	100
DCB Decachlorobiphenyl	216	S1+	37 - 121	09/26/22 15:50	09/28/22 09:58	100

# Client Sample Results

Client: Civil & Environmental Consultants Inc  
 Project/Site: Arconic - Elliot Ditch - Lafayette, IN

Job ID: 500-222850-1

**Client Sample ID: ED-R3SL-DUP001**

**Lab Sample ID: 500-222850-2**

Date Collected: 09/26/22 00:00

Matrix: Solid

Date Received: 09/26/22 15:11

Percent Solids: 94.5

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<1.7		1.7		mg/Kg	☼	09/26/22 15:50	09/28/22 10:12	100
PCB-1221	<1.7		1.7		mg/Kg	☼	09/26/22 15:50	09/28/22 10:12	100
PCB-1232	<1.7		1.7		mg/Kg	☼	09/26/22 15:50	09/28/22 10:12	100
PCB-1242	<1.7		1.7		mg/Kg	☼	09/26/22 15:50	09/28/22 10:12	100
<b>PCB-1248</b>	<b>12</b>		1.7		mg/Kg	☼	09/26/22 15:50	09/28/22 10:12	100
PCB-1254	<1.7		1.7		mg/Kg	☼	09/26/22 15:50	09/28/22 10:12	100
PCB-1260	<1.7		1.7		mg/Kg	☼	09/26/22 15:50	09/28/22 10:12	100

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	140	S1+	49 - 129	09/26/22 15:50	09/28/22 10:12	100
DCB Decachlorobiphenyl	203	S1+	37 - 121	09/26/22 15:50	09/28/22 10:12	100

# Client Sample Results

Client: Civil & Environmental Consultants Inc  
 Project/Site: Arconic - Elliot Ditch - Lafayette, IN

Job ID: 500-222850-1

**Client Sample ID: ED-R3SL-002**

**Lab Sample ID: 500-222850-3**

Date Collected: 09/26/22 13:35

Matrix: Solid

Date Received: 09/26/22 15:11

Percent Solids: 93.1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<0.35	F2 F1	0.35		mg/Kg	✱	09/26/22 15:50	09/28/22 08:58	20
PCB-1221	<0.35		0.35		mg/Kg	✱	09/26/22 15:50	09/28/22 08:58	20
PCB-1232	<0.35		0.35		mg/Kg	✱	09/26/22 15:50	09/28/22 08:58	20
PCB-1242	<0.35		0.35		mg/Kg	✱	09/26/22 15:50	09/28/22 08:58	20
<b>PCB-1248</b>	<b>6.3</b>		0.35		mg/Kg	✱	09/26/22 15:50	09/28/22 08:58	20
PCB-1254	<0.35		0.35		mg/Kg	✱	09/26/22 15:50	09/28/22 08:58	20
PCB-1260	<0.35	F2 F1	0.35		mg/Kg	✱	09/26/22 15:50	09/28/22 08:58	20

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	112		49 - 129	09/26/22 15:50	09/28/22 08:58	20
DCB Decachlorobiphenyl	164	S1+	37 - 121	09/26/22 15:50	09/28/22 08:58	20

# Client Sample Results

Client: Civil & Environmental Consultants Inc  
 Project/Site: Arconic - Elliot Ditch - Lafayette, IN

Job ID: 500-222850-1

**Client Sample ID: ED-R3SL-SW001**

**Lab Sample ID: 500-222850-4**

Date Collected: 09/26/22 13:40

Matrix: Solid

Date Received: 09/26/22 15:11

Percent Solids: 92.6

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<0.18		0.18		mg/Kg	☼	09/26/22 15:50	09/28/22 09:43	10
PCB-1221	<0.18		0.18		mg/Kg	☼	09/26/22 15:50	09/28/22 09:43	10
PCB-1232	<0.18		0.18		mg/Kg	☼	09/26/22 15:50	09/28/22 09:43	10
PCB-1242	<0.18		0.18		mg/Kg	☼	09/26/22 15:50	09/28/22 09:43	10
<b>PCB-1248</b>	<b>1.9</b>		0.18		mg/Kg	☼	09/26/22 15:50	09/28/22 09:43	10
PCB-1254	<0.18		0.18		mg/Kg	☼	09/26/22 15:50	09/28/22 09:43	10
PCB-1260	<0.18		0.18		mg/Kg	☼	09/26/22 15:50	09/28/22 09:43	10

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	169	S1+	49 - 129	09/26/22 15:50	09/28/22 09:43	10
DCB Decachlorobiphenyl	216	S1+	37 - 121	09/26/22 15:50	09/28/22 09:43	10

# Definitions/Glossary

Client: Civil & Environmental Consultants Inc  
Project/Site: Arconic - Elliot Ditch - Lafayette, IN

Job ID: 500-222850-1

## Qualifiers

### GC Semi VOA

Qualifier	Qualifier Description
F1	MS and/or MSD recovery exceeds control limits.
F2	MS/MSD RPD exceeds control limits
S1+	Surrogate recovery exceeds control limits, high biased.

## Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
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)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
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)
TNTC	Too Numerous To Count

# QC Association Summary

Client: Civil & Environmental Consultants Inc  
Project/Site: Arconic - Elliot Ditch - Lafayette, IN

Job ID: 500-222850-1

## GC Semi VOA

### Prep Batch: 676447

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-222850-1	ED-R3SL-001	Total/NA	Solid	3541	
500-222850-2	ED-R3SL-DUP001	Total/NA	Solid	3541	
500-222850-3	ED-R3SL-002	Total/NA	Solid	3541	
500-222850-4	ED-R3SL-SW001	Total/NA	Solid	3541	
MB 500-676447/1-A	Method Blank	Total/NA	Solid	3541	
LCS 500-676447/2-A	Lab Control Sample	Total/NA	Solid	3541	
500-222850-3 MS	ED-R3SL-002	Total/NA	Solid	3541	
500-222850-3 MSD	ED-R3SL-002	Total/NA	Solid	3541	

### Analysis Batch: 676708

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-222850-1	ED-R3SL-001	Total/NA	Solid	8082A	676447
500-222850-2	ED-R3SL-DUP001	Total/NA	Solid	8082A	676447
500-222850-3	ED-R3SL-002	Total/NA	Solid	8082A	676447
500-222850-4	ED-R3SL-SW001	Total/NA	Solid	8082A	676447
MB 500-676447/1-A	Method Blank	Total/NA	Solid	8082A	676447
LCS 500-676447/2-A	Lab Control Sample	Total/NA	Solid	8082A	676447
500-222850-3 MS	ED-R3SL-002	Total/NA	Solid	8082A	676447
500-222850-3 MSD	ED-R3SL-002	Total/NA	Solid	8082A	676447

## General Chemistry

### Analysis Batch: 676431

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-222850-1	ED-R3SL-001	Total/NA	Solid	Moisture	
500-222850-2	ED-R3SL-DUP001	Total/NA	Solid	Moisture	
500-222850-3	ED-R3SL-002	Total/NA	Solid	Moisture	
500-222850-4	ED-R3SL-SW001	Total/NA	Solid	Moisture	

# Surrogate Summary

Client: Civil & Environmental Consultants Inc  
Project/Site: Arconic - Elliot Ditch - Lafayette, IN

Job ID: 500-222850-1

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

Matrix: Solid

Prep Type: Total/NA

### Percent Surrogate Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	TCX1	DCBP1
		(49-129)	(37-121)
500-222850-1	ED-R3SL-001	162 S1+	216 S1+
500-222850-2	ED-R3SL-DUP001	140 S1+	203 S1+
500-222850-3	ED-R3SL-002	112	164 S1+
500-222850-3 MS	ED-R3SL-002	118	182 S1+
500-222850-3 MSD	ED-R3SL-002	176 S1+	243 S1+
500-222850-4	ED-R3SL-SW001	169 S1+	216 S1+
LCS 500-676447/2-A	Lab Control Sample	120	122 S1+
MB 500-676447/1-A	Method Blank	120	123 S1+

#### Surrogate Legend

TCX = Tetrachloro-m-xylene

DCBP = DCB Decachlorobiphenyl

# QC Sample Results

Client: Civil & Environmental Consultants Inc  
 Project/Site: Arconic - Elliot Ditch - Lafayette, IN

Job ID: 500-222850-1

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

**Lab Sample ID: MB 500-676447/1-A**  
**Matrix: Solid**  
**Analysis Batch: 676708**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**  
**Prep Batch: 676447**

Analyte	MB MB		RL	MDL	Unit	D	Prepared		Analyzed		Dil Fac
	Result	Qualifier									
PCB-1016	<0.017		0.017		mg/Kg		09/26/22 15:50	09/28/22 07:59			1
PCB-1221	<0.017		0.017		mg/Kg		09/26/22 15:50	09/28/22 07:59			1
PCB-1232	<0.017		0.017		mg/Kg		09/26/22 15:50	09/28/22 07:59			1
PCB-1242	<0.017		0.017		mg/Kg		09/26/22 15:50	09/28/22 07:59			1
PCB-1248	<0.017		0.017		mg/Kg		09/26/22 15:50	09/28/22 07:59			1
PCB-1254	<0.017		0.017		mg/Kg		09/26/22 15:50	09/28/22 07:59			1
PCB-1260	<0.017		0.017		mg/Kg		09/26/22 15:50	09/28/22 07:59			1

Surrogate	MB MB		Limits	Prepared		Analyzed		Dil Fac
	%Recovery	Qualifier						
Tetrachloro-m-xylene	120		49 - 129	09/26/22 15:50		09/28/22 07:59		1
DCB Decachlorobiphenyl	123	S1+	37 - 121	09/26/22 15:50		09/28/22 07:59		1

**Lab Sample ID: LCS 500-676447/2-A**  
**Matrix: Solid**  
**Analysis Batch: 676708**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**  
**Prep Batch: 676447**

Analyte	Spike Added	LCS LCS		Unit	D	%Rec	%Rec	
		Result	Qualifier				Limits	
PCB-1016	0.167	0.160		mg/Kg		96	57 - 120	
PCB-1260	0.167	0.168		mg/Kg		101	61 - 125	

Surrogate	LCS LCS		Limits
	%Recovery	Qualifier	
Tetrachloro-m-xylene	120		49 - 129
DCB Decachlorobiphenyl	122	S1+	37 - 121

**Lab Sample ID: 500-222850-3 MS**  
**Matrix: Solid**  
**Analysis Batch: 676708**

**Client Sample ID: ED-R3SL-002**  
**Prep Type: Total/NA**  
**Prep Batch: 676447**

Analyte	Sample		Spike Added	MS MS		Unit	D	%Rec	%Rec	
	Result	Qualifier		Result	Qualifier				Limits	
PCB-1016	<0.35	F2 F1	0.175	2.65	F1	mg/Kg	☼	1517	57 - 120	
PCB-1260	<0.35	F2 F1	0.175	1.16	F1	mg/Kg	☼	665	61 - 125	

Surrogate	MS MS		Limits
	%Recovery	Qualifier	
Tetrachloro-m-xylene	118		49 - 129
DCB Decachlorobiphenyl	182	S1+	37 - 121

**Lab Sample ID: 500-222850-3 MSD**  
**Matrix: Solid**  
**Analysis Batch: 676708**

**Client Sample ID: ED-R3SL-002**  
**Prep Type: Total/NA**  
**Prep Batch: 676447**

Analyte	Sample		Spike Added	MSD MSD		Unit	D	%Rec	%Rec		RPD	
	Result	Qualifier		Result	Qualifier				Limits	RPD	Limit	
PCB-1016	<0.35	F2 F1	0.176	5.24	F1 F2	mg/Kg	☼	2981	57 - 120	66	30	
PCB-1260	<0.35	F2 F1	0.176	2.35	F1 F2	mg/Kg	☼	1338	61 - 125	68	30	

Surrogate	MSD MSD		Limits
	%Recovery	Qualifier	
Tetrachloro-m-xylene	176	S1+	49 - 129
DCB Decachlorobiphenyl	243	S1+	37 - 121

Eurofins Chicago

# Lab Chronicle

Client: Civil & Environmental Consultants Inc  
Project/Site: Arconic - Elliot Ditch - Lafayette, IN

Job ID: 500-222850-1

**Client Sample ID: ED-R3SL-001**

**Date Collected: 09/26/22 13:30**

**Date Received: 09/26/22 15:11**

**Lab Sample ID: 500-222850-1**

**Matrix: Solid**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Moisture		1	676431	LWN	EET CHI	09/26/22 15:41

**Client Sample ID: ED-R3SL-001**

**Date Collected: 09/26/22 13:30**

**Date Received: 09/26/22 15:11**

**Lab Sample ID: 500-222850-1**

**Matrix: Solid**

**Percent Solids: 94.2**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3541			676447	DAK	EET CHI	09/26/22 15:50 - 09/26/22 20:00 <sup>1</sup>
Total/NA	Analysis	8082A		100	676708	SB	EET CHI	09/28/22 09:58

**Client Sample ID: ED-R3SL-DUP001**

**Date Collected: 09/26/22 00:00**

**Date Received: 09/26/22 15:11**

**Lab Sample ID: 500-222850-2**

**Matrix: Solid**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Moisture		1	676431	LWN	EET CHI	09/26/22 15:41

**Client Sample ID: ED-R3SL-DUP001**

**Date Collected: 09/26/22 00:00**

**Date Received: 09/26/22 15:11**

**Lab Sample ID: 500-222850-2**

**Matrix: Solid**

**Percent Solids: 94.5**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3541			676447	DAK	EET CHI	09/26/22 15:50 - 09/26/22 20:00 <sup>1</sup>
Total/NA	Analysis	8082A		100	676708	SB	EET CHI	09/28/22 10:12

**Client Sample ID: ED-R3SL-002**

**Date Collected: 09/26/22 13:35**

**Date Received: 09/26/22 15:11**

**Lab Sample ID: 500-222850-3**

**Matrix: Solid**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Moisture		1	676431	LWN	EET CHI	09/26/22 15:41

**Client Sample ID: ED-R3SL-002**

**Date Collected: 09/26/22 13:35**

**Date Received: 09/26/22 15:11**

**Lab Sample ID: 500-222850-3**

**Matrix: Solid**

**Percent Solids: 93.1**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3541			676447	DAK	EET CHI	09/26/22 15:50 - 09/26/22 20:00 <sup>1</sup>
Total/NA	Analysis	8082A		20	676708	SB	EET CHI	09/28/22 08:58

**Client Sample ID: ED-R3SL-SW001**

**Date Collected: 09/26/22 13:40**

**Date Received: 09/26/22 15:11**

**Lab Sample ID: 500-222850-4**

**Matrix: Solid**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Moisture		1	676431	LWN	EET CHI	09/26/22 15:41

Eurofins Chicago

# Lab Chronicle

Client: Civil & Environmental Consultants Inc  
Project/Site: Arconic - Elliot Ditch - Lafayette, IN

Job ID: 500-222850-1

**Client Sample ID: ED-R3SL-SW001**

**Lab Sample ID: 500-222850-4**

**Date Collected: 09/26/22 13:40**

**Matrix: Solid**

**Date Received: 09/26/22 15:11**

**Percent Solids: 92.6**

<u>Prep Type</u>	<u>Batch Type</u>	<u>Batch Method</u>	<u>Run</u>	<u>Dilution Factor</u>	<u>Batch Number</u>	<u>Analyst</u>	<u>Lab</u>	<u>Prepared or Analyzed</u>
Total/NA	Prep	3541			676447	DAK	EET CHI	09/26/22 15:50 - 09/26/22 20:00 <sup>1</sup>
Total/NA	Analysis	8082A		10	676708	SB	EET CHI	09/28/22 09:43

<sup>1</sup> Completion dates and times are reported or not reported per method requirements or individual lab discretion.

### Laboratory References:

EET CHI = Eurofins Chicago, 2417 Bond Street, University Park, IL 60484, TEL (708)534-5200



# Accreditation/Certification Summary

Client: Civil & Environmental Consultants Inc  
Project/Site: Arconic - Elliot Ditch - Lafayette, IN

Job ID: 500-222850-1

## Laboratory: Eurofins Chicago

The accreditations/certifications listed below are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Illinois	NELAP	IL00035	04-30-23

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**Eurofins Chicago**

2417 Bond Street  
 University Park IL 60484  
 Phone 708-534-5200 Fax 708-534-5211

**Chain of Custody Record**



Environment Testing  
 America

<b>Client Information</b>		Sampler:		Lab PM: Kintz Robin M		Carrier Tracking No(s):		COC No: 500-105440-44981 8											
Client Contact: Jenny Rickford O'Brien		Phone:		E-Mail: Robin Kintz@et.eurofinsus.com		State of Origin:		Page: Page 8 of 8											
Company: Civil & Environmental Consultants Inc		PWSID:		<b>Analysis Requested</b>				Job #: 510-222850											
Address: 2704 Cherokee Farm Way Suite 101		Due Date Requested:		<table border="1"> <tr><td>Field Filtered Sample (Yes or No)</td><td></td></tr> <tr><td>Perform MS/MSD (Yes or No)</td><td></td></tr> <tr><td>8082A - PCBs</td><td></td></tr> <tr><td>Total Number of Containers</td><td></td></tr> </table>				Field Filtered Sample (Yes or No)		Perform MS/MSD (Yes or No)		8082A - PCBs		Total Number of Containers		Preservation Codes			
Field Filtered Sample (Yes or No)																			
Perform MS/MSD (Yes or No)																			
8082A - PCBs																			
Total Number of Containers																			
City: Knoxville		TAT Requested (days):		A HCL		M Hexane													
State, Zip: TN 37920		Compliance Project. Δ Yes Δ No		B NaOH		N None													
Phone: 865-340-4914(Tel)		PO #: Purchase Order not required		C Zn Acetate		O AsNaO2													
Email: jrickfordobrien@cecinc.com		WO #:		D Nitric Acid		P Na2O4S													
Project Name: Arconic - Elliot Ditch - Lafayette IN		Project #: 50019033		E NaHSO4		Q Na2SO3													
Site:		SSOW#:		F MeOH		R Na2S2O3													
				G Amchlor		S H2SO4													
				H Ascorbic Acid		T TSP Dodecahydrate													
				I Ice		U Acetone													
				J DI Water		V MCAA													
				K EDTA		W pH 4-5													
				L EDA		Y Trizma													
						Z other (specify)													
						Other:													

**Sample Identification**		Sample Date		Sample Time		Sample Type (C=comp, G=grab)		Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)		Field Filtered Sample (Yes or No)		Perform MS/MSD (Yes or No)		8082A - PCBs		Total Number of Containers		Special Instructions/Note	
						Preservation Code:				X		N							
1 ED-R3SL-001		9/26/22		1330		C S				X						1			
2 ED-R3SL-DUP001		9/26/22		/		C S				X						1			
3 ED-R3SL-002		9/26/22		1335		C S				X		X				3			
4 ED-R3SL-SN001		9/26/22		1340		C S				X						1			

**Possible Hazard Identification**  
 Non-Hazard  Flammable  Skin Irritant  Poison B  Unknown  Radiological

**Sample Disposal ( A fee may be assessed if samples are retained longer than 1 month)**  
 Return To Client  Disposal By Lab  Archive For \_\_\_\_\_ Months

Deliverable Requested I II III IV Other (specify)

Special Instructions/QC Requirements

Empty Kit Relinquished by: \_\_\_\_\_ Date \_\_\_\_\_ Time \_\_\_\_\_ Method of Shipment \_\_\_\_\_

Relinquished by: <i>Jenny Rickford O'Brien</i>	Date/Time: 9/26/22 1355	Company: CEC	Received by: <i>Robin Kintz</i>	Date/Time: 9/26/22 1301	Company: ETA
Relinquished by: <i>R. Elias</i>	Date/Time: 9/26/22 1511	Company: ETA	Received by: <i>Robin Kintz</i>	Date/Time: 9/26/22 1511	Company: ETA
Relinquished by:	Date/Time:	Company:	Received by:	Date/Time:	Company:

Custody Seals Intact. Custody Seal No  
 Δ Yes Δ No

Cooler Temperature(s) °C and Other Remarks

510-73.0

## Login Sample Receipt Checklist

Client: Civil & Environmental Consultants Inc

Job Number: 500-222850-1

**Login Number: 222850**

**List Number: 1**

**Creator: Scott, Sherri L**

**List Source: Eurofins Chicago**

Question	Answer	Comment
Radioactivity wasn't checked or is <math>\leq</math> background as measured by a survey meter.	True	
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	3.0
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 <math><6\text{mm}</math> (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	



## ANALYTICAL REPORT

Eurofins Chicago  
2417 Bond Street  
University Park, IL 60484  
Tel: (708)534-5200

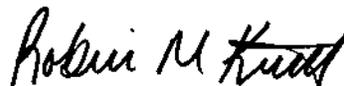
Laboratory Job ID: 500-222901-1

Client Project/Site: Arconic - Elliot Ditch - Lafayette, IN

**For:**

Civil & Environmental Consultants Inc  
2704 Cherokee Farm Way  
Suite 101  
Knoxville, Tennessee 37920

Attn: Garrett Welch



*Authorized for release by:*

*9/28/2022 3:19:31 PM*

Robin Kintz, Project Manager II  
(708)534-5200

[Robin.Kintz@et.eurofinsus.com](mailto:Robin.Kintz@et.eurofinsus.com)

### LINKS

Review your project  
results through



Have a Question?



Visit us at:

[www.eurofinsus.com/Env](http://www.eurofinsus.com/Env)

The test results in this report meet all 2003 NELAC, 2009 TNI, and 2016 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.



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# Case Narrative

Client: Civil & Environmental Consultants Inc  
Project/Site: Arconic - Elliot Ditch - Lafayette, IN

Job ID: 500-222901-1

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## Job ID: 500-222901-1

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### Laboratory: Eurofins Chicago

#### Narrative

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#### Job Narrative 500-222901-1

#### Comments

No additional comments.

#### Receipt

The samples were received on 9/27/2022 3:06 PM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperature of the cooler at receipt was 3.9° C.

#### GC Semi VOA

Method 8082A: The following sample required a mercury clean-up, via EPA Method 3660A, to reduce matrix interferences caused by sulfur: ED-R3SL-003 (500-222901-1). The reagent lot number used was: T12I032.

Method 8082A: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 500-676676 and analytical batch 500-676708 were outside control limits. Sample matrix interference are suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

Method 8082A: The surrogate recovery for DCB Decachlorobiphenyl was above the control limit in the following sample: ED-R3SL-003 (500-222901-1), ED-R3SL-005 (500-222901-3), ED-R3SL-006 (500-222901-4), ED-R3SL-007 (500-222901-5), ED-R3SL-SW002 (500-222901-6), ED-R3SL-008 (500-222901-7), ED-R3SL-009 (500-222901-8), ED-R3SL-010 (500-222901-9), ED-R3SL-011 (500-222901-10), (LCS 500-676676/2-A), (MB 500-676676/1-A), (500-222901-A-10-B MS) and (500-222901-A-10-C MSD); however, the surrogate Tetrachloro-m-xylene was within control limits. The laboratory's SOP allows one surrogate to be outside acceptance limits; therefore, re-extraction was not performed. These results have been reported and qualified.

Method 8082A: The following sample required a dilution due to the nature of the sample matrix: ED-R3SL-004 (500-222901-2). Because of this dilution, the surrogate spike concentration in the sample was reduced to a level where the recovery calculation does not provide useful information.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

#### Metals

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

#### Organic Prep

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

# Detection Summary

Client: Civil & Environmental Consultants Inc  
Project/Site: Arconic - Elliot Ditch - Lafayette, IN

Job ID: 500-222901-1

## Client Sample ID: ED-R3SL-003

## Lab Sample ID: 500-222901-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
PCB-1248	1.6		0.17		mg/Kg	10	✳	8082A	Total/NA

## Client Sample ID: ED-R3SL-004

## Lab Sample ID: 500-222901-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
PCB-1248	4.4		0.85		mg/Kg	50	✳	8082A	Total/NA

## Client Sample ID: ED-R3SL-005

## Lab Sample ID: 500-222901-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
PCB-1248	1.0		0.17		mg/Kg	10	✳	8082A	Total/NA

## Client Sample ID: ED-R3SL-006

## Lab Sample ID: 500-222901-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
PCB-1248	0.53		0.17		mg/Kg	10	✳	8082A	Total/NA

## Client Sample ID: ED-R3SL-007

## Lab Sample ID: 500-222901-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
PCB-1248	1.3		0.18		mg/Kg	10	✳	8082A	Total/NA

## Client Sample ID: ED-R3SL-SW002

## Lab Sample ID: 500-222901-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
PCB-1248	0.44		0.17		mg/Kg	10	✳	8082A	Total/NA

## Client Sample ID: ED-R3SL-008

## Lab Sample ID: 500-222901-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
PCB-1248	1.8		0.18		mg/Kg	10	✳	8082A	Total/NA

## Client Sample ID: ED-R3SL-009

## Lab Sample ID: 500-222901-8

No Detections.

## Client Sample ID: ED-R3SL-010

## Lab Sample ID: 500-222901-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
PCB-1248	1.2		0.17		mg/Kg	10	✳	8082A	Total/NA

## Client Sample ID: ED-R3SL-011

## Lab Sample ID: 500-222901-10

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
PCB-1248	0.45		0.17		mg/Kg	10	✳	8082A	Total/NA

This Detection Summary does not include radiochemical test results.

Euofins Chicago

# Method Summary

Client: Civil & Environmental Consultants Inc  
Project/Site: Arconic - Elliot Ditch - Lafayette, IN

Job ID: 500-222901-1

Method	Method Description	Protocol	Laboratory
8082A	Polychlorinated Biphenyls (PCBs) by Gas Chromatography	SW846	EET CHI
Moisture	Percent Moisture	EPA	EET CHI
3541	Automated Soxhlet Extraction	SW846	EET CHI

**Protocol References:**

EPA = US Environmental Protection Agency

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

**Laboratory References:**

EET CHI = Eurofins Chicago, 2417 Bond Street, University Park, IL 60484, TEL (708)534-5200



# Sample Summary

Client: Civil & Environmental Consultants Inc  
Project/Site: Arconic - Elliot Ditch - Lafayette, IN

Job ID: 500-222901-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
500-222901-1	ED-R3SL-003	Solid	09/26/22 15:25	09/27/22 15:06
500-222901-2	ED-R3SL-004	Solid	09/26/22 15:30	09/27/22 15:06
500-222901-3	ED-R3SL-005	Solid	09/26/22 16:20	09/27/22 15:06
500-222901-4	ED-R3SL-006	Solid	09/26/22 16:25	09/27/22 15:06
500-222901-5	ED-R3SL-007	Solid	09/26/22 16:30	09/27/22 15:06
500-222901-6	ED-R3SL-SW002	Solid	09/27/22 11:20	09/27/22 15:06
500-222901-7	ED-R3SL-008	Solid	09/27/22 11:45	09/27/22 15:06
500-222901-8	ED-R3SL-009	Solid	09/27/22 11:50	09/27/22 15:06
500-222901-9	ED-R3SL-010	Solid	09/27/22 11:55	09/27/22 15:06
500-222901-10	ED-R3SL-011	Solid	09/27/22 12:40	09/27/22 15:06

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# Client Sample Results

Client: Civil & Environmental Consultants Inc  
 Project/Site: Arconic - Elliot Ditch - Lafayette, IN

Job ID: 500-222901-1

**Client Sample ID: ED-R3SL-003**

**Lab Sample ID: 500-222901-1**

Date Collected: 09/26/22 15:25

Matrix: Solid

Date Received: 09/27/22 15:06

Percent Solids: 94.6

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<0.17		0.17		mg/Kg	☼	09/27/22 16:15	09/28/22 10:57	10
PCB-1221	<0.17		0.17		mg/Kg	☼	09/27/22 16:15	09/28/22 10:57	10
PCB-1232	<0.17		0.17		mg/Kg	☼	09/27/22 16:15	09/28/22 10:57	10
PCB-1242	<0.17		0.17		mg/Kg	☼	09/27/22 16:15	09/28/22 10:57	10
<b>PCB-1248</b>	<b>1.6</b>		0.17		mg/Kg	☼	09/27/22 16:15	09/28/22 10:57	10
PCB-1254	<0.17		0.17		mg/Kg	☼	09/27/22 16:15	09/28/22 10:57	10
PCB-1260	<0.17		0.17		mg/Kg	☼	09/27/22 16:15	09/28/22 10:57	10

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	121		49 - 129	09/27/22 16:15	09/28/22 10:57	10
DCB Decachlorobiphenyl	162	S1+	37 - 121	09/27/22 16:15	09/28/22 10:57	10

# Client Sample Results

Client: Civil & Environmental Consultants Inc  
 Project/Site: Arconic - Elliot Ditch - Lafayette, IN

Job ID: 500-222901-1

**Client Sample ID: ED-R3SL-004**

**Lab Sample ID: 500-222901-2**

Date Collected: 09/26/22 15:30

Matrix: Solid

Date Received: 09/27/22 15:06

Percent Solids: 93.4

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<0.85		0.85		mg/Kg	☼	09/27/22 16:15	09/28/22 13:54	50
PCB-1221	<0.85		0.85		mg/Kg	☼	09/27/22 16:15	09/28/22 13:54	50
PCB-1232	<0.85		0.85		mg/Kg	☼	09/27/22 16:15	09/28/22 13:54	50
PCB-1242	<0.85		0.85		mg/Kg	☼	09/27/22 16:15	09/28/22 13:54	50
<b>PCB-1248</b>	<b>4.4</b>		0.85		mg/Kg	☼	09/27/22 16:15	09/28/22 13:54	50
PCB-1254	<0.85		0.85		mg/Kg	☼	09/27/22 16:15	09/28/22 13:54	50
PCB-1260	<0.85		0.85		mg/Kg	☼	09/27/22 16:15	09/28/22 13:54	50

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	132	S1+	49 - 129	09/27/22 16:15	09/28/22 13:54	50
DCB Decachlorobiphenyl	188	S1+	37 - 121	09/27/22 16:15	09/28/22 13:54	50

# Client Sample Results

Client: Civil & Environmental Consultants Inc  
 Project/Site: Arconic - Elliot Ditch - Lafayette, IN

Job ID: 500-222901-1

**Client Sample ID: ED-R3SL-005**

**Lab Sample ID: 500-222901-3**

Date Collected: 09/26/22 16:20

Matrix: Solid

Date Received: 09/27/22 15:06

Percent Solids: 93.2

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<0.17		0.17		mg/Kg	☼	09/27/22 16:15	09/28/22 11:27	10
PCB-1221	<0.17		0.17		mg/Kg	☼	09/27/22 16:15	09/28/22 11:27	10
PCB-1232	<0.17		0.17		mg/Kg	☼	09/27/22 16:15	09/28/22 11:27	10
PCB-1242	<0.17		0.17		mg/Kg	☼	09/27/22 16:15	09/28/22 11:27	10
<b>PCB-1248</b>	<b>1.0</b>		0.17		mg/Kg	☼	09/27/22 16:15	09/28/22 11:27	10
PCB-1254	<0.17		0.17		mg/Kg	☼	09/27/22 16:15	09/28/22 11:27	10
PCB-1260	<0.17		0.17		mg/Kg	☼	09/27/22 16:15	09/28/22 11:27	10

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	98		49 - 129	09/27/22 16:15	09/28/22 11:27	10
DCB Decachlorobiphenyl	132	S1+	37 - 121	09/27/22 16:15	09/28/22 11:27	10

# Client Sample Results

Client: Civil & Environmental Consultants Inc  
 Project/Site: Arconic - Elliot Ditch - Lafayette, IN

Job ID: 500-222901-1

**Client Sample ID: ED-R3SL-006**

**Lab Sample ID: 500-222901-4**

Date Collected: 09/26/22 16:25

Matrix: Solid

Date Received: 09/27/22 15:06

Percent Solids: 95.1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<0.17		0.17		mg/Kg	☼	09/27/22 16:15	09/28/22 11:41	10
PCB-1221	<0.17		0.17		mg/Kg	☼	09/27/22 16:15	09/28/22 11:41	10
PCB-1232	<0.17		0.17		mg/Kg	☼	09/27/22 16:15	09/28/22 11:41	10
PCB-1242	<0.17		0.17		mg/Kg	☼	09/27/22 16:15	09/28/22 11:41	10
<b>PCB-1248</b>	<b>0.53</b>		0.17		mg/Kg	☼	09/27/22 16:15	09/28/22 11:41	10
PCB-1254	<0.17		0.17		mg/Kg	☼	09/27/22 16:15	09/28/22 11:41	10
PCB-1260	<0.17		0.17		mg/Kg	☼	09/27/22 16:15	09/28/22 11:41	10

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	79		49 - 129	09/27/22 16:15	09/28/22 11:41	10
DCB Decachlorobiphenyl	147	S1+	37 - 121	09/27/22 16:15	09/28/22 11:41	10

# Client Sample Results

Client: Civil & Environmental Consultants Inc  
 Project/Site: Arconic - Elliot Ditch - Lafayette, IN

Job ID: 500-222901-1

**Client Sample ID: ED-R3SL-007**

**Lab Sample ID: 500-222901-5**

Date Collected: 09/26/22 16:30

Matrix: Solid

Date Received: 09/27/22 15:06

Percent Solids: 93.9

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<0.18		0.18		mg/Kg	☼	09/27/22 16:15	09/28/22 11:56	10
PCB-1221	<0.18		0.18		mg/Kg	☼	09/27/22 16:15	09/28/22 11:56	10
PCB-1232	<0.18		0.18		mg/Kg	☼	09/27/22 16:15	09/28/22 11:56	10
PCB-1242	<0.18		0.18		mg/Kg	☼	09/27/22 16:15	09/28/22 11:56	10
<b>PCB-1248</b>	<b>1.3</b>		0.18		mg/Kg	☼	09/27/22 16:15	09/28/22 11:56	10
PCB-1254	<0.18		0.18		mg/Kg	☼	09/27/22 16:15	09/28/22 11:56	10
PCB-1260	<0.18		0.18		mg/Kg	☼	09/27/22 16:15	09/28/22 11:56	10

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	99		49 - 129	09/27/22 16:15	09/28/22 11:56	10
DCB Decachlorobiphenyl	140	S1+	37 - 121	09/27/22 16:15	09/28/22 11:56	10

# Client Sample Results

Client: Civil & Environmental Consultants Inc  
 Project/Site: Arconic - Elliot Ditch - Lafayette, IN

Job ID: 500-222901-1

**Client Sample ID: ED-R3SL-SW002**

**Lab Sample ID: 500-222901-6**

Date Collected: 09/27/22 11:20

Matrix: Solid

Date Received: 09/27/22 15:06

Percent Solids: 93.1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<0.17		0.17		mg/Kg	☼	09/27/22 16:15	09/28/22 12:11	10
PCB-1221	<0.17		0.17		mg/Kg	☼	09/27/22 16:15	09/28/22 12:11	10
PCB-1232	<0.17		0.17		mg/Kg	☼	09/27/22 16:15	09/28/22 12:11	10
PCB-1242	<0.17		0.17		mg/Kg	☼	09/27/22 16:15	09/28/22 12:11	10
<b>PCB-1248</b>	<b>0.44</b>		0.17		mg/Kg	☼	09/27/22 16:15	09/28/22 12:11	10
PCB-1254	<0.17		0.17		mg/Kg	☼	09/27/22 16:15	09/28/22 12:11	10
PCB-1260	<0.17		0.17		mg/Kg	☼	09/27/22 16:15	09/28/22 12:11	10

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	101		49 - 129	09/27/22 16:15	09/28/22 12:11	10
DCB Decachlorobiphenyl	137	S1+	37 - 121	09/27/22 16:15	09/28/22 12:11	10

# Client Sample Results

Client: Civil & Environmental Consultants Inc  
 Project/Site: Arconic - Elliot Ditch - Lafayette, IN

Job ID: 500-222901-1

**Client Sample ID: ED-R3SL-008**

**Lab Sample ID: 500-222901-7**

Date Collected: 09/27/22 11:45

Matrix: Solid

Date Received: 09/27/22 15:06

Percent Solids: 94.2

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<0.18		0.18		mg/Kg	☼	09/27/22 16:15	09/28/22 12:26	10
PCB-1221	<0.18		0.18		mg/Kg	☼	09/27/22 16:15	09/28/22 12:26	10
PCB-1232	<0.18		0.18		mg/Kg	☼	09/27/22 16:15	09/28/22 12:26	10
PCB-1242	<0.18		0.18		mg/Kg	☼	09/27/22 16:15	09/28/22 12:26	10
<b>PCB-1248</b>	<b>1.8</b>		0.18		mg/Kg	☼	09/27/22 16:15	09/28/22 12:26	10
PCB-1254	<0.18		0.18		mg/Kg	☼	09/27/22 16:15	09/28/22 12:26	10
PCB-1260	<0.18		0.18		mg/Kg	☼	09/27/22 16:15	09/28/22 12:26	10

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	96		49 - 129	09/27/22 16:15	09/28/22 12:26	10
DCB Decachlorobiphenyl	140	S1+	37 - 121	09/27/22 16:15	09/28/22 12:26	10

# Client Sample Results

Client: Civil & Environmental Consultants Inc  
 Project/Site: Arconic - Elliot Ditch - Lafayette, IN

Job ID: 500-222901-1

**Client Sample ID: ED-R3SL-009**

**Lab Sample ID: 500-222901-8**

**Date Collected: 09/27/22 11:50**

**Matrix: Solid**

**Date Received: 09/27/22 15:06**

**Percent Solids: 95.4**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<0.17		0.17		mg/Kg	☼	09/27/22 16:15	09/28/22 12:40	10
PCB-1221	<0.17		0.17		mg/Kg	☼	09/27/22 16:15	09/28/22 12:40	10
PCB-1232	<0.17		0.17		mg/Kg	☼	09/27/22 16:15	09/28/22 12:40	10
PCB-1242	<0.17		0.17		mg/Kg	☼	09/27/22 16:15	09/28/22 12:40	10
PCB-1248	<0.17		0.17		mg/Kg	☼	09/27/22 16:15	09/28/22 12:40	10
PCB-1254	<0.17		0.17		mg/Kg	☼	09/27/22 16:15	09/28/22 12:40	10
PCB-1260	<0.17		0.17		mg/Kg	☼	09/27/22 16:15	09/28/22 12:40	10

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	103		49 - 129	09/27/22 16:15	09/28/22 12:40	10
DCB Decachlorobiphenyl	146	S1+	37 - 121	09/27/22 16:15	09/28/22 12:40	10

# Client Sample Results

Client: Civil & Environmental Consultants Inc  
 Project/Site: Arconic - Elliot Ditch - Lafayette, IN

Job ID: 500-222901-1

**Client Sample ID: ED-R3SL-010**

**Lab Sample ID: 500-222901-9**

Date Collected: 09/27/22 11:55

Matrix: Solid

Date Received: 09/27/22 15:06

Percent Solids: 92.6

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<0.17		0.17		mg/Kg	☼	09/27/22 16:15	09/28/22 12:55	10
PCB-1221	<0.17		0.17		mg/Kg	☼	09/27/22 16:15	09/28/22 12:55	10
PCB-1232	<0.17		0.17		mg/Kg	☼	09/27/22 16:15	09/28/22 12:55	10
PCB-1242	<0.17		0.17		mg/Kg	☼	09/27/22 16:15	09/28/22 12:55	10
<b>PCB-1248</b>	<b>1.2</b>		0.17		mg/Kg	☼	09/27/22 16:15	09/28/22 12:55	10
PCB-1254	<0.17		0.17		mg/Kg	☼	09/27/22 16:15	09/28/22 12:55	10
PCB-1260	<0.17		0.17		mg/Kg	☼	09/27/22 16:15	09/28/22 12:55	10

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	90		49 - 129	09/27/22 16:15	09/28/22 12:55	10
DCB Decachlorobiphenyl	132	S1+	37 - 121	09/27/22 16:15	09/28/22 12:55	10

# Client Sample Results

Client: Civil & Environmental Consultants Inc  
 Project/Site: Arconic - Elliot Ditch - Lafayette, IN

Job ID: 500-222901-1

**Client Sample ID: ED-R3SL-011**

**Lab Sample ID: 500-222901-10**

Date Collected: 09/27/22 12:40

Matrix: Solid

Date Received: 09/27/22 15:06

Percent Solids: 95.6

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<0.17	F1	0.17		mg/Kg	☼	09/27/22 16:15	09/28/22 13:10	10
PCB-1221	<0.17		0.17		mg/Kg	☼	09/27/22 16:15	09/28/22 13:10	10
PCB-1232	<0.17		0.17		mg/Kg	☼	09/27/22 16:15	09/28/22 13:10	10
PCB-1242	<0.17		0.17		mg/Kg	☼	09/27/22 16:15	09/28/22 13:10	10
<b>PCB-1248</b>	<b>0.45</b>		0.17		mg/Kg	☼	09/27/22 16:15	09/28/22 13:10	10
PCB-1254	<0.17		0.17		mg/Kg	☼	09/27/22 16:15	09/28/22 13:10	10
PCB-1260	<0.17	F1	0.17		mg/Kg	☼	09/27/22 16:15	09/28/22 13:10	10

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	94		49 - 129	09/27/22 16:15	09/28/22 13:10	10
DCB Decachlorobiphenyl	138	S1+	37 - 121	09/27/22 16:15	09/28/22 13:10	10

# Definitions/Glossary

Client: Civil & Environmental Consultants Inc  
Project/Site: Arconic - Elliot Ditch - Lafayette, IN

Job ID: 500-222901-1

## Qualifiers

### GC Semi VOA

Qualifier	Qualifier Description
F1	MS and/or MSD recovery exceeds control limits.
S1+	Surrogate recovery exceeds control limits, high biased.

## Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
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)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
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)
TNTC	Too Numerous To Count

# QC Association Summary

Client: Civil & Environmental Consultants Inc  
 Project/Site: Arconic - Elliot Ditch - Lafayette, IN

Job ID: 500-222901-1

## GC Semi VOA

### Prep Batch: 676676

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-222901-1	ED-R3SL-003	Total/NA	Solid	3541	
500-222901-2	ED-R3SL-004	Total/NA	Solid	3541	
500-222901-3	ED-R3SL-005	Total/NA	Solid	3541	
500-222901-4	ED-R3SL-006	Total/NA	Solid	3541	
500-222901-5	ED-R3SL-007	Total/NA	Solid	3541	
500-222901-6	ED-R3SL-SW002	Total/NA	Solid	3541	
500-222901-7	ED-R3SL-008	Total/NA	Solid	3541	
500-222901-8	ED-R3SL-009	Total/NA	Solid	3541	
500-222901-9	ED-R3SL-010	Total/NA	Solid	3541	
500-222901-10	ED-R3SL-011	Total/NA	Solid	3541	
MB 500-676676/1-A	Method Blank	Total/NA	Solid	3541	
LCS 500-676676/2-A	Lab Control Sample	Total/NA	Solid	3541	
500-222901-10 MS	ED-R3SL-011	Total/NA	Solid	3541	
500-222901-10 MSD	ED-R3SL-011	Total/NA	Solid	3541	

### Analysis Batch: 676708

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-222901-1	ED-R3SL-003	Total/NA	Solid	8082A	676676
500-222901-2	ED-R3SL-004	Total/NA	Solid	8082A	676676
500-222901-3	ED-R3SL-005	Total/NA	Solid	8082A	676676
500-222901-4	ED-R3SL-006	Total/NA	Solid	8082A	676676
500-222901-5	ED-R3SL-007	Total/NA	Solid	8082A	676676
500-222901-6	ED-R3SL-SW002	Total/NA	Solid	8082A	676676
500-222901-7	ED-R3SL-008	Total/NA	Solid	8082A	676676
500-222901-8	ED-R3SL-009	Total/NA	Solid	8082A	676676
500-222901-9	ED-R3SL-010	Total/NA	Solid	8082A	676676
500-222901-10	ED-R3SL-011	Total/NA	Solid	8082A	676676
MB 500-676676/1-A	Method Blank	Total/NA	Solid	8082A	676676
LCS 500-676676/2-A	Lab Control Sample	Total/NA	Solid	8082A	676676
500-222901-10 MS	ED-R3SL-011	Total/NA	Solid	8082A	676676
500-222901-10 MSD	ED-R3SL-011	Total/NA	Solid	8082A	676676

## General Chemistry

### Analysis Batch: 676672

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-222901-1	ED-R3SL-003	Total/NA	Solid	Moisture	
500-222901-2	ED-R3SL-004	Total/NA	Solid	Moisture	
500-222901-3	ED-R3SL-005	Total/NA	Solid	Moisture	
500-222901-4	ED-R3SL-006	Total/NA	Solid	Moisture	
500-222901-5	ED-R3SL-007	Total/NA	Solid	Moisture	
500-222901-6	ED-R3SL-SW002	Total/NA	Solid	Moisture	
500-222901-7	ED-R3SL-008	Total/NA	Solid	Moisture	
500-222901-8	ED-R3SL-009	Total/NA	Solid	Moisture	
500-222901-9	ED-R3SL-010	Total/NA	Solid	Moisture	
500-222901-10	ED-R3SL-011	Total/NA	Solid	Moisture	
500-222901-1 DU	ED-R3SL-003	Total/NA	Solid	Moisture	

# Surrogate Summary

Client: Civil & Environmental Consultants Inc  
 Project/Site: Arconic - Elliot Ditch - Lafayette, IN

Job ID: 500-222901-1

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

Matrix: Solid

Prep Type: Total/NA

### Percent Surrogate Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	TCX1	DCBP1
		(49-129)	(37-121)
500-222901-1	ED-R3SL-003	121	162 S1+
500-222901-2	ED-R3SL-004	132 S1+	188 S1+
500-222901-3	ED-R3SL-005	98	132 S1+
500-222901-4	ED-R3SL-006	79	147 S1+
500-222901-5	ED-R3SL-007	99	140 S1+
500-222901-6	ED-R3SL-SW002	101	137 S1+
500-222901-7	ED-R3SL-008	96	140 S1+
500-222901-8	ED-R3SL-009	103	146 S1+
500-222901-9	ED-R3SL-010	90	132 S1+
500-222901-10	ED-R3SL-011	94	138 S1+
500-222901-10 MS	ED-R3SL-011	101	139 S1+
500-222901-10 MSD	ED-R3SL-011	110	148 S1+
LCS 500-676676/2-A	Lab Control Sample	116	122 S1+
MB 500-676676/1-A	Method Blank	118	126 S1+

#### Surrogate Legend

TCX = Tetrachloro-m-xylene

DCBP = DCB Decachlorobiphenyl

# QC Sample Results

Client: Civil & Environmental Consultants Inc  
 Project/Site: Arconic - Elliot Ditch - Lafayette, IN

Job ID: 500-222901-1

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

**Lab Sample ID: MB 500-676676/1-A**  
**Matrix: Solid**  
**Analysis Batch: 676708**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**  
**Prep Batch: 676676**

Analyte	MB MB		RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
PCB-1016	<0.017		0.017		mg/Kg		09/27/22 16:15	09/28/22 10:27	1
PCB-1221	<0.017		0.017		mg/Kg		09/27/22 16:15	09/28/22 10:27	1
PCB-1232	<0.017		0.017		mg/Kg		09/27/22 16:15	09/28/22 10:27	1
PCB-1242	<0.017		0.017		mg/Kg		09/27/22 16:15	09/28/22 10:27	1
PCB-1248	<0.017		0.017		mg/Kg		09/27/22 16:15	09/28/22 10:27	1
PCB-1254	<0.017		0.017		mg/Kg		09/27/22 16:15	09/28/22 10:27	1
PCB-1260	<0.017		0.017		mg/Kg		09/27/22 16:15	09/28/22 10:27	1

Surrogate	MB MB		Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
Tetrachloro-m-xylene	118		49 - 129	09/27/22 16:15	09/28/22 10:27	1
DCB Decachlorobiphenyl	126	S1+	37 - 121	09/27/22 16:15	09/28/22 10:27	1

**Lab Sample ID: LCS 500-676676/2-A**  
**Matrix: Solid**  
**Analysis Batch: 676708**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**  
**Prep Batch: 676676**

Analyte	Spike Added	LCS LCS		Unit	D	%Rec	%Rec Limits
		Result	Qualifier				
PCB-1016	0.167	0.157		mg/Kg		94	57 - 120
PCB-1260	0.167	0.163		mg/Kg		98	61 - 125

Surrogate	LCS LCS		Limits
	%Recovery	Qualifier	
Tetrachloro-m-xylene	116		49 - 129
DCB Decachlorobiphenyl	122	S1+	37 - 121

**Lab Sample ID: 500-222901-10 MS**  
**Matrix: Solid**  
**Analysis Batch: 676708**

**Client Sample ID: ED-R3SL-011**  
**Prep Type: Total/NA**  
**Prep Batch: 676676**

Analyte	Sample Sample		Spike Added	MS MS		Unit	D	%Rec	%Rec Limits
	Result	Qualifier		Result	Qualifier				
PCB-1016	<0.17	F1	0.166	0.268	F1	mg/Kg	☼	162	57 - 120
PCB-1260	<0.17	F1	0.166	0.213	F1	mg/Kg	☼	128	61 - 125

Surrogate	MS MS		Limits
	%Recovery	Qualifier	
Tetrachloro-m-xylene	101		49 - 129
DCB Decachlorobiphenyl	139	S1+	37 - 121

**Lab Sample ID: 500-222901-10 MSD**  
**Matrix: Solid**  
**Analysis Batch: 676708**

**Client Sample ID: ED-R3SL-011**  
**Prep Type: Total/NA**  
**Prep Batch: 676676**

Analyte	Sample Sample		Spike Added	MSD MSD		Unit	D	%Rec	%Rec Limits	RPD	
	Result	Qualifier		Result	Qualifier					RPD	Limit
PCB-1016	<0.17	F1	0.167	0.287	F1	mg/Kg	☼	172	57 - 120	7	30
PCB-1260	<0.17	F1	0.167	0.227	F1	mg/Kg	☼	136	61 - 125	6	30

Surrogate	MSD MSD		Limits
	%Recovery	Qualifier	
Tetrachloro-m-xylene	110		49 - 129
DCB Decachlorobiphenyl	148	S1+	37 - 121

Eurofins Chicago

# Lab Chronicle

Client: Civil & Environmental Consultants Inc  
Project/Site: Arconic - Elliot Ditch - Lafayette, IN

Job ID: 500-222901-1

**Client Sample ID: ED-R3SL-003**

**Date Collected: 09/26/22 15:25**

**Date Received: 09/27/22 15:06**

**Lab Sample ID: 500-222901-1**

**Matrix: Solid**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Moisture		1	676672	LWN	EET CHI	09/27/22 15:52

**Client Sample ID: ED-R3SL-003**

**Date Collected: 09/26/22 15:25**

**Date Received: 09/27/22 15:06**

**Lab Sample ID: 500-222901-1**

**Matrix: Solid**

**Percent Solids: 94.6**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3541			676676	DAK	EET CHI	09/27/22 16:15 - 09/27/22 19:30 <sup>1</sup>
Total/NA	Analysis	8082A		10	676708	SB	EET CHI	09/28/22 10:57

**Client Sample ID: ED-R3SL-004**

**Date Collected: 09/26/22 15:30**

**Date Received: 09/27/22 15:06**

**Lab Sample ID: 500-222901-2**

**Matrix: Solid**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Moisture		1	676672	LWN	EET CHI	09/27/22 15:52

**Client Sample ID: ED-R3SL-004**

**Date Collected: 09/26/22 15:30**

**Date Received: 09/27/22 15:06**

**Lab Sample ID: 500-222901-2**

**Matrix: Solid**

**Percent Solids: 93.4**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3541			676676	DAK	EET CHI	09/27/22 16:15 - 09/27/22 19:30 <sup>1</sup>
Total/NA	Analysis	8082A		50	676708	SB	EET CHI	09/28/22 13:54

**Client Sample ID: ED-R3SL-005**

**Date Collected: 09/26/22 16:20**

**Date Received: 09/27/22 15:06**

**Lab Sample ID: 500-222901-3**

**Matrix: Solid**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Moisture		1	676672	LWN	EET CHI	09/27/22 15:52

**Client Sample ID: ED-R3SL-005**

**Date Collected: 09/26/22 16:20**

**Date Received: 09/27/22 15:06**

**Lab Sample ID: 500-222901-3**

**Matrix: Solid**

**Percent Solids: 93.2**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3541			676676	DAK	EET CHI	09/27/22 16:15 - 09/27/22 19:30 <sup>1</sup>
Total/NA	Analysis	8082A		10	676708	SB	EET CHI	09/28/22 11:27

**Client Sample ID: ED-R3SL-006**

**Date Collected: 09/26/22 16:25**

**Date Received: 09/27/22 15:06**

**Lab Sample ID: 500-222901-4**

**Matrix: Solid**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Moisture		1	676672	LWN	EET CHI	09/27/22 15:52

Eurofins Chicago

# Lab Chronicle

Client: Civil & Environmental Consultants Inc  
Project/Site: Arconic - Elliot Ditch - Lafayette, IN

Job ID: 500-222901-1

**Client Sample ID: ED-R3SL-006**

**Lab Sample ID: 500-222901-4**

**Date Collected: 09/26/22 16:25**

**Matrix: Solid**

**Date Received: 09/27/22 15:06**

**Percent Solids: 95.1**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3541			676676	DAK	EET CHI	09/27/22 16:15 - 09/27/22 19:30 <sup>1</sup>
Total/NA	Analysis	8082A		10	676708	SB	EET CHI	09/28/22 11:41

**Client Sample ID: ED-R3SL-007**

**Lab Sample ID: 500-222901-5**

**Date Collected: 09/26/22 16:30**

**Matrix: Solid**

**Date Received: 09/27/22 15:06**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Moisture		1	676672	LWN	EET CHI	09/27/22 15:52

**Client Sample ID: ED-R3SL-007**

**Lab Sample ID: 500-222901-5**

**Date Collected: 09/26/22 16:30**

**Matrix: Solid**

**Date Received: 09/27/22 15:06**

**Percent Solids: 93.9**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3541			676676	DAK	EET CHI	09/27/22 16:15 - 09/27/22 19:30 <sup>1</sup>
Total/NA	Analysis	8082A		10	676708	SB	EET CHI	09/28/22 11:56

**Client Sample ID: ED-R3SL-SW002**

**Lab Sample ID: 500-222901-6**

**Date Collected: 09/27/22 11:20**

**Matrix: Solid**

**Date Received: 09/27/22 15:06**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Moisture		1	676672	LWN	EET CHI	09/27/22 15:52

**Client Sample ID: ED-R3SL-SW002**

**Lab Sample ID: 500-222901-6**

**Date Collected: 09/27/22 11:20**

**Matrix: Solid**

**Date Received: 09/27/22 15:06**

**Percent Solids: 93.1**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3541			676676	DAK	EET CHI	09/27/22 16:15 - 09/27/22 19:30 <sup>1</sup>
Total/NA	Analysis	8082A		10	676708	SB	EET CHI	09/28/22 12:11

**Client Sample ID: ED-R3SL-008**

**Lab Sample ID: 500-222901-7**

**Date Collected: 09/27/22 11:45**

**Matrix: Solid**

**Date Received: 09/27/22 15:06**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Moisture		1	676672	LWN	EET CHI	09/27/22 15:52

# Lab Chronicle

Client: Civil & Environmental Consultants Inc  
Project/Site: Arconic - Elliot Ditch - Lafayette, IN

Job ID: 500-222901-1

## Client Sample ID: ED-R3SL-008

Date Collected: 09/27/22 11:45

Date Received: 09/27/22 15:06

## Lab Sample ID: 500-222901-7

Matrix: Solid

Percent Solids: 94.2

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3541			676676	DAK	EET CHI	09/27/22 16:15 - 09/27/22 19:30 <sup>1</sup>
Total/NA	Analysis	8082A		10	676708	SB	EET CHI	09/28/22 12:26

## Client Sample ID: ED-R3SL-009

Date Collected: 09/27/22 11:50

Date Received: 09/27/22 15:06

## Lab Sample ID: 500-222901-8

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Moisture		1	676672	LWN	EET CHI	09/27/22 15:52

## Client Sample ID: ED-R3SL-009

Date Collected: 09/27/22 11:50

Date Received: 09/27/22 15:06

## Lab Sample ID: 500-222901-8

Matrix: Solid

Percent Solids: 95.4

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3541			676676	DAK	EET CHI	09/27/22 16:15 - 09/27/22 19:30 <sup>1</sup>
Total/NA	Analysis	8082A		10	676708	SB	EET CHI	09/28/22 12:40

## Client Sample ID: ED-R3SL-010

Date Collected: 09/27/22 11:55

Date Received: 09/27/22 15:06

## Lab Sample ID: 500-222901-9

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Moisture		1	676672	LWN	EET CHI	09/27/22 15:52

## Client Sample ID: ED-R3SL-010

Date Collected: 09/27/22 11:55

Date Received: 09/27/22 15:06

## Lab Sample ID: 500-222901-9

Matrix: Solid

Percent Solids: 92.6

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3541			676676	DAK	EET CHI	09/27/22 16:15 - 09/27/22 19:30 <sup>1</sup>
Total/NA	Analysis	8082A		10	676708	SB	EET CHI	09/28/22 12:55

## Client Sample ID: ED-R3SL-011

Date Collected: 09/27/22 12:40

Date Received: 09/27/22 15:06

## Lab Sample ID: 500-222901-10

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Moisture		1	676672	LWN	EET CHI	09/27/22 15:52

# Lab Chronicle

Client: Civil & Environmental Consultants Inc  
Project/Site: Arconic - Elliot Ditch - Lafayette, IN

Job ID: 500-222901-1

**Client Sample ID: ED-R3SL-011**

**Lab Sample ID: 500-222901-10**

**Date Collected: 09/27/22 12:40**

**Matrix: Solid**

**Date Received: 09/27/22 15:06**

**Percent Solids: 95.6**

<u>Prep Type</u>	<u>Batch Type</u>	<u>Batch Method</u>	<u>Run</u>	<u>Dilution Factor</u>	<u>Batch Number</u>	<u>Analyst</u>	<u>Lab</u>	<u>Prepared or Analyzed</u>
Total/NA	Prep	3541			676676	DAK	EET CHI	09/27/22 16:15 - 09/27/22 19:30 <sup>1</sup>
Total/NA	Analysis	8082A		10	676708	SB	EET CHI	09/28/22 13:10

<sup>1</sup> Completion dates and times are reported or not reported per method requirements or individual lab discretion.

## Laboratory References:

EET CHI = Eurofins Chicago, 2417 Bond Street, University Park, IL 60484, TEL (708)534-5200

# Accreditation/Certification Summary

Client: Civil & Environmental Consultants Inc  
Project/Site: Arconic - Elliot Ditch - Lafayette, IN

Job ID: 500-222901-1

## Laboratory: Eurofins Chicago

The accreditations/certifications listed below are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Illinois	NELAP	IL00035	04-30-23

1

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15

**Eurofins Chicago**

2417 Bond Street  
University Park IL 60484  
Phone 708-534-5200 Fax. 708-534-5211

**Chain of Custody Record**



Environment Testing  
America

<b>Client Information</b>		Sampler: <b>J. O'Brien</b>		Lab PM: <b>Kintz Robin M</b>		Carrier Tracking No(s)		COC No. <b>500-105440-44981 7</b>																																					
Client Contact: <b>Jenny Rickford O'Brien</b>		Phone: <b>865-407-8865</b>		E Mail: <b>Robin Kintz@et eurofinsus.com</b>		State of Origin		Page: <b>Page 7 of 8</b>																																					
Company: <b>Civil &amp; Environmental Consultants Inc</b>		PWSID		<b>Analysis Requested</b>						Job #: <b>500-222901</b>																																			
Address: <b>2704 Cherokee Farm Way Suite 101</b>		Due Date Requested		<table border="1"> <tr><td>Field Filtered Sample (Yes or No)</td><td></td></tr> <tr><td>Perform MS/MSD (Yes or No)</td><td></td></tr> <tr><td>8082A - PCBs</td><td></td></tr> </table>						Field Filtered Sample (Yes or No)		Perform MS/MSD (Yes or No)		8082A - PCBs		Preservation Codes		<table border="1"> <tr><td>A HCL</td><td>M Hexane</td></tr> <tr><td>B NaOH</td><td>N None</td></tr> <tr><td>C Zn Acetate</td><td>O AsNaO2</td></tr> <tr><td>D Nitric Acid</td><td>P Na2O4S</td></tr> <tr><td>E NaHSO4</td><td>Q Na2SO3</td></tr> <tr><td>F MeOH</td><td>R Na2S2O3</td></tr> <tr><td>G Amchlor</td><td>S H2SO4</td></tr> <tr><td>H Ascorbic Acid</td><td>T TSP Dodecahydrate</td></tr> <tr><td>I Ice</td><td>U Acetone</td></tr> <tr><td>J DI Water</td><td>V MCAA</td></tr> <tr><td>K EDTA</td><td>W pH 4-5</td></tr> <tr><td>L EDA</td><td>Y Trizma</td></tr> <tr><td></td><td>Z - other (specify)</td></tr> </table>		A HCL	M Hexane	B NaOH	N None	C Zn Acetate	O AsNaO2	D Nitric Acid	P Na2O4S	E NaHSO4	Q Na2SO3	F MeOH	R Na2S2O3	G Amchlor	S H2SO4	H Ascorbic Acid	T TSP Dodecahydrate	I Ice	U Acetone	J DI Water	V MCAA	K EDTA	W pH 4-5	L EDA	Y Trizma		Z - other (specify)
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L EDA	Y Trizma																																												
	Z - other (specify)																																												
City: <b>Knoxville</b>		TAT Requested (days):																																											
State Zip: <b>TN 37920</b>		Compliance Project: <input type="checkbox"/> Yes <input type="checkbox"/> No																																											
Phone: <b>865-340-4914(Tel)</b> <b>500-222901 COC</b>		PO #:																																											
Email: <b>jrickfordobrien@cecinc.com</b>		Purchase Order not required																																											
Project Name: <b>Arconic - Elliot Ditch - Lafayette IN</b>		WO #:		<table border="1"> <tr><td>Field Filtered Sample (Yes or No)</td><td></td></tr> <tr><td>Perform MS/MSD (Yes or No)</td><td></td></tr> <tr><td>8082A - PCBs</td><td></td></tr> </table>						Field Filtered Sample (Yes or No)		Perform MS/MSD (Yes or No)		8082A - PCBs		Other:																													
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8082A - PCBs																																													
Site:		Project #: <b>50019033</b>		<table border="1"> <tr><td>Field Filtered Sample (Yes or No)</td><td></td></tr> <tr><td>Perform MS/MSD (Yes or No)</td><td></td></tr> <tr><td>8082A - PCBs</td><td></td></tr> </table>						Field Filtered Sample (Yes or No)		Perform MS/MSD (Yes or No)		8082A - PCBs		Special Instructions/Note																													
Field Filtered Sample (Yes or No)																																													
Perform MS/MSD (Yes or No)																																													
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SSOW#:		Sample Identification		<table border="1"> <tr><td>Field Filtered Sample (Yes or No)</td><td></td></tr> <tr><td>Perform MS/MSD (Yes or No)</td><td></td></tr> <tr><td>8082A - PCBs</td><td></td></tr> </table>						Field Filtered Sample (Yes or No)		Perform MS/MSD (Yes or No)		8082A - PCBs		Total Number of containers																													
Field Filtered Sample (Yes or No)																																													
Perform MS/MSD (Yes or No)																																													
8082A - PCBs																																													
Sample Date		Sample Time		Sample Type (C=Comp, G=grab)		Matrix (W=water, S=solid, O=waste/oil, BT=Tissue A=Air)		Preservation Code		Total Number of containers																																			
1 ED-R3SL-008		9/26/22 1525		C S		S		X		1																																			
2 ED-R3SL-004		9/26/22 1530		C S		S		X		1																																			
3 ED-R3SL-005		9/26/22 1620		C S		S		X		1																																			
4 ED-R3SL-006		9/26/22 1625		C S		S		X		1																																			
5 ED-R3SL-007		9/26/22 1630		C S		S		X		1																																			
6 ED-R3SL-SW002		9/27/22 1120		C S		S		X		1																																			
7 ED-R3SL-008		9/27/22 1145		C S		S		X		1																																			
8 ED-R3SL-009		9/27/22 1150		C S		S		X		1																																			
9 ED-R3SL-010		9/27/22 1155		C S		S		X		1																																			
10 ED-R3SL-011		9/27/22 1240		C S		S		X		1																																			
11 ED-R3SL-2B001		9/27/22 1305		G W		W		X		2																																			
Possible Hazard Identification						Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)																																							
<input type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison B <input type="checkbox"/> Unknown <input type="checkbox"/> Radiological						<input type="checkbox"/> Return To Client <input type="checkbox"/> Disposal By Lab <input type="checkbox"/> Archive For _____ Months																																							
Deliverable Requested I II III IV Other (specify)						Special Instructions/QC Requirements																																							
Empty Kit Relinquished by:			Date			Time			Method of Shipment:																																				
Relinquished by: <b>Thermy O'Brien</b>		Date/Time: <b>9/27/22 1340</b>		Company: <b>EETA</b>		Received by: <b>M. J. Ellwood</b>		Date/Time: <b>9/27/22 1242 CST</b>		Company: <b>EETA</b>																																			
Relinquished by: <b>M. J. Ellwood</b>		Date/Time: <b>9/27/22 1506 CST</b>		Company: <b>EETA</b>		Received by: <b>Ellwood</b>		Date/Time: <b>9/27/22 1506</b>		Company: <b>EETA</b>																																			
Relinquished by:		Date/Time:		Company:		Received by:		Date/Time:		Company:																																			
Custody Seals Intact. <input type="checkbox"/> Yes <input type="checkbox"/> No		Custody Seal No		Cooler Temperature(s) °C and Other Remarks		5.9-73.0																																							

# Login Sample Receipt Checklist

Client: Civil & Environmental Consultants Inc

Job Number: 500-222901-1

**Login Number: 222901**

**List Number: 1**

**Creator: Scott, Sherri L**

**List Source: Eurofins Chicago**

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
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	3.9
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").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	



## ANALYTICAL REPORT

Eurofins Chicago  
2417 Bond Street  
University Park, IL 60484  
Tel: (708)534-5200

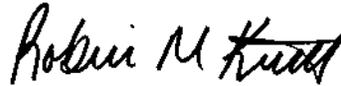
Laboratory Job ID: 500-222901-2

Client Project/Site: Arconic - Elliot Ditch - Lafayette, IN - EB

**For:**

Civil & Environmental Consultants Inc  
2704 Cherokee Farm Way  
Suite 101  
Knoxville, Tennessee 37920

Attn: Garrett Welch



Authorized for release by:  
10/6/2022 5:58:23 PM

Robin Kintz, Project Manager II  
(708)534-5200  
[Robin.Kintz@et.eurofinsus.com](mailto:Robin.Kintz@et.eurofinsus.com)

### LINKS

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results through



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The test results in this report meet all 2003 NELAC, 2009 TNI, and 2016 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.

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# Case Narrative

Client: Civil & Environmental Consultants Inc  
Project/Site: Arconic - Elliot Ditch - Lafayette, IN - EB

Job ID: 500-222901-2

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**Job ID: 500-222901-2**

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**Laboratory: Eurofins Chicago**

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**Narrative**

**Job Narrative  
500-222901-2**

**Comments**

No additional comments.

**Receipt**

The samples were received on 9/27/2022 3:06 PM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperature of the cooler at receipt was 3.9° C.

**GC Semi VOA**

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

**Organic Prep**

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

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# Detection Summary

Client: Civil & Environmental Consultants Inc  
Project/Site: Arconic - Elliot Ditch - Lafayette, IN - EB

Job ID: 500-222901-2

**Client Sample ID: ED-R3SL-EB001**

**Lab Sample ID: 500-222901-11**

No Detections.

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This Detection Summary does not include radiochemical test results.

Eurofins Chicago

# Method Summary

Client: Civil & Environmental Consultants Inc  
Project/Site: Arconic - Elliot Ditch - Lafayette, IN - EB

Job ID: 500-222901-2

Method	Method Description	Protocol	Laboratory
8082A	Polychlorinated Biphenyls (PCBs) by Gas Chromatography	SW846	EET CHI
3510C	Liquid-Liquid Extraction (Separatory Funnel)	SW846	EET CHI

**Protocol References:**

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

**Laboratory References:**

EET CHI = Eurofins Chicago, 2417 Bond Street, University Park, IL 60484, TEL (708)534-5200

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# Sample Summary

Client: Civil & Environmental Consultants Inc  
Project/Site: Arconic - Elliot Ditch - Lafayette, IN - EB

Job ID: 500-222901-2

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Lab Sample ID	Client Sample ID	Matrix	Collected	Received
500-222901-11	ED-R3SL-EB001	Water	09/27/22 13:05	09/27/22 15:06

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# Client Sample Results

Client: Civil & Environmental Consultants Inc  
 Project/Site: Arconic - Elliot Ditch - Lafayette, IN - EB

Job ID: 500-222901-2

**Client Sample ID: ED-R3SL-EB001**

**Lab Sample ID: 500-222901-11**

**Date Collected: 09/27/22 13:05**

**Matrix: Water**

**Date Received: 09/27/22 15:06**

**Method: SW846 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<0.00039		0.00039		mg/L		09/28/22 10:36	10/05/22 21:46	1
PCB-1221	<0.00039		0.00039		mg/L		09/28/22 10:36	10/05/22 21:46	1
PCB-1232	<0.00039		0.00039		mg/L		09/28/22 10:36	10/05/22 21:46	1
PCB-1242	<0.00039		0.00039		mg/L		09/28/22 10:36	10/05/22 21:46	1
PCB-1248	<0.00039		0.00039		mg/L		09/28/22 10:36	10/05/22 21:46	1
PCB-1254	<0.00039		0.00039		mg/L		09/28/22 10:36	10/05/22 21:46	1
PCB-1260	<0.00039		0.00039		mg/L		09/28/22 10:36	10/05/22 21:46	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	83		30 - 120	09/28/22 10:36	10/05/22 21:46	1
DCB Decachlorobiphenyl	65		30 - 140	09/28/22 10:36	10/05/22 21:46	1

## Definitions/Glossary

Client: Civil & Environmental Consultants Inc  
Project/Site: Arconic - Elliot Ditch - Lafayette, IN - EB

Job ID: 500-222901-2

### Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
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)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
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)
TNTC	Too Numerous To Count

# QC Association Summary

Client: Civil & Environmental Consultants Inc  
Project/Site: Arconic - Elliot Ditch - Lafayette, IN - EB

Job ID: 500-222901-2

## GC Semi VOA

### Prep Batch: 676818

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-222901-11	ED-R3SL-EB001	Total/NA	Water	3510C	
MB 500-676818/1-A	Method Blank	Total/NA	Water	3510C	
LCS 500-676818/4-A	Lab Control Sample	Total/NA	Water	3510C	
LCSD 500-676818/5-A	Lab Control Sample Dup	Total/NA	Water	3510C	

### Analysis Batch: 678095

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-222901-11	ED-R3SL-EB001	Total/NA	Water	8082A	676818
MB 500-676818/1-A	Method Blank	Total/NA	Water	8082A	676818
LCS 500-676818/4-A	Lab Control Sample	Total/NA	Water	8082A	676818
LCSD 500-676818/5-A	Lab Control Sample Dup	Total/NA	Water	8082A	676818

# Surrogate Summary

Client: Civil & Environmental Consultants Inc  
Project/Site: Arconic - Elliot Ditch - Lafayette, IN - EB

Job ID: 500-222901-2

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

Matrix: Water

Prep Type: Total/NA

### Percent Surrogate Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	TCX2	DCBP2
		(30-120)	(30-140)
500-222901-11	ED-R3SL-EB001	83	65
LCS 500-676818/4-A	Lab Control Sample	72	85
LCSD 500-676818/5-A	Lab Control Sample Dup	77	93
MB 500-676818/1-A	Method Blank	75	96

#### Surrogate Legend

TCX = Tetrachloro-m-xylene

DCBP = DCB Decachlorobiphenyl

# QC Sample Results

Client: Civil & Environmental Consultants Inc  
 Project/Site: Arconic - Elliot Ditch - Lafayette, IN - EB

Job ID: 500-222901-2

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

**Lab Sample ID: MB 500-676818/1-A**  
**Matrix: Water**  
**Analysis Batch: 678095**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**  
**Prep Batch: 676818**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<0.00040		0.00040		mg/L		09/28/22 10:36	10/05/22 19:05	1
PCB-1221	<0.00040		0.00040		mg/L		09/28/22 10:36	10/05/22 19:05	1
PCB-1232	<0.00040		0.00040		mg/L		09/28/22 10:36	10/05/22 19:05	1
PCB-1242	<0.00040		0.00040		mg/L		09/28/22 10:36	10/05/22 19:05	1
PCB-1248	<0.00040		0.00040		mg/L		09/28/22 10:36	10/05/22 19:05	1
PCB-1254	<0.00040		0.00040		mg/L		09/28/22 10:36	10/05/22 19:05	1
PCB-1260	<0.00040		0.00040		mg/L		09/28/22 10:36	10/05/22 19:05	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	75		30 - 120	09/28/22 10:36	10/05/22 19:05	1
DCB Decachlorobiphenyl	96		30 - 140	09/28/22 10:36	10/05/22 19:05	1

**Lab Sample ID: LCS 500-676818/4-A**  
**Matrix: Water**  
**Analysis Batch: 678095**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**  
**Prep Batch: 676818**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
PCB-1016	0.00400	0.00353		mg/L		88	56 - 120
PCB-1260	0.00400	0.00385		mg/L		96	53 - 137

Surrogate	LCS %Recovery	LCS Qualifier	Limits
Tetrachloro-m-xylene	72		30 - 120
DCB Decachlorobiphenyl	85		30 - 140

**Lab Sample ID: LCSD 500-676818/5-A**  
**Matrix: Water**  
**Analysis Batch: 678095**

**Client Sample ID: Lab Control Sample Dup**  
**Prep Type: Total/NA**  
**Prep Batch: 676818**

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
PCB-1016	0.00400	0.00409		mg/L		102	56 - 120	15	20
PCB-1260	0.00400	0.00444		mg/L		111	53 - 137	14	20

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
Tetrachloro-m-xylene	77		30 - 120
DCB Decachlorobiphenyl	93		30 - 140

# Lab Chronicle

Client: Civil & Environmental Consultants Inc  
Project/Site: Arconic - Elliot Ditch - Lafayette, IN - EB

Job ID: 500-222901-2

**Client Sample ID: ED-R3SL-EB001**

**Lab Sample ID: 500-222901-11**

**Date Collected: 09/27/22 13:05**

**Matrix: Water**

**Date Received: 09/27/22 15:06**

<u>Prep Type</u>	<u>Batch Type</u>	<u>Batch Method</u>	<u>Run</u>	<u>Dilution Factor</u>	<u>Batch Number</u>	<u>Analyst</u>	<u>Lab</u>	<u>Prepared or Analyzed</u>
Total/NA	Prep	3510C			676818	TS	EET CHI	09/28/22 10:36
Total/NA	Analysis	8082A		1	678095	SS	EET CHI	10/05/22 21:46

**Laboratory References:**

EET CHI = Eurofins Chicago, 2417 Bond Street, University Park, IL 60484, TEL (708)534-5200

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# Accreditation/Certification Summary

Client: Civil & Environmental Consultants Inc  
Project/Site: Arconic - Elliot Ditch - Lafayette, IN - EB

Job ID: 500-222901-2

## Laboratory: Eurofins Chicago

The accreditations/certifications listed below are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Illinois	NELAP	IL00035	04-30-23

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**Eurofins Chicago**

2417 Bond Street  
 University Park IL 60484  
 Phone 708-534-5200 Fax. 708-534-5211

**Chain of Custody Record**



Environment Testing  
 America

<b>Client Information</b>		Sampler: <b>J. O'Brien</b>		Lab PM: <b>Kintz Robin M</b>		Carrier Tracking No(s)		COC No. <b>500-105440-44981 7</b>																																																															
Client Contact: <b>Jenny Rickford O'Brien</b>		Phone: <b>865-407-8865</b>		E Mail: <b>Robin Kintz@et eurofinsus.com</b>		State of Origin		Page: <b>Page 7 of 8</b>																																																															
Company: <b>Civil &amp; Environmental Consultants Inc</b>		PWSID		<b>Analysis Requested</b>						Job #: <b>500-222901</b>																																																													
Address: <b>2704 Cherokee Farm Way Suite 101</b>		Due Date Requested		<table border="1"> <tr><td>Field Filtered Sample (Yes or No)</td><td></td></tr> <tr><td>Perform MS/MSD (Yes or No)</td><td></td></tr> <tr><td>8082A - PCBs</td><td></td></tr> </table>						Field Filtered Sample (Yes or No)		Perform MS/MSD (Yes or No)		8082A - PCBs		Preservation Codes		<table border="1"> <tr><td>A</td><td>HCL</td><td>M</td><td>Hexane</td></tr> <tr><td>B</td><td>NaOH</td><td>N</td><td>None</td></tr> <tr><td>C</td><td>Zn Acetate</td><td>O</td><td>AsNaO2</td></tr> <tr><td>D</td><td>Nitric Acid</td><td>P</td><td>Na2O4S</td></tr> <tr><td>E</td><td>NaHSO4</td><td>Q</td><td>Na2SO3</td></tr> <tr><td>F</td><td>MeOH</td><td>R</td><td>Na2S2O3</td></tr> <tr><td>G</td><td>Amchlor</td><td>S</td><td>H2SO4</td></tr> <tr><td>H</td><td>Ascorbic Acid</td><td>T</td><td>TSP Dodecahydrate</td></tr> <tr><td>I</td><td>Ice</td><td>U</td><td>Acetone</td></tr> <tr><td>J</td><td>DI Water</td><td>V</td><td>MCAA</td></tr> <tr><td>K</td><td>EDTA</td><td>W</td><td>pH 4-5</td></tr> <tr><td>L</td><td>EDA</td><td>Y</td><td>Trizma</td></tr> <tr><td></td><td></td><td>Z</td><td>- other (specify)</td></tr> </table>		A	HCL	M	Hexane	B	NaOH	N	None	C	Zn Acetate	O	AsNaO2	D	Nitric Acid	P	Na2O4S	E	NaHSO4	Q	Na2SO3	F	MeOH	R	Na2S2O3	G	Amchlor	S	H2SO4	H	Ascorbic Acid	T	TSP Dodecahydrate	I	Ice	U	Acetone	J	DI Water	V	MCAA	K	EDTA	W	pH 4-5	L	EDA	Y	Trizma			Z	- other (specify)
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F	MeOH	R	Na2S2O3																																																																				
G	Amchlor	S	H2SO4																																																																				
H	Ascorbic Acid	T	TSP Dodecahydrate																																																																				
I	Ice	U	Acetone																																																																				
J	DI Water	V	MCAA																																																																				
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City: <b>Knoxville</b>		TAT Requested (days):																																																																					
State Zip: <b>TN 37920</b>		Compliance Project: <input type="checkbox"/> Yes <input type="checkbox"/> No																																																																					
Phone: <b>865-340-4914(Tel)</b> <b>500-222901 COC</b>		PO #:																																																																					
Email: <b>jrickfordobrien@cecinc.com</b>		Purchase Order not required																																																																					
Project Name: <b>Arconic - Elliot Ditch - Lafayette IN</b>		WO #:		<table border="1"> <tr><td>Field Filtered Sample (Yes or No)</td><td></td></tr> <tr><td>Perform MS/MSD (Yes or No)</td><td></td></tr> <tr><td>8082A - PCBs</td><td></td></tr> </table>						Field Filtered Sample (Yes or No)		Perform MS/MSD (Yes or No)		8082A - PCBs		Other:																																																							
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Site:		Project #: <b>50019033</b>		<table border="1"> <tr><td>Field Filtered Sample (Yes or No)</td><td></td></tr> <tr><td>Perform MS/MSD (Yes or No)</td><td></td></tr> <tr><td>8082A - PCBs</td><td></td></tr> </table>						Field Filtered Sample (Yes or No)		Perform MS/MSD (Yes or No)		8082A - PCBs		Special Instructions/Note																																																							
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SSOW#:		Matrix		<table border="1"> <tr><td>Field Filtered Sample (Yes or No)</td><td></td></tr> <tr><td>Perform MS/MSD (Yes or No)</td><td></td></tr> <tr><td>8082A - PCBs</td><td></td></tr> </table>						Field Filtered Sample (Yes or No)		Perform MS/MSD (Yes or No)		8082A - PCBs		Total Number of containers																																																							
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8082A - PCBs																																																																							
Sample Identification		Sample Date		Sample Time		Sample Type (C=Comp, G=grab)		Matrix (W=water, S=solid, O=waste/oil, BT=Tissue A=Air)		Preservation Code		Field Filtered Sample (Yes or No)		Perform MS/MSD (Yes or No)		8082A - PCBs		Total Number of containers		Special Instructions/Note																																																			
<b>ED-R3SL-008</b>		<b>9/26/22</b>		<b>1525</b>		<b>C</b>		<b>S</b>				<b>X</b>						<b>1</b>																																																					
<b>ED-R3SL-004</b>		<b>9/26/22</b>		<b>1530</b>		<b>C</b>		<b>S</b>				<b>X</b>						<b>1</b>																																																					
<b>ED-R3SL-005</b>		<b>9/26/22</b>		<b>1620</b>		<b>C</b>		<b>S</b>				<b>X</b>						<b>1</b>																																																					
<b>ED-R3SL-006</b>		<b>9/26/22</b>		<b>1625</b>		<b>C</b>		<b>S</b>				<b>X</b>						<b>1</b>																																																					
<b>ED-R3SL-007</b>		<b>9/26/22</b>		<b>1630</b>		<b>C</b>		<b>S</b>				<b>X</b>						<b>1</b>																																																					
<b>ED-R3SL-SW002</b>		<b>9/27/22</b>		<b>1120</b>		<b>C</b>		<b>S</b>				<b>X</b>						<b>1</b>																																																					
<b>ED-R3SL-008</b>		<b>9/27/22</b>		<b>1145</b>		<b>C</b>		<b>S</b>				<b>X</b>						<b>1</b>																																																					
<b>ED-R3SL-009</b>		<b>9/27/22</b>		<b>1150</b>		<b>C</b>		<b>S</b>				<b>X</b>						<b>1</b>																																																					
<b>ED-R3SL-010</b>		<b>9/27/22</b>		<b>1155</b>		<b>C</b>		<b>S</b>				<b>X</b>						<b>1</b>																																																					
<b>ED-R3SL-011</b>		<b>9/27/22</b>		<b>1240</b>		<b>C</b>		<b>S</b>				<b>X</b>						<b>1</b>																																																					
<b>ED-R3SL-2B001</b>		<b>9/27/22</b>		<b>1305</b>		<b>G</b>		<b>W</b>				<b>X</b>						<b>2</b>																																																					
<b>Possible Hazard Identification</b>						<b>Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)</b>																																																																	
<input type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison B <input type="checkbox"/> Unknown <input type="checkbox"/> Radiological						<input type="checkbox"/> Return To Client <input type="checkbox"/> Disposal By Lab <input type="checkbox"/> Archive For _____ Months																																																																	
Deliverable Requested I II III IV Other (specify)						Special Instructions/QC Requirements																																																																	
Empty Kit Relinquished by:			Date			Time			Method of Shipment:																																																														
Relinquished by: <b>[Signature]</b>			Date/Time: <b>9/27/22 1340</b>			Company: <b>EETA</b>			Received by: <b>[Signature]</b>			Date/Time: <b>9/27/22 1242 CST</b>			Company: <b>EETA</b>																																																								
Relinquished by: <b>[Signature]</b>			Date/Time: <b>9/27/22 1506 CST</b>			Company: <b>EETA</b>			Received by: <b>[Signature]</b>			Date/Time: <b>9/27/22 1506</b>			Company: <b>EETA</b>																																																								
Relinquished by: <b>[Signature]</b>			Date/Time:			Company:			Received by:			Date/Time:			Company:																																																								
Custody Seals Intact. <input type="checkbox"/> Yes <input type="checkbox"/> No		Custody Seal No		Cooler Temperature(s) °C and Other Remarks: <b>5.9-73.0</b>																																																																			

## Login Sample Receipt Checklist

Client: Civil & Environmental Consultants Inc

Job Number: 500-222901-2

**Login Number: 222901**

**List Number: 1**

**Creator: Scott, Sherri L**

**List Source: Eurofins Chicago**

Question	Answer	Comment
Radioactivity wasn't checked or is <math>\leq</math> background as measured by a survey meter.	True	
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	3.9
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 <math><6\text{mm}</math> (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

## ANALYTICAL REPORT

Eurofins Chicago  
2417 Bond Street  
University Park, IL 60484  
Tel: (708)534-5200

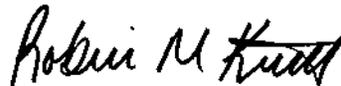
Laboratory Job ID: 500-222970-1

Client Project/Site: Arconic - Elliot Ditch - Lafayette, IN

**For:**

Civil & Environmental Consultants Inc  
2704 Cherokee Farm Way  
Suite 101  
Knoxville, Tennessee 37920

Attn: Garrett Welch



*Authorized for release by:  
9/29/2022 5:41:50 PM*

Robin Kintz, Project Manager II  
(708)534-5200

[Robin.Kintz@et.eurofinsus.com](mailto:Robin.Kintz@et.eurofinsus.com)

### LINKS

Review your project  
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The test results in this report meet all 2003 NELAC, 2009 TNI, and 2016 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.



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# Case Narrative

Client: Civil & Environmental Consultants Inc  
Project/Site: Arconic - Elliot Ditch - Lafayette, IN

Job ID: 500-222970-1

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**Job ID: 500-222970-1**

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**Laboratory: Eurofins Chicago**

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**Narrative**

**Job Narrative  
500-222970-1**

**Comments**

No additional comments.

**Receipt**

The samples were received on 9/28/2022 3:09 PM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperature of the cooler at receipt was 3.3° C.

**GC Semi VOA**

Method 8082A: Surrogate recovery for the following samples were outside the upper control limit: (LCS 500-676920/2-A) and (MB 500-676920/1-A). The MB sample did not contain any target analytes and the LCS was within QC limits; therefore, re-extraction and/or re-analysis was not performed.

Method 8082A: Surrogate Tetrachloro-m-xylene is outside acceptable control limits for the following continuing calibration verification: (CCVIS 500-676972/3), however the other surrogate is within range; therefore re-analysis was not performed.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

**Metals**

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

**Organic Prep**

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.



# Detection Summary

Client: Civil & Environmental Consultants Inc  
Project/Site: Arconic - Elliot Ditch - Lafayette, IN

Job ID: 500-222970-1

## Client Sample ID: ED-R3SL-012

## Lab Sample ID: 500-222970-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
PCB-1248	0.34		0.25		mg/Kg	10	✳	8082A	Total/NA

## Client Sample ID: ED-R3SL-013

## Lab Sample ID: 500-222970-2

No Detections.

## Client Sample ID: ED-R3SL-015

## Lab Sample ID: 500-222970-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
PCB-1248	0.68		0.27		mg/Kg	10	✳	8082A	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins Chicago



# Method Summary

Client: Civil & Environmental Consultants Inc  
Project/Site: Arconic - Elliot Ditch - Lafayette, IN

Job ID: 500-222970-1

Method	Method Description	Protocol	Laboratory
8082A	Polychlorinated Biphenyls (PCBs) by Gas Chromatography	SW846	EET CHI
Moisture	Percent Moisture	EPA	EET CHI
3541	Automated Soxhlet Extraction	SW846	EET CHI

**Protocol References:**

EPA = US Environmental Protection Agency

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

**Laboratory References:**

EET CHI = Eurofins Chicago, 2417 Bond Street, University Park, IL 60484, TEL (708)534-5200



# Sample Summary

Client: Civil & Environmental Consultants Inc  
Project/Site: Arconic - Elliot Ditch - Lafayette, IN

Job ID: 500-222970-1

---

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
500-222970-1	ED-R3SL-012	Solid	09/28/22 13:10	09/28/22 15:09
500-222970-2	ED-R3SL-013	Solid	09/28/22 13:15	09/28/22 15:09
500-222970-3	ED-R3SL-015	Solid	09/28/22 13:20	09/28/22 15:09

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# Client Sample Results

Client: Civil & Environmental Consultants Inc  
 Project/Site: Arconic - Elliot Ditch - Lafayette, IN

Job ID: 500-222970-1

**Client Sample ID: ED-R3SL-012**

**Lab Sample ID: 500-222970-1**

**Date Collected: 09/28/22 13:10**

**Matrix: Solid**

**Date Received: 09/28/22 15:09**

**Percent Solids: 92.5**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<0.25		0.25		mg/Kg	☼	09/28/22 15:59	09/29/22 09:44	10
PCB-1221	<0.25		0.25		mg/Kg	☼	09/28/22 15:59	09/29/22 09:44	10
PCB-1232	<0.25		0.25		mg/Kg	☼	09/28/22 15:59	09/29/22 09:44	10
PCB-1242	<0.25		0.25		mg/Kg	☼	09/28/22 15:59	09/29/22 09:44	10
<b>PCB-1248</b>	<b>0.34</b>		0.25		mg/Kg	☼	09/28/22 15:59	09/29/22 09:44	10
PCB-1254	<0.25		0.25		mg/Kg	☼	09/28/22 15:59	09/29/22 09:44	10
PCB-1260	<0.25		0.25		mg/Kg	☼	09/28/22 15:59	09/29/22 09:44	10

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	116		49 - 129	09/28/22 15:59	09/29/22 09:44	10
DCB Decachlorobiphenyl	119		37 - 121	09/28/22 15:59	09/29/22 09:44	10

# Client Sample Results

Client: Civil & Environmental Consultants Inc  
 Project/Site: Arconic - Elliot Ditch - Lafayette, IN

Job ID: 500-222970-1

**Client Sample ID: ED-R3SL-013**

**Lab Sample ID: 500-222970-2**

**Date Collected: 09/28/22 13:15**

**Matrix: Solid**

**Date Received: 09/28/22 15:09**

**Percent Solids: 94.3**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<0.26		0.26		mg/Kg	☼	09/28/22 15:59	09/29/22 10:29	10
PCB-1221	<0.26		0.26		mg/Kg	☼	09/28/22 15:59	09/29/22 10:29	10
PCB-1232	<0.26		0.26		mg/Kg	☼	09/28/22 15:59	09/29/22 10:29	10
PCB-1242	<0.26		0.26		mg/Kg	☼	09/28/22 15:59	09/29/22 10:29	10
PCB-1248	<0.26		0.26		mg/Kg	☼	09/28/22 15:59	09/29/22 10:29	10
PCB-1254	<0.26		0.26		mg/Kg	☼	09/28/22 15:59	09/29/22 10:29	10
PCB-1260	<0.26		0.26		mg/Kg	☼	09/28/22 15:59	09/29/22 10:29	10

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	102		49 - 129	09/28/22 15:59	09/29/22 10:29	10
DCB Decachlorobiphenyl	114		37 - 121	09/28/22 15:59	09/29/22 10:29	10

# Client Sample Results

Client: Civil & Environmental Consultants Inc  
 Project/Site: Arconic - Elliot Ditch - Lafayette, IN

Job ID: 500-222970-1

**Client Sample ID: ED-R3SL-015**

**Lab Sample ID: 500-222970-3**

Date Collected: 09/28/22 13:20

Matrix: Solid

Date Received: 09/28/22 15:09

Percent Solids: 92.0

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<0.27		0.27		mg/Kg	☼	09/28/22 15:59	09/29/22 10:44	10
PCB-1221	<0.27		0.27		mg/Kg	☼	09/28/22 15:59	09/29/22 10:44	10
PCB-1232	<0.27		0.27		mg/Kg	☼	09/28/22 15:59	09/29/22 10:44	10
PCB-1242	<0.27		0.27		mg/Kg	☼	09/28/22 15:59	09/29/22 10:44	10
<b>PCB-1248</b>	<b>0.68</b>		0.27		mg/Kg	☼	09/28/22 15:59	09/29/22 10:44	10
PCB-1254	<0.27		0.27		mg/Kg	☼	09/28/22 15:59	09/29/22 10:44	10
PCB-1260	<0.27		0.27		mg/Kg	☼	09/28/22 15:59	09/29/22 10:44	10

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	107		49 - 129	09/28/22 15:59	09/29/22 10:44	10
DCB Decachlorobiphenyl	112		37 - 121	09/28/22 15:59	09/29/22 10:44	10

# Definitions/Glossary

Client: Civil & Environmental Consultants Inc  
Project/Site: Arconic - Elliot Ditch - Lafayette, IN

Job ID: 500-222970-1

## Qualifiers

### GC Semi VOA

Qualifier	Qualifier Description
S1+	Surrogate recovery exceeds control limits, high biased.

## Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
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)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
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)
TNTC	Too Numerous To Count

# QC Association Summary

Client: Civil & Environmental Consultants Inc  
Project/Site: Arconic - Elliot Ditch - Lafayette, IN

Job ID: 500-222970-1

## GC Semi VOA

### Prep Batch: 676920

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-222970-1	ED-R3SL-012	Total/NA	Solid	3541	
500-222970-2	ED-R3SL-013	Total/NA	Solid	3541	
500-222970-3	ED-R3SL-015	Total/NA	Solid	3541	
MB 500-676920/1-A	Method Blank	Total/NA	Solid	3541	
LCS 500-676920/2-A	Lab Control Sample	Total/NA	Solid	3541	
500-222970-1 MS	ED-R3SL-012	Total/NA	Solid	3541	
500-222970-1 MSD	ED-R3SL-012	Total/NA	Solid	3541	

### Analysis Batch: 676972

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-222970-1	ED-R3SL-012	Total/NA	Solid	8082A	676920
500-222970-2	ED-R3SL-013	Total/NA	Solid	8082A	676920
500-222970-3	ED-R3SL-015	Total/NA	Solid	8082A	676920
MB 500-676920/1-A	Method Blank	Total/NA	Solid	8082A	676920
LCS 500-676920/2-A	Lab Control Sample	Total/NA	Solid	8082A	676920
500-222970-1 MS	ED-R3SL-012	Total/NA	Solid	8082A	676920
500-222970-1 MSD	ED-R3SL-012	Total/NA	Solid	8082A	676920

## General Chemistry

### Analysis Batch: 676913

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-222970-1	ED-R3SL-012	Total/NA	Solid	Moisture	
500-222970-2	ED-R3SL-013	Total/NA	Solid	Moisture	
500-222970-3	ED-R3SL-015	Total/NA	Solid	Moisture	
500-222970-1 DU	ED-R3SL-012	Total/NA	Solid	Moisture	

# Surrogate Summary

Client: Civil & Environmental Consultants Inc  
Project/Site: Arconic - Elliot Ditch - Lafayette, IN

Job ID: 500-222970-1

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

Matrix: Solid

Prep Type: Total/NA

### Percent Surrogate Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	TCX2	DCBP2
		(49-129)	(37-121)
500-222970-1	ED-R3SL-012	116	119
500-222970-1 MS	ED-R3SL-012	123	125 S1+
500-222970-1 MSD	ED-R3SL-012	94	98
500-222970-2	ED-R3SL-013	102	114
500-222970-3	ED-R3SL-015	107	112
LCS 500-676920/2-A	Lab Control Sample	136 S1+	136 S1+
MB 500-676920/1-A	Method Blank	136 S1+	133 S1+

### Surrogate Legend

TCX = Tetrachloro-m-xylene

DCBP = DCB Decachlorobiphenyl

# QC Sample Results

Client: Civil & Environmental Consultants Inc  
 Project/Site: Arconic - Elliot Ditch - Lafayette, IN

Job ID: 500-222970-1

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

**Lab Sample ID: MB 500-676920/1-A**  
**Matrix: Solid**  
**Analysis Batch: 676972**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**  
**Prep Batch: 676920**

Analyte	MB MB		RL	MDL	Unit	D	Prepared		Analyzed		Dil Fac
	Result	Qualifier									
PCB-1016	<0.17		0.17		mg/Kg		09/28/22 15:59	09/29/22 09:15		10	
PCB-1221	<0.17		0.17		mg/Kg		09/28/22 15:59	09/29/22 09:15		10	
PCB-1232	<0.17		0.17		mg/Kg		09/28/22 15:59	09/29/22 09:15		10	
PCB-1242	<0.17		0.17		mg/Kg		09/28/22 15:59	09/29/22 09:15		10	
PCB-1248	<0.17		0.17		mg/Kg		09/28/22 15:59	09/29/22 09:15		10	
PCB-1254	<0.17		0.17		mg/Kg		09/28/22 15:59	09/29/22 09:15		10	
PCB-1260	<0.17		0.17		mg/Kg		09/28/22 15:59	09/29/22 09:15		10	

Surrogate	MB MB		Limits	Prepared		Analyzed		Dil Fac
	%Recovery	Qualifier						
Tetrachloro-m-xylene	136	S1+	49 - 129	09/28/22 15:59	09/29/22 09:15		10	
DCB Decachlorobiphenyl	133	S1+	37 - 121	09/28/22 15:59	09/29/22 09:15		10	

**Lab Sample ID: LCS 500-676920/2-A**  
**Matrix: Solid**  
**Analysis Batch: 676972**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**  
**Prep Batch: 676920**

Analyte	Spike Added	LCS LCS		Unit	D	%Rec	%Rec Limits	
		Result	Qualifier					
PCB-1016	1.67	1.80		mg/Kg		108	57 - 120	
PCB-1260	1.67	1.91		mg/Kg		115	61 - 125	

Surrogate	LCS LCS		Limits
	%Recovery	Qualifier	
Tetrachloro-m-xylene	136	S1+	49 - 129
DCB Decachlorobiphenyl	136	S1+	37 - 121

**Lab Sample ID: 500-222970-1 MS**  
**Matrix: Solid**  
**Analysis Batch: 676972**

**Client Sample ID: ED-R3SL-012**  
**Prep Type: Total/NA**  
**Prep Batch: 676920**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS MS		Unit	D	%Rec	%Rec Limits	
				Result	Qualifier					
PCB-1016	<0.25		2.66	2.84		mg/Kg	☼	107	57 - 120	
PCB-1260	<0.25		2.66	2.95		mg/Kg	☼	111	61 - 125	

Surrogate	MS MS		Limits
	%Recovery	Qualifier	
Tetrachloro-m-xylene	123		49 - 129
DCB Decachlorobiphenyl	125	S1+	37 - 121

**Lab Sample ID: 500-222970-1 MSD**  
**Matrix: Solid**  
**Analysis Batch: 676972**

**Client Sample ID: ED-R3SL-012**  
**Prep Type: Total/NA**  
**Prep Batch: 676920**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD MSD		Unit	D	%Rec	%Rec Limits		RPD	
				Result	Qualifier						RPD	Limit
PCB-1016	<0.25		2.68	2.29		mg/Kg	☼	86	57 - 120	21	30	
PCB-1260	<0.25		2.68	2.27		mg/Kg	☼	85	61 - 125	26	30	

Surrogate	MSD MSD		Limits
	%Recovery	Qualifier	
Tetrachloro-m-xylene	94		49 - 129
DCB Decachlorobiphenyl	98		37 - 121

Eurofins Chicago

# Lab Chronicle

Client: Civil & Environmental Consultants Inc  
 Project/Site: Arconic - Elliot Ditch - Lafayette, IN

Job ID: 500-222970-1

**Client Sample ID: ED-R3SL-012**

**Lab Sample ID: 500-222970-1**

Date Collected: 09/28/22 13:10

Matrix: Solid

Date Received: 09/28/22 15:09

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Moisture		1	676913	LWN	EET CHI	09/28/22 15:50

**Client Sample ID: ED-R3SL-012**

**Lab Sample ID: 500-222970-1**

Date Collected: 09/28/22 13:10

Matrix: Solid

Date Received: 09/28/22 15:09

Percent Solids: 92.5

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3541			676920	EK	EET CHI	09/28/22 15:59 - 09/28/22 18:00 <sup>1</sup>
Total/NA	Analysis	8082A		10	676972	SB	EET CHI	09/29/22 09:44

**Client Sample ID: ED-R3SL-013**

**Lab Sample ID: 500-222970-2**

Date Collected: 09/28/22 13:15

Matrix: Solid

Date Received: 09/28/22 15:09

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Moisture		1	676913	LWN	EET CHI	09/28/22 15:50

**Client Sample ID: ED-R3SL-013**

**Lab Sample ID: 500-222970-2**

Date Collected: 09/28/22 13:15

Matrix: Solid

Date Received: 09/28/22 15:09

Percent Solids: 94.3

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3541			676920	EK	EET CHI	09/28/22 15:59 - 09/28/22 18:00 <sup>1</sup>
Total/NA	Analysis	8082A		10	676972	SB	EET CHI	09/29/22 10:29

**Client Sample ID: ED-R3SL-015**

**Lab Sample ID: 500-222970-3**

Date Collected: 09/28/22 13:20

Matrix: Solid

Date Received: 09/28/22 15:09

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Moisture		1	676913	LWN	EET CHI	09/28/22 15:50

**Client Sample ID: ED-R3SL-015**

**Lab Sample ID: 500-222970-3**

Date Collected: 09/28/22 13:20

Matrix: Solid

Date Received: 09/28/22 15:09

Percent Solids: 92.0

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3541			676920	EK	EET CHI	09/28/22 15:59 - 09/28/22 18:00 <sup>1</sup>
Total/NA	Analysis	8082A		10	676972	SB	EET CHI	09/29/22 10:44

<sup>1</sup> Completion dates and times are reported or not reported per method requirements or individual lab discretion.

**Laboratory References:**

EET CHI = Eurofins Chicago, 2417 Bond Street, University Park, IL 60484, TEL (708)534-5200

# Accreditation/Certification Summary

Client: Civil & Environmental Consultants Inc  
Project/Site: Arconic - Elliot Ditch - Lafayette, IN

Job ID: 500-222970-1

## Laboratory: Eurofins Chicago

The accreditations/certifications listed below are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Illinois	NELAP	IL00035	04-30-23

- 1
- 2
- 3
- 4
- 5
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- 10
- 11
- 12
- 13
- 14
- 15

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2417 Bond Street  
 University Park IL 60484  
 Phone 708-534-5200 Fax 708-534-5211

**Chain of Custody Record**



Environment Testing  
 America

<b>Client Information</b>		Sampler: <b>J O'Brien</b>		Lab PM: <b>Kintz Robin M</b>		Carrier Tracking No(s):		COC No: <b>500-105440-44981 5</b>											
Client Contact: <b>Jenny Rickford O'Brien</b>		Phone: <b>865-407-8861</b>		E-Mail: <b>Robin Kintz@et eurofinsus.com</b>		State of Origin:		Page: <b>Page 5 of 8</b>											
Company: <b>Civil &amp; Environmental Consultants Inc</b>		PWSID:		<b>Analysis Requested</b>						Job #: <b>500-222970</b>									
Address: <b>2704 Cherokee Farm Way Suite 101</b>		Due Date Requested:		<table border="1"> <tr><td>Field Filtered Sample (Yes or No)</td><td></td></tr> <tr><td>Perform MS/MSD (Yes or No)</td><td></td></tr> <tr><td>8082A - PCBs</td><td></td></tr> </table>						Field Filtered Sample (Yes or No)		Perform MS/MSD (Yes or No)		8082A - PCBs		Preservation Codes		A HCL M Hexane B NaOH N None C Zn Acetate O AsNaO2 D Nitric Acid P - Na2O4S E NaHSO4 R Na2S2O3 F MeOH S H2SO4 G - Amchlor T TSP Dodecahydrate H - Ascorbic Acid U Acetone I - Ice V MCAA J DI Water W pH 4-5 K EDTA Y Trizma L EDA Z other (specify)	
Field Filtered Sample (Yes or No)																			
Perform MS/MSD (Yes or No)																			
8082A - PCBs																			
City: <b>Knoxville</b>		TAT Requested (days):																	
State Zip: <b>TN 37920</b>		Compliance Project: <input type="checkbox"/> Yes <input type="checkbox"/> No																	
Phone: <b>865-340-4914(Tel)</b>		PO #:																	
Email: <b>jrickfordobrien@cecinc.com</b>		Purchase Order not required																	
Project Name: <b>Arconic Elliot Ditch - Lafayette IN</b>		Project #: <b>50019033</b>		WO #:		Other:													
Site:		SSOW#:																	
<b>Sample Identification</b>		<b>Sample Date</b>		<b>Sample Time</b>		<b>Sample Type (C=Comp, G=grab)</b>		<b>Matrix (W=water, S=solid, O=waste/soil, BT=Tissue, A=Air)</b>		<b>Special Instructions/Note</b>									
						<b>Preservation Code</b>		<b>Field Filtered Sample (Yes or No)</b>		<b>Perform MS/MSD (Yes or No)</b>									
1 ED-R3SL-012		9/28/22		1310		C S		X		N									
2 ED-R3SL-013		↓		1315		C S		X		N									
3 ED-R3SL-015		↓		1320		C S		X		N									
4 ED-R3SL-EP00Z		9/28/22		1340		G W		X		2									
<b>Possible Hazard Identification</b>		<input type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison B <input type="checkbox"/> Unknown <input type="checkbox"/> Radiological		<b>Sample Disposal ( A fee may be assessed if samples are retained longer than 1 month)</b>															
Deliverable Requested I II III IV Other (specify)				<input type="checkbox"/> Return To Client <input type="checkbox"/> Disposal By Lab <input type="checkbox"/> Archive For _____ Months															
Empty Kit Relinquished by:		Date		Time		Method of Shipment:													
Relinquished by: <i>[Signature]</i>		Date/Time: <b>9/28/22 1345</b>		Company: <b>EETA</b>		Received by: <i>[Signature]</i>		Date/Time: <b>9/28/22 1347 EST</b>		Company: <b>EETA</b>									
Relinquished by: <i>[Signature]</i>		Date/Time: <b>9/28/22 1509 CST</b>		Company: <b>EETA</b>		Received by: <i>[Signature]</i>		Date/Time: <b>9/28/22 1509</b>		Company: <b>EETA</b>									
Custody Seals Intact <input type="checkbox"/> Yes <input type="checkbox"/> No		Custody Seal No		Cooler Temperature(s) °C and Other Remarks: <b>5.3 → 3.3</b>															

## Login Sample Receipt Checklist

Client: Civil & Environmental Consultants Inc

Job Number: 500-222970-1

**Login Number: 222970**

**List Number: 1**

**Creator: Scott, Sherri L**

**List Source: Eurofins Chicago**

Question	Answer	Comment
Radioactivity wasn't checked or is <math>\leq</math> background as measured by a survey meter.	True	
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	3.3
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 <math><6\text{mm}</math> (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	



## ANALYTICAL REPORT

Eurofins Chicago  
2417 Bond Street  
University Park, IL 60484  
Tel: (708)534-5200

Laboratory Job ID: 500-222970-2

Client Project/Site: Arconic - Elliot Ditch - Lafayette, IN - EB

**For:**

Civil & Environmental Consultants Inc  
2704 Cherokee Farm Way  
Suite 101  
Knoxville, Tennessee 37920

Attn: Garrett Welch



*Authorized for release by:  
10/11/2022 2:27:45 PM*

Robin Kintz, Project Manager II  
(708)534-5200

[Robin.Kintz@et.eurofinsus.com](mailto:Robin.Kintz@et.eurofinsus.com)

### LINKS

Review your project  
results through



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[www.eurofinsus.com/Env](http://www.eurofinsus.com/Env)

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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.



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# Case Narrative

Client: Civil & Environmental Consultants Inc  
Project/Site: Arconic - Elliot Ditch - Lafayette, IN - EB

Job ID: 500-222970-2

---

**Job ID: 500-222970-2**

---

**Laboratory: Eurofins Chicago**

---

**Narrative**

**Job Narrative  
500-222970-2**

**Comments**

No additional comments.

**Receipt**

The samples were received on 9/28/2022 3:09 PM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperature of the cooler at receipt was 3.3° C.

**GC Semi VOA**

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

**Organic Prep**

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

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# Detection Summary

Client: Civil & Environmental Consultants Inc  
Project/Site: Arconic - Elliot Ditch - Lafayette, IN - EB

Job ID: 500-222970-2

**Client Sample ID: ED-R3SL-EB002**

**Lab Sample ID: 500-222970-4**

No Detections.

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This Detection Summary does not include radiochemical test results.

Eurofins Chicago

# Method Summary

Client: Civil & Environmental Consultants Inc  
Project/Site: Arconic - Elliot Ditch - Lafayette, IN - EB

Job ID: 500-222970-2

Method	Method Description	Protocol	Laboratory
8082A	Polychlorinated Biphenyls (PCBs) by Gas Chromatography	SW846	EET CHI
3510C	Liquid-Liquid Extraction (Separatory Funnel)	SW846	EET CHI

**Protocol References:**

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

**Laboratory References:**

EET CHI = Eurofins Chicago, 2417 Bond Street, University Park, IL 60484, TEL (708)534-5200

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# Sample Summary

Client: Civil & Environmental Consultants Inc  
Project/Site: Arconic - Elliot Ditch - Lafayette, IN - EB

Job ID: 500-222970-2

---

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
500-222970-4	ED-R3SL-EB002	Water	09/28/22 13:40	09/28/22 15:09

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# Client Sample Results

Client: Civil & Environmental Consultants Inc  
 Project/Site: Arconic - Elliot Ditch - Lafayette, IN - EB

Job ID: 500-222970-2

**Client Sample ID: ED-R3SL-EB002**

**Lab Sample ID: 500-222970-4**

**Date Collected: 09/28/22 13:40**

**Matrix: Water**

**Date Received: 09/28/22 15:09**

**Method: SW846 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<0.00043		0.00043		mg/L		10/07/22 11:58	10/10/22 12:26	1
PCB-1221	<0.00043		0.00043		mg/L		10/07/22 11:58	10/10/22 12:26	1
PCB-1232	<0.00043		0.00043		mg/L		10/07/22 11:58	10/10/22 12:26	1
PCB-1242	<0.00043		0.00043		mg/L		10/07/22 11:58	10/10/22 12:26	1
PCB-1248	<0.00043		0.00043		mg/L		10/07/22 11:58	10/10/22 12:26	1
PCB-1254	<0.00043		0.00043		mg/L		10/07/22 11:58	10/10/22 12:26	1
PCB-1260	<0.00043		0.00043		mg/L		10/07/22 11:58	10/10/22 12:26	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	79		30 - 120	10/07/22 11:58	10/10/22 12:26	1
DCB Decachlorobiphenyl	58		30 - 140	10/07/22 11:58	10/10/22 12:26	1

# Definitions/Glossary

Client: Civil & Environmental Consultants Inc  
Project/Site: Arconic - Elliot Ditch - Lafayette, IN - EB

Job ID: 500-222970-2

## Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
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)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
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)
TNTC	Too Numerous To Count

# QC Association Summary

Client: Civil & Environmental Consultants Inc  
Project/Site: Arconic - Elliot Ditch - Lafayette, IN - EB

Job ID: 500-222970-2

## GC Semi VOA

### Prep Batch: 678510

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-222970-4	ED-R3SL-EB002	Total/NA	Water	3510C	
LCS 500-678510/2-A	Lab Control Sample	Total/NA	Water	3510C	

### Analysis Batch: 678766

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-222970-4	ED-R3SL-EB002	Total/NA	Water	8082A	678510
LCS 500-678510/2-A	Lab Control Sample	Total/NA	Water	8082A	678510

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# Surrogate Summary

Client: Civil & Environmental Consultants Inc  
Project/Site: Arconic - Elliot Ditch - Lafayette, IN - EB

Job ID: 500-222970-2

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

Matrix: Water

Prep Type: Total/NA

### Percent Surrogate Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	TCX2	DCBP2
		(30-120)	(30-140)
500-222970-4	ED-R3SL-EB002	79	58
LCS 500-678510/2-A	Lab Control Sample	72	89

#### Surrogate Legend

TCX = Tetrachloro-m-xylene

DCBP = DCB Decachlorobiphenyl

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# QC Sample Results

Client: Civil & Environmental Consultants Inc  
 Project/Site: Arconic - Elliot Ditch - Lafayette, IN - EB

Job ID: 500-222970-2

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

**Lab Sample ID: LCS 500-678510/2-A**  
**Matrix: Water**  
**Analysis Batch: 678766**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**  
**Prep Batch: 678510**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
PCB-1016	0.00400	0.00365		mg/L		91	56 - 120
PCB-1260	0.00400	0.00399		mg/L		100	53 - 137

Surrogate	LCS LCS		Limits
	%Recovery	Qualifier	
Tetrachloro-m-xylene	72		30 - 120
DCB Decachlorobiphenyl	89		30 - 140



# Lab Chronicle

Client: Civil & Environmental Consultants Inc  
Project/Site: Arconic - Elliot Ditch - Lafayette, IN - EB

Job ID: 500-222970-2

**Client Sample ID: ED-R3SL-EB002**

**Lab Sample ID: 500-222970-4**

**Date Collected: 09/28/22 13:40**

**Matrix: Water**

**Date Received: 09/28/22 15:09**

<u>Prep Type</u>	<u>Batch Type</u>	<u>Batch Method</u>	<u>Run</u>	<u>Dilution Factor</u>	<u>Batch Number</u>	<u>Analyst</u>	<u>Lab</u>	<u>Prepared or Analyzed</u>
Total/NA	Prep	3510C			678510	TS	EET CHI	10/07/22 11:58
Total/NA	Analysis	8082A		1	678766	SS	EET CHI	10/10/22 12:26

**Laboratory References:**

EET CHI = Eurofins Chicago, 2417 Bond Street, University Park, IL 60484, TEL (708)534-5200

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# Accreditation/Certification Summary

Client: Civil & Environmental Consultants Inc  
Project/Site: Arconic - Elliot Ditch - Lafayette, IN - EB

Job ID: 500-222970-2

## Laboratory: Eurofins Chicago

The accreditations/certifications listed below are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Illinois	NELAP	IL00035	04-30-23

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**Eurofins Chicago**

2417 Bond Street  
 University Park IL 60484  
 Phone 708-534-5200 Fax 708-534-5211

**Chain of Custody Record**



Environment Testing  
 America

<b>Client Information</b>		Sampler: <b>J O'Brien</b>		Lab PM: Kintz Robin M		Carrier Tracking No(s):		COC No: 500-105440-44981 5																					
Client Contact: Jenny Rickford O'Brien		Phone: <b>865-407-8861</b>		E-Mail: Robin Kintz@et eurofinsus.com		State of Origin:		Page: Page 5 of 8																					
Company: Civil & Environmental Consultants Inc		PWSID:		<b>Analysis Requested</b>						Job #: <b>500-222970</b>																			
Address: 2704 Cherokee Farm Way Suite 101		Due Date Requested:		<table border="1"> <tr><td>Field Filtered Sample (Yes or No)</td><td></td></tr> <tr><td>Perform MS/MSD (Yes or No)</td><td></td></tr> <tr><td>8082A - PCBs</td><td></td></tr> </table>						Field Filtered Sample (Yes or No)		Perform MS/MSD (Yes or No)		8082A - PCBs		Preservation Codes		A HCL M Hexane B NaOH N None C Zn Acetate O AsNaO2 D Nitric Acid P - Na2O4S E NaHSO4 R Na2S2O3 F MeOH S H2SO4 G - Amchlor T TSP Dodecahydrate H - Ascorbic Acid U Acetone I - Ice V MCAA J DI Water W pH 4-5 K EDTA Y Trizma L EDA Z other (specify)											
Field Filtered Sample (Yes or No)																													
Perform MS/MSD (Yes or No)																													
8082A - PCBs																													
City: Knoxville		TAT Requested (days):																											
State Zip: TN 37920		Compliance Project: <input type="checkbox"/> Yes <input type="checkbox"/> No																											
Phone: 865-340-4914(Tel)		PO #:																											
Email: jrnickfordobrien@cecinc.com		Purchase Order not required																											
Project Name: Arconic Elliot Ditch - Lafayette IN		Project #: 50019033		WO #:		Other:																							
Site:		SSOW#:																											
<b>Sample Identification</b>		Sample Date		Sample Time		Sample Type (C=Comp, G=grab)		Matrix (W=water, S=solid, O=waste/soil, BT=Tissue, A=Air)		Field Filtered Sample (Yes or No)		Perform MS/MSD (Yes or No)		8082A - PCBs		Total Number of Containers		Special Instructions/Note											
						Preservation Code																							
1 ED-R3SL-012		9/28/22		1310		C S		S		X						1													
2 ED-R3SL-013		↓		1315		C S		S		X						1													
3 ED-R3SL-015		↓		1320		C S		S		X						1													
4 ED-R3SL-EP00Z		9/28/22		1340		G W		W		X						2													
<b>Possible Hazard Identification</b>										<b>Sample Disposal ( A fee may be assessed if samples are retained longer than 1 month)</b>																			
<input type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison B <input type="checkbox"/> Unknown <input type="checkbox"/> Radiological										<input type="checkbox"/> Return To Client <input type="checkbox"/> Disposal By Lab <input type="checkbox"/> Archive For _____ Months																			
Deliverable Requested I II III IV Other (specify)										Special Instructions/QC Requirements																			
Empty Kit Relinquished by:					Date					Time					Method of Shipment:														
Relinquished by: <i>Shirley Kramer</i>					Date/Time: 9/28/22 1345					Company: EETA					Received by: <i>R. J. Ellis</i>					Date/Time: 9/28/22 1347 EST					Company: EETA				
Relinquished by: <i>R. J. Ellis</i>					Date/Time: 9/28/22 1509 CST					Company: EETA					Received by: <i>Shirley Kramer</i>					Date/Time: 9/28/22 1509					Company: EETA				
Relinquished by:					Date/Time:					Company:					Received by:					Date/Time:					Company:				
Custody Seals Intact <input type="checkbox"/> Yes <input type="checkbox"/> No					Custody Seal No					Cooler Temperature(s) °C and Other Remarks: <b>5.3 → 3.3</b>																			

# Login Sample Receipt Checklist

Client: Civil & Environmental Consultants Inc

Job Number: 500-222970-2

**Login Number: 222970**

**List Number: 1**

**Creator: Scott, Sherri L**

**List Source: Eurofins Chicago**

Question	Answer	Comment
Radioactivity wasn't checked or is <math>\leq</math> background as measured by a survey meter.	True	
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	3.3
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 <math><6\text{mm}</math> (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	



## ANALYTICAL REPORT

Eurofins Chicago  
2417 Bond Street  
University Park, IL 60484  
Tel: (708)534-5200

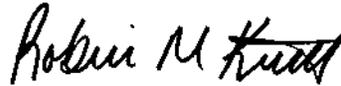
Laboratory Job ID: 500-223041-1

Client Project/Site: Arconic - Elliot Ditch - Lafayette, IN

**For:**

Civil & Environmental Consultants Inc  
2704 Cherokee Farm Way  
Suite 101  
Knoxville, Tennessee 37920

Attn: Garrett Welch



*Authorized for release by:  
9/30/2022 4:46:28 PM*

Robin Kintz, Project Manager II  
(708)534-5200  
[Robin.Kintz@et.eurofinsus.com](mailto:Robin.Kintz@et.eurofinsus.com)

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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.



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# Case Narrative

Client: Civil & Environmental Consultants Inc  
Project/Site: Arconic - Elliot Ditch - Lafayette, IN

Job ID: 500-223041-1

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## Job ID: 500-223041-1

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### Laboratory: Eurofins Chicago

#### Narrative

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#### Job Narrative 500-223041-1

#### Comments

No additional comments.

#### Receipt

The samples were received on 9/29/2022 3:17 PM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperature of the cooler at receipt was 0.9° C.

#### GC Semi VOA

Method 8082A: The continuing calibration verification (CCVIS) 500-677230 was outside the method criteria for Tetrachloro-m-xylene on the primary column. The secondary column recovered within control limits; therefore, the data has been reported.

Method 8082A: Surrogate recovery for the following sample was outside the upper control limit: (MB 500-677163/1-A). This sample did not contain any target analytes; therefore, re-extraction and/or re-analysis was not performed.

Method 8082A: DCB Decachlorobiphenyl surrogate recovery for the following samples was outside control limits: ED-R3SL-002-1 (500-223041-3), ED-R3SL-004-1 (500-223041-5) and ED-R3SL-DUP002 (500-223041-6). Tetrachloro-m-xylene surrogate was within the control limits; therefore, re-extraction and/or re-analysis was not performed.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

#### Metals

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

#### Organic Prep

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

# Detection Summary

Client: Civil & Environmental Consultants Inc  
Project/Site: Arconic - Elliot Ditch - Lafayette, IN

Job ID: 500-223041-1

## Client Sample ID: ED-R3SL-SW001-1

Lab Sample ID: 500-223041-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
PCB-1248	3.2		0.25		mg/Kg	10	✳	8082A	Total/NA

## Client Sample ID: ED-R3SL-001-1

Lab Sample ID: 500-223041-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
PCB-1248	5.5		1.3		mg/Kg	50	✳	8082A	Total/NA

## Client Sample ID: ED-R3SL-002-1

Lab Sample ID: 500-223041-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
PCB-1248	11		2.6		mg/Kg	100	✳	8082A	Total/NA

## Client Sample ID: ED-R3SL-003-1

Lab Sample ID: 500-223041-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
PCB-1248	2.6		0.26		mg/Kg	10	✳	8082A	Total/NA

## Client Sample ID: ED-R3SL-004-1

Lab Sample ID: 500-223041-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
PCB-1248	13		5.2		mg/Kg	200	✳	8082A	Total/NA

## Client Sample ID: ED-R3SL-DUP002

Lab Sample ID: 500-223041-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
PCB-1248	10		2.6		mg/Kg	100	✳	8082A	Total/NA

## Client Sample ID: ED-R3SL-007-1

Lab Sample ID: 500-223041-7

No Detections.

## Client Sample ID: ED-R3SL-008-1

Lab Sample ID: 500-223041-8

No Detections.

## Client Sample ID: ED-R3SL-010-1

Lab Sample ID: 500-223041-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
PCB-1248	0.57		0.26		mg/Kg	10	✳	8082A	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins Chicago

# Method Summary

Client: Civil & Environmental Consultants Inc  
Project/Site: Arconic - Elliot Ditch - Lafayette, IN

Job ID: 500-223041-1

Method	Method Description	Protocol	Laboratory
8082A	Polychlorinated Biphenyls (PCBs) by Gas Chromatography	SW846	EET CHI
Moisture	Percent Moisture	EPA	EET CHI
3541	Automated Soxhlet Extraction	SW846	EET CHI

**Protocol References:**

EPA = US Environmental Protection Agency

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

**Laboratory References:**

EET CHI = Eurofins Chicago, 2417 Bond Street, University Park, IL 60484, TEL (708)534-5200



# Sample Summary

Client: Civil & Environmental Consultants Inc  
Project/Site: Arconic - Elliot Ditch - Lafayette, IN

Job ID: 500-223041-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
500-223041-1	ED-R3SL-SW001-1	Solid	09/29/22 10:45	09/29/22 15:17
500-223041-2	ED-R3SL-001-1	Solid	09/29/22 11:15	09/29/22 15:17
500-223041-3	ED-R3SL-002-1	Solid	09/29/22 11:20	09/29/22 15:17
500-223041-4	ED-R3SL-003-1	Solid	09/29/22 11:25	09/29/22 15:17
500-223041-5	ED-R3SL-004-1	Solid	09/29/22 11:30	09/29/22 15:17
500-223041-6	ED-R3SL-DUP002	Solid	09/29/22 00:00	09/29/22 15:17
500-223041-7	ED-R3SL-007-1	Solid	09/29/22 13:15	09/29/22 15:17
500-223041-8	ED-R3SL-008-1	Solid	09/29/22 13:30	09/29/22 15:17
500-223041-9	ED-R3SL-010-1	Solid	09/29/22 13:35	09/29/22 15:17

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# Client Sample Results

Client: Civil & Environmental Consultants Inc  
 Project/Site: Arconic - Elliot Ditch - Lafayette, IN

Job ID: 500-223041-1

**Client Sample ID: ED-R3SL-SW001-1**

**Lab Sample ID: 500-223041-1**

Date Collected: 09/29/22 10:45

Matrix: Solid

Date Received: 09/29/22 15:17

Percent Solids: 93.7

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<0.25		0.25		mg/Kg	☼	09/29/22 16:18	09/30/22 09:42	10
PCB-1221	<0.25		0.25		mg/Kg	☼	09/29/22 16:18	09/30/22 09:42	10
PCB-1232	<0.25		0.25		mg/Kg	☼	09/29/22 16:18	09/30/22 09:42	10
PCB-1242	<0.25		0.25		mg/Kg	☼	09/29/22 16:18	09/30/22 09:42	10
<b>PCB-1248</b>	<b>3.2</b>		0.25		mg/Kg	☼	09/29/22 16:18	09/30/22 09:42	10
PCB-1254	<0.25		0.25		mg/Kg	☼	09/29/22 16:18	09/30/22 09:42	10
PCB-1260	<0.25		0.25		mg/Kg	☼	09/29/22 16:18	09/30/22 09:42	10

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	88		49 - 129	09/29/22 16:18	09/30/22 09:42	10
DCB Decachlorobiphenyl	95		37 - 121	09/29/22 16:18	09/30/22 09:42	10

# Client Sample Results

Client: Civil & Environmental Consultants Inc  
 Project/Site: Arconic - Elliot Ditch - Lafayette, IN

Job ID: 500-223041-1

**Client Sample ID: ED-R3SL-001-1**

**Lab Sample ID: 500-223041-2**

Date Collected: 09/29/22 11:15

Matrix: Solid

Date Received: 09/29/22 15:17

Percent Solids: 93.6

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<1.3		1.3		mg/Kg	☼	09/29/22 16:18	09/30/22 14:23	50
PCB-1221	<1.3		1.3		mg/Kg	☼	09/29/22 16:18	09/30/22 14:23	50
PCB-1232	<1.3		1.3		mg/Kg	☼	09/29/22 16:18	09/30/22 14:23	50
PCB-1242	<1.3		1.3		mg/Kg	☼	09/29/22 16:18	09/30/22 14:23	50
<b>PCB-1248</b>	<b>5.5</b>		1.3		mg/Kg	☼	09/29/22 16:18	09/30/22 14:23	50
PCB-1254	<1.3		1.3		mg/Kg	☼	09/29/22 16:18	09/30/22 14:23	50
PCB-1260	<1.3		1.3		mg/Kg	☼	09/29/22 16:18	09/30/22 14:23	50

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	87		49 - 129	09/29/22 16:18	09/30/22 14:23	50
DCB Decachlorobiphenyl	112		37 - 121	09/29/22 16:18	09/30/22 14:23	50

# Client Sample Results

Client: Civil & Environmental Consultants Inc  
 Project/Site: Arconic - Elliot Ditch - Lafayette, IN

Job ID: 500-223041-1

**Client Sample ID: ED-R3SL-002-1**

**Lab Sample ID: 500-223041-3**

Date Collected: 09/29/22 11:20

Matrix: Solid

Date Received: 09/29/22 15:17

Percent Solids: 93.7

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<2.6		2.6		mg/Kg	☼	09/29/22 16:18	09/30/22 14:38	100
PCB-1221	<2.6		2.6		mg/Kg	☼	09/29/22 16:18	09/30/22 14:38	100
PCB-1232	<2.6		2.6		mg/Kg	☼	09/29/22 16:18	09/30/22 14:38	100
PCB-1242	<2.6		2.6		mg/Kg	☼	09/29/22 16:18	09/30/22 14:38	100
<b>PCB-1248</b>	<b>11</b>		2.6		mg/Kg	☼	09/29/22 16:18	09/30/22 14:38	100
PCB-1254	<2.6		2.6		mg/Kg	☼	09/29/22 16:18	09/30/22 14:38	100
PCB-1260	<2.6		2.6		mg/Kg	☼	09/29/22 16:18	09/30/22 14:38	100

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	99		49 - 129	09/29/22 16:18	09/30/22 14:38	100
DCB Decachlorobiphenyl	129	S1+	37 - 121	09/29/22 16:18	09/30/22 14:38	100

# Client Sample Results

Client: Civil & Environmental Consultants Inc  
 Project/Site: Arconic - Elliot Ditch - Lafayette, IN

Job ID: 500-223041-1

**Client Sample ID: ED-R3SL-003-1**

**Lab Sample ID: 500-223041-4**

Date Collected: 09/29/22 11:25

Matrix: Solid

Date Received: 09/29/22 15:17

Percent Solids: 94.0

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<0.26		0.26		mg/Kg	☼	09/29/22 16:18	09/30/22 10:26	10
PCB-1221	<0.26		0.26		mg/Kg	☼	09/29/22 16:18	09/30/22 10:26	10
PCB-1232	<0.26		0.26		mg/Kg	☼	09/29/22 16:18	09/30/22 10:26	10
PCB-1242	<0.26		0.26		mg/Kg	☼	09/29/22 16:18	09/30/22 10:26	10
<b>PCB-1248</b>	<b>2.6</b>		0.26		mg/Kg	☼	09/29/22 16:18	09/30/22 10:26	10
PCB-1254	<0.26		0.26		mg/Kg	☼	09/29/22 16:18	09/30/22 10:26	10
PCB-1260	<0.26		0.26		mg/Kg	☼	09/29/22 16:18	09/30/22 10:26	10

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	92		49 - 129	09/29/22 16:18	09/30/22 10:26	10
DCB Decachlorobiphenyl	110		37 - 121	09/29/22 16:18	09/30/22 10:26	10

# Client Sample Results

Client: Civil & Environmental Consultants Inc  
 Project/Site: Arconic - Elliot Ditch - Lafayette, IN

Job ID: 500-223041-1

**Client Sample ID: ED-R3SL-004-1**

**Lab Sample ID: 500-223041-5**

Date Collected: 09/29/22 11:30

Matrix: Solid

Date Received: 09/29/22 15:17

Percent Solids: 94.0

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<5.2		5.2		mg/Kg	☼	09/29/22 16:18	09/30/22 14:53	200
PCB-1221	<5.2		5.2		mg/Kg	☼	09/29/22 16:18	09/30/22 14:53	200
PCB-1232	<5.2		5.2		mg/Kg	☼	09/29/22 16:18	09/30/22 14:53	200
PCB-1242	<5.2		5.2		mg/Kg	☼	09/29/22 16:18	09/30/22 14:53	200
<b>PCB-1248</b>	<b>13</b>		5.2		mg/Kg	☼	09/29/22 16:18	09/30/22 14:53	200
PCB-1254	<5.2		5.2		mg/Kg	☼	09/29/22 16:18	09/30/22 14:53	200
PCB-1260	<5.2		5.2		mg/Kg	☼	09/29/22 16:18	09/30/22 14:53	200

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	98		49 - 129	09/29/22 16:18	09/30/22 14:53	200
DCB Decachlorobiphenyl	131	S1+	37 - 121	09/29/22 16:18	09/30/22 14:53	200

# Client Sample Results

Client: Civil & Environmental Consultants Inc  
 Project/Site: Arconic - Elliot Ditch - Lafayette, IN

Job ID: 500-223041-1

**Client Sample ID: ED-R3SL-DUP002**

**Lab Sample ID: 500-223041-6**

Date Collected: 09/29/22 00:00

Matrix: Solid

Date Received: 09/29/22 15:17

Percent Solids: 93.8

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<2.6		2.6		mg/Kg	☼	09/29/22 16:18	09/30/22 15:08	100
PCB-1221	<2.6		2.6		mg/Kg	☼	09/29/22 16:18	09/30/22 15:08	100
PCB-1232	<2.6		2.6		mg/Kg	☼	09/29/22 16:18	09/30/22 15:08	100
PCB-1242	<2.6		2.6		mg/Kg	☼	09/29/22 16:18	09/30/22 15:08	100
<b>PCB-1248</b>	<b>10</b>		2.6		mg/Kg	☼	09/29/22 16:18	09/30/22 15:08	100
PCB-1254	<2.6		2.6		mg/Kg	☼	09/29/22 16:18	09/30/22 15:08	100
PCB-1260	<2.6		2.6		mg/Kg	☼	09/29/22 16:18	09/30/22 15:08	100

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	100		49 - 129	09/29/22 16:18	09/30/22 15:08	100
DCB Decachlorobiphenyl	128	S1+	37 - 121	09/29/22 16:18	09/30/22 15:08	100

# Client Sample Results

Client: Civil & Environmental Consultants Inc  
 Project/Site: Arconic - Elliot Ditch - Lafayette, IN

Job ID: 500-223041-1

**Client Sample ID: ED-R3SL-007-1**

**Lab Sample ID: 500-223041-7**

**Date Collected: 09/29/22 13:15**

**Matrix: Solid**

**Date Received: 09/29/22 15:17**

**Percent Solids: 93.8**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<0.25		0.25		mg/Kg	☼	09/29/22 16:18	09/30/22 11:11	10
PCB-1221	<0.25		0.25		mg/Kg	☼	09/29/22 16:18	09/30/22 11:11	10
PCB-1232	<0.25		0.25		mg/Kg	☼	09/29/22 16:18	09/30/22 11:11	10
PCB-1242	<0.25		0.25		mg/Kg	☼	09/29/22 16:18	09/30/22 11:11	10
PCB-1248	<0.25		0.25		mg/Kg	☼	09/29/22 16:18	09/30/22 11:11	10
PCB-1254	<0.25		0.25		mg/Kg	☼	09/29/22 16:18	09/30/22 11:11	10
PCB-1260	<0.25		0.25		mg/Kg	☼	09/29/22 16:18	09/30/22 11:11	10

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	102		49 - 129	09/29/22 16:18	09/30/22 11:11	10
DCB Decachlorobiphenyl	105		37 - 121	09/29/22 16:18	09/30/22 11:11	10

# Client Sample Results

Client: Civil & Environmental Consultants Inc  
 Project/Site: Arconic - Elliot Ditch - Lafayette, IN

Job ID: 500-223041-1

**Client Sample ID: ED-R3SL-008-1**

**Lab Sample ID: 500-223041-8**

**Date Collected: 09/29/22 13:30**

**Matrix: Solid**

**Date Received: 09/29/22 15:17**

**Percent Solids: 94.3**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<0.25		0.25		mg/Kg	☼	09/29/22 16:18	09/30/22 11:55	10
PCB-1221	<0.25		0.25		mg/Kg	☼	09/29/22 16:18	09/30/22 11:55	10
PCB-1232	<0.25		0.25		mg/Kg	☼	09/29/22 16:18	09/30/22 11:55	10
PCB-1242	<0.25		0.25		mg/Kg	☼	09/29/22 16:18	09/30/22 11:55	10
PCB-1248	<0.25		0.25		mg/Kg	☼	09/29/22 16:18	09/30/22 11:55	10
PCB-1254	<0.25		0.25		mg/Kg	☼	09/29/22 16:18	09/30/22 11:55	10
PCB-1260	<0.25		0.25		mg/Kg	☼	09/29/22 16:18	09/30/22 11:55	10

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	89		49 - 129	09/29/22 16:18	09/30/22 11:55	10
DCB Decachlorobiphenyl	101		37 - 121	09/29/22 16:18	09/30/22 11:55	10

# Client Sample Results

Client: Civil & Environmental Consultants Inc  
 Project/Site: Arconic - Elliot Ditch - Lafayette, IN

Job ID: 500-223041-1

**Client Sample ID: ED-R3SL-010-1**

**Lab Sample ID: 500-223041-9**

Date Collected: 09/29/22 13:35

Matrix: Solid

Date Received: 09/29/22 15:17

Percent Solids: 92.8

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<0.26		0.26		mg/Kg	☼	09/29/22 16:18	09/30/22 12:10	10
PCB-1221	<0.26		0.26		mg/Kg	☼	09/29/22 16:18	09/30/22 12:10	10
PCB-1232	<0.26		0.26		mg/Kg	☼	09/29/22 16:18	09/30/22 12:10	10
PCB-1242	<0.26		0.26		mg/Kg	☼	09/29/22 16:18	09/30/22 12:10	10
<b>PCB-1248</b>	<b>0.57</b>		0.26		mg/Kg	☼	09/29/22 16:18	09/30/22 12:10	10
PCB-1254	<0.26		0.26		mg/Kg	☼	09/29/22 16:18	09/30/22 12:10	10
PCB-1260	<0.26		0.26		mg/Kg	☼	09/29/22 16:18	09/30/22 12:10	10

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	84		49 - 129	09/29/22 16:18	09/30/22 12:10	10
DCB Decachlorobiphenyl	100		37 - 121	09/29/22 16:18	09/30/22 12:10	10

# Definitions/Glossary

Client: Civil & Environmental Consultants Inc  
Project/Site: Arconic - Elliot Ditch - Lafayette, IN

Job ID: 500-223041-1

## Qualifiers

### GC Semi VOA

Qualifier	Qualifier Description
S1+	Surrogate recovery exceeds control limits, high biased.

## Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
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)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
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)
TNTC	Too Numerous To Count

# QC Association Summary

Client: Civil & Environmental Consultants Inc  
Project/Site: Arconic - Elliot Ditch - Lafayette, IN

Job ID: 500-223041-1

## GC Semi VOA

### Prep Batch: 677163

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-223041-1	ED-R3SL-SW001-1	Total/NA	Solid	3541	
500-223041-2	ED-R3SL-001-1	Total/NA	Solid	3541	
500-223041-3	ED-R3SL-002-1	Total/NA	Solid	3541	
500-223041-4	ED-R3SL-003-1	Total/NA	Solid	3541	
500-223041-5	ED-R3SL-004-1	Total/NA	Solid	3541	
500-223041-6	ED-R3SL-DUP002	Total/NA	Solid	3541	
500-223041-7	ED-R3SL-007-1	Total/NA	Solid	3541	
500-223041-8	ED-R3SL-008-1	Total/NA	Solid	3541	
500-223041-9	ED-R3SL-010-1	Total/NA	Solid	3541	
MB 500-677163/1-A	Method Blank	Total/NA	Solid	3541	
LCS 500-677163/2-A	Lab Control Sample	Total/NA	Solid	3541	
500-223041-7 MS	ED-R3SL-007-1	Total/NA	Solid	3541	
500-223041-7 MSD	ED-R3SL-007-1	Total/NA	Solid	3541	

### Analysis Batch: 677230

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-223041-1	ED-R3SL-SW001-1	Total/NA	Solid	8082A	677163
500-223041-2	ED-R3SL-001-1	Total/NA	Solid	8082A	677163
500-223041-3	ED-R3SL-002-1	Total/NA	Solid	8082A	677163
500-223041-4	ED-R3SL-003-1	Total/NA	Solid	8082A	677163
500-223041-5	ED-R3SL-004-1	Total/NA	Solid	8082A	677163
500-223041-6	ED-R3SL-DUP002	Total/NA	Solid	8082A	677163
500-223041-7	ED-R3SL-007-1	Total/NA	Solid	8082A	677163
500-223041-8	ED-R3SL-008-1	Total/NA	Solid	8082A	677163
500-223041-9	ED-R3SL-010-1	Total/NA	Solid	8082A	677163
MB 500-677163/1-A	Method Blank	Total/NA	Solid	8082A	677163
LCS 500-677163/2-A	Lab Control Sample	Total/NA	Solid	8082A	677163
500-223041-7 MS	ED-R3SL-007-1	Total/NA	Solid	8082A	677163
500-223041-7 MSD	ED-R3SL-007-1	Total/NA	Solid	8082A	677163

## General Chemistry

### Analysis Batch: 677127

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-223041-1	ED-R3SL-SW001-1	Total/NA	Solid	Moisture	
500-223041-2	ED-R3SL-001-1	Total/NA	Solid	Moisture	
500-223041-3	ED-R3SL-002-1	Total/NA	Solid	Moisture	
500-223041-4	ED-R3SL-003-1	Total/NA	Solid	Moisture	
500-223041-5	ED-R3SL-004-1	Total/NA	Solid	Moisture	
500-223041-6	ED-R3SL-DUP002	Total/NA	Solid	Moisture	
500-223041-7	ED-R3SL-007-1	Total/NA	Solid	Moisture	
500-223041-8	ED-R3SL-008-1	Total/NA	Solid	Moisture	
500-223041-9	ED-R3SL-010-1	Total/NA	Solid	Moisture	
500-223041-2 DU	ED-R3SL-001-1	Total/NA	Solid	Moisture	

# Surrogate Summary

Client: Civil & Environmental Consultants Inc  
Project/Site: Arconic - Elliot Ditch - Lafayette, IN

Job ID: 500-223041-1

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

Matrix: Solid

Prep Type: Total/NA

### Percent Surrogate Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	TCX1	DCBP1
		(49-129)	(37-121)
500-223041-1	ED-R3SL-SW001-1	88	95
500-223041-2	ED-R3SL-001-1	87	112
500-223041-3	ED-R3SL-002-1	99	129 S1+
500-223041-4	ED-R3SL-003-1	92	110
500-223041-5	ED-R3SL-004-1	98	131 S1+
500-223041-6	ED-R3SL-DUP002	100	128 S1+
500-223041-7	ED-R3SL-007-1	102	105
500-223041-7 MS	ED-R3SL-007-1	104	118
500-223041-7 MSD	ED-R3SL-007-1	94	109
500-223041-8	ED-R3SL-008-1	89	101
500-223041-9	ED-R3SL-010-1	84	100
LCS 500-677163/2-A	Lab Control Sample	104	107
MB 500-677163/1-A	Method Blank	138 S1+	139 S1+

#### Surrogate Legend

TCX = Tetrachloro-m-xylene

DCBP = DCB Decachlorobiphenyl

# QC Sample Results

Client: Civil & Environmental Consultants Inc  
 Project/Site: Arconic - Elliot Ditch - Lafayette, IN

Job ID: 500-223041-1

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

**Lab Sample ID: MB 500-677163/1-A**  
**Matrix: Solid**  
**Analysis Batch: 677230**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**  
**Prep Batch: 677163**

Analyte	MB MB		RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
PCB-1016	<0.17		0.17		mg/Kg		09/29/22 16:18	09/30/22 09:12	10
PCB-1221	<0.17		0.17		mg/Kg		09/29/22 16:18	09/30/22 09:12	10
PCB-1232	<0.17		0.17		mg/Kg		09/29/22 16:18	09/30/22 09:12	10
PCB-1242	<0.17		0.17		mg/Kg		09/29/22 16:18	09/30/22 09:12	10
PCB-1248	<0.17		0.17		mg/Kg		09/29/22 16:18	09/30/22 09:12	10
PCB-1254	<0.17		0.17		mg/Kg		09/29/22 16:18	09/30/22 09:12	10
PCB-1260	<0.17		0.17		mg/Kg		09/29/22 16:18	09/30/22 09:12	10

Surrogate	MB MB		Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
Tetrachloro-m-xylene	138	S1+	49 - 129	09/29/22 16:18	09/30/22 09:12	10
DCB Decachlorobiphenyl	139	S1+	37 - 121	09/29/22 16:18	09/30/22 09:12	10

**Lab Sample ID: LCS 500-677163/2-A**  
**Matrix: Solid**  
**Analysis Batch: 677230**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**  
**Prep Batch: 677163**

Analyte	Spike Added	LCS LCS		Unit	D	%Rec	%Rec Limits
		Result	Qualifier				
PCB-1016	1.67	1.39		mg/Kg		83	57 - 120
PCB-1260	1.67	1.40		mg/Kg		84	61 - 125

Surrogate	LCS LCS		Limits
	%Recovery	Qualifier	
Tetrachloro-m-xylene	104		49 - 129
DCB Decachlorobiphenyl	107		37 - 121

**Lab Sample ID: 500-223041-7 MS**  
**Matrix: Solid**  
**Analysis Batch: 677230**

**Client Sample ID: ED-R3SL-007-1**  
**Prep Type: Total/NA**  
**Prep Batch: 677163**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS MS		Unit	D	%Rec	%Rec Limits
				Result	Qualifier				
PCB-1016	<0.25		2.55	2.37		mg/Kg	☼	93	57 - 120
PCB-1260	<0.25		2.55	2.50		mg/Kg	☼	98	61 - 125

Surrogate	MS MS		Limits
	%Recovery	Qualifier	
Tetrachloro-m-xylene	104		49 - 129
DCB Decachlorobiphenyl	118		37 - 121

**Lab Sample ID: 500-223041-7 MSD**  
**Matrix: Solid**  
**Analysis Batch: 677230**

**Client Sample ID: ED-R3SL-007-1**  
**Prep Type: Total/NA**  
**Prep Batch: 677163**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD MSD		Unit	D	%Rec	%Rec Limits	RPD	
				Result	Qualifier					RPD	Limit
PCB-1016	<0.25		2.51	2.19		mg/Kg	☼	87	57 - 120	8	30
PCB-1260	<0.25		2.51	2.23		mg/Kg	☼	89	61 - 125	12	30

Surrogate	MSD MSD		Limits
	%Recovery	Qualifier	
Tetrachloro-m-xylene	94		49 - 129
DCB Decachlorobiphenyl	109		37 - 121

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# Lab Chronicle

Client: Civil & Environmental Consultants Inc  
Project/Site: Arconic - Elliot Ditch - Lafayette, IN

Job ID: 500-223041-1

**Client Sample ID: ED-R3SL-SW001-1**

**Date Collected: 09/29/22 10:45**

**Date Received: 09/29/22 15:17**

**Lab Sample ID: 500-223041-1**

**Matrix: Solid**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Moisture		1	677127	LWN	EET CHI	09/29/22 15:42

**Client Sample ID: ED-R3SL-SW001-1**

**Date Collected: 09/29/22 10:45**

**Date Received: 09/29/22 15:17**

**Lab Sample ID: 500-223041-1**

**Matrix: Solid**

**Percent Solids: 93.7**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3541			677163	EK	EET CHI	09/29/22 16:18 - 09/29/22 19:00 <sup>1</sup>
Total/NA	Analysis	8082A		10	677230	SB	EET CHI	09/30/22 09:42

**Client Sample ID: ED-R3SL-001-1**

**Date Collected: 09/29/22 11:15**

**Date Received: 09/29/22 15:17**

**Lab Sample ID: 500-223041-2**

**Matrix: Solid**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Moisture		1	677127	LWN	EET CHI	09/29/22 15:42

**Client Sample ID: ED-R3SL-001-1**

**Date Collected: 09/29/22 11:15**

**Date Received: 09/29/22 15:17**

**Lab Sample ID: 500-223041-2**

**Matrix: Solid**

**Percent Solids: 93.6**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3541			677163	EK	EET CHI	09/29/22 16:18 - 09/29/22 19:00 <sup>1</sup>
Total/NA	Analysis	8082A		50	677230	SB	EET CHI	09/30/22 14:23

**Client Sample ID: ED-R3SL-002-1**

**Date Collected: 09/29/22 11:20**

**Date Received: 09/29/22 15:17**

**Lab Sample ID: 500-223041-3**

**Matrix: Solid**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Moisture		1	677127	LWN	EET CHI	09/29/22 15:42

**Client Sample ID: ED-R3SL-002-1**

**Date Collected: 09/29/22 11:20**

**Date Received: 09/29/22 15:17**

**Lab Sample ID: 500-223041-3**

**Matrix: Solid**

**Percent Solids: 93.7**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3541			677163	EK	EET CHI	09/29/22 16:18 - 09/29/22 19:00 <sup>1</sup>
Total/NA	Analysis	8082A		100	677230	SB	EET CHI	09/30/22 14:38

**Client Sample ID: ED-R3SL-003-1**

**Date Collected: 09/29/22 11:25**

**Date Received: 09/29/22 15:17**

**Lab Sample ID: 500-223041-4**

**Matrix: Solid**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Moisture		1	677127	LWN	EET CHI	09/29/22 15:42

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# Lab Chronicle

Client: Civil & Environmental Consultants Inc  
Project/Site: Arconic - Elliot Ditch - Lafayette, IN

Job ID: 500-223041-1

**Client Sample ID: ED-R3SL-003-1**

**Lab Sample ID: 500-223041-4**

**Date Collected: 09/29/22 11:25**

**Matrix: Solid**

**Date Received: 09/29/22 15:17**

**Percent Solids: 94.0**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3541			677163	EK	EET CHI	09/29/22 16:18 - 09/29/22 19:00 <sup>1</sup>
Total/NA	Analysis	8082A		10	677230	SB	EET CHI	09/30/22 10:26

**Client Sample ID: ED-R3SL-004-1**

**Lab Sample ID: 500-223041-5**

**Date Collected: 09/29/22 11:30**

**Matrix: Solid**

**Date Received: 09/29/22 15:17**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Moisture		1	677127	LWN	EET CHI	09/29/22 15:42

**Client Sample ID: ED-R3SL-004-1**

**Lab Sample ID: 500-223041-5**

**Date Collected: 09/29/22 11:30**

**Matrix: Solid**

**Date Received: 09/29/22 15:17**

**Percent Solids: 94.0**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3541			677163	EK	EET CHI	09/29/22 16:18 - 09/29/22 19:00 <sup>1</sup>
Total/NA	Analysis	8082A		200	677230	SB	EET CHI	09/30/22 14:53

**Client Sample ID: ED-R3SL-DUP002**

**Lab Sample ID: 500-223041-6**

**Date Collected: 09/29/22 00:00**

**Matrix: Solid**

**Date Received: 09/29/22 15:17**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Moisture		1	677127	LWN	EET CHI	09/29/22 15:42

**Client Sample ID: ED-R3SL-DUP002**

**Lab Sample ID: 500-223041-6**

**Date Collected: 09/29/22 00:00**

**Matrix: Solid**

**Date Received: 09/29/22 15:17**

**Percent Solids: 93.8**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3541			677163	EK	EET CHI	09/29/22 16:18 - 09/29/22 19:00 <sup>1</sup>
Total/NA	Analysis	8082A		100	677230	SB	EET CHI	09/30/22 15:08

**Client Sample ID: ED-R3SL-007-1**

**Lab Sample ID: 500-223041-7**

**Date Collected: 09/29/22 13:15**

**Matrix: Solid**

**Date Received: 09/29/22 15:17**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Moisture		1	677127	LWN	EET CHI	09/29/22 15:42

# Lab Chronicle

Client: Civil & Environmental Consultants Inc  
Project/Site: Arconic - Elliot Ditch - Lafayette, IN

Job ID: 500-223041-1

**Client Sample ID: ED-R3SL-007-1**

**Lab Sample ID: 500-223041-7**

**Date Collected: 09/29/22 13:15**

**Matrix: Solid**

**Date Received: 09/29/22 15:17**

**Percent Solids: 93.8**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3541			677163	EK	EET CHI	09/29/22 16:18 - 09/29/22 19:00 <sup>1</sup>
Total/NA	Analysis	8082A		10	677230	SB	EET CHI	09/30/22 11:11

**Client Sample ID: ED-R3SL-008-1**

**Lab Sample ID: 500-223041-8**

**Date Collected: 09/29/22 13:30**

**Matrix: Solid**

**Date Received: 09/29/22 15:17**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Moisture		1	677127	LWN	EET CHI	09/29/22 15:42

**Client Sample ID: ED-R3SL-008-1**

**Lab Sample ID: 500-223041-8**

**Date Collected: 09/29/22 13:30**

**Matrix: Solid**

**Date Received: 09/29/22 15:17**

**Percent Solids: 94.3**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3541			677163	EK	EET CHI	09/29/22 16:18 - 09/29/22 19:00 <sup>1</sup>
Total/NA	Analysis	8082A		10	677230	SB	EET CHI	09/30/22 11:55

**Client Sample ID: ED-R3SL-010-1**

**Lab Sample ID: 500-223041-9**

**Date Collected: 09/29/22 13:35**

**Matrix: Solid**

**Date Received: 09/29/22 15:17**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Moisture		1	677127	LWN	EET CHI	09/29/22 15:42

**Client Sample ID: ED-R3SL-010-1**

**Lab Sample ID: 500-223041-9**

**Date Collected: 09/29/22 13:35**

**Matrix: Solid**

**Date Received: 09/29/22 15:17**

**Percent Solids: 92.8**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3541			677163	EK	EET CHI	09/29/22 16:18 - 09/29/22 19:00 <sup>1</sup>
Total/NA	Analysis	8082A		10	677230	SB	EET CHI	09/30/22 12:10

<sup>1</sup> Completion dates and times are reported or not reported per method requirements or individual lab discretion.

**Laboratory References:**

EET CHI = Eurofins Chicago, 2417 Bond Street, University Park, IL 60484, TEL (708)534-5200

# Accreditation/Certification Summary

Client: Civil & Environmental Consultants Inc  
Project/Site: Arconic - Elliot Ditch - Lafayette, IN

Job ID: 500-223041-1

## Laboratory: Eurofins Chicago

The accreditations/certifications listed below are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Illinois	NELAP	IL00035	04-30-23

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## Login Sample Receipt Checklist

Client: Civil & Environmental Consultants Inc

Job Number: 500-223041-1

**Login Number: 223041**

**List Number: 1**

**Creator: James, Jeff A**

**List Source: Eurofins Chicago**

Question	Answer	Comment
Radioactivity wasn't checked or is <math>\leq</math> background as measured by a survey meter.	True	
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	0.9
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 <math><6\text{mm}</math> (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

## ANALYTICAL REPORT

Eurofins Chicago  
2417 Bond Street  
University Park, IL 60484  
Tel: (708)534-5200

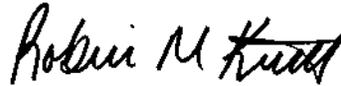
Laboratory Job ID: 500-223041-2

Client Project/Site: Arconic - Elliot Ditch - Lafayette, IN - EB

**For:**

Civil & Environmental Consultants Inc  
2704 Cherokee Farm Way  
Suite 101  
Knoxville, Tennessee 37920

Attn: Garrett Welch



*Authorized for release by:*  
10/11/2022 2:34:08 PM

Robin Kintz, Project Manager II  
(708)534-5200  
[Robin.Kintz@et.eurofinsus.com](mailto:Robin.Kintz@et.eurofinsus.com)

### LINKS

Review your project  
results through



Have a Question?



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The test results in this report meet all 2003 NELAC, 2009 TNI, and 2016 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.

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# Case Narrative

Client: Civil & Environmental Consultants Inc  
Project/Site: Arconic - Elliot Ditch - Lafayette, IN - EB

Job ID: 500-223041-2

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**Job ID: 500-223041-2**

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**Laboratory: Eurofins Chicago**

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**Narrative**

**Job Narrative  
500-223041-2**

**Comments**

No additional comments.

**Receipt**

The samples were received on 9/29/2022 3:17 PM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperature of the cooler at receipt was 0.9° C.

**GC Semi VOA**

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

**Organic Prep**

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

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# Detection Summary

Client: Civil & Environmental Consultants Inc  
Project/Site: Arconic - Elliot Ditch - Lafayette, IN - EB

Job ID: 500-223041-2

**Client Sample ID: ED-R3SL-EB003**

**Lab Sample ID: 500-223041-10**

No Detections.

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This Detection Summary does not include radiochemical test results.

Eurofins Chicago

# Method Summary

Client: Civil & Environmental Consultants Inc  
Project/Site: Arconic - Elliot Ditch - Lafayette, IN - EB

Job ID: 500-223041-2

Method	Method Description	Protocol	Laboratory
8082A	Polychlorinated Biphenyls (PCBs) by Gas Chromatography	SW846	EET CHI
3510C	Liquid-Liquid Extraction (Separatory Funnel)	SW846	EET CHI

**Protocol References:**

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

**Laboratory References:**

EET CHI = Eurofins Chicago, 2417 Bond Street, University Park, IL 60484, TEL (708)534-5200

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# Sample Summary

Client: Civil & Environmental Consultants Inc  
Project/Site: Arconic - Elliot Ditch - Lafayette, IN - EB

Job ID: 500-223041-2

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Lab Sample ID	Client Sample ID	Matrix	Collected	Received
500-223041-10	ED-R3SL-EB003	Water	09/29/22 13:50	09/29/22 15:17

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# Client Sample Results

Client: Civil & Environmental Consultants Inc  
 Project/Site: Arconic - Elliot Ditch - Lafayette, IN - EB

Job ID: 500-223041-2

**Client Sample ID: ED-R3SL-EB003**

**Lab Sample ID: 500-223041-10**

**Date Collected: 09/29/22 13:50**

**Matrix: Water**

**Date Received: 09/29/22 15:17**

**Method: SW846 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<0.00044		0.00044		mg/L		10/07/22 11:58	10/10/22 14:51	1
PCB-1221	<0.00044		0.00044		mg/L		10/07/22 11:58	10/10/22 14:51	1
PCB-1232	<0.00044		0.00044		mg/L		10/07/22 11:58	10/10/22 14:51	1
PCB-1242	<0.00044		0.00044		mg/L		10/07/22 11:58	10/10/22 14:51	1
PCB-1248	<0.00044		0.00044		mg/L		10/07/22 11:58	10/10/22 14:51	1
PCB-1254	<0.00044		0.00044		mg/L		10/07/22 11:58	10/10/22 14:51	1
PCB-1260	<0.00044		0.00044		mg/L		10/07/22 11:58	10/10/22 14:51	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	78		30 - 120	10/07/22 11:58	10/10/22 14:51	1
DCB Decachlorobiphenyl	33		30 - 140	10/07/22 11:58	10/10/22 14:51	1

# Definitions/Glossary

Client: Civil & Environmental Consultants Inc  
Project/Site: Arconic - Elliot Ditch - Lafayette, IN - EB

Job ID: 500-223041-2

## Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
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)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
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)
TNTC	Too Numerous To Count

# QC Association Summary

Client: Civil & Environmental Consultants Inc  
Project/Site: Arconic - Elliot Ditch - Lafayette, IN - EB

Job ID: 500-223041-2

## GC Semi VOA

### Prep Batch: 678510

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-223041-10	ED-R3SL-EB003	Total/NA	Water	3510C	
MB 500-678510/1-A	Method Blank	Total/NA	Water	3510C	
LCS 500-678510/2-A	Lab Control Sample	Total/NA	Water	3510C	

### Analysis Batch: 678766

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-223041-10	ED-R3SL-EB003	Total/NA	Water	8082A	678510
MB 500-678510/1-A	Method Blank	Total/NA	Water	8082A	678510
LCS 500-678510/2-A	Lab Control Sample	Total/NA	Water	8082A	678510

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# Surrogate Summary

Client: Civil & Environmental Consultants Inc  
Project/Site: Arconic - Elliot Ditch - Lafayette, IN - EB

Job ID: 500-223041-2

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

Matrix: Water

Prep Type: Total/NA

### Percent Surrogate Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	TCX2	DCBP2
		(30-120)	(30-140)
500-223041-10	ED-R3SL-EB003	78	33
LCS 500-678510/2-A	Lab Control Sample	72	89
MB 500-678510/1-A	Method Blank	64	89

#### Surrogate Legend

TCX = Tetrachloro-m-xylene

DCBP = DCB Decachlorobiphenyl

# QC Sample Results

Client: Civil & Environmental Consultants Inc  
 Project/Site: Arconic - Elliot Ditch - Lafayette, IN - EB

Job ID: 500-223041-2

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

**Lab Sample ID: MB 500-678510/1-A**  
**Matrix: Water**  
**Analysis Batch: 678766**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**  
**Prep Batch: 678510**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<0.00040		0.00040		mg/L		10/07/22 11:58	10/10/22 11:54	1
PCB-1221	<0.00040		0.00040		mg/L		10/07/22 11:58	10/10/22 11:54	1
PCB-1232	<0.00040		0.00040		mg/L		10/07/22 11:58	10/10/22 11:54	1
PCB-1242	<0.00040		0.00040		mg/L		10/07/22 11:58	10/10/22 11:54	1
PCB-1248	<0.00040		0.00040		mg/L		10/07/22 11:58	10/10/22 11:54	1
PCB-1254	<0.00040		0.00040		mg/L		10/07/22 11:58	10/10/22 11:54	1
PCB-1260	<0.00040		0.00040		mg/L		10/07/22 11:58	10/10/22 11:54	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	64		30 - 120	10/07/22 11:58	10/10/22 11:54	1
DCB Decachlorobiphenyl	89		30 - 140	10/07/22 11:58	10/10/22 11:54	1

**Lab Sample ID: LCS 500-678510/2-A**  
**Matrix: Water**  
**Analysis Batch: 678766**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**  
**Prep Batch: 678510**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
PCB-1016	0.00400	0.00365		mg/L		91	56 - 120
PCB-1260	0.00400	0.00399		mg/L		100	53 - 137

Surrogate	LCS %Recovery	LCS Qualifier	Limits
Tetrachloro-m-xylene	72		30 - 120
DCB Decachlorobiphenyl	89		30 - 140

# Lab Chronicle

Client: Civil & Environmental Consultants Inc  
Project/Site: Arconic - Elliot Ditch - Lafayette, IN - EB

Job ID: 500-223041-2

**Client Sample ID: ED-R3SL-EB003**

**Lab Sample ID: 500-223041-10**

**Date Collected: 09/29/22 13:50**

**Matrix: Water**

**Date Received: 09/29/22 15:17**

<u>Prep Type</u>	<u>Batch Type</u>	<u>Batch Method</u>	<u>Run</u>	<u>Dilution Factor</u>	<u>Batch Number</u>	<u>Analyst</u>	<u>Lab</u>	<u>Prepared or Analyzed</u>
Total/NA	Prep	3510C			678510	TS	EET CHI	10/07/22 11:58
Total/NA	Analysis	8082A		1	678766	SS	EET CHI	10/10/22 14:51

**Laboratory References:**

EET CHI = Eurofins Chicago, 2417 Bond Street, University Park, IL 60484, TEL (708)534-5200

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# Accreditation/Certification Summary

Client: Civil & Environmental Consultants Inc  
Project/Site: Arconic - Elliot Ditch - Lafayette, IN - EB

Job ID: 500-223041-2

## Laboratory: Eurofins Chicago

The accreditations/certifications listed below are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Illinois	NELAP	IL00035	04-30-23

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# Login Sample Receipt Checklist

Client: Civil & Environmental Consultants Inc

Job Number: 500-223041-2

**Login Number: 223041**

**List Number: 1**

**Creator: James, Jeff A**

**List Source: Eurofins Chicago**

Question	Answer	Comment
Radioactivity wasn't checked or is <=/ background as measured by a survey meter.	True	
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	0.9
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").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	



## ANALYTICAL REPORT

Eurofins Chicago  
2417 Bond Street  
University Park, IL 60484  
Tel: (708)534-5200

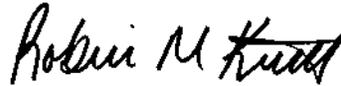
Laboratory Job ID: 500-223109-1

Client Project/Site: Arconic - Elliot Ditch - Lafayette, IN

**For:**

Civil & Environmental Consultants Inc  
2704 Cherokee Farm Way  
Suite 101  
Knoxville, Tennessee 37920

Attn: Garrett Welch



*Authorized for release by:  
10/4/2022 2:40:05 PM*

Robin Kintz, Project Manager II  
(708)534-5200  
[Robin.Kintz@et.eurofinsus.com](mailto:Robin.Kintz@et.eurofinsus.com)

### LINKS

Review your project  
results through



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The test results in this report meet all 2003 NELAC, 2009 TNI, and 2016 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.



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# Case Narrative

Client: Civil & Environmental Consultants Inc  
Project/Site: Arconic - Elliot Ditch - Lafayette, IN

Job ID: 500-223109-1

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## Job ID: 500-223109-1

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### Laboratory: Eurofins Chicago

#### Narrative

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#### Job Narrative 500-223109-1

#### Comments

No additional comments.

#### Receipt

The samples were received on 9/30/2022 3:10 PM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperature of the cooler at receipt was 1.6° C.

#### GC Semi VOA

Method 8082A: DCB Decachlorobiphenyl surrogate recovery for the following samples was outside control limits: ED-R3SL-SW003 (500-223109-1), ED-R3SL-014 (500-223109-2), ED-R3SL-016 (500-223109-3), ED-R3SL-018 (500-223109-5), ED-R3SL-019 (500-223109-6), ED-R3SL-21 (500-223109-7), ED-R3SL-22 (500-223109-8) and (500-223109-A-1-B MS). Tetrachloro-m-xylene surrogate was within the control limits; therefore, re-extraction and/or re-analysis was not performed.

Method 8082A: Surrogate recovery for the following sample was outside control limits: ED-R3SL-014 (500-223109-2). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Method 8082A: Surrogate recovery for the following sample was outside the upper control limit: (MB 500-677355/1-A). This sample did not contain any target analytes; therefore, re-extraction and/or re-analysis was not performed.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

#### Metals

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

#### Organic Prep

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

# Detection Summary

Client: Civil & Environmental Consultants Inc  
Project/Site: Arconic - Elliot Ditch - Lafayette, IN

Job ID: 500-223109-1

## Client Sample ID: ED-R3SL-SW003

Lab Sample ID: 500-223109-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
PCB-1248	0.30		0.18		mg/Kg	10	✳	8082A	Total/NA

## Client Sample ID: ED-R3SL-014

Lab Sample ID: 500-223109-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
PCB-1248	1.5		0.17		mg/Kg	10	✳	8082A	Total/NA

## Client Sample ID: ED-R3SL-016

Lab Sample ID: 500-223109-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
PCB-1248	0.38		0.17		mg/Kg	10	✳	8082A	Total/NA

## Client Sample ID: ED-R3SL-017

Lab Sample ID: 500-223109-4

No Detections.

## Client Sample ID: ED-R3SL-018

Lab Sample ID: 500-223109-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
PCB-1248	0.67		0.17		mg/Kg	10	✳	8082A	Total/NA

## Client Sample ID: ED-R3SL-019

Lab Sample ID: 500-223109-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
PCB-1248	0.29		0.18		mg/Kg	10	✳	8082A	Total/NA

## Client Sample ID: ED-R3SL-21

Lab Sample ID: 500-223109-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
PCB-1248	0.43		0.18		mg/Kg	10	✳	8082A	Total/NA

## Client Sample ID: ED-R3SL-22

Lab Sample ID: 500-223109-8

No Detections.

This Detection Summary does not include radiochemical test results.

Eurofins Chicago

# Method Summary

Client: Civil & Environmental Consultants Inc  
Project/Site: Arconic - Elliot Ditch - Lafayette, IN

Job ID: 500-223109-1

Method	Method Description	Protocol	Laboratory
8082A	Polychlorinated Biphenyls (PCBs) by Gas Chromatography	SW846	EET CHI
Moisture	Percent Moisture	EPA	EET CHI
3541	Automated Soxhlet Extraction	SW846	EET CHI

**Protocol References:**

EPA = US Environmental Protection Agency

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

**Laboratory References:**

EET CHI = Eurofins Chicago, 2417 Bond Street, University Park, IL 60484, TEL (708)534-5200



# Sample Summary

Client: Civil & Environmental Consultants Inc  
Project/Site: Arconic - Elliot Ditch - Lafayette, IN

Job ID: 500-223109-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
500-223109-1	ED-R3SL-SW003	Solid	09/30/22 11:15	09/30/22 15:10
500-223109-2	ED-R3SL-014	Solid	09/30/22 11:50	09/30/22 15:10
500-223109-3	ED-R3SL-016	Solid	09/30/22 11:55	09/30/22 15:10
500-223109-4	ED-R3SL-017	Solid	09/30/22 12:10	09/30/22 15:10
500-223109-5	ED-R3SL-018	Solid	09/30/22 12:20	09/30/22 15:10
500-223109-6	ED-R3SL-019	Solid	09/30/22 12:35	09/30/22 15:10
500-223109-7	ED-R3SL-21	Solid	09/30/22 13:00	09/30/22 15:10
500-223109-8	ED-R3SL-22	Solid	09/30/22 12:45	09/30/22 15:10

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# Client Sample Results

Client: Civil & Environmental Consultants Inc  
 Project/Site: Arconic - Elliot Ditch - Lafayette, IN

Job ID: 500-223109-1

**Client Sample ID: ED-R3SL-SW003**

**Lab Sample ID: 500-223109-1**

Date Collected: 09/30/22 11:15

Matrix: Solid

Date Received: 09/30/22 15:10

Percent Solids: 92.7

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<0.18	F2	0.18		mg/Kg	☼	09/30/22 15:59	10/04/22 11:25	10
PCB-1221	<0.18		0.18		mg/Kg	☼	09/30/22 15:59	10/04/22 11:25	10
PCB-1232	<0.18		0.18		mg/Kg	☼	09/30/22 15:59	10/04/22 11:25	10
PCB-1242	<0.18		0.18		mg/Kg	☼	09/30/22 15:59	10/04/22 11:25	10
<b>PCB-1248</b>	<b>0.30</b>		0.18		mg/Kg	☼	09/30/22 15:59	10/04/22 11:25	10
PCB-1254	<0.18		0.18		mg/Kg	☼	09/30/22 15:59	10/04/22 11:25	10
PCB-1260	<0.18		0.18		mg/Kg	☼	09/30/22 15:59	10/04/22 11:25	10

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	109		49 - 129	09/30/22 15:59	10/04/22 11:25	10
DCB Decachlorobiphenyl	146	S1+	37 - 121	09/30/22 15:59	10/04/22 11:25	10

# Client Sample Results

Client: Civil & Environmental Consultants Inc  
 Project/Site: Arconic - Elliot Ditch - Lafayette, IN

Job ID: 500-223109-1

**Client Sample ID: ED-R3SL-014**

**Lab Sample ID: 500-223109-2**

Date Collected: 09/30/22 11:50

Matrix: Solid

Date Received: 09/30/22 15:10

Percent Solids: 93.7

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<0.17		0.17		mg/Kg	☼	09/30/22 15:59	10/04/22 12:10	10
PCB-1221	<0.17		0.17		mg/Kg	☼	09/30/22 15:59	10/04/22 12:10	10
PCB-1232	<0.17		0.17		mg/Kg	☼	09/30/22 15:59	10/04/22 12:10	10
PCB-1242	<0.17		0.17		mg/Kg	☼	09/30/22 15:59	10/04/22 12:10	10
<b>PCB-1248</b>	<b>1.5</b>		0.17		mg/Kg	☼	09/30/22 15:59	10/04/22 12:10	10
PCB-1254	<0.17		0.17		mg/Kg	☼	09/30/22 15:59	10/04/22 12:10	10
PCB-1260	<0.17		0.17		mg/Kg	☼	09/30/22 15:59	10/04/22 12:10	10

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	135	S1+	49 - 129	09/30/22 15:59	10/04/22 12:10	10
DCB Decachlorobiphenyl	148	S1+	37 - 121	09/30/22 15:59	10/04/22 12:10	10

# Client Sample Results

Client: Civil & Environmental Consultants Inc  
 Project/Site: Arconic - Elliot Ditch - Lafayette, IN

Job ID: 500-223109-1

**Client Sample ID: ED-R3SL-016**

**Lab Sample ID: 500-223109-3**

Date Collected: 09/30/22 11:55

Matrix: Solid

Date Received: 09/30/22 15:10

Percent Solids: 94.0

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<0.17		0.17		mg/Kg	☼	09/30/22 15:59	10/04/22 12:24	10
PCB-1221	<0.17		0.17		mg/Kg	☼	09/30/22 15:59	10/04/22 12:24	10
PCB-1232	<0.17		0.17		mg/Kg	☼	09/30/22 15:59	10/04/22 12:24	10
PCB-1242	<0.17		0.17		mg/Kg	☼	09/30/22 15:59	10/04/22 12:24	10
<b>PCB-1248</b>	<b>0.38</b>		0.17		mg/Kg	☼	09/30/22 15:59	10/04/22 12:24	10
PCB-1254	<0.17		0.17		mg/Kg	☼	09/30/22 15:59	10/04/22 12:24	10
PCB-1260	<0.17		0.17		mg/Kg	☼	09/30/22 15:59	10/04/22 12:24	10

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	113		49 - 129	09/30/22 15:59	10/04/22 12:24	10
DCB Decachlorobiphenyl	137	S1+	37 - 121	09/30/22 15:59	10/04/22 12:24	10

# Client Sample Results

Client: Civil & Environmental Consultants Inc  
 Project/Site: Arconic - Elliot Ditch - Lafayette, IN

Job ID: 500-223109-1

**Client Sample ID: ED-R3SL-017**

**Lab Sample ID: 500-223109-4**

**Date Collected: 09/30/22 12:10**

**Matrix: Solid**

**Date Received: 09/30/22 15:10**

**Percent Solids: 93.4**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<0.17		0.17		mg/Kg	☼	09/30/22 15:59	10/04/22 12:39	10
PCB-1221	<0.17		0.17		mg/Kg	☼	09/30/22 15:59	10/04/22 12:39	10
PCB-1232	<0.17		0.17		mg/Kg	☼	09/30/22 15:59	10/04/22 12:39	10
PCB-1242	<0.17		0.17		mg/Kg	☼	09/30/22 15:59	10/04/22 12:39	10
PCB-1248	<0.17		0.17		mg/Kg	☼	09/30/22 15:59	10/04/22 12:39	10
PCB-1254	<0.17		0.17		mg/Kg	☼	09/30/22 15:59	10/04/22 12:39	10
PCB-1260	<0.17		0.17		mg/Kg	☼	09/30/22 15:59	10/04/22 12:39	10

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	88		49 - 129	09/30/22 15:59	10/04/22 12:39	10
DCB Decachlorobiphenyl	108		37 - 121	09/30/22 15:59	10/04/22 12:39	10

# Client Sample Results

Client: Civil & Environmental Consultants Inc  
 Project/Site: Arconic - Elliot Ditch - Lafayette, IN

Job ID: 500-223109-1

**Client Sample ID: ED-R3SL-018**

**Lab Sample ID: 500-223109-5**

Date Collected: 09/30/22 12:20

Matrix: Solid

Date Received: 09/30/22 15:10

Percent Solids: 93.9

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<0.17		0.17		mg/Kg	☼	09/30/22 15:59	10/04/22 12:54	10
PCB-1221	<0.17		0.17		mg/Kg	☼	09/30/22 15:59	10/04/22 12:54	10
PCB-1232	<0.17		0.17		mg/Kg	☼	09/30/22 15:59	10/04/22 12:54	10
PCB-1242	<0.17		0.17		mg/Kg	☼	09/30/22 15:59	10/04/22 12:54	10
<b>PCB-1248</b>	<b>0.67</b>		0.17		mg/Kg	☼	09/30/22 15:59	10/04/22 12:54	10
PCB-1254	<0.17		0.17		mg/Kg	☼	09/30/22 15:59	10/04/22 12:54	10
PCB-1260	<0.17		0.17		mg/Kg	☼	09/30/22 15:59	10/04/22 12:54	10

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	119		49 - 129	09/30/22 15:59	10/04/22 12:54	10
DCB Decachlorobiphenyl	137	S1+	37 - 121	09/30/22 15:59	10/04/22 12:54	10

# Client Sample Results

Client: Civil & Environmental Consultants Inc  
 Project/Site: Arconic - Elliot Ditch - Lafayette, IN

Job ID: 500-223109-1

**Client Sample ID: ED-R3SL-019**

**Lab Sample ID: 500-223109-6**

Date Collected: 09/30/22 12:35

Matrix: Solid

Date Received: 09/30/22 15:10

Percent Solids: 93.4

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<0.18		0.18		mg/Kg	☼	09/30/22 15:59	10/04/22 13:09	10
PCB-1221	<0.18		0.18		mg/Kg	☼	09/30/22 15:59	10/04/22 13:09	10
PCB-1232	<0.18		0.18		mg/Kg	☼	09/30/22 15:59	10/04/22 13:09	10
PCB-1242	<0.18		0.18		mg/Kg	☼	09/30/22 15:59	10/04/22 13:09	10
<b>PCB-1248</b>	<b>0.29</b>		0.18		mg/Kg	☼	09/30/22 15:59	10/04/22 13:09	10
PCB-1254	<0.18		0.18		mg/Kg	☼	09/30/22 15:59	10/04/22 13:09	10
PCB-1260	<0.18		0.18		mg/Kg	☼	09/30/22 15:59	10/04/22 13:09	10

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	115		49 - 129	09/30/22 15:59	10/04/22 13:09	10
DCB Decachlorobiphenyl	142	S1+	37 - 121	09/30/22 15:59	10/04/22 13:09	10

# Client Sample Results

Client: Civil & Environmental Consultants Inc  
 Project/Site: Arconic - Elliot Ditch - Lafayette, IN

Job ID: 500-223109-1

**Client Sample ID: ED-R3SL-21**

**Lab Sample ID: 500-223109-7**

Date Collected: 09/30/22 13:00

Matrix: Solid

Date Received: 09/30/22 15:10

Percent Solids: 93.5

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<0.18		0.18		mg/Kg	☼	09/30/22 15:59	10/04/22 13:24	10
PCB-1221	<0.18		0.18		mg/Kg	☼	09/30/22 15:59	10/04/22 13:24	10
PCB-1232	<0.18		0.18		mg/Kg	☼	09/30/22 15:59	10/04/22 13:24	10
PCB-1242	<0.18		0.18		mg/Kg	☼	09/30/22 15:59	10/04/22 13:24	10
<b>PCB-1248</b>	<b>0.43</b>		0.18		mg/Kg	☼	09/30/22 15:59	10/04/22 13:24	10
PCB-1254	<0.18		0.18		mg/Kg	☼	09/30/22 15:59	10/04/22 13:24	10
PCB-1260	<0.18		0.18		mg/Kg	☼	09/30/22 15:59	10/04/22 13:24	10

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	115		49 - 129	09/30/22 15:59	10/04/22 13:24	10
DCB Decachlorobiphenyl	141	S1+	37 - 121	09/30/22 15:59	10/04/22 13:24	10

# Client Sample Results

Client: Civil & Environmental Consultants Inc  
 Project/Site: Arconic - Elliot Ditch - Lafayette, IN

Job ID: 500-223109-1

**Client Sample ID: ED-R3SL-22**

**Lab Sample ID: 500-223109-8**

**Date Collected: 09/30/22 12:45**

**Matrix: Solid**

**Date Received: 09/30/22 15:10**

**Percent Solids: 90.7**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<0.18		0.18		mg/Kg	☼	09/30/22 15:59	10/04/22 13:38	10
PCB-1221	<0.18		0.18		mg/Kg	☼	09/30/22 15:59	10/04/22 13:38	10
PCB-1232	<0.18		0.18		mg/Kg	☼	09/30/22 15:59	10/04/22 13:38	10
PCB-1242	<0.18		0.18		mg/Kg	☼	09/30/22 15:59	10/04/22 13:38	10
PCB-1248	<0.18		0.18		mg/Kg	☼	09/30/22 15:59	10/04/22 13:38	10
PCB-1254	<0.18		0.18		mg/Kg	☼	09/30/22 15:59	10/04/22 13:38	10
PCB-1260	<0.18		0.18		mg/Kg	☼	09/30/22 15:59	10/04/22 13:38	10

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	99		49 - 129	09/30/22 15:59	10/04/22 13:38	10
DCB Decachlorobiphenyl	132	S1+	37 - 121	09/30/22 15:59	10/04/22 13:38	10

# Definitions/Glossary

Client: Civil & Environmental Consultants Inc  
Project/Site: Arconic - Elliot Ditch - Lafayette, IN

Job ID: 500-223109-1

## Qualifiers

### GC Semi VOA

Qualifier	Qualifier Description
F2	MS/MSD RPD exceeds control limits
S1+	Surrogate recovery exceeds control limits, high biased.

## Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
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)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
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)
TNTC	Too Numerous To Count

# QC Association Summary

Client: Civil & Environmental Consultants Inc  
 Project/Site: Arconic - Elliot Ditch - Lafayette, IN

Job ID: 500-223109-1

## GC Semi VOA

### Prep Batch: 677355

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-223109-1	ED-R3SL-SW003	Total/NA	Solid	3541	
500-223109-2	ED-R3SL-014	Total/NA	Solid	3541	
500-223109-3	ED-R3SL-016	Total/NA	Solid	3541	
500-223109-4	ED-R3SL-017	Total/NA	Solid	3541	
500-223109-5	ED-R3SL-018	Total/NA	Solid	3541	
500-223109-6	ED-R3SL-019	Total/NA	Solid	3541	
500-223109-7	ED-R3SL-21	Total/NA	Solid	3541	
500-223109-8	ED-R3SL-22	Total/NA	Solid	3541	
MB 500-677355/1-A	Method Blank	Total/NA	Solid	3541	
LCS 500-677355/2-A	Lab Control Sample	Total/NA	Solid	3541	
500-223109-1 MS	ED-R3SL-SW003	Total/NA	Solid	3541	
500-223109-1 MSD	ED-R3SL-SW003	Total/NA	Solid	3541	

### Analysis Batch: 677736

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-223109-1	ED-R3SL-SW003	Total/NA	Solid	8082A	677355
500-223109-2	ED-R3SL-014	Total/NA	Solid	8082A	677355
500-223109-3	ED-R3SL-016	Total/NA	Solid	8082A	677355
500-223109-4	ED-R3SL-017	Total/NA	Solid	8082A	677355
500-223109-5	ED-R3SL-018	Total/NA	Solid	8082A	677355
500-223109-6	ED-R3SL-019	Total/NA	Solid	8082A	677355
500-223109-7	ED-R3SL-21	Total/NA	Solid	8082A	677355
500-223109-8	ED-R3SL-22	Total/NA	Solid	8082A	677355
MB 500-677355/1-A	Method Blank	Total/NA	Solid	8082A	677355
LCS 500-677355/2-A	Lab Control Sample	Total/NA	Solid	8082A	677355
500-223109-1 MS	ED-R3SL-SW003	Total/NA	Solid	8082A	677355
500-223109-1 MSD	ED-R3SL-SW003	Total/NA	Solid	8082A	677355

## General Chemistry

### Analysis Batch: 677455

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-223109-1	ED-R3SL-SW003	Total/NA	Solid	Moisture	
500-223109-2	ED-R3SL-014	Total/NA	Solid	Moisture	
500-223109-3	ED-R3SL-016	Total/NA	Solid	Moisture	
500-223109-4	ED-R3SL-017	Total/NA	Solid	Moisture	
500-223109-5	ED-R3SL-018	Total/NA	Solid	Moisture	
500-223109-6	ED-R3SL-019	Total/NA	Solid	Moisture	
500-223109-7	ED-R3SL-21	Total/NA	Solid	Moisture	
500-223109-8	ED-R3SL-22	Total/NA	Solid	Moisture	
500-223109-1 DU	ED-R3SL-SW003	Total/NA	Solid	Moisture	

# Surrogate Summary

Client: Civil & Environmental Consultants Inc  
Project/Site: Arconic - Elliot Ditch - Lafayette, IN

Job ID: 500-223109-1

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

Matrix: Solid

Prep Type: Total/NA

### Percent Surrogate Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	TCX1	DCBP1
		(49-129)	(37-121)
500-223109-1	ED-R3SL-SW003	109	146 S1+
500-223109-1 MS	ED-R3SL-SW003	112	143 S1+
500-223109-1 MSD	ED-R3SL-SW003	73	109
500-223109-2	ED-R3SL-014	135 S1+	148 S1+
500-223109-3	ED-R3SL-016	113	137 S1+
500-223109-4	ED-R3SL-017	88	108
500-223109-5	ED-R3SL-018	119	137 S1+
500-223109-6	ED-R3SL-019	115	142 S1+
500-223109-7	ED-R3SL-21	115	141 S1+
500-223109-8	ED-R3SL-22	99	132 S1+
LCS 500-677355/2-A	Lab Control Sample	113	137 S1+
MB 500-677355/1-A	Method Blank	139 S1+	148 S1+

#### Surrogate Legend

TCX = Tetrachloro-m-xylene

DCBP = DCB Decachlorobiphenyl

# QC Sample Results

Client: Civil & Environmental Consultants Inc  
 Project/Site: Arconic - Elliot Ditch - Lafayette, IN

Job ID: 500-223109-1

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

**Lab Sample ID: MB 500-677355/1-A**  
**Matrix: Solid**  
**Analysis Batch: 677736**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**  
**Prep Batch: 677355**

Analyte	MB MB		RL	MDL	Unit	D	Prepared		Analyzed		Dil Fac
	Result	Qualifier									
PCB-1016	<0.17		0.17		mg/Kg		09/30/22 15:59	10/04/22 10:56		10	
PCB-1221	<0.17		0.17		mg/Kg		09/30/22 15:59	10/04/22 10:56		10	
PCB-1232	<0.17		0.17		mg/Kg		09/30/22 15:59	10/04/22 10:56		10	
PCB-1242	<0.17		0.17		mg/Kg		09/30/22 15:59	10/04/22 10:56		10	
PCB-1248	<0.17		0.17		mg/Kg		09/30/22 15:59	10/04/22 10:56		10	
PCB-1254	<0.17		0.17		mg/Kg		09/30/22 15:59	10/04/22 10:56		10	
PCB-1260	<0.17		0.17		mg/Kg		09/30/22 15:59	10/04/22 10:56		10	

Surrogate	MB MB		Limits	Prepared		Analyzed		Dil Fac
	%Recovery	Qualifier						
Tetrachloro-m-xylene	139	S1+	49 - 129	09/30/22 15:59	10/04/22 10:56		10	
DCB Decachlorobiphenyl	148	S1+	37 - 121	09/30/22 15:59	10/04/22 10:56		10	

**Lab Sample ID: LCS 500-677355/2-A**  
**Matrix: Solid**  
**Analysis Batch: 677736**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**  
**Prep Batch: 677355**

Analyte	Spike Added	LCS LCS		Unit	D	%Rec	%Rec Limits	
		Result	Qualifier					
PCB-1016	1.67	1.64		mg/Kg		98	57 - 120	
PCB-1260	1.67	1.89		mg/Kg		114	61 - 125	

Surrogate	LCS LCS		Limits
	%Recovery	Qualifier	
Tetrachloro-m-xylene	113		49 - 129
DCB Decachlorobiphenyl	137	S1+	37 - 121

**Lab Sample ID: 500-223109-1 MS**  
**Matrix: Solid**  
**Analysis Batch: 677736**

**Client Sample ID: ED-R3SL-SW003**  
**Prep Type: Total/NA**  
**Prep Batch: 677355**

Analyte	Sample		Spike Added	MS MS		Unit	D	%Rec	%Rec Limits	
	Result	Qualifier		Result	Qualifier					
PCB-1016	<0.18	F2	1.73	1.96		mg/Kg	☼	113	57 - 120	
PCB-1260	<0.18		1.73	2.08		mg/Kg	☼	120	61 - 125	

Surrogate	MS MS		Limits
	%Recovery	Qualifier	
Tetrachloro-m-xylene	112		49 - 129
DCB Decachlorobiphenyl	143	S1+	37 - 121

**Lab Sample ID: 500-223109-1 MSD**  
**Matrix: Solid**  
**Analysis Batch: 677736**

**Client Sample ID: ED-R3SL-SW003**  
**Prep Type: Total/NA**  
**Prep Batch: 677355**

Analyte	Sample		Spike Added	MSD MSD		Unit	D	%Rec	%Rec Limits		RPD	
	Result	Qualifier		Result	Qualifier						RPD	Limit
PCB-1016	<0.18	F2	1.75	1.44	F2	mg/Kg	☼	82	57 - 120	31	30	
PCB-1260	<0.18		1.75	1.59		mg/Kg	☼	91	61 - 125	27	30	

Surrogate	MSD MSD		Limits
	%Recovery	Qualifier	
Tetrachloro-m-xylene	73		49 - 129
DCB Decachlorobiphenyl	109		37 - 121

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# Lab Chronicle

Client: Civil & Environmental Consultants Inc  
Project/Site: Arconic - Elliot Ditch - Lafayette, IN

Job ID: 500-223109-1

**Client Sample ID: ED-R3SL-SW003**

**Date Collected: 09/30/22 11:15**

**Date Received: 09/30/22 15:10**

**Lab Sample ID: 500-223109-1**

**Matrix: Solid**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Moisture		1	677455	LWN	EET CHI	10/03/22 07:55

**Client Sample ID: ED-R3SL-SW003**

**Date Collected: 09/30/22 11:15**

**Date Received: 09/30/22 15:10**

**Lab Sample ID: 500-223109-1**

**Matrix: Solid**

**Percent Solids: 92.7**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3541			677355	EK	EET CHI	09/30/22 15:59 - 09/30/22 18:00 <sup>1</sup>
Total/NA	Analysis	8082A		10	677736	SB	EET CHI	10/04/22 11:25

**Client Sample ID: ED-R3SL-014**

**Date Collected: 09/30/22 11:50**

**Date Received: 09/30/22 15:10**

**Lab Sample ID: 500-223109-2**

**Matrix: Solid**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Moisture		1	677455	LWN	EET CHI	10/03/22 07:55

**Client Sample ID: ED-R3SL-014**

**Date Collected: 09/30/22 11:50**

**Date Received: 09/30/22 15:10**

**Lab Sample ID: 500-223109-2**

**Matrix: Solid**

**Percent Solids: 93.7**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3541			677355	EK	EET CHI	09/30/22 15:59 - 09/30/22 18:00 <sup>1</sup>
Total/NA	Analysis	8082A		10	677736	SB	EET CHI	10/04/22 12:10

**Client Sample ID: ED-R3SL-016**

**Date Collected: 09/30/22 11:55**

**Date Received: 09/30/22 15:10**

**Lab Sample ID: 500-223109-3**

**Matrix: Solid**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Moisture		1	677455	LWN	EET CHI	10/03/22 07:55

**Client Sample ID: ED-R3SL-016**

**Date Collected: 09/30/22 11:55**

**Date Received: 09/30/22 15:10**

**Lab Sample ID: 500-223109-3**

**Matrix: Solid**

**Percent Solids: 94.0**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3541			677355	EK	EET CHI	09/30/22 15:59 - 09/30/22 18:00 <sup>1</sup>
Total/NA	Analysis	8082A		10	677736	SB	EET CHI	10/04/22 12:24

**Client Sample ID: ED-R3SL-017**

**Date Collected: 09/30/22 12:10**

**Date Received: 09/30/22 15:10**

**Lab Sample ID: 500-223109-4**

**Matrix: Solid**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Moisture		1	677455	LWN	EET CHI	10/03/22 07:55

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# Lab Chronicle

Client: Civil & Environmental Consultants Inc  
Project/Site: Arconic - Elliot Ditch - Lafayette, IN

Job ID: 500-223109-1

## Client Sample ID: ED-R3SL-017

Lab Sample ID: 500-223109-4

Date Collected: 09/30/22 12:10

Matrix: Solid

Date Received: 09/30/22 15:10

Percent Solids: 93.4

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3541			677355	EK	EET CHI	09/30/22 15:59 - 09/30/22 18:00 <sup>1</sup>
Total/NA	Analysis	8082A		10	677736	SB	EET CHI	10/04/22 12:39

## Client Sample ID: ED-R3SL-018

Lab Sample ID: 500-223109-5

Date Collected: 09/30/22 12:20

Matrix: Solid

Date Received: 09/30/22 15:10

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Moisture		1	677455	LWN	EET CHI	10/03/22 07:55

## Client Sample ID: ED-R3SL-018

Lab Sample ID: 500-223109-5

Date Collected: 09/30/22 12:20

Matrix: Solid

Date Received: 09/30/22 15:10

Percent Solids: 93.9

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3541			677355	EK	EET CHI	09/30/22 15:59 - 09/30/22 18:00 <sup>1</sup>
Total/NA	Analysis	8082A		10	677736	SB	EET CHI	10/04/22 12:54

## Client Sample ID: ED-R3SL-019

Lab Sample ID: 500-223109-6

Date Collected: 09/30/22 12:35

Matrix: Solid

Date Received: 09/30/22 15:10

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Moisture		1	677455	LWN	EET CHI	10/03/22 07:55

## Client Sample ID: ED-R3SL-019

Lab Sample ID: 500-223109-6

Date Collected: 09/30/22 12:35

Matrix: Solid

Date Received: 09/30/22 15:10

Percent Solids: 93.4

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3541			677355	EK	EET CHI	09/30/22 15:59 - 09/30/22 18:00 <sup>1</sup>
Total/NA	Analysis	8082A		10	677736	SB	EET CHI	10/04/22 13:09

## Client Sample ID: ED-R3SL-21

Lab Sample ID: 500-223109-7

Date Collected: 09/30/22 13:00

Matrix: Solid

Date Received: 09/30/22 15:10

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Moisture		1	677455	LWN	EET CHI	10/03/22 07:55

# Lab Chronicle

Client: Civil & Environmental Consultants Inc  
 Project/Site: Arconic - Elliot Ditch - Lafayette, IN

Job ID: 500-223109-1

**Client Sample ID: ED-R3SL-21**

**Lab Sample ID: 500-223109-7**

Date Collected: 09/30/22 13:00

Matrix: Solid

Date Received: 09/30/22 15:10

Percent Solids: 93.5

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3541			677355	EK	EET CHI	09/30/22 15:59 - 09/30/22 18:00 <sup>1</sup>
Total/NA	Analysis	8082A		10	677736	SB	EET CHI	10/04/22 13:24

**Client Sample ID: ED-R3SL-22**

**Lab Sample ID: 500-223109-8**

Date Collected: 09/30/22 12:45

Matrix: Solid

Date Received: 09/30/22 15:10

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Moisture		1	677455	LWN	EET CHI	10/03/22 07:55

**Client Sample ID: ED-R3SL-22**

**Lab Sample ID: 500-223109-8**

Date Collected: 09/30/22 12:45

Matrix: Solid

Date Received: 09/30/22 15:10

Percent Solids: 90.7

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3541			677355	EK	EET CHI	09/30/22 15:59 - 09/30/22 18:00 <sup>1</sup>
Total/NA	Analysis	8082A		10	677736	SB	EET CHI	10/04/22 13:38

<sup>1</sup> Completion dates and times are reported or not reported per method requirements or individual lab discretion.

**Laboratory References:**

EET CHI = Eurofins Chicago, 2417 Bond Street, University Park, IL 60484, TEL (708)534-5200

# Accreditation/Certification Summary

Client: Civil & Environmental Consultants Inc  
Project/Site: Arconic - Elliot Ditch - Lafayette, IN

Job ID: 500-223109-1

## Laboratory: Eurofins Chicago

The accreditations/certifications listed below are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Illinois	NELAP	IL00035	04-30-23

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# Login Sample Receipt Checklist

Client: Civil & Environmental Consultants Inc

Job Number: 500-223109-1

**Login Number: 223109**

**List Number: 1**

**Creator: James, Jeff A**

**List Source: Eurofins Chicago**

Question	Answer	Comment
Radioactivity wasn't checked or is <math>\leq</math> background as measured by a survey meter.	True	
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	1.6
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 <math><6\text{mm}</math> (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	



## ANALYTICAL REPORT

Eurofins Chicago  
2417 Bond Street  
University Park, IL 60484  
Tel: (708)534-5200

Laboratory Job ID: 500-223109-2

Client Project/Site: Arconic - Elliot Ditch - Lafayette, IN - EB

**For:**

Civil & Environmental Consultants Inc  
2704 Cherokee Farm Way  
Suite 101  
Knoxville, Tennessee 37920

Attn: Garrett Welch



Authorized for release by:  
10/11/2022 2:35:40 PM

Robin Kintz, Project Manager II  
(708)534-5200

[Robin.Kintz@et.eurofinsus.com](mailto:Robin.Kintz@et.eurofinsus.com)

### LINKS

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results through



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[www.eurofinsus.com/Env](http://www.eurofinsus.com/Env)

The test results in this report meet all 2003 NELAC, 2009 TNI, and 2016 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.



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# Case Narrative

Client: Civil & Environmental Consultants Inc  
Project/Site: Arconic - Elliot Ditch - Lafayette, IN - EB

Job ID: 500-223109-2

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**Job ID: 500-223109-2**

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**Laboratory: Eurofins Chicago**

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**Narrative**

**Job Narrative  
500-223109-2**

**Comments**

No additional comments.

**Receipt**

The samples were received on 9/30/2022 3:10 PM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperature of the cooler at receipt was 1.6° C.

**GC Semi VOA**

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

**Organic Prep**

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

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# Detection Summary

Client: Civil & Environmental Consultants Inc  
Project/Site: Arconic - Elliot Ditch - Lafayette, IN - EB

Job ID: 500-223109-2

**Client Sample ID: ED-R3SL-EB004**

**Lab Sample ID: 500-223109-9**

No Detections.

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This Detection Summary does not include radiochemical test results.

Eurofins Chicago

# Method Summary

Client: Civil & Environmental Consultants Inc  
Project/Site: Arconic - Elliot Ditch - Lafayette, IN - EB

Job ID: 500-223109-2

Method	Method Description	Protocol	Laboratory
8082A	Polychlorinated Biphenyls (PCBs) by Gas Chromatography	SW846	EET CHI
3510C	Liquid-Liquid Extraction (Separatory Funnel)	SW846	EET CHI

**Protocol References:**

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

**Laboratory References:**

EET CHI = Eurofins Chicago, 2417 Bond Street, University Park, IL 60484, TEL (708)534-5200

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# Sample Summary

Client: Civil & Environmental Consultants Inc  
Project/Site: Arconic - Elliot Ditch - Lafayette, IN - EB

Job ID: 500-223109-2

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Lab Sample ID	Client Sample ID	Matrix	Collected	Received
500-223109-9	ED-R3SL-EB004	Water	09/30/22 13:40	09/30/22 15:10

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# Client Sample Results

Client: Civil & Environmental Consultants Inc  
 Project/Site: Arconic - Elliot Ditch - Lafayette, IN - EB

Job ID: 500-223109-2

**Client Sample ID: ED-R3SL-EB004**

**Lab Sample ID: 500-223109-9**

**Date Collected: 09/30/22 13:40**

**Matrix: Water**

**Date Received: 09/30/22 15:10**

**Method: SW846 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<0.00042		0.00042		mg/L		10/07/22 11:58	10/10/22 15:07	1
PCB-1221	<0.00042		0.00042		mg/L		10/07/22 11:58	10/10/22 15:07	1
PCB-1232	<0.00042		0.00042		mg/L		10/07/22 11:58	10/10/22 15:07	1
PCB-1242	<0.00042		0.00042		mg/L		10/07/22 11:58	10/10/22 15:07	1
PCB-1248	<0.00042		0.00042		mg/L		10/07/22 11:58	10/10/22 15:07	1
PCB-1254	<0.00042		0.00042		mg/L		10/07/22 11:58	10/10/22 15:07	1
PCB-1260	<0.00042		0.00042		mg/L		10/07/22 11:58	10/10/22 15:07	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	58		30 - 120	10/07/22 11:58	10/10/22 15:07	1
DCB Decachlorobiphenyl	33		30 - 140	10/07/22 11:58	10/10/22 15:07	1

# Definitions/Glossary

Client: Civil & Environmental Consultants Inc  
Project/Site: Arconic - Elliot Ditch - Lafayette, IN - EB

Job ID: 500-223109-2

## Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
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)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
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)
TNTC	Too Numerous To Count

# QC Association Summary

Client: Civil & Environmental Consultants Inc  
Project/Site: Arconic - Elliot Ditch - Lafayette, IN - EB

Job ID: 500-223109-2

## GC Semi VOA

### Prep Batch: 678510

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-223109-9	ED-R3SL-EB004	Total/NA	Water	3510C	
MB 500-678510/1-A	Method Blank	Total/NA	Water	3510C	
LCS 500-678510/2-A	Lab Control Sample	Total/NA	Water	3510C	

### Analysis Batch: 678766

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-223109-9	ED-R3SL-EB004	Total/NA	Water	8082A	678510
MB 500-678510/1-A	Method Blank	Total/NA	Water	8082A	678510
LCS 500-678510/2-A	Lab Control Sample	Total/NA	Water	8082A	678510

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# Surrogate Summary

Client: Civil & Environmental Consultants Inc  
Project/Site: Arconic - Elliot Ditch - Lafayette, IN - EB

Job ID: 500-223109-2

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

Matrix: Water

Prep Type: Total/NA

### Percent Surrogate Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	TCX2	DCBP2
		(30-120)	(30-140)
500-223109-9	ED-R3SL-EB004	58	33
LCS 500-678510/2-A	Lab Control Sample	72	89
MB 500-678510/1-A	Method Blank	64	89

#### Surrogate Legend

TCX = Tetrachloro-m-xylene

DCBP = DCB Decachlorobiphenyl

# QC Sample Results

Client: Civil & Environmental Consultants Inc  
 Project/Site: Arconic - Elliot Ditch - Lafayette, IN - EB

Job ID: 500-223109-2

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

**Lab Sample ID: MB 500-678510/1-A**  
**Matrix: Water**  
**Analysis Batch: 678766**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**  
**Prep Batch: 678510**

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
PCB-1016	<0.00040		0.00040		mg/L		10/07/22 11:58	10/10/22 11:54	1
PCB-1221	<0.00040		0.00040		mg/L		10/07/22 11:58	10/10/22 11:54	1
PCB-1232	<0.00040		0.00040		mg/L		10/07/22 11:58	10/10/22 11:54	1
PCB-1242	<0.00040		0.00040		mg/L		10/07/22 11:58	10/10/22 11:54	1
PCB-1248	<0.00040		0.00040		mg/L		10/07/22 11:58	10/10/22 11:54	1
PCB-1254	<0.00040		0.00040		mg/L		10/07/22 11:58	10/10/22 11:54	1
PCB-1260	<0.00040		0.00040		mg/L		10/07/22 11:58	10/10/22 11:54	1

Surrogate	MB	MB	Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
Tetrachloro-m-xylene	64		30 - 120	10/07/22 11:58	10/10/22 11:54	1
DCB Decachlorobiphenyl	89		30 - 140	10/07/22 11:58	10/10/22 11:54	1

**Lab Sample ID: LCS 500-678510/2-A**  
**Matrix: Water**  
**Analysis Batch: 678766**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**  
**Prep Batch: 678510**

Analyte	Spike Added	LCS	LCS	Unit	D	%Rec	%Rec Limits
		Result	Qualifier				
PCB-1016	0.00400	0.00365		mg/L		91	56 - 120
PCB-1260	0.00400	0.00399		mg/L		100	53 - 137

Surrogate	LCS	LCS	Limits
	%Recovery	Qualifier	
Tetrachloro-m-xylene	72		30 - 120
DCB Decachlorobiphenyl	89		30 - 140

# Lab Chronicle

Client: Civil & Environmental Consultants Inc  
Project/Site: Arconic - Elliot Ditch - Lafayette, IN - EB

Job ID: 500-223109-2

**Client Sample ID: ED-R3SL-EB004**

**Lab Sample ID: 500-223109-9**

**Date Collected: 09/30/22 13:40**

**Matrix: Water**

**Date Received: 09/30/22 15:10**

<u>Prep Type</u>	<u>Batch Type</u>	<u>Batch Method</u>	<u>Run</u>	<u>Dilution Factor</u>	<u>Batch Number</u>	<u>Analyst</u>	<u>Lab</u>	<u>Prepared or Analyzed</u>
Total/NA	Prep	3510C			678510	TS	EET CHI	10/07/22 11:58
Total/NA	Analysis	8082A		1	678766	SS	EET CHI	10/10/22 15:07

**Laboratory References:**

EET CHI = Eurofins Chicago, 2417 Bond Street, University Park, IL 60484, TEL (708)534-5200

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# Accreditation/Certification Summary

Client: Civil & Environmental Consultants Inc  
Project/Site: Arconic - Elliot Ditch - Lafayette, IN - EB

Job ID: 500-223109-2

## Laboratory: Eurofins Chicago

The accreditations/certifications listed below are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Illinois	NELAP	IL00035	04-30-23

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## Login Sample Receipt Checklist

Client: Civil & Environmental Consultants Inc

Job Number: 500-223109-2

**Login Number: 223109**

**List Number: 1**

**Creator: James, Jeff A**

**List Source: Eurofins Chicago**

Question	Answer	Comment
Radioactivity wasn't checked or is <math>\leq</math> background as measured by a survey meter.	True	
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	1.6
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 <math><6\text{mm}</math> (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	



## ANALYTICAL REPORT

Eurofins Chicago  
2417 Bond Street  
University Park, IL 60484  
Tel: (708)534-5200

Laboratory Job ID: 500-223166-1

Client Project/Site: Arconic - Elliot Ditch - Lafayette, IN

**For:**

Civil & Environmental Consultants Inc  
2704 Cherokee Farm Way  
Suite 101  
Knoxville, Tennessee 37920

Attn: Garrett Welch



*Authorized for release by:*

10/4/2022 5:22:48 PM

Robin Kintz, Project Manager II  
(708)534-5200

[Robin.Kintz@et.eurofinsus.com](mailto:Robin.Kintz@et.eurofinsus.com)

### LINKS

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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.



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# Case Narrative

Client: Civil & Environmental Consultants Inc  
Project/Site: Arconic - Elliot Ditch - Lafayette, IN

Job ID: 500-223166-1

**Job ID: 500-223166-1**

**Laboratory: Eurofins Chicago**

## Narrative

### Job Narrative 500-223166-1

#### Comments

No additional comments.

#### Receipt

The samples were received on 10/3/2022 3:11 PM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperature of the cooler at receipt was 3.3° C.

#### GC Semi VOA

Method 8082A: The surrogate recovery for DCB Decachlorobiphenyl was above the control limit in the following samples: (LCS 500-677628/2-A) and (MB 500-677628/1-A); however, the surrogate Tetrachloro-m-xylene was within control limits. The laboratory's SOP allows one surrogate to be outside acceptance limits; therefore, re-extraction was not performed. These results have been reported and qualified.

Method 8082A: Surrogate recovery for the following sample was outside control limits: ED-R3SL-030 (500-223166-10). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Method 8082A: DCB Decachlorobiphenyl surrogate recovery for the following sample was outside control limits: ED-R3SL-028 (500-223166-7). Tetrachloro-m-xylene surrogate was within the control limits; therefore, re-extraction and/or re-analysis was not performed.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

#### Metals

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

#### Organic Prep

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

# Detection Summary

Client: Civil & Environmental Consultants Inc  
Project/Site: Arconic - Elliot Ditch - Lafayette, IN

Job ID: 500-223166-1

## Client Sample ID: ED-R3SL-020

## Lab Sample ID: 500-223166-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
PCB-1248	0.37		0.17		mg/Kg	10	✳	8082A	Total/NA

## Client Sample ID: ED-R3SL-023

## Lab Sample ID: 500-223166-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
PCB-1248	2.8		0.84		mg/Kg	50	✳	8082A	Total/NA

## Client Sample ID: ED-R3SL-024

## Lab Sample ID: 500-223166-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
PCB-1248	0.63		0.17		mg/Kg	10	✳	8082A	Total/NA

## Client Sample ID: ED-R3SL-025

## Lab Sample ID: 500-223166-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
PCB-1248	4.8		1.7		mg/Kg	100	✳	8082A	Total/NA

## Client Sample ID: ED-R3SL-026

## Lab Sample ID: 500-223166-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
PCB-1248	3.9		1.7		mg/Kg	100	✳	8082A	Total/NA

## Client Sample ID: ED-R3SL-027

## Lab Sample ID: 500-223166-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
PCB-1248	2.0		0.88		mg/Kg	50	✳	8082A	Total/NA

## Client Sample ID: ED-R3SL-028

## Lab Sample ID: 500-223166-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
PCB-1248	1.6		0.88		mg/Kg	50	✳	8082A	Total/NA

## Client Sample ID: ED-R3SL-029

## Lab Sample ID: 500-223166-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
PCB-1248	1.6		0.17		mg/Kg	10	✳	8082A	Total/NA

## Client Sample ID: ED-R3SL-SW004

## Lab Sample ID: 500-223166-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
PCB-1248	0.79		0.17		mg/Kg	10	✳	8082A	Total/NA

## Client Sample ID: ED-R3SL-030

## Lab Sample ID: 500-223166-10

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
PCB-1248	9.0		1.7		mg/Kg	100	✳	8082A	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins Chicago

# Method Summary

Client: Civil & Environmental Consultants Inc  
Project/Site: Arconic - Elliot Ditch - Lafayette, IN

Job ID: 500-223166-1

Method	Method Description	Protocol	Laboratory
8082A	Polychlorinated Biphenyls (PCBs) by Gas Chromatography	SW846	EET CHI
Moisture	Percent Moisture	EPA	EET CHI
3541	Automated Soxhlet Extraction	SW846	EET CHI

**Protocol References:**

EPA = US Environmental Protection Agency

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

**Laboratory References:**

EET CHI = Eurofins Chicago, 2417 Bond Street, University Park, IL 60484, TEL (708)534-5200



# Sample Summary

Client: Civil & Environmental Consultants Inc  
Project/Site: Arconic - Elliot Ditch - Lafayette, IN

Job ID: 500-223166-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
500-223166-1	ED-R3SL-020	Solid	10/03/22 10:26	10/03/22 15:11
500-223166-2	ED-R3SL-023	Solid	10/03/22 10:42	10/03/22 15:11
500-223166-3	ED-R3SL-024	Solid	10/03/22 10:38	10/03/22 15:11
500-223166-4	ED-R3SL-025	Solid	10/03/22 10:50	10/03/22 15:11
500-223166-5	ED-R3SL-026	Solid	10/03/22 10:57	10/03/22 15:11
500-223166-6	ED-R3SL-027	Solid	10/03/22 12:07	10/03/22 15:11
500-223166-7	ED-R3SL-028	Solid	10/03/22 12:14	10/03/22 15:11
500-223166-8	ED-R3SL-029	Solid	10/03/22 12:23	10/03/22 15:11
500-223166-9	ED-R3SL-SW004	Solid	10/03/22 12:30	10/03/22 15:11
500-223166-10	ED-R3SL-030	Solid	10/03/22 12:38	10/03/22 15:11

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14
- 15

# Client Sample Results

Client: Civil & Environmental Consultants Inc  
 Project/Site: Arconic - Elliot Ditch - Lafayette, IN

Job ID: 500-223166-1

**Client Sample ID: ED-R3SL-020**

**Lab Sample ID: 500-223166-1**

Date Collected: 10/03/22 10:26

Matrix: Solid

Date Received: 10/03/22 15:11

Percent Solids: 94.1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<0.17		0.17		mg/Kg	☼	10/03/22 16:01	10/04/22 09:18	10
PCB-1221	<0.17		0.17		mg/Kg	☼	10/03/22 16:01	10/04/22 09:18	10
PCB-1232	<0.17		0.17		mg/Kg	☼	10/03/22 16:01	10/04/22 09:18	10
PCB-1242	<0.17		0.17		mg/Kg	☼	10/03/22 16:01	10/04/22 09:18	10
<b>PCB-1248</b>	<b>0.37</b>		0.17		mg/Kg	☼	10/03/22 16:01	10/04/22 09:18	10
PCB-1254	<0.17		0.17		mg/Kg	☼	10/03/22 16:01	10/04/22 09:18	10
PCB-1260	<0.17		0.17		mg/Kg	☼	10/03/22 16:01	10/04/22 09:18	10

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	100		49 - 129	10/03/22 16:01	10/04/22 09:18	10
DCB Decachlorobiphenyl	111		37 - 121	10/03/22 16:01	10/04/22 09:18	10

# Client Sample Results

Client: Civil & Environmental Consultants Inc  
 Project/Site: Arconic - Elliot Ditch - Lafayette, IN

Job ID: 500-223166-1

**Client Sample ID: ED-R3SL-023**

**Lab Sample ID: 500-223166-2**

Date Collected: 10/03/22 10:42

Matrix: Solid

Date Received: 10/03/22 15:11

Percent Solids: 93.8

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<0.84	F1 F2	0.84		mg/Kg	☼	10/03/22 16:01	10/04/22 14:43	50
PCB-1221	<0.84		0.84		mg/Kg	☼	10/03/22 16:01	10/04/22 14:43	50
PCB-1232	<0.84		0.84		mg/Kg	☼	10/03/22 16:01	10/04/22 14:43	50
PCB-1242	<0.84		0.84		mg/Kg	☼	10/03/22 16:01	10/04/22 14:43	50
<b>PCB-1248</b>	<b>2.8</b>		0.84		mg/Kg	☼	10/03/22 16:01	10/04/22 14:43	50
PCB-1254	<0.84		0.84		mg/Kg	☼	10/03/22 16:01	10/04/22 14:43	50
PCB-1260	<0.84	F1	0.84		mg/Kg	☼	10/03/22 16:01	10/04/22 14:43	50

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	97		49 - 129	10/03/22 16:01	10/04/22 14:43	50
DCB Decachlorobiphenyl	95		37 - 121	10/03/22 16:01	10/04/22 14:43	50

# Client Sample Results

Client: Civil & Environmental Consultants Inc  
 Project/Site: Arconic - Elliot Ditch - Lafayette, IN

Job ID: 500-223166-1

**Client Sample ID: ED-R3SL-024**

**Lab Sample ID: 500-223166-3**

Date Collected: 10/03/22 10:38

Matrix: Solid

Date Received: 10/03/22 15:11

Percent Solids: 94.6

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<0.17		0.17		mg/Kg	☼	10/03/22 16:01	10/04/22 10:17	10
PCB-1221	<0.17		0.17		mg/Kg	☼	10/03/22 16:01	10/04/22 10:17	10
PCB-1232	<0.17		0.17		mg/Kg	☼	10/03/22 16:01	10/04/22 10:17	10
PCB-1242	<0.17		0.17		mg/Kg	☼	10/03/22 16:01	10/04/22 10:17	10
<b>PCB-1248</b>	<b>0.63</b>		0.17		mg/Kg	☼	10/03/22 16:01	10/04/22 10:17	10
PCB-1254	<0.17		0.17		mg/Kg	☼	10/03/22 16:01	10/04/22 10:17	10
PCB-1260	<0.17		0.17		mg/Kg	☼	10/03/22 16:01	10/04/22 10:17	10

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	104		49 - 129	10/03/22 16:01	10/04/22 10:17	10
DCB Decachlorobiphenyl	102		37 - 121	10/03/22 16:01	10/04/22 10:17	10

# Client Sample Results

Client: Civil & Environmental Consultants Inc  
 Project/Site: Arconic - Elliot Ditch - Lafayette, IN

Job ID: 500-223166-1

**Client Sample ID: ED-R3SL-025**

**Lab Sample ID: 500-223166-4**

Date Collected: 10/03/22 10:50

Matrix: Solid

Date Received: 10/03/22 15:11

Percent Solids: 94.4

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<1.7		1.7		mg/Kg	☼	10/03/22 16:01	10/04/22 15:28	100
PCB-1221	<1.7		1.7		mg/Kg	☼	10/03/22 16:01	10/04/22 15:28	100
PCB-1232	<1.7		1.7		mg/Kg	☼	10/03/22 16:01	10/04/22 15:28	100
PCB-1242	<1.7		1.7		mg/Kg	☼	10/03/22 16:01	10/04/22 15:28	100
<b>PCB-1248</b>	<b>4.8</b>		1.7		mg/Kg	☼	10/03/22 16:01	10/04/22 15:28	100
PCB-1254	<1.7		1.7		mg/Kg	☼	10/03/22 16:01	10/04/22 15:28	100
PCB-1260	<1.7		1.7		mg/Kg	☼	10/03/22 16:01	10/04/22 15:28	100

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	107		49 - 129	10/03/22 16:01	10/04/22 15:28	100
DCB Decachlorobiphenyl	112		37 - 121	10/03/22 16:01	10/04/22 15:28	100

# Client Sample Results

Client: Civil & Environmental Consultants Inc  
 Project/Site: Arconic - Elliot Ditch - Lafayette, IN

Job ID: 500-223166-1

**Client Sample ID: ED-R3SL-026**

**Lab Sample ID: 500-223166-5**

Date Collected: 10/03/22 10:57

Matrix: Solid

Date Received: 10/03/22 15:11

Percent Solids: 94.1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<1.7		1.7		mg/Kg	☼	10/03/22 16:01	10/04/22 15:42	100
PCB-1221	<1.7		1.7		mg/Kg	☼	10/03/22 16:01	10/04/22 15:42	100
PCB-1232	<1.7		1.7		mg/Kg	☼	10/03/22 16:01	10/04/22 15:42	100
PCB-1242	<1.7		1.7		mg/Kg	☼	10/03/22 16:01	10/04/22 15:42	100
<b>PCB-1248</b>	<b>3.9</b>		1.7		mg/Kg	☼	10/03/22 16:01	10/04/22 15:42	100
PCB-1254	<1.7		1.7		mg/Kg	☼	10/03/22 16:01	10/04/22 15:42	100
PCB-1260	<1.7		1.7		mg/Kg	☼	10/03/22 16:01	10/04/22 15:42	100

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	106		49 - 129	10/03/22 16:01	10/04/22 15:42	100
DCB Decachlorobiphenyl	98		37 - 121	10/03/22 16:01	10/04/22 15:42	100

# Client Sample Results

Client: Civil & Environmental Consultants Inc  
 Project/Site: Arconic - Elliot Ditch - Lafayette, IN

Job ID: 500-223166-1

**Client Sample ID: ED-R3SL-027**

**Lab Sample ID: 500-223166-6**

Date Collected: 10/03/22 12:07

Matrix: Solid

Date Received: 10/03/22 15:11

Percent Solids: 94.4

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<0.88		0.88		mg/Kg	☼	10/03/22 16:01	10/04/22 15:57	50
PCB-1221	<0.88		0.88		mg/Kg	☼	10/03/22 16:01	10/04/22 15:57	50
PCB-1232	<0.88		0.88		mg/Kg	☼	10/03/22 16:01	10/04/22 15:57	50
PCB-1242	<0.88		0.88		mg/Kg	☼	10/03/22 16:01	10/04/22 15:57	50
<b>PCB-1248</b>	<b>2.0</b>		0.88		mg/Kg	☼	10/03/22 16:01	10/04/22 15:57	50
PCB-1254	<0.88		0.88		mg/Kg	☼	10/03/22 16:01	10/04/22 15:57	50
PCB-1260	<0.88		0.88		mg/Kg	☼	10/03/22 16:01	10/04/22 15:57	50

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	119		49 - 129	10/03/22 16:01	10/04/22 15:57	50
DCB Decachlorobiphenyl	117		37 - 121	10/03/22 16:01	10/04/22 15:57	50

# Client Sample Results

Client: Civil & Environmental Consultants Inc  
 Project/Site: Arconic - Elliot Ditch - Lafayette, IN

Job ID: 500-223166-1

**Client Sample ID: ED-R3SL-028**

**Lab Sample ID: 500-223166-7**

Date Collected: 10/03/22 12:14

Matrix: Solid

Date Received: 10/03/22 15:11

Percent Solids: 94.1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<0.88		0.88		mg/Kg	☼	10/03/22 16:01	10/04/22 16:12	50
PCB-1221	<0.88		0.88		mg/Kg	☼	10/03/22 16:01	10/04/22 16:12	50
PCB-1232	<0.88		0.88		mg/Kg	☼	10/03/22 16:01	10/04/22 16:12	50
PCB-1242	<0.88		0.88		mg/Kg	☼	10/03/22 16:01	10/04/22 16:12	50
<b>PCB-1248</b>	<b>1.6</b>		0.88		mg/Kg	☼	10/03/22 16:01	10/04/22 16:12	50
PCB-1254	<0.88		0.88		mg/Kg	☼	10/03/22 16:01	10/04/22 16:12	50
PCB-1260	<0.88		0.88		mg/Kg	☼	10/03/22 16:01	10/04/22 16:12	50

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	129		49 - 129	10/03/22 16:01	10/04/22 16:12	50
DCB Decachlorobiphenyl	125	S1+	37 - 121	10/03/22 16:01	10/04/22 16:12	50

# Client Sample Results

Client: Civil & Environmental Consultants Inc  
 Project/Site: Arconic - Elliot Ditch - Lafayette, IN

Job ID: 500-223166-1

**Client Sample ID: ED-R3SL-029**

**Lab Sample ID: 500-223166-8**

Date Collected: 10/03/22 12:23

Matrix: Solid

Date Received: 10/03/22 15:11

Percent Solids: 94.2

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<0.17		0.17		mg/Kg	☼	10/03/22 16:01	10/04/22 11:31	10
PCB-1221	<0.17		0.17		mg/Kg	☼	10/03/22 16:01	10/04/22 11:31	10
PCB-1232	<0.17		0.17		mg/Kg	☼	10/03/22 16:01	10/04/22 11:31	10
PCB-1242	<0.17		0.17		mg/Kg	☼	10/03/22 16:01	10/04/22 11:31	10
<b>PCB-1248</b>	<b>1.6</b>		0.17		mg/Kg	☼	10/03/22 16:01	10/04/22 11:31	10
PCB-1254	<0.17		0.17		mg/Kg	☼	10/03/22 16:01	10/04/22 11:31	10
PCB-1260	<0.17		0.17		mg/Kg	☼	10/03/22 16:01	10/04/22 11:31	10

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	108		49 - 129	10/03/22 16:01	10/04/22 11:31	10
DCB Decachlorobiphenyl	102		37 - 121	10/03/22 16:01	10/04/22 11:31	10

# Client Sample Results

Client: Civil & Environmental Consultants Inc  
 Project/Site: Arconic - Elliot Ditch - Lafayette, IN

Job ID: 500-223166-1

**Client Sample ID: ED-R3SL-SW004**

**Lab Sample ID: 500-223166-9**

Date Collected: 10/03/22 12:30

Matrix: Solid

Date Received: 10/03/22 15:11

Percent Solids: 95.6

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<0.17		0.17		mg/Kg	☼	10/03/22 16:01	10/04/22 11:46	10
PCB-1221	<0.17		0.17		mg/Kg	☼	10/03/22 16:01	10/04/22 11:46	10
PCB-1232	<0.17		0.17		mg/Kg	☼	10/03/22 16:01	10/04/22 11:46	10
PCB-1242	<0.17		0.17		mg/Kg	☼	10/03/22 16:01	10/04/22 11:46	10
<b>PCB-1248</b>	<b>0.79</b>		0.17		mg/Kg	☼	10/03/22 16:01	10/04/22 11:46	10
PCB-1254	<0.17		0.17		mg/Kg	☼	10/03/22 16:01	10/04/22 11:46	10
PCB-1260	<0.17		0.17		mg/Kg	☼	10/03/22 16:01	10/04/22 11:46	10

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	107		49 - 129	10/03/22 16:01	10/04/22 11:46	10
DCB Decachlorobiphenyl	102		37 - 121	10/03/22 16:01	10/04/22 11:46	10

# Client Sample Results

Client: Civil & Environmental Consultants Inc  
 Project/Site: Arconic - Elliot Ditch - Lafayette, IN

Job ID: 500-223166-1

**Client Sample ID: ED-R3SL-030**

**Lab Sample ID: 500-223166-10**

Date Collected: 10/03/22 12:38

Matrix: Solid

Date Received: 10/03/22 15:11

Percent Solids: 93.4

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<1.7		1.7		mg/Kg	☼	10/03/22 16:01	10/04/22 16:27	100
PCB-1221	<1.7		1.7		mg/Kg	☼	10/03/22 16:01	10/04/22 16:27	100
PCB-1232	<1.7		1.7		mg/Kg	☼	10/03/22 16:01	10/04/22 16:27	100
PCB-1242	<1.7		1.7		mg/Kg	☼	10/03/22 16:01	10/04/22 16:27	100
<b>PCB-1248</b>	<b>9.0</b>		1.7		mg/Kg	☼	10/03/22 16:01	10/04/22 16:27	100
PCB-1254	<1.7		1.7		mg/Kg	☼	10/03/22 16:01	10/04/22 16:27	100
PCB-1260	<1.7		1.7		mg/Kg	☼	10/03/22 16:01	10/04/22 16:27	100

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	131	S1+	49 - 129	10/03/22 16:01	10/04/22 16:27	100
DCB Decachlorobiphenyl	141	S1+	37 - 121	10/03/22 16:01	10/04/22 16:27	100

# Definitions/Glossary

Client: Civil & Environmental Consultants Inc  
Project/Site: Arconic - Elliot Ditch - Lafayette, IN

Job ID: 500-223166-1

## Qualifiers

### GC Semi VOA

Qualifier	Qualifier Description
F1	MS and/or MSD recovery exceeds control limits.
F2	MS/MSD RPD exceeds control limits
S1+	Surrogate recovery exceeds control limits, high biased.

## Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
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)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
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)
TNTC	Too Numerous To Count

# QC Association Summary

Client: Civil & Environmental Consultants Inc  
 Project/Site: Arconic - Elliot Ditch - Lafayette, IN

Job ID: 500-223166-1

## GC Semi VOA

### Prep Batch: 677628

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-223166-1	ED-R3SL-020	Total/NA	Solid	3541	
500-223166-2	ED-R3SL-023	Total/NA	Solid	3541	
500-223166-3	ED-R3SL-024	Total/NA	Solid	3541	
500-223166-4	ED-R3SL-025	Total/NA	Solid	3541	
500-223166-5	ED-R3SL-026	Total/NA	Solid	3541	
500-223166-6	ED-R3SL-027	Total/NA	Solid	3541	
500-223166-7	ED-R3SL-028	Total/NA	Solid	3541	
500-223166-8	ED-R3SL-029	Total/NA	Solid	3541	
500-223166-9	ED-R3SL-SW004	Total/NA	Solid	3541	
500-223166-10	ED-R3SL-030	Total/NA	Solid	3541	
MB 500-677628/1-A	Method Blank	Total/NA	Solid	3541	
LCS 500-677628/2-A	Lab Control Sample	Total/NA	Solid	3541	
500-223166-2 MS	ED-R3SL-023	Total/NA	Solid	3541	
500-223166-2 MSD	ED-R3SL-023	Total/NA	Solid	3541	

### Analysis Batch: 677727

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-223166-1	ED-R3SL-020	Total/NA	Solid	8082A	677628
500-223166-2	ED-R3SL-023	Total/NA	Solid	8082A	677628
500-223166-3	ED-R3SL-024	Total/NA	Solid	8082A	677628
500-223166-4	ED-R3SL-025	Total/NA	Solid	8082A	677628
500-223166-5	ED-R3SL-026	Total/NA	Solid	8082A	677628
500-223166-6	ED-R3SL-027	Total/NA	Solid	8082A	677628
500-223166-7	ED-R3SL-028	Total/NA	Solid	8082A	677628
500-223166-8	ED-R3SL-029	Total/NA	Solid	8082A	677628
500-223166-9	ED-R3SL-SW004	Total/NA	Solid	8082A	677628
500-223166-10	ED-R3SL-030	Total/NA	Solid	8082A	677628
500-223166-2 MS	ED-R3SL-023	Total/NA	Solid	8082A	677628
500-223166-2 MSD	ED-R3SL-023	Total/NA	Solid	8082A	677628

### Analysis Batch: 677736

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 500-677628/1-A	Method Blank	Total/NA	Solid	8082A	677628
LCS 500-677628/2-A	Lab Control Sample	Total/NA	Solid	8082A	677628

## General Chemistry

### Analysis Batch: 677616

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-223166-1	ED-R3SL-020	Total/NA	Solid	Moisture	
500-223166-2	ED-R3SL-023	Total/NA	Solid	Moisture	
500-223166-3	ED-R3SL-024	Total/NA	Solid	Moisture	
500-223166-4	ED-R3SL-025	Total/NA	Solid	Moisture	
500-223166-5	ED-R3SL-026	Total/NA	Solid	Moisture	
500-223166-6	ED-R3SL-027	Total/NA	Solid	Moisture	
500-223166-7	ED-R3SL-028	Total/NA	Solid	Moisture	
500-223166-8	ED-R3SL-029	Total/NA	Solid	Moisture	
500-223166-9	ED-R3SL-SW004	Total/NA	Solid	Moisture	
500-223166-10	ED-R3SL-030	Total/NA	Solid	Moisture	

# Surrogate Summary

Client: Civil & Environmental Consultants Inc  
Project/Site: Arconic - Elliot Ditch - Lafayette, IN

Job ID: 500-223166-1

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

Matrix: Solid

Prep Type: Total/NA

### Percent Surrogate Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	TCX2	DCBP2
		(49-129)	(37-121)
500-223166-1	ED-R3SL-020	100	111
500-223166-2	ED-R3SL-023	97	95
500-223166-2 MS	ED-R3SL-023	99	99
500-223166-2 MSD	ED-R3SL-023	118	108
500-223166-3	ED-R3SL-024	104	102
500-223166-4	ED-R3SL-025	107	112
500-223166-5	ED-R3SL-026	106	98
500-223166-6	ED-R3SL-027	119	117
500-223166-7	ED-R3SL-028	129	125 S1+
500-223166-8	ED-R3SL-029	108	102
500-223166-9	ED-R3SL-SW004	107	102
500-223166-10	ED-R3SL-030	131 S1+	141 S1+

#### Surrogate Legend

TCX = Tetrachloro-m-xylene

DCBP = DCB Decachlorobiphenyl

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

Matrix: Solid

Prep Type: Total/NA

### Percent Surrogate Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	TCX1	DCBP1
		(49-129)	(37-121)
LCS 500-677628/2-A	Lab Control Sample	125	134 S1+
MB 500-677628/1-A	Method Blank	126	135 S1+

#### Surrogate Legend

TCX = Tetrachloro-m-xylene

DCBP = DCB Decachlorobiphenyl

# QC Sample Results

Client: Civil & Environmental Consultants Inc  
 Project/Site: Arconic - Elliot Ditch - Lafayette, IN

Job ID: 500-223166-1

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

**Lab Sample ID: MB 500-677628/1-A**  
**Matrix: Solid**  
**Analysis Batch: 677736**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**  
**Prep Batch: 677628**

Analyte	MB MB		RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
PCB-1016	<0.17		0.17		mg/Kg		10/03/22 16:01	10/04/22 10:26	10
PCB-1221	<0.17		0.17		mg/Kg		10/03/22 16:01	10/04/22 10:26	10
PCB-1232	<0.17		0.17		mg/Kg		10/03/22 16:01	10/04/22 10:26	10
PCB-1242	<0.17		0.17		mg/Kg		10/03/22 16:01	10/04/22 10:26	10
PCB-1248	<0.17		0.17		mg/Kg		10/03/22 16:01	10/04/22 10:26	10
PCB-1254	<0.17		0.17		mg/Kg		10/03/22 16:01	10/04/22 10:26	10
PCB-1260	<0.17		0.17		mg/Kg		10/03/22 16:01	10/04/22 10:26	10
Surrogate	MB MB		Limits			D	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier		Prepared	Analyzed				
Tetrachloro-m-xylene	126		49 - 129				10/03/22 16:01	10/04/22 10:26	10
DCB Decachlorobiphenyl	135	S1+	37 - 121				10/03/22 16:01	10/04/22 10:26	10

**Lab Sample ID: LCS 500-677628/2-A**  
**Matrix: Solid**  
**Analysis Batch: 677736**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**  
**Prep Batch: 677628**

Analyte	Spike Added	LCS LCS		Unit	D	%Rec	%Rec Limits
		Result	Qualifier				
PCB-1016	1.67	1.77		mg/Kg		106	57 - 120
PCB-1260	1.67	1.84		mg/Kg		111	61 - 125
Surrogate	LCS LCS		Limits			D	%Rec
	%Recovery	Qualifier		Prepared	Analyzed		
Tetrachloro-m-xylene	125		49 - 129				
DCB Decachlorobiphenyl	134	S1+	37 - 121				

**Lab Sample ID: 500-223166-2 MS**  
**Matrix: Solid**  
**Analysis Batch: 677727**

**Client Sample ID: ED-R3SL-023**  
**Prep Type: Total/NA**  
**Prep Batch: 677628**

Analyte	Sample Sample		Spike Added	MS MS		Unit	D	%Rec	%Rec Limits
	Result	Qualifier		Result	Qualifier				
PCB-1016	<0.84	F1 F2	1.71	2.74	F1	mg/Kg	☼	160	57 - 120
PCB-1260	<0.84	F1	1.71	2.08		mg/Kg	☼	121	61 - 125
Surrogate	MS MS		Limits			D	%Rec		
	%Recovery	Qualifier		Prepared	Analyzed				
Tetrachloro-m-xylene	99		49 - 129						
DCB Decachlorobiphenyl	99		37 - 121						

**Lab Sample ID: 500-223166-2 MSD**  
**Matrix: Solid**  
**Analysis Batch: 677727**

**Client Sample ID: ED-R3SL-023**  
**Prep Type: Total/NA**  
**Prep Batch: 677628**

Analyte	Sample Sample		Spike Added	MSD MSD		Unit	D	%Rec	%Rec Limits	RPD	
	Result	Qualifier		Result	Qualifier					RPD	Limit
PCB-1016	<0.84	F1 F2	1.76	3.48	F1 F2	mg/Kg	☼	198	57 - 120	42	30
PCB-1260	<0.84	F1	1.76	2.38	F1	mg/Kg	☼	135	61 - 125	11	30
Surrogate	MSD MSD		Limits			D	%Rec				
	%Recovery	Qualifier		Prepared	Analyzed						
Tetrachloro-m-xylene	118		49 - 129								
DCB Decachlorobiphenyl	108		37 - 121								

Eurofins Chicago

# Lab Chronicle

Client: Civil & Environmental Consultants Inc  
Project/Site: Arconic - Elliot Ditch - Lafayette, IN

Job ID: 500-223166-1

**Client Sample ID: ED-R3SL-020**

**Date Collected: 10/03/22 10:26**

**Date Received: 10/03/22 15:11**

**Lab Sample ID: 500-223166-1**

**Matrix: Solid**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Moisture		1	677616	LWN	EET CHI	10/03/22 15:29

**Client Sample ID: ED-R3SL-020**

**Date Collected: 10/03/22 10:26**

**Date Received: 10/03/22 15:11**

**Lab Sample ID: 500-223166-1**

**Matrix: Solid**

**Percent Solids: 94.1**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3541			677628	EK	EET CHI	10/03/22 16:01 - 10/03/22 18:30 <sup>1</sup>
Total/NA	Analysis	8082A		10	677727	SB	EET CHI	10/04/22 09:18

**Client Sample ID: ED-R3SL-023**

**Date Collected: 10/03/22 10:42**

**Date Received: 10/03/22 15:11**

**Lab Sample ID: 500-223166-2**

**Matrix: Solid**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Moisture		1	677616	LWN	EET CHI	10/03/22 15:29

**Client Sample ID: ED-R3SL-023**

**Date Collected: 10/03/22 10:42**

**Date Received: 10/03/22 15:11**

**Lab Sample ID: 500-223166-2**

**Matrix: Solid**

**Percent Solids: 93.8**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3541			677628	EK	EET CHI	10/03/22 16:01 - 10/03/22 18:30 <sup>1</sup>
Total/NA	Analysis	8082A		50	677727	SB	EET CHI	10/04/22 14:43

**Client Sample ID: ED-R3SL-024**

**Date Collected: 10/03/22 10:38**

**Date Received: 10/03/22 15:11**

**Lab Sample ID: 500-223166-3**

**Matrix: Solid**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Moisture		1	677616	LWN	EET CHI	10/03/22 15:29

**Client Sample ID: ED-R3SL-024**

**Date Collected: 10/03/22 10:38**

**Date Received: 10/03/22 15:11**

**Lab Sample ID: 500-223166-3**

**Matrix: Solid**

**Percent Solids: 94.6**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3541			677628	EK	EET CHI	10/03/22 16:01 - 10/03/22 18:30 <sup>1</sup>
Total/NA	Analysis	8082A		10	677727	SB	EET CHI	10/04/22 10:17

**Client Sample ID: ED-R3SL-025**

**Date Collected: 10/03/22 10:50**

**Date Received: 10/03/22 15:11**

**Lab Sample ID: 500-223166-4**

**Matrix: Solid**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Moisture		1	677616	LWN	EET CHI	10/03/22 15:29

Eurofins Chicago

# Lab Chronicle

Client: Civil & Environmental Consultants Inc  
Project/Site: Arconic - Elliot Ditch - Lafayette, IN

Job ID: 500-223166-1

**Client Sample ID: ED-R3SL-025**

**Lab Sample ID: 500-223166-4**

Date Collected: 10/03/22 10:50

Matrix: Solid

Date Received: 10/03/22 15:11

Percent Solids: 94.4

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3541			677628	EK	EET CHI	10/03/22 16:01 - 10/03/22 18:30 <sup>1</sup>
Total/NA	Analysis	8082A		100	677727	SB	EET CHI	10/04/22 15:28

**Client Sample ID: ED-R3SL-026**

**Lab Sample ID: 500-223166-5**

Date Collected: 10/03/22 10:57

Matrix: Solid

Date Received: 10/03/22 15:11

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Moisture		1	677616	LWN	EET CHI	10/03/22 15:29

**Client Sample ID: ED-R3SL-026**

**Lab Sample ID: 500-223166-5**

Date Collected: 10/03/22 10:57

Matrix: Solid

Date Received: 10/03/22 15:11

Percent Solids: 94.1

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3541			677628	EK	EET CHI	10/03/22 16:01 - 10/03/22 18:30 <sup>1</sup>
Total/NA	Analysis	8082A		100	677727	SB	EET CHI	10/04/22 15:42

**Client Sample ID: ED-R3SL-027**

**Lab Sample ID: 500-223166-6**

Date Collected: 10/03/22 12:07

Matrix: Solid

Date Received: 10/03/22 15:11

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Moisture		1	677616	LWN	EET CHI	10/03/22 15:29

**Client Sample ID: ED-R3SL-027**

**Lab Sample ID: 500-223166-6**

Date Collected: 10/03/22 12:07

Matrix: Solid

Date Received: 10/03/22 15:11

Percent Solids: 94.4

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3541			677628	EK	EET CHI	10/03/22 16:01 - 10/03/22 18:30 <sup>1</sup>
Total/NA	Analysis	8082A		50	677727	SB	EET CHI	10/04/22 15:57

**Client Sample ID: ED-R3SL-028**

**Lab Sample ID: 500-223166-7**

Date Collected: 10/03/22 12:14

Matrix: Solid

Date Received: 10/03/22 15:11

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Moisture		1	677616	LWN	EET CHI	10/03/22 15:29

# Lab Chronicle

Client: Civil & Environmental Consultants Inc  
Project/Site: Arconic - Elliot Ditch - Lafayette, IN

Job ID: 500-223166-1

**Client Sample ID: ED-R3SL-028**

**Lab Sample ID: 500-223166-7**

Date Collected: 10/03/22 12:14

Matrix: Solid

Date Received: 10/03/22 15:11

Percent Solids: 94.1

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3541			677628	EK	EET CHI	10/03/22 16:01 - 10/03/22 18:30 <sup>1</sup>
Total/NA	Analysis	8082A		50	677727	SB	EET CHI	10/04/22 16:12

**Client Sample ID: ED-R3SL-029**

**Lab Sample ID: 500-223166-8**

Date Collected: 10/03/22 12:23

Matrix: Solid

Date Received: 10/03/22 15:11

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Moisture		1	677616	LWN	EET CHI	10/03/22 15:29

**Client Sample ID: ED-R3SL-029**

**Lab Sample ID: 500-223166-8**

Date Collected: 10/03/22 12:23

Matrix: Solid

Date Received: 10/03/22 15:11

Percent Solids: 94.2

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3541			677628	EK	EET CHI	10/03/22 16:01 - 10/03/22 18:30 <sup>1</sup>
Total/NA	Analysis	8082A		10	677727	SB	EET CHI	10/04/22 11:31

**Client Sample ID: ED-R3SL-SW004**

**Lab Sample ID: 500-223166-9**

Date Collected: 10/03/22 12:30

Matrix: Solid

Date Received: 10/03/22 15:11

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Moisture		1	677616	LWN	EET CHI	10/03/22 15:29

**Client Sample ID: ED-R3SL-SW004**

**Lab Sample ID: 500-223166-9**

Date Collected: 10/03/22 12:30

Matrix: Solid

Date Received: 10/03/22 15:11

Percent Solids: 95.6

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3541			677628	EK	EET CHI	10/03/22 16:01 - 10/03/22 18:30 <sup>1</sup>
Total/NA	Analysis	8082A		10	677727	SB	EET CHI	10/04/22 11:46

**Client Sample ID: ED-R3SL-030**

**Lab Sample ID: 500-223166-10**

Date Collected: 10/03/22 12:38

Matrix: Solid

Date Received: 10/03/22 15:11

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Moisture		1	677616	LWN	EET CHI	10/03/22 15:29

# Lab Chronicle

Client: Civil & Environmental Consultants Inc  
Project/Site: Arconic - Elliot Ditch - Lafayette, IN

Job ID: 500-223166-1

**Client Sample ID: ED-R3SL-030**

**Lab Sample ID: 500-223166-10**

**Date Collected: 10/03/22 12:38**

**Matrix: Solid**

**Date Received: 10/03/22 15:11**

**Percent Solids: 93.4**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3541			677628	EK	EET CHI	10/03/22 16:01 - 10/03/22 18:30 <sup>1</sup>
Total/NA	Analysis	8082A		100	677727	SB	EET CHI	10/04/22 16:27

<sup>1</sup> Completion dates and times are reported or not reported per method requirements or individual lab discretion.

### Laboratory References:

EET CHI = Eurofins Chicago, 2417 Bond Street, University Park, IL 60484, TEL (708)534-5200



# Accreditation/Certification Summary

Client: Civil & Environmental Consultants Inc  
Project/Site: Arconic - Elliot Ditch - Lafayette, IN

Job ID: 500-223166-1

## Laboratory: Eurofins Chicago

The accreditations/certifications listed below are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Illinois	NELAP	IL00035	04-30-23

1

2

3

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15

**Eurofins Chicago**

2417 Bond Street  
 University Park IL 60484  
 Phone 708-534-5200 Fax 708-534-5211

**Chain of Custody Record**

eurofins Environment Testing  
 America

<b>Client Information</b>		Sampler G. Welch		Lab PM Kintz Robin M		Carrier Tracking No(s)		COC No: 500-105440-44981 3	
Client Contact Jenny Rickford O'Brien		Phone 865-440-1655		E-Mail Robin.Kintz@et.eurofinsus.com		State of Origin IN		Page Page 3 of 8 1 of 1	
Company Civil & Environmental Consultants Inc				PWSID		<b>Analysis Requested</b>			
Address 2704 Cherokee Farm Way Suite 101		Due Date Requested 10/4/22		Field Filtered Sample (Yes or No) Perform MS/MSD (Yes or No) 8082A - PCBs		Total Number of Containers		Job # 500-223166	
City Knoxville		TAT Requested (days) 24 HR						Preservation Codes	
State, Zip TN 37920		Compliance Project: <input type="checkbox"/> Yes <input type="checkbox"/> No						A HCL M Hexane	
Phone 865-340-4914(Tel)		PO # Purchase Order not required						B NaOH N None	
Email jrickfordobrien@cecinc.com		WO #:						C Zn Acetate O AsNaO2	
Project Name Arconic - Elliot Ditch - Lafayette IN		Project # 50019033		D Nitric Acid P Na2O4S		E NaHSO4 Q Na2SO3		F MeOH R Na2S2O3	
Site: Reach 3 Isolated Soil		SSOW#:		G Amchlor S H2SO4		H Ascorbic Acid T TSP Dodecahydrate		I Ice U Acetone	
				J DI Water V MCAA		K EDTA W pH 4-5		L EDA Y Trizma	
				Z other (specify)		Other:			
<b>Sample Identification</b>		<b>Sample Date</b>		<b>Sample Time</b>		<b>Sample Type (C=Comp, G=grab)</b>		<b>Matrix (W=water, S=solid, O=waste/oli, BT=Tissue, A=Air)</b>	
								<b>Preservation Code:</b>	
1 ED-R3SL-020		10/3/22		1026		C		S	
2 ED-R3SL-023				1042					
3 ED-R3SL-024				1035					
4 ED-R3SL-025				1050					
5 ED-R3SL-026				1057					
6 ED-R3SL-027				1207					
7 ED-R3SL-028				1214					
8 ED-R3SL-029				1223					
9 ED-R3SL-SW004				1230					
10 ED-R3SL-030				1238					
11 ED-R3SL-EB005		10/3/22		1315		G		W	
<b>Possible Hazard Identification</b>					<b>Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)</b>				
<input checked="" type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison B <input type="checkbox"/> Unknown <input type="checkbox"/> Radiological					<input type="checkbox"/> Return To Client <input checked="" type="checkbox"/> Disposal By Lab <input type="checkbox"/> Archive For _____ Months				
Deliverable Requested I II III IV Other (specify)					Special Instructions/QC Requirements				
Empty Kit Relinquished by			Date		Time		Method of Shipment		
Relinquished by: <i>[Signature]</i>			Date/Time: 10/3/22 1349		Company: EETA		Received by: <i>[Signature]</i> Date/Time: 10/3/22 135249 Company: EETA		
Relinquished by: <i>[Signature]</i>			Date/Time: 10/3/22 1511 CST		Company: EETA		Received by: <i>[Signature]</i> Date/Time: 10/3/22 1511 Company: EETA		
Relinquished by:			Date/Time:		Company:		Received by: Date/Time: Company:		
Custody Seals Intact. <input type="checkbox"/> Yes <input type="checkbox"/> No		Custody Seal No		Cooler Temperature(s) °C and Other Remarks 5.3 → 33					

## Login Sample Receipt Checklist

Client: Civil & Environmental Consultants Inc

Job Number: 500-223166-1

**Login Number: 223166**

**List Number: 1**

**Creator: Scott, Sherri L**

**List Source: Eurofins Chicago**

Question	Answer	Comment
Radioactivity wasn't checked or is <math>\leq</math> background as measured by a survey meter.	True	
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	3.3
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 <math><6\text{mm}</math> (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

## ANALYTICAL REPORT

Eurofins Chicago  
2417 Bond Street  
University Park, IL 60484  
Tel: (708)534-5200

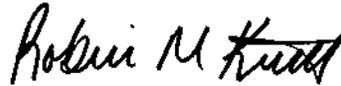
Laboratory Job ID: 500-223166-2

Client Project/Site: Arconic - Elliot Ditch - Lafayette, IN - EB

**For:**

Civil & Environmental Consultants Inc  
2704 Cherokee Farm Way  
Suite 101  
Knoxville, Tennessee 37920

Attn: Garrett Welch



*Authorized for release by:  
10/11/2022 2:38:27 PM*

Robin Kintz, Project Manager II  
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The test results in this report meet all 2003 NELAC, 2009 TNI, and 2016 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.

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# Case Narrative

Client: Civil & Environmental Consultants Inc  
Project/Site: Arconic - Elliot Ditch - Lafayette, IN - EB

Job ID: 500-223166-2

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**Job ID: 500-223166-2**

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**Laboratory: Eurofins Chicago**

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**Narrative**

**Job Narrative  
500-223166-2**

**Comments**

No additional comments.

**Receipt**

The samples were received on 10/3/2022 3:11 PM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperature of the cooler at receipt was 3.3° C.

**GC Semi VOA**

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

**Organic Prep**

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

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# Detection Summary

Client: Civil & Environmental Consultants Inc  
Project/Site: Arconic - Elliot Ditch - Lafayette, IN - EB

Job ID: 500-223166-2

**Client Sample ID: ED-R3SL-EB005**

**Lab Sample ID: 500-223166-11**

No Detections.

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This Detection Summary does not include radiochemical test results.

Eurofins Chicago

# Method Summary

Client: Civil & Environmental Consultants Inc  
Project/Site: Arconic - Elliot Ditch - Lafayette, IN - EB

Job ID: 500-223166-2

Method	Method Description	Protocol	Laboratory
8082A	Polychlorinated Biphenyls (PCBs) by Gas Chromatography	SW846	EET CHI
3510C	Liquid-Liquid Extraction (Separatory Funnel)	SW846	EET CHI

**Protocol References:**

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

**Laboratory References:**

EET CHI = Eurofins Chicago, 2417 Bond Street, University Park, IL 60484, TEL (708)534-5200



# Sample Summary

Client: Civil & Environmental Consultants Inc  
Project/Site: Arconic - Elliot Ditch - Lafayette, IN - EB

Job ID: 500-223166-2

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Lab Sample ID	Client Sample ID	Matrix	Collected	Received
500-223166-11	ED-R3SL-EB005	Water	10/03/22 13:15	10/03/22 15:11

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# Client Sample Results

Client: Civil & Environmental Consultants Inc  
 Project/Site: Arconic - Elliot Ditch - Lafayette, IN - EB

Job ID: 500-223166-2

**Client Sample ID: ED-R3SL-EB005**

**Lab Sample ID: 500-223166-11**

Date Collected: 10/03/22 13:15

Matrix: Water

Date Received: 10/03/22 15:11

**Method: SW846 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<0.00041		0.00041		mg/L		10/07/22 11:58	10/10/22 15:24	1
PCB-1221	<0.00041		0.00041		mg/L		10/07/22 11:58	10/10/22 15:24	1
PCB-1232	<0.00041		0.00041		mg/L		10/07/22 11:58	10/10/22 15:24	1
PCB-1242	<0.00041		0.00041		mg/L		10/07/22 11:58	10/10/22 15:24	1
PCB-1248	<0.00041		0.00041		mg/L		10/07/22 11:58	10/10/22 15:24	1
PCB-1254	<0.00041		0.00041		mg/L		10/07/22 11:58	10/10/22 15:24	1
PCB-1260	<0.00041		0.00041		mg/L		10/07/22 11:58	10/10/22 15:24	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	64		30 - 120	10/07/22 11:58	10/10/22 15:24	1
DCB Decachlorobiphenyl	32		30 - 140	10/07/22 11:58	10/10/22 15:24	1

# Definitions/Glossary

Client: Civil & Environmental Consultants Inc  
Project/Site: Arconic - Elliot Ditch - Lafayette, IN - EB

Job ID: 500-223166-2

## Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
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)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
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)
TNTC	Too Numerous To Count

# QC Association Summary

Client: Civil & Environmental Consultants Inc  
Project/Site: Arconic - Elliot Ditch - Lafayette, IN - EB

Job ID: 500-223166-2

## GC Semi VOA

### Prep Batch: 678510

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-223166-11	ED-R3SL-EB005	Total/NA	Water	3510C	
MB 500-678510/1-A	Method Blank	Total/NA	Water	3510C	
LCS 500-678510/2-A	Lab Control Sample	Total/NA	Water	3510C	

### Analysis Batch: 678766

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-223166-11	ED-R3SL-EB005	Total/NA	Water	8082A	678510
MB 500-678510/1-A	Method Blank	Total/NA	Water	8082A	678510
LCS 500-678510/2-A	Lab Control Sample	Total/NA	Water	8082A	678510

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# Surrogate Summary

Client: Civil & Environmental Consultants Inc  
Project/Site: Arconic - Elliot Ditch - Lafayette, IN - EB

Job ID: 500-223166-2

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

Matrix: Water

Prep Type: Total/NA

### Percent Surrogate Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	TCX2	DCBP2
		(30-120)	(30-140)
500-223166-11	ED-R3SL-EB005	64	32
LCS 500-678510/2-A	Lab Control Sample	72	89
MB 500-678510/1-A	Method Blank	64	89

#### Surrogate Legend

TCX = Tetrachloro-m-xylene

DCBP = DCB Decachlorobiphenyl

# QC Sample Results

Client: Civil & Environmental Consultants Inc  
 Project/Site: Arconic - Elliot Ditch - Lafayette, IN - EB

Job ID: 500-223166-2

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

**Lab Sample ID: MB 500-678510/1-A**  
**Matrix: Water**  
**Analysis Batch: 678766**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**  
**Prep Batch: 678510**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<0.00040		0.00040		mg/L		10/07/22 11:58	10/10/22 11:54	1
PCB-1221	<0.00040		0.00040		mg/L		10/07/22 11:58	10/10/22 11:54	1
PCB-1232	<0.00040		0.00040		mg/L		10/07/22 11:58	10/10/22 11:54	1
PCB-1242	<0.00040		0.00040		mg/L		10/07/22 11:58	10/10/22 11:54	1
PCB-1248	<0.00040		0.00040		mg/L		10/07/22 11:58	10/10/22 11:54	1
PCB-1254	<0.00040		0.00040		mg/L		10/07/22 11:58	10/10/22 11:54	1
PCB-1260	<0.00040		0.00040		mg/L		10/07/22 11:58	10/10/22 11:54	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	64		30 - 120	10/07/22 11:58	10/10/22 11:54	1
DCB Decachlorobiphenyl	89		30 - 140	10/07/22 11:58	10/10/22 11:54	1

**Lab Sample ID: LCS 500-678510/2-A**  
**Matrix: Water**  
**Analysis Batch: 678766**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**  
**Prep Batch: 678510**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
PCB-1016	0.00400	0.00365		mg/L		91	56 - 120
PCB-1260	0.00400	0.00399		mg/L		100	53 - 137

Surrogate	LCS %Recovery	LCS Qualifier	Limits
Tetrachloro-m-xylene	72		30 - 120
DCB Decachlorobiphenyl	89		30 - 140

# Lab Chronicle

Client: Civil & Environmental Consultants Inc  
Project/Site: Arconic - Elliot Ditch - Lafayette, IN - EB

Job ID: 500-223166-2

**Client Sample ID: ED-R3SL-EB005**

**Lab Sample ID: 500-223166-11**

**Date Collected: 10/03/22 13:15**

**Matrix: Water**

**Date Received: 10/03/22 15:11**

<u>Prep Type</u>	<u>Batch Type</u>	<u>Batch Method</u>	<u>Run</u>	<u>Dilution Factor</u>	<u>Batch Number</u>	<u>Analyst</u>	<u>Lab</u>	<u>Prepared or Analyzed</u>
Total/NA	Prep	3510C			678510	TS	EET CHI	10/07/22 11:58
Total/NA	Analysis	8082A		1	678766	SS	EET CHI	10/10/22 15:24

**Laboratory References:**

EET CHI = Eurofins Chicago, 2417 Bond Street, University Park, IL 60484, TEL (708)534-5200

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# Accreditation/Certification Summary

Client: Civil & Environmental Consultants Inc  
Project/Site: Arconic - Elliot Ditch - Lafayette, IN - EB

Job ID: 500-223166-2

## Laboratory: Eurofins Chicago

The accreditations/certifications listed below are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Illinois	NELAP	IL00035	04-30-23

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**Eurofins Chicago**

2417 Bond Street  
 University Park IL 60484  
 Phone 708-534-5200 Fax 708-534-5211

**Chain of Custody Record**

eurofins Environment Testing  
 America

<b>Client Information</b>		Sampler G. Welch		Lab PM Kintz Robin M		Carrier Tracking No(s)		COC No: 500-105440-44981 3	
Client Contact Jenny Rickford O'Brien		Phone 865-440-1655		E-Mail Robin.Kintz@et.eurofinsus.com		State of Origin IN		Page Page 3 of 8 1 of 1	
Company Civil & Environmental Consultants Inc				PWSID		<b>Analysis Requested</b>			
Address 2704 Cherokee Farm Way Suite 101		Due Date Requested 10/4/22		Field Filtered Sample (Yes or No) Perform MS/MSD (Yes or No) 8082A - PCBs		Total Number of Containers		Job # 500-223166	
City Knoxville		TAT Requested (days) 24 HR						Preservation Codes	
State, Zip TN 37920		Compliance Project: <input type="checkbox"/> Yes <input type="checkbox"/> No						A HCL M Hexane	
Phone 865-340-4914(Tel)		PO # Purchase Order not required						B NaOH N None	
Email jrickfordobrien@cecinc.com		WO #:						C Zn Acetate O AsNaO2	
Project Name Arconic - Elliot Ditch - Lafayette IN		Project # 50019033		D Nitric Acid P Na2O4S		E NaHSO4 Q Na2SO3		F MeOH R Na2S2O3	
Site: Reach 3 Isolated Soil		SSOW#:		G Amchlor S H2SO4		H Ascorbic Acid T TSP Dodecahydrate		I Ice U Acetone	
				J DI Water V MCAA		K EDTA W pH 4-5		L EDA Y Trizma	
				Z other (specify)		Other:			
<b>Sample Identification</b>		<b>Sample Date</b>		<b>Sample Time</b>		<b>Sample Type (C=Comp, G=grab)</b>		<b>Matrix (W=water, S=solid, O=waste/oli, BT=Tissue, A=Air)</b>	
								<b>Preservation Code:</b>	
1 ED-R3SL-020		10/3/22		1026		C		S	
2 ED-R3SL-023				1042					
3 ED-R3SL-024				1035					
4 ED-R3SL-025				1050					
5 ED-R3SL-026				1057					
6 ED-R3SL-027				1207					
7 ED-R3SL-028				1214					
8 ED-R3SL-029				1223					
9 ED-R3SL-SW004				1230					
10 ED-R3SL-030				1238					
11 ED-R3SL-EB005		10/3/22		1315		G		W	
<b>Possible Hazard Identification</b>					<b>Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)</b>				
<input checked="" type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison B <input type="checkbox"/> Unknown <input type="checkbox"/> Radiological					<input type="checkbox"/> Return To Client <input checked="" type="checkbox"/> Disposal By Lab <input type="checkbox"/> Archive For _____ Months				
Deliverable Requested I II III IV Other (specify)					Special Instructions/QC Requirements				
Empty Kit Relinquished by			Date		Time		Method of Shipment		
Relinquished by: <i>[Signature]</i>			Date/Time: 10/3/22 1349		Company: EETA		Received by: <i>[Signature]</i> Date/Time: 10/3/22 135249 Company: EETA		
Relinquished by: <i>[Signature]</i>			Date/Time: 10/3/22 1511 CST		Company: EETA		Received by: <i>[Signature]</i> Date/Time: 10/3/22 1511 Company: EETA		
Relinquished by:			Date/Time:		Company:		Received by: Date/Time: Company:		
Custody Seals Intact. <input type="checkbox"/> Yes <input type="checkbox"/> No		Custody Seal No		Cooler Temperature(s) °C and Other Remarks 5.3 → 33					

# Login Sample Receipt Checklist

Client: Civil & Environmental Consultants Inc

Job Number: 500-223166-2

**Login Number: 223166**

**List Number: 1**

**Creator: Scott, Sherri L**

**List Source: Eurofins Chicago**

Question	Answer	Comment
Radioactivity wasn't checked or is <math>\leq</math> background as measured by a survey meter.	True	
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	3.3
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 <math><6\text{mm}</math> (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	



## ANALYTICAL REPORT

Eurofins Chicago  
2417 Bond Street  
University Park, IL 60484  
Tel: (708)534-5200

Laboratory Job ID: 500-223218-1

Client Project/Site: Arconic - Elliot Ditch - Lafayette, IN

**For:**

Civil & Environmental Consultants Inc  
2704 Cherokee Farm Way  
Suite 101  
Knoxville, Tennessee 37920

Attn: Garrett Welch



*Authorized for release by:  
10/5/2022 3:56:58 PM*

Robin Kintz, Project Manager II  
(708)534-5200

[Robin.Kintz@et.eurofinsus.com](mailto:Robin.Kintz@et.eurofinsus.com)

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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.



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# Case Narrative

Client: Civil & Environmental Consultants Inc  
Project/Site: Arconic - Elliot Ditch - Lafayette, IN

Job ID: 500-223218-1

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## Job ID: 500-223218-1

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### Laboratory: Eurofins Chicago

#### Narrative

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#### Job Narrative 500-223218-1

#### Comments

No additional comments.

#### Receipt

The samples were received on 10/4/2022 3:05 PM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperature of the cooler at receipt was 1.2° C.

#### GC Semi VOA

Method 8082A: DCB Decachlorobiphenyl surrogate recovery for the following samples was outside control limits: ED-R3SL-036 (500-223218-5) and ED-R3SL-SW005 (500-223218-10). Tetrachloro-m-xylene surrogate was within the control limits; therefore, re-extraction and/or re-analysis was not performed.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

#### Metals

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

#### Organic Prep

Method 3541: The client specified MS/MSD on sample -3 was inadvertently not performed. The sample -1 was utilized as the MS/MSD. ED-R3SL-031 (500-223218-1), ED-R3SL-032 (500-223218-3), (500-223218-A-1 MS) and (500-223218-A-1 MSD)

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

# Detection Summary

Client: Civil & Environmental Consultants Inc  
Project/Site: Arconic - Elliot Ditch - Lafayette, IN

Job ID: 500-223218-1

## Client Sample ID: ED-R3SL-031

Lab Sample ID: 500-223218-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
PCB-1248	0.29		0.18		mg/Kg	10	✳	8082A	Total/NA

## Client Sample ID: ED-R3SL-DUP003

Lab Sample ID: 500-223218-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
PCB-1248	0.35		0.17		mg/Kg	10	✳	8082A	Total/NA

## Client Sample ID: ED-R3SL-032

Lab Sample ID: 500-223218-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
PCB-1248	0.27		0.17		mg/Kg	10	✳	8082A	Total/NA

## Client Sample ID: ED-R3SL-034

Lab Sample ID: 500-223218-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
PCB-1248	0.49		0.18		mg/Kg	10	✳	8082A	Total/NA

## Client Sample ID: ED-R3SL-036

Lab Sample ID: 500-223218-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
PCB-1248	3.1		0.89		mg/Kg	50	✳	8082A	Total/NA

## Client Sample ID: ED-R3SL-033

Lab Sample ID: 500-223218-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
PCB-1248	0.42		0.18		mg/Kg	10	✳	8082A	Total/NA

## Client Sample ID: ED-R3SL-035

Lab Sample ID: 500-223218-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
PCB-1248	0.41		0.19		mg/Kg	10	✳	8082A	Total/NA

## Client Sample ID: ED-R3SL-037

Lab Sample ID: 500-223218-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
PCB-1248	0.61		0.18		mg/Kg	10	✳	8082A	Total/NA

## Client Sample ID: ED-R3SL-SW005

Lab Sample ID: 500-223218-10

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
PCB-1248	1.3		0.17		mg/Kg	10	✳	8082A	Total/NA

## Client Sample ID: ED-R3SL-SW006

Lab Sample ID: 500-223218-11

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
PCB-1248	1.3		0.17		mg/Kg	10	✳	8082A	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins Chicago

# Method Summary

Client: Civil & Environmental Consultants Inc  
Project/Site: Arconic - Elliot Ditch - Lafayette, IN

Job ID: 500-223218-1

Method	Method Description	Protocol	Laboratory
8082A	Polychlorinated Biphenyls (PCBs) by Gas Chromatography	SW846	EET CHI
Moisture	Percent Moisture	EPA	EET CHI
3541	Automated Soxhlet Extraction	SW846	EET CHI

**Protocol References:**

EPA = US Environmental Protection Agency

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

**Laboratory References:**

EET CHI = Eurofins Chicago, 2417 Bond Street, University Park, IL 60484, TEL (708)534-5200



# Sample Summary

Client: Civil & Environmental Consultants Inc  
Project/Site: Arconic - Elliot Ditch - Lafayette, IN

Job ID: 500-223218-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
500-223218-1	ED-R3SL-031	Solid	10/04/22 08:27	10/04/22 15:05
500-223218-2	ED-R3SL-DUP003	Solid	10/04/22 00:00	10/04/22 15:05
500-223218-3	ED-R3SL-032	Solid	10/04/22 08:44	10/04/22 15:05
500-223218-4	ED-R3SL-034	Solid	10/04/22 08:52	10/04/22 15:05
500-223218-5	ED-R3SL-036	Solid	10/04/22 08:58	10/04/22 15:05
500-223218-6	ED-R3SL-033	Solid	10/04/22 09:50	10/04/22 15:05
500-223218-7	ED-R3SL-035	Solid	10/04/22 09:58	10/04/22 15:05
500-223218-9	ED-R3SL-037	Solid	10/04/22 10:35	10/04/22 15:05
500-223218-10	ED-R3SL-SW005	Solid	10/04/22 10:47	10/04/22 15:05
500-223218-11	ED-R3SL-SW006	Solid	10/04/22 10:59	10/04/22 15:05

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# Client Sample Results

Client: Civil & Environmental Consultants Inc  
 Project/Site: Arconic - Elliot Ditch - Lafayette, IN

Job ID: 500-223218-1

**Client Sample ID: ED-R3SL-031**

**Lab Sample ID: 500-223218-1**

**Date Collected: 10/04/22 08:27**

**Matrix: Solid**

**Date Received: 10/04/22 15:05**

**Percent Solids: 94.1**

**Method: SW846 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<0.18		0.18		mg/Kg	☼	10/04/22 16:17	10/05/22 08:59	10
PCB-1221	<0.18		0.18		mg/Kg	☼	10/04/22 16:17	10/05/22 08:59	10
PCB-1232	<0.18		0.18		mg/Kg	☼	10/04/22 16:17	10/05/22 08:59	10
PCB-1242	<0.18		0.18		mg/Kg	☼	10/04/22 16:17	10/05/22 08:59	10
PCB-1248	<b>0.29</b>		0.18		mg/Kg	☼	10/04/22 16:17	10/05/22 08:59	10
PCB-1254	<0.18		0.18		mg/Kg	☼	10/04/22 16:17	10/05/22 08:59	10
PCB-1260	<0.18		0.18		mg/Kg	☼	10/04/22 16:17	10/05/22 08:59	10

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	102		49 - 129	10/04/22 16:17	10/05/22 08:59	10
DCB Decachlorobiphenyl	106		37 - 121	10/04/22 16:17	10/05/22 08:59	10

# Client Sample Results

Client: Civil & Environmental Consultants Inc  
 Project/Site: Arconic - Elliot Ditch - Lafayette, IN

Job ID: 500-223218-1

**Client Sample ID: ED-R3SL-DUP003**

**Lab Sample ID: 500-223218-2**

**Date Collected: 10/04/22 00:00**

**Matrix: Solid**

**Date Received: 10/04/22 15:05**

**Percent Solids: 94.4**

**Method: SW846 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<0.17		0.17		mg/Kg	☼	10/04/22 16:17	10/05/22 09:44	10
PCB-1221	<0.17		0.17		mg/Kg	☼	10/04/22 16:17	10/05/22 09:44	10
PCB-1232	<0.17		0.17		mg/Kg	☼	10/04/22 16:17	10/05/22 09:44	10
PCB-1242	<0.17		0.17		mg/Kg	☼	10/04/22 16:17	10/05/22 09:44	10
PCB-1248	<b>0.35</b>		0.17		mg/Kg	☼	10/04/22 16:17	10/05/22 09:44	10
PCB-1254	<0.17		0.17		mg/Kg	☼	10/04/22 16:17	10/05/22 09:44	10
PCB-1260	<0.17		0.17		mg/Kg	☼	10/04/22 16:17	10/05/22 09:44	10

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	106		49 - 129	10/04/22 16:17	10/05/22 09:44	10
DCB Decachlorobiphenyl	117		37 - 121	10/04/22 16:17	10/05/22 09:44	10

# Client Sample Results

Client: Civil & Environmental Consultants Inc  
 Project/Site: Arconic - Elliot Ditch - Lafayette, IN

Job ID: 500-223218-1

**Client Sample ID: ED-R3SL-032**

**Lab Sample ID: 500-223218-3**

**Date Collected: 10/04/22 08:44**

**Matrix: Solid**

**Date Received: 10/04/22 15:05**

**Percent Solids: 93.6**

**Method: SW846 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<0.17		0.17		mg/Kg	☼	10/04/22 16:17	10/05/22 09:59	10
PCB-1221	<0.17		0.17		mg/Kg	☼	10/04/22 16:17	10/05/22 09:59	10
PCB-1232	<0.17		0.17		mg/Kg	☼	10/04/22 16:17	10/05/22 09:59	10
PCB-1242	<0.17		0.17		mg/Kg	☼	10/04/22 16:17	10/05/22 09:59	10
PCB-1248	<b>0.27</b>		0.17		mg/Kg	☼	10/04/22 16:17	10/05/22 09:59	10
PCB-1254	<0.17		0.17		mg/Kg	☼	10/04/22 16:17	10/05/22 09:59	10
PCB-1260	<0.17		0.17		mg/Kg	☼	10/04/22 16:17	10/05/22 09:59	10

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	97		49 - 129	10/04/22 16:17	10/05/22 09:59	10
DCB Decachlorobiphenyl	102		37 - 121	10/04/22 16:17	10/05/22 09:59	10

# Client Sample Results

Client: Civil & Environmental Consultants Inc  
 Project/Site: Arconic - Elliot Ditch - Lafayette, IN

Job ID: 500-223218-1

**Client Sample ID: ED-R3SL-034**

**Lab Sample ID: 500-223218-4**

**Date Collected: 10/04/22 08:52**

**Matrix: Solid**

**Date Received: 10/04/22 15:05**

**Percent Solids: 93.0**

**Method: SW846 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<0.18		0.18		mg/Kg	☼	10/04/22 16:17	10/05/22 10:13	10
PCB-1221	<0.18		0.18		mg/Kg	☼	10/04/22 16:17	10/05/22 10:13	10
PCB-1232	<0.18		0.18		mg/Kg	☼	10/04/22 16:17	10/05/22 10:13	10
PCB-1242	<0.18		0.18		mg/Kg	☼	10/04/22 16:17	10/05/22 10:13	10
PCB-1248	<b>0.49</b>		0.18		mg/Kg	☼	10/04/22 16:17	10/05/22 10:13	10
PCB-1254	<0.18		0.18		mg/Kg	☼	10/04/22 16:17	10/05/22 10:13	10
PCB-1260	<0.18		0.18		mg/Kg	☼	10/04/22 16:17	10/05/22 10:13	10

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	92		49 - 129	10/04/22 16:17	10/05/22 10:13	10
DCB Decachlorobiphenyl	101		37 - 121	10/04/22 16:17	10/05/22 10:13	10

# Client Sample Results

Client: Civil & Environmental Consultants Inc  
 Project/Site: Arconic - Elliot Ditch - Lafayette, IN

Job ID: 500-223218-1

**Client Sample ID: ED-R3SL-036**

**Lab Sample ID: 500-223218-5**

**Date Collected: 10/04/22 08:58**

**Matrix: Solid**

**Date Received: 10/04/22 15:05**

**Percent Solids: 93.0**

**Method: SW846 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<0.89		0.89		mg/Kg	☼	10/04/22 16:17	10/05/22 12:12	50
PCB-1221	<0.89		0.89		mg/Kg	☼	10/04/22 16:17	10/05/22 12:12	50
PCB-1232	<0.89		0.89		mg/Kg	☼	10/04/22 16:17	10/05/22 12:12	50
PCB-1242	<0.89		0.89		mg/Kg	☼	10/04/22 16:17	10/05/22 12:12	50
PCB-1248	<b>3.1</b>		0.89		mg/Kg	☼	10/04/22 16:17	10/05/22 12:12	50
PCB-1254	<0.89		0.89		mg/Kg	☼	10/04/22 16:17	10/05/22 12:12	50
PCB-1260	<0.89		0.89		mg/Kg	☼	10/04/22 16:17	10/05/22 12:12	50

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	124		49 - 129	10/04/22 16:17	10/05/22 12:12	50
DCB Decachlorobiphenyl	165	S1+	37 - 121	10/04/22 16:17	10/05/22 12:12	50

# Client Sample Results

Client: Civil & Environmental Consultants Inc  
 Project/Site: Arconic - Elliot Ditch - Lafayette, IN

Job ID: 500-223218-1

**Client Sample ID: ED-R3SL-033**

**Lab Sample ID: 500-223218-6**

**Date Collected: 10/04/22 09:50**

**Matrix: Solid**

**Date Received: 10/04/22 15:05**

**Percent Solids: 91.8**

**Method: SW846 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<0.18		0.18		mg/Kg	☼	10/04/22 16:17	10/05/22 10:43	10
PCB-1221	<0.18		0.18		mg/Kg	☼	10/04/22 16:17	10/05/22 10:43	10
PCB-1232	<0.18		0.18		mg/Kg	☼	10/04/22 16:17	10/05/22 10:43	10
PCB-1242	<0.18		0.18		mg/Kg	☼	10/04/22 16:17	10/05/22 10:43	10
PCB-1248	<b>0.42</b>		0.18		mg/Kg	☼	10/04/22 16:17	10/05/22 10:43	10
PCB-1254	<0.18		0.18		mg/Kg	☼	10/04/22 16:17	10/05/22 10:43	10
PCB-1260	<0.18		0.18		mg/Kg	☼	10/04/22 16:17	10/05/22 10:43	10

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
<i>Tetrachloro-m-xylene</i>	108		49 - 129	10/04/22 16:17	10/05/22 10:43	10
<i>Tetrachloro-m-xylene</i>	101		49 - 129	10/04/22 16:17	10/05/22 10:43	10
<i>DCB Decachlorobiphenyl</i>	122	S1+	37 - 121	10/04/22 16:17	10/05/22 10:43	10
<i>DCB Decachlorobiphenyl</i>	114		37 - 121	10/04/22 16:17	10/05/22 10:43	10

# Client Sample Results

Client: Civil & Environmental Consultants Inc  
 Project/Site: Arconic - Elliot Ditch - Lafayette, IN

Job ID: 500-223218-1

**Client Sample ID: ED-R3SL-035**

**Lab Sample ID: 500-223218-7**

**Date Collected: 10/04/22 09:58**

**Matrix: Solid**

**Date Received: 10/04/22 15:05**

**Percent Solids: 89.2**

**Method: SW846 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<0.19		0.19		mg/Kg	☼	10/04/22 16:17	10/05/22 10:58	10
PCB-1221	<0.19		0.19		mg/Kg	☼	10/04/22 16:17	10/05/22 10:58	10
PCB-1232	<0.19		0.19		mg/Kg	☼	10/04/22 16:17	10/05/22 10:58	10
PCB-1242	<0.19		0.19		mg/Kg	☼	10/04/22 16:17	10/05/22 10:58	10
PCB-1248	<b>0.41</b>		0.19		mg/Kg	☼	10/04/22 16:17	10/05/22 10:58	10
PCB-1254	<0.19		0.19		mg/Kg	☼	10/04/22 16:17	10/05/22 10:58	10
PCB-1260	<0.19		0.19		mg/Kg	☼	10/04/22 16:17	10/05/22 10:58	10

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	108		49 - 129	10/04/22 16:17	10/05/22 10:58	10
DCB Decachlorobiphenyl	120		37 - 121	10/04/22 16:17	10/05/22 10:58	10

# Client Sample Results

Client: Civil & Environmental Consultants Inc  
 Project/Site: Arconic - Elliot Ditch - Lafayette, IN

Job ID: 500-223218-1

**Client Sample ID: ED-R3SL-037**

**Lab Sample ID: 500-223218-9**

**Date Collected: 10/04/22 10:35**

**Matrix: Solid**

**Date Received: 10/04/22 15:05**

**Percent Solids: 92.6**

**Method: SW846 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<0.18		0.18		mg/Kg	☼	10/04/22 16:17	10/05/22 11:27	10
PCB-1221	<0.18		0.18		mg/Kg	☼	10/04/22 16:17	10/05/22 11:27	10
PCB-1232	<0.18		0.18		mg/Kg	☼	10/04/22 16:17	10/05/22 11:27	10
PCB-1242	<0.18		0.18		mg/Kg	☼	10/04/22 16:17	10/05/22 11:27	10
PCB-1248	<b>0.61</b>		0.18		mg/Kg	☼	10/04/22 16:17	10/05/22 11:27	10
PCB-1254	<0.18		0.18		mg/Kg	☼	10/04/22 16:17	10/05/22 11:27	10
PCB-1260	<0.18		0.18		mg/Kg	☼	10/04/22 16:17	10/05/22 11:27	10

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	102		49 - 129	10/04/22 16:17	10/05/22 11:27	10
DCB Decachlorobiphenyl	114		37 - 121	10/04/22 16:17	10/05/22 11:27	10

# Client Sample Results

Client: Civil & Environmental Consultants Inc  
 Project/Site: Arconic - Elliot Ditch - Lafayette, IN

Job ID: 500-223218-1

**Client Sample ID: ED-R3SL-SW005**

**Lab Sample ID: 500-223218-10**

**Date Collected: 10/04/22 10:47**

**Matrix: Solid**

**Date Received: 10/04/22 15:05**

**Percent Solids: 95.3**

**Method: SW846 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<0.17		0.17		mg/Kg	☼	10/04/22 16:17	10/05/22 11:42	10
PCB-1221	<0.17		0.17		mg/Kg	☼	10/04/22 16:17	10/05/22 11:42	10
PCB-1232	<0.17		0.17		mg/Kg	☼	10/04/22 16:17	10/05/22 11:42	10
PCB-1242	<0.17		0.17		mg/Kg	☼	10/04/22 16:17	10/05/22 11:42	10
PCB-1248	<b>1.3</b>		0.17		mg/Kg	☼	10/04/22 16:17	10/05/22 11:42	10
PCB-1254	<0.17		0.17		mg/Kg	☼	10/04/22 16:17	10/05/22 11:42	10
PCB-1260	<0.17		0.17		mg/Kg	☼	10/04/22 16:17	10/05/22 11:42	10

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	107		49 - 129	10/04/22 16:17	10/05/22 11:42	10
DCB Decachlorobiphenyl	124	S1+	37 - 121	10/04/22 16:17	10/05/22 11:42	10

# Client Sample Results

Client: Civil & Environmental Consultants Inc  
 Project/Site: Arconic - Elliot Ditch - Lafayette, IN

Job ID: 500-223218-1

**Client Sample ID: ED-R3SL-SW006**

**Lab Sample ID: 500-223218-11**

**Date Collected: 10/04/22 10:59**

**Matrix: Solid**

**Date Received: 10/04/22 15:05**

**Percent Solids: 95.8**

**Method: SW846 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<0.17		0.17		mg/Kg	☼	10/04/22 16:17	10/05/22 11:57	10
PCB-1221	<0.17		0.17		mg/Kg	☼	10/04/22 16:17	10/05/22 11:57	10
PCB-1232	<0.17		0.17		mg/Kg	☼	10/04/22 16:17	10/05/22 11:57	10
PCB-1242	<0.17		0.17		mg/Kg	☼	10/04/22 16:17	10/05/22 11:57	10
PCB-1248	1.3		0.17		mg/Kg	☼	10/04/22 16:17	10/05/22 11:57	10
PCB-1254	<0.17		0.17		mg/Kg	☼	10/04/22 16:17	10/05/22 11:57	10
PCB-1260	<0.17		0.17		mg/Kg	☼	10/04/22 16:17	10/05/22 11:57	10

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	108		49 - 129	10/04/22 16:17	10/05/22 11:57	10
DCB Decachlorobiphenyl	121		37 - 121	10/04/22 16:17	10/05/22 11:57	10

# Definitions/Glossary

Client: Civil & Environmental Consultants Inc  
Project/Site: Arconic - Elliot Ditch - Lafayette, IN

Job ID: 500-223218-1

## Qualifiers

### GC Semi VOA

Qualifier	Qualifier Description
S1+	Surrogate recovery exceeds control limits, high biased.

## Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
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)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
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)
TNTC	Too Numerous To Count

# QC Association Summary

Client: Civil & Environmental Consultants Inc  
Project/Site: Arconic - Elliot Ditch - Lafayette, IN

Job ID: 500-223218-1

## GC Semi VOA

### Prep Batch: 677869

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-223218-1	ED-R3SL-031	Total/NA	Solid	3541	
500-223218-2	ED-R3SL-DUP003	Total/NA	Solid	3541	
500-223218-3	ED-R3SL-032	Total/NA	Solid	3541	
500-223218-4	ED-R3SL-034	Total/NA	Solid	3541	
500-223218-5	ED-R3SL-036	Total/NA	Solid	3541	
500-223218-6	ED-R3SL-033	Total/NA	Solid	3541	
500-223218-7	ED-R3SL-035	Total/NA	Solid	3541	
500-223218-9	ED-R3SL-037	Total/NA	Solid	3541	
500-223218-10	ED-R3SL-SW005	Total/NA	Solid	3541	
500-223218-11	ED-R3SL-SW006	Total/NA	Solid	3541	
MB 500-677869/1-A	Method Blank	Total/NA	Solid	3541	
LCS 500-677869/2-A	Lab Control Sample	Total/NA	Solid	3541	
500-223218-1 MS	ED-R3SL-031	Total/NA	Solid	3541	
500-223218-1 MSD	ED-R3SL-031	Total/NA	Solid	3541	

### Analysis Batch: 677916

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-223218-1	ED-R3SL-031	Total/NA	Solid	8082A	677869
500-223218-2	ED-R3SL-DUP003	Total/NA	Solid	8082A	677869
500-223218-3	ED-R3SL-032	Total/NA	Solid	8082A	677869
500-223218-4	ED-R3SL-034	Total/NA	Solid	8082A	677869
500-223218-5	ED-R3SL-036	Total/NA	Solid	8082A	677869
500-223218-6	ED-R3SL-033	Total/NA	Solid	8082A	677869
500-223218-7	ED-R3SL-035	Total/NA	Solid	8082A	677869
500-223218-9	ED-R3SL-037	Total/NA	Solid	8082A	677869
500-223218-10	ED-R3SL-SW005	Total/NA	Solid	8082A	677869
500-223218-11	ED-R3SL-SW006	Total/NA	Solid	8082A	677869
MB 500-677869/1-A	Method Blank	Total/NA	Solid	8082A	677869
LCS 500-677869/2-A	Lab Control Sample	Total/NA	Solid	8082A	677869
500-223218-1 MS	ED-R3SL-031	Total/NA	Solid	8082A	677869
500-223218-1 MSD	ED-R3SL-031	Total/NA	Solid	8082A	677869

## General Chemistry

### Analysis Batch: 677867

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-223218-1	ED-R3SL-031	Total/NA	Solid	Moisture	
500-223218-2	ED-R3SL-DUP003	Total/NA	Solid	Moisture	
500-223218-3	ED-R3SL-032	Total/NA	Solid	Moisture	
500-223218-4	ED-R3SL-034	Total/NA	Solid	Moisture	
500-223218-5	ED-R3SL-036	Total/NA	Solid	Moisture	
500-223218-6	ED-R3SL-033	Total/NA	Solid	Moisture	
500-223218-7	ED-R3SL-035	Total/NA	Solid	Moisture	
500-223218-9	ED-R3SL-037	Total/NA	Solid	Moisture	
500-223218-10	ED-R3SL-SW005	Total/NA	Solid	Moisture	
500-223218-11	ED-R3SL-SW006	Total/NA	Solid	Moisture	
500-223218-2 DU	ED-R3SL-DUP003	Total/NA	Solid	Moisture	

# Surrogate Summary

Client: Civil & Environmental Consultants Inc  
 Project/Site: Arconic - Elliot Ditch - Lafayette, IN

Job ID: 500-223218-1

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

Matrix: Solid

Prep Type: Total/NA

### Percent Surrogate Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)			
		TCX1 (49-129)	TCX2 (49-129)	DCBP1 (37-121)	DCBP2 (37-121)
500-223218-1	ED-R3SL-031		102		106
500-223218-1 MS	ED-R3SL-031		82		94
500-223218-1 MSD	ED-R3SL-031		110		114
500-223218-2	ED-R3SL-DUP003		106		117
500-223218-3	ED-R3SL-032		97		102
500-223218-4	ED-R3SL-034		92		101
500-223218-5	ED-R3SL-036		124		165 S1+
500-223218-6	ED-R3SL-033	108	101	122 S1+	114
500-223218-7	ED-R3SL-035		108		120
500-223218-9	ED-R3SL-037		102		114
500-223218-10	ED-R3SL-SW005		107		124 S1+
500-223218-11	ED-R3SL-SW006		108		121
LCS 500-677869/2-A	Lab Control Sample		88		86
MB 500-677869/1-A	Method Blank		112		108

### Surrogate Legend

TCX = Tetrachloro-m-xylene

DCBP = DCB Decachlorobiphenyl

# QC Sample Results

Client: Civil & Environmental Consultants Inc  
 Project/Site: Arconic - Elliot Ditch - Lafayette, IN

Job ID: 500-223218-1

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

**Lab Sample ID: MB 500-677869/1-A**  
**Matrix: Solid**  
**Analysis Batch: 677916**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**  
**Prep Batch: 677869**

Analyte	MB MB		RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
PCB-1016	<0.17		0.17		mg/Kg		10/04/22 16:17	10/05/22 08:30	10
PCB-1221	<0.17		0.17		mg/Kg		10/04/22 16:17	10/05/22 08:30	10
PCB-1232	<0.17		0.17		mg/Kg		10/04/22 16:17	10/05/22 08:30	10
PCB-1242	<0.17		0.17		mg/Kg		10/04/22 16:17	10/05/22 08:30	10
PCB-1248	<0.17		0.17		mg/Kg		10/04/22 16:17	10/05/22 08:30	10
PCB-1254	<0.17		0.17		mg/Kg		10/04/22 16:17	10/05/22 08:30	10
PCB-1260	<0.17		0.17		mg/Kg		10/04/22 16:17	10/05/22 08:30	10

Surrogate	MB MB		Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
Tetrachloro-m-xylene	112		49 - 129	10/04/22 16:17	10/05/22 08:30	10
DCB Decachlorobiphenyl	108		37 - 121	10/04/22 16:17	10/05/22 08:30	10

**Lab Sample ID: LCS 500-677869/2-A**  
**Matrix: Solid**  
**Analysis Batch: 677916**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**  
**Prep Batch: 677869**

Analyte	Spike Added	LCS LCS		Unit	D	%Rec	%Rec Limits
		Result	Qualifier				
PCB-1016	1.67	1.31		mg/Kg		78	57 - 120
PCB-1260	1.67	1.31		mg/Kg		79	61 - 125

Surrogate	LCS LCS		Limits
	%Recovery	Qualifier	
Tetrachloro-m-xylene	88		49 - 129
DCB Decachlorobiphenyl	86		37 - 121

**Lab Sample ID: 500-223218-1 MS**  
**Matrix: Solid**  
**Analysis Batch: 677916**

**Client Sample ID: ED-R3SL-031**  
**Prep Type: Total/NA**  
**Prep Batch: 677869**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS MS		Unit	D	%Rec	%Rec Limits
				Result	Qualifier				
PCB-1016	<0.18		1.69	1.44		mg/Kg	☼	85	57 - 120
PCB-1260	<0.18		1.69	1.45		mg/Kg	☼	86	61 - 125

Surrogate	MS MS		Limits
	%Recovery	Qualifier	
Tetrachloro-m-xylene	82		49 - 129
DCB Decachlorobiphenyl	94		37 - 121

**Lab Sample ID: 500-223218-1 MSD**  
**Matrix: Solid**  
**Analysis Batch: 677916**

**Client Sample ID: ED-R3SL-031**  
**Prep Type: Total/NA**  
**Prep Batch: 677869**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD MSD		Unit	D	%Rec	%Rec Limits	RPD	
				Result	Qualifier					RPD	Limit
PCB-1016	<0.18		1.68	1.73		mg/Kg	☼	103	57 - 120	18	30
PCB-1260	<0.18		1.68	1.76		mg/Kg	☼	105	61 - 125	19	30

Surrogate	MSD MSD		Limits
	%Recovery	Qualifier	
Tetrachloro-m-xylene	110		49 - 129
DCB Decachlorobiphenyl	114		37 - 121

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# Lab Chronicle

Client: Civil & Environmental Consultants Inc  
Project/Site: Arconic - Elliot Ditch - Lafayette, IN

Job ID: 500-223218-1

**Client Sample ID: ED-R3SL-031**

**Date Collected: 10/04/22 08:27**

**Date Received: 10/04/22 15:05**

**Lab Sample ID: 500-223218-1**

**Matrix: Solid**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Moisture		1	677867	LWN	EET CHI	10/04/22 15:58

**Client Sample ID: ED-R3SL-031**

**Date Collected: 10/04/22 08:27**

**Date Received: 10/04/22 15:05**

**Lab Sample ID: 500-223218-1**

**Matrix: Solid**

**Percent Solids: 94.1**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3541			677869	EK	EET CHI	10/04/22 16:17 - 10/04/22 19:00 <sup>1</sup>
Total/NA	Analysis	8082A		10	677916	SB	EET CHI	10/05/22 08:59

**Client Sample ID: ED-R3SL-DUP003**

**Date Collected: 10/04/22 00:00**

**Date Received: 10/04/22 15:05**

**Lab Sample ID: 500-223218-2**

**Matrix: Solid**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Moisture		1	677867	LWN	EET CHI	10/04/22 15:58

**Client Sample ID: ED-R3SL-DUP003**

**Date Collected: 10/04/22 00:00**

**Date Received: 10/04/22 15:05**

**Lab Sample ID: 500-223218-2**

**Matrix: Solid**

**Percent Solids: 94.4**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3541			677869	EK	EET CHI	10/04/22 16:17 - 10/04/22 19:00 <sup>1</sup>
Total/NA	Analysis	8082A		10	677916	SB	EET CHI	10/05/22 09:44

**Client Sample ID: ED-R3SL-032**

**Date Collected: 10/04/22 08:44**

**Date Received: 10/04/22 15:05**

**Lab Sample ID: 500-223218-3**

**Matrix: Solid**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Moisture		1	677867	LWN	EET CHI	10/04/22 15:58

**Client Sample ID: ED-R3SL-032**

**Date Collected: 10/04/22 08:44**

**Date Received: 10/04/22 15:05**

**Lab Sample ID: 500-223218-3**

**Matrix: Solid**

**Percent Solids: 93.6**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3541			677869	EK	EET CHI	10/04/22 16:17 - 10/04/22 19:00 <sup>1</sup>
Total/NA	Analysis	8082A		10	677916	SB	EET CHI	10/05/22 09:59

**Client Sample ID: ED-R3SL-034**

**Date Collected: 10/04/22 08:52**

**Date Received: 10/04/22 15:05**

**Lab Sample ID: 500-223218-4**

**Matrix: Solid**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Moisture		1	677867	LWN	EET CHI	10/04/22 15:58

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# Lab Chronicle

Client: Civil & Environmental Consultants Inc  
Project/Site: Arconic - Elliot Ditch - Lafayette, IN

Job ID: 500-223218-1

**Client Sample ID: ED-R3SL-034**

**Lab Sample ID: 500-223218-4**

**Date Collected: 10/04/22 08:52**

**Matrix: Solid**

**Date Received: 10/04/22 15:05**

**Percent Solids: 93.0**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3541			677869	EK	EET CHI	10/04/22 16:17 - 10/04/22 19:00 <sup>1</sup>
Total/NA	Analysis	8082A		10	677916	SB	EET CHI	10/05/22 10:13

**Client Sample ID: ED-R3SL-036**

**Lab Sample ID: 500-223218-5**

**Date Collected: 10/04/22 08:58**

**Matrix: Solid**

**Date Received: 10/04/22 15:05**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Moisture		1	677867	LWN	EET CHI	10/04/22 15:58

**Client Sample ID: ED-R3SL-036**

**Lab Sample ID: 500-223218-5**

**Date Collected: 10/04/22 08:58**

**Matrix: Solid**

**Date Received: 10/04/22 15:05**

**Percent Solids: 93.0**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3541			677869	EK	EET CHI	10/04/22 16:17 - 10/04/22 19:00 <sup>1</sup>
Total/NA	Analysis	8082A		50	677916	SB	EET CHI	10/05/22 12:12

**Client Sample ID: ED-R3SL-033**

**Lab Sample ID: 500-223218-6**

**Date Collected: 10/04/22 09:50**

**Matrix: Solid**

**Date Received: 10/04/22 15:05**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Moisture		1	677867	LWN	EET CHI	10/04/22 15:58

**Client Sample ID: ED-R3SL-033**

**Lab Sample ID: 500-223218-6**

**Date Collected: 10/04/22 09:50**

**Matrix: Solid**

**Date Received: 10/04/22 15:05**

**Percent Solids: 91.8**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3541			677869	EK	EET CHI	10/04/22 16:17 - 10/04/22 19:00 <sup>1</sup>
Total/NA	Analysis	8082A		10	677916	SB	EET CHI	10/05/22 10:43

**Client Sample ID: ED-R3SL-035**

**Lab Sample ID: 500-223218-7**

**Date Collected: 10/04/22 09:58**

**Matrix: Solid**

**Date Received: 10/04/22 15:05**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Moisture		1	677867	LWN	EET CHI	10/04/22 15:58

# Lab Chronicle

Client: Civil & Environmental Consultants Inc  
Project/Site: Arconic - Elliot Ditch - Lafayette, IN

Job ID: 500-223218-1

**Client Sample ID: ED-R3SL-035**

**Lab Sample ID: 500-223218-7**

**Date Collected: 10/04/22 09:58**

**Matrix: Solid**

**Date Received: 10/04/22 15:05**

**Percent Solids: 89.2**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3541			677869	EK	EET CHI	10/04/22 16:17 - 10/04/22 19:00 <sup>1</sup>
Total/NA	Analysis	8082A		10	677916	SB	EET CHI	10/05/22 10:58

**Client Sample ID: ED-R3SL-037**

**Lab Sample ID: 500-223218-9**

**Date Collected: 10/04/22 10:35**

**Matrix: Solid**

**Date Received: 10/04/22 15:05**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Moisture		1	677867	LWN	EET CHI	10/04/22 15:58

**Client Sample ID: ED-R3SL-037**

**Lab Sample ID: 500-223218-9**

**Date Collected: 10/04/22 10:35**

**Matrix: Solid**

**Date Received: 10/04/22 15:05**

**Percent Solids: 92.6**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3541			677869	EK	EET CHI	10/04/22 16:17 - 10/04/22 19:00 <sup>1</sup>
Total/NA	Analysis	8082A		10	677916	SB	EET CHI	10/05/22 11:27

**Client Sample ID: ED-R3SL-SW005**

**Lab Sample ID: 500-223218-10**

**Date Collected: 10/04/22 10:47**

**Matrix: Solid**

**Date Received: 10/04/22 15:05**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Moisture		1	677867	LWN	EET CHI	10/04/22 15:58

**Client Sample ID: ED-R3SL-SW005**

**Lab Sample ID: 500-223218-10**

**Date Collected: 10/04/22 10:47**

**Matrix: Solid**

**Date Received: 10/04/22 15:05**

**Percent Solids: 95.3**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3541			677869	EK	EET CHI	10/04/22 16:17 - 10/04/22 19:00 <sup>1</sup>
Total/NA	Analysis	8082A		10	677916	SB	EET CHI	10/05/22 11:42

**Client Sample ID: ED-R3SL-SW006**

**Lab Sample ID: 500-223218-11**

**Date Collected: 10/04/22 10:59**

**Matrix: Solid**

**Date Received: 10/04/22 15:05**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Moisture		1	677867	LWN	EET CHI	10/04/22 15:58

# Lab Chronicle

Client: Civil & Environmental Consultants Inc  
Project/Site: Arconic - Elliot Ditch - Lafayette, IN

Job ID: 500-223218-1

**Client Sample ID: ED-R3SL-SW006**

**Lab Sample ID: 500-223218-11**

**Date Collected: 10/04/22 10:59**

**Matrix: Solid**

**Date Received: 10/04/22 15:05**

**Percent Solids: 95.8**

<u>Prep Type</u>	<u>Batch Type</u>	<u>Batch Method</u>	<u>Run</u>	<u>Dilution Factor</u>	<u>Batch Number</u>	<u>Analyst</u>	<u>Lab</u>	<u>Prepared or Analyzed</u>
Total/NA	Prep	3541			677869	EK	EET CHI	10/04/22 16:17 - 10/04/22 19:00 <sup>1</sup>
Total/NA	Analysis	8082A		10	677916	SB	EET CHI	10/05/22 11:57

<sup>1</sup> Completion dates and times are reported or not reported per method requirements or individual lab discretion.

### Laboratory References:

EET CHI = Eurofins Chicago, 2417 Bond Street, University Park, IL 60484, TEL (708)534-5200



# Accreditation/Certification Summary

Client: Civil & Environmental Consultants Inc  
Project/Site: Arconic - Elliot Ditch - Lafayette, IN

Job ID: 500-223218-1

## Laboratory: Eurofins Chicago

The accreditations/certifications listed below are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Illinois	NELAP	IL00035	04-30-23

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14
- 15

**Eurofins Chicago**

2417 Bond Street  
University Park IL 60484  
Phone 708-534-5200 Fax 708-534-5211

**Chain of Custody Record**



Environment Testing  
America

<b>Client Information</b>		Sampler: <i>G Welch</i>		Lab PM: Kintz Robin M		Carrier Tracking No(s)		COC No: 500-105440-44981 2	
Client Contact: Jenny Rickford O'Brien		Phone: <i>865-440-1655</i>		E-Mail: Robin.Kintz@et.eurofinsus.com		State of Origin: <i>IN</i>		Page: <i>2 of 8</i> 1 of 2	
Company: Civil & Environmental Consultants Inc				PWSID		<b>Analysis Requested</b>			
Address: 2704 Cherokee Farm Way Suite 101		Due Date Requested: <i>10/5/22</i>		Field Filtered Sample (Yes or No) Perform MS/MSD (Yes or No) 8082A - PCBs		 500-223218 COC		Job #: <i>500-223218</i>	
City: Knoxville		TAT Requested (days): <i>24 HR</i>						Preservation Codes	
State/Zip: TN 37920		Compliance Project: <input type="checkbox"/> Yes <input type="checkbox"/> No						A HCL M Hexane B NaOH N None C Zn Acetate O AsNaO2 D Nitric Acid P Na2O4S E NaHSO4 Q Na2SO3 F MeOH R Na2S2O3 G Amchlor S H2SO4 H Ascorbic Acid T TSP Dodecahydrate I Ice U Acetone J DI Water V MCAA K EDTA W - pH 4-5 L EDA Y Trizma Z other (specify)	
Phone: 865-340-4914(Tel)		PO #: Purchase Order not required						Other:	
Email: jricketfordobrien@cecinc.com		WO #:							
Project Name: Arconic - Elliot Ditch - Lafayette IN		Project #: 50019033							
Site: <i>Reach 3 Im Project</i>		SSOW#:							
<b>Sample Identification</b>		<b>Sample Date</b>		<b>Sample Time</b>		<b>Sample Type (C=Comp, G=grab)</b>		<b>Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)</b>	
								<b>Preservation Code</b>	
								<b>Special Instructions/Note</b>	
<i>ED-R3SL-φ31</i>		<i>10/4/22</i>		<i>0827</i>		<i>C S</i>		<i>X</i>	
<i>ED-R3SL-DWP003</i>		<i>10/4/22</i>				<i>C S</i>		<i>X</i>	
<i>ED-R3SL-φ32</i>		<i>10/4/22</i>		<i>0844</i>		<i>C S</i>		<i>X X</i>	
<i>ED-R3SL-φ34</i>		<i>10/4/22</i>		<i>0852</i>		<i>C S</i>		<i>X</i>	
<i>ED-R3SL-φ36</i>		<i>10/4/22</i>		<i>0858</i>		<i>C S</i>		<i>X</i>	
<i>ED-R3SL-φ33</i>		<i>10/4/22</i>		<i>0950</i>		<i>C S</i>		<i>X</i>	
<i>ED-R3SL-φ35</i>		<i>10/4/22</i>		<i>0958</i>		<i>C S</i>		<i>X</i>	
<i>ED-R3SL-φ38</i>		<i>10/4/22</i>		<i>1010</i>		<i>C S</i>		<i>X</i>	
<i>ED-R3SL-φ37</i>		<i>10/4/22</i>		<i>1035</i>		<i>C S</i>		<i>X</i>	
<i>ED-R3SL-SW005</i>		<i>10/4/22</i>		<i>1047</i>		<i>C S</i>		<i>X</i>	
<i>ED-R3SL-SW006</i>		<i>10/4/22</i>		<i>1059</i>		<i>C S</i>		<i>X</i>	
<b>Possible Hazard Identification</b>					<b>Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)</b>				
<input checked="" type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison B <input type="checkbox"/> Unknown <input type="checkbox"/> Radiological					<input type="checkbox"/> Return To Client <input checked="" type="checkbox"/> Disposal By Lab <input type="checkbox"/> Archive For _____ Months				
Deliverable Requested I II III IV Other (specify)					Special Instructions/QC Requirements				
Empty Kit Relinquished by			Date		Time		Method of Shipment:		
Relinquished by: <i>[Signature]</i>			Date/Time: <i>10/4/22 1340</i>		Company: <i>CEL</i>		Received by: <i>[Signature]</i>		
Relinquished by: <i>[Signature]</i>			Date/Time: <i>10/4/22 1505 CST</i>		Company: <i>ETA</i>		Received by: <i>Stephane Hernandez</i>		
Relinquished by:			Date/Time:		Company:		Received by:		
Custody Seals Intact.		Custody Seal No			Cooler Temperature(s) °C and Other Remarks: <i>32+1.2</i>				
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No									



## Login Sample Receipt Checklist

Client: Civil & Environmental Consultants Inc

Job Number: 500-223218-1

**Login Number: 223218**

**List Number: 1**

**Creator: Hernandez, Stephanie**

**List Source: Eurofins Chicago**

Question	Answer	Comment
Radioactivity wasn't checked or is <math>\leq</math> background as measured by a survey meter.	True	
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	1.2
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 <math><6\text{mm}</math> (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

## ANALYTICAL REPORT

Eurofins Chicago  
2417 Bond Street  
University Park, IL 60484  
Tel: (708)534-5200

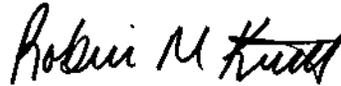
Laboratory Job ID: 500-223218-2

Client Project/Site: Arconic - Elliot Ditch - Lafayette, IN

For:

Civil & Environmental Consultants Inc  
2704 Cherokee Farm Way  
Suite 101  
Knoxville, Tennessee 37920

Attn: Garrett Welch



Authorized for release by:  
10/5/2022 4:45:12 PM

Robin Kintz, Project Manager II  
(708)534-5200  
[Robin.Kintz@et.eurofinsus.com](mailto:Robin.Kintz@et.eurofinsus.com)

### LINKS

Review your project  
results through



Have a Question?



Visit us at:

[www.eurofinsus.com/Env](http://www.eurofinsus.com/Env)

The test results in this report meet all 2003 NELAC, 2009 TNI, and 2016 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.



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# Case Narrative

Client: Civil & Environmental Consultants Inc  
Project/Site: Arconic - Elliot Ditch - Lafayette, IN

Job ID: 500-223218-2

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**Job ID: 500-223218-2**

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**Laboratory: Eurofins Chicago**

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**Narrative**

**Job Narrative  
500-223218-2**

**Comments**

No additional comments.

**Receipt**

The samples were received on 10/4/2022 3:05 PM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperature of the cooler at receipt was 1.2° C.

**GC Semi VOA**

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

**Metals**

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

**Organic Prep**

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

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# Detection Summary

Client: Civil & Environmental Consultants Inc  
Project/Site: Arconic - Elliot Ditch - Lafayette, IN

Job ID: 500-223218-2

**Client Sample ID: ED-R3SL-038**

**Lab Sample ID: 500-223218-8**

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
PCB-1248	0.25		0.18		mg/Kg	10	✳	8082A	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins Chicago

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# Method Summary

Client: Civil & Environmental Consultants Inc  
Project/Site: Arconic - Elliot Ditch - Lafayette, IN

Job ID: 500-223218-2

Method	Method Description	Protocol	Laboratory
8082A	Polychlorinated Biphenyls (PCBs) by Gas Chromatography	SW846	EET CHI
Moisture	Percent Moisture	EPA	EET CHI
3541	Automated Soxhlet Extraction	SW846	EET CHI

**Protocol References:**

EPA = US Environmental Protection Agency

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

**Laboratory References:**

EET CHI = Eurofins Chicago, 2417 Bond Street, University Park, IL 60484, TEL (708)534-5200



# Sample Summary

Client: Civil & Environmental Consultants Inc  
Project/Site: Arconic - Elliot Ditch - Lafayette, IN

Job ID: 500-223218-2

---

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
500-223218-8	ED-R3SL-038	Solid	10/04/22 10:10	10/04/22 15:05

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# Client Sample Results

Client: Civil & Environmental Consultants Inc  
 Project/Site: Arconic - Elliot Ditch - Lafayette, IN

Job ID: 500-223218-2

**Client Sample ID: ED-R3SL-038**

**Lab Sample ID: 500-223218-8**

**Date Collected: 10/04/22 10:10**

**Matrix: Solid**

**Date Received: 10/04/22 15:05**

**Percent Solids: 92.9**

**Method: SW846 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<0.18		0.18		mg/Kg	☼	10/04/22 16:17	10/05/22 11:13	10
PCB-1221	<0.18		0.18		mg/Kg	☼	10/04/22 16:17	10/05/22 11:13	10
PCB-1232	<0.18		0.18		mg/Kg	☼	10/04/22 16:17	10/05/22 11:13	10
PCB-1242	<0.18		0.18		mg/Kg	☼	10/04/22 16:17	10/05/22 11:13	10
PCB-1248	<b>0.25</b>		0.18		mg/Kg	☼	10/04/22 16:17	10/05/22 11:13	10
PCB-1254	<0.18		0.18		mg/Kg	☼	10/04/22 16:17	10/05/22 11:13	10
PCB-1260	<0.18		0.18		mg/Kg	☼	10/04/22 16:17	10/05/22 11:13	10

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	96		49 - 129	10/04/22 16:17	10/05/22 11:13	10
DCB Decachlorobiphenyl	109		37 - 121	10/04/22 16:17	10/05/22 11:13	10

## Definitions/Glossary

Client: Civil & Environmental Consultants Inc  
Project/Site: Arconic - Elliot Ditch - Lafayette, IN

Job ID: 500-223218-2

### Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
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)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
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)
TNTC	Too Numerous To Count

# QC Association Summary

Client: Civil & Environmental Consultants Inc  
Project/Site: Arconic - Elliot Ditch - Lafayette, IN

Job ID: 500-223218-2

## GC Semi VOA

### Prep Batch: 677869

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-223218-8	ED-R3SL-038	Total/NA	Solid	3541	
MB 500-677869/1-A	Method Blank	Total/NA	Solid	3541	
LCS 500-677869/2-A	Lab Control Sample	Total/NA	Solid	3541	

### Analysis Batch: 677916

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-223218-8	ED-R3SL-038	Total/NA	Solid	8082A	677869
MB 500-677869/1-A	Method Blank	Total/NA	Solid	8082A	677869
LCS 500-677869/2-A	Lab Control Sample	Total/NA	Solid	8082A	677869

## General Chemistry

### Analysis Batch: 677867

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-223218-8	ED-R3SL-038	Total/NA	Solid	Moisture	

# Surrogate Summary

Client: Civil & Environmental Consultants Inc  
Project/Site: Arconic - Elliot Ditch - Lafayette, IN

Job ID: 500-223218-2

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

Matrix: Solid

Prep Type: Total/NA

### Percent Surrogate Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	TCX2	DCBP2
		(49-129)	(37-121)
500-223218-8	ED-R3SL-038	96	109
LCS 500-677869/2-A	Lab Control Sample	88	86
MB 500-677869/1-A	Method Blank	112	108

#### Surrogate Legend

TCX = Tetrachloro-m-xylene

DCBP = DCB Decachlorobiphenyl

# QC Sample Results

Client: Civil & Environmental Consultants Inc  
 Project/Site: Arconic - Elliot Ditch - Lafayette, IN

Job ID: 500-223218-2

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

**Lab Sample ID: MB 500-677869/1-A**  
**Matrix: Solid**  
**Analysis Batch: 677916**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**  
**Prep Batch: 677869**

Analyte	MB MB		RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
PCB-1016	<0.17		0.17		mg/Kg		10/04/22 16:17	10/05/22 08:30	10
PCB-1221	<0.17		0.17		mg/Kg		10/04/22 16:17	10/05/22 08:30	10
PCB-1232	<0.17		0.17		mg/Kg		10/04/22 16:17	10/05/22 08:30	10
PCB-1242	<0.17		0.17		mg/Kg		10/04/22 16:17	10/05/22 08:30	10
PCB-1248	<0.17		0.17		mg/Kg		10/04/22 16:17	10/05/22 08:30	10
PCB-1254	<0.17		0.17		mg/Kg		10/04/22 16:17	10/05/22 08:30	10
PCB-1260	<0.17		0.17		mg/Kg		10/04/22 16:17	10/05/22 08:30	10

Surrogate	MB MB		Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
Tetrachloro-m-xylene	112		49 - 129	10/04/22 16:17	10/05/22 08:30	10
DCB Decachlorobiphenyl	108		37 - 121	10/04/22 16:17	10/05/22 08:30	10

**Lab Sample ID: LCS 500-677869/2-A**  
**Matrix: Solid**  
**Analysis Batch: 677916**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**  
**Prep Batch: 677869**

Analyte	Spike Added	LCS LCS		Unit	D	%Rec	%Rec Limits
		Result	Qualifier				
PCB-1016	1.67	1.31		mg/Kg		78	57 - 120
PCB-1260	1.67	1.31		mg/Kg		79	61 - 125

Surrogate	LCS LCS		Limits
	%Recovery	Qualifier	
Tetrachloro-m-xylene	88		49 - 129
DCB Decachlorobiphenyl	86		37 - 121

# Lab Chronicle

Client: Civil & Environmental Consultants Inc  
Project/Site: Arconic - Elliot Ditch - Lafayette, IN

Job ID: 500-223218-2

**Client Sample ID: ED-R3SL-038**

**Lab Sample ID: 500-223218-8**

**Date Collected: 10/04/22 10:10**

**Matrix: Solid**

**Date Received: 10/04/22 15:05**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Moisture		1	677867	LWN	EET CHI	10/04/22 15:58

**Client Sample ID: ED-R3SL-038**

**Lab Sample ID: 500-223218-8**

**Date Collected: 10/04/22 10:10**

**Matrix: Solid**

**Date Received: 10/04/22 15:05**

**Percent Solids: 92.9**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3541			677869	EK	EET CHI	10/04/22 16:17 - 10/04/22 19:00 <sup>1</sup>
Total/NA	Analysis	8082A		10	677916	SB	EET CHI	10/05/22 11:13

<sup>1</sup> Completion dates and times are reported or not reported per method requirements or individual lab discretion.

### Laboratory References:

EET CHI = Eurofins Chicago, 2417 Bond Street, University Park, IL 60484, TEL (708)534-5200

# Accreditation/Certification Summary

Client: Civil & Environmental Consultants Inc  
Project/Site: Arconic - Elliot Ditch - Lafayette, IN

Job ID: 500-223218-2

## Laboratory: Eurofins Chicago

The accreditations/certifications listed below are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Illinois	NELAP	IL00035	04-30-23

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**Eurofins Chicago**

2417 Bond Street  
University Park IL 60484  
Phone 708-534-5200 Fax 708-534-5211

**Chain of Custody Record**



Environment Testing  
America

<b>Client Information</b>		Sampler: <i>G Welch</i>		Lab PM: Kintz Robin M		Carrier Tracking No(s)		COC No: 500-105440-44981 2	
Client Contact: Jenny Rickford O'Brien		Phone: <i>865-440-1655</i>		E-Mail: Robin.Kintz@et.eurofinsus.com		State of Origin: <i>IN</i>		Page: <i>2 of 8</i> 1 of 2	
Company: Civil & Environmental Consultants Inc				PWSID		<b>Analysis Requested</b>			
Address: 2704 Cherokee Farm Way Suite 101		Due Date Requested: <i>10/5/22</i>		Field Filtered Sample (Yes or No) Perform MS/MSD (Yes or No) 8082A - PCBs		 500-223218 COC		Job #: <i>500-223218</i>	
City: Knoxville		TAT Requested (days): <i>24 HR</i>						Preservation Codes	
State Zip: TN 37920		Compliance Project: <input type="checkbox"/> Yes <input type="checkbox"/> No						A HCL M Hexane B NaOH N None C Zn Acetate O AsNaO2 D Nitric Acid P Na2O4S E NaHSO4 Q Na2SO3 F MeOH R Na2S2O3 G Amchlor S H2SO4 H Ascorbic Acid T TSP Dodecahydrate I Ice U Acetone J DI Water V MCAA K EDTA W - pH 4-5 L EDA Y Trizma Z other (specify)	
Phone: 865-340-4914(Tel)		PO #						Other:	
Email: jrnickfordobrien@cecinc.com		Purchase Order not required							
Project Name: Arconic - Elliot Ditch - Lafayette IN		Project #: 50019033							
Site: <i>Reach 3 Im Project</i>		SSOW#							
<b>Sample Identification</b>		<b>Sample Date</b>		<b>Sample Time</b>		<b>Sample Type (C=Comp, G=grab)</b>		<b>Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)</b>	
								<b>Field Filtered Sample (Yes or No)</b>	
								<b>Perform MS/MSD (Yes or No)</b>	
								<b>8082A - PCBs</b>	
								<b>Total Number of containers</b>	
								<b>Special Instructions/Note</b>	
<i>1 ED-R3SL-φ31</i>		<i>10/4/22</i>		<i>0827</i>		<i>C S</i>		<i>X</i>	
<i>2 ED-R3SL-DWP003</i>		<i>10/4/22</i>				<i>C S</i>		<i>X</i>	
<i>3 ED-R3SL-φ32</i>		<i>10/4/22</i>		<i>0844</i>		<i>C S</i>		<i>X X</i>	
<i>4 ED-R3SL-φ34</i>		<i>10/4/22</i>		<i>0852</i>		<i>C S</i>		<i>X</i>	
<i>5 ED-R3SL-φ36</i>		<i>10/4/22</i>		<i>0858</i>		<i>C S</i>		<i>X</i>	
<i>6 ED-R3SL-φ33</i>		<i>10/4/22</i>		<i>0950</i>		<i>C S</i>		<i>X</i>	
<i>7 ED-R3SL-φ35</i>		<i>10/4/22</i>		<i>0958</i>		<i>C S</i>		<i>X</i>	
<i>8 ED-R3SL-φ38</i>		<i>10/4/22</i>		<i>1010</i>		<i>C S</i>		<i>X</i>	
<i>9 ED-R3SL-φ37</i>		<i>10/4/22</i>		<i>1035</i>		<i>C S</i>		<i>X</i>	
<i>10 ED-R3SL-SW005</i>		<i>10/4/22</i>		<i>1047</i>		<i>C S</i>		<i>X</i>	
<i>11 ED-R3SL-SW006</i>		<i>10/4/22</i>		<i>1059</i>		<i>C S</i>		<i>X</i>	
<b>Possible Hazard Identification</b>					<b>Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)</b>				
<input checked="" type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison B <input type="checkbox"/> Unknown <input type="checkbox"/> Radiological					<input type="checkbox"/> Return To Client <input checked="" type="checkbox"/> Disposal By Lab <input type="checkbox"/> Archive For _____ Months				
Deliverable Requested I II III IV Other (specify)					Special Instructions/QC Requirements				
Empty Kit Relinquished by			Date		Time		Method of Shipment:		
Relinquished by: <i>[Signature]</i>			Date/Time: <i>10/4/22 1340</i>		Company: <i>CEL</i>		Received by: <i>[Signature]</i>		
Relinquished by: <i>[Signature]</i>			Date/Time: <i>10/4/22 1505 CST</i>		Company: <i>ETA</i>		Received by: <i>Stephane Hemanduy</i>		
Relinquished by:			Date/Time:		Company:		Received by:		
Custody Seals Intact.		Custody Seal No			Cooler Temperature(s) °C and Other Remarks: <i>32+1.2</i>				
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No									

# Chain of Custody Record

524993



Environment Testing  
TestAmerica

Address \_\_\_\_\_

Regulatory Program:  DW  NPDES  RCRA  Other

TAL-8210

Client Contact		Project Manager <u>G. W. R. Kintz</u>		Site Contact <u>G. Welch</u>		Date <u>10/4/22</u>		COC No					
Company Name <u>CEC</u>		Tel/Email <u>gwelch@cecinc.com</u>		Lab Contact <u>R. Kintz</u>		Carrier <u>Conifer</u>		<u>2</u> of <u>2</u> COCs					
Address <u>2704 Cherokee Farm Way STE 101</u>		Analysis Turnaround Time											
City/State/Zip <u>Knoxville, TN 37920</u>		<input type="checkbox"/> CALENDAR DAYS <input type="checkbox"/> WORKING DAYS		TAT if different from Below _____ <input type="checkbox"/> 2 weeks <input type="checkbox"/> 1 week <b>*24HR RUSH</b> <input type="checkbox"/> 2 days <input checked="" type="checkbox"/> 1 day						Sampler			
Phone <u>865-977-9497</u>										For Lab Use Only			
Fax _____										Walk-in Client <input type="checkbox"/>			
Project Name <u>Elliott Ditch IM - Reach 3</u>										Lab Sampling <input type="checkbox"/>			
Site <u>Reach 3</u>										Job / SDG No			
P O # _____				<u>500-223218</u>		Sample Specific Notes							
Sample Identification		Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix					# of Cont.	Filtered Sample (Y/N)	Perform MS/MSD (Y/N)	
<u>ED-RSSL-EB006</u>		<u>10/4/22</u>	<u>1120</u>	<u>G</u>	<u>W</u>					<u>2</u>	<u>X</u>	<u>Y</u>	<u>Y</u>
Preservation Used: 1=Ice, 2=HCl; 3=H2SO4; 4=HNO3; 5=NaOH; 6=Other _____					Sample Disposal ( A fee may be assessed if samples are retained longer than 1 month)								
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 checked="" type="checkbox"/> Non Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison B <input type="checkbox"/> Unknown <input type="checkbox"/> Return to Client <input checked="" type="checkbox"/> Disposal by Lab <input type="checkbox"/> Archive for _____ Months								
Special Instructions/QC Requirements & Comments: <p style="text-align: center; font-size: 1.2em;">Water Sample (EB 006) Does not require 24hr rush!</p>													
Custody Seals Intact <input type="checkbox"/> Yes <input type="checkbox"/> No		Custody Seal No _____		Cooler Temp (°C) Obs'd _____		Corr'd _____		Therm ID No _____					
Relinquished by <u>[Signature]</u>		Company <u>CEC</u>		Date/Time <u>10/4/22 1340</u>		Received by <u>[Signature]</u>		Company <u>EETA</u>					
Relinquished by <u>[Signature]</u>		Company <u>EETA</u>		Date/Time <u>10/4/22 1505</u>		Received by _____		Company _____					
Relinquished by _____		Company _____		Date/Time _____		Received in Laboratory by <u>[Signature]</u>		Company <u>EETA</u>					
								Date/Time <u>10/4/22 1505</u>					



# Login Sample Receipt Checklist

Client: Civil & Environmental Consultants Inc

Job Number: 500-223218-2

**Login Number: 223218**

**List Source: Eurofins Chicago**

**List Number: 1**

**Creator: Hernandez, Stephanie**

Question	Answer	Comment
Radioactivity wasn't checked or is <math>\leq</math> background as measured by a survey meter.	True	
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	1.2
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 <math><6\text{mm}</math> (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	



## ANALYTICAL REPORT

Eurofins Chicago  
2417 Bond Street  
University Park, IL 60484  
Tel: (708)534-5200

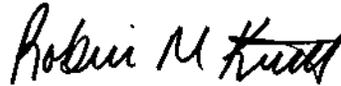
Laboratory Job ID: 500-223218-3

Client Project/Site: Arconic - Elliot Ditch - Lafayette, IN - EB

**For:**

Civil & Environmental Consultants Inc  
2704 Cherokee Farm Way  
Suite 101  
Knoxville, Tennessee 37920

Attn: Garrett Welch



*Authorized for release by:*  
10/11/2022 2:39:24 PM

Robin Kintz, Project Manager II  
(708)534-5200  
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The test results in this report meet all 2003 NELAC, 2009 TNI, and 2016 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.

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# Case Narrative

Client: Civil & Environmental Consultants Inc  
Project/Site: Arconic - Elliot Ditch - Lafayette, IN - EB

Job ID: 500-223218-3

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**Job ID: 500-223218-3**

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**Laboratory: Eurofins Chicago**

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**Narrative**

**Job Narrative  
500-223218-3**

**Comments**

No additional comments.

**Receipt**

The samples were received on 10/4/2022 3:05 PM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperature of the cooler at receipt was 1.2° C.

**GC Semi VOA**

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

**Organic Prep**

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

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# Detection Summary

Client: Civil & Environmental Consultants Inc  
Project/Site: Arconic - Elliot Ditch - Lafayette, IN - EB

Job ID: 500-223218-3

**Client Sample ID: ED-R3SL-EB006**

**Lab Sample ID: 500-223218-12**

No Detections.

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This Detection Summary does not include radiochemical test results.

Eurofins Chicago

# Method Summary

Client: Civil & Environmental Consultants Inc  
Project/Site: Arconic - Elliot Ditch - Lafayette, IN - EB

Job ID: 500-223218-3

Method	Method Description	Protocol	Laboratory
8082A	Polychlorinated Biphenyls (PCBs) by Gas Chromatography	SW846	EET CHI
3510C	Liquid-Liquid Extraction (Separatory Funnel)	SW846	EET CHI

**Protocol References:**

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

**Laboratory References:**

EET CHI = Eurofins Chicago, 2417 Bond Street, University Park, IL 60484, TEL (708)534-5200

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# Sample Summary

Client: Civil & Environmental Consultants Inc  
Project/Site: Arconic - Elliot Ditch - Lafayette, IN - EB

Job ID: 500-223218-3

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Lab Sample ID	Client Sample ID	Matrix	Collected	Received
500-223218-12	ED-R3SL-EB006	Water	10/04/22 11:20	10/04/22 15:05

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# Client Sample Results

Client: Civil & Environmental Consultants Inc  
 Project/Site: Arconic - Elliot Ditch - Lafayette, IN - EB

Job ID: 500-223218-3

**Client Sample ID: ED-R3SL-EB006**

**Lab Sample ID: 500-223218-12**

Date Collected: 10/04/22 11:20

Matrix: Water

Date Received: 10/04/22 15:05

**Method: SW846 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<0.00041		0.00041		mg/L		10/07/22 11:58	10/10/22 15:40	1
PCB-1221	<0.00041		0.00041		mg/L		10/07/22 11:58	10/10/22 15:40	1
PCB-1232	<0.00041		0.00041		mg/L		10/07/22 11:58	10/10/22 15:40	1
PCB-1242	<0.00041		0.00041		mg/L		10/07/22 11:58	10/10/22 15:40	1
PCB-1248	<0.00041		0.00041		mg/L		10/07/22 11:58	10/10/22 15:40	1
PCB-1254	<0.00041		0.00041		mg/L		10/07/22 11:58	10/10/22 15:40	1
PCB-1260	<0.00041		0.00041		mg/L		10/07/22 11:58	10/10/22 15:40	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	97		30 - 120	10/07/22 11:58	10/10/22 15:40	1
DCB Decachlorobiphenyl	70		30 - 140	10/07/22 11:58	10/10/22 15:40	1

# Definitions/Glossary

Client: Civil & Environmental Consultants Inc  
Project/Site: Arconic - Elliot Ditch - Lafayette, IN - EB

Job ID: 500-223218-3

## Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
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)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
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)
TNTC	Too Numerous To Count

# QC Association Summary

Client: Civil & Environmental Consultants Inc  
Project/Site: Arconic - Elliot Ditch - Lafayette, IN - EB

Job ID: 500-223218-3

## GC Semi VOA

### Prep Batch: 678510

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-223218-12	ED-R3SL-EB006	Total/NA	Water	3510C	
MB 500-678510/1-A	Method Blank	Total/NA	Water	3510C	
LCS 500-678510/2-A	Lab Control Sample	Total/NA	Water	3510C	

### Analysis Batch: 678766

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-223218-12	ED-R3SL-EB006	Total/NA	Water	8082A	678510
MB 500-678510/1-A	Method Blank	Total/NA	Water	8082A	678510
LCS 500-678510/2-A	Lab Control Sample	Total/NA	Water	8082A	678510

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# Surrogate Summary

Client: Civil & Environmental Consultants Inc  
Project/Site: Arconic - Elliot Ditch - Lafayette, IN - EB

Job ID: 500-223218-3

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

Matrix: Water

Prep Type: Total/NA

### Percent Surrogate Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	TCX2	DCBP2
		(30-120)	(30-140)
500-223218-12	ED-R3SL-EB006	97	70
LCS 500-678510/2-A	Lab Control Sample	72	89
MB 500-678510/1-A	Method Blank	64	89

#### Surrogate Legend

TCX = Tetrachloro-m-xylene

DCBP = DCB Decachlorobiphenyl

# QC Sample Results

Client: Civil & Environmental Consultants Inc  
 Project/Site: Arconic - Elliot Ditch - Lafayette, IN - EB

Job ID: 500-223218-3

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

**Lab Sample ID: MB 500-678510/1-A**  
**Matrix: Water**  
**Analysis Batch: 678766**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**  
**Prep Batch: 678510**

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
PCB-1016	<0.00040		0.00040		mg/L		10/07/22 11:58	10/10/22 11:54	1
PCB-1221	<0.00040		0.00040		mg/L		10/07/22 11:58	10/10/22 11:54	1
PCB-1232	<0.00040		0.00040		mg/L		10/07/22 11:58	10/10/22 11:54	1
PCB-1242	<0.00040		0.00040		mg/L		10/07/22 11:58	10/10/22 11:54	1
PCB-1248	<0.00040		0.00040		mg/L		10/07/22 11:58	10/10/22 11:54	1
PCB-1254	<0.00040		0.00040		mg/L		10/07/22 11:58	10/10/22 11:54	1
PCB-1260	<0.00040		0.00040		mg/L		10/07/22 11:58	10/10/22 11:54	1

Surrogate	MB	MB	Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
Tetrachloro-m-xylene	64		30 - 120	10/07/22 11:58	10/10/22 11:54	1
DCB Decachlorobiphenyl	89		30 - 140	10/07/22 11:58	10/10/22 11:54	1

**Lab Sample ID: LCS 500-678510/2-A**  
**Matrix: Water**  
**Analysis Batch: 678766**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**  
**Prep Batch: 678510**

Analyte	Spike Added	LCS	LCS	Unit	D	%Rec	%Rec Limits
		Result	Qualifier				
PCB-1016	0.00400	0.00365		mg/L		91	56 - 120
PCB-1260	0.00400	0.00399		mg/L		100	53 - 137

Surrogate	LCS	LCS	Limits
	%Recovery	Qualifier	
Tetrachloro-m-xylene	72		30 - 120
DCB Decachlorobiphenyl	89		30 - 140

# Lab Chronicle

Client: Civil & Environmental Consultants Inc  
Project/Site: Arconic - Elliot Ditch - Lafayette, IN - EB

Job ID: 500-223218-3

**Client Sample ID: ED-R3SL-EB006**

**Lab Sample ID: 500-223218-12**

**Date Collected: 10/04/22 11:20**

**Matrix: Water**

**Date Received: 10/04/22 15:05**

<u>Prep Type</u>	<u>Batch Type</u>	<u>Batch Method</u>	<u>Run</u>	<u>Dilution Factor</u>	<u>Batch Number</u>	<u>Analyst</u>	<u>Lab</u>	<u>Prepared or Analyzed</u>
Total/NA	Prep	3510C			678510	TS	EET CHI	10/07/22 11:58
Total/NA	Analysis	8082A		1	678766	SS	EET CHI	10/10/22 15:40

**Laboratory References:**

EET CHI = Eurofins Chicago, 2417 Bond Street, University Park, IL 60484, TEL (708)534-5200

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# Accreditation/Certification Summary

Client: Civil & Environmental Consultants Inc  
Project/Site: Arconic - Elliot Ditch - Lafayette, IN - EB

Job ID: 500-223218-3

## Laboratory: Eurofins Chicago

The accreditations/certifications listed below are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Illinois	NELAP	IL00035	04-30-23

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**Eurofins Chicago**

2417 Bond Street  
University Park IL 60484  
Phone 708-534-5200 Fax 708-534-5211

**Chain of Custody Record**



Environment Testing  
America

<b>Client Information</b>		Sampler: <i>G Welch</i>		Lab PM: Kintz Robin M		Carrier Tracking No(s)		COC No: 500-105440-44981 2	
Client Contact: Jenny Rickford O'Brien		Phone: <i>865-440-1655</i>		E-Mail: Robin Kintz@et.eurofinsus.com		State of Origin: <i>IN</i>		Page: <i>2 of 8</i> 1 of 2	
Company: Civil & Environmental Consultants Inc				PWSID		<b>Analysis Requested</b>			
Address: 2704 Cherokee Farm Way Suite 101		Due Date Requested: <i>10/5/22</i>		Field Filtered Sample (Yes or No) Perform MS/MSD (Yes or No) 8082A - PCBs		 500-223218 COC		Job #: <i>500-223218</i>	
City: Knoxville		TAT Requested (days): <i>24 HR</i>						Preservation Codes	
State/Zip: TN 37920		Compliance Project: <input type="checkbox"/> Yes <input type="checkbox"/> No						A HCL M Hexane B NaOH N None C Zn Acetate O AsNaO2 D Nitric Acid P Na2O4S E NaHSO4 Q Na2SO3 F MeOH R Na2S2O3 G Amchlor S H2SO4 H Ascorbic Acid T TSP Dodecahydrate I Ice U Acetone J DI Water V MCAA K EDTA W - pH 4-5 L EDA Y Trizma Z other (specify)	
Phone: 865-340-4914(Tel)		PO #: Purchase Order not required						Other:	
Email: jricketfordobrien@cecinc.com		WO #							
Project Name: Arconic - Elliot Ditch - Lafayette IN		Project #: 50019033							
Site: <i>Reach 3 Im Project</i>		SSOW#							
<b>Sample Identification</b>		<b>Sample Date</b>		<b>Sample Time</b>		<b>Sample Type (C=Comp, G=grab)</b>		<b>Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)</b>	
								<b>Preservation Code</b>	
								<b>Special Instructions/Note</b>	
<i>ED-R3SL-φ31</i>		<i>10/4/22</i>		<i>0827</i>		<i>C S</i>		<i>X</i>	
<i>ED-R3SL-DWP003</i>		<i>10/4/22</i>				<i>C S</i>		<i>X</i>	
<i>ED-R3SL-φ32</i>		<i>10/4/22</i>		<i>0844</i>		<i>C S</i>		<i>X X</i>	
<i>ED-R3SL-φ34</i>		<i>10/4/22</i>		<i>0852</i>		<i>C S</i>		<i>X</i>	
<i>ED-R3SL-φ36</i>		<i>10/4/22</i>		<i>0858</i>		<i>C S</i>		<i>X</i>	
<i>ED-R3SL-φ33</i>		<i>10/4/22</i>		<i>0950</i>		<i>C S</i>		<i>X</i>	
<i>ED-R3SL-φ35</i>		<i>10/4/22</i>		<i>0958</i>		<i>C S</i>		<i>X</i>	
<i>ED-R3SL-φ38</i>		<i>10/4/22</i>		<i>1010</i>		<i>C S</i>		<i>X</i>	
<i>ED-R3SL-φ37</i>		<i>10/4/22</i>		<i>1035</i>		<i>C S</i>		<i>X</i>	
<i>ED-R3SL-SW005</i>		<i>10/4/22</i>		<i>1047</i>		<i>C S</i>		<i>X</i>	
<i>ED-R3SL-SW006</i>		<i>10/4/22</i>		<i>1059</i>		<i>C S</i>		<i>X</i>	
<b>Possible Hazard Identification</b>					<b>Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)</b>				
<input checked="" type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison B <input type="checkbox"/> Unknown <input type="checkbox"/> Radiological					<input type="checkbox"/> Return To Client <input checked="" type="checkbox"/> Disposal By Lab <input type="checkbox"/> Archive For _____ Months				
Deliverable Requested I II III IV Other (specify)					Special Instructions/QC Requirements				
Empty Kit Relinquished by			Date		Time		Method of Shipment:		
Relinquished by: <i>[Signature]</i>			Date/Time: <i>10/4/22 1340</i>		Company: <i>CEL</i>		Received by: <i>[Signature]</i>		
Relinquished by: <i>[Signature]</i>			Date/Time: <i>10/4/22 1505 CST</i>		Company: <i>ETA</i>		Received by: <i>Stephane Hemanduy</i>		
Relinquished by:			Date/Time:		Company:		Received by:		
Custody Seals Intact.		Custody Seal No			Cooler Temperature(s) °C and Other Remarks: <i>32+1.2</i>				
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No									

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## Login Sample Receipt Checklist

Client: Civil & Environmental Consultants Inc

Job Number: 500-223218-3

**Login Number: 223218**

**List Number: 1**

**Creator: Hernandez, Stephanie**

**List Source: Eurofins Chicago**

Question	Answer	Comment
Radioactivity wasn't checked or is <math>\leq</math> background as measured by a survey meter.	True	
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	1.2
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 <math><6\text{mm}</math> (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

## ANALYTICAL REPORT

Eurofins Chicago  
2417 Bond Street  
University Park, IL 60484  
Tel: (708)534-5200

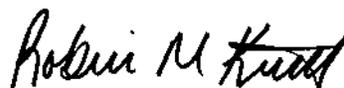
Laboratory Job ID: 500-223305-1

Client Project/Site: Arconic - Elliot Ditch - Lafayette, IN

**For:**

Civil & Environmental Consultants Inc  
2704 Cherokee Farm Way  
Suite 101  
Knoxville, Tennessee 37920

Attn: Garrett Welch



*Authorized for release by:*

10/6/2022 3:21:59 PM

Robin Kintz, Project Manager II  
(708)534-5200

[Robin.Kintz@et.eurofinsus.com](mailto:Robin.Kintz@et.eurofinsus.com)

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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.



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# Case Narrative

Client: Civil & Environmental Consultants Inc  
Project/Site: Arconic - Elliot Ditch - Lafayette, IN

Job ID: 500-223305-1

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**Job ID: 500-223305-1**

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**Laboratory: Eurofins Chicago**

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**Narrative**

**Job Narrative  
500-223305-1**

**Comments**

No additional comments.

**Receipt**

The samples were received on 10/5/2022 3:12 PM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperature of the cooler at receipt was 2.6° C.

**GC Semi VOA**

Method 8082A: The continuing calibration verification (CCVIS) was slightly outside of the control limits for Tetrachloro-m-xylene for analytical batch 500-678250. The CCVIS recoveries of the target analytes and the other surrogate DCB were within the control limits; therefore the data has been reported. (CCVIS 500-678250/3)

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

**Metals**

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

**Organic Prep**

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.



# Detection Summary

Client: Civil & Environmental Consultants Inc  
Project/Site: Arconic - Elliot Ditch - Lafayette, IN

Job ID: 500-223305-1

## Client Sample ID: ED-R3SL-039

## Lab Sample ID: 500-223305-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
PCB-1248	0.33		0.18		mg/Kg	10	✳	8082A	Total/NA

## Client Sample ID: ED-R3SL-040

## Lab Sample ID: 500-223305-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
PCB-1248	0.20		0.17		mg/Kg	10	✳	8082A	Total/NA

## Client Sample ID: ED-R3SL-041

## Lab Sample ID: 500-223305-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
PCB-1248	0.21		0.18		mg/Kg	10	✳	8082A	Total/NA

## Client Sample ID: ED-R3SL-SW007

## Lab Sample ID: 500-223305-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
PCB-1248	0.18		0.18		mg/Kg	10	✳	8082A	Total/NA

## Client Sample ID: ED-R3SL-SW008

## Lab Sample ID: 500-223305-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
PCB-1248	0.20		0.18		mg/Kg	10	✳	8082A	Total/NA

## Client Sample ID: ED-R3SL-SW009

## Lab Sample ID: 500-223305-9

No Detections.

## Client Sample ID: ED-R3SL-SW001-2

## Lab Sample ID: 500-223305-10

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
PCB-1248	1.4		0.18		mg/Kg	10	✳	8082A	Total/NA

## Client Sample ID: ED-R3SL-002-2

## Lab Sample ID: 500-223305-11

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
PCB-1248	0.47		0.17		mg/Kg	10	✳	8082A	Total/NA

## Client Sample ID: ED-R3SL-001-2

## Lab Sample ID: 500-223305-12

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
PCB-1248	0.93		0.18		mg/Kg	10	✳	8082A	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins Chicago

# Method Summary

Client: Civil & Environmental Consultants Inc  
Project/Site: Arconic - Elliot Ditch - Lafayette, IN

Job ID: 500-223305-1

Method	Method Description	Protocol	Laboratory
8082A	Polychlorinated Biphenyls (PCBs) by Gas Chromatography	SW846	EET CHI
Moisture	Percent Moisture	EPA	EET CHI
3541	Automated Soxhlet Extraction	SW846	EET CHI

**Protocol References:**

EPA = US Environmental Protection Agency

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

**Laboratory References:**

EET CHI = Eurofins Chicago, 2417 Bond Street, University Park, IL 60484, TEL (708)534-5200



# Sample Summary

Client: Civil & Environmental Consultants Inc  
Project/Site: Arconic - Elliot Ditch - Lafayette, IN

Job ID: 500-223305-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
500-223305-1	ED-R3SL-039	Solid	10/05/22 08:13	10/05/22 15:12
500-223305-2	ED-R3SL-040	Solid	10/05/22 08:25	10/05/22 15:12
500-223305-3	ED-R3SL-041	Solid	10/05/22 08:36	10/05/22 15:12
500-223305-7	ED-R3SL-SW007	Solid	10/05/22 09:29	10/05/22 15:12
500-223305-8	ED-R3SL-SW008	Solid	10/05/22 09:38	10/05/22 15:12
500-223305-9	ED-R3SL-SW009	Solid	10/05/22 09:45	10/05/22 15:12
500-223305-10	ED-R3SL-SW001-2	Solid	10/05/22 11:36	10/05/22 15:12
500-223305-11	ED-R3SL-002-2	Solid	10/05/22 11:53	10/05/22 15:12
500-223305-12	ED-R3SL-001-2	Solid	10/05/22 12:05	10/05/22 15:12

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# Client Sample Results

Client: Civil & Environmental Consultants Inc  
 Project/Site: Arconic - Elliot Ditch - Lafayette, IN

Job ID: 500-223305-1

**Client Sample ID: ED-R3SL-039**

**Lab Sample ID: 500-223305-1**

**Date Collected: 10/05/22 08:13**

**Matrix: Solid**

**Date Received: 10/05/22 15:12**

**Percent Solids: 93.3**

**Method: SW846 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<0.18		0.18		mg/Kg	☼	10/05/22 16:00	10/06/22 11:13	10
PCB-1221	<0.18		0.18		mg/Kg	☼	10/05/22 16:00	10/06/22 11:13	10
PCB-1232	<0.18		0.18		mg/Kg	☼	10/05/22 16:00	10/06/22 11:13	10
PCB-1242	<0.18		0.18		mg/Kg	☼	10/05/22 16:00	10/06/22 11:13	10
PCB-1248	<b>0.33</b>		0.18		mg/Kg	☼	10/05/22 16:00	10/06/22 11:13	10
PCB-1254	<0.18		0.18		mg/Kg	☼	10/05/22 16:00	10/06/22 11:13	10
PCB-1260	<0.18		0.18		mg/Kg	☼	10/05/22 16:00	10/06/22 11:13	10

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	111		49 - 129	10/05/22 16:00	10/06/22 11:13	10
DCB Decachlorobiphenyl	100		37 - 121	10/05/22 16:00	10/06/22 11:13	10

# Client Sample Results

Client: Civil & Environmental Consultants Inc  
 Project/Site: Arconic - Elliot Ditch - Lafayette, IN

Job ID: 500-223305-1

**Client Sample ID: ED-R3SL-040**

**Lab Sample ID: 500-223305-2**

**Date Collected: 10/05/22 08:25**

**Matrix: Solid**

**Date Received: 10/05/22 15:12**

**Percent Solids: 93.9**

**Method: SW846 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<0.17		0.17		mg/Kg	☼	10/05/22 16:00	10/06/22 11:58	10
PCB-1221	<0.17		0.17		mg/Kg	☼	10/05/22 16:00	10/06/22 11:58	10
PCB-1232	<0.17		0.17		mg/Kg	☼	10/05/22 16:00	10/06/22 11:58	10
PCB-1242	<0.17		0.17		mg/Kg	☼	10/05/22 16:00	10/06/22 11:58	10
PCB-1248	<b>0.20</b>		0.17		mg/Kg	☼	10/05/22 16:00	10/06/22 11:58	10
PCB-1254	<0.17		0.17		mg/Kg	☼	10/05/22 16:00	10/06/22 11:58	10
PCB-1260	<0.17		0.17		mg/Kg	☼	10/05/22 16:00	10/06/22 11:58	10

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	124		49 - 129	10/05/22 16:00	10/06/22 11:58	10
DCB Decachlorobiphenyl	115		37 - 121	10/05/22 16:00	10/06/22 11:58	10

# Client Sample Results

Client: Civil & Environmental Consultants Inc  
 Project/Site: Arconic - Elliot Ditch - Lafayette, IN

Job ID: 500-223305-1

**Client Sample ID: ED-R3SL-041**

**Lab Sample ID: 500-223305-3**

**Date Collected: 10/05/22 08:36**

**Matrix: Solid**

**Date Received: 10/05/22 15:12**

**Percent Solids: 93.2**

**Method: SW846 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<0.18		0.18		mg/Kg	☼	10/05/22 16:00	10/06/22 12:13	10
PCB-1221	<0.18		0.18		mg/Kg	☼	10/05/22 16:00	10/06/22 12:13	10
PCB-1232	<0.18		0.18		mg/Kg	☼	10/05/22 16:00	10/06/22 12:13	10
PCB-1242	<0.18		0.18		mg/Kg	☼	10/05/22 16:00	10/06/22 12:13	10
PCB-1248	<b>0.21</b>		0.18		mg/Kg	☼	10/05/22 16:00	10/06/22 12:13	10
PCB-1254	<0.18		0.18		mg/Kg	☼	10/05/22 16:00	10/06/22 12:13	10
PCB-1260	<0.18		0.18		mg/Kg	☼	10/05/22 16:00	10/06/22 12:13	10

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
<i>Tetrachloro-m-xylene</i>	69		49 - 129	10/05/22 16:00	10/06/22 12:13	10
<i>DCB Decachlorobiphenyl</i>	83		37 - 121	10/05/22 16:00	10/06/22 12:13	10

# Client Sample Results

Client: Civil & Environmental Consultants Inc  
 Project/Site: Arconic - Elliot Ditch - Lafayette, IN

Job ID: 500-223305-1

**Client Sample ID: ED-R3SL-SW007**

**Lab Sample ID: 500-223305-7**

**Date Collected: 10/05/22 09:29**

**Matrix: Solid**

**Date Received: 10/05/22 15:12**

**Percent Solids: 93.6**

**Method: SW846 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<0.18		0.18		mg/Kg	☼	10/05/22 16:00	10/06/22 13:12	10
PCB-1221	<0.18		0.18		mg/Kg	☼	10/05/22 16:00	10/06/22 13:12	10
PCB-1232	<0.18		0.18		mg/Kg	☼	10/05/22 16:00	10/06/22 13:12	10
PCB-1242	<0.18		0.18		mg/Kg	☼	10/05/22 16:00	10/06/22 13:12	10
PCB-1248	<b>0.18</b>		0.18		mg/Kg	☼	10/05/22 16:00	10/06/22 13:12	10
PCB-1254	<0.18		0.18		mg/Kg	☼	10/05/22 16:00	10/06/22 13:12	10
PCB-1260	<0.18		0.18		mg/Kg	☼	10/05/22 16:00	10/06/22 13:12	10

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	98		49 - 129	10/05/22 16:00	10/06/22 13:12	10
DCB Decachlorobiphenyl	102		37 - 121	10/05/22 16:00	10/06/22 13:12	10

# Client Sample Results

Client: Civil & Environmental Consultants Inc  
 Project/Site: Arconic - Elliot Ditch - Lafayette, IN

Job ID: 500-223305-1

**Client Sample ID: ED-R3SL-SW008**

**Lab Sample ID: 500-223305-8**

**Date Collected: 10/05/22 09:38**

**Matrix: Solid**

**Date Received: 10/05/22 15:12**

**Percent Solids: 93.8**

**Method: SW846 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<0.18		0.18		mg/Kg	☼	10/05/22 16:00	10/06/22 13:27	10
PCB-1221	<0.18		0.18		mg/Kg	☼	10/05/22 16:00	10/06/22 13:27	10
PCB-1232	<0.18		0.18		mg/Kg	☼	10/05/22 16:00	10/06/22 13:27	10
PCB-1242	<0.18		0.18		mg/Kg	☼	10/05/22 16:00	10/06/22 13:27	10
PCB-1248	<b>0.20</b>		0.18		mg/Kg	☼	10/05/22 16:00	10/06/22 13:27	10
PCB-1254	<0.18		0.18		mg/Kg	☼	10/05/22 16:00	10/06/22 13:27	10
PCB-1260	<0.18		0.18		mg/Kg	☼	10/05/22 16:00	10/06/22 13:27	10

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	113		49 - 129	10/05/22 16:00	10/06/22 13:27	10
DCB Decachlorobiphenyl	105		37 - 121	10/05/22 16:00	10/06/22 13:27	10

# Client Sample Results

Client: Civil & Environmental Consultants Inc  
 Project/Site: Arconic - Elliot Ditch - Lafayette, IN

Job ID: 500-223305-1

**Client Sample ID: ED-R3SL-SW009**

**Lab Sample ID: 500-223305-9**

Date Collected: 10/05/22 09:45

Matrix: Solid

Date Received: 10/05/22 15:12

Percent Solids: 90.3

**Method: SW846 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<0.18		0.18		mg/Kg	☼	10/05/22 16:00	10/06/22 13:41	10
PCB-1221	<0.18		0.18		mg/Kg	☼	10/05/22 16:00	10/06/22 13:41	10
PCB-1232	<0.18		0.18		mg/Kg	☼	10/05/22 16:00	10/06/22 13:41	10
PCB-1242	<0.18		0.18		mg/Kg	☼	10/05/22 16:00	10/06/22 13:41	10
PCB-1248	<0.18		0.18		mg/Kg	☼	10/05/22 16:00	10/06/22 13:41	10
PCB-1254	<0.18		0.18		mg/Kg	☼	10/05/22 16:00	10/06/22 13:41	10
PCB-1260	<0.18		0.18		mg/Kg	☼	10/05/22 16:00	10/06/22 13:41	10

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	80		49 - 129	10/05/22 16:00	10/06/22 13:41	10
DCB Decachlorobiphenyl	88		37 - 121	10/05/22 16:00	10/06/22 13:41	10

# Client Sample Results

Client: Civil & Environmental Consultants Inc  
 Project/Site: Arconic - Elliot Ditch - Lafayette, IN

Job ID: 500-223305-1

**Client Sample ID: ED-R3SL-SW001-2**

**Lab Sample ID: 500-223305-10**

Date Collected: 10/05/22 11:36

Matrix: Solid

Date Received: 10/05/22 15:12

Percent Solids: 91.8

**Method: SW846 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<0.18		0.18		mg/Kg	☼	10/05/22 16:00	10/06/22 13:56	10
PCB-1221	<0.18		0.18		mg/Kg	☼	10/05/22 16:00	10/06/22 13:56	10
PCB-1232	<0.18		0.18		mg/Kg	☼	10/05/22 16:00	10/06/22 13:56	10
PCB-1242	<0.18		0.18		mg/Kg	☼	10/05/22 16:00	10/06/22 13:56	10
PCB-1248	1.4		0.18		mg/Kg	☼	10/05/22 16:00	10/06/22 13:56	10
PCB-1254	<0.18		0.18		mg/Kg	☼	10/05/22 16:00	10/06/22 13:56	10
PCB-1260	<0.18		0.18		mg/Kg	☼	10/05/22 16:00	10/06/22 13:56	10

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	100		49 - 129	10/05/22 16:00	10/06/22 13:56	10
DCB Decachlorobiphenyl	93		37 - 121	10/05/22 16:00	10/06/22 13:56	10

# Client Sample Results

Client: Civil & Environmental Consultants Inc  
 Project/Site: Arconic - Elliot Ditch - Lafayette, IN

Job ID: 500-223305-1

**Client Sample ID: ED-R3SL-002-2**

**Lab Sample ID: 500-223305-11**

**Date Collected: 10/05/22 11:53**

**Matrix: Solid**

**Date Received: 10/05/22 15:12**

**Percent Solids: 92.2**

**Method: SW846 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<0.17		0.17		mg/Kg	☼	10/05/22 16:00	10/06/22 14:11	10
PCB-1221	<0.17		0.17		mg/Kg	☼	10/05/22 16:00	10/06/22 14:11	10
PCB-1232	<0.17		0.17		mg/Kg	☼	10/05/22 16:00	10/06/22 14:11	10
PCB-1242	<0.17		0.17		mg/Kg	☼	10/05/22 16:00	10/06/22 14:11	10
PCB-1248	<b>0.47</b>		0.17		mg/Kg	☼	10/05/22 16:00	10/06/22 14:11	10
PCB-1254	<0.17		0.17		mg/Kg	☼	10/05/22 16:00	10/06/22 14:11	10
PCB-1260	<0.17		0.17		mg/Kg	☼	10/05/22 16:00	10/06/22 14:11	10

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	99		49 - 129	10/05/22 16:00	10/06/22 14:11	10
DCB Decachlorobiphenyl	98		37 - 121	10/05/22 16:00	10/06/22 14:11	10

# Client Sample Results

Client: Civil & Environmental Consultants Inc  
 Project/Site: Arconic - Elliot Ditch - Lafayette, IN

Job ID: 500-223305-1

**Client Sample ID: ED-R3SL-001-2**

**Lab Sample ID: 500-223305-12**

**Date Collected: 10/05/22 12:05**

**Matrix: Solid**

**Date Received: 10/05/22 15:12**

**Percent Solids: 93.0**

**Method: SW846 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<0.18		0.18		mg/Kg	☼	10/05/22 16:00	10/06/22 14:26	10
PCB-1221	<0.18		0.18		mg/Kg	☼	10/05/22 16:00	10/06/22 14:26	10
PCB-1232	<0.18		0.18		mg/Kg	☼	10/05/22 16:00	10/06/22 14:26	10
PCB-1242	<0.18		0.18		mg/Kg	☼	10/05/22 16:00	10/06/22 14:26	10
PCB-1248	<b>0.93</b>		0.18		mg/Kg	☼	10/05/22 16:00	10/06/22 14:26	10
PCB-1254	<0.18		0.18		mg/Kg	☼	10/05/22 16:00	10/06/22 14:26	10
PCB-1260	<0.18		0.18		mg/Kg	☼	10/05/22 16:00	10/06/22 14:26	10

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
<i>Tetrachloro-m-xylene</i>	98		49 - 129	10/05/22 16:00	10/06/22 14:26	10
<i>DCB Decachlorobiphenyl</i>	102		37 - 121	10/05/22 16:00	10/06/22 14:26	10

# Definitions/Glossary

Client: Civil & Environmental Consultants Inc  
Project/Site: Arconic - Elliot Ditch - Lafayette, IN

Job ID: 500-223305-1

## Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
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)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
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)
TNTC	Too Numerous To Count

# QC Association Summary

Client: Civil & Environmental Consultants Inc  
Project/Site: Arconic - Elliot Ditch - Lafayette, IN

Job ID: 500-223305-1

## GC Semi VOA

### Prep Batch: 678079

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-223305-1	ED-R3SL-039	Total/NA	Solid	3541	
500-223305-2	ED-R3SL-040	Total/NA	Solid	3541	
500-223305-3	ED-R3SL-041	Total/NA	Solid	3541	
500-223305-7	ED-R3SL-SW007	Total/NA	Solid	3541	
500-223305-8	ED-R3SL-SW008	Total/NA	Solid	3541	
500-223305-9	ED-R3SL-SW009	Total/NA	Solid	3541	
500-223305-10	ED-R3SL-SW001-2	Total/NA	Solid	3541	
500-223305-11	ED-R3SL-002-2	Total/NA	Solid	3541	
500-223305-12	ED-R3SL-001-2	Total/NA	Solid	3541	
MB 500-678079/1-A	Method Blank	Total/NA	Solid	3541	
LCS 500-678079/2-A	Lab Control Sample	Total/NA	Solid	3541	
500-223305-1 MS	ED-R3SL-039	Total/NA	Solid	3541	
500-223305-1 MSD	ED-R3SL-039	Total/NA	Solid	3541	

### Analysis Batch: 678250

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-223305-1	ED-R3SL-039	Total/NA	Solid	8082A	678079
500-223305-2	ED-R3SL-040	Total/NA	Solid	8082A	678079
500-223305-3	ED-R3SL-041	Total/NA	Solid	8082A	678079
500-223305-7	ED-R3SL-SW007	Total/NA	Solid	8082A	678079
500-223305-8	ED-R3SL-SW008	Total/NA	Solid	8082A	678079
500-223305-9	ED-R3SL-SW009	Total/NA	Solid	8082A	678079
500-223305-10	ED-R3SL-SW001-2	Total/NA	Solid	8082A	678079
500-223305-11	ED-R3SL-002-2	Total/NA	Solid	8082A	678079
500-223305-12	ED-R3SL-001-2	Total/NA	Solid	8082A	678079
MB 500-678079/1-A	Method Blank	Total/NA	Solid	8082A	678079
LCS 500-678079/2-A	Lab Control Sample	Total/NA	Solid	8082A	678079
500-223305-1 MS	ED-R3SL-039	Total/NA	Solid	8082A	678079
500-223305-1 MSD	ED-R3SL-039	Total/NA	Solid	8082A	678079

## General Chemistry

### Analysis Batch: 678107

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-223305-1	ED-R3SL-039	Total/NA	Solid	Moisture	
500-223305-2	ED-R3SL-040	Total/NA	Solid	Moisture	
500-223305-3	ED-R3SL-041	Total/NA	Solid	Moisture	
500-223305-7	ED-R3SL-SW007	Total/NA	Solid	Moisture	
500-223305-8	ED-R3SL-SW008	Total/NA	Solid	Moisture	
500-223305-9	ED-R3SL-SW009	Total/NA	Solid	Moisture	
500-223305-10	ED-R3SL-SW001-2	Total/NA	Solid	Moisture	
500-223305-11	ED-R3SL-002-2	Total/NA	Solid	Moisture	
500-223305-12	ED-R3SL-001-2	Total/NA	Solid	Moisture	
500-223305-1 DU	ED-R3SL-039	Total/NA	Solid	Moisture	

# Surrogate Summary

Client: Civil & Environmental Consultants Inc  
Project/Site: Arconic - Elliot Ditch - Lafayette, IN

Job ID: 500-223305-1

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

Matrix: Solid

Prep Type: Total/NA

### Percent Surrogate Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	TCX2	DCBP2
		(49-129)	(37-121)
500-223305-1	ED-R3SL-039	111	100
500-223305-1 MS	ED-R3SL-039	106	93
500-223305-1 MSD	ED-R3SL-039	100	94
500-223305-2	ED-R3SL-040	124	115
500-223305-3	ED-R3SL-041	69	83
500-223305-7	ED-R3SL-SW007	98	102
500-223305-8	ED-R3SL-SW008	113	105
500-223305-9	ED-R3SL-SW009	80	88
500-223305-10	ED-R3SL-SW001-2	100	93
500-223305-11	ED-R3SL-002-2	99	98
500-223305-12	ED-R3SL-001-2	98	102
LCS 500-678079/2-A	Lab Control Sample	117	100
MB 500-678079/1-A	Method Blank	117	106

#### Surrogate Legend

TCX = Tetrachloro-m-xylene

DCBP = DCB Decachlorobiphenyl

# QC Sample Results

Client: Civil & Environmental Consultants Inc  
 Project/Site: Arconic - Elliot Ditch - Lafayette, IN

Job ID: 500-223305-1

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

**Lab Sample ID: MB 500-678079/1-A**  
**Matrix: Solid**  
**Analysis Batch: 678250**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**  
**Prep Batch: 678079**

Analyte	MB MB		RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
PCB-1016	<0.17		0.17		mg/Kg		10/05/22 16:00	10/06/22 10:44	10
PCB-1221	<0.17		0.17		mg/Kg		10/05/22 16:00	10/06/22 10:44	10
PCB-1232	<0.17		0.17		mg/Kg		10/05/22 16:00	10/06/22 10:44	10
PCB-1242	<0.17		0.17		mg/Kg		10/05/22 16:00	10/06/22 10:44	10
PCB-1248	<0.17		0.17		mg/Kg		10/05/22 16:00	10/06/22 10:44	10
PCB-1254	<0.17		0.17		mg/Kg		10/05/22 16:00	10/06/22 10:44	10
PCB-1260	<0.17		0.17		mg/Kg		10/05/22 16:00	10/06/22 10:44	10

Surrogate	MB MB		Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
Tetrachloro-m-xylene	117		49 - 129	10/05/22 16:00	10/06/22 10:44	10
DCB Decachlorobiphenyl	106		37 - 121	10/05/22 16:00	10/06/22 10:44	10

**Lab Sample ID: LCS 500-678079/2-A**  
**Matrix: Solid**  
**Analysis Batch: 678250**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**  
**Prep Batch: 678079**

Analyte	Spike Added	LCS LCS		Unit	D	%Rec	%Rec Limits
		Result	Qualifier				
PCB-1016	1.67	1.73		mg/Kg		104	57 - 120
PCB-1260	1.67	1.93		mg/Kg		116	61 - 125

Surrogate	LCS LCS		Limits
	%Recovery	Qualifier	
Tetrachloro-m-xylene	117		49 - 129
DCB Decachlorobiphenyl	100		37 - 121

**Lab Sample ID: 500-223305-1 MS**  
**Matrix: Solid**  
**Analysis Batch: 678250**

**Client Sample ID: ED-R3SL-039**  
**Prep Type: Total/NA**  
**Prep Batch: 678079**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS MS		Unit	D	%Rec	%Rec Limits
				Result	Qualifier				
PCB-1016	<0.18		1.78	1.77		mg/Kg	☼	100	57 - 120
PCB-1260	<0.18		1.78	1.92		mg/Kg	☼	108	61 - 125

Surrogate	MS MS		Limits
	%Recovery	Qualifier	
Tetrachloro-m-xylene	106		49 - 129
DCB Decachlorobiphenyl	93		37 - 121

**Lab Sample ID: 500-223305-1 MSD**  
**Matrix: Solid**  
**Analysis Batch: 678250**

**Client Sample ID: ED-R3SL-039**  
**Prep Type: Total/NA**  
**Prep Batch: 678079**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD MSD		Unit	D	%Rec	%Rec Limits	RPD	
				Result	Qualifier					RPD	Limit
PCB-1016	<0.18		1.78	1.82		mg/Kg	☼	102	57 - 120	2	30
PCB-1260	<0.18		1.78	2.01		mg/Kg	☼	113	61 - 125	4	30

Surrogate	MSD MSD		Limits
	%Recovery	Qualifier	
Tetrachloro-m-xylene	100		49 - 129
DCB Decachlorobiphenyl	94		37 - 121

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# Lab Chronicle

Client: Civil & Environmental Consultants Inc  
Project/Site: Arconic - Elliot Ditch - Lafayette, IN

Job ID: 500-223305-1

**Client Sample ID: ED-R3SL-039**

**Date Collected: 10/05/22 08:13**

**Date Received: 10/05/22 15:12**

**Lab Sample ID: 500-223305-1**

**Matrix: Solid**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Moisture		1	678107	LWN	EET CHI	10/05/22 15:49

**Client Sample ID: ED-R3SL-039**

**Date Collected: 10/05/22 08:13**

**Date Received: 10/05/22 15:12**

**Lab Sample ID: 500-223305-1**

**Matrix: Solid**

**Percent Solids: 93.3**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3541			678079	EK	EET CHI	10/05/22 16:00 - 10/05/22 18:30 <sup>1</sup>
Total/NA	Analysis	8082A		10	678250	SB	EET CHI	10/06/22 11:13

**Client Sample ID: ED-R3SL-040**

**Date Collected: 10/05/22 08:25**

**Date Received: 10/05/22 15:12**

**Lab Sample ID: 500-223305-2**

**Matrix: Solid**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Moisture		1	678107	LWN	EET CHI	10/05/22 15:49

**Client Sample ID: ED-R3SL-040**

**Date Collected: 10/05/22 08:25**

**Date Received: 10/05/22 15:12**

**Lab Sample ID: 500-223305-2**

**Matrix: Solid**

**Percent Solids: 93.9**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3541			678079	EK	EET CHI	10/05/22 16:00 - 10/05/22 18:30 <sup>1</sup>
Total/NA	Analysis	8082A		10	678250	SB	EET CHI	10/06/22 11:58

**Client Sample ID: ED-R3SL-041**

**Date Collected: 10/05/22 08:36**

**Date Received: 10/05/22 15:12**

**Lab Sample ID: 500-223305-3**

**Matrix: Solid**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Moisture		1	678107	LWN	EET CHI	10/05/22 15:49

**Client Sample ID: ED-R3SL-041**

**Date Collected: 10/05/22 08:36**

**Date Received: 10/05/22 15:12**

**Lab Sample ID: 500-223305-3**

**Matrix: Solid**

**Percent Solids: 93.2**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3541			678079	EK	EET CHI	10/05/22 16:00 - 10/05/22 18:30 <sup>1</sup>
Total/NA	Analysis	8082A		10	678250	SB	EET CHI	10/06/22 12:13

**Client Sample ID: ED-R3SL-SW007**

**Date Collected: 10/05/22 09:29**

**Date Received: 10/05/22 15:12**

**Lab Sample ID: 500-223305-7**

**Matrix: Solid**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Moisture		1	678107	LWN	EET CHI	10/05/22 15:49

Eurofins Chicago

# Lab Chronicle

Client: Civil & Environmental Consultants Inc  
Project/Site: Arconic - Elliot Ditch - Lafayette, IN

Job ID: 500-223305-1

**Client Sample ID: ED-R3SL-SW007**

**Lab Sample ID: 500-223305-7**

Date Collected: 10/05/22 09:29

Matrix: Solid

Date Received: 10/05/22 15:12

Percent Solids: 93.6

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3541			678079	EK	EET CHI	10/05/22 16:00 - 10/05/22 18:30 <sup>1</sup>
Total/NA	Analysis	8082A		10	678250	SB	EET CHI	10/06/22 13:12

**Client Sample ID: ED-R3SL-SW008**

**Lab Sample ID: 500-223305-8**

Date Collected: 10/05/22 09:38

Matrix: Solid

Date Received: 10/05/22 15:12

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Moisture		1	678107	LWN	EET CHI	10/05/22 15:49

**Client Sample ID: ED-R3SL-SW008**

**Lab Sample ID: 500-223305-8**

Date Collected: 10/05/22 09:38

Matrix: Solid

Date Received: 10/05/22 15:12

Percent Solids: 93.8

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3541			678079	EK	EET CHI	10/05/22 16:00 - 10/05/22 18:30 <sup>1</sup>
Total/NA	Analysis	8082A		10	678250	SB	EET CHI	10/06/22 13:27

**Client Sample ID: ED-R3SL-SW009**

**Lab Sample ID: 500-223305-9**

Date Collected: 10/05/22 09:45

Matrix: Solid

Date Received: 10/05/22 15:12

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Moisture		1	678107	LWN	EET CHI	10/05/22 15:49

**Client Sample ID: ED-R3SL-SW009**

**Lab Sample ID: 500-223305-9**

Date Collected: 10/05/22 09:45

Matrix: Solid

Date Received: 10/05/22 15:12

Percent Solids: 90.3

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3541			678079	EK	EET CHI	10/05/22 16:00 - 10/05/22 18:30 <sup>1</sup>
Total/NA	Analysis	8082A		10	678250	SB	EET CHI	10/06/22 13:41

**Client Sample ID: ED-R3SL-SW001-2**

**Lab Sample ID: 500-223305-10**

Date Collected: 10/05/22 11:36

Matrix: Solid

Date Received: 10/05/22 15:12

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Moisture		1	678107	LWN	EET CHI	10/05/22 15:49

# Lab Chronicle

Client: Civil & Environmental Consultants Inc  
Project/Site: Arconic - Elliot Ditch - Lafayette, IN

Job ID: 500-223305-1

**Client Sample ID: ED-R3SL-SW001-2**

**Lab Sample ID: 500-223305-10**

**Date Collected: 10/05/22 11:36**

**Matrix: Solid**

**Date Received: 10/05/22 15:12**

**Percent Solids: 91.8**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3541			678079	EK	EET CHI	10/05/22 16:00 - 10/05/22 18:30 <sup>1</sup>
Total/NA	Analysis	8082A		10	678250	SB	EET CHI	10/06/22 13:56

**Client Sample ID: ED-R3SL-002-2**

**Lab Sample ID: 500-223305-11**

**Date Collected: 10/05/22 11:53**

**Matrix: Solid**

**Date Received: 10/05/22 15:12**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Moisture		1	678107	LWN	EET CHI	10/05/22 15:49

**Client Sample ID: ED-R3SL-002-2**

**Lab Sample ID: 500-223305-11**

**Date Collected: 10/05/22 11:53**

**Matrix: Solid**

**Date Received: 10/05/22 15:12**

**Percent Solids: 92.2**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3541			678079	EK	EET CHI	10/05/22 16:00 - 10/05/22 18:30 <sup>1</sup>
Total/NA	Analysis	8082A		10	678250	SB	EET CHI	10/06/22 14:11

**Client Sample ID: ED-R3SL-001-2**

**Lab Sample ID: 500-223305-12**

**Date Collected: 10/05/22 12:05**

**Matrix: Solid**

**Date Received: 10/05/22 15:12**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Moisture		1	678107	LWN	EET CHI	10/05/22 15:49

**Client Sample ID: ED-R3SL-001-2**

**Lab Sample ID: 500-223305-12**

**Date Collected: 10/05/22 12:05**

**Matrix: Solid**

**Date Received: 10/05/22 15:12**

**Percent Solids: 93.0**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3541			678079	EK	EET CHI	10/05/22 16:00 - 10/05/22 18:30 <sup>1</sup>
Total/NA	Analysis	8082A		10	678250	SB	EET CHI	10/06/22 14:26

<sup>1</sup> Completion dates and times are reported or not reported per method requirements or individual lab discretion.

**Laboratory References:**

EET CHI = Eurofins Chicago, 2417 Bond Street, University Park, IL 60484, TEL (708)534-5200

# Accreditation/Certification Summary

Client: Civil & Environmental Consultants Inc  
Project/Site: Arconic - Elliot Ditch - Lafayette, IN

Job ID: 500-223305-1

## Laboratory: Eurofins Chicago

The accreditations/certifications listed below are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Illinois	NELAP	IL00035	04-30-23

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# Chain of Custody Record

524992



Environment Testing  
TestAmerica

TAL-8210

Address \_\_\_\_\_

Regulatory Program:  DW  NPDES  RCRA  Other

Client Contact		Project Manager: <i>G. Welch</i>			Site Contact: <i>G. Welch</i>			Date: <i>10/5/22</i>		COC No	
Company Name: <i>CEC</i>		Tel/Email: <i>865-440-1655</i>			Lab Contact: <i>R. Kintz</i>			Carrier: <i>Courier</i>		1 of 2 COCs	
Address: <i>2704 Cherokee Farm Way Suite 101</i>		Analysis Turnaround Time			 <p>500-223305 COC</p>			For Lab Use Only. Walk-in Client <input type="checkbox"/> Lab Sampling <input type="checkbox"/>  Job / SDG No <i>500-223305</i>		Sample Specific Notes	
City/State/Zip: <i>Knoxville, TN 37120</i>		<input type="checkbox"/> CALENDAR DAYS <input type="checkbox"/> WORKING DAYS TAT if different from Below _____									
Phone: <i>865-977-9497</i>		<input type="checkbox"/> 2 weeks <input type="checkbox"/> 1 week <i>24 Hour*</i> <input type="checkbox"/> 2 days <i>Rush</i> <input checked="" type="checkbox"/> 1 day									
Project Name: <i>Elkton Ditch IM Project</i>											
Site: <i>Reach 3</i>											
P O #											
Sample Identification		Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.	Filtered Sample (Y/N)	Perform MS/MSD (Y/N)	PCBS via		
<i>ED-R3SL-039</i>		<i>10/5/22</i>	<i>0813</i>	<i>C</i>	<i>S</i>	<i>1</i>	<i>X</i>		<i>808Z</i>		
<i>ED-R3SL-040</i>		<i>10/5/22</i>	<i>0825</i>	<i>C</i>	<i>S</i>	<i>1</i>	<i>X</i>				
<i>ED-R3SL-041</i>		<i>10/5/22</i>	<i>0836</i>	<i>C</i>	<i>S</i>	<i>1</i>	<i>X</i>				
<i>ED-R3SL-042</i>		<i>10/5/22</i>	<i>0845</i>	<i>C</i>	<i>S</i>	<i>1</i>	<i>X</i>				
<i>ED-R3SL-043</i>		<i>10/5/22</i>	<i>0854</i>	<i>C</i>	<i>S</i>	<i>1</i>	<i>X</i>				
<i>ED-R3SL-044</i>		<i>10/5/22</i>	<i>0905</i>	<i>C</i>	<i>S</i>	<i>1</i>	<i>X</i>				
<i>ED-R3SL-SW007</i>		<i>10/5/22</i>	<i>0929</i>	<i>C</i>	<i>S</i>	<i>1</i>	<i>X</i>				
<i>ED-R3SL-SW008</i>		<i>10/5/22</i>	<i>0938</i>	<i>C</i>	<i>S</i>	<i>1</i>	<i>X</i>				
<i>ED-R3SL-SW009</i>		<i>10/5/22</i>	<i>0945</i>	<i>C</i>	<i>S</i>	<i>1</i>	<i>X</i>				
<i>ED-R3SL-SW001-2</i>		<i>10/5/22</i>	<i>1136</i>	<i>C</i>	<i>S</i>	<i>1</i>	<i>X</i>				
<i>ED-R3SL-002-2</i>		<i>10/5/22</i>	<i>1153</i>	<i>C</i>	<i>S</i>	<i>1</i>	<i>X</i>				
<i>ED-R3SL-001-2</i>		<i>10/5/22</i>	<i>1205</i>	<i>C</i>	<i>S</i>	<i>1</i>	<i>X</i>				
Preservation Used: 1=Ice, 2=HCl, 3=H2SO4, 4=HNO3, 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							Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)				
<input checked="" type="checkbox"/> Non Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison B <input type="checkbox"/> Unknown							<input type="checkbox"/> Return to Client <input checked="" type="checkbox"/> Disposal by Lab <input type="checkbox"/> Archive for _____ Months				
Special Instructions/QC Requirements & Comments:											
Custody Seals Intact <input type="checkbox"/> Yes <input type="checkbox"/> No		Custody Seal No			Cooler Temp (°C) Obs'd <i>3.9</i> Corr'd <i>2.6</i>		Therm ID No				
Relinquished by <i>[Signature]</i>		Company: <i>CEC</i>		Date/Time: <i>10/5/22 1400</i>		Received by <i>[Signature]</i>		Company: <i>ETA</i>		Date/Time: <i>10/5/22 1402EST</i>	
Relinquished by <i>[Signature]</i>		Company: <i>ETA</i>		Date/Time: <i>10/5/22 1402EST</i>		Received by <i>[Signature]</i>		Company: <i>ETA</i>		Date/Time: <i>10/5/22 1512</i>	
Relinquished by <i>[Signature]</i>		Company: <i>ETA</i>		Date/Time: <i>10/5/22 1512</i>		Received in Laboratory by <i>[Signature]</i>		Company: <i>ETA</i>		Date/Time: <i>10/5/22 1512</i>	

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# Login Sample Receipt Checklist

Client: Civil & Environmental Consultants Inc

Job Number: 500-223305-1

**Login Number: 223305**

**List Number: 1**

**Creator: Scott, Sherri L**

**List Source: Eurofins Chicago**

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
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	2.6
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").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	



## ANALYTICAL REPORT

Eurofins Chicago  
2417 Bond Street  
University Park, IL 60484  
Tel: (708)534-5200

Laboratory Job ID: 500-223305-2

Client Project/Site: Arconic - Elliot Ditch - Lafayette, IN - EB

**For:**

Civil & Environmental Consultants Inc  
2704 Cherokee Farm Way  
Suite 101  
Knoxville, Tennessee 37920

Attn: Garrett Welch



*Authorized for release by:  
10/11/2022 2:40:28 PM*

Robin Kintz, Project Manager II  
(708)534-5200

[Robin.Kintz@et.eurofinsus.com](mailto:Robin.Kintz@et.eurofinsus.com)

### LINKS

Review your project  
results through



Have a Question?



Visit us at:

[www.eurofinsus.com/Env](http://www.eurofinsus.com/Env)

The test results in this report meet all 2003 NELAC, 2009 TNI, and 2016 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.



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# Case Narrative

Client: Civil & Environmental Consultants Inc  
Project/Site: Arconic - Elliot Ditch - Lafayette, IN - EB

Job ID: 500-223305-2

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**Job ID: 500-223305-2**

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**Laboratory: Eurofins Chicago**

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**Narrative**

**Job Narrative  
500-223305-2**

**Comments**

No additional comments.

**Receipt**

The samples were received on 10/5/2022 3:12 PM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperature of the cooler at receipt was 2.6° C.

**GC Semi VOA**

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

**Organic Prep**

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

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# Detection Summary

Client: Civil & Environmental Consultants Inc  
Project/Site: Arconic - Elliot Ditch - Lafayette, IN - EB

Job ID: 500-223305-2

**Client Sample ID: ED-R3SL-EB007**

**Lab Sample ID: 500-223305-13**

No Detections.

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This Detection Summary does not include radiochemical test results.

Eurofins Chicago

# Method Summary

Client: Civil & Environmental Consultants Inc  
Project/Site: Arconic - Elliot Ditch - Lafayette, IN - EB

Job ID: 500-223305-2

Method	Method Description	Protocol	Laboratory
8082A	Polychlorinated Biphenyls (PCBs) by Gas Chromatography	SW846	EET CHI
3510C	Liquid-Liquid Extraction (Separatory Funnel)	SW846	EET CHI

**Protocol References:**

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

**Laboratory References:**

EET CHI = Eurofins Chicago, 2417 Bond Street, University Park, IL 60484, TEL (708)534-5200

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# Sample Summary

Client: Civil & Environmental Consultants Inc  
Project/Site: Arconic - Elliot Ditch - Lafayette, IN - EB

Job ID: 500-223305-2

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Lab Sample ID	Client Sample ID	Matrix	Collected	Received
500-223305-13	ED-R3SL-EB007	Water	10/05/22 13:15	10/05/22 15:12

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# Client Sample Results

Client: Civil & Environmental Consultants Inc  
 Project/Site: Arconic - Elliot Ditch - Lafayette, IN - EB

Job ID: 500-223305-2

**Client Sample ID: ED-R3SL-EB007**

**Lab Sample ID: 500-223305-13**

**Date Collected: 10/05/22 13:15**

**Matrix: Water**

**Date Received: 10/05/22 15:12**

**Method: SW846 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<0.00043		0.00043		mg/L		10/07/22 11:58	10/10/22 15:56	1
PCB-1221	<0.00043		0.00043		mg/L		10/07/22 11:58	10/10/22 15:56	1
PCB-1232	<0.00043		0.00043		mg/L		10/07/22 11:58	10/10/22 15:56	1
PCB-1242	<0.00043		0.00043		mg/L		10/07/22 11:58	10/10/22 15:56	1
PCB-1248	<0.00043		0.00043		mg/L		10/07/22 11:58	10/10/22 15:56	1
PCB-1254	<0.00043		0.00043		mg/L		10/07/22 11:58	10/10/22 15:56	1
PCB-1260	<0.00043		0.00043		mg/L		10/07/22 11:58	10/10/22 15:56	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	56		30 - 120	10/07/22 11:58	10/10/22 15:56	1
DCB Decachlorobiphenyl	42		30 - 140	10/07/22 11:58	10/10/22 15:56	1

## Definitions/Glossary

Client: Civil & Environmental Consultants Inc  
Project/Site: Arconic - Elliot Ditch - Lafayette, IN - EB

Job ID: 500-223305-2

### Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
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)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
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)
TNTC	Too Numerous To Count

# QC Association Summary

Client: Civil & Environmental Consultants Inc  
Project/Site: Arconic - Elliot Ditch - Lafayette, IN - EB

Job ID: 500-223305-2

## GC Semi VOA

### Prep Batch: 678510

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-223305-13	ED-R3SL-EB007	Total/NA	Water	3510C	
MB 500-678510/1-A	Method Blank	Total/NA	Water	3510C	
LCS 500-678510/2-A	Lab Control Sample	Total/NA	Water	3510C	

### Analysis Batch: 678766

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-223305-13	ED-R3SL-EB007	Total/NA	Water	8082A	678510
MB 500-678510/1-A	Method Blank	Total/NA	Water	8082A	678510
LCS 500-678510/2-A	Lab Control Sample	Total/NA	Water	8082A	678510

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# Surrogate Summary

Client: Civil & Environmental Consultants Inc  
Project/Site: Arconic - Elliot Ditch - Lafayette, IN - EB

Job ID: 500-223305-2

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

Matrix: Water

Prep Type: Total/NA

### Percent Surrogate Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	TCX2	DCBP2
		(30-120)	(30-140)
500-223305-13	ED-R3SL-EB007	56	42
LCS 500-678510/2-A	Lab Control Sample	72	89
MB 500-678510/1-A	Method Blank	64	89

#### Surrogate Legend

TCX = Tetrachloro-m-xylene

DCBP = DCB Decachlorobiphenyl

# QC Sample Results

Client: Civil & Environmental Consultants Inc  
 Project/Site: Arconic - Elliot Ditch - Lafayette, IN - EB

Job ID: 500-223305-2

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

**Lab Sample ID: MB 500-678510/1-A**  
**Matrix: Water**  
**Analysis Batch: 678766**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**  
**Prep Batch: 678510**

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
PCB-1016	<0.00040		0.00040		mg/L		10/07/22 11:58	10/10/22 11:54	1
PCB-1221	<0.00040		0.00040		mg/L		10/07/22 11:58	10/10/22 11:54	1
PCB-1232	<0.00040		0.00040		mg/L		10/07/22 11:58	10/10/22 11:54	1
PCB-1242	<0.00040		0.00040		mg/L		10/07/22 11:58	10/10/22 11:54	1
PCB-1248	<0.00040		0.00040		mg/L		10/07/22 11:58	10/10/22 11:54	1
PCB-1254	<0.00040		0.00040		mg/L		10/07/22 11:58	10/10/22 11:54	1
PCB-1260	<0.00040		0.00040		mg/L		10/07/22 11:58	10/10/22 11:54	1

Surrogate	MB	MB	Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
Tetrachloro-m-xylene	64		30 - 120	10/07/22 11:58	10/10/22 11:54	1
DCB Decachlorobiphenyl	89		30 - 140	10/07/22 11:58	10/10/22 11:54	1

**Lab Sample ID: LCS 500-678510/2-A**  
**Matrix: Water**  
**Analysis Batch: 678766**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**  
**Prep Batch: 678510**

Analyte	Spike Added	LCS	LCS	Unit	D	%Rec	%Rec Limits
		Result	Qualifier				
PCB-1016	0.00400	0.00365		mg/L		91	56 - 120
PCB-1260	0.00400	0.00399		mg/L		100	53 - 137

Surrogate	LCS	LCS	Limits
	%Recovery	Qualifier	
Tetrachloro-m-xylene	72		30 - 120
DCB Decachlorobiphenyl	89		30 - 140

# Lab Chronicle

Client: Civil & Environmental Consultants Inc  
Project/Site: Arconic - Elliot Ditch - Lafayette, IN - EB

Job ID: 500-223305-2

**Client Sample ID: ED-R3SL-EB007**

**Lab Sample ID: 500-223305-13**

**Date Collected: 10/05/22 13:15**

**Matrix: Water**

**Date Received: 10/05/22 15:12**

<u>Prep Type</u>	<u>Batch Type</u>	<u>Batch Method</u>	<u>Run</u>	<u>Dilution Factor</u>	<u>Batch Number</u>	<u>Analyst</u>	<u>Lab</u>	<u>Prepared or Analyzed</u>
Total/NA	Prep	3510C			678510	TS	EET CHI	10/07/22 11:58
Total/NA	Analysis	8082A		1	678766	SS	EET CHI	10/10/22 15:56

**Laboratory References:**

EET CHI = Eurofins Chicago, 2417 Bond Street, University Park, IL 60484, TEL (708)534-5200

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# Accreditation/Certification Summary

Client: Civil & Environmental Consultants Inc  
Project/Site: Arconic - Elliot Ditch - Lafayette, IN - EB

Job ID: 500-223305-2

## Laboratory: Eurofins Chicago

The accreditations/certifications listed below are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Illinois	NELAP	IL00035	04-30-23

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# Chain of Custody Record

524992



Environment Testing  
TestAmerica

TAL-8210

Address \_\_\_\_\_

Regulatory Program:  DW  NPDES  RCRA  Other

Client Contact		Project Manager: <u>G. Welch</u>		Site Contact: <u>G. Welch</u>		Date: <u>10/5/22</u>		COC No		
Company Name <u>CEC</u>		Tel/Email: <u>865-440-1655</u>		Lab Contact: <u>R. Kintz</u>		Carrier: <u>Courier</u>		<u>1</u> of <u>2</u> COCs		
Address <u>2704 Cherokee Farm Way Suite 101</u>		Analysis Turnaround Time <input type="checkbox"/> CALENDAR DAYS <input type="checkbox"/> WORKING DAYS TAT if different from Below _____ <input type="checkbox"/> 2 weeks <input type="checkbox"/> 1 week <u>24 Hour*</u> <input type="checkbox"/> 2 days <u>RUSH</u> <input checked="" type="checkbox"/> 1 day		 500-223305 COC		Filtered Sample (Y/N) Perform MS/MSD (Y/N) PCBs via 808Z		Sampler For Lab Use Only. Walk-in Client <input type="checkbox"/> Lab Sampling <input type="checkbox"/> Job / SDG No <u>500-223305</u>		
City/State/Zip <u>Knoxville, TN 37120</u>										
Phone <u>865-977-9497</u>										
Project Name <u>Elkton Ditch IM Project</u>										
Site <u>Reach 3</u>										
P O # _____										
Sample Identification		Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.	Filtered Sample (Y/N)	Perform MS/MSD (Y/N)	PCBs via 808Z	Sample Specific Notes
1 ED-R3SL-039		10/5/22	0813	C	S	1	X			
2 ED-R3SL-040		10/5/22	0825	C	S	1	X			
3 ED-R3SL-041		10/5/22	0836	C	S	1	X			
4 ED-R3SL-042		10/5/22	0845	C	S	1	X			
5 ED-R3SL-043		10/5/22	0854	C	S	1	X			
6 ED-R3SL-044		10/5/22	0905	C	S	1	X			
7 ED-R3SL-SW007		10/5/22	0929	C	S	1	X			
8 ED-R3SL-SW008		10/5/22	0938	C	S	1	X			
9 ED-R3SL-SW009		10/5/22	0945	C	S	1	X			
10 ED-R3SL-SW001-2		10/5/22	1136	C	S	1	X			
11 ED-R3SL-002-2		10/5/22	1153	C	S	1	X			
12 ED-R3SL-001-2		10/5/22	1205	C	S	1	X			
Preservation Used: 1=Ice, 2=HCl, 3=H2SO4, 4=HNO3, 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							Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)			
<input checked="" type="checkbox"/> Non Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison B <input type="checkbox"/> Unknown							<input type="checkbox"/> Return to Client <input checked="" type="checkbox"/> Disposal by Lab <input type="checkbox"/> Archive for _____ Months			
Special Instructions/QC Requirements & Comments:										
Custody Seals Intact <input type="checkbox"/> Yes <input type="checkbox"/> No		Custody Seal No _____		Cooler Temp (°C) Obs'd <u>3.9</u> Corr'd <u>2.6</u>		Therm ID No _____				
Relinquished by <u>[Signature]</u>		Company <u>CEC</u>		Date/Time <u>10/5/22 1400</u>		Received by <u>[Signature]</u>		Company <u>ETA</u> Date/Time <u>10/5/22 1402 EST</u>		
Relinquished by <u>[Signature]</u>		Company <u>ETA</u>		Date/Time <u>10/5/22 1402 EST</u>		Received by <u>[Signature]</u>		Company <u>ETA</u> Date/Time _____		
Relinquished by _____		Company _____		Date/Time _____		Received in Laboratory by <u>[Signature]</u>		Company <u>ETA</u> Date/Time <u>10/5/22 1512</u>		



## Login Sample Receipt Checklist

Client: Civil & Environmental Consultants Inc

Job Number: 500-223305-2

**Login Number: 223305**

**List Number: 1**

**Creator: Scott, Sherri L**

**List Source: Eurofins Chicago**

Question	Answer	Comment
Radioactivity wasn't checked or is <=/ background as measured by a survey meter.	True	
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	2.6
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").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	



## ANALYTICAL REPORT

Eurofins Chicago  
2417 Bond Street  
University Park, IL 60484  
Tel: (708)534-5200

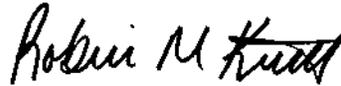
Laboratory Job ID: 500-223305-3

Client Project/Site: Arconic - Elliot Ditch - Lafayette, IN

**For:**

Civil & Environmental Consultants Inc  
2704 Cherokee Farm Way  
Suite 101  
Knoxville, Tennessee 37920

Attn: Garrett Welch



*Authorized for release by:  
10/6/2022 3:23:00 PM*

Robin Kintz, Project Manager II  
(708)534-5200  
[Robin.Kintz@et.eurofinsus.com](mailto:Robin.Kintz@et.eurofinsus.com)

### LINKS

Review your project  
results through



Have a Question?



Visit us at:

[www.eurofinsus.com/Env](http://www.eurofinsus.com/Env)

The test results in this report meet all 2003 NELAC, 2009 TNI, and 2016 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.



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# Case Narrative

Client: Civil & Environmental Consultants Inc  
Project/Site: Arconic - Elliot Ditch - Lafayette, IN

Job ID: 500-223305-3

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## Job ID: 500-223305-3

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### Laboratory: Eurofins Chicago

#### Narrative

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#### Job Narrative 500-223305-3

#### Comments

No additional comments.

#### Receipt

The samples were received on 10/5/2022 3:12 PM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperature of the cooler at receipt was 2.6° C.

#### GC Semi VOA

Method 8082A: DCB Decachlorobiphenyl surrogate recovery for the following sample was outside control limits: ED-R3SL-044 (500-223305-6). Tetrachloro-m-xylene surrogate was within the control limits; therefore, re-extraction and/or re-analysis was not performed.

Method 8082A: The continuing calibration verification (CCVIS) was slightly outside of the control limits for Tetrachloro-m-xylene for analytical batch 500-678250. The CCVIS recoveries of the target analytes and the other surrogate DCB were within the control limits; therefore the data has been reported. (CCVIS 500-678250/3)

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

#### Metals

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

#### Organic Prep

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

# Detection Summary

Client: Civil & Environmental Consultants Inc  
Project/Site: Arconic - Elliot Ditch - Lafayette, IN

Job ID: 500-223305-3

## Client Sample ID: ED-R3SL-042

Lab Sample ID: 500-223305-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
PCB-1248	0.60		0.18		mg/Kg	10	✳	8082A	Total/NA

## Client Sample ID: ED-R3SL-043

Lab Sample ID: 500-223305-5

No Detections.

## Client Sample ID: ED-R3SL-044

Lab Sample ID: 500-223305-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
PCB-1248	3.6		0.89		mg/Kg	50	✳	8082A	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins Chicago



# Method Summary

Client: Civil & Environmental Consultants Inc  
Project/Site: Arconic - Elliot Ditch - Lafayette, IN

Job ID: 500-223305-3

Method	Method Description	Protocol	Laboratory
8082A	Polychlorinated Biphenyls (PCBs) by Gas Chromatography	SW846	EET CHI
Moisture	Percent Moisture	EPA	EET CHI
3541	Automated Soxhlet Extraction	SW846	EET CHI

**Protocol References:**

EPA = US Environmental Protection Agency

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

**Laboratory References:**

EET CHI = Eurofins Chicago, 2417 Bond Street, University Park, IL 60484, TEL (708)534-5200



# Sample Summary

Client: Civil & Environmental Consultants Inc  
Project/Site: Arconic - Elliot Ditch - Lafayette, IN

Job ID: 500-223305-3

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
500-223305-4	ED-R3SL-042	Solid	10/05/22 08:45	10/05/22 15:12
500-223305-5	ED-R3SL-043	Solid	10/05/22 08:54	10/05/22 15:12
500-223305-6	ED-R3SL-044	Solid	10/05/22 09:05	10/05/22 15:12

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# Client Sample Results

Client: Civil & Environmental Consultants Inc  
 Project/Site: Arconic - Elliot Ditch - Lafayette, IN

Job ID: 500-223305-3

**Client Sample ID: ED-R3SL-042**

**Lab Sample ID: 500-223305-4**

**Date Collected: 10/05/22 08:45**

**Matrix: Solid**

**Date Received: 10/05/22 15:12**

**Percent Solids: 92.3**

**Method: SW846 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<0.18		0.18		mg/Kg	☼	10/05/22 16:00	10/06/22 12:27	10
PCB-1221	<0.18		0.18		mg/Kg	☼	10/05/22 16:00	10/06/22 12:27	10
PCB-1232	<0.18		0.18		mg/Kg	☼	10/05/22 16:00	10/06/22 12:27	10
PCB-1242	<0.18		0.18		mg/Kg	☼	10/05/22 16:00	10/06/22 12:27	10
PCB-1248	<b>0.60</b>		0.18		mg/Kg	☼	10/05/22 16:00	10/06/22 12:27	10
PCB-1254	<0.18		0.18		mg/Kg	☼	10/05/22 16:00	10/06/22 12:27	10
PCB-1260	<0.18		0.18		mg/Kg	☼	10/05/22 16:00	10/06/22 12:27	10

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
<i>Tetrachloro-m-xylene</i>	91		49 - 129	10/05/22 16:00	10/06/22 12:27	10
<i>DCB Decachlorobiphenyl</i>	87		37 - 121	10/05/22 16:00	10/06/22 12:27	10

# Client Sample Results

Client: Civil & Environmental Consultants Inc  
 Project/Site: Arconic - Elliot Ditch - Lafayette, IN

Job ID: 500-223305-3

**Client Sample ID: ED-R3SL-043**

**Lab Sample ID: 500-223305-5**

**Date Collected: 10/05/22 08:54**

**Matrix: Solid**

**Date Received: 10/05/22 15:12**

**Percent Solids: 91.9**

**Method: SW846 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<0.18		0.18		mg/Kg	☼	10/05/22 16:00	10/06/22 12:42	10
PCB-1221	<0.18		0.18		mg/Kg	☼	10/05/22 16:00	10/06/22 12:42	10
PCB-1232	<0.18		0.18		mg/Kg	☼	10/05/22 16:00	10/06/22 12:42	10
PCB-1242	<0.18		0.18		mg/Kg	☼	10/05/22 16:00	10/06/22 12:42	10
PCB-1248	<0.18		0.18		mg/Kg	☼	10/05/22 16:00	10/06/22 12:42	10
PCB-1254	<0.18		0.18		mg/Kg	☼	10/05/22 16:00	10/06/22 12:42	10
PCB-1260	<0.18		0.18		mg/Kg	☼	10/05/22 16:00	10/06/22 12:42	10

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	91		49 - 129	10/05/22 16:00	10/06/22 12:42	10
DCB Decachlorobiphenyl	99		37 - 121	10/05/22 16:00	10/06/22 12:42	10

# Client Sample Results

Client: Civil & Environmental Consultants Inc  
 Project/Site: Arconic - Elliot Ditch - Lafayette, IN

Job ID: 500-223305-3

**Client Sample ID: ED-R3SL-044**

**Lab Sample ID: 500-223305-6**

**Date Collected: 10/05/22 09:05**

**Matrix: Solid**

**Date Received: 10/05/22 15:12**

**Percent Solids: 89.4**

**Method: SW846 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<0.89		0.89		mg/Kg	☼	10/05/22 16:00	10/06/22 14:41	50
PCB-1221	<0.89		0.89		mg/Kg	☼	10/05/22 16:00	10/06/22 14:41	50
PCB-1232	<0.89		0.89		mg/Kg	☼	10/05/22 16:00	10/06/22 14:41	50
PCB-1242	<0.89		0.89		mg/Kg	☼	10/05/22 16:00	10/06/22 14:41	50
PCB-1248	<b>3.6</b>		0.89		mg/Kg	☼	10/05/22 16:00	10/06/22 14:41	50
PCB-1254	<0.89		0.89		mg/Kg	☼	10/05/22 16:00	10/06/22 14:41	50
PCB-1260	<0.89		0.89		mg/Kg	☼	10/05/22 16:00	10/06/22 14:41	50

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	113		49 - 129	10/05/22 16:00	10/06/22 14:41	50
DCB Decachlorobiphenyl	125	S1+	37 - 121	10/05/22 16:00	10/06/22 14:41	50

# Definitions/Glossary

Client: Civil & Environmental Consultants Inc  
Project/Site: Arconic - Elliot Ditch - Lafayette, IN

Job ID: 500-223305-3

## Qualifiers

### GC Semi VOA

Qualifier	Qualifier Description
S1+	Surrogate recovery exceeds control limits, high biased.

## Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
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)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
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)
TNTC	Too Numerous To Count

# QC Association Summary

Client: Civil & Environmental Consultants Inc  
Project/Site: Arconic - Elliot Ditch - Lafayette, IN

Job ID: 500-223305-3

## GC Semi VOA

### Prep Batch: 678079

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-223305-4	ED-R3SL-042	Total/NA	Solid	3541	
500-223305-5	ED-R3SL-043	Total/NA	Solid	3541	
500-223305-6	ED-R3SL-044	Total/NA	Solid	3541	
MB 500-678079/1-A	Method Blank	Total/NA	Solid	3541	
LCS 500-678079/2-A	Lab Control Sample	Total/NA	Solid	3541	

### Analysis Batch: 678250

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-223305-4	ED-R3SL-042	Total/NA	Solid	8082A	678079
500-223305-5	ED-R3SL-043	Total/NA	Solid	8082A	678079
500-223305-6	ED-R3SL-044	Total/NA	Solid	8082A	678079
MB 500-678079/1-A	Method Blank	Total/NA	Solid	8082A	678079
LCS 500-678079/2-A	Lab Control Sample	Total/NA	Solid	8082A	678079

## General Chemistry

### Analysis Batch: 678107

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-223305-4	ED-R3SL-042	Total/NA	Solid	Moisture	
500-223305-5	ED-R3SL-043	Total/NA	Solid	Moisture	
500-223305-6	ED-R3SL-044	Total/NA	Solid	Moisture	

# Surrogate Summary

Client: Civil & Environmental Consultants Inc  
Project/Site: Arconic - Elliot Ditch - Lafayette, IN

Job ID: 500-223305-3

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

Matrix: Solid

Prep Type: Total/NA

### Percent Surrogate Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	TCX2	DCBP2
		(49-129)	(37-121)
500-223305-4	ED-R3SL-042	91	87
500-223305-5	ED-R3SL-043	91	99
500-223305-6	ED-R3SL-044	113	125 S1+
LCS 500-678079/2-A	Lab Control Sample	117	100
MB 500-678079/1-A	Method Blank	117	106

#### Surrogate Legend

TCX = Tetrachloro-m-xylene

DCBP = DCB Decachlorobiphenyl

# QC Sample Results

Client: Civil & Environmental Consultants Inc  
 Project/Site: Arconic - Elliot Ditch - Lafayette, IN

Job ID: 500-223305-3

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

**Lab Sample ID: MB 500-678079/1-A**  
**Matrix: Solid**  
**Analysis Batch: 678250**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**  
**Prep Batch: 678079**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<0.17		0.17		mg/Kg		10/05/22 16:00	10/06/22 10:44	10
PCB-1221	<0.17		0.17		mg/Kg		10/05/22 16:00	10/06/22 10:44	10
PCB-1232	<0.17		0.17		mg/Kg		10/05/22 16:00	10/06/22 10:44	10
PCB-1242	<0.17		0.17		mg/Kg		10/05/22 16:00	10/06/22 10:44	10
PCB-1248	<0.17		0.17		mg/Kg		10/05/22 16:00	10/06/22 10:44	10
PCB-1254	<0.17		0.17		mg/Kg		10/05/22 16:00	10/06/22 10:44	10
PCB-1260	<0.17		0.17		mg/Kg		10/05/22 16:00	10/06/22 10:44	10

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
<i>Tetrachloro-m-xylene</i>	117		49 - 129	10/05/22 16:00	10/06/22 10:44	10
<i>DCB Decachlorobiphenyl</i>	106		37 - 121	10/05/22 16:00	10/06/22 10:44	10

**Lab Sample ID: LCS 500-678079/2-A**  
**Matrix: Solid**  
**Analysis Batch: 678250**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**  
**Prep Batch: 678079**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
PCB-1016	1.67	1.73		mg/Kg		104	57 - 120
PCB-1260	1.67	1.93		mg/Kg		116	61 - 125

Surrogate	LCS %Recovery	LCS Qualifier	Limits
<i>Tetrachloro-m-xylene</i>	117		49 - 129
<i>DCB Decachlorobiphenyl</i>	100		37 - 121

# Lab Chronicle

Client: Civil & Environmental Consultants Inc  
 Project/Site: Arconic - Elliot Ditch - Lafayette, IN

Job ID: 500-223305-3

**Client Sample ID: ED-R3SL-042**

**Lab Sample ID: 500-223305-4**

**Date Collected: 10/05/22 08:45**

**Matrix: Solid**

**Date Received: 10/05/22 15:12**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Moisture		1	678107	LWN	EET CHI	10/05/22 15:49

**Client Sample ID: ED-R3SL-042**

**Lab Sample ID: 500-223305-4**

**Date Collected: 10/05/22 08:45**

**Matrix: Solid**

**Date Received: 10/05/22 15:12**

**Percent Solids: 92.3**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3541			678079	EK	EET CHI	10/05/22 16:00 - 10/05/22 18:30 <sup>1</sup>
Total/NA	Analysis	8082A		10	678250	SB	EET CHI	10/06/22 12:27

**Client Sample ID: ED-R3SL-043**

**Lab Sample ID: 500-223305-5**

**Date Collected: 10/05/22 08:54**

**Matrix: Solid**

**Date Received: 10/05/22 15:12**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Moisture		1	678107	LWN	EET CHI	10/05/22 15:49

**Client Sample ID: ED-R3SL-043**

**Lab Sample ID: 500-223305-5**

**Date Collected: 10/05/22 08:54**

**Matrix: Solid**

**Date Received: 10/05/22 15:12**

**Percent Solids: 91.9**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3541			678079	EK	EET CHI	10/05/22 16:00 - 10/05/22 18:30 <sup>1</sup>
Total/NA	Analysis	8082A		10	678250	SB	EET CHI	10/06/22 12:42

**Client Sample ID: ED-R3SL-044**

**Lab Sample ID: 500-223305-6**

**Date Collected: 10/05/22 09:05**

**Matrix: Solid**

**Date Received: 10/05/22 15:12**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Moisture		1	678107	LWN	EET CHI	10/05/22 15:49

**Client Sample ID: ED-R3SL-044**

**Lab Sample ID: 500-223305-6**

**Date Collected: 10/05/22 09:05**

**Matrix: Solid**

**Date Received: 10/05/22 15:12**

**Percent Solids: 89.4**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3541			678079	EK	EET CHI	10/05/22 16:00 - 10/05/22 18:30 <sup>1</sup>
Total/NA	Analysis	8082A		50	678250	SB	EET CHI	10/06/22 14:41

<sup>1</sup> Completion dates and times are reported or not reported per method requirements or individual lab discretion.

**Laboratory References:**

EET CHI = Eurofins Chicago, 2417 Bond Street, University Park, IL 60484, TEL (708)534-5200

# Accreditation/Certification Summary

Client: Civil & Environmental Consultants Inc  
Project/Site: Arconic - Elliot Ditch - Lafayette, IN

Job ID: 500-223305-3

## Laboratory: Eurofins Chicago

The accreditations/certifications listed below are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Illinois	NELAP	IL00035	04-30-23

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# Chain of Custody Record

524992



Environment Testing  
TestAmerica

TAL-8210

Address \_\_\_\_\_

Regulatory Program:  DW  NPDES  RCRA  Other

Client Contact		Project Manager: <i>G. Welch</i>			Site Contact: <i>G. Welch</i>			Date: <i>10/5/22</i>		COC No			
Company Name: <i>CEC</i>		Tel/Email: <i>865-440-1655</i>			Lab Contact: <i>R. Kintz</i>			Carrier: <i>Courier</i>		1 of 2 COCs			
Address: <i>2704 Cherokee Farm Way Suite 101</i>		Analysis Turnaround Time			 500-223305 COC			Sampler		For Lab Use Only.			
City/State/Zip: <i>Knoxville, TN 37120</i>		<input type="checkbox"/> CALENDAR DAYS <input type="checkbox"/> WORKING DAYS TAT if different from Below _____						Walk-in Client		Lab Sampling		Job / SDG No	
Phone: <i>865-977-9497</i>		<input type="checkbox"/> 2 weeks <input type="checkbox"/> 1 week <input type="checkbox"/> 2 days <input checked="" type="checkbox"/> 1 day						24 Hour* RUSH				<i>500-223305</i>	
Project Name: <i>Elkton Ditch IM Project</i>								Filtered Sample (Y/N)				Sample Specific Notes	
Site: <i>Reach 3</i>					Perform MS/MSD (Y/N)								
P O #					PCBS via 808Z								
Sample Identification		Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.	Filtered Sample (Y/N)	Perform MS/MSD (Y/N)	PCBS via 808Z				
<i>ED-R3SL-039</i>		<i>10/5/22</i>	<i>0813</i>	<i>C</i>	<i>S</i>	<i>1</i>	<i>X</i>						
<i>ED-R3SL-040</i>		<i>10/5/22</i>	<i>0825</i>	<i>C</i>	<i>S</i>	<i>1</i>	<i>X</i>						
<i>ED-R3SL-041</i>		<i>10/5/22</i>	<i>0836</i>	<i>C</i>	<i>S</i>	<i>1</i>	<i>X</i>						
<i>ED-R3SL-042</i>		<i>10/5/22</i>	<i>0845</i>	<i>C</i>	<i>S</i>	<i>1</i>	<i>X</i>						
<i>ED-R3SL-043</i>		<i>10/5/22</i>	<i>0854</i>	<i>C</i>	<i>S</i>	<i>1</i>	<i>X</i>						
<i>ED-R3SL-044</i>		<i>10/5/22</i>	<i>0905</i>	<i>C</i>	<i>S</i>	<i>1</i>	<i>X</i>						
<i>ED-R3SL-SW007</i>		<i>10/5/22</i>	<i>0929</i>	<i>C</i>	<i>S</i>	<i>1</i>	<i>X</i>						
<i>ED-R3SL-SW008</i>		<i>10/5/22</i>	<i>0938</i>	<i>C</i>	<i>S</i>	<i>1</i>	<i>X</i>						
<i>ED-R3SL-SW009</i>		<i>10/5/22</i>	<i>0945</i>	<i>C</i>	<i>S</i>	<i>1</i>	<i>X</i>						
<i>ED-R3SL-SW001-2</i>		<i>10/5/22</i>	<i>1136</i>	<i>C</i>	<i>S</i>	<i>1</i>	<i>X</i>						
<i>ED-R3SL-002-2</i>		<i>10/5/22</i>	<i>1153</i>	<i>C</i>	<i>S</i>	<i>1</i>	<i>X</i>						
<i>ED-R3SL-001-2</i>		<i>10/5/22</i>	<i>1205</i>	<i>C</i>	<i>S</i>	<i>1</i>	<i>X</i>						
Preservation Used: 1=Ice, 2=HCl, 3=H2SO4, 4=HNO3, 5=NaOH, 6=Other							Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)						
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"/> Return to Client <input checked="" type="checkbox"/> Disposal by Lab <input type="checkbox"/> Archive for _____ Months						
<input checked="" type="checkbox"/> Non Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison B <input type="checkbox"/> Unknown													
Special Instructions/QC Requirements & Comments:													
Custody Seals Intact <input type="checkbox"/> Yes <input type="checkbox"/> No				Custody Seal No		Cooler Temp (°C) Obs'd <i>3.9</i> Corr'd <i>2.6</i>		Therm ID No _____					
Relinquished by <i>[Signature]</i>		Company: <i>CEC</i>		Date/Time: <i>10/5/22 1400</i>		Received by <i>[Signature]</i>		Company: <i>ETA</i>		Date/Time: <i>10/5/22 1402 EST</i>			
Relinquished by <i>[Signature]</i>		Company: <i>ETA</i>		Date/Time: <i>10/5/22 1402 EST</i>		Received by <i>[Signature]</i>		Company: <i>ETA</i>		Date/Time: _____			
Relinquished by <i>[Signature]</i>		Company: _____		Date/Time: _____		Received in Laboratory by <i>[Signature]</i>		Company: <i>ETA</i>		Date/Time: <i>10/5/22 1512</i>			

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## Login Sample Receipt Checklist

Client: Civil & Environmental Consultants Inc

Job Number: 500-223305-3

**Login Number: 223305**

**List Number: 1**

**Creator: Scott, Sherri L**

**List Source: Eurofins Chicago**

Question	Answer	Comment
Radioactivity wasn't checked or is <math>\leq</math> background as measured by a survey meter.	True	
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	2.6
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 <math><6\text{mm}</math> (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

## ANALYTICAL REPORT

Eurofins Chicago  
2417 Bond Street  
University Park, IL 60484  
Tel: (708)534-5200

Laboratory Job ID: 500-223392-1

Client Project/Site: Arconic - Elliot Ditch - Lafayette, IN

**For:**

Civil & Environmental Consultants Inc  
2704 Cherokee Farm Way  
Suite 101  
Knoxville, Tennessee 37920

Attn: Garrett Welch



*Authorized for release by:*

10/7/2022 4:47:32 PM

Robin Kintz, Project Manager II  
(708)534-5200

[Robin.Kintz@et.eurofinsus.com](mailto:Robin.Kintz@et.eurofinsus.com)

### LINKS

Review your project  
results through



Have a Question?



Visit us at:

[www.eurofinsus.com/Env](http://www.eurofinsus.com/Env)

The test results in this report meet all 2003 NELAC, 2009 TNI, and 2016 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.



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# Case Narrative

Client: Civil & Environmental Consultants Inc  
Project/Site: Arconic - Elliot Ditch - Lafayette, IN

Job ID: 500-223392-1

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## Job ID: 500-223392-1

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### Laboratory: Eurofins Chicago

#### Narrative

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#### Job Narrative 500-223392-1

#### Comments

No additional comments.

#### Receipt

The samples were received on 10/6/2022 3:06 PM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperature of the cooler at receipt was 2.8° C.

#### GC Semi VOA

Method 8082A: Surrogate recovery for the following samples were outside control limits: ED-R3SL-029-1 (500-223392-10) and ED-R3SL-030-1 (500-223392-11). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Method 8082A: DCB Decachlorobiphenyl Surrogate recovery for the following sample was outside control limits: ED-R3SL-SW005-1 (500-223392-12). Tetrachloro-m-xylene Surrogate was within the control limits; therefore, re-extraction and/or re-analysis was not performed.

Method 8082A: The surrogate recovery for Tetrachloro-m-xylene was above the control limit in the following sample: (CCVIS 500-678412/3); however, the surrogate DCB Decachlorobiphenyl was within control limits. The laboratory's SOP allows one surrogate to be outside acceptance limits; therefore, re-analysis was not performed. These results have been reported and qualified.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

#### Metals

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

#### Organic Prep

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

# Detection Summary

Client: Civil & Environmental Consultants Inc  
Project/Site: Arconic - Elliot Ditch - Lafayette, IN

Job ID: 500-223392-1

## Client Sample ID: ED-R3SL-003-2

Lab Sample ID: 500-223392-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
PCB-1248	1.1		0.17		mg/Kg	10	✳	8082A	Total/NA

## Client Sample ID: ED-R3SL-004-2

Lab Sample ID: 500-223392-2

No Detections.

## Client Sample ID: ED-R3SL-DUP004

Lab Sample ID: 500-223392-3

No Detections.

## Client Sample ID: ED-R3SL-014-1

Lab Sample ID: 500-223392-4

No Detections.

## Client Sample ID: ED-R3SL-023-1

Lab Sample ID: 500-223392-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
PCB-1248	0.29		0.18		mg/Kg	10	✳	8082A	Total/NA

## Client Sample ID: ED-R3SL-025-1

Lab Sample ID: 500-223392-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
PCB-1248	1.2		0.18		mg/Kg	10	✳	8082A	Total/NA

## Client Sample ID: ED-R3SL-026-1

Lab Sample ID: 500-223392-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
PCB-1248	1.5		0.18		mg/Kg	10	✳	8082A	Total/NA

## Client Sample ID: ED-R3SL-027-1

Lab Sample ID: 500-223392-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
PCB-1248	1.4		0.18		mg/Kg	10	✳	8082A	Total/NA

## Client Sample ID: ED-R3SL-028-1

Lab Sample ID: 500-223392-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
PCB-1248	1.6		0.17		mg/Kg	10	✳	8082A	Total/NA

## Client Sample ID: ED-R3SL-029-1

Lab Sample ID: 500-223392-10

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
PCB-1248	2.6		0.88		mg/Kg	50	✳	8082A	Total/NA

## Client Sample ID: ED-R3SL-030-1

Lab Sample ID: 500-223392-11

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
PCB-1248	2.3		0.88		mg/Kg	50	✳	8082A	Total/NA

## Client Sample ID: ED-R3SL-SW005-1

Lab Sample ID: 500-223392-12

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
PCB-1248	2.5		0.87		mg/Kg	50	✳	8082A	Total/NA

## Client Sample ID: ED-R3SL-SW006-1

Lab Sample ID: 500-223392-13

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
PCB-1248	2.4		0.86		mg/Kg	50	✳	8082A	Total/NA

This Detection Summary does not include radiochemical test results.

Euromins Chicago

# Detection Summary

Client: Civil & Environmental Consultants Inc  
Project/Site: Arconic - Elliot Ditch - Lafayette, IN

Job ID: 500-223392-1

**Client Sample ID: ED-R3SL-036-1**

**Lab Sample ID: 500-223392-14**

No Detections.

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This Detection Summary does not include radiochemical test results.

Eurofins Chicago

# Method Summary

Client: Civil & Environmental Consultants Inc  
Project/Site: Arconic - Elliot Ditch - Lafayette, IN

Job ID: 500-223392-1

Method	Method Description	Protocol	Laboratory
8082A	Polychlorinated Biphenyls (PCBs) by Gas Chromatography	SW846	EET CHI
Moisture	Percent Moisture	EPA	EET CHI
3541	Automated Soxhlet Extraction	SW846	EET CHI

**Protocol References:**

EPA = US Environmental Protection Agency

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

**Laboratory References:**

EET CHI = Eurofins Chicago, 2417 Bond Street, University Park, IL 60484, TEL (708)534-5200



# Sample Summary

Client: Civil & Environmental Consultants Inc  
Project/Site: Arconic - Elliot Ditch - Lafayette, IN

Job ID: 500-223392-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
500-223392-1	ED-R3SL-003-2	Solid	10/05/22 15:13	10/06/22 15:06
500-223392-2	ED-R3SL-004-2	Solid	10/05/22 15:25	10/06/22 15:06
500-223392-3	ED-R3SL-DUP004	Solid	10/05/22 00:00	10/06/22 15:06
500-223392-4	ED-R3SL-014-1	Solid	10/05/22 15:40	10/06/22 15:06
500-223392-5	ED-R3SL-023-1	Solid	10/06/22 09:15	10/06/22 15:06
500-223392-6	ED-R3SL-025-1	Solid	10/06/22 09:25	10/06/22 15:06
500-223392-7	ED-R3SL-026-1	Solid	10/06/22 09:36	10/06/22 15:06
500-223392-8	ED-R3SL-027-1	Solid	10/06/22 09:47	10/06/22 15:06
500-223392-9	ED-R3SL-028-1	Solid	10/06/22 10:00	10/06/22 15:06
500-223392-10	ED-R3SL-029-1	Solid	10/06/22 10:11	10/06/22 15:06
500-223392-11	ED-R3SL-030-1	Solid	10/06/22 10:18	10/06/22 15:06
500-223392-12	ED-R3SL-SW005-1	Solid	10/06/22 10:31	10/06/22 15:06
500-223392-13	ED-R3SL-SW006-1	Solid	10/06/22 10:44	10/06/22 15:06
500-223392-14	ED-R3SL-036-1	Solid	10/06/22 10:55	10/06/22 15:06

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# Client Sample Results

Client: Civil & Environmental Consultants Inc  
 Project/Site: Arconic - Elliot Ditch - Lafayette, IN

Job ID: 500-223392-1

**Client Sample ID: ED-R3SL-003-2**

**Lab Sample ID: 500-223392-1**

**Date Collected: 10/05/22 15:13**

**Matrix: Solid**

**Date Received: 10/06/22 15:06**

**Percent Solids: 94.0**

**Method: SW846 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<0.17	F1	0.17		mg/Kg	☼	10/06/22 16:10	10/07/22 10:03	10
PCB-1221	<0.17		0.17		mg/Kg	☼	10/06/22 16:10	10/07/22 10:03	10
PCB-1232	<0.17		0.17		mg/Kg	☼	10/06/22 16:10	10/07/22 10:03	10
PCB-1242	<0.17		0.17		mg/Kg	☼	10/06/22 16:10	10/07/22 10:03	10
PCB-1248	1.1		0.17		mg/Kg	☼	10/06/22 16:10	10/07/22 10:03	10
PCB-1254	<0.17		0.17		mg/Kg	☼	10/06/22 16:10	10/07/22 10:03	10
PCB-1260	<0.17	F1	0.17		mg/Kg	☼	10/06/22 16:10	10/07/22 10:03	10

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	116		49 - 129	10/06/22 16:10	10/07/22 10:03	10
DCB Decachlorobiphenyl	106		37 - 121	10/06/22 16:10	10/07/22 10:03	10

# Client Sample Results

Client: Civil & Environmental Consultants Inc  
 Project/Site: Arconic - Elliot Ditch - Lafayette, IN

Job ID: 500-223392-1

**Client Sample ID: ED-R3SL-004-2**

**Lab Sample ID: 500-223392-2**

Date Collected: 10/05/22 15:25

Matrix: Solid

Date Received: 10/06/22 15:06

Percent Solids: 90.8

**Method: SW846 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<0.18		0.18		mg/Kg	☼	10/06/22 16:10	10/07/22 10:47	10
PCB-1221	<0.18		0.18		mg/Kg	☼	10/06/22 16:10	10/07/22 10:47	10
PCB-1232	<0.18		0.18		mg/Kg	☼	10/06/22 16:10	10/07/22 10:47	10
PCB-1242	<0.18		0.18		mg/Kg	☼	10/06/22 16:10	10/07/22 10:47	10
PCB-1248	<0.18		0.18		mg/Kg	☼	10/06/22 16:10	10/07/22 10:47	10
PCB-1254	<0.18		0.18		mg/Kg	☼	10/06/22 16:10	10/07/22 10:47	10
PCB-1260	<0.18		0.18		mg/Kg	☼	10/06/22 16:10	10/07/22 10:47	10

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	111		49 - 129	10/06/22 16:10	10/07/22 10:47	10
DCB Decachlorobiphenyl	99		37 - 121	10/06/22 16:10	10/07/22 10:47	10

# Client Sample Results

Client: Civil & Environmental Consultants Inc  
 Project/Site: Arconic - Elliot Ditch - Lafayette, IN

Job ID: 500-223392-1

**Client Sample ID: ED-R3SL-DUP004**

**Lab Sample ID: 500-223392-3**

**Date Collected: 10/05/22 00:00**

**Matrix: Solid**

**Date Received: 10/06/22 15:06**

**Percent Solids: 90.5**

**Method: SW846 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<0.18		0.18		mg/Kg	☼	10/06/22 16:10	10/07/22 11:02	10
PCB-1221	<0.18		0.18		mg/Kg	☼	10/06/22 16:10	10/07/22 11:02	10
PCB-1232	<0.18		0.18		mg/Kg	☼	10/06/22 16:10	10/07/22 11:02	10
PCB-1242	<0.18		0.18		mg/Kg	☼	10/06/22 16:10	10/07/22 11:02	10
PCB-1248	<0.18		0.18		mg/Kg	☼	10/06/22 16:10	10/07/22 11:02	10
PCB-1254	<0.18		0.18		mg/Kg	☼	10/06/22 16:10	10/07/22 11:02	10
PCB-1260	<0.18		0.18		mg/Kg	☼	10/06/22 16:10	10/07/22 11:02	10

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
<i>Tetrachloro-m-xylene</i>	98		49 - 129	10/06/22 16:10	10/07/22 11:02	10
<i>DCB Decachlorobiphenyl</i>	99		37 - 121	10/06/22 16:10	10/07/22 11:02	10

# Client Sample Results

Client: Civil & Environmental Consultants Inc  
 Project/Site: Arconic - Elliot Ditch - Lafayette, IN

Job ID: 500-223392-1

**Client Sample ID: ED-R3SL-014-1**

**Lab Sample ID: 500-223392-4**

**Date Collected: 10/05/22 15:40**

**Matrix: Solid**

**Date Received: 10/06/22 15:06**

**Percent Solids: 91.7**

**Method: SW846 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<0.18		0.18		mg/Kg	☼	10/06/22 16:10	10/07/22 11:17	10
PCB-1221	<0.18		0.18		mg/Kg	☼	10/06/22 16:10	10/07/22 11:17	10
PCB-1232	<0.18		0.18		mg/Kg	☼	10/06/22 16:10	10/07/22 11:17	10
PCB-1242	<0.18		0.18		mg/Kg	☼	10/06/22 16:10	10/07/22 11:17	10
PCB-1248	<0.18		0.18		mg/Kg	☼	10/06/22 16:10	10/07/22 11:17	10
PCB-1254	<0.18		0.18		mg/Kg	☼	10/06/22 16:10	10/07/22 11:17	10
PCB-1260	<0.18		0.18		mg/Kg	☼	10/06/22 16:10	10/07/22 11:17	10

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	103		49 - 129	10/06/22 16:10	10/07/22 11:17	10
DCB Decachlorobiphenyl	103		37 - 121	10/06/22 16:10	10/07/22 11:17	10

# Client Sample Results

Client: Civil & Environmental Consultants Inc  
 Project/Site: Arconic - Elliot Ditch - Lafayette, IN

Job ID: 500-223392-1

**Client Sample ID: ED-R3SL-023-1**

**Lab Sample ID: 500-223392-5**

**Date Collected: 10/06/22 09:15**

**Matrix: Solid**

**Date Received: 10/06/22 15:06**

**Percent Solids: 93.4**

**Method: SW846 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<0.18		0.18		mg/Kg	☼	10/06/22 16:10	10/07/22 11:32	10
PCB-1221	<0.18		0.18		mg/Kg	☼	10/06/22 16:10	10/07/22 11:32	10
PCB-1232	<0.18		0.18		mg/Kg	☼	10/06/22 16:10	10/07/22 11:32	10
PCB-1242	<0.18		0.18		mg/Kg	☼	10/06/22 16:10	10/07/22 11:32	10
PCB-1248	<b>0.29</b>		0.18		mg/Kg	☼	10/06/22 16:10	10/07/22 11:32	10
PCB-1254	<0.18		0.18		mg/Kg	☼	10/06/22 16:10	10/07/22 11:32	10
PCB-1260	<0.18		0.18		mg/Kg	☼	10/06/22 16:10	10/07/22 11:32	10

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	91		49 - 129	10/06/22 16:10	10/07/22 11:32	10
DCB Decachlorobiphenyl	82		37 - 121	10/06/22 16:10	10/07/22 11:32	10

# Client Sample Results

Client: Civil & Environmental Consultants Inc  
 Project/Site: Arconic - Elliot Ditch - Lafayette, IN

Job ID: 500-223392-1

**Client Sample ID: ED-R3SL-025-1**

**Lab Sample ID: 500-223392-6**

**Date Collected: 10/06/22 09:25**

**Matrix: Solid**

**Date Received: 10/06/22 15:06**

**Percent Solids: 94.1**

**Method: SW846 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<0.18		0.18		mg/Kg	☼	10/06/22 16:10	10/07/22 11:47	10
PCB-1221	<0.18		0.18		mg/Kg	☼	10/06/22 16:10	10/07/22 11:47	10
PCB-1232	<0.18		0.18		mg/Kg	☼	10/06/22 16:10	10/07/22 11:47	10
PCB-1242	<0.18		0.18		mg/Kg	☼	10/06/22 16:10	10/07/22 11:47	10
PCB-1248	1.2		0.18		mg/Kg	☼	10/06/22 16:10	10/07/22 11:47	10
PCB-1254	<0.18		0.18		mg/Kg	☼	10/06/22 16:10	10/07/22 11:47	10
PCB-1260	<0.18		0.18		mg/Kg	☼	10/06/22 16:10	10/07/22 11:47	10

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	117		49 - 129	10/06/22 16:10	10/07/22 11:47	10
DCB Decachlorobiphenyl	116		37 - 121	10/06/22 16:10	10/07/22 11:47	10

# Client Sample Results

Client: Civil & Environmental Consultants Inc  
 Project/Site: Arconic - Elliot Ditch - Lafayette, IN

Job ID: 500-223392-1

**Client Sample ID: ED-R3SL-026-1**

**Lab Sample ID: 500-223392-7**

**Date Collected: 10/06/22 09:36**

**Matrix: Solid**

**Date Received: 10/06/22 15:06**

**Percent Solids: 94.2**

**Method: SW846 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<0.18		0.18		mg/Kg	☼	10/06/22 16:10	10/07/22 12:01	10
PCB-1221	<0.18		0.18		mg/Kg	☼	10/06/22 16:10	10/07/22 12:01	10
PCB-1232	<0.18		0.18		mg/Kg	☼	10/06/22 16:10	10/07/22 12:01	10
PCB-1242	<0.18		0.18		mg/Kg	☼	10/06/22 16:10	10/07/22 12:01	10
PCB-1248	<b>1.5</b>		0.18		mg/Kg	☼	10/06/22 16:10	10/07/22 12:01	10
PCB-1254	<0.18		0.18		mg/Kg	☼	10/06/22 16:10	10/07/22 12:01	10
PCB-1260	<0.18		0.18		mg/Kg	☼	10/06/22 16:10	10/07/22 12:01	10

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
<i>Tetrachloro-m-xylene</i>	106		49 - 129	10/06/22 16:10	10/07/22 12:01	10
<i>DCB Decachlorobiphenyl</i>	94		37 - 121	10/06/22 16:10	10/07/22 12:01	10

# Client Sample Results

Client: Civil & Environmental Consultants Inc  
 Project/Site: Arconic - Elliot Ditch - Lafayette, IN

Job ID: 500-223392-1

**Client Sample ID: ED-R3SL-027-1**

**Lab Sample ID: 500-223392-8**

**Date Collected: 10/06/22 09:47**

**Matrix: Solid**

**Date Received: 10/06/22 15:06**

**Percent Solids: 93.7**

**Method: SW846 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<0.18		0.18		mg/Kg	☼	10/06/22 16:10	10/07/22 12:16	10
PCB-1221	<0.18		0.18		mg/Kg	☼	10/06/22 16:10	10/07/22 12:16	10
PCB-1232	<0.18		0.18		mg/Kg	☼	10/06/22 16:10	10/07/22 12:16	10
PCB-1242	<0.18		0.18		mg/Kg	☼	10/06/22 16:10	10/07/22 12:16	10
PCB-1248	1.4		0.18		mg/Kg	☼	10/06/22 16:10	10/07/22 12:16	10
PCB-1254	<0.18		0.18		mg/Kg	☼	10/06/22 16:10	10/07/22 12:16	10
PCB-1260	<0.18		0.18		mg/Kg	☼	10/06/22 16:10	10/07/22 12:16	10

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	102		49 - 129	10/06/22 16:10	10/07/22 12:16	10
DCB Decachlorobiphenyl	106		37 - 121	10/06/22 16:10	10/07/22 12:16	10

# Client Sample Results

Client: Civil & Environmental Consultants Inc  
 Project/Site: Arconic - Elliot Ditch - Lafayette, IN

Job ID: 500-223392-1

**Client Sample ID: ED-R3SL-028-1**

**Lab Sample ID: 500-223392-9**

**Date Collected: 10/06/22 10:00**

**Matrix: Solid**

**Date Received: 10/06/22 15:06**

**Percent Solids: 94.2**

**Method: SW846 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<0.17		0.17		mg/Kg	☼	10/06/22 16:10	10/07/22 12:31	10
PCB-1221	<0.17		0.17		mg/Kg	☼	10/06/22 16:10	10/07/22 12:31	10
PCB-1232	<0.17		0.17		mg/Kg	☼	10/06/22 16:10	10/07/22 12:31	10
PCB-1242	<0.17		0.17		mg/Kg	☼	10/06/22 16:10	10/07/22 12:31	10
PCB-1248	<b>1.6</b>		0.17		mg/Kg	☼	10/06/22 16:10	10/07/22 12:31	10
PCB-1254	<0.17		0.17		mg/Kg	☼	10/06/22 16:10	10/07/22 12:31	10
PCB-1260	<0.17		0.17		mg/Kg	☼	10/06/22 16:10	10/07/22 12:31	10

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	102		49 - 129	10/06/22 16:10	10/07/22 12:31	10
DCB Decachlorobiphenyl	105		37 - 121	10/06/22 16:10	10/07/22 12:31	10

# Client Sample Results

Client: Civil & Environmental Consultants Inc  
 Project/Site: Arconic - Elliot Ditch - Lafayette, IN

Job ID: 500-223392-1

**Client Sample ID: ED-R3SL-029-1**

**Lab Sample ID: 500-223392-10**

**Date Collected: 10/06/22 10:11**

**Matrix: Solid**

**Date Received: 10/06/22 15:06**

**Percent Solids: 93.7**

**Method: SW846 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<0.88		0.88		mg/Kg	☼	10/06/22 16:10	10/07/22 14:14	50
PCB-1221	<0.88		0.88		mg/Kg	☼	10/06/22 16:10	10/07/22 14:14	50
PCB-1232	<0.88		0.88		mg/Kg	☼	10/06/22 16:10	10/07/22 14:14	50
PCB-1242	<0.88		0.88		mg/Kg	☼	10/06/22 16:10	10/07/22 14:14	50
PCB-1248	<b>2.6</b>		0.88		mg/Kg	☼	10/06/22 16:10	10/07/22 14:14	50
PCB-1254	<0.88		0.88		mg/Kg	☼	10/06/22 16:10	10/07/22 14:14	50
PCB-1260	<0.88		0.88		mg/Kg	☼	10/06/22 16:10	10/07/22 14:14	50

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
<i>Tetrachloro-m-xylene</i>	131	S1+	49 - 129	10/06/22 16:10	10/07/22 14:14	50
<i>DCB Decachlorobiphenyl</i>	134	S1+	37 - 121	10/06/22 16:10	10/07/22 14:14	50

# Client Sample Results

Client: Civil & Environmental Consultants Inc  
 Project/Site: Arconic - Elliot Ditch - Lafayette, IN

Job ID: 500-223392-1

**Client Sample ID: ED-R3SL-030-1**

**Lab Sample ID: 500-223392-11**

**Date Collected: 10/06/22 10:18**

**Matrix: Solid**

**Date Received: 10/06/22 15:06**

**Percent Solids: 93.1**

**Method: SW846 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<0.88		0.88		mg/Kg	☼	10/06/22 16:10	10/07/22 14:29	50
PCB-1221	<0.88		0.88		mg/Kg	☼	10/06/22 16:10	10/07/22 14:29	50
PCB-1232	<0.88		0.88		mg/Kg	☼	10/06/22 16:10	10/07/22 14:29	50
PCB-1242	<0.88		0.88		mg/Kg	☼	10/06/22 16:10	10/07/22 14:29	50
PCB-1248	<b>2.3</b>		0.88		mg/Kg	☼	10/06/22 16:10	10/07/22 14:29	50
PCB-1254	<0.88		0.88		mg/Kg	☼	10/06/22 16:10	10/07/22 14:29	50
PCB-1260	<0.88		0.88		mg/Kg	☼	10/06/22 16:10	10/07/22 14:29	50

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	143	S1+	49 - 129	10/06/22 16:10	10/07/22 14:29	50
DCB Decachlorobiphenyl	154	S1+	37 - 121	10/06/22 16:10	10/07/22 14:29	50

# Client Sample Results

Client: Civil & Environmental Consultants Inc  
 Project/Site: Arconic - Elliot Ditch - Lafayette, IN

Job ID: 500-223392-1

**Client Sample ID: ED-R3SL-SW005-1**

**Lab Sample ID: 500-223392-12**

Date Collected: 10/06/22 10:31

Matrix: Solid

Date Received: 10/06/22 15:06

Percent Solids: 93.9

**Method: SW846 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<0.87		0.87		mg/Kg	☼	10/06/22 16:10	10/07/22 14:44	50
PCB-1221	<0.87		0.87		mg/Kg	☼	10/06/22 16:10	10/07/22 14:44	50
PCB-1232	<0.87		0.87		mg/Kg	☼	10/06/22 16:10	10/07/22 14:44	50
PCB-1242	<0.87		0.87		mg/Kg	☼	10/06/22 16:10	10/07/22 14:44	50
PCB-1248	2.5		0.87		mg/Kg	☼	10/06/22 16:10	10/07/22 14:44	50
PCB-1254	<0.87		0.87		mg/Kg	☼	10/06/22 16:10	10/07/22 14:44	50
PCB-1260	<0.87		0.87		mg/Kg	☼	10/06/22 16:10	10/07/22 14:44	50

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	115		49 - 129	10/06/22 16:10	10/07/22 14:44	50
DCB Decachlorobiphenyl	131	S1+	37 - 121	10/06/22 16:10	10/07/22 14:44	50

# Client Sample Results

Client: Civil & Environmental Consultants Inc  
 Project/Site: Arconic - Elliot Ditch - Lafayette, IN

Job ID: 500-223392-1

**Client Sample ID: ED-R3SL-SW006-1**

**Lab Sample ID: 500-223392-13**

**Date Collected: 10/06/22 10:44**

**Matrix: Solid**

**Date Received: 10/06/22 15:06**

**Percent Solids: 93.5**

**Method: SW846 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<0.86		0.86		mg/Kg	☼	10/06/22 16:10	10/07/22 14:58	50
PCB-1221	<0.86		0.86		mg/Kg	☼	10/06/22 16:10	10/07/22 14:58	50
PCB-1232	<0.86		0.86		mg/Kg	☼	10/06/22 16:10	10/07/22 14:58	50
PCB-1242	<0.86		0.86		mg/Kg	☼	10/06/22 16:10	10/07/22 14:58	50
PCB-1248	2.4		0.86		mg/Kg	☼	10/06/22 16:10	10/07/22 14:58	50
PCB-1254	<0.86		0.86		mg/Kg	☼	10/06/22 16:10	10/07/22 14:58	50
PCB-1260	<0.86		0.86		mg/Kg	☼	10/06/22 16:10	10/07/22 14:58	50

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	112		49 - 129	10/06/22 16:10	10/07/22 14:58	50
DCB Decachlorobiphenyl	116		37 - 121	10/06/22 16:10	10/07/22 14:58	50

# Client Sample Results

Client: Civil & Environmental Consultants Inc  
 Project/Site: Arconic - Elliot Ditch - Lafayette, IN

Job ID: 500-223392-1

**Client Sample ID: ED-R3SL-036-1**

**Lab Sample ID: 500-223392-14**

**Date Collected: 10/06/22 10:55**

**Matrix: Solid**

**Date Received: 10/06/22 15:06**

**Percent Solids: 92.1**

**Method: SW846 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<0.18		0.18		mg/Kg	☼	10/06/22 16:10	10/07/22 13:45	10
PCB-1221	<0.18		0.18		mg/Kg	☼	10/06/22 16:10	10/07/22 13:45	10
PCB-1232	<0.18		0.18		mg/Kg	☼	10/06/22 16:10	10/07/22 13:45	10
PCB-1242	<0.18		0.18		mg/Kg	☼	10/06/22 16:10	10/07/22 13:45	10
PCB-1248	<0.18		0.18		mg/Kg	☼	10/06/22 16:10	10/07/22 13:45	10
PCB-1254	<0.18		0.18		mg/Kg	☼	10/06/22 16:10	10/07/22 13:45	10
PCB-1260	<0.18		0.18		mg/Kg	☼	10/06/22 16:10	10/07/22 13:45	10

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	110		49 - 129	10/06/22 16:10	10/07/22 13:45	10
DCB Decachlorobiphenyl	115		37 - 121	10/06/22 16:10	10/07/22 13:45	10

# Definitions/Glossary

Client: Civil & Environmental Consultants Inc  
Project/Site: Arconic - Elliot Ditch - Lafayette, IN

Job ID: 500-223392-1

## Qualifiers

### GC Semi VOA

Qualifier	Qualifier Description
F1	MS and/or MSD recovery exceeds control limits.
S1+	Surrogate recovery exceeds control limits, high biased.

## Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
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)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
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)
TNTC	Too Numerous To Count

# QC Association Summary

Client: Civil & Environmental Consultants Inc  
 Project/Site: Arconic - Elliot Ditch - Lafayette, IN

Job ID: 500-223392-1

## GC Semi VOA

### Prep Batch: 678366

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-223392-1	ED-R3SL-003-2	Total/NA	Solid	3541	
500-223392-2	ED-R3SL-004-2	Total/NA	Solid	3541	
500-223392-3	ED-R3SL-DUP004	Total/NA	Solid	3541	
500-223392-4	ED-R3SL-014-1	Total/NA	Solid	3541	
500-223392-5	ED-R3SL-023-1	Total/NA	Solid	3541	
500-223392-6	ED-R3SL-025-1	Total/NA	Solid	3541	
500-223392-7	ED-R3SL-026-1	Total/NA	Solid	3541	
500-223392-8	ED-R3SL-027-1	Total/NA	Solid	3541	
500-223392-9	ED-R3SL-028-1	Total/NA	Solid	3541	
500-223392-10	ED-R3SL-029-1	Total/NA	Solid	3541	
500-223392-11	ED-R3SL-030-1	Total/NA	Solid	3541	
500-223392-12	ED-R3SL-SW005-1	Total/NA	Solid	3541	
500-223392-13	ED-R3SL-SW006-1	Total/NA	Solid	3541	
500-223392-14	ED-R3SL-036-1	Total/NA	Solid	3541	
MB 500-678366/1-A	Method Blank	Total/NA	Solid	3541	
LCS 500-678366/2-A	Lab Control Sample	Total/NA	Solid	3541	
500-223392-1 MS	ED-R3SL-003-2	Total/NA	Solid	3541	
500-223392-1 MSD	ED-R3SL-003-2	Total/NA	Solid	3541	

### Analysis Batch: 678412

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-223392-1	ED-R3SL-003-2	Total/NA	Solid	8082A	678366
500-223392-2	ED-R3SL-004-2	Total/NA	Solid	8082A	678366
500-223392-3	ED-R3SL-DUP004	Total/NA	Solid	8082A	678366
500-223392-4	ED-R3SL-014-1	Total/NA	Solid	8082A	678366
500-223392-5	ED-R3SL-023-1	Total/NA	Solid	8082A	678366
500-223392-6	ED-R3SL-025-1	Total/NA	Solid	8082A	678366
500-223392-7	ED-R3SL-026-1	Total/NA	Solid	8082A	678366
500-223392-8	ED-R3SL-027-1	Total/NA	Solid	8082A	678366
500-223392-9	ED-R3SL-028-1	Total/NA	Solid	8082A	678366
500-223392-10	ED-R3SL-029-1	Total/NA	Solid	8082A	678366
500-223392-11	ED-R3SL-030-1	Total/NA	Solid	8082A	678366
500-223392-12	ED-R3SL-SW005-1	Total/NA	Solid	8082A	678366
500-223392-13	ED-R3SL-SW006-1	Total/NA	Solid	8082A	678366
500-223392-14	ED-R3SL-036-1	Total/NA	Solid	8082A	678366
MB 500-678366/1-A	Method Blank	Total/NA	Solid	8082A	678366
LCS 500-678366/2-A	Lab Control Sample	Total/NA	Solid	8082A	678366
500-223392-1 MS	ED-R3SL-003-2	Total/NA	Solid	8082A	678366
500-223392-1 MSD	ED-R3SL-003-2	Total/NA	Solid	8082A	678366

## General Chemistry

### Analysis Batch: 678355

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-223392-1	ED-R3SL-003-2	Total/NA	Solid	Moisture	
500-223392-2	ED-R3SL-004-2	Total/NA	Solid	Moisture	
500-223392-3	ED-R3SL-DUP004	Total/NA	Solid	Moisture	
500-223392-4	ED-R3SL-014-1	Total/NA	Solid	Moisture	
500-223392-5	ED-R3SL-023-1	Total/NA	Solid	Moisture	
500-223392-6	ED-R3SL-025-1	Total/NA	Solid	Moisture	
500-223392-7	ED-R3SL-026-1	Total/NA	Solid	Moisture	

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# QC Association Summary

Client: Civil & Environmental Consultants Inc  
Project/Site: Arconic - Elliot Ditch - Lafayette, IN

Job ID: 500-223392-1

## General Chemistry (Continued)

### Analysis Batch: 678355 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-223392-8	ED-R3SL-027-1	Total/NA	Solid	Moisture	
500-223392-9	ED-R3SL-028-1	Total/NA	Solid	Moisture	
500-223392-10	ED-R3SL-029-1	Total/NA	Solid	Moisture	
500-223392-11	ED-R3SL-030-1	Total/NA	Solid	Moisture	
500-223392-12	ED-R3SL-SW005-1	Total/NA	Solid	Moisture	
500-223392-13	ED-R3SL-SW006-1	Total/NA	Solid	Moisture	
500-223392-14	ED-R3SL-036-1	Total/NA	Solid	Moisture	
500-223392-1 DU	ED-R3SL-003-2	Total/NA	Solid	Moisture	

# Surrogate Summary

Client: Civil & Environmental Consultants Inc  
Project/Site: Arconic - Elliot Ditch - Lafayette, IN

Job ID: 500-223392-1

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

Matrix: Solid

Prep Type: Total/NA

### Percent Surrogate Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	TCX2	DCBP2
		(49-129)	(37-121)
500-223392-1	ED-R3SL-003-2	116	106
500-223392-1 MS	ED-R3SL-003-2	111	111
500-223392-1 MSD	ED-R3SL-003-2	109	109
500-223392-2	ED-R3SL-004-2	111	99
500-223392-3	ED-R3SL-DUP004	98	99
500-223392-4	ED-R3SL-014-1	103	103
500-223392-5	ED-R3SL-023-1	91	82
500-223392-6	ED-R3SL-025-1	117	116
500-223392-7	ED-R3SL-026-1	106	94
500-223392-8	ED-R3SL-027-1	102	106
500-223392-9	ED-R3SL-028-1	102	105
500-223392-10	ED-R3SL-029-1	131 S1+	134 S1+
500-223392-11	ED-R3SL-030-1	143 S1+	154 S1+
500-223392-12	ED-R3SL-SW005-1	115	131 S1+
500-223392-13	ED-R3SL-SW006-1	112	116
500-223392-14	ED-R3SL-036-1	110	115
LCS 500-678366/2-A	Lab Control Sample	106	107
MB 500-678366/1-A	Method Blank	128	114

#### Surrogate Legend

TCX = Tetrachloro-m-xylene

DCBP = DCB Decachlorobiphenyl

# QC Sample Results

Client: Civil & Environmental Consultants Inc  
 Project/Site: Arconic - Elliot Ditch - Lafayette, IN

Job ID: 500-223392-1

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

**Lab Sample ID: MB 500-678366/1-A**  
**Matrix: Solid**  
**Analysis Batch: 678412**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**  
**Prep Batch: 678366**

Analyte	MB MB		RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
PCB-1016	<0.17		0.17		mg/Kg		10/06/22 16:10	10/07/22 09:34	10
PCB-1221	<0.17		0.17		mg/Kg		10/06/22 16:10	10/07/22 09:34	10
PCB-1232	<0.17		0.17		mg/Kg		10/06/22 16:10	10/07/22 09:34	10
PCB-1242	<0.17		0.17		mg/Kg		10/06/22 16:10	10/07/22 09:34	10
PCB-1248	<0.17		0.17		mg/Kg		10/06/22 16:10	10/07/22 09:34	10
PCB-1254	<0.17		0.17		mg/Kg		10/06/22 16:10	10/07/22 09:34	10
PCB-1260	<0.17		0.17		mg/Kg		10/06/22 16:10	10/07/22 09:34	10

Surrogate	MB MB		Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
Tetrachloro-m-xylene	128		49 - 129	10/06/22 16:10	10/07/22 09:34	10
DCB Decachlorobiphenyl	114		37 - 121	10/06/22 16:10	10/07/22 09:34	10

**Lab Sample ID: LCS 500-678366/2-A**  
**Matrix: Solid**  
**Analysis Batch: 678412**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**  
**Prep Batch: 678366**

Analyte	Spike Added	LCS LCS		Unit	D	%Rec	%Rec Limits
		Result	Qualifier				
PCB-1016	1.67	1.67		mg/Kg		100	57 - 120
PCB-1260	1.67	2.01		mg/Kg		121	61 - 125

Surrogate	LCS LCS		Limits
	%Recovery	Qualifier	
Tetrachloro-m-xylene	106		49 - 129
DCB Decachlorobiphenyl	107		37 - 121

**Lab Sample ID: 500-223392-1 MS**  
**Matrix: Solid**  
**Analysis Batch: 678412**

**Client Sample ID: ED-R3SL-003-2**  
**Prep Type: Total/NA**  
**Prep Batch: 678366**

Analyte	Sample Sample		Spike Added	MS MS		Unit	D	%Rec	%Rec Limits
	Result	Qualifier		Result	Qualifier				
PCB-1016	<0.17	F1	1.69	2.54	F1	mg/Kg	☼	150	57 - 120
PCB-1260	<0.17	F1	1.69	2.17	F1	mg/Kg	☼	128	61 - 125

Surrogate	MS MS		Limits
	%Recovery	Qualifier	
Tetrachloro-m-xylene	111		49 - 129
DCB Decachlorobiphenyl	111		37 - 121

**Lab Sample ID: 500-223392-1 MSD**  
**Matrix: Solid**  
**Analysis Batch: 678412**

**Client Sample ID: ED-R3SL-003-2**  
**Prep Type: Total/NA**  
**Prep Batch: 678366**

Analyte	Sample Sample		Spike Added	MSD MSD		Unit	D	%Rec	%Rec Limits	RPD	
	Result	Qualifier		Result	Qualifier					RPD	Limit
PCB-1016	<0.17	F1	1.69	2.66	F1	mg/Kg	☼	157	57 - 120	4	30
PCB-1260	<0.17	F1	1.69	2.16	F1	mg/Kg	☼	128	61 - 125	0	30

Surrogate	MSD MSD		Limits
	%Recovery	Qualifier	
Tetrachloro-m-xylene	109		49 - 129
DCB Decachlorobiphenyl	109		37 - 121

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# Lab Chronicle

Client: Civil & Environmental Consultants Inc  
Project/Site: Arconic - Elliot Ditch - Lafayette, IN

Job ID: 500-223392-1

**Client Sample ID: ED-R3SL-003-2**

**Lab Sample ID: 500-223392-1**

Date Collected: 10/05/22 15:13

Matrix: Solid

Date Received: 10/06/22 15:06

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Moisture		1	678355	LWN	EET CHI	10/06/22 15:44

**Client Sample ID: ED-R3SL-003-2**

**Lab Sample ID: 500-223392-1**

Date Collected: 10/05/22 15:13

Matrix: Solid

Date Received: 10/06/22 15:06

Percent Solids: 94.0

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3541			678366	EK	EET CHI	10/06/22 16:10 - 10/06/22 18:30 <sup>1</sup>
Total/NA	Analysis	8082A		10	678412	SB	EET CHI	10/07/22 10:03

**Client Sample ID: ED-R3SL-004-2**

**Lab Sample ID: 500-223392-2**

Date Collected: 10/05/22 15:25

Matrix: Solid

Date Received: 10/06/22 15:06

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Moisture		1	678355	LWN	EET CHI	10/06/22 15:44

**Client Sample ID: ED-R3SL-004-2**

**Lab Sample ID: 500-223392-2**

Date Collected: 10/05/22 15:25

Matrix: Solid

Date Received: 10/06/22 15:06

Percent Solids: 90.8

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3541			678366	EK	EET CHI	10/06/22 16:10 - 10/06/22 18:30 <sup>1</sup>
Total/NA	Analysis	8082A		10	678412	SB	EET CHI	10/07/22 10:47

**Client Sample ID: ED-R3SL-DUP004**

**Lab Sample ID: 500-223392-3**

Date Collected: 10/05/22 00:00

Matrix: Solid

Date Received: 10/06/22 15:06

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Moisture		1	678355	LWN	EET CHI	10/06/22 15:44

**Client Sample ID: ED-R3SL-DUP004**

**Lab Sample ID: 500-223392-3**

Date Collected: 10/05/22 00:00

Matrix: Solid

Date Received: 10/06/22 15:06

Percent Solids: 90.5

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3541			678366	EK	EET CHI	10/06/22 16:10 - 10/06/22 18:30 <sup>1</sup>
Total/NA	Analysis	8082A		10	678412	SB	EET CHI	10/07/22 11:02

**Client Sample ID: ED-R3SL-014-1**

**Lab Sample ID: 500-223392-4**

Date Collected: 10/05/22 15:40

Matrix: Solid

Date Received: 10/06/22 15:06

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Moisture		1	678355	LWN	EET CHI	10/06/22 15:44

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# Lab Chronicle

Client: Civil & Environmental Consultants Inc  
Project/Site: Arconic - Elliot Ditch - Lafayette, IN

Job ID: 500-223392-1

**Client Sample ID: ED-R3SL-014-1**

**Lab Sample ID: 500-223392-4**

**Date Collected: 10/05/22 15:40**

**Matrix: Solid**

**Date Received: 10/06/22 15:06**

**Percent Solids: 91.7**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3541			678366	EK	EET CHI	10/06/22 16:10 - 10/06/22 18:30 <sup>1</sup>
Total/NA	Analysis	8082A		10	678412	SB	EET CHI	10/07/22 11:17

**Client Sample ID: ED-R3SL-023-1**

**Lab Sample ID: 500-223392-5**

**Date Collected: 10/06/22 09:15**

**Matrix: Solid**

**Date Received: 10/06/22 15:06**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Moisture		1	678355	LWN	EET CHI	10/06/22 15:44

**Client Sample ID: ED-R3SL-023-1**

**Lab Sample ID: 500-223392-5**

**Date Collected: 10/06/22 09:15**

**Matrix: Solid**

**Date Received: 10/06/22 15:06**

**Percent Solids: 93.4**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3541			678366	EK	EET CHI	10/06/22 16:10 - 10/06/22 18:30 <sup>1</sup>
Total/NA	Analysis	8082A		10	678412	SB	EET CHI	10/07/22 11:32

**Client Sample ID: ED-R3SL-025-1**

**Lab Sample ID: 500-223392-6**

**Date Collected: 10/06/22 09:25**

**Matrix: Solid**

**Date Received: 10/06/22 15:06**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Moisture		1	678355	LWN	EET CHI	10/06/22 15:44

**Client Sample ID: ED-R3SL-025-1**

**Lab Sample ID: 500-223392-6**

**Date Collected: 10/06/22 09:25**

**Matrix: Solid**

**Date Received: 10/06/22 15:06**

**Percent Solids: 94.1**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3541			678366	EK	EET CHI	10/06/22 16:10 - 10/06/22 18:30 <sup>1</sup>
Total/NA	Analysis	8082A		10	678412	SB	EET CHI	10/07/22 11:47

**Client Sample ID: ED-R3SL-026-1**

**Lab Sample ID: 500-223392-7**

**Date Collected: 10/06/22 09:36**

**Matrix: Solid**

**Date Received: 10/06/22 15:06**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Moisture		1	678355	LWN	EET CHI	10/06/22 15:44

# Lab Chronicle

Client: Civil & Environmental Consultants Inc  
Project/Site: Arconic - Elliot Ditch - Lafayette, IN

Job ID: 500-223392-1

**Client Sample ID: ED-R3SL-026-1**

**Lab Sample ID: 500-223392-7**

Date Collected: 10/06/22 09:36

Matrix: Solid

Date Received: 10/06/22 15:06

Percent Solids: 94.2

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3541			678366	EK	EET CHI	10/06/22 16:10 - 10/06/22 18:30 <sup>1</sup>
Total/NA	Analysis	8082A		10	678412	SB	EET CHI	10/07/22 12:01

**Client Sample ID: ED-R3SL-027-1**

**Lab Sample ID: 500-223392-8**

Date Collected: 10/06/22 09:47

Matrix: Solid

Date Received: 10/06/22 15:06

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Moisture		1	678355	LWN	EET CHI	10/06/22 15:44

**Client Sample ID: ED-R3SL-027-1**

**Lab Sample ID: 500-223392-8**

Date Collected: 10/06/22 09:47

Matrix: Solid

Date Received: 10/06/22 15:06

Percent Solids: 93.7

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3541			678366	EK	EET CHI	10/06/22 16:10 - 10/06/22 18:30 <sup>1</sup>
Total/NA	Analysis	8082A		10	678412	SB	EET CHI	10/07/22 12:16

**Client Sample ID: ED-R3SL-028-1**

**Lab Sample ID: 500-223392-9**

Date Collected: 10/06/22 10:00

Matrix: Solid

Date Received: 10/06/22 15:06

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Moisture		1	678355	LWN	EET CHI	10/06/22 15:44

**Client Sample ID: ED-R3SL-028-1**

**Lab Sample ID: 500-223392-9**

Date Collected: 10/06/22 10:00

Matrix: Solid

Date Received: 10/06/22 15:06

Percent Solids: 94.2

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3541			678366	EK	EET CHI	10/06/22 16:10 - 10/06/22 18:30 <sup>1</sup>
Total/NA	Analysis	8082A		10	678412	SB	EET CHI	10/07/22 12:31

**Client Sample ID: ED-R3SL-029-1**

**Lab Sample ID: 500-223392-10**

Date Collected: 10/06/22 10:11

Matrix: Solid

Date Received: 10/06/22 15:06

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Moisture		1	678355	LWN	EET CHI	10/06/22 15:44

# Lab Chronicle

Client: Civil & Environmental Consultants Inc  
Project/Site: Arconic - Elliot Ditch - Lafayette, IN

Job ID: 500-223392-1

## Client Sample ID: ED-R3SL-029-1

Date Collected: 10/06/22 10:11

Date Received: 10/06/22 15:06

## Lab Sample ID: 500-223392-10

Matrix: Solid

Percent Solids: 93.7

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3541			678366	EK	EET CHI	10/06/22 16:10 - 10/06/22 18:30 <sup>1</sup>
Total/NA	Analysis	8082A		50	678412	SB	EET CHI	10/07/22 14:14

## Client Sample ID: ED-R3SL-030-1

Date Collected: 10/06/22 10:18

Date Received: 10/06/22 15:06

## Lab Sample ID: 500-223392-11

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Moisture		1	678355	LWN	EET CHI	10/06/22 15:44

## Client Sample ID: ED-R3SL-030-1

Date Collected: 10/06/22 10:18

Date Received: 10/06/22 15:06

## Lab Sample ID: 500-223392-11

Matrix: Solid

Percent Solids: 93.1

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3541			678366	EK	EET CHI	10/06/22 16:10 - 10/06/22 18:30 <sup>1</sup>
Total/NA	Analysis	8082A		50	678412	SB	EET CHI	10/07/22 14:29

## Client Sample ID: ED-R3SL-SW005-1

Date Collected: 10/06/22 10:31

Date Received: 10/06/22 15:06

## Lab Sample ID: 500-223392-12

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Moisture		1	678355	LWN	EET CHI	10/06/22 15:44

## Client Sample ID: ED-R3SL-SW005-1

Date Collected: 10/06/22 10:31

Date Received: 10/06/22 15:06

## Lab Sample ID: 500-223392-12

Matrix: Solid

Percent Solids: 93.9

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3541			678366	EK	EET CHI	10/06/22 16:10 - 10/06/22 18:30 <sup>1</sup>
Total/NA	Analysis	8082A		50	678412	SB	EET CHI	10/07/22 14:44

## Client Sample ID: ED-R3SL-SW006-1

Date Collected: 10/06/22 10:44

Date Received: 10/06/22 15:06

## Lab Sample ID: 500-223392-13

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Moisture		1	678355	LWN	EET CHI	10/06/22 15:44

# Lab Chronicle

Client: Civil & Environmental Consultants Inc  
 Project/Site: Arconic - Elliot Ditch - Lafayette, IN

Job ID: 500-223392-1

**Client Sample ID: ED-R3SL-SW006-1**

**Lab Sample ID: 500-223392-13**

**Date Collected: 10/06/22 10:44**

**Matrix: Solid**

**Date Received: 10/06/22 15:06**

**Percent Solids: 93.5**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3541			678366	EK	EET CHI	10/06/22 16:10 - 10/06/22 18:30 <sup>1</sup>
Total/NA	Analysis	8082A		50	678412	SB	EET CHI	10/07/22 14:58

**Client Sample ID: ED-R3SL-036-1**

**Lab Sample ID: 500-223392-14**

**Date Collected: 10/06/22 10:55**

**Matrix: Solid**

**Date Received: 10/06/22 15:06**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Moisture		1	678355	LWN	EET CHI	10/06/22 15:44

**Client Sample ID: ED-R3SL-036-1**

**Lab Sample ID: 500-223392-14**

**Date Collected: 10/06/22 10:55**

**Matrix: Solid**

**Date Received: 10/06/22 15:06**

**Percent Solids: 92.1**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3541			678366	EK	EET CHI	10/06/22 16:10 - 10/06/22 18:30 <sup>1</sup>
Total/NA	Analysis	8082A		10	678412	SB	EET CHI	10/07/22 13:45

<sup>1</sup> Completion dates and times are reported or not reported per method requirements or individual lab discretion.

**Laboratory References:**

EET CHI = Eurofins Chicago, 2417 Bond Street, University Park, IL 60484, TEL (708)534-5200

# Accreditation/Certification Summary

Client: Civil & Environmental Consultants Inc  
Project/Site: Arconic - Elliot Ditch - Lafayette, IN

Job ID: 500-223392-1

## Laboratory: Eurofins Chicago

The accreditations/certifications listed below are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Illinois	NELAP	IL00035	04-30-23

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Address \_\_\_\_\_

Regulatory Program:  DW  NPDES  RCRA  Other

TAL-8210

Client Contact		Project Manager: <i>G. Welch</i>		Site Contact: <i>G. Welch</i>		Date: <i>10/5 &amp; 10/16/22</i>		COC No	
Company Name: <i>CEC</i>		Tel/Email: <i>865-446-1655</i>		Lab Contact: <i>R. Kintz</i>		Carrier: <i>Carrier</i>		1 of 2 COCs	
Address: <i>2704 Cherokee Farm Way Suite 101</i>		Analysis Turnaround Time		Filtered Sample (Y/N) Perform MS/MSD (Y/N) PCBs via GC/MS		 500-223392 COC		Sampler	
City/State/Zip: <i>Madison, TN 37120</i>		<input type="checkbox"/> CALENDAR DAYS <input type="checkbox"/> WORKING DAYS TAT if different from Below _____						For Lab Use Only:	
Phone: <i>865-933-9497</i>		<input type="checkbox"/> 2 weeks <i>24 Hour*</i> <input type="checkbox"/> 1 week <i>Rush</i> <input type="checkbox"/> 2 days <input checked="" type="checkbox"/> 1 day						Walk-in Client	
Fax								Lab Sampling	
Project Name: <i>Elloch Ditch IM Project</i>						Job / SDG No		<i>500-223392</i>	
Site: <i>Reach 3</i>								Sample Specific Notes	
P O #									
Sample Identification		Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.	Filtered Sample (Y/N)	Perform MS/MSD (Y/N)	PCBs via GC/MS
<i>ED-R3SL-003-2</i>		<i>10/5/22</i>	<i>1513</i>	<i>C</i>	<i>S</i>	<i>3</i>	<i>X</i>	<i>X</i>	
<i>ED-R3SL-004-2</i>		<i>10/5/22</i>	<i>1525</i>	<i>C</i>	<i>S</i>	<i>1</i>	<i>X</i>	<i>X</i>	
<i>ED-R3SL-DUP#05</i>		<i>10/5/22</i>	<i>/</i>	<i>C</i>	<i>S</i>	<i>1</i>	<i>X</i>	<i>X</i>	
<i>ED-R3SL-014-1</i>		<i>10/5/22</i>	<i>1540</i>	<i>C</i>	<i>S</i>	<i>1</i>	<i>X</i>	<i>X</i>	
<i>ED-R3SL-023-1</i>		<i>10/6/22</i>	<i>0915</i>	<i>C</i>	<i>S</i>	<i>1</i>	<i>X</i>	<i>X</i>	
<i>ED-R3SL-025-1</i>		<i>10/6/22</i>	<i>0925</i>	<i>C</i>	<i>S</i>	<i>1</i>	<i>X</i>	<i>X</i>	
<i>ED-R3SL-026-1</i>		<i>10/6/22</i>	<i>0936</i>	<i>C</i>	<i>S</i>	<i>1</i>	<i>X</i>	<i>X</i>	
<i>ED-R3SL-027-1</i>		<i>10/6/22</i>	<i>0947</i>	<i>C</i>	<i>S</i>	<i>1</i>	<i>X</i>	<i>X</i>	
<i>ED-R3SL-028-1</i>		<i>10/6/22</i>	<i>1000</i>	<i>C</i>	<i>S</i>	<i>1</i>	<i>X</i>	<i>X</i>	
<i>ED-R3SL-029-1</i>		<i>10/6/22</i>	<i>1011</i>	<i>C</i>	<i>S</i>	<i>1</i>	<i>X</i>	<i>X</i>	
<i>ED-R3SL-030-1</i>		<i>10/6/22</i>	<i>1018</i>	<i>C</i>	<i>S</i>	<i>1</i>	<i>X</i>	<i>X</i>	
<i>ED-R3SL-SW005-1</i>		<i>10/6/22</i>	<i>1031</i>	<i>C</i>	<i>S</i>	<i>1</i>	<i>X</i>	<i>X</i>	
Preservation Used: 1=Ice, 2=HCl; 3=H2SO4; 4=HNO3; 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					Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)				
<input checked="" type="checkbox"/> Non Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison B <input type="checkbox"/> Unknown					<input type="checkbox"/> Return to Client <input checked="" type="checkbox"/> Disposal by Lab <input type="checkbox"/> Archive for _____ Months				
Special Instructions/QC Requirements & Comments:									
Custody Seals Intact: <input type="checkbox"/> Yes <input type="checkbox"/> No		Custody Seal No		Cooler Temp (°C) Obs'd <i>4.8</i> Corr'd <i>2.0</i>		Therm ID No			
Relinquished by: <i>[Signature]</i>		Company: <i>CEC</i>		Date/Time: <i>10/6/22 1355</i>		Received by: <i>[Signature]</i>		Company: <i>ETA</i>	
Relinquished by: <i>[Signature]</i>		Company: <i>ETA</i>		Date/Time: <i>10/6/22 1506</i>		Received by:		Company:	
Relinquished by:		Company:		Date/Time:		Received in Laboratory by: <i>[Signature]</i>		Company: <i>ETA</i>	
								Date/Time: <i>10/6/22 1506</i>	

# Chain of Custody Record

524992



Environment Testing  
TestAmerica

Address \_\_\_\_\_

Regulatory Program:  DW  NPDES  RCRA  Other

TAL-8210

Client Contact		Project Manager: <u>G. Welch</u>		Site Contact: <u>G. Welch</u>		Date: <u>10/6/22</u>		COC No			
Company Name <u>CEC</u>		Tel/Email: <u>865-440-1655</u>		Lab Contact: <u>R. Kintz</u>		Carrier: <u>Courier</u>		<u>2</u> of <u>2</u> COCs			
Address <u>2704 Cherokee Farm Way Suite 101</u>		Analysis Turnaround Time									
City/State/Zip <u>Knoxville, TN 37120</u>		<input type="checkbox"/> CALENDAR DAYS <input type="checkbox"/> WORKING DAYS		TAT if different from Below _____ <input type="checkbox"/> 2 weeks <input type="checkbox"/> 1 week <u>24 Hour*</u> <input type="checkbox"/> 2 days <u>RUSH</u> <input checked="" type="checkbox"/> 1 day						Sampler	
Phone <u>865-933-9497</u>										For Lab Use Only:	
Fax _____										Walk-in Client <input type="checkbox"/>	
Project Name <u>Elm Ditch IM Project</u>										Lab Sampling <input type="checkbox"/>	
Site <u>Reach 3</u>				Filtered Sample (Y/N) _____ Perform MS / MSD (Y/N) _____ <u>PCBs via 800Z</u>						Job / SDG No	
P O # _____										<u>500-223392</u>	
Sample Identification		Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.			Sample Specific Notes		
<u>13 ED-R3SL-SWCOG-1</u>		<u>10/6/22</u>	<u>1049</u>	<u>C</u>	<u>S</u>	<u>1</u>	<u>X</u>				
<u>14 ED-R3SL-030-1</u>		<u>10/6/22</u>	<u>1055</u>	<u>C</u>	<u>S</u>	<u>1</u>	<u>X</u>				
<u>15 ED-R3SL-EB007</u>		<u>10/6/22</u>	<u>1129</u>	<u>G</u>	<u>W</u>	<u>2</u>	<u>X</u>				
Preservation Used: 1=Ice, 2=HCl; 3=H2SO4; 4=HNO3; 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					Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)						
<input checked="" type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison B <input type="checkbox"/> Unknown					<input type="checkbox"/> Return to Client <input checked="" type="checkbox"/> Disposal by Lab <input type="checkbox"/> Archive for _____ Months						
Special Instructions/QC Requirements & Comments: <u>Standard turn around for ED-R3SL-EB007</u>											
Custody Seals Intact <input type="checkbox"/> Yes <input type="checkbox"/> No		Custody Seal No _____			Cooler Temp (°C) Obs'd _____ Corr'd _____		Therm ID No _____				
Relinquished by <u>[Signature]</u>		Company <u>CEC</u>		Date/Time <u>10/6/22 1358</u>		Received by <u>[Signature]</u>		Company <u>EETA</u>			
Relinquished by <u>[Signature]</u>		Company <u>EETA</u>		Date/Time <u>10/6/22 1506 CST</u>		Received by _____		Company _____			
Relinquished by _____		Company _____		Date/Time _____		Received in Laboratory by <u>[Signature]</u>		Company <u>EETA</u>			
								Date/Time <u>10/6/22 1506</u>			

# Login Sample Receipt Checklist

Client: Civil & Environmental Consultants Inc

Job Number: 500-223392-1

**Login Number: 223392**

**List Number: 1**

**Creator: Scott, Sherri L**

**List Source: Eurofins Chicago**

Question	Answer	Comment
Radioactivity wasn't checked or is <math>\leq</math> background as measured by a survey meter.	True	
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	2.8
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 <math><6\text{mm}</math> (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

## ANALYTICAL REPORT

Eurofins Chicago  
2417 Bond Street  
University Park, IL 60484  
Tel: (708)534-5200

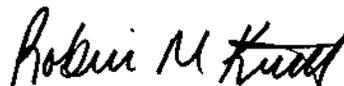
Laboratory Job ID: 500-223392-2

Client Project/Site: Arconic - Elliot Ditch - Lafayette, IN - EB

**For:**

Civil & Environmental Consultants Inc  
2704 Cherokee Farm Way  
Suite 101  
Knoxville, Tennessee 37920

Attn: Garrett Welch



*Authorized for release by:*

10/11/2022 2:41:43 PM

Robin Kintz, Project Manager II  
(708)534-5200

[Robin.Kintz@et.eurofinsus.com](mailto:Robin.Kintz@et.eurofinsus.com)

### LINKS

Review your project  
results through



Have a Question?



Visit us at:

[www.eurofinsus.com/Env](http://www.eurofinsus.com/Env)

The test results in this report meet all 2003 NELAC, 2009 TNI, and 2016 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.

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# Case Narrative

Client: Civil & Environmental Consultants Inc  
Project/Site: Arconic - Elliot Ditch - Lafayette, IN - EB

Job ID: 500-223392-2

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**Job ID: 500-223392-2**

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**Laboratory: Eurofins Chicago**

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**Narrative**

**Job Narrative  
500-223392-2**

**Comments**

No additional comments.

**Receipt**

The samples were received on 10/6/2022 3:06 PM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperature of the cooler at receipt was 2.8° C.

**GC Semi VOA**

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

**Organic Prep**

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

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# Detection Summary

Client: Civil & Environmental Consultants Inc  
Project/Site: Arconic - Elliot Ditch - Lafayette, IN - EB

Job ID: 500-223392-2

**Client Sample ID: ED-R3SL-EB008**

**Lab Sample ID: 500-223392-15**

No Detections.

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This Detection Summary does not include radiochemical test results.

Eurofins Chicago

# Method Summary

Client: Civil & Environmental Consultants Inc  
Project/Site: Arconic - Elliot Ditch - Lafayette, IN - EB

Job ID: 500-223392-2

Method	Method Description	Protocol	Laboratory
8082A	Polychlorinated Biphenyls (PCBs) by Gas Chromatography	SW846	EET CHI
3510C	Liquid-Liquid Extraction (Separatory Funnel)	SW846	EET CHI

**Protocol References:**

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

**Laboratory References:**

EET CHI = Eurofins Chicago, 2417 Bond Street, University Park, IL 60484, TEL (708)534-5200

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# Sample Summary

Client: Civil & Environmental Consultants Inc  
Project/Site: Arconic - Elliot Ditch - Lafayette, IN - EB

Job ID: 500-223392-2

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Lab Sample ID	Client Sample ID	Matrix	Collected	Received
500-223392-15	ED-R3SL-EB008	Water	10/06/22 11:29	10/06/22 15:06

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# Client Sample Results

Client: Civil & Environmental Consultants Inc  
 Project/Site: Arconic - Elliot Ditch - Lafayette, IN - EB

Job ID: 500-223392-2

**Client Sample ID: ED-R3SL-EB008**

**Lab Sample ID: 500-223392-15**

Date Collected: 10/06/22 11:29

Matrix: Water

Date Received: 10/06/22 15:06

**Method: SW846 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<0.00040		0.00040		mg/L		10/07/22 11:58	10/10/22 16:12	1
PCB-1221	<0.00040		0.00040		mg/L		10/07/22 11:58	10/10/22 16:12	1
PCB-1232	<0.00040		0.00040		mg/L		10/07/22 11:58	10/10/22 16:12	1
PCB-1242	<0.00040		0.00040		mg/L		10/07/22 11:58	10/10/22 16:12	1
PCB-1248	<0.00040		0.00040		mg/L		10/07/22 11:58	10/10/22 16:12	1
PCB-1254	<0.00040		0.00040		mg/L		10/07/22 11:58	10/10/22 16:12	1
PCB-1260	<0.00040		0.00040		mg/L		10/07/22 11:58	10/10/22 16:12	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	76		30 - 120	10/07/22 11:58	10/10/22 16:12	1
DCB Decachlorobiphenyl	49		30 - 140	10/07/22 11:58	10/10/22 16:12	1

## Definitions/Glossary

Client: Civil & Environmental Consultants Inc  
Project/Site: Arconic - Elliot Ditch - Lafayette, IN - EB

Job ID: 500-223392-2

### Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
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)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
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)
TNTC	Too Numerous To Count

# QC Association Summary

Client: Civil & Environmental Consultants Inc  
Project/Site: Arconic - Elliot Ditch - Lafayette, IN - EB

Job ID: 500-223392-2

## GC Semi VOA

### Prep Batch: 678510

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-223392-15	ED-R3SL-EB008	Total/NA	Water	3510C	
MB 500-678510/1-A	Method Blank	Total/NA	Water	3510C	
LCS 500-678510/2-A	Lab Control Sample	Total/NA	Water	3510C	

### Analysis Batch: 678766

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-223392-15	ED-R3SL-EB008	Total/NA	Water	8082A	678510
MB 500-678510/1-A	Method Blank	Total/NA	Water	8082A	678510
LCS 500-678510/2-A	Lab Control Sample	Total/NA	Water	8082A	678510

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# Surrogate Summary

Client: Civil & Environmental Consultants Inc  
Project/Site: Arconic - Elliot Ditch - Lafayette, IN - EB

Job ID: 500-223392-2

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

Matrix: Water

Prep Type: Total/NA

### Percent Surrogate Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	TCX2	DCBP2
		(30-120)	(30-140)
500-223392-15	ED-R3SL-EB008	76	49
LCS 500-678510/2-A	Lab Control Sample	72	89
MB 500-678510/1-A	Method Blank	64	89

#### Surrogate Legend

TCX = Tetrachloro-m-xylene

DCBP = DCB Decachlorobiphenyl

# QC Sample Results

Client: Civil & Environmental Consultants Inc  
 Project/Site: Arconic - Elliot Ditch - Lafayette, IN - EB

Job ID: 500-223392-2

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

**Lab Sample ID: MB 500-678510/1-A**  
**Matrix: Water**  
**Analysis Batch: 678766**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**  
**Prep Batch: 678510**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<0.00040		0.00040		mg/L		10/07/22 11:58	10/10/22 11:54	1
PCB-1221	<0.00040		0.00040		mg/L		10/07/22 11:58	10/10/22 11:54	1
PCB-1232	<0.00040		0.00040		mg/L		10/07/22 11:58	10/10/22 11:54	1
PCB-1242	<0.00040		0.00040		mg/L		10/07/22 11:58	10/10/22 11:54	1
PCB-1248	<0.00040		0.00040		mg/L		10/07/22 11:58	10/10/22 11:54	1
PCB-1254	<0.00040		0.00040		mg/L		10/07/22 11:58	10/10/22 11:54	1
PCB-1260	<0.00040		0.00040		mg/L		10/07/22 11:58	10/10/22 11:54	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	64		30 - 120	10/07/22 11:58	10/10/22 11:54	1
DCB Decachlorobiphenyl	89		30 - 140	10/07/22 11:58	10/10/22 11:54	1

**Lab Sample ID: LCS 500-678510/2-A**  
**Matrix: Water**  
**Analysis Batch: 678766**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**  
**Prep Batch: 678510**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
PCB-1016	0.00400	0.00365		mg/L		91	56 - 120
PCB-1260	0.00400	0.00399		mg/L		100	53 - 137

Surrogate	LCS %Recovery	LCS Qualifier	Limits
Tetrachloro-m-xylene	72		30 - 120
DCB Decachlorobiphenyl	89		30 - 140

# Lab Chronicle

Client: Civil & Environmental Consultants Inc  
Project/Site: Arconic - Elliot Ditch - Lafayette, IN - EB

Job ID: 500-223392-2

**Client Sample ID: ED-R3SL-EB008**

**Lab Sample ID: 500-223392-15**

**Date Collected: 10/06/22 11:29**

**Matrix: Water**

**Date Received: 10/06/22 15:06**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3510C			678510	TS	EET CHI	10/07/22 11:58
Total/NA	Analysis	8082A		1	678766	SS	EET CHI	10/10/22 16:12

**Laboratory References:**

EET CHI = Eurofins Chicago, 2417 Bond Street, University Park, IL 60484, TEL (708)534-5200

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# Accreditation/Certification Summary

Client: Civil & Environmental Consultants Inc  
Project/Site: Arconic - Elliot Ditch - Lafayette, IN - EB

Job ID: 500-223392-2

## Laboratory: Eurofins Chicago

The accreditations/certifications listed below are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Illinois	NELAP	IL00035	04-30-23

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Address \_\_\_\_\_

Regulatory Program:  DW  NPDES  RCRA  Other

TAL-8210

Client Contact		Project Manager: <u>G. Welch</u>		Site Contact: <u>G. Welch</u>		Date: <u>10/5 &amp; 10/16/22</u>		COC No	
Company Name <u>CEC</u>		Tel/Email: <u>865-446-1655</u>		Lab Contact: <u>R. Kintz</u>		Carrier: <u>Carrier</u>		1 of 2 COCs	
Address <u>2704 Cherokee Farm Way Suite 101</u>		Analysis Turnaround Time							
City/State/Zip <u>Madison, TN 37220</u>		<input type="checkbox"/> CALENDAR DAYS <input type="checkbox"/> WORKING DAYS TAT if different from Below _____ <input type="checkbox"/> 2 weeks <u>24 Hour*</u> <input type="checkbox"/> 1 week <u>Rush</u> <input type="checkbox"/> 2 days <input checked="" type="checkbox"/> 1 day							
Phone <u>865-933-9497</u>		Filtered Sample (Y/N) _____ Perform MS/MSD (Y/N) _____ PCBs via BCBZ _____		500-223392 COC				Sampler	
Fax _____								For Lab Use Only:	
Project Name <u>ElmH Ditch IM Project</u>								Walk-in Client	
Site <u>Reach 3</u>								Lab Sampling	
P O # _____		Job / SDG No		500-223392		Sample Specific Notes			
Sample Identification		Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.	Filtered Sample (Y/N)	Perform MS/MSD (Y/N)	PCBs via BCBZ
ED-R3SL-003-2		10/5/22	1513	C	S	3	X	X	
ED-R3SL-004-2		10/5/22	1525	C	S	1	X	X	
ED-R3SL-DUP#05		10/5/22		C	S	1	X	X	
ED-R3SL-014-1		10/5/22	1540	C	S	1	X	X	
ED-R3SL-023-1		10/6/22	0915	C	S	1	X	X	
ED-R3SL-025-1		10/6/22	0925	C	S	1	X	X	
ED-R3SL-026-1		10/6/22	0936	C	S	1	X	X	
ED-R3SL-027-1		10/6/22	0947	C	S	1	X	X	
ED-R3SL-028-1		10/6/22	1000	C	S	1	X	X	
ED-R3SL-029-1		10/6/22	1011	C	S	1	X	X	
ED-R3SL-030-1		10/6/22	1018	C	S	1	X	X	
ED-R3SL-SW005-1		10/6/22	1031	C	S	1	X	X	
Preservation Used: 1=Ice, 2=HCl; 3=H2SO4; 4=HNO3; 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					Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)				
<input checked="" type="checkbox"/> Non Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison B <input type="checkbox"/> Unknown					<input type="checkbox"/> Return to Client <input checked="" type="checkbox"/> Disposal by Lab <input type="checkbox"/> Archive for _____ Months				
Special Instructions/QC Requirements & Comments:									
Custody Seals Intact. <input type="checkbox"/> Yes <input type="checkbox"/> No		Custody Seal No		Cooler Temp (°C) Obs'd <u>4.8</u> Corr'd <u>2.0</u>		Therm ID No			
Relinquished by: <u>[Signature]</u>		Company <u>CEC</u>		Date/Time <u>10/6/22 1355</u>		Received by <u>[Signature]</u>		Company <u>EE TA</u>	
Relinquished by: <u>[Signature]</u>		Company <u>EE TA</u>		Date/Time <u>10/6/22 1506</u>		Received by		Company	
Relinquished by		Company		Date/Time		Received in Laboratory by <u>[Signature]</u>		Company <u>EE TA</u>	
								Date/Time <u>10/6/22 1506</u>	

# Chain of Custody Record

524992



Environment Testing  
TestAmerica

Address \_\_\_\_\_

Regulatory Program:  DW  NPDES  RCRA  Other

TAL-8210

Client Contact		Project Manager: <u>G. Welch</u>		Site Contact: <u>G. Welch</u>		Date: <u>10/6/22</u>		COC No	
Company Name <u>CEC</u>		Tel/Email: <u>865-440-1655</u>		Lab Contact: <u>R. Kintz</u>		Carrier: <u>Courier</u>		<u>2</u> of <u>2</u> COCs	
Address <u>2704 Cherokee Farm Way Suite 101</u>		Analysis Turnaround Time							
City/State/Zip <u>Knoxville, TN 37120</u>		<input type="checkbox"/> CALENDAR DAYS <input type="checkbox"/> WORKING DAYS TAT if different from Below _____ <input type="checkbox"/> 2 weeks <u>24 Hour*</u> <input type="checkbox"/> 1 week <u>RUSH</u> <input checked="" type="checkbox"/> 2 days <input checked="" type="checkbox"/> 1 day							
Phone <u>865-933-9497</u>		Filtered Sample (Y/N) Perform MS / MSD (Y/N) <u>PCBs via 800Z</u>						Sampler For Lab Use Only: Walk-in Client <input type="checkbox"/> Lab Sampling <input type="checkbox"/> Job / SDG No <u>500-223392</u>	
Fax _____									
Project Name <u>Elm Ditch IM Project</u>									
Site <u>Reach 3</u>									
P O # _____									
Sample Identification		Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.	Filtered Sample (Y/N)	Perform MS / MSD (Y/N)	Sample Specific Notes
<u>13 ED-R3SL-SWCOG-1</u>		<u>10/6/22</u>	<u>1049</u>	<u>C</u>	<u>S</u>	<u>1</u>		<u>X</u>	
<u>14 ED-R3SL-030-1</u>		<u>10/6/22</u>	<u>1055</u>	<u>C</u>	<u>S</u>	<u>1</u>		<u>X</u>	
<u>15 ED-R3SL-EB007</u>		<u>10/6/22</u>	<u>1129</u>	<u>G</u>	<u>W</u>	<u>2</u>		<u>X</u>	
Preservation Used: 1=Ice, 2=HCl; 3=H2SO4; 4=HNO3; 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					Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)				
<input checked="" type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison B <input type="checkbox"/> Unknown					<input type="checkbox"/> Return to Client <input checked="" type="checkbox"/> Disposal by Lab <input type="checkbox"/> Archive for _____ Months				
Special Instructions/QC Requirements & Comments: <u>Standard turn around for ED-R3SL-EB007</u>									
Custody Seals Intact <input type="checkbox"/> Yes <input type="checkbox"/> No		Custody Seal No _____		Cooler Temp (°C) Obs'd _____ Corr'd _____		Therm ID No _____			
Relinquished by <u>[Signature]</u>		Company <u>CEC</u>		Date/Time <u>10/6/22 1358</u>		Received by <u>[Signature]</u>		Company <u>EETA</u>	
Relinquished by <u>[Signature]</u>		Company <u>EETA</u>		Date/Time <u>10/6/22 1506 CST</u>		Received by _____		Company _____	
Relinquished by _____		Company _____		Date/Time _____		Received in Laboratory by <u>[Signature]</u>		Company <u>EETA</u>	
								Date/Time <u>10/6/22 1506</u>	

## Login Sample Receipt Checklist

Client: Civil & Environmental Consultants Inc

Job Number: 500-223392-2

**Login Number: 223392**

**List Number: 1**

**Creator: Scott, Sherri L**

**List Source: Eurofins Chicago**

Question	Answer	Comment
Radioactivity wasn't checked or is <=/ background as measured by a survey meter.	True	
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	2.8
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").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	



## ANALYTICAL REPORT

Eurofins Chicago  
2417 Bond Street  
University Park, IL 60484  
Tel: (708)534-5200

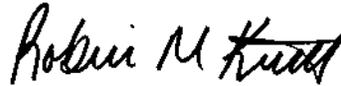
Laboratory Job ID: 500-223469-1

Client Project/Site: Arconic - Elliot Ditch - Lafayette, IN

**For:**

Civil & Environmental Consultants Inc  
2704 Cherokee Farm Way  
Suite 101  
Knoxville, Tennessee 37920

Attn: Garrett Welch



*Authorized for release by:  
10/10/2022 6:27:35 PM*

Robin Kintz, Project Manager II  
(708)534-5200

[Robin.Kintz@et.eurofinsus.com](mailto:Robin.Kintz@et.eurofinsus.com)

### LINKS

Review your project  
results through



Have a Question?



Visit us at:

[www.eurofinsus.com/Env](http://www.eurofinsus.com/Env)

The test results in this report meet all 2003 NELAC, 2009 TNI, and 2016 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.



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# Case Narrative

Client: Civil & Environmental Consultants Inc  
Project/Site: Arconic - Elliot Ditch - Lafayette, IN

Job ID: 500-223469-1

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**Job ID: 500-223469-1**

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**Laboratory: Eurofins Chicago**

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**Narrative**

**Job Narrative  
500-223469-1**

**Comments**

No additional comments.

**Receipt**

The samples were received on 10/7/2022 3:18 PM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperature of the cooler at receipt was 2.2° C.

**GC Semi VOA**

Method 8082A: Surrogate recovery for the following sample was outside the upper control limit: ED-R3SL-064 (500-223469-12). This sample did not contain any target analytes; therefore, re-extraction and/or re-analysis was not performed.

Method 8082A: The continuing calibration verification (CCV) associated with batch 500-678730 recovered above the upper control limit for PCB-1260. The samples associated with this CCV were non-detects for all analytes; therefore, the data have been reported.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

**Metals**

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

**Organic Prep**

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.



# Detection Summary

Client: Civil & Environmental Consultants Inc  
Project/Site: Arconic - Elliot Ditch - Lafayette, IN

Job ID: 500-223469-1

**Client Sample ID: ED-R3SL-064**

**Lab Sample ID: 500-223469-12**

No Detections.

**Client Sample ID: ED-R3SL-063**

**Lab Sample ID: 500-223469-14**

No Detections.

**Client Sample ID: ED-R3SL-061**

**Lab Sample ID: 500-223469-15**

No Detections.

**Client Sample ID: ED-R3SL-062**

**Lab Sample ID: 500-223469-17**

No Detections.

**Client Sample ID: ED-R3SL-060**

**Lab Sample ID: 500-223469-18**

No Detections.

This Detection Summary does not include radiochemical test results.

Eurofins Chicago

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# Method Summary

Client: Civil & Environmental Consultants Inc  
Project/Site: Arconic - Elliot Ditch - Lafayette, IN

Job ID: 500-223469-1

Method	Method Description	Protocol	Laboratory
8082A	Polychlorinated Biphenyls (PCBs) by Gas Chromatography	SW846	EET CHI
Moisture	Percent Moisture	EPA	EET CHI
3541	Automated Soxhlet Extraction	SW846	EET CHI

**Protocol References:**

EPA = US Environmental Protection Agency

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

**Laboratory References:**

EET CHI = Eurofins Chicago, 2417 Bond Street, University Park, IL 60484, TEL (708)534-5200



# Sample Summary

Client: Civil & Environmental Consultants Inc  
Project/Site: Arconic - Elliot Ditch - Lafayette, IN

Job ID: 500-223469-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
500-223469-12	ED-R3SL-064	Solid	10/07/22 11:47	10/07/22 15:18
500-223469-14	ED-R3SL-063	Solid	10/07/22 12:12	10/07/22 15:18
500-223469-15	ED-R3SL-061	Solid	10/07/22 12:20	10/07/22 15:18
500-223469-17	ED-R3SL-062	Solid	10/07/22 13:33	10/07/22 15:18
500-223469-18	ED-R3SL-060	Solid	10/07/22 13:40	10/07/22 15:18

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# Client Sample Results

Client: Civil & Environmental Consultants Inc  
 Project/Site: Arconic - Elliot Ditch - Lafayette, IN

Job ID: 500-223469-1

**Client Sample ID: ED-R3SL-064**

**Lab Sample ID: 500-223469-12**

**Date Collected: 10/07/22 11:47**

**Matrix: Solid**

**Date Received: 10/07/22 15:18**

**Percent Solids: 93.5**

**Method: SW846 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<0.17		0.17		mg/Kg	☼	10/07/22 16:29	10/10/22 14:09	10
PCB-1221	<0.17		0.17		mg/Kg	☼	10/07/22 16:29	10/10/22 14:09	10
PCB-1232	<0.17		0.17		mg/Kg	☼	10/07/22 16:29	10/10/22 14:09	10
PCB-1242	<0.17		0.17		mg/Kg	☼	10/07/22 16:29	10/10/22 14:09	10
PCB-1248	<0.17		0.17		mg/Kg	☼	10/07/22 16:29	10/10/22 14:09	10
PCB-1254	<0.17		0.17		mg/Kg	☼	10/07/22 16:29	10/10/22 14:09	10
PCB-1260	<0.17		0.17		mg/Kg	☼	10/07/22 16:29	10/10/22 14:09	10

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	132	S1+	49 - 129	10/07/22 16:29	10/10/22 14:09	10
DCB Decachlorobiphenyl	124	S1+	37 - 121	10/07/22 16:29	10/10/22 14:09	10

# Client Sample Results

Client: Civil & Environmental Consultants Inc  
 Project/Site: Arconic - Elliot Ditch - Lafayette, IN

Job ID: 500-223469-1

**Client Sample ID: ED-R3SL-063**

**Lab Sample ID: 500-223469-14**

**Date Collected: 10/07/22 12:12**

**Matrix: Solid**

**Date Received: 10/07/22 15:18**

**Percent Solids: 92.2**

**Method: SW846 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<0.18		0.18		mg/Kg	☼	10/07/22 16:29	10/10/22 14:23	10
PCB-1221	<0.18		0.18		mg/Kg	☼	10/07/22 16:29	10/10/22 14:23	10
PCB-1232	<0.18		0.18		mg/Kg	☼	10/07/22 16:29	10/10/22 14:23	10
PCB-1242	<0.18		0.18		mg/Kg	☼	10/07/22 16:29	10/10/22 14:23	10
PCB-1248	<0.18		0.18		mg/Kg	☼	10/07/22 16:29	10/10/22 14:23	10
PCB-1254	<0.18		0.18		mg/Kg	☼	10/07/22 16:29	10/10/22 14:23	10
PCB-1260	<0.18		0.18		mg/Kg	☼	10/07/22 16:29	10/10/22 14:23	10

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	116		49 - 129	10/07/22 16:29	10/10/22 14:23	10
DCB Decachlorobiphenyl	118		37 - 121	10/07/22 16:29	10/10/22 14:23	10

# Client Sample Results

Client: Civil & Environmental Consultants Inc  
 Project/Site: Arconic - Elliot Ditch - Lafayette, IN

Job ID: 500-223469-1

**Client Sample ID: ED-R3SL-061**

**Lab Sample ID: 500-223469-15**

**Date Collected: 10/07/22 12:20**

**Matrix: Solid**

**Date Received: 10/07/22 15:18**

**Percent Solids: 92.6**

**Method: SW846 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<0.18		0.18		mg/Kg	☼	10/07/22 16:29	10/10/22 14:38	10
PCB-1221	<0.18		0.18		mg/Kg	☼	10/07/22 16:29	10/10/22 14:38	10
PCB-1232	<0.18		0.18		mg/Kg	☼	10/07/22 16:29	10/10/22 14:38	10
PCB-1242	<0.18		0.18		mg/Kg	☼	10/07/22 16:29	10/10/22 14:38	10
PCB-1248	<0.18		0.18		mg/Kg	☼	10/07/22 16:29	10/10/22 14:38	10
PCB-1254	<0.18		0.18		mg/Kg	☼	10/07/22 16:29	10/10/22 14:38	10
PCB-1260	<0.18		0.18		mg/Kg	☼	10/07/22 16:29	10/10/22 14:38	10

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	103		49 - 129	10/07/22 16:29	10/10/22 14:38	10
DCB Decachlorobiphenyl	109		37 - 121	10/07/22 16:29	10/10/22 14:38	10

# Client Sample Results

Client: Civil & Environmental Consultants Inc  
 Project/Site: Arconic - Elliot Ditch - Lafayette, IN

Job ID: 500-223469-1

**Client Sample ID: ED-R3SL-062**

**Lab Sample ID: 500-223469-17**

**Date Collected: 10/07/22 13:33**

**Matrix: Solid**

**Date Received: 10/07/22 15:18**

**Percent Solids: 93.6**

**Method: SW846 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<0.17		0.17		mg/Kg	☼	10/07/22 16:29	10/10/22 14:53	10
PCB-1221	<0.17		0.17		mg/Kg	☼	10/07/22 16:29	10/10/22 14:53	10
PCB-1232	<0.17		0.17		mg/Kg	☼	10/07/22 16:29	10/10/22 14:53	10
PCB-1242	<0.17		0.17		mg/Kg	☼	10/07/22 16:29	10/10/22 14:53	10
PCB-1248	<0.17		0.17		mg/Kg	☼	10/07/22 16:29	10/10/22 14:53	10
PCB-1254	<0.17		0.17		mg/Kg	☼	10/07/22 16:29	10/10/22 14:53	10
PCB-1260	<0.17		0.17		mg/Kg	☼	10/07/22 16:29	10/10/22 14:53	10

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	104		49 - 129	10/07/22 16:29	10/10/22 14:53	10
DCB Decachlorobiphenyl	118		37 - 121	10/07/22 16:29	10/10/22 14:53	10

# Client Sample Results

Client: Civil & Environmental Consultants Inc  
 Project/Site: Arconic - Elliot Ditch - Lafayette, IN

Job ID: 500-223469-1

**Client Sample ID: ED-R3SL-060**

**Lab Sample ID: 500-223469-18**

**Date Collected: 10/07/22 13:40**

**Matrix: Solid**

**Date Received: 10/07/22 15:18**

**Percent Solids: 92.7**

**Method: SW846 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<0.18		0.18		mg/Kg	☼	10/07/22 16:29	10/10/22 15:08	10
PCB-1221	<0.18		0.18		mg/Kg	☼	10/07/22 16:29	10/10/22 15:08	10
PCB-1232	<0.18		0.18		mg/Kg	☼	10/07/22 16:29	10/10/22 15:08	10
PCB-1242	<0.18		0.18		mg/Kg	☼	10/07/22 16:29	10/10/22 15:08	10
PCB-1248	<0.18		0.18		mg/Kg	☼	10/07/22 16:29	10/10/22 15:08	10
PCB-1254	<0.18		0.18		mg/Kg	☼	10/07/22 16:29	10/10/22 15:08	10
PCB-1260	<0.18		0.18		mg/Kg	☼	10/07/22 16:29	10/10/22 15:08	10

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	98		49 - 129	10/07/22 16:29	10/10/22 15:08	10
DCB Decachlorobiphenyl	109		37 - 121	10/07/22 16:29	10/10/22 15:08	10

# Definitions/Glossary

Client: Civil & Environmental Consultants Inc  
Project/Site: Arconic - Elliot Ditch - Lafayette, IN

Job ID: 500-223469-1

## Qualifiers

### GC Semi VOA

Qualifier	Qualifier Description
S1+	Surrogate recovery exceeds control limits, high biased.

## Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
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)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
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)
TNTC	Too Numerous To Count

# QC Association Summary

Client: Civil & Environmental Consultants Inc  
Project/Site: Arconic - Elliot Ditch - Lafayette, IN

Job ID: 500-223469-1

## GC Semi VOA

### Prep Batch: 678584

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-223469-12	ED-R3SL-064	Total/NA	Solid	3541	
500-223469-14	ED-R3SL-063	Total/NA	Solid	3541	
500-223469-15	ED-R3SL-061	Total/NA	Solid	3541	
500-223469-17	ED-R3SL-062	Total/NA	Solid	3541	
500-223469-18	ED-R3SL-060	Total/NA	Solid	3541	
MB 500-678584/1-A	Method Blank	Total/NA	Solid	3541	
LCS 500-678584/2-A	Lab Control Sample	Total/NA	Solid	3541	

### Analysis Batch: 678730

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-223469-12	ED-R3SL-064	Total/NA	Solid	8082A	678584
500-223469-14	ED-R3SL-063	Total/NA	Solid	8082A	678584
500-223469-15	ED-R3SL-061	Total/NA	Solid	8082A	678584
500-223469-17	ED-R3SL-062	Total/NA	Solid	8082A	678584
500-223469-18	ED-R3SL-060	Total/NA	Solid	8082A	678584
MB 500-678584/1-A	Method Blank	Total/NA	Solid	8082A	678584
LCS 500-678584/2-A	Lab Control Sample	Total/NA	Solid	8082A	678584

## General Chemistry

### Analysis Batch: 678582

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-223469-12	ED-R3SL-064	Total/NA	Solid	Moisture	
500-223469-14	ED-R3SL-063	Total/NA	Solid	Moisture	
500-223469-15	ED-R3SL-061	Total/NA	Solid	Moisture	
500-223469-17	ED-R3SL-062	Total/NA	Solid	Moisture	
500-223469-18	ED-R3SL-060	Total/NA	Solid	Moisture	

# Surrogate Summary

Client: Civil & Environmental Consultants Inc  
Project/Site: Arconic - Elliot Ditch - Lafayette, IN

Job ID: 500-223469-1

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

Matrix: Solid

Prep Type: Total/NA

### Percent Surrogate Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	TCX2	DCBP2
		(49-129)	(37-121)
500-223469-12	ED-R3SL-064	132 S1+	124 S1+
500-223469-14	ED-R3SL-063	116	118
500-223469-15	ED-R3SL-061	103	109
500-223469-17	ED-R3SL-062	104	118
500-223469-18	ED-R3SL-060	98	109
LCS 500-678584/2-A	Lab Control Sample	113	108
MB 500-678584/1-A	Method Blank	125	115

### Surrogate Legend

TCX = Tetrachloro-m-xylene

DCBP = DCB Decachlorobiphenyl

# QC Sample Results

Client: Civil & Environmental Consultants Inc  
 Project/Site: Arconic - Elliot Ditch - Lafayette, IN

Job ID: 500-223469-1

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

**Lab Sample ID: MB 500-678584/1-A**  
**Matrix: Solid**  
**Analysis Batch: 678730**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**  
**Prep Batch: 678584**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<0.17		0.17		mg/Kg		10/07/22 16:29	10/10/22 09:57	10
PCB-1221	<0.17		0.17		mg/Kg		10/07/22 16:29	10/10/22 09:57	10
PCB-1232	<0.17		0.17		mg/Kg		10/07/22 16:29	10/10/22 09:57	10
PCB-1242	<0.17		0.17		mg/Kg		10/07/22 16:29	10/10/22 09:57	10
PCB-1248	<0.17		0.17		mg/Kg		10/07/22 16:29	10/10/22 09:57	10
PCB-1254	<0.17		0.17		mg/Kg		10/07/22 16:29	10/10/22 09:57	10
PCB-1260	<0.17		0.17		mg/Kg		10/07/22 16:29	10/10/22 09:57	10

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
<i>Tetrachloro-m-xylene</i>	125		49 - 129	10/07/22 16:29	10/10/22 09:57	10
<i>DCB Decachlorobiphenyl</i>	115		37 - 121	10/07/22 16:29	10/10/22 09:57	10

**Lab Sample ID: LCS 500-678584/2-A**  
**Matrix: Solid**  
**Analysis Batch: 678730**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**  
**Prep Batch: 678584**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
PCB-1016	1.67	1.72		mg/Kg		103	57 - 120
PCB-1260	1.67	1.92		mg/Kg		115	61 - 125

Surrogate	LCS %Recovery	LCS Qualifier	Limits
<i>Tetrachloro-m-xylene</i>	113		49 - 129
<i>DCB Decachlorobiphenyl</i>	108		37 - 121

# Lab Chronicle

Client: Civil & Environmental Consultants Inc  
Project/Site: Arconic - Elliot Ditch - Lafayette, IN

Job ID: 500-223469-1

**Client Sample ID: ED-R3SL-064**

**Date Collected: 10/07/22 11:47**

**Date Received: 10/07/22 15:18**

**Lab Sample ID: 500-223469-12**

**Matrix: Solid**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Moisture		1	678582	LWN	EET CHI	10/07/22 16:28

**Client Sample ID: ED-R3SL-064**

**Date Collected: 10/07/22 11:47**

**Date Received: 10/07/22 15:18**

**Lab Sample ID: 500-223469-12**

**Matrix: Solid**

**Percent Solids: 93.5**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3541			678584	EK	EET CHI	10/07/22 16:29 - 10/07/22 19:00 <sup>1</sup>
Total/NA	Analysis	8082A		10	678730	SB	EET CHI	10/10/22 14:09

**Client Sample ID: ED-R3SL-063**

**Date Collected: 10/07/22 12:12**

**Date Received: 10/07/22 15:18**

**Lab Sample ID: 500-223469-14**

**Matrix: Solid**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Moisture		1	678582	LWN	EET CHI	10/07/22 16:28

**Client Sample ID: ED-R3SL-063**

**Date Collected: 10/07/22 12:12**

**Date Received: 10/07/22 15:18**

**Lab Sample ID: 500-223469-14**

**Matrix: Solid**

**Percent Solids: 92.2**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3541			678584	EK	EET CHI	10/07/22 16:29 - 10/07/22 19:00 <sup>1</sup>
Total/NA	Analysis	8082A		10	678730	SB	EET CHI	10/10/22 14:23

**Client Sample ID: ED-R3SL-061**

**Date Collected: 10/07/22 12:20**

**Date Received: 10/07/22 15:18**

**Lab Sample ID: 500-223469-15**

**Matrix: Solid**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Moisture		1	678582	LWN	EET CHI	10/07/22 16:28

**Client Sample ID: ED-R3SL-061**

**Date Collected: 10/07/22 12:20**

**Date Received: 10/07/22 15:18**

**Lab Sample ID: 500-223469-15**

**Matrix: Solid**

**Percent Solids: 92.6**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3541			678584	EK	EET CHI	10/07/22 16:29 - 10/07/22 19:00 <sup>1</sup>
Total/NA	Analysis	8082A		10	678730	SB	EET CHI	10/10/22 14:38

**Client Sample ID: ED-R3SL-062**

**Date Collected: 10/07/22 13:33**

**Date Received: 10/07/22 15:18**

**Lab Sample ID: 500-223469-17**

**Matrix: Solid**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Moisture		1	678582	LWN	EET CHI	10/07/22 16:28

Eurofins Chicago

# Lab Chronicle

Client: Civil & Environmental Consultants Inc  
Project/Site: Arconic - Elliot Ditch - Lafayette, IN

Job ID: 500-223469-1

**Client Sample ID: ED-R3SL-062**

**Lab Sample ID: 500-223469-17**

**Date Collected: 10/07/22 13:33**

**Matrix: Solid**

**Date Received: 10/07/22 15:18**

**Percent Solids: 93.6**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3541			678584	EK	EET CHI	10/07/22 16:29 - 10/07/22 19:00 <sup>1</sup>
Total/NA	Analysis	8082A		10	678730	SB	EET CHI	10/10/22 14:53

**Client Sample ID: ED-R3SL-060**

**Lab Sample ID: 500-223469-18**

**Date Collected: 10/07/22 13:40**

**Matrix: Solid**

**Date Received: 10/07/22 15:18**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Moisture		1	678582	LWN	EET CHI	10/07/22 16:28

**Client Sample ID: ED-R3SL-060**

**Lab Sample ID: 500-223469-18**

**Date Collected: 10/07/22 13:40**

**Matrix: Solid**

**Date Received: 10/07/22 15:18**

**Percent Solids: 92.7**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3541			678584	EK	EET CHI	10/07/22 16:29 - 10/07/22 19:00 <sup>1</sup>
Total/NA	Analysis	8082A		10	678730	SB	EET CHI	10/10/22 15:08

<sup>1</sup> Completion dates and times are reported or not reported per method requirements or individual lab discretion.

**Laboratory References:**

EET CHI = Eurofins Chicago, 2417 Bond Street, University Park, IL 60484, TEL (708)534-5200

# Accreditation/Certification Summary

Client: Civil & Environmental Consultants Inc  
Project/Site: Arconic - Elliot Ditch - Lafayette, IN

Job ID: 500-223469-1

## Laboratory: Eurofins Chicago

The accreditations/certifications listed below are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Illinois	NELAP	IL00035	04-30-23

1

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# Chain of Custody Record 52



Address \_\_\_\_\_

Regulatory Program:  DW  NPDES  RCRA  Other

TAL-8210

Client Contact		Project Manager: <u>G. Welch</u>		Site Contact: <u>G. Welch</u>		Date: <u>500-223469 COC</u>		COC No			
Company Name <u>CEC</u>		Tel/Email: <u>865-446-7655</u>		Lab Contact: <u>R. Kintz</u>		Carrier: <u>Course</u>		_____ of _____ COCs			
Address <u>2704 Cherokee Farm Way Suite 101</u>		Analysis Turnaround Time									
City/State/Zip <u>Knoxville, TN 37920</u>		<input type="checkbox"/> CALENDAR DAYS <input type="checkbox"/> WORKING DAYS		TAT if different from Below _____ <input type="checkbox"/> 2 weeks <input type="checkbox"/> 1 week <u>* 24 Hour *</u> <input type="checkbox"/> 2 days <u>RUSH</u> <input checked="" type="checkbox"/> 1 day						Sampler	
Phone <u>865-977-9997</u>										For Lab Use Only:	
Fax _____										Walk-in Client	
Project Name <u>Elkhead Ditch IM Project</u>										Lab Sampling	
Site <u>Reach 3</u>				Job / SDG No <u>500-223469</u>							
P O # _____											
Sample Identification		Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.	Filtered Sample (Y/N)	Perform MS/MSD (Y/N)	Sample Specific Notes		
<u>ED-R3SL-SW001-3</u>		<u>10/7/22</u>	<u>0830</u>	<u>C</u>	<u>S</u>	<u>1</u>		<u>X</u>			
<u>ED-R3SL-070</u>		<u>10/7/22</u>	<u>0912</u>	<u>C</u>	<u>S</u>	<u>1</u>		<u>X</u>			
<u>ED-R3SL-069</u>		<u>10/7/22</u>	<u>0920</u>	<u>C</u>	<u>S</u>	<u>1</u>		<u>X</u>			
<u>ED-R3SL-068</u>		<u>10/7/22</u>	<u>0931</u>	<u>C</u>	<u>S</u>	<u>1</u>		<u>X</u>			
<u>ED-R3SL-DWP005</u>		<u>10/7/22</u>	<u>/</u>	<u>C</u>	<u>S</u>	<u>1</u>		<u>X</u>			
<u>ED-R3SL-SW019</u>		<u>10/7/22</u>	<u>0945</u>	<u>C</u>	<u>S</u>	<u>3</u>	<u>X</u>	<u>X</u>			
<u>ED-R3SL-067 R3SL-067</u>		<u>10/7/22</u>	<u>1000</u>	<u>C</u>	<u>S</u>	<u>1</u>		<u>X</u>			
<u>ED-R3SL-065</u>		<u>10/7/22</u>	<u>1010</u>	<u>C</u>	<u>S</u>	<u>1</u>		<u>X</u>			
<u>ED-R3SL-SW018</u>		<u>10/7/22</u>	<u>1015</u>	<u>C</u>	<u>S</u>	<u>1</u>		<u>X</u>			
<u>ED-R3SL-044-2</u>		<u>10/7/22</u>	<u>1120</u>	<u>C</u>	<u>S</u>	<u>1</u>		<u>X</u>			
<u>ED-R3SL-045</u>		<u>10/7/22</u>	<u>1131</u>	<u>C</u>	<u>S</u>	<u>1</u>		<u>X</u>			
<u>ED-R3SL-064</u>		<u>10/7/22</u>	<u>1147</u>	<u>C</u>	<u>S</u>	<u>1</u>		<u>X</u>			
Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other _____											
Possible Hazard Identification:					Sample Disposal ( A fee may be assessed if samples are retained longer than 1 month)						
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 checked="" type="checkbox"/> Non-Hazardous <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison B <input type="checkbox"/> Unknown					<input type="checkbox"/> Return to Client <input checked="" type="checkbox"/> Disposal by Lab <input type="checkbox"/> Archive for _____ Months						
Special Instructions/QC Requirements & Comments:											
Custody Seals Intact <input type="checkbox"/> Yes <input type="checkbox"/> No		Custody Seal No _____		Cooler Temp (°C) Obs'd <u>4.2</u> Corr'd <u>2.2</u>		Therm ID No _____					
Relinquished by <u>[Signature]</u>		Company <u>CEC</u>		Date/Time <u>10/7/22 1350</u>		Received by <u>[Signature]</u>		Company <u>EETA</u>			
Relinquished by <u>[Signature]</u>		Company <u>EETA</u>		Date/Time <u>10/7/22 05T</u>		Received by _____		Company _____			
Relinquished by _____		Company _____		Date/Time _____		Received in Laboratory by <u>[Signature]</u>		Company <u>EETA</u>			

# Chain of Custody Record

524992



Environment Testing  
TestAmerica

Address \_\_\_\_\_

Regulatory Program:  DW  NPDES  RCRA  Other

TAL-8210

Client Contact		Project Manager: <u>G. Welch</u>		Site Contact: <u>G. Welch</u>		Date:		COC No	
Company Name <u>CEC</u>		Tel/Email: <u>865-442-7655</u>		Lab Contact: <u>R. Kintz</u>		Carrier: <u>Courier</u>		_____ of _____ COCs	
Address <u>2904 Cherokee Farm Way Suite 101</u>		Analysis Turnaround Time							
City/State/Zip <u>Knoxville, TN 37220</u>		<input type="checkbox"/> CALENDAR DAYS <input type="checkbox"/> WORKING DAYS TAT if different from Below _____ <input type="checkbox"/> 2 weeks <input type="checkbox"/> 1 week <u>* 24 Hour *</u> <input type="checkbox"/> 2 days <u>Rush</u> <input checked="" type="checkbox"/> 1 day							
Phone <u>865-977-9997</u>		Sample Identification Sample Date Sample Time Sample Type (C=Comp, G=Grab) Matrix # of Cont.		Filtered Sample (Y/N) Perform MS / MSD (Y/N) PCBs via <u>80E2</u>				Sampler For Lab Use Only: Walk-in Client Lab Sampling	
Fax _____								Job / SDG No <u>500-223469</u>	
Project Name <u>Ellett Ditch IM Project</u>								Sample Specific Notes	
Site <u>Reach 3</u>									
PO# _____									
ED-R3SL-066		10/7/22 1157		C S 1				X	
ED-R3SL-063		10/7/22 1210		C S 1				X	
ED-R3SL-061		10/7/22 1220		C S 1				X	
ED-R3SL-SW017		10/7/22 1232		C S 1				X	
ED-R3SL-062		10/7/22 1333		C S 1				X	
ED-R3SL-060		10/7/22 1340		C S 1				X	
ED-R3SL-04-EB009		10/7/22 1350		G S 2				X	
Preservation Used: 1=Ice, 2=HCl, 3=H2SO4, 4=HNO3, 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 checked="" type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison B <input type="checkbox"/> Unknown					Sample Disposal ( A fee may be assessed if samples are retained longer than 1 month) <input type="checkbox"/> Return to Client <input checked="" type="checkbox"/> Disposal by Lab <input type="checkbox"/> Archive for _____ Months				
Special Instructions/QC Requirements & Comments:									
Custody Seals Intact <input type="checkbox"/> Yes <input type="checkbox"/> No		Custody Seal No		Cooler Temp (°C) Obs'd _____ Corr'd _____		Therm ID No _____			
Relinquished by <u>[Signature]</u>		Company: <u>CEC</u>		Date/Time: <u>10/7/22 1350</u>		Received by: <u>[Signature]</u>		Company: <u>ETA</u>	
Relinquished by <u>[Signature]</u>		Company: <u>ETA</u>		Date/Time: <u>10/7/22 1415</u>		Received by:		Company:	
Relinquished by		Company:		Date/Time:		Received in Laboratory by: <u>[Signature]</u>		Company: <u>ETA</u>	

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# Login Sample Receipt Checklist

Client: Civil & Environmental Consultants Inc

Job Number: 500-223469-1

**Login Number: 223469**

**List Number: 1**

**Creator: Carbajal, Melina**

**List Source: Eurofins Chicago**

Question	Answer	Comment
Radioactivity wasn't checked or is <=/ background as measured by a survey meter.	True	
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	2.2
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").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	



## ANALYTICAL REPORT

Eurofins Chicago  
2417 Bond Street  
University Park, IL 60484  
Tel: (708)534-5200

Laboratory Job ID: 500-223469-2

Client Project/Site: Arconic - Elliot Ditch - Lafayette, IN

For:

Civil & Environmental Consultants Inc  
2704 Cherokee Farm Way  
Suite 101  
Knoxville, Tennessee 37920

Attn: Garrett Welch



Authorized for release by:

10/10/2022 4:57:44 PM

Robin Kintz, Project Manager II  
(708)534-5200

[Robin.Kintz@et.eurofinsus.com](mailto:Robin.Kintz@et.eurofinsus.com)

### LINKS

Review your project  
results through



Have a Question?



Visit us at:

[www.eurofinsus.com/Env](http://www.eurofinsus.com/Env)

The test results in this report meet all 2003 NELAC, 2009 TNI, and 2016 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.



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# Case Narrative

Client: Civil & Environmental Consultants Inc  
Project/Site: Arconic - Elliot Ditch - Lafayette, IN

Job ID: 500-223469-2

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## Job ID: 500-223469-2

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### Laboratory: Eurofins Chicago

#### Narrative

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#### Job Narrative 500-223469-2

#### Comments

No additional comments.

#### Receipt

The samples were received on 10/7/2022 3:18 PM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperature of the cooler at receipt was 2.2° C.

#### GC Semi VOA

Method 8082A: DCB Decachlorobiphenyl Tetrachloro-m-xylene surrogate recovery for the following sample was outside control limits: (CCVIS 500-678730/3). DCB Decachlorobiphenyl surrogate was within the control limits; therefore, re-analysis was not performed.

Method 8082A: The continuing calibration verification (CCV) associated with batch 500-678730 recovered above the upper control limit for PCB-1260. The samples associated with this CCV were non-detects for all analytes; therefore, the data have been reported.

Method 8082A: Surrogate recovery for the following samples were outside the upper control limit: ED-R3SL-067 (500-223469-7) and ED-R3SL-066 (500-223469-13). This sample did not contain any target analytes; therefore, re-extraction and/or re-analysis was not performed.

Method 8082A: DCB Decachlorobiphenyl surrogate recovery for the following sample was outside control limits: ED-R3SL-SW018 (500-223469-9). Tetrachloro-m-xylene surrogate was within the control limits; therefore, re-extraction and/or re-analysis was not performed.

Method 8082A: Tetrachloro-m-xylene surrogate recovery for the following sample was outside control limits: (CCVIS 500-678789/3). DCB Decachlorobiphenyl surrogate was within the control limits; therefore, re-analysis was not performed.

Method 8082A: DCB Decachlorobiphenyl surrogate recovery for the following sample was outside control limits: ED-R3SL-045 (500-223469-11). Tetrachloro-m-xylene surrogate was within the control limits; therefore, re-extraction and/or re-analysis was not performed.

Method 8082A: Surrogate recovery for the following sample was outside control limits: ED-R3SL-044-1 (500-223469-10). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Method 8082A: Surrogate recovery for the following sample was outside the upper control limit: ED-R3SL-065 (500-223469-8). This sample did not contain any target analytes; therefore, re-extraction and/or re-analysis was not performed.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

#### Metals

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

#### Organic Prep

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

# Detection Summary

Client: Civil & Environmental Consultants Inc  
Project/Site: Arconic - Elliot Ditch - Lafayette, IN

Job ID: 500-223469-2

## Client Sample ID: ED-R3SL-SW001-3

Lab Sample ID: 500-223469-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
PCB-1248	2.8		0.91		mg/Kg	50	✳	8082A	Total/NA

## Client Sample ID: ED-R3SL-070

Lab Sample ID: 500-223469-2

No Detections.

## Client Sample ID: ED-R3SL-069

Lab Sample ID: 500-223469-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
PCB-1248	0.77		0.17		mg/Kg	10	✳	8082A	Total/NA

## Client Sample ID: ED-R3SL-068

Lab Sample ID: 500-223469-4

No Detections.

## Client Sample ID: ED-R3SL-DUP005

Lab Sample ID: 500-223469-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
PCB-1248	0.29		0.18		mg/Kg	10	✳	8082A	Total/NA

## Client Sample ID: ED-R3SL-SW019

Lab Sample ID: 500-223469-6

No Detections.

## Client Sample ID: ED-R3SL-067

Lab Sample ID: 500-223469-7

No Detections.

## Client Sample ID: ED-R3SL-065

Lab Sample ID: 500-223469-8

No Detections.

## Client Sample ID: ED-R3SL-SW018

Lab Sample ID: 500-223469-9

No Detections.

## Client Sample ID: ED-R3SL-044-1

Lab Sample ID: 500-223469-10

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
PCB-1248	0.40		0.18		mg/Kg	10	✳	8082A	Total/NA

## Client Sample ID: ED-R3SL-045

Lab Sample ID: 500-223469-11

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
PCB-1248	0.68		0.18		mg/Kg	10	✳	8082A	Total/NA

## Client Sample ID: ED-R3SL-066

Lab Sample ID: 500-223469-12

No Detections.

## Client Sample ID: ED-R3SL-SW017

Lab Sample ID: 500-223469-13

No Detections.

This Detection Summary does not include radiochemical test results.

Eurofins Chicago

# Method Summary

Client: Civil & Environmental Consultants Inc  
Project/Site: Arconic - Elliot Ditch - Lafayette, IN

Job ID: 500-223469-2

Method	Method Description	Protocol	Laboratory
8082A	Polychlorinated Biphenyls (PCBs) by Gas Chromatography	SW846	EET CHI
Moisture	Percent Moisture	EPA	EET CHI
3541	Automated Soxhlet Extraction	SW846	EET CHI

**Protocol References:**

EPA = US Environmental Protection Agency

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

**Laboratory References:**

EET CHI = Eurofins Chicago, 2417 Bond Street, University Park, IL 60484, TEL (708)534-5200



# Sample Summary

Client: Civil & Environmental Consultants Inc  
Project/Site: Arconic - Elliot Ditch - Lafayette, IN

Job ID: 500-223469-2

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
500-223469-1	ED-R3SL-SW001-3	Solid	10/07/22 08:30	10/07/22 15:18
500-223469-2	ED-R3SL-070	Solid	10/07/22 09:12	10/07/22 15:18
500-223469-3	ED-R3SL-069	Solid	10/07/22 09:20	10/07/22 15:18
500-223469-4	ED-R3SL-068	Solid	10/07/22 09:31	10/07/22 15:18
500-223469-5	ED-R3SL-DUP005	Solid	10/07/22 00:00	10/07/22 15:18
500-223469-6	ED-R3SL-SW019	Solid	10/07/22 09:45	10/07/22 15:18
500-223469-7	ED-R3SL-067	Solid	10/07/22 10:00	10/07/22 15:18
500-223469-8	ED-R3SL-065	Solid	10/07/22 10:10	10/07/22 15:18
500-223469-9	ED-R3SL-SW018	Solid	10/07/22 10:15	10/07/22 15:18
500-223469-10	ED-R3SL-044-1	Solid	10/07/22 11:20	10/07/22 15:18
500-223469-11	ED-R3SL-045	Solid	10/07/22 11:31	10/07/22 15:18
500-223469-13	ED-R3SL-066	Solid	10/07/22 11:57	10/07/22 15:18
500-223469-16	ED-R3SL-SW017	Solid	10/07/22 12:32	10/07/22 15:18

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# Client Sample Results

Client: Civil & Environmental Consultants Inc  
 Project/Site: Arconic - Elliot Ditch - Lafayette, IN

Job ID: 500-223469-2

**Client Sample ID: ED-R3SL-SW001-3**

**Lab Sample ID: 500-223469-1**

**Date Collected: 10/07/22 08:30**

**Matrix: Solid**

**Date Received: 10/07/22 15:18**

**Percent Solids: 89.5**

**Method: SW846 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<0.91		0.91		mg/Kg	☼	10/07/22 16:29	10/10/22 12:43	50
PCB-1221	<0.91		0.91		mg/Kg	☼	10/07/22 16:29	10/10/22 12:43	50
PCB-1232	<0.91		0.91		mg/Kg	☼	10/07/22 16:29	10/10/22 12:43	50
PCB-1242	<0.91		0.91		mg/Kg	☼	10/07/22 16:29	10/10/22 12:43	50
PCB-1248	<b>2.8</b>		0.91		mg/Kg	☼	10/07/22 16:29	10/10/22 12:43	50
PCB-1254	<0.91		0.91		mg/Kg	☼	10/07/22 16:29	10/10/22 12:43	50
PCB-1260	<0.91		0.91		mg/Kg	☼	10/07/22 16:29	10/10/22 12:43	50

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	85		49 - 129	10/07/22 16:29	10/10/22 12:43	50
DCB Decachlorobiphenyl	103		37 - 121	10/07/22 16:29	10/10/22 12:43	50

# Client Sample Results

Client: Civil & Environmental Consultants Inc  
 Project/Site: Arconic - Elliot Ditch - Lafayette, IN

Job ID: 500-223469-2

**Client Sample ID: ED-R3SL-070**

**Lab Sample ID: 500-223469-2**

**Date Collected: 10/07/22 09:12**

**Matrix: Solid**

**Date Received: 10/07/22 15:18**

**Percent Solids: 92.7**

**Method: SW846 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<0.17		0.17		mg/Kg	☼	10/07/22 16:29	10/10/22 10:41	10
PCB-1221	<0.17		0.17		mg/Kg	☼	10/07/22 16:29	10/10/22 10:41	10
PCB-1232	<0.17		0.17		mg/Kg	☼	10/07/22 16:29	10/10/22 10:41	10
PCB-1242	<0.17		0.17		mg/Kg	☼	10/07/22 16:29	10/10/22 10:41	10
PCB-1248	<0.17		0.17		mg/Kg	☼	10/07/22 16:29	10/10/22 10:41	10
PCB-1254	<0.17		0.17		mg/Kg	☼	10/07/22 16:29	10/10/22 10:41	10
PCB-1260	<0.17		0.17		mg/Kg	☼	10/07/22 16:29	10/10/22 10:41	10

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	121		49 - 129	10/07/22 16:29	10/10/22 10:41	10
DCB Decachlorobiphenyl	109		37 - 121	10/07/22 16:29	10/10/22 10:41	10

# Client Sample Results

Client: Civil & Environmental Consultants Inc  
 Project/Site: Arconic - Elliot Ditch - Lafayette, IN

Job ID: 500-223469-2

**Client Sample ID: ED-R3SL-069**

**Lab Sample ID: 500-223469-3**

**Date Collected: 10/07/22 09:20**

**Matrix: Solid**

**Date Received: 10/07/22 15:18**

**Percent Solids: 93.0**

**Method: SW846 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<0.17		0.17		mg/Kg	☼	10/07/22 16:29	10/10/22 12:58	10
PCB-1221	<0.17		0.17		mg/Kg	☼	10/07/22 16:29	10/10/22 12:58	10
PCB-1232	<0.17		0.17		mg/Kg	☼	10/07/22 16:29	10/10/22 12:58	10
PCB-1242	<0.17		0.17		mg/Kg	☼	10/07/22 16:29	10/10/22 12:58	10
PCB-1248	<b>0.77</b>		0.17		mg/Kg	☼	10/07/22 16:29	10/10/22 12:58	10
PCB-1254	<0.17		0.17		mg/Kg	☼	10/07/22 16:29	10/10/22 12:58	10
PCB-1260	<0.17		0.17		mg/Kg	☼	10/07/22 16:29	10/10/22 12:58	10

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	106		49 - 129	10/07/22 16:29	10/10/22 12:58	10
DCB Decachlorobiphenyl	99		37 - 121	10/07/22 16:29	10/10/22 12:58	10

# Client Sample Results

Client: Civil & Environmental Consultants Inc  
 Project/Site: Arconic - Elliot Ditch - Lafayette, IN

Job ID: 500-223469-2

**Client Sample ID: ED-R3SL-068**

**Lab Sample ID: 500-223469-4**

**Date Collected: 10/07/22 09:31**

**Matrix: Solid**

**Date Received: 10/07/22 15:18**

**Percent Solids: 92.6**

**Method: SW846 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<0.17		0.17		mg/Kg	☼	10/07/22 16:29	10/10/22 11:11	10
PCB-1221	<0.17		0.17		mg/Kg	☼	10/07/22 16:29	10/10/22 11:11	10
PCB-1232	<0.17		0.17		mg/Kg	☼	10/07/22 16:29	10/10/22 11:11	10
PCB-1242	<0.17		0.17		mg/Kg	☼	10/07/22 16:29	10/10/22 11:11	10
PCB-1248	<0.17		0.17		mg/Kg	☼	10/07/22 16:29	10/10/22 11:11	10
PCB-1254	<0.17		0.17		mg/Kg	☼	10/07/22 16:29	10/10/22 11:11	10
PCB-1260	<0.17		0.17		mg/Kg	☼	10/07/22 16:29	10/10/22 11:11	10

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	102		49 - 129	10/07/22 16:29	10/10/22 11:11	10
DCB Decachlorobiphenyl	106		37 - 121	10/07/22 16:29	10/10/22 11:11	10

# Client Sample Results

Client: Civil & Environmental Consultants Inc  
 Project/Site: Arconic - Elliot Ditch - Lafayette, IN

Job ID: 500-223469-2

**Client Sample ID: ED-R3SL-DUP005**

**Lab Sample ID: 500-223469-5**

**Date Collected: 10/07/22 00:00**

**Matrix: Solid**

**Date Received: 10/07/22 15:18**

**Percent Solids: 92.2**

**Method: SW846 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<0.18		0.18		mg/Kg	☼	10/07/22 16:29	10/10/22 13:12	10
PCB-1221	<0.18		0.18		mg/Kg	☼	10/07/22 16:29	10/10/22 13:12	10
PCB-1232	<0.18		0.18		mg/Kg	☼	10/07/22 16:29	10/10/22 13:12	10
PCB-1242	<0.18		0.18		mg/Kg	☼	10/07/22 16:29	10/10/22 13:12	10
PCB-1248	<b>0.29</b>		0.18		mg/Kg	☼	10/07/22 16:29	10/10/22 13:12	10
PCB-1254	<0.18		0.18		mg/Kg	☼	10/07/22 16:29	10/10/22 13:12	10
PCB-1260	<0.18		0.18		mg/Kg	☼	10/07/22 16:29	10/10/22 13:12	10

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	95		49 - 129	10/07/22 16:29	10/10/22 13:12	10
DCB Decachlorobiphenyl	99		37 - 121	10/07/22 16:29	10/10/22 13:12	10

# Client Sample Results

Client: Civil & Environmental Consultants Inc  
 Project/Site: Arconic - Elliot Ditch - Lafayette, IN

Job ID: 500-223469-2

**Client Sample ID: ED-R3SL-SW019**

**Lab Sample ID: 500-223469-6**

Date Collected: 10/07/22 09:45

Matrix: Solid

Date Received: 10/07/22 15:18

Percent Solids: 92.2

**Method: SW846 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<0.18		0.18		mg/Kg	☼	10/07/22 16:29	10/10/22 11:41	10
PCB-1221	<0.18		0.18		mg/Kg	☼	10/07/22 16:29	10/10/22 11:41	10
PCB-1232	<0.18		0.18		mg/Kg	☼	10/07/22 16:29	10/10/22 11:41	10
PCB-1242	<0.18		0.18		mg/Kg	☼	10/07/22 16:29	10/10/22 11:41	10
PCB-1248	<0.18		0.18		mg/Kg	☼	10/07/22 16:29	10/10/22 11:41	10
PCB-1254	<0.18		0.18		mg/Kg	☼	10/07/22 16:29	10/10/22 11:41	10
PCB-1260	<0.18		0.18		mg/Kg	☼	10/07/22 16:29	10/10/22 11:41	10

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	110		49 - 129	10/07/22 16:29	10/10/22 11:41	10
DCB Decachlorobiphenyl	104		37 - 121	10/07/22 16:29	10/10/22 11:41	10

# Client Sample Results

Client: Civil & Environmental Consultants Inc  
 Project/Site: Arconic - Elliot Ditch - Lafayette, IN

Job ID: 500-223469-2

**Client Sample ID: ED-R3SL-067**

**Lab Sample ID: 500-223469-7**

**Date Collected: 10/07/22 10:00**

**Matrix: Solid**

**Date Received: 10/07/22 15:18**

**Percent Solids: 92.4**

**Method: SW846 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<0.17		0.17		mg/Kg	☼	10/07/22 16:29	10/10/22 12:25	10
PCB-1221	<0.17		0.17		mg/Kg	☼	10/07/22 16:29	10/10/22 12:25	10
PCB-1232	<0.17		0.17		mg/Kg	☼	10/07/22 16:29	10/10/22 12:25	10
PCB-1242	<0.17		0.17		mg/Kg	☼	10/07/22 16:29	10/10/22 12:25	10
PCB-1248	<0.17		0.17		mg/Kg	☼	10/07/22 16:29	10/10/22 12:25	10
PCB-1254	<0.17		0.17		mg/Kg	☼	10/07/22 16:29	10/10/22 12:25	10
PCB-1260	<0.17		0.17		mg/Kg	☼	10/07/22 16:29	10/10/22 12:25	10

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	151	S1+	49 - 129	10/07/22 16:29	10/10/22 12:25	10
DCB Decachlorobiphenyl	143	S1+	37 - 121	10/07/22 16:29	10/10/22 12:25	10

# Client Sample Results

Client: Civil & Environmental Consultants Inc  
 Project/Site: Arconic - Elliot Ditch - Lafayette, IN

Job ID: 500-223469-2

**Client Sample ID: ED-R3SL-065**

**Lab Sample ID: 500-223469-8**

**Date Collected: 10/07/22 10:10**

**Matrix: Solid**

**Date Received: 10/07/22 15:18**

**Percent Solids: 92.8**

**Method: SW846 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<0.17		0.17		mg/Kg	☼	10/07/22 16:29	10/10/22 15:21	10
PCB-1221	<0.17		0.17		mg/Kg	☼	10/07/22 16:29	10/10/22 15:21	10
PCB-1232	<0.17		0.17		mg/Kg	☼	10/07/22 16:29	10/10/22 15:21	10
PCB-1242	<0.17		0.17		mg/Kg	☼	10/07/22 16:29	10/10/22 15:21	10
PCB-1248	<0.17		0.17		mg/Kg	☼	10/07/22 16:29	10/10/22 15:21	10
PCB-1254	<0.17		0.17		mg/Kg	☼	10/07/22 16:29	10/10/22 15:21	10
PCB-1260	<0.17		0.17		mg/Kg	☼	10/07/22 16:29	10/10/22 15:21	10

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	134	S1+	49 - 129	10/07/22 16:29	10/10/22 15:21	10
DCB Decachlorobiphenyl	127	S1+	37 - 121	10/07/22 16:29	10/10/22 15:21	10

# Client Sample Results

Client: Civil & Environmental Consultants Inc  
 Project/Site: Arconic - Elliot Ditch - Lafayette, IN

Job ID: 500-223469-2

**Client Sample ID: ED-R3SL-SW018**

**Lab Sample ID: 500-223469-9**

Date Collected: 10/07/22 10:15

Matrix: Solid

Date Received: 10/07/22 15:18

Percent Solids: 93.7

**Method: SW846 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<0.17		0.17		mg/Kg	☼	10/07/22 16:29	10/10/22 12:55	10
PCB-1221	<0.17		0.17		mg/Kg	☼	10/07/22 16:29	10/10/22 12:55	10
PCB-1232	<0.17		0.17		mg/Kg	☼	10/07/22 16:29	10/10/22 12:55	10
PCB-1242	<0.17		0.17		mg/Kg	☼	10/07/22 16:29	10/10/22 12:55	10
PCB-1248	<0.17		0.17		mg/Kg	☼	10/07/22 16:29	10/10/22 12:55	10
PCB-1254	<0.17		0.17		mg/Kg	☼	10/07/22 16:29	10/10/22 12:55	10
PCB-1260	<0.17		0.17		mg/Kg	☼	10/07/22 16:29	10/10/22 12:55	10

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	127		49 - 129	10/07/22 16:29	10/10/22 12:55	10
DCB Decachlorobiphenyl	123	S1+	37 - 121	10/07/22 16:29	10/10/22 12:55	10

# Client Sample Results

Client: Civil & Environmental Consultants Inc  
 Project/Site: Arconic - Elliot Ditch - Lafayette, IN

Job ID: 500-223469-2

**Client Sample ID: ED-R3SL-044-1**

**Lab Sample ID: 500-223469-10**

**Date Collected: 10/07/22 11:20**

**Matrix: Solid**

**Date Received: 10/07/22 15:18**

**Percent Solids: 90.3**

**Method: SW846 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<0.18		0.18		mg/Kg	☼	10/07/22 16:29	10/10/22 14:45	10
PCB-1221	<0.18		0.18		mg/Kg	☼	10/07/22 16:29	10/10/22 14:45	10
PCB-1232	<0.18		0.18		mg/Kg	☼	10/07/22 16:29	10/10/22 14:45	10
PCB-1242	<0.18		0.18		mg/Kg	☼	10/07/22 16:29	10/10/22 14:45	10
PCB-1248	<b>0.40</b>		0.18		mg/Kg	☼	10/07/22 16:29	10/10/22 14:45	10
PCB-1254	<0.18		0.18		mg/Kg	☼	10/07/22 16:29	10/10/22 14:45	10
PCB-1260	<0.18		0.18		mg/Kg	☼	10/07/22 16:29	10/10/22 14:45	10

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
<i>Tetrachloro-m-xylene</i>	159	S1+	49 - 129	10/07/22 16:29	10/10/22 14:45	10
<i>DCB Decachlorobiphenyl</i>	152	S1+	37 - 121	10/07/22 16:29	10/10/22 14:45	10

# Client Sample Results

Client: Civil & Environmental Consultants Inc  
 Project/Site: Arconic - Elliot Ditch - Lafayette, IN

Job ID: 500-223469-2

**Client Sample ID: ED-R3SL-045**

**Lab Sample ID: 500-223469-11**

**Date Collected: 10/07/22 11:31**

**Matrix: Solid**

**Date Received: 10/07/22 15:18**

**Percent Solids: 92.9**

**Method: SW846 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<0.18		0.18		mg/Kg	☼	10/07/22 16:29	10/10/22 15:00	10
PCB-1221	<0.18		0.18		mg/Kg	☼	10/07/22 16:29	10/10/22 15:00	10
PCB-1232	<0.18		0.18		mg/Kg	☼	10/07/22 16:29	10/10/22 15:00	10
PCB-1242	<0.18		0.18		mg/Kg	☼	10/07/22 16:29	10/10/22 15:00	10
PCB-1248	<b>0.68</b>		0.18		mg/Kg	☼	10/07/22 16:29	10/10/22 15:00	10
PCB-1254	<0.18		0.18		mg/Kg	☼	10/07/22 16:29	10/10/22 15:00	10
PCB-1260	<0.18		0.18		mg/Kg	☼	10/07/22 16:29	10/10/22 15:00	10

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	122		49 - 129	10/07/22 16:29	10/10/22 15:00	10
DCB Decachlorobiphenyl	123	S1+	37 - 121	10/07/22 16:29	10/10/22 15:00	10

# Client Sample Results

Client: Civil & Environmental Consultants Inc  
 Project/Site: Arconic - Elliot Ditch - Lafayette, IN

Job ID: 500-223469-2

**Client Sample ID: ED-R3SL-066**

**Lab Sample ID: 500-223469-13**

**Date Collected: 10/07/22 11:57**

**Matrix: Solid**

**Date Received: 10/07/22 15:18**

**Percent Solids: 92.5**

**Method: SW846 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<0.17		0.17		mg/Kg	☼	10/07/22 16:29	10/10/22 13:39	10
PCB-1221	<0.17		0.17		mg/Kg	☼	10/07/22 16:29	10/10/22 13:39	10
PCB-1232	<0.17		0.17		mg/Kg	☼	10/07/22 16:29	10/10/22 13:39	10
PCB-1242	<0.17		0.17		mg/Kg	☼	10/07/22 16:29	10/10/22 13:39	10
PCB-1248	<0.17		0.17		mg/Kg	☼	10/07/22 16:29	10/10/22 13:39	10
PCB-1254	<0.17		0.17		mg/Kg	☼	10/07/22 16:29	10/10/22 13:39	10
PCB-1260	<0.17		0.17		mg/Kg	☼	10/07/22 16:29	10/10/22 13:39	10

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
<i>Tetrachloro-m-xylene</i>	130	S1+	49 - 129	10/07/22 16:29	10/10/22 13:39	10
<i>DCB Decachlorobiphenyl</i>	131	S1+	37 - 121	10/07/22 16:29	10/10/22 13:39	10

# Client Sample Results

Client: Civil & Environmental Consultants Inc  
 Project/Site: Arconic - Elliot Ditch - Lafayette, IN

Job ID: 500-223469-2

**Client Sample ID: ED-R3SL-SW017**

**Lab Sample ID: 500-223469-16**

Date Collected: 10/07/22 12:32

Matrix: Solid

Date Received: 10/07/22 15:18

Percent Solids: 93.8

**Method: SW846 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<0.17		0.17		mg/Kg	☼	10/07/22 16:29	10/10/22 13:54	10
PCB-1221	<0.17		0.17		mg/Kg	☼	10/07/22 16:29	10/10/22 13:54	10
PCB-1232	<0.17		0.17		mg/Kg	☼	10/07/22 16:29	10/10/22 13:54	10
PCB-1242	<0.17		0.17		mg/Kg	☼	10/07/22 16:29	10/10/22 13:54	10
PCB-1248	<0.17		0.17		mg/Kg	☼	10/07/22 16:29	10/10/22 13:54	10
PCB-1254	<0.17		0.17		mg/Kg	☼	10/07/22 16:29	10/10/22 13:54	10
PCB-1260	<0.17		0.17		mg/Kg	☼	10/07/22 16:29	10/10/22 13:54	10

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	98		49 - 129	10/07/22 16:29	10/10/22 13:54	10
DCB Decachlorobiphenyl	105		37 - 121	10/07/22 16:29	10/10/22 13:54	10

# Definitions/Glossary

Client: Civil & Environmental Consultants Inc  
Project/Site: Arconic - Elliot Ditch - Lafayette, IN

Job ID: 500-223469-2

## Qualifiers

### GC Semi VOA

Qualifier	Qualifier Description
S1+	Surrogate recovery exceeds control limits, high biased.

## Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
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)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
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)
TNTC	Too Numerous To Count

# QC Association Summary

Client: Civil & Environmental Consultants Inc  
 Project/Site: Arconic - Elliot Ditch - Lafayette, IN

Job ID: 500-223469-2

## GC Semi VOA

### Prep Batch: 678584

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-223469-1	ED-R3SL-SW001-3	Total/NA	Solid	3541	
500-223469-2	ED-R3SL-070	Total/NA	Solid	3541	
500-223469-3	ED-R3SL-069	Total/NA	Solid	3541	
500-223469-4	ED-R3SL-068	Total/NA	Solid	3541	
500-223469-5	ED-R3SL-DUP005	Total/NA	Solid	3541	
500-223469-6	ED-R3SL-SW019	Total/NA	Solid	3541	
500-223469-7	ED-R3SL-067	Total/NA	Solid	3541	
500-223469-8	ED-R3SL-065	Total/NA	Solid	3541	
500-223469-9	ED-R3SL-SW018	Total/NA	Solid	3541	
500-223469-10	ED-R3SL-044-1	Total/NA	Solid	3541	
500-223469-11	ED-R3SL-045	Total/NA	Solid	3541	
500-223469-13	ED-R3SL-066	Total/NA	Solid	3541	
500-223469-16	ED-R3SL-SW017	Total/NA	Solid	3541	
MB 500-678584/1-A	Method Blank	Total/NA	Solid	3541	
LCS 500-678584/2-A	Lab Control Sample	Total/NA	Solid	3541	
500-223469-6 MS	ED-R3SL-SW019	Total/NA	Solid	3541	
500-223469-6 MSD	ED-R3SL-SW019	Total/NA	Solid	3541	

### Analysis Batch: 678730

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-223469-2	ED-R3SL-070	Total/NA	Solid	8082A	678584
500-223469-4	ED-R3SL-068	Total/NA	Solid	8082A	678584
500-223469-6	ED-R3SL-SW019	Total/NA	Solid	8082A	678584
500-223469-7	ED-R3SL-067	Total/NA	Solid	8082A	678584
500-223469-9	ED-R3SL-SW018	Total/NA	Solid	8082A	678584
500-223469-13	ED-R3SL-066	Total/NA	Solid	8082A	678584
500-223469-16	ED-R3SL-SW017	Total/NA	Solid	8082A	678584
MB 500-678584/1-A	Method Blank	Total/NA	Solid	8082A	678584
LCS 500-678584/2-A	Lab Control Sample	Total/NA	Solid	8082A	678584
500-223469-6 MS	ED-R3SL-SW019	Total/NA	Solid	8082A	678584
500-223469-6 MSD	ED-R3SL-SW019	Total/NA	Solid	8082A	678584

### Analysis Batch: 678789

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-223469-1	ED-R3SL-SW001-3	Total/NA	Solid	8082A	678584
500-223469-3	ED-R3SL-069	Total/NA	Solid	8082A	678584
500-223469-5	ED-R3SL-DUP005	Total/NA	Solid	8082A	678584
500-223469-8	ED-R3SL-065	Total/NA	Solid	8082A	678584
500-223469-10	ED-R3SL-044-1	Total/NA	Solid	8082A	678584
500-223469-11	ED-R3SL-045	Total/NA	Solid	8082A	678584

## General Chemistry

### Analysis Batch: 678582

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-223469-1	ED-R3SL-SW001-3	Total/NA	Solid	Moisture	
500-223469-2	ED-R3SL-070	Total/NA	Solid	Moisture	
500-223469-3	ED-R3SL-069	Total/NA	Solid	Moisture	
500-223469-4	ED-R3SL-068	Total/NA	Solid	Moisture	
500-223469-5	ED-R3SL-DUP005	Total/NA	Solid	Moisture	
500-223469-6	ED-R3SL-SW019	Total/NA	Solid	Moisture	

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# QC Association Summary

Client: Civil & Environmental Consultants Inc  
Project/Site: Arconic - Elliot Ditch - Lafayette, IN

Job ID: 500-223469-2

## General Chemistry (Continued)

### Analysis Batch: 678582 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-223469-7	ED-R3SL-067	Total/NA	Solid	Moisture	
500-223469-8	ED-R3SL-065	Total/NA	Solid	Moisture	
500-223469-9	ED-R3SL-SW018	Total/NA	Solid	Moisture	
500-223469-10	ED-R3SL-044-1	Total/NA	Solid	Moisture	
500-223469-11	ED-R3SL-045	Total/NA	Solid	Moisture	
500-223469-13	ED-R3SL-066	Total/NA	Solid	Moisture	
500-223469-16	ED-R3SL-SW017	Total/NA	Solid	Moisture	
500-223469-1 DU	ED-R3SL-SW001-3	Total/NA	Solid	Moisture	

# Surrogate Summary

Client: Civil & Environmental Consultants Inc  
 Project/Site: Arconic - Elliot Ditch - Lafayette, IN

Job ID: 500-223469-2

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

Matrix: Solid

Prep Type: Total/NA

### Percent Surrogate Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	TCX1	DCBP1
		(49-129)	(37-121)
500-223469-1	ED-R3SL-SW001-3	85	103
500-223469-3	ED-R3SL-069	106	99
500-223469-5	ED-R3SL-DUP005	95	99
500-223469-8	ED-R3SL-065	134 S1+	127 S1+
500-223469-10	ED-R3SL-044-1	159 S1+	152 S1+
500-223469-11	ED-R3SL-045	122	123 S1+

#### Surrogate Legend

TCX = Tetrachloro-m-xylene  
 DCBP = DCB Decachlorobiphenyl

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

Matrix: Solid

Prep Type: Total/NA

### Percent Surrogate Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	TCX2	DCBP2
		(49-129)	(37-121)
500-223469-2	ED-R3SL-070	121	109
500-223469-4	ED-R3SL-068	102	106
500-223469-6	ED-R3SL-SW019	110	104
500-223469-6 MS	ED-R3SL-SW019	103	113
500-223469-6 MSD	ED-R3SL-SW019	81	96
500-223469-7	ED-R3SL-067	151 S1+	143 S1+
500-223469-9	ED-R3SL-SW018	127	123 S1+
500-223469-13	ED-R3SL-066	130 S1+	131 S1+
500-223469-16	ED-R3SL-SW017	98	105
LCS 500-678584/2-A	Lab Control Sample	113	108
MB 500-678584/1-A	Method Blank	125	115

#### Surrogate Legend

TCX = Tetrachloro-m-xylene  
 DCBP = DCB Decachlorobiphenyl

# QC Sample Results

Client: Civil & Environmental Consultants Inc  
 Project/Site: Arconic - Elliot Ditch - Lafayette, IN

Job ID: 500-223469-2

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

**Lab Sample ID: MB 500-678584/1-A**  
**Matrix: Solid**  
**Analysis Batch: 678730**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**  
**Prep Batch: 678584**

Analyte	MB MB		RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
PCB-1016	<0.17		0.17		mg/Kg		10/07/22 16:29	10/10/22 09:57	10
PCB-1221	<0.17		0.17		mg/Kg		10/07/22 16:29	10/10/22 09:57	10
PCB-1232	<0.17		0.17		mg/Kg		10/07/22 16:29	10/10/22 09:57	10
PCB-1242	<0.17		0.17		mg/Kg		10/07/22 16:29	10/10/22 09:57	10
PCB-1248	<0.17		0.17		mg/Kg		10/07/22 16:29	10/10/22 09:57	10
PCB-1254	<0.17		0.17		mg/Kg		10/07/22 16:29	10/10/22 09:57	10
PCB-1260	<0.17		0.17		mg/Kg		10/07/22 16:29	10/10/22 09:57	10

Surrogate	MB MB		Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
Tetrachloro-m-xylene	125		49 - 129	10/07/22 16:29	10/10/22 09:57	10
DCB Decachlorobiphenyl	115		37 - 121	10/07/22 16:29	10/10/22 09:57	10

**Lab Sample ID: LCS 500-678584/2-A**  
**Matrix: Solid**  
**Analysis Batch: 678730**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**  
**Prep Batch: 678584**

Analyte	Spike Added	LCS LCS		Unit	D	%Rec	%Rec Limits
		Result	Qualifier				
PCB-1016	1.67	1.72		mg/Kg		103	57 - 120
PCB-1260	1.67	1.92		mg/Kg		115	61 - 125

Surrogate	LCS LCS		Limits
	%Recovery	Qualifier	
Tetrachloro-m-xylene	113		49 - 129
DCB Decachlorobiphenyl	108		37 - 121

**Lab Sample ID: 500-223469-6 MS**  
**Matrix: Solid**  
**Analysis Batch: 678730**

**Client Sample ID: ED-R3SL-SW019**  
**Prep Type: Total/NA**  
**Prep Batch: 678584**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS MS		Unit	D	%Rec	%Rec Limits
				Result	Qualifier				
PCB-1016	<0.18		1.79	1.83		mg/Kg	☼	102	57 - 120
PCB-1260	<0.18		1.79	2.17		mg/Kg	☼	121	61 - 125

Surrogate	MS MS		Limits
	%Recovery	Qualifier	
Tetrachloro-m-xylene	103		49 - 129
DCB Decachlorobiphenyl	113		37 - 121

**Lab Sample ID: 500-223469-6 MSD**  
**Matrix: Solid**  
**Analysis Batch: 678730**

**Client Sample ID: ED-R3SL-SW019**  
**Prep Type: Total/NA**  
**Prep Batch: 678584**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD MSD		Unit	D	%Rec	%Rec Limits	RPD	
				Result	Qualifier					RPD	Limit
PCB-1016	<0.18		1.74	1.64		mg/Kg	☼	94	57 - 120	11	30
PCB-1260	<0.18		1.74	1.90		mg/Kg	☼	109	61 - 125	13	30

Surrogate	MSD MSD		Limits
	%Recovery	Qualifier	
Tetrachloro-m-xylene	81		49 - 129
DCB Decachlorobiphenyl	96		37 - 121

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# Lab Chronicle

Client: Civil & Environmental Consultants Inc  
Project/Site: Arconic - Elliot Ditch - Lafayette, IN

Job ID: 500-223469-2

**Client Sample ID: ED-R3SL-SW001-3**

Date Collected: 10/07/22 08:30

Date Received: 10/07/22 15:18

**Lab Sample ID: 500-223469-1**

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Moisture		1	678582	LWN	EET CHI	10/07/22 16:28

**Client Sample ID: ED-R3SL-SW001-3**

Date Collected: 10/07/22 08:30

Date Received: 10/07/22 15:18

**Lab Sample ID: 500-223469-1**

Matrix: Solid

Percent Solids: 89.5

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3541			678584	EK	EET CHI	10/07/22 16:29 - 10/07/22 19:00 <sup>1</sup>
Total/NA	Analysis	8082A		50	678789	SB	EET CHI	10/10/22 12:43

**Client Sample ID: ED-R3SL-070**

Date Collected: 10/07/22 09:12

Date Received: 10/07/22 15:18

**Lab Sample ID: 500-223469-2**

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Moisture		1	678582	LWN	EET CHI	10/07/22 16:28

**Client Sample ID: ED-R3SL-070**

Date Collected: 10/07/22 09:12

Date Received: 10/07/22 15:18

**Lab Sample ID: 500-223469-2**

Matrix: Solid

Percent Solids: 92.7

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3541			678584	EK	EET CHI	10/07/22 16:29 - 10/07/22 19:00 <sup>1</sup>
Total/NA	Analysis	8082A		10	678730	SB	EET CHI	10/10/22 10:41

**Client Sample ID: ED-R3SL-069**

Date Collected: 10/07/22 09:20

Date Received: 10/07/22 15:18

**Lab Sample ID: 500-223469-3**

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Moisture		1	678582	LWN	EET CHI	10/07/22 16:28

**Client Sample ID: ED-R3SL-069**

Date Collected: 10/07/22 09:20

Date Received: 10/07/22 15:18

**Lab Sample ID: 500-223469-3**

Matrix: Solid

Percent Solids: 93.0

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3541			678584	EK	EET CHI	10/07/22 16:29 - 10/07/22 19:00 <sup>1</sup>
Total/NA	Analysis	8082A		10	678789	SB	EET CHI	10/10/22 12:58

**Client Sample ID: ED-R3SL-068**

Date Collected: 10/07/22 09:31

Date Received: 10/07/22 15:18

**Lab Sample ID: 500-223469-4**

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Moisture		1	678582	LWN	EET CHI	10/07/22 16:28

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# Lab Chronicle

Client: Civil & Environmental Consultants Inc  
Project/Site: Arconic - Elliot Ditch - Lafayette, IN

Job ID: 500-223469-2

**Client Sample ID: ED-R3SL-068**

**Lab Sample ID: 500-223469-4**

**Date Collected: 10/07/22 09:31**

**Matrix: Solid**

**Date Received: 10/07/22 15:18**

**Percent Solids: 92.6**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3541			678584	EK	EET CHI	10/07/22 16:29 - 10/07/22 19:00 <sup>1</sup>
Total/NA	Analysis	8082A		10	678730	SB	EET CHI	10/10/22 11:11

**Client Sample ID: ED-R3SL-DUP005**

**Lab Sample ID: 500-223469-5**

**Date Collected: 10/07/22 00:00**

**Matrix: Solid**

**Date Received: 10/07/22 15:18**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Moisture		1	678582	LWN	EET CHI	10/07/22 16:28

**Client Sample ID: ED-R3SL-DUP005**

**Lab Sample ID: 500-223469-5**

**Date Collected: 10/07/22 00:00**

**Matrix: Solid**

**Date Received: 10/07/22 15:18**

**Percent Solids: 92.2**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3541			678584	EK	EET CHI	10/07/22 16:29 - 10/07/22 19:00 <sup>1</sup>
Total/NA	Analysis	8082A		10	678789	SB	EET CHI	10/10/22 13:12

**Client Sample ID: ED-R3SL-SW019**

**Lab Sample ID: 500-223469-6**

**Date Collected: 10/07/22 09:45**

**Matrix: Solid**

**Date Received: 10/07/22 15:18**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Moisture		1	678582	LWN	EET CHI	10/07/22 16:28

**Client Sample ID: ED-R3SL-SW019**

**Lab Sample ID: 500-223469-6**

**Date Collected: 10/07/22 09:45**

**Matrix: Solid**

**Date Received: 10/07/22 15:18**

**Percent Solids: 92.2**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3541			678584	EK	EET CHI	10/07/22 16:29 - 10/07/22 19:00 <sup>1</sup>
Total/NA	Analysis	8082A		10	678730	SB	EET CHI	10/10/22 11:41

**Client Sample ID: ED-R3SL-067**

**Lab Sample ID: 500-223469-7**

**Date Collected: 10/07/22 10:00**

**Matrix: Solid**

**Date Received: 10/07/22 15:18**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Moisture		1	678582	LWN	EET CHI	10/07/22 16:28

# Lab Chronicle

Client: Civil & Environmental Consultants Inc  
Project/Site: Arconic - Elliot Ditch - Lafayette, IN

Job ID: 500-223469-2

**Client Sample ID: ED-R3SL-067**

**Lab Sample ID: 500-223469-7**

Date Collected: 10/07/22 10:00

Matrix: Solid

Date Received: 10/07/22 15:18

Percent Solids: 92.4

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3541			678584	EK	EET CHI	10/07/22 16:29 - 10/07/22 19:00 <sup>1</sup>
Total/NA	Analysis	8082A		10	678730	SB	EET CHI	10/10/22 12:25

**Client Sample ID: ED-R3SL-065**

**Lab Sample ID: 500-223469-8**

Date Collected: 10/07/22 10:10

Matrix: Solid

Date Received: 10/07/22 15:18

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Moisture		1	678582	LWN	EET CHI	10/07/22 16:28

**Client Sample ID: ED-R3SL-065**

**Lab Sample ID: 500-223469-8**

Date Collected: 10/07/22 10:10

Matrix: Solid

Date Received: 10/07/22 15:18

Percent Solids: 92.8

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3541			678584	EK	EET CHI	10/07/22 16:29 - 10/07/22 19:00 <sup>1</sup>
Total/NA	Analysis	8082A		10	678789	SB	EET CHI	10/10/22 15:21

**Client Sample ID: ED-R3SL-SW018**

**Lab Sample ID: 500-223469-9**

Date Collected: 10/07/22 10:15

Matrix: Solid

Date Received: 10/07/22 15:18

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Moisture		1	678582	LWN	EET CHI	10/07/22 16:28

**Client Sample ID: ED-R3SL-SW018**

**Lab Sample ID: 500-223469-9**

Date Collected: 10/07/22 10:15

Matrix: Solid

Date Received: 10/07/22 15:18

Percent Solids: 93.7

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3541			678584	EK	EET CHI	10/07/22 16:29 - 10/07/22 19:00 <sup>1</sup>
Total/NA	Analysis	8082A		10	678730	SB	EET CHI	10/10/22 12:55

**Client Sample ID: ED-R3SL-044-1**

**Lab Sample ID: 500-223469-10**

Date Collected: 10/07/22 11:20

Matrix: Solid

Date Received: 10/07/22 15:18

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Moisture		1	678582	LWN	EET CHI	10/07/22 16:28

# Lab Chronicle

Client: Civil & Environmental Consultants Inc  
Project/Site: Arconic - Elliot Ditch - Lafayette, IN

Job ID: 500-223469-2

**Client Sample ID: ED-R3SL-044-1**

**Lab Sample ID: 500-223469-10**

Date Collected: 10/07/22 11:20

Matrix: Solid

Date Received: 10/07/22 15:18

Percent Solids: 90.3

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3541			678584	EK	EET CHI	10/07/22 16:29 - 10/07/22 19:00 <sup>1</sup>
Total/NA	Analysis	8082A		10	678789	SB	EET CHI	10/10/22 14:45

**Client Sample ID: ED-R3SL-045**

**Lab Sample ID: 500-223469-11**

Date Collected: 10/07/22 11:31

Matrix: Solid

Date Received: 10/07/22 15:18

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Moisture		1	678582	LWN	EET CHI	10/07/22 16:28

**Client Sample ID: ED-R3SL-045**

**Lab Sample ID: 500-223469-11**

Date Collected: 10/07/22 11:31

Matrix: Solid

Date Received: 10/07/22 15:18

Percent Solids: 92.9

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3541			678584	EK	EET CHI	10/07/22 16:29 - 10/07/22 19:00 <sup>1</sup>
Total/NA	Analysis	8082A		10	678789	SB	EET CHI	10/10/22 15:00

**Client Sample ID: ED-R3SL-066**

**Lab Sample ID: 500-223469-13**

Date Collected: 10/07/22 11:57

Matrix: Solid

Date Received: 10/07/22 15:18

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Moisture		1	678582	LWN	EET CHI	10/07/22 16:28

**Client Sample ID: ED-R3SL-066**

**Lab Sample ID: 500-223469-13**

Date Collected: 10/07/22 11:57

Matrix: Solid

Date Received: 10/07/22 15:18

Percent Solids: 92.5

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3541			678584	EK	EET CHI	10/07/22 16:29 - 10/07/22 19:00 <sup>1</sup>
Total/NA	Analysis	8082A		10	678730	SB	EET CHI	10/10/22 13:39

**Client Sample ID: ED-R3SL-SW017**

**Lab Sample ID: 500-223469-16**

Date Collected: 10/07/22 12:32

Matrix: Solid

Date Received: 10/07/22 15:18

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Moisture		1	678582	LWN	EET CHI	10/07/22 16:28

# Lab Chronicle

Client: Civil & Environmental Consultants Inc  
Project/Site: Arconic - Elliot Ditch - Lafayette, IN

Job ID: 500-223469-2

**Client Sample ID: ED-R3SL-SW017**

**Lab Sample ID: 500-223469-16**

**Date Collected: 10/07/22 12:32**

**Matrix: Solid**

**Date Received: 10/07/22 15:18**

**Percent Solids: 93.8**

<u>Prep Type</u>	<u>Batch Type</u>	<u>Batch Method</u>	<u>Run</u>	<u>Dilution Factor</u>	<u>Batch Number</u>	<u>Analyst</u>	<u>Lab</u>	<u>Prepared or Analyzed</u>
Total/NA	Prep	3541			678584	EK	EET CHI	10/07/22 16:29 - 10/07/22 19:00 <sup>1</sup>
Total/NA	Analysis	8082A		10	678730	SB	EET CHI	10/10/22 13:54

<sup>1</sup> Completion dates and times are reported or not reported per method requirements or individual lab discretion.

### Laboratory References:

EET CHI = Eurofins Chicago, 2417 Bond Street, University Park, IL 60484, TEL (708)534-5200



# Accreditation/Certification Summary

Client: Civil & Environmental Consultants Inc  
Project/Site: Arconic - Elliot Ditch - Lafayette, IN

Job ID: 500-223469-2

## Laboratory: Eurofins Chicago

The accreditations/certifications listed below are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Illinois	NELAP	IL00035	04-30-23

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14
- 15

# Chain of Custody Record 52



Address \_\_\_\_\_

Regulatory Program:  DW  NPDES  RCRA  Other

TAL-8210

Client Contact		Project Manager: <u>G. Welch</u>		Site Contact: <u>G. Welch</u>		Date: <u>500-223469 COC</u>		COC No	
Company Name <u>CEC</u>		Tel/Email: <u>865-446-7655</u>		Lab Contact: <u>R. Kintz</u>		Carrier: <u>Course</u>		_____ of _____ COCs	
Address <u>2704 Cherokee Farm Way Suite 101</u>		Analysis Turnaround Time							
City/State/Zip <u>Knoxville, TN 37720</u>		<input type="checkbox"/> CALENDAR DAYS <input type="checkbox"/> WORKING DAYS							
Phone <u>865-977-9997</u>		TAT if different from Below _____							
Fax _____		<input type="checkbox"/> 2 weeks							
Project Name <u>Elkhead Ditch IM Project</u>		<input type="checkbox"/> 1 week <u>*24 Hour*</u>							
Site <u>Reach 3</u>		<input type="checkbox"/> 2 days <u>RUSH</u>							
P O # _____		<input checked="" type="checkbox"/> 1 day							
Sampler		Filtered Sample (Y/N) _____ Perform MS/MSD (Y/N) _____ <u>PCBS via BCEZ</u>							
For Lab Use Only: Walk-in Client _____ Lab Sampling _____									
Job / SDG No		_____							
_____		_____							
Sample Identification		Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.	Sample Specific Notes		
2	ED-R3SL-SW001-3	10/7/22	0830	C	S	1	X		
3	ED-R3SL-070	10/7/22	0912	C	S	1	X		
4	ED-R3SL-069	10/7/22	0920	C	S	1	X		
5	ED-R3SL-068	10/7/22	0931	C	S	1	X		
6	ED-R3SL-DWP005	10/7/22	/	C	S	1	X		
7	ED-R3SL-SW019	10/7/22	0945	C	S	3	X	X	
8	ED-R3SL-067	10/7/22	1000	C	S	1	X		
9	ED-R3SL-065	10/7/22	1010	C	S	1	X		
10	ED-R3SL-SW018	10/7/22	1015	C	S	1	X		
11	ED-R3SL-044-2	10/7/22	1120	C	S	1	X		
12	ED-R3SL-045	10/7/22	1131	C	S	1	X		
	ED-R3SL-064	10/7/22	1147	C	S	1	X		
Preservation Used: 1=Ice, 2=HCl; 3=H2SO4; 4=HNO3; 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					Sample Disposal ( A fee may be assessed if samples are retained longer than 1 month)				
<input checked="" type="checkbox"/> Non-Hazardous <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison B <input type="checkbox"/> Unknown					<input type="checkbox"/> Return to Client <input checked="" type="checkbox"/> Disposal by Lab <input type="checkbox"/> Archive for _____ Months				
Special Instructions/QC Requirements & Comments:									
Custody Seals Intact <input type="checkbox"/> Yes <input type="checkbox"/> No		Custody Seal No		Cooler Temp (°C) Obs'd <u>4.2</u> Corr'd <u>2.2</u>		Therm ID No _____			
Relinquished by <u>[Signature]</u>	Company <u>CEC</u>	Date/Time <u>10/7/22 1350</u>	Received by <u>[Signature]</u>	Company <u>EETA</u>	Date/Time <u>10/7/22 1400 EST</u>				
Relinquished by <u>[Signature]</u>	Company <u>EETA</u>	Date/Time <u>10/7/22 1515</u>	Received by _____	Company _____	Date/Time _____				
Relinquished by _____	Company _____	Date/Time _____	Received in Laboratory by <u>[Signature]</u>	Company <u>EETA</u>	Date/Time <u>10/7/22 1518</u>				



# Login Sample Receipt Checklist

Client: Civil & Environmental Consultants Inc

Job Number: 500-223469-2

**Login Number: 223469**

**List Number: 1**

**Creator: Carbajal, Melina**

**List Source: Eurofins Chicago**

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
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	2.2
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").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	



## ANALYTICAL REPORT

Eurofins Chicago  
2417 Bond Street  
University Park, IL 60484  
Tel: (708)534-5200

Laboratory Job ID: 500-223469-3

Client Project/Site: Arconic - Elliot Ditch - Lafayette, IN

**For:**

Civil & Environmental Consultants Inc  
2704 Cherokee Farm Way  
Suite 101  
Knoxville, Tennessee 37920

Attn: Garrett Welch



*Authorized for release by:  
10/14/2022 2:39:31 PM*

Robin Kintz, Project Manager II  
(708)534-5200

[Robin.Kintz@et.eurofinsus.com](mailto:Robin.Kintz@et.eurofinsus.com)

### LINKS

Review your project  
results through



Have a Question?



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[www.eurofinsus.com/Env](http://www.eurofinsus.com/Env)

The test results in this report meet all 2003 NELAC, 2009 TNI, and 2016 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.



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# Case Narrative

Client: Civil & Environmental Consultants Inc  
Project/Site: Arconic - Elliot Ditch - Lafayette, IN

Job ID: 500-223469-3

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**Job ID: 500-223469-3**

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**Laboratory: Eurofins Chicago**

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**Narrative**

**Job Narrative**  
**500-223469-3**

**Comments**

No additional comments.

**Receipt**

The samples were received on 10/7/2022 3:18 PM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperature of the cooler at receipt was 2.2° C.

**GC Semi VOA**

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

**Organic Prep**

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

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# Detection Summary

Client: Civil & Environmental Consultants Inc  
Project/Site: Arconic - Elliot Ditch - Lafayette, IN

Job ID: 500-223469-3

**Client Sample ID: ED-R3SL-EB009**

**Lab Sample ID: 500-223469-19**

No Detections.

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This Detection Summary does not include radiochemical test results.

Eurofins Chicago

# Method Summary

Client: Civil & Environmental Consultants Inc  
Project/Site: Arconic - Elliot Ditch - Lafayette, IN

Job ID: 500-223469-3

Method	Method Description	Protocol	Laboratory
8082A	Polychlorinated Biphenyls (PCBs) by Gas Chromatography	SW846	EET CHI
3510C	Liquid-Liquid Extraction (Separatory Funnel)	SW846	EET CHI

**Protocol References:**

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

**Laboratory References:**

EET CHI = Eurofins Chicago, 2417 Bond Street, University Park, IL 60484, TEL (708)534-5200



# Sample Summary

Client: Civil & Environmental Consultants Inc  
Project/Site: Arconic - Elliot Ditch - Lafayette, IN

Job ID: 500-223469-3

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Lab Sample ID	Client Sample ID	Matrix	Collected	Received
500-223469-19	ED-R3SL-EB009	Water	10/07/22 13:50	10/07/22 15:18

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# Client Sample Results

Client: Civil & Environmental Consultants Inc  
 Project/Site: Arconic - Elliot Ditch - Lafayette, IN

Job ID: 500-223469-3

**Client Sample ID: ED-R3SL-EB009**

**Lab Sample ID: 500-223469-19**

**Date Collected: 10/07/22 13:50**

**Matrix: Water**

**Date Received: 10/07/22 15:18**

**Method: SW846 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<0.00041		0.00041		mg/L		10/11/22 07:41	10/11/22 18:32	1
PCB-1221	<0.00041		0.00041		mg/L		10/11/22 07:41	10/11/22 18:32	1
PCB-1232	<0.00041		0.00041		mg/L		10/11/22 07:41	10/11/22 18:32	1
PCB-1242	<0.00041		0.00041		mg/L		10/11/22 07:41	10/11/22 18:32	1
PCB-1248	<0.00041		0.00041		mg/L		10/11/22 07:41	10/11/22 18:32	1
PCB-1254	<0.00041		0.00041		mg/L		10/11/22 07:41	10/11/22 18:32	1
PCB-1260	<0.00041		0.00041		mg/L		10/11/22 07:41	10/11/22 18:32	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	67		30 - 120	10/11/22 07:41	10/11/22 18:32	1
DCB Decachlorobiphenyl	40		30 - 140	10/11/22 07:41	10/11/22 18:32	1

## Definitions/Glossary

Client: Civil & Environmental Consultants Inc  
Project/Site: Arconic - Elliot Ditch - Lafayette, IN

Job ID: 500-223469-3

### Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
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)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
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)
TNTC	Too Numerous To Count

# QC Association Summary

Client: Civil & Environmental Consultants Inc  
Project/Site: Arconic - Elliot Ditch - Lafayette, IN

Job ID: 500-223469-3

## GC Semi VOA

### Prep Batch: 678933

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-223469-19	ED-R3SL-EB009	Total/NA	Water	3510C	
MB 500-678933/1-A	Method Blank	Total/NA	Water	3510C	
LCS 500-678933/4-A	Lab Control Sample	Total/NA	Water	3510C	
LCSD 500-678933/5-A	Lab Control Sample Dup	Total/NA	Water	3510C	

### Analysis Batch: 679122

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-223469-19	ED-R3SL-EB009	Total/NA	Water	8082A	678933
MB 500-678933/1-A	Method Blank	Total/NA	Water	8082A	678933
LCS 500-678933/4-A	Lab Control Sample	Total/NA	Water	8082A	678933
LCSD 500-678933/5-A	Lab Control Sample Dup	Total/NA	Water	8082A	678933



# Surrogate Summary

Client: Civil & Environmental Consultants Inc  
Project/Site: Arconic - Elliot Ditch - Lafayette, IN

Job ID: 500-223469-3

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

Matrix: Water

Prep Type: Total/NA

### Percent Surrogate Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	TCX2	DCBP2
		(30-120)	(30-140)
500-223469-19	ED-R3SL-EB009	67	40
LCS 500-678933/4-A	Lab Control Sample	84	94
LCSD 500-678933/5-A	Lab Control Sample Dup	88	98
MB 500-678933/1-A	Method Blank	95	112

#### Surrogate Legend

TCX = Tetrachloro-m-xylene

DCBP = DCB Decachlorobiphenyl

# QC Sample Results

Client: Civil & Environmental Consultants Inc  
 Project/Site: Arconic - Elliot Ditch - Lafayette, IN

Job ID: 500-223469-3

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

**Lab Sample ID: MB 500-678933/1-A**  
**Matrix: Water**  
**Analysis Batch: 679122**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**  
**Prep Batch: 678933**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<0.00040		0.00040		mg/L		10/11/22 07:41	10/11/22 16:55	1
PCB-1221	<0.00040		0.00040		mg/L		10/11/22 07:41	10/11/22 16:55	1
PCB-1232	<0.00040		0.00040		mg/L		10/11/22 07:41	10/11/22 16:55	1
PCB-1242	<0.00040		0.00040		mg/L		10/11/22 07:41	10/11/22 16:55	1
PCB-1248	<0.00040		0.00040		mg/L		10/11/22 07:41	10/11/22 16:55	1
PCB-1254	<0.00040		0.00040		mg/L		10/11/22 07:41	10/11/22 16:55	1
PCB-1260	<0.00040		0.00040		mg/L		10/11/22 07:41	10/11/22 16:55	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	95		30 - 120	10/11/22 07:41	10/11/22 16:55	1
DCB Decachlorobiphenyl	112		30 - 140	10/11/22 07:41	10/11/22 16:55	1

**Lab Sample ID: LCS 500-678933/4-A**  
**Matrix: Water**  
**Analysis Batch: 679122**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**  
**Prep Batch: 678933**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
PCB-1016	0.00400	0.00378		mg/L		94	56 - 120
PCB-1260	0.00400	0.00401		mg/L		100	53 - 137

Surrogate	LCS %Recovery	LCS Qualifier	Limits
Tetrachloro-m-xylene	84		30 - 120
DCB Decachlorobiphenyl	94		30 - 140

**Lab Sample ID: LCSD 500-678933/5-A**  
**Matrix: Water**  
**Analysis Batch: 679122**

**Client Sample ID: Lab Control Sample Dup**  
**Prep Type: Total/NA**  
**Prep Batch: 678933**

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
PCB-1016	0.00400	0.00390		mg/L		97	56 - 120	3	20
PCB-1260	0.00400	0.00409		mg/L		102	53 - 137	2	20

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
Tetrachloro-m-xylene	88		30 - 120
DCB Decachlorobiphenyl	98		30 - 140

# Lab Chronicle

Client: Civil & Environmental Consultants Inc  
Project/Site: Arconic - Elliot Ditch - Lafayette, IN

Job ID: 500-223469-3

**Client Sample ID: ED-R3SL-EB009**

**Lab Sample ID: 500-223469-19**

**Date Collected: 10/07/22 13:50**

**Matrix: Water**

**Date Received: 10/07/22 15:18**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3510C			678933	FRG	EET CHI	10/11/22 07:41
Total/NA	Analysis	8082A		1	679122	SS	EET CHI	10/11/22 18:32

**Laboratory References:**

EET CHI = Eurofins Chicago, 2417 Bond Street, University Park, IL 60484, TEL (708)534-5200

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# Accreditation/Certification Summary

Client: Civil & Environmental Consultants Inc  
Project/Site: Arconic - Elliot Ditch - Lafayette, IN

Job ID: 500-223469-3

## Laboratory: Eurofins Chicago

The accreditations/certifications listed below are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Illinois	NELAP	IL00035	04-30-23

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# Chain of Custody Record 52



Address \_\_\_\_\_

Regulatory Program:  DW  NPDES  RCRA  Other

TAL-8210

Client Contact		Project Manager: <u>G. Welch</u>		Site Contact: <u>G. Welch</u>		Date: <u>500-223469 COC</u>		COC No			
Company Name <u>CEC</u>		Tel/Email: <u>865-446-7655</u>		Lab Contact: <u>R. Kintz</u>		Carrier: <u>Course</u>		_____ of _____ COCs			
Address <u>2704 Cherokee Farm Way Suite 101</u>		Analysis Turnaround Time									
City/State/Zip <u>Knoxville, TN 37920</u>		<input type="checkbox"/> CALENDAR DAYS <input type="checkbox"/> WORKING DAYS		Filtered Sample (Y/N) _____ Perform MS/MSD (Y/N) _____ <u>PCBS via BCEZ</u>						Sampler	
Phone <u>865-977-9997</u>		TAT if different from Below _____								For Lab Use Only:	
Fax _____		<input type="checkbox"/> 2 weeks								Walk-in Client	
Project Name <u>Elkhead Ditch IM Project</u>		<input type="checkbox"/> 1 week <u>*24 Hour*</u>								Lab Sampling	
Site <u>Reach 3</u>		<input type="checkbox"/> 2 days <u>RUSH</u>		Job / SDG No		<u>500-223469</u>					
P O # _____		<input checked="" type="checkbox"/> 1 day									
Sample Identification		Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.	Filtered Sample (Y/N)	Perform MS/MSD (Y/N)	Sample Specific Notes		
<u>ED-R3SL-SW001-3</u>		<u>10/7/22</u>	<u>0830</u>	<u>C</u>	<u>S</u>	<u>1</u>		<u>X</u>			
<u>ED-R3SL-070</u>		<u>10/7/22</u>	<u>0912</u>	<u>C</u>	<u>S</u>	<u>1</u>		<u>X</u>			
<u>ED-R3SL-069</u>		<u>10/7/22</u>	<u>0920</u>	<u>C</u>	<u>S</u>	<u>1</u>		<u>X</u>			
<u>ED-R3SL-068</u>		<u>10/7/22</u>	<u>0931</u>	<u>C</u>	<u>S</u>	<u>1</u>		<u>X</u>			
<u>ED-R3SL-DWP005</u>		<u>10/7/22</u>	<u>/</u>	<u>C</u>	<u>S</u>	<u>1</u>		<u>X</u>			
<u>ED-R3SL-SW019</u>		<u>10/7/22</u>	<u>0945</u>	<u>C</u>	<u>S</u>	<u>3</u>	<u>X</u>	<u>X</u>			
<u>ED-R3SL-067 R3SL-067</u>		<u>10/7/22</u>	<u>1000</u>	<u>C</u>	<u>S</u>	<u>1</u>		<u>X</u>			
<u>ED-R3SL-065</u>		<u>10/7/22</u>	<u>1010</u>	<u>C</u>	<u>S</u>	<u>1</u>		<u>X</u>			
<u>ED-R3SL-SW018</u>		<u>10/7/22</u>	<u>1015</u>	<u>C</u>	<u>S</u>	<u>1</u>		<u>X</u>			
<u>ED-R3SL-044-2</u>		<u>10/7/22</u>	<u>1120</u>	<u>C</u>	<u>S</u>	<u>1</u>		<u>X</u>			
<u>ED-R3SL-045</u>		<u>10/7/22</u>	<u>1131</u>	<u>C</u>	<u>S</u>	<u>1</u>		<u>X</u>			
<u>ED-R3SL-064</u>		<u>10/7/22</u>	<u>1147</u>	<u>C</u>	<u>S</u>	<u>1</u>		<u>X</u>			
Preservation Used: 1=Ice, 2=HCl; 3=H2SO4; 4=HNO3; 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					Sample Disposal ( A fee may be assessed if samples are retained longer than 1 month)						
<input checked="" type="checkbox"/> Non-Hazardous <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison B <input type="checkbox"/> Unknown					<input type="checkbox"/> Return to Client <input checked="" type="checkbox"/> Disposal by Lab <input type="checkbox"/> Archive for _____ Months						
Special Instructions/QC Requirements & Comments:											
Custody Seals Intact <input type="checkbox"/> Yes <input type="checkbox"/> No		Custody Seal No		Cooler Temp (°C) Obs'd <u>4.2</u> Corr'd <u>2.2</u>		Therm ID No _____					
Relinquished by <u>[Signature]</u>		Company <u>CEC</u>		Date/Time <u>10/7/22 1350</u>		Received by <u>[Signature]</u>		Company <u>EETA</u> Date/Time <u>10/7/22 1400 EST</u>			
Relinquished by <u>[Signature]</u>		Company <u>EETA</u>		Date/Time <u>10/7/22 1515</u>		Received by _____		Company _____ Date/Time _____			
Relinquished by _____		Company _____		Date/Time _____		Received in Laboratory by <u>[Signature]</u>		Company <u>EETA</u> Date/Time <u>10/7/22 1518</u>			

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# Chain of Custody Record

524992



Environment Testing  
TestAmerica

Address \_\_\_\_\_

Regulatory Program:  DW  NPDES  RCRA  Other

TAL-8210

Client Contact		Project Manager: <u>G. Welch</u>		Site Contact: <u>G. Welch</u>		Date:		COC No			
Company Name <u>CEC</u>		Tel/Email: <u>865-442-7655</u>		Lab Contact: <u>R. Kintz</u>		Carrier: <u>Courier</u>		_____ of _____ COCs			
Address <u>2904 Cherokee Farm Way Suite 101</u>		Analysis Turnaround Time									
City/State/Zip <u>Knoxville, TN 37220</u>		<input type="checkbox"/> CALENDAR DAYS <input type="checkbox"/> WORKING DAYS TAT if different from Below _____ <input type="checkbox"/> 2 weeks <input type="checkbox"/> 1 week <u>* 24 Hour *</u> <input type="checkbox"/> 2 days <u>Rush</u> <input checked="" type="checkbox"/> 1 day									
Phone <u>865-977-9997</u>		Sample Identification Sample Date    Sample Time    Sample Type (C=Comp, G=Grab)    Matrix    # of Cont.		Filtered Sample (Y/N) Perform MS / MSD (Y/N) PCBs via <u>80E2</u>				Sampler For Lab Use Only: Walk-in Client Lab Sampling			
Fax _____										Job / SDG No <u>500-223469</u>	
Project Name <u>Ellett Ditch IM Project</u>											
Site <u>Reach 3</u>											
PO# _____								Sample Specific Notes			
ED-R3SL-066		10/7/22 1157		C S 1							
ED-R3SL-063		10/7/22 1210		C S 1							
ED-R3SL-061		10/7/22 1220		C S 1							
ED-R3SL-SW017		10/7/22 1232		C S 1							
ED-R3SL-062		10/7/22 1333		C S 1							
ED-R3SL-060		10/7/22 1340		C S 1							
ED-R3SL-04-EB009		10/7/22 1350		G S 2							
Preservation Used: 1=Ice, 2=HCl, 3=H2SO4, 4=HNO3, 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 checked="" type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison B <input type="checkbox"/> Unknown					Sample Disposal ( A fee may be assessed if samples are retained longer than 1 month) <input type="checkbox"/> Return to Client <input checked="" type="checkbox"/> Disposal by Lab <input type="checkbox"/> Archive for _____ Months						
Special Instructions/QC Requirements & Comments:											
Custody Seals Intact <input type="checkbox"/> Yes <input type="checkbox"/> No		Custody Seal No		Cooler Temp (°C) Obs'd _____ Corr'd _____		Therm ID No _____					
Relinquished by <u>[Signature]</u>		Company: <u>CEC</u>		Date/Time: <u>10/7/22 1350</u>		Received by: <u>[Signature]</u>		Company: <u>ETA</u>			
Relinquished by <u>[Signature]</u>		Company: <u>ETA</u>		Date/Time: <u>10/14/22 1118</u>		Received by: _____		Company: _____			
Relinquished by _____		Company: _____		Date/Time: _____		Received in Laboratory by: <u>[Signature]</u>		Company: <u>ETA</u>			

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## Login Sample Receipt Checklist

Client: Civil & Environmental Consultants Inc

Job Number: 500-223469-3

**Login Number: 223469**

**List Number: 1**

**Creator: Carbajal, Melina**

**List Source: Eurofins Chicago**

Question	Answer	Comment
Radioactivity wasn't checked or is <math>\leq</math> background as measured by a survey meter.	True	
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	2.2
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 <math><6\text{mm}</math> (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

## ANALYTICAL REPORT

Eurofins Chicago  
2417 Bond Street  
University Park, IL 60484  
Tel: (708)534-5200

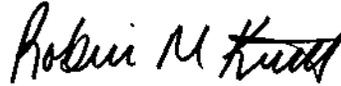
Laboratory Job ID: 500-223548-1

Client Project/Site: Arconic - Elliot Ditch - Lafayette, IN  
Revision: 1

**For:**

Civil & Environmental Consultants Inc  
2704 Cherokee Farm Way  
Suite 101  
Knoxville, Tennessee 37920

Attn: Garrett Welch



Authorized for release by:  
10/11/2022 4:22:25 PM

Robin Kintz, Project Manager II  
(708)534-5200  
[Robin.Kintz@et.eurofinsus.com](mailto:Robin.Kintz@et.eurofinsus.com)

### LINKS

Review your project  
results through



Have a Question?



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The test results in this report meet all 2003 NELAC, 2009 TNI, and 2016 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.



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# Case Narrative

Client: Civil & Environmental Consultants Inc  
Project/Site: Arconic - Elliot Ditch - Lafayette, IN

Job ID: 500-223548-1

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**Job ID: 500-223548-1**

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**Laboratory: Eurofins Chicago**

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**Narrative**

**Job Narrative  
500-223548-1**

**Comments**

No additional comments.

**Revision**

The report being provided is a revision of the original report sent on 10/11/2022. The report (revision 1) is being revised due to: The report was revised to correct the client sample ID for one sample.

**Receipt**

The samples were received on 10/10/2022 3:00 PM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperature of the cooler at receipt was 3.9° C.

**GC Semi VOA**

Method 8082A: Tetrachloro-m-xylene surrogate recovery for the following sample was outside control limits: (CCVIS 500-678919/3). DCB Decachlorobiphenyl surrogate was within the control limits; therefore, re-analysis was not performed.

Method 8082A: DCB Decachlorobiphenyl surrogate recovery for the following sample was outside control limits: (LCS 500-678879/2-A). Tetrachloro-m-xylene surrogate was within the control limits; therefore, re-extraction and/or re-analysis was not performed.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

**Metals**

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

**Organic Prep**

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

# Detection Summary

Client: Civil & Environmental Consultants Inc  
Project/Site: Arconic - Elliot Ditch - Lafayette, IN

Job ID: 500-223548-1

## Client Sample ID: ED-R3SL-059

Lab Sample ID: 500-223548-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
PCB-1248	0.20		0.17		mg/Kg	10	✳	8082A	Total/NA

## Client Sample ID: ED-R3SL-058

Lab Sample ID: 500-223548-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
PCB-1248	0.21		0.17		mg/Kg	10	✳	8082A	Total/NA

## Client Sample ID: ED-R3SL-003-3

Lab Sample ID: 500-223548-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
PCB-1248	1.3		0.18		mg/Kg	10	✳	8082A	Total/NA

## Client Sample ID: ED-R3SL-057

Lab Sample ID: 500-223548-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
PCB-1248	0.40		0.17		mg/Kg	10	✳	8082A	Total/NA

## Client Sample ID: ED-R3SL-SW016

Lab Sample ID: 500-223548-5

No Detections.

## Client Sample ID: ED-R3SL-025-2

Lab Sample ID: 500-223548-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
PCB-1248	1.0		0.17		mg/Kg	10	✳	8082A	Total/NA

## Client Sample ID: ED-R3SL-026-2

Lab Sample ID: 500-223548-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
PCB-1248	1.5		0.18		mg/Kg	10	✳	8082A	Total/NA

## Client Sample ID: ED-R3SL-027-2

Lab Sample ID: 500-223548-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
PCB-1248	1.4		0.17		mg/Kg	10	✳	8082A	Total/NA

## Client Sample ID: ED-R3SL-SW005-2

Lab Sample ID: 500-223548-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
PCB-1248	1.2		0.17		mg/Kg	10	✳	8082A	Total/NA

## Client Sample ID: ED-R3SL-028-2

Lab Sample ID: 500-223548-10

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
PCB-1248	1.5		0.18		mg/Kg	10	✳	8082A	Total/NA

## Client Sample ID: ED-R3SL-029-2

Lab Sample ID: 500-223548-11

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
PCB-1248	1.1		0.18		mg/Kg	10	✳	8082A	Total/NA

## Client Sample ID: ED-R3SL-030-2

Lab Sample ID: 500-223548-12

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
PCB-1248	0.96		0.18		mg/Kg	10	✳	8082A	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins Chicago

# Detection Summary

Client: Civil & Environmental Consultants Inc  
Project/Site: Arconic - Elliot Ditch - Lafayette, IN

Job ID: 500-223548-1

**Client Sample ID: ED-R3SL-SW006-2**

**Lab Sample ID: 500-223548-13**

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
PCB-1248	0.58		0.17		mg/Kg	10	✱	8082A	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins Chicago

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# Method Summary

Client: Civil & Environmental Consultants Inc  
Project/Site: Arconic - Elliot Ditch - Lafayette, IN

Job ID: 500-223548-1

Method	Method Description	Protocol	Laboratory
8082A	Polychlorinated Biphenyls (PCBs) by Gas Chromatography	SW846	EET CHI
Moisture	Percent Moisture	EPA	EET CHI
3541	Automated Soxhlet Extraction	SW846	EET CHI

**Protocol References:**

EPA = US Environmental Protection Agency

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

**Laboratory References:**

EET CHI = Eurofins Chicago, 2417 Bond Street, University Park, IL 60484, TEL (708)534-5200



# Sample Summary

Client: Civil & Environmental Consultants Inc  
Project/Site: Arconic - Elliot Ditch - Lafayette, IN

Job ID: 500-223548-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
500-223548-1	ED-R3SL-059	Solid	10/10/22 08:26	10/10/22 15:00
500-223548-2	ED-R3SL-058	Solid	10/10/22 08:33	10/10/22 15:00
500-223548-3	ED-R3SL-003-3	Solid	10/10/22 09:02	10/10/22 15:00
500-223548-4	ED-R3SL-057	Solid	10/10/22 09:11	10/10/22 15:00
500-223548-5	ED-R3SL-SW016	Solid	10/10/22 09:24	10/10/22 15:00
500-223548-6	ED-R3SL-025-2	Solid	10/10/22 11:02	10/10/22 15:00
500-223548-7	ED-R3SL-026-2	Solid	10/10/22 11:22	10/10/22 15:00
500-223548-8	ED-R3SL-027-2	Solid	10/10/22 11:54	10/10/22 15:00
500-223548-9	ED-R3SL-SW005-2	Solid	10/10/22 12:04	10/10/22 15:00
500-223548-10	ED-R3SL-028-2	Solid	10/10/22 12:31	10/10/22 15:00
500-223548-11	ED-R3SL-029-2	Solid	10/10/22 12:41	10/10/22 15:00
500-223548-12	ED-R3SL-030-2	Solid	10/10/22 12:55	10/10/22 15:00
500-223548-13	ED-R3SL-SW006-2	Solid	10/10/22 13:10	10/10/22 15:00

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# Client Sample Results

Client: Civil & Environmental Consultants Inc  
 Project/Site: Arconic - Elliot Ditch - Lafayette, IN

Job ID: 500-223548-1

**Client Sample ID: ED-R3SL-059**

**Lab Sample ID: 500-223548-1**

**Date Collected: 10/10/22 08:26**

**Matrix: Solid**

**Date Received: 10/10/22 15:00**

**Percent Solids: 94.3**

**Method: SW846 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<0.17		0.17		mg/Kg	☼	10/10/22 15:34	10/11/22 08:32	10
PCB-1221	<0.17		0.17		mg/Kg	☼	10/10/22 15:34	10/11/22 08:32	10
PCB-1232	<0.17		0.17		mg/Kg	☼	10/10/22 15:34	10/11/22 08:32	10
PCB-1242	<0.17		0.17		mg/Kg	☼	10/10/22 15:34	10/11/22 08:32	10
PCB-1248	<b>0.20</b>		0.17		mg/Kg	☼	10/10/22 15:34	10/11/22 08:32	10
PCB-1254	<0.17		0.17		mg/Kg	☼	10/10/22 15:34	10/11/22 08:32	10
PCB-1260	<0.17		0.17		mg/Kg	☼	10/10/22 15:34	10/11/22 08:32	10

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	116		49 - 129	10/10/22 15:34	10/11/22 08:32	10
DCB Decachlorobiphenyl	115		37 - 121	10/10/22 15:34	10/11/22 08:32	10

# Client Sample Results

Client: Civil & Environmental Consultants Inc  
 Project/Site: Arconic - Elliot Ditch - Lafayette, IN

Job ID: 500-223548-1

**Client Sample ID: ED-R3SL-058**

**Lab Sample ID: 500-223548-2**

**Date Collected: 10/10/22 08:33**

**Matrix: Solid**

**Date Received: 10/10/22 15:00**

**Percent Solids: 93.8**

**Method: SW846 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<0.17		0.17		mg/Kg	☼	10/10/22 15:34	10/11/22 09:17	10
PCB-1221	<0.17		0.17		mg/Kg	☼	10/10/22 15:34	10/11/22 09:17	10
PCB-1232	<0.17		0.17		mg/Kg	☼	10/10/22 15:34	10/11/22 09:17	10
PCB-1242	<0.17		0.17		mg/Kg	☼	10/10/22 15:34	10/11/22 09:17	10
PCB-1248	<b>0.21</b>		0.17		mg/Kg	☼	10/10/22 15:34	10/11/22 09:17	10
PCB-1254	<0.17		0.17		mg/Kg	☼	10/10/22 15:34	10/11/22 09:17	10
PCB-1260	<0.17		0.17		mg/Kg	☼	10/10/22 15:34	10/11/22 09:17	10

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	82		49 - 129	10/10/22 15:34	10/11/22 09:17	10
DCB Decachlorobiphenyl	96		37 - 121	10/10/22 15:34	10/11/22 09:17	10

# Client Sample Results

Client: Civil & Environmental Consultants Inc  
 Project/Site: Arconic - Elliot Ditch - Lafayette, IN

Job ID: 500-223548-1

**Client Sample ID: ED-R3SL-003-3**

**Lab Sample ID: 500-223548-3**

Date Collected: 10/10/22 09:02

Matrix: Solid

Date Received: 10/10/22 15:00

Percent Solids: 93.4

**Method: SW846 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<0.18		0.18		mg/Kg	☼	10/10/22 15:34	10/11/22 09:32	10
PCB-1221	<0.18		0.18		mg/Kg	☼	10/10/22 15:34	10/11/22 09:32	10
PCB-1232	<0.18		0.18		mg/Kg	☼	10/10/22 15:34	10/11/22 09:32	10
PCB-1242	<0.18		0.18		mg/Kg	☼	10/10/22 15:34	10/11/22 09:32	10
PCB-1248	1.3		0.18		mg/Kg	☼	10/10/22 15:34	10/11/22 09:32	10
PCB-1254	<0.18		0.18		mg/Kg	☼	10/10/22 15:34	10/11/22 09:32	10
PCB-1260	<0.18		0.18		mg/Kg	☼	10/10/22 15:34	10/11/22 09:32	10

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	90		49 - 129	10/10/22 15:34	10/11/22 09:32	10
DCB Decachlorobiphenyl	92		37 - 121	10/10/22 15:34	10/11/22 09:32	10

# Client Sample Results

Client: Civil & Environmental Consultants Inc  
 Project/Site: Arconic - Elliot Ditch - Lafayette, IN

Job ID: 500-223548-1

**Client Sample ID: ED-R3SL-057**

**Lab Sample ID: 500-223548-4**

**Date Collected: 10/10/22 09:11**

**Matrix: Solid**

**Date Received: 10/10/22 15:00**

**Percent Solids: 93.9**

**Method: SW846 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<0.17		0.17		mg/Kg	☼	10/10/22 15:34	10/11/22 09:47	10
PCB-1221	<0.17		0.17		mg/Kg	☼	10/10/22 15:34	10/11/22 09:47	10
PCB-1232	<0.17		0.17		mg/Kg	☼	10/10/22 15:34	10/11/22 09:47	10
PCB-1242	<0.17		0.17		mg/Kg	☼	10/10/22 15:34	10/11/22 09:47	10
PCB-1248	<b>0.40</b>		0.17		mg/Kg	☼	10/10/22 15:34	10/11/22 09:47	10
PCB-1254	<0.17		0.17		mg/Kg	☼	10/10/22 15:34	10/11/22 09:47	10
PCB-1260	<0.17		0.17		mg/Kg	☼	10/10/22 15:34	10/11/22 09:47	10

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	97		49 - 129	10/10/22 15:34	10/11/22 09:47	10
DCB Decachlorobiphenyl	108		37 - 121	10/10/22 15:34	10/11/22 09:47	10

# Client Sample Results

Client: Civil & Environmental Consultants Inc  
 Project/Site: Arconic - Elliot Ditch - Lafayette, IN

Job ID: 500-223548-1

**Client Sample ID: ED-R3SL-SW016**

**Lab Sample ID: 500-223548-5**

**Date Collected: 10/10/22 09:24**

**Matrix: Solid**

**Date Received: 10/10/22 15:00**

**Percent Solids: 94.6**

**Method: SW846 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<0.18		0.18		mg/Kg	☼	10/10/22 15:34	10/11/22 10:01	10
PCB-1221	<0.18		0.18		mg/Kg	☼	10/10/22 15:34	10/11/22 10:01	10
PCB-1232	<0.18		0.18		mg/Kg	☼	10/10/22 15:34	10/11/22 10:01	10
PCB-1242	<0.18		0.18		mg/Kg	☼	10/10/22 15:34	10/11/22 10:01	10
PCB-1248	<0.18		0.18		mg/Kg	☼	10/10/22 15:34	10/11/22 10:01	10
PCB-1254	<0.18		0.18		mg/Kg	☼	10/10/22 15:34	10/11/22 10:01	10
PCB-1260	<0.18		0.18		mg/Kg	☼	10/10/22 15:34	10/11/22 10:01	10

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	99		49 - 129	10/10/22 15:34	10/11/22 10:01	10
DCB Decachlorobiphenyl	97		37 - 121	10/10/22 15:34	10/11/22 10:01	10

# Client Sample Results

Client: Civil & Environmental Consultants Inc  
 Project/Site: Arconic - Elliot Ditch - Lafayette, IN

Job ID: 500-223548-1

**Client Sample ID: ED-R3SL-025-2**

**Lab Sample ID: 500-223548-6**

**Date Collected: 10/10/22 11:02**

**Matrix: Solid**

**Date Received: 10/10/22 15:00**

**Percent Solids: 94.1**

**Method: SW846 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<0.17		0.17		mg/Kg	☼	10/10/22 15:34	10/11/22 10:16	10
PCB-1221	<0.17		0.17		mg/Kg	☼	10/10/22 15:34	10/11/22 10:16	10
PCB-1232	<0.17		0.17		mg/Kg	☼	10/10/22 15:34	10/11/22 10:16	10
PCB-1242	<0.17		0.17		mg/Kg	☼	10/10/22 15:34	10/11/22 10:16	10
PCB-1248	<b>1.0</b>		0.17		mg/Kg	☼	10/10/22 15:34	10/11/22 10:16	10
PCB-1254	<0.17		0.17		mg/Kg	☼	10/10/22 15:34	10/11/22 10:16	10
PCB-1260	<0.17		0.17		mg/Kg	☼	10/10/22 15:34	10/11/22 10:16	10

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
<i>Tetrachloro-m-xylene</i>	89		49 - 129	10/10/22 15:34	10/11/22 10:16	10
<i>DCB Decachlorobiphenyl</i>	94		37 - 121	10/10/22 15:34	10/11/22 10:16	10

# Client Sample Results

Client: Civil & Environmental Consultants Inc  
 Project/Site: Arconic - Elliot Ditch - Lafayette, IN

Job ID: 500-223548-1

**Client Sample ID: ED-R3SL-026-2**

**Lab Sample ID: 500-223548-7**

**Date Collected: 10/10/22 11:22**

**Matrix: Solid**

**Date Received: 10/10/22 15:00**

**Percent Solids: 93.9**

**Method: SW846 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<0.18		0.18		mg/Kg	☼	10/10/22 15:34	10/11/22 10:31	10
PCB-1221	<0.18		0.18		mg/Kg	☼	10/10/22 15:34	10/11/22 10:31	10
PCB-1232	<0.18		0.18		mg/Kg	☼	10/10/22 15:34	10/11/22 10:31	10
PCB-1242	<0.18		0.18		mg/Kg	☼	10/10/22 15:34	10/11/22 10:31	10
PCB-1248	1.5		0.18		mg/Kg	☼	10/10/22 15:34	10/11/22 10:31	10
PCB-1254	<0.18		0.18		mg/Kg	☼	10/10/22 15:34	10/11/22 10:31	10
PCB-1260	<0.18		0.18		mg/Kg	☼	10/10/22 15:34	10/11/22 10:31	10

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	82		49 - 129	10/10/22 15:34	10/11/22 10:31	10
DCB Decachlorobiphenyl	87		37 - 121	10/10/22 15:34	10/11/22 10:31	10

# Client Sample Results

Client: Civil & Environmental Consultants Inc  
 Project/Site: Arconic - Elliot Ditch - Lafayette, IN

Job ID: 500-223548-1

**Client Sample ID: ED-R3SL-027-2**

**Lab Sample ID: 500-223548-8**

**Date Collected: 10/10/22 11:54**

**Matrix: Solid**

**Date Received: 10/10/22 15:00**

**Percent Solids: 94.3**

**Method: SW846 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<0.17		0.17		mg/Kg	☼	10/10/22 15:34	10/11/22 10:46	10
PCB-1221	<0.17		0.17		mg/Kg	☼	10/10/22 15:34	10/11/22 10:46	10
PCB-1232	<0.17		0.17		mg/Kg	☼	10/10/22 15:34	10/11/22 10:46	10
PCB-1242	<0.17		0.17		mg/Kg	☼	10/10/22 15:34	10/11/22 10:46	10
PCB-1248	1.4		0.17		mg/Kg	☼	10/10/22 15:34	10/11/22 10:46	10
PCB-1254	<0.17		0.17		mg/Kg	☼	10/10/22 15:34	10/11/22 10:46	10
PCB-1260	<0.17		0.17		mg/Kg	☼	10/10/22 15:34	10/11/22 10:46	10

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	87		49 - 129	10/10/22 15:34	10/11/22 10:46	10
DCB Decachlorobiphenyl	92		37 - 121	10/10/22 15:34	10/11/22 10:46	10

# Client Sample Results

Client: Civil & Environmental Consultants Inc  
 Project/Site: Arconic - Elliot Ditch - Lafayette, IN

Job ID: 500-223548-1

**Client Sample ID: ED-R3SL-SW005-2**

**Lab Sample ID: 500-223548-9**

**Date Collected: 10/10/22 12:04**

**Matrix: Solid**

**Date Received: 10/10/22 15:00**

**Percent Solids: 94.3**

**Method: SW846 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<0.17		0.17		mg/Kg	☼	10/10/22 15:34	10/11/22 11:01	10
PCB-1221	<0.17		0.17		mg/Kg	☼	10/10/22 15:34	10/11/22 11:01	10
PCB-1232	<0.17		0.17		mg/Kg	☼	10/10/22 15:34	10/11/22 11:01	10
PCB-1242	<0.17		0.17		mg/Kg	☼	10/10/22 15:34	10/11/22 11:01	10
PCB-1248	<b>1.2</b>		0.17		mg/Kg	☼	10/10/22 15:34	10/11/22 11:01	10
PCB-1254	<0.17		0.17		mg/Kg	☼	10/10/22 15:34	10/11/22 11:01	10
PCB-1260	<0.17		0.17		mg/Kg	☼	10/10/22 15:34	10/11/22 11:01	10

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	75		49 - 129	10/10/22 15:34	10/11/22 11:01	10
DCB Decachlorobiphenyl	89		37 - 121	10/10/22 15:34	10/11/22 11:01	10

# Client Sample Results

Client: Civil & Environmental Consultants Inc  
 Project/Site: Arconic - Elliot Ditch - Lafayette, IN

Job ID: 500-223548-1

**Client Sample ID: ED-R3SL-028-2**

**Lab Sample ID: 500-223548-10**

Date Collected: 10/10/22 12:31

Matrix: Solid

Date Received: 10/10/22 15:00

Percent Solids: 94.1

**Method: SW846 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<0.18		0.18		mg/Kg	☼	10/10/22 15:34	10/11/22 11:15	10
PCB-1221	<0.18		0.18		mg/Kg	☼	10/10/22 15:34	10/11/22 11:15	10
PCB-1232	<0.18		0.18		mg/Kg	☼	10/10/22 15:34	10/11/22 11:15	10
PCB-1242	<0.18		0.18		mg/Kg	☼	10/10/22 15:34	10/11/22 11:15	10
PCB-1248	1.5		0.18		mg/Kg	☼	10/10/22 15:34	10/11/22 11:15	10
PCB-1254	<0.18		0.18		mg/Kg	☼	10/10/22 15:34	10/11/22 11:15	10
PCB-1260	<0.18		0.18		mg/Kg	☼	10/10/22 15:34	10/11/22 11:15	10

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	85		49 - 129	10/10/22 15:34	10/11/22 11:15	10
DCB Decachlorobiphenyl	99		37 - 121	10/10/22 15:34	10/11/22 11:15	10

# Client Sample Results

Client: Civil & Environmental Consultants Inc  
 Project/Site: Arconic - Elliot Ditch - Lafayette, IN

Job ID: 500-223548-1

**Client Sample ID: ED-R3SL-029-2**

**Lab Sample ID: 500-223548-11**

**Date Collected: 10/10/22 12:41**

**Matrix: Solid**

**Date Received: 10/10/22 15:00**

**Percent Solids: 92.9**

**Method: SW846 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<0.18		0.18		mg/Kg	☼	10/10/22 15:34	10/11/22 11:30	10
PCB-1221	<0.18		0.18		mg/Kg	☼	10/10/22 15:34	10/11/22 11:30	10
PCB-1232	<0.18		0.18		mg/Kg	☼	10/10/22 15:34	10/11/22 11:30	10
PCB-1242	<0.18		0.18		mg/Kg	☼	10/10/22 15:34	10/11/22 11:30	10
PCB-1248	1.1		0.18		mg/Kg	☼	10/10/22 15:34	10/11/22 11:30	10
PCB-1254	<0.18		0.18		mg/Kg	☼	10/10/22 15:34	10/11/22 11:30	10
PCB-1260	<0.18		0.18		mg/Kg	☼	10/10/22 15:34	10/11/22 11:30	10

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	85		49 - 129	10/10/22 15:34	10/11/22 11:30	10
DCB Decachlorobiphenyl	91		37 - 121	10/10/22 15:34	10/11/22 11:30	10

# Client Sample Results

Client: Civil & Environmental Consultants Inc  
 Project/Site: Arconic - Elliot Ditch - Lafayette, IN

Job ID: 500-223548-1

**Client Sample ID: ED-R3SL-030-2**

**Lab Sample ID: 500-223548-12**

**Date Collected: 10/10/22 12:55**

**Matrix: Solid**

**Date Received: 10/10/22 15:00**

**Percent Solids: 93.5**

**Method: SW846 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<0.18		0.18		mg/Kg	☼	10/10/22 15:34	10/11/22 11:45	10
PCB-1221	<0.18		0.18		mg/Kg	☼	10/10/22 15:34	10/11/22 11:45	10
PCB-1232	<0.18		0.18		mg/Kg	☼	10/10/22 15:34	10/11/22 11:45	10
PCB-1242	<0.18		0.18		mg/Kg	☼	10/10/22 15:34	10/11/22 11:45	10
PCB-1248	<b>0.96</b>		0.18		mg/Kg	☼	10/10/22 15:34	10/11/22 11:45	10
PCB-1254	<0.18		0.18		mg/Kg	☼	10/10/22 15:34	10/11/22 11:45	10
PCB-1260	<0.18		0.18		mg/Kg	☼	10/10/22 15:34	10/11/22 11:45	10

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	67		49 - 129	10/10/22 15:34	10/11/22 11:45	10
DCB Decachlorobiphenyl	89		37 - 121	10/10/22 15:34	10/11/22 11:45	10

# Client Sample Results

Client: Civil & Environmental Consultants Inc  
 Project/Site: Arconic - Elliot Ditch - Lafayette, IN

Job ID: 500-223548-1

**Client Sample ID: ED-R3SL-SW006-2**

**Lab Sample ID: 500-223548-13**

**Date Collected: 10/10/22 13:10**

**Matrix: Solid**

**Date Received: 10/10/22 15:00**

**Percent Solids: 94.8**

**Method: SW846 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<0.17		0.17		mg/Kg	☼	10/10/22 15:34	10/11/22 12:00	10
PCB-1221	<0.17		0.17		mg/Kg	☼	10/10/22 15:34	10/11/22 12:00	10
PCB-1232	<0.17		0.17		mg/Kg	☼	10/10/22 15:34	10/11/22 12:00	10
PCB-1242	<0.17		0.17		mg/Kg	☼	10/10/22 15:34	10/11/22 12:00	10
PCB-1248	<b>0.58</b>		0.17		mg/Kg	☼	10/10/22 15:34	10/11/22 12:00	10
PCB-1254	<0.17		0.17		mg/Kg	☼	10/10/22 15:34	10/11/22 12:00	10
PCB-1260	<0.17		0.17		mg/Kg	☼	10/10/22 15:34	10/11/22 12:00	10

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	81		49 - 129	10/10/22 15:34	10/11/22 12:00	10
DCB Decachlorobiphenyl	83		37 - 121	10/10/22 15:34	10/11/22 12:00	10

# Definitions/Glossary

Client: Civil & Environmental Consultants Inc  
Project/Site: Arconic - Elliot Ditch - Lafayette, IN

Job ID: 500-223548-1

## Qualifiers

### GC Semi VOA

Qualifier	Qualifier Description
S1+	Surrogate recovery exceeds control limits, high biased.

## Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
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)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
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)
TNTC	Too Numerous To Count

# QC Association Summary

Client: Civil & Environmental Consultants Inc  
 Project/Site: Arconic - Elliot Ditch - Lafayette, IN

Job ID: 500-223548-1

## GC Semi VOA

### Prep Batch: 678879

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-223548-1	ED-R3SL-059	Total/NA	Solid	3541	
500-223548-2	ED-R3SL-058	Total/NA	Solid	3541	
500-223548-3	ED-R3SL-003-3	Total/NA	Solid	3541	
500-223548-4	ED-R3SL-057	Total/NA	Solid	3541	
500-223548-5	ED-R3SL-SW016	Total/NA	Solid	3541	
500-223548-6	ED-R3SL-025-2	Total/NA	Solid	3541	
500-223548-7	ED-R3SL-026-2	Total/NA	Solid	3541	
500-223548-8	ED-R3SL-027-2	Total/NA	Solid	3541	
500-223548-9	ED-R3SL-SW005-2	Total/NA	Solid	3541	
500-223548-10	ED-R3SL-028-2	Total/NA	Solid	3541	
500-223548-11	ED-R3SL-029-2	Total/NA	Solid	3541	
500-223548-12	ED-R3SL-030-2	Total/NA	Solid	3541	
500-223548-13	ED-R3SL-SW006-2	Total/NA	Solid	3541	
MB 500-678879/1-A	Method Blank	Total/NA	Solid	3541	
LCS 500-678879/2-A	Lab Control Sample	Total/NA	Solid	3541	
500-223548-1 MS	ED-R3SL-059	Total/NA	Solid	3541	
500-223548-1 MSD	ED-R3SL-059	Total/NA	Solid	3541	

### Analysis Batch: 678919

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-223548-1	ED-R3SL-059	Total/NA	Solid	8082A	678879
500-223548-2	ED-R3SL-058	Total/NA	Solid	8082A	678879
500-223548-3	ED-R3SL-003-3	Total/NA	Solid	8082A	678879
500-223548-4	ED-R3SL-057	Total/NA	Solid	8082A	678879
500-223548-5	ED-R3SL-SW016	Total/NA	Solid	8082A	678879
500-223548-6	ED-R3SL-025-2	Total/NA	Solid	8082A	678879
500-223548-7	ED-R3SL-026-2	Total/NA	Solid	8082A	678879
500-223548-8	ED-R3SL-027-2	Total/NA	Solid	8082A	678879
500-223548-9	ED-R3SL-SW005-2	Total/NA	Solid	8082A	678879
500-223548-10	ED-R3SL-028-2	Total/NA	Solid	8082A	678879
500-223548-11	ED-R3SL-029-2	Total/NA	Solid	8082A	678879
500-223548-12	ED-R3SL-030-2	Total/NA	Solid	8082A	678879
500-223548-13	ED-R3SL-SW006-2	Total/NA	Solid	8082A	678879
MB 500-678879/1-A	Method Blank	Total/NA	Solid	8082A	678879
LCS 500-678879/2-A	Lab Control Sample	Total/NA	Solid	8082A	678879
500-223548-1 MS	ED-R3SL-059	Total/NA	Solid	8082A	678879
500-223548-1 MSD	ED-R3SL-059	Total/NA	Solid	8082A	678879

## General Chemistry

### Analysis Batch: 678886

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-223548-1	ED-R3SL-059	Total/NA	Solid	Moisture	
500-223548-2	ED-R3SL-058	Total/NA	Solid	Moisture	
500-223548-3	ED-R3SL-003-3	Total/NA	Solid	Moisture	
500-223548-4	ED-R3SL-057	Total/NA	Solid	Moisture	
500-223548-5	ED-R3SL-SW016	Total/NA	Solid	Moisture	
500-223548-6	ED-R3SL-025-2	Total/NA	Solid	Moisture	
500-223548-7	ED-R3SL-026-2	Total/NA	Solid	Moisture	
500-223548-8	ED-R3SL-027-2	Total/NA	Solid	Moisture	
500-223548-9	ED-R3SL-SW005-2	Total/NA	Solid	Moisture	

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# QC Association Summary

Client: Civil & Environmental Consultants Inc  
Project/Site: Arconic - Elliot Ditch - Lafayette, IN

Job ID: 500-223548-1

## General Chemistry (Continued)

### Analysis Batch: 678886 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-223548-10	ED-R3SL-028-2	Total/NA	Solid	Moisture	
500-223548-11	ED-R3SL-029-2	Total/NA	Solid	Moisture	
500-223548-12	ED-R3SL-030-2	Total/NA	Solid	Moisture	
500-223548-13	ED-R3SL-SW006-2	Total/NA	Solid	Moisture	
500-223548-1 DU	ED-R3SL-059	Total/NA	Solid	Moisture	

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# Surrogate Summary

Client: Civil & Environmental Consultants Inc  
 Project/Site: Arconic - Elliot Ditch - Lafayette, IN

Job ID: 500-223548-1

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

Matrix: Solid

Prep Type: Total/NA

### Percent Surrogate Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)	
		TCX1 (49-129)	DCBP1 (37-121)
500-223548-1	ED-R3SL-059	116	115
500-223548-1 MS	ED-R3SL-059	92	89
500-223548-1 MSD	ED-R3SL-059	83	89
500-223548-2	ED-R3SL-058	82	96
500-223548-3	ED-R3SL-003-3	90	92
500-223548-4	ED-R3SL-057	97	108
500-223548-5	ED-R3SL-SW016	99	97
500-223548-6	ED-R3SL-025-2	89	94
500-223548-7	ED-R3SL-026-2	82	87
500-223548-8	ED-R3SL-027-2	87	92
500-223548-9	ED-R3SL-SW005-2	75	89
500-223548-10	ED-R3SL-028-2	85	99
500-223548-11	ED-R3SL-029-2	85	91
500-223548-12	ED-R3SL-030-2	67	89
500-223548-13	ED-R3SL-SW006-2	81	83
LCS 500-678879/2-A	Lab Control Sample	105	122 S1+
MB 500-678879/1-A	Method Blank	101	96

#### Surrogate Legend

TCX = Tetrachloro-m-xylene  
 DCBP = DCB Decachlorobiphenyl

# QC Sample Results

Client: Civil & Environmental Consultants Inc  
 Project/Site: Arconic - Elliot Ditch - Lafayette, IN

Job ID: 500-223548-1

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

**Lab Sample ID: MB 500-678879/1-A**  
**Matrix: Solid**  
**Analysis Batch: 678919**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**  
**Prep Batch: 678879**

Analyte	MB MB		RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
PCB-1016	<0.17		0.17		mg/Kg		10/10/22 15:34	10/11/22 08:03	10
PCB-1221	<0.17		0.17		mg/Kg		10/10/22 15:34	10/11/22 08:03	10
PCB-1232	<0.17		0.17		mg/Kg		10/10/22 15:34	10/11/22 08:03	10
PCB-1242	<0.17		0.17		mg/Kg		10/10/22 15:34	10/11/22 08:03	10
PCB-1248	<0.17		0.17		mg/Kg		10/10/22 15:34	10/11/22 08:03	10
PCB-1254	<0.17		0.17		mg/Kg		10/10/22 15:34	10/11/22 08:03	10
PCB-1260	<0.17		0.17		mg/Kg		10/10/22 15:34	10/11/22 08:03	10
Surrogate	MB MB		Limits				Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier							
Tetrachloro-m-xylene	101		49 - 129				10/10/22 15:34	10/11/22 08:03	10
DCB Decachlorobiphenyl	96		37 - 121				10/10/22 15:34	10/11/22 08:03	10

**Lab Sample ID: LCS 500-678879/2-A**  
**Matrix: Solid**  
**Analysis Batch: 678919**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**  
**Prep Batch: 678879**

Analyte	Spike Added	LCS LCS		Unit	D	%Rec	%Rec Limits
		Result	Qualifier				
PCB-1016	1.67	1.61		mg/Kg		97	57 - 120
PCB-1260	1.67	1.86		mg/Kg		112	61 - 125
Surrogate	LCS LCS		Limits				%Rec
	%Recovery	Qualifier					
Tetrachloro-m-xylene	105		49 - 129				
DCB Decachlorobiphenyl	122	S1+	37 - 121				

**Lab Sample ID: 500-223548-1 MS**  
**Matrix: Solid**  
**Analysis Batch: 678919**

**Client Sample ID: ED-R3SL-059**  
**Prep Type: Total/NA**  
**Prep Batch: 678879**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS MS		Unit	D	%Rec	%Rec Limits
				Result	Qualifier				
PCB-1016	<0.17		1.74	1.38		mg/Kg	☼	79	57 - 120
PCB-1260	<0.17		1.74	1.44		mg/Kg	☼	83	61 - 125
Surrogate	MS MS		Limits					%Rec	
	%Recovery	Qualifier							
Tetrachloro-m-xylene	92		49 - 129						
DCB Decachlorobiphenyl	89		37 - 121						

**Lab Sample ID: 500-223548-1 MSD**  
**Matrix: Solid**  
**Analysis Batch: 678919**

**Client Sample ID: ED-R3SL-059**  
**Prep Type: Total/NA**  
**Prep Batch: 678879**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD MSD		Unit	D	%Rec	%Rec Limits	RPD	
				Result	Qualifier					RPD	Limit
PCB-1016	<0.17		1.72	1.32		mg/Kg	☼	77	57 - 120	5	30
PCB-1260	<0.17		1.72	1.44		mg/Kg	☼	84	61 - 125	0	30
Surrogate	MSD MSD		Limits					%Rec	RPD		
	%Recovery	Qualifier									
Tetrachloro-m-xylene	83		49 - 129								
DCB Decachlorobiphenyl	89		37 - 121								

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# Lab Chronicle

Client: Civil & Environmental Consultants Inc  
Project/Site: Arconic - Elliot Ditch - Lafayette, IN

Job ID: 500-223548-1

**Client Sample ID: ED-R3SL-059**

**Date Collected: 10/10/22 08:26**

**Date Received: 10/10/22 15:00**

**Lab Sample ID: 500-223548-1**

**Matrix: Solid**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Moisture		1	678886	LWN	EET CHI	10/10/22 16:06

**Client Sample ID: ED-R3SL-059**

**Date Collected: 10/10/22 08:26**

**Date Received: 10/10/22 15:00**

**Lab Sample ID: 500-223548-1**

**Matrix: Solid**

**Percent Solids: 94.3**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3541			678879	EK	EET CHI	10/10/22 15:34 - 10/10/22 19:00 <sup>1</sup>
Total/NA	Analysis	8082A		10	678919	SB	EET CHI	10/11/22 08:32

**Client Sample ID: ED-R3SL-058**

**Date Collected: 10/10/22 08:33**

**Date Received: 10/10/22 15:00**

**Lab Sample ID: 500-223548-2**

**Matrix: Solid**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Moisture		1	678886	LWN	EET CHI	10/10/22 16:06

**Client Sample ID: ED-R3SL-058**

**Date Collected: 10/10/22 08:33**

**Date Received: 10/10/22 15:00**

**Lab Sample ID: 500-223548-2**

**Matrix: Solid**

**Percent Solids: 93.8**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3541			678879	EK	EET CHI	10/10/22 15:34 - 10/10/22 19:00 <sup>1</sup>
Total/NA	Analysis	8082A		10	678919	SB	EET CHI	10/11/22 09:17

**Client Sample ID: ED-R3SL-003-3**

**Date Collected: 10/10/22 09:02**

**Date Received: 10/10/22 15:00**

**Lab Sample ID: 500-223548-3**

**Matrix: Solid**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Moisture		1	678886	LWN	EET CHI	10/10/22 16:06

**Client Sample ID: ED-R3SL-003-3**

**Date Collected: 10/10/22 09:02**

**Date Received: 10/10/22 15:00**

**Lab Sample ID: 500-223548-3**

**Matrix: Solid**

**Percent Solids: 93.4**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3541			678879	EK	EET CHI	10/10/22 15:34 - 10/10/22 19:00 <sup>1</sup>
Total/NA	Analysis	8082A		10	678919	SB	EET CHI	10/11/22 09:32

**Client Sample ID: ED-R3SL-057**

**Date Collected: 10/10/22 09:11**

**Date Received: 10/10/22 15:00**

**Lab Sample ID: 500-223548-4**

**Matrix: Solid**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Moisture		1	678886	LWN	EET CHI	10/10/22 16:06

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# Lab Chronicle

Client: Civil & Environmental Consultants Inc  
Project/Site: Arconic - Elliot Ditch - Lafayette, IN

Job ID: 500-223548-1

**Client Sample ID: ED-R3SL-057**

**Lab Sample ID: 500-223548-4**

**Date Collected: 10/10/22 09:11**

**Matrix: Solid**

**Date Received: 10/10/22 15:00**

**Percent Solids: 93.9**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3541			678879	EK	EET CHI	10/10/22 15:34 - 10/10/22 19:00 <sup>1</sup>
Total/NA	Analysis	8082A		10	678919	SB	EET CHI	10/11/22 09:47

**Client Sample ID: ED-R3SL-SW016**

**Lab Sample ID: 500-223548-5**

**Date Collected: 10/10/22 09:24**

**Matrix: Solid**

**Date Received: 10/10/22 15:00**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Moisture		1	678886	LWN	EET CHI	10/10/22 16:06

**Client Sample ID: ED-R3SL-SW016**

**Lab Sample ID: 500-223548-5**

**Date Collected: 10/10/22 09:24**

**Matrix: Solid**

**Date Received: 10/10/22 15:00**

**Percent Solids: 94.6**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3541			678879	EK	EET CHI	10/10/22 15:34 - 10/10/22 19:00 <sup>1</sup>
Total/NA	Analysis	8082A		10	678919	SB	EET CHI	10/11/22 10:01

**Client Sample ID: ED-R3SL-025-2**

**Lab Sample ID: 500-223548-6**

**Date Collected: 10/10/22 11:02**

**Matrix: Solid**

**Date Received: 10/10/22 15:00**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Moisture		1	678886	LWN	EET CHI	10/10/22 16:06

**Client Sample ID: ED-R3SL-025-2**

**Lab Sample ID: 500-223548-6**

**Date Collected: 10/10/22 11:02**

**Matrix: Solid**

**Date Received: 10/10/22 15:00**

**Percent Solids: 94.1**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3541			678879	EK	EET CHI	10/10/22 15:34 - 10/10/22 19:00 <sup>1</sup>
Total/NA	Analysis	8082A		10	678919	SB	EET CHI	10/11/22 10:16

**Client Sample ID: ED-R3SL-026-2**

**Lab Sample ID: 500-223548-7**

**Date Collected: 10/10/22 11:22**

**Matrix: Solid**

**Date Received: 10/10/22 15:00**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Moisture		1	678886	LWN	EET CHI	10/10/22 16:06

# Lab Chronicle

Client: Civil & Environmental Consultants Inc  
Project/Site: Arconic - Elliot Ditch - Lafayette, IN

Job ID: 500-223548-1

**Client Sample ID: ED-R3SL-026-2**

**Lab Sample ID: 500-223548-7**

**Date Collected: 10/10/22 11:22**

**Matrix: Solid**

**Date Received: 10/10/22 15:00**

**Percent Solids: 93.9**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3541			678879	EK	EET CHI	10/10/22 15:34 - 10/10/22 19:00 <sup>1</sup>
Total/NA	Analysis	8082A		10	678919	SB	EET CHI	10/11/22 10:31

**Client Sample ID: ED-R3SL-027-2**

**Lab Sample ID: 500-223548-8**

**Date Collected: 10/10/22 11:54**

**Matrix: Solid**

**Date Received: 10/10/22 15:00**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Moisture		1	678886	LWN	EET CHI	10/10/22 16:06

**Client Sample ID: ED-R3SL-027-2**

**Lab Sample ID: 500-223548-8**

**Date Collected: 10/10/22 11:54**

**Matrix: Solid**

**Date Received: 10/10/22 15:00**

**Percent Solids: 94.3**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3541			678879	EK	EET CHI	10/10/22 15:34 - 10/10/22 19:00 <sup>1</sup>
Total/NA	Analysis	8082A		10	678919	SB	EET CHI	10/11/22 10:46

**Client Sample ID: ED-R3SL-SW005-2**

**Lab Sample ID: 500-223548-9**

**Date Collected: 10/10/22 12:04**

**Matrix: Solid**

**Date Received: 10/10/22 15:00**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Moisture		1	678886	LWN	EET CHI	10/10/22 16:06

**Client Sample ID: ED-R3SL-SW005-2**

**Lab Sample ID: 500-223548-9**

**Date Collected: 10/10/22 12:04**

**Matrix: Solid**

**Date Received: 10/10/22 15:00**

**Percent Solids: 94.3**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3541			678879	EK	EET CHI	10/10/22 15:34 - 10/10/22 19:00 <sup>1</sup>
Total/NA	Analysis	8082A		10	678919	SB	EET CHI	10/11/22 11:01

**Client Sample ID: ED-R3SL-028-2**

**Lab Sample ID: 500-223548-10**

**Date Collected: 10/10/22 12:31**

**Matrix: Solid**

**Date Received: 10/10/22 15:00**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Moisture		1	678886	LWN	EET CHI	10/10/22 16:06

Eurofins Chicago

# Lab Chronicle

Client: Civil & Environmental Consultants Inc  
Project/Site: Arconic - Elliot Ditch - Lafayette, IN

Job ID: 500-223548-1

## Client Sample ID: ED-R3SL-028-2

Date Collected: 10/10/22 12:31

Date Received: 10/10/22 15:00

## Lab Sample ID: 500-223548-10

Matrix: Solid

Percent Solids: 94.1

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3541			678879	EK	EET CHI	10/10/22 15:34 - 10/10/22 19:00 <sup>1</sup>
Total/NA	Analysis	8082A		10	678919	SB	EET CHI	10/11/22 11:15

## Client Sample ID: ED-R3SL-029-2

Date Collected: 10/10/22 12:41

Date Received: 10/10/22 15:00

## Lab Sample ID: 500-223548-11

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Moisture		1	678886	LWN	EET CHI	10/10/22 16:06

## Client Sample ID: ED-R3SL-029-2

Date Collected: 10/10/22 12:41

Date Received: 10/10/22 15:00

## Lab Sample ID: 500-223548-11

Matrix: Solid

Percent Solids: 92.9

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3541			678879	EK	EET CHI	10/10/22 15:34 - 10/10/22 19:00 <sup>1</sup>
Total/NA	Analysis	8082A		10	678919	SB	EET CHI	10/11/22 11:30

## Client Sample ID: ED-R3SL-030-2

Date Collected: 10/10/22 12:55

Date Received: 10/10/22 15:00

## Lab Sample ID: 500-223548-12

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Moisture		1	678886	LWN	EET CHI	10/10/22 16:06

## Client Sample ID: ED-R3SL-030-2

Date Collected: 10/10/22 12:55

Date Received: 10/10/22 15:00

## Lab Sample ID: 500-223548-12

Matrix: Solid

Percent Solids: 93.5

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3541			678879	EK	EET CHI	10/10/22 15:34 - 10/10/22 19:00 <sup>1</sup>
Total/NA	Analysis	8082A		10	678919	SB	EET CHI	10/11/22 11:45

## Client Sample ID: ED-R3SL-SW006-2

Date Collected: 10/10/22 13:10

Date Received: 10/10/22 15:00

## Lab Sample ID: 500-223548-13

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Moisture		1	678886	LWN	EET CHI	10/10/22 16:06

# Lab Chronicle

Client: Civil & Environmental Consultants Inc  
Project/Site: Arconic - Elliot Ditch - Lafayette, IN

Job ID: 500-223548-1

**Client Sample ID: ED-R3SL-SW006-2**

**Lab Sample ID: 500-223548-13**

**Date Collected: 10/10/22 13:10**

**Matrix: Solid**

**Date Received: 10/10/22 15:00**

**Percent Solids: 94.8**

<u>Prep Type</u>	<u>Batch Type</u>	<u>Batch Method</u>	<u>Run</u>	<u>Dilution Factor</u>	<u>Batch Number</u>	<u>Analyst</u>	<u>Lab</u>	<u>Prepared or Analyzed</u>
Total/NA	Prep	3541			678879	EK	EET CHI	10/10/22 15:34 - 10/10/22 19:00 <sup>1</sup>
Total/NA	Analysis	8082A		10	678919	SB	EET CHI	10/11/22 12:00

<sup>1</sup> Completion dates and times are reported or not reported per method requirements or individual lab discretion.

## Laboratory References:

EET CHI = Eurofins Chicago, 2417 Bond Street, University Park, IL 60484, TEL (708)534-5200

# Accreditation/Certification Summary

Client: Civil & Environmental Consultants Inc  
Project/Site: Arconic - Elliot Ditch - Lafayette, IN

Job ID: 500-223548-1

## Laboratory: Eurofins Chicago

The accreditations/certifications listed below are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Illinois	NELAP	IL00035	04-30-23

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# Chain of Custody Record

524992



Environment Testing  
TestAmerica

Address \_\_\_\_\_

Regulatory Program:  DW  NPDES  RCRA  Other

TAL-8210

Client Contact		Project Manager: <i>G. Welch</i>		Site Contact: <i>G. Welch</i>		Date:		COC No	
Company Name: <i>CEC</i>		Tel/Email: <i>865-446-1655</i>		Lab Contact: <i>R. Kintz</i>		Carrier: <i>Courier</i>		_____ of _____ COCs	
Address: <i>2704 Cherokee Farm Way Suite 101</i>		Analysis Turnaround Time		Filtered Sample (Y/N) _____ Perform MS/MSD (Y/N) _____ <i>PLBS via BCBZ</i>		 500-223548 COC		Sampler	
City/State/Zip: <i>Knoxville, TN 37220</i>		<input type="checkbox"/> CALENDAR DAYS <input type="checkbox"/> WORKING DAYS TAT if different from Below _____						For Lab Use Only:	
Phone: <i>865-977-9497</i>		<input type="checkbox"/> 2 weeks <input type="checkbox"/> 1 week <i>24 Hour*</i> <input type="checkbox"/> 2 days <i>Rush</i> <input checked="" type="checkbox"/> 1 day						Walk-in Client	
Fax: _____								Lab Sampling	
Project Name: <i>Ellett Ditch IM Project</i>						Job / SDG No		<i>500-223548</i>	
Site: <i>Reach 3</i>								Sample Specific Notes	
PO #: _____									
Sample Identification		Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.			
<i>ED-R3SL-059</i>		<i>10/10/22</i>	<i>0826</i>	<i>C</i>	<i>S</i>	<i>1</i>	<i>X</i>		
<i>ED-R3SL-058</i>		<i>10/10/22</i>	<i>0833</i>	<i>C</i>	<i>S</i>	<i>1</i>	<i>X</i>		
<i>ED-R3SL-003-3</i>		<i>10/10/22</i>	<i>0902</i>	<i>C</i>	<i>S</i>	<i>1</i>	<i>X</i>	<i>Prioritize</i>	
<i>ED-R3SL-057</i>		<i>10/10/22</i>	<i>0911</i>	<i>C</i>	<i>S</i>	<i>1</i>	<i>X</i>		
<i>ED-R3SL-SW016</i>		<i>10/10/22</i>	<i>0924</i>	<i>C</i>	<i>S</i>	<i>1</i>	<i>X</i>		
<i>ED-R3SL-025-2</i>		<i>10/10/22</i>	<i>1102</i>	<i>C</i>	<i>S</i>	<i>1</i>	<i>X</i>	<i>Prioritize</i>	
<i>ED-R3SL-026-2</i>		<i>10/10/22</i>	<i>1122</i>	<i>C</i>	<i>S</i>	<i>1</i>	<i>X</i>		
<i>ED-R3SL-027-2</i>		<i>10/10/22</i>	<i>1154</i>	<i>C</i>	<i>S</i>	<i>1</i>	<i>X</i>		
<i>ED-R3SL-SW005-2</i>		<i>10/10/22</i>	<i>1204</i>	<i>C</i>	<i>S</i>	<i>1</i>	<i>X</i>		
<i>ED-R3SL-028-2</i>		<i>10/10/22</i>	<i>1231</i>	<i>C</i>	<i>S</i>	<i>1</i>	<i>X</i>		
<i>ED-R3SL-029-2</i>		<i>10/10/22</i>	<i>1241</i>	<i>C</i>	<i>S</i>	<i>1</i>	<i>X</i>		
<i>ED-R3SL-030-2</i>		<i>10/10/22</i>	<i>1255</i>	<i>C</i>	<i>S</i>	<i>1</i>	<i>X</i>		
Preservation Used: 1=Ice, 2=HCl, 3=H2SO4, 4=HNO3, 5=NaOH, 6=Other									
Possible Hazard Identification:					Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)				
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 checked="" type="checkbox"/> Non-Hazardous <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison B <input type="checkbox"/> Unknown					<input type="checkbox"/> Return to Client <input checked="" type="checkbox"/> Disposal by Lab <input type="checkbox"/> Archive for _____ Months				
Special Instructions/QC Requirements & Comments:									
Custody Seals Intact: <input type="checkbox"/> Yes <input type="checkbox"/> No		Custody Seal No		Cooler Temp (°C) Obs'd: <i>4.1</i>		Corr'd: <i>3.9</i>		Therm ID No	
Relinquished by: <i>[Signature]</i>		Company: <i>CEC</i>		Date/Time: <i>10/10/22 1355</i>		Received by: <i>[Signature]</i>		Company: <i>EETA</i>	
Relinquished by: <i>[Signature]</i>		Company: <i>EETA</i>		Date/Time: <i>10/10/22 1400 EST</i>		Received by:		Company:	
Relinquished by:		Company:		Date/Time:		Received in Laboratory by: <i>[Signature]</i>		Company: <i>EETA</i>	
								Date/Time: <i>10/10/22 1500</i>	

10-9-2022

# Chain of Custody Record

524992



Environment Testing  
TestAmerica

TAL-8210

Address \_\_\_\_\_

Regulatory Program:  DW  NPDES  RCRA  Other

<b>Client Contact</b>		<b>Project Manager:</b> <i>G. Welch</i>		<b>Site Contact:</b> <i>G. Welch</i>		<b>Date:</b>		<b>COC No</b>	
Company Name <i>CEC</i>		Tel/Email: <i>865-446-7655</i>		Lab Contact: <i>R. Kintz</i>		Carrier: <i>Cowen</i>		_____ of _____ COCs	
Address <i>2704 Cherokee Farm Way Suite 101</i>		<b>Analysis Turnaround Time</b>							
City/State/Zip <i>Knoxville, TN 37920</i>		<input type="checkbox"/> CALENDAR DAYS <input type="checkbox"/> WORKING DAYS							
Phone <i>865-977-9497</i>		TAT if different from Below _____							
Fax _____		<input type="checkbox"/> 2 weeks							
Project Name <i>Ellicott Ditch IM Project</i>		<input checked="" type="checkbox"/> 1 week <i>24 Hour*</i>							
Site <i>Reach 3</i>		<input type="checkbox"/> 2 days <i>RUSH</i>							
P O # _____		<input checked="" type="checkbox"/> 1 day							
<b>Sample Identification</b>		Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.	Filtered Sample (Y/N)	Perform MS/MSD (Y/N)	Sample Specific Notes
<i>ED-R35L-SW006-2</i>		<i>10/10/22</i>	<i>1310</i>	<i>C</i>	<i>S</i>	<i>1</i>		<i>X</i>	<i>Prioritize</i>
<i>ED-R35L-EB010</i>		<i>10/16/22</i>	<i>1345</i>	<i>G</i>	<i>W/S</i>	<i>2</i>		<i>X</i>	<i>No Rush required</i>
					<i>CAW</i>	<i>10/10/22</i>			
Preservation Used: 1=Ice, 2=HCl; 3=H2SO4; 4=HNO3; 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					Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)				
<input checked="" type="checkbox"/> Non-Hazardous <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison B <input type="checkbox"/> Unknown					<input type="checkbox"/> Return to Client <input checked="" type="checkbox"/> Disposal by Lab <input type="checkbox"/> Archive for _____ Months				
Special Instructions/QC Requirements & Comments:									
Custody Seals Intact <input type="checkbox"/> Yes <input type="checkbox"/> No		Custody Seal No _____		Cooler Temp (°C) Obs'd <i>4.1</i> Corr'd <i>3.9</i>		Therm ID No _____			
Relinquished by <i>[Signature]</i>		Company: <i>CEC</i>		Date/Time: <i>10/10/22 1352</i>		Received by: <i>[Signature]</i>		Company: <i>EETA</i>	
Relinquished by <i>[Signature]</i>		Company: <i>EETA</i>		Date/Time: <i>10/10/22 1500 EST</i>		Received by: <i>[Signature]</i>		Company: <i>EETA</i>	
Relinquished by _____		Company: _____		Date/Time: _____		Received in Laboratory by: <i>[Signature]</i>		Company: <i>EETA</i>	

13/24

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## Login Sample Receipt Checklist

Client: Civil & Environmental Consultants Inc

Job Number: 500-223548-1

**Login Number: 223548**

**List Number: 1**

**Creator: Scott, Sherri L**

**List Source: Eurofins Chicago**

Question	Answer	Comment
Radioactivity wasn't checked or is <math>\leq</math> background as measured by a survey meter.	True	
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	3.9
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 <math><6\text{mm}</math> (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

## ANALYTICAL REPORT

Eurofins Chicago  
2417 Bond Street  
University Park, IL 60484  
Tel: (708)534-5200

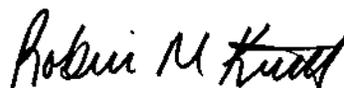
Laboratory Job ID: 500-223548-2

Client Project/Site: Arconic - Elliot Ditch - Lafayette, IN

**For:**

Civil & Environmental Consultants Inc  
2704 Cherokee Farm Way  
Suite 101  
Knoxville, Tennessee 37920

Attn: Garrett Welch



Authorized for release by:  
10/14/2022 3:22:28 PM

Robin Kintz, Project Manager II  
(708)534-5200

[Robin.Kintz@et.eurofinsus.com](mailto:Robin.Kintz@et.eurofinsus.com)

### LINKS

Review your project  
results through



Have a Question?



Visit us at:

[www.eurofinsus.com/Env](http://www.eurofinsus.com/Env)

The test results in this report meet all 2003 NELAC, 2009 TNI, and 2016 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.



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# Case Narrative

Client: Civil & Environmental Consultants Inc  
Project/Site: Arconic - Elliot Ditch - Lafayette, IN

Job ID: 500-223548-2

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**Job ID: 500-223548-2**

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**Laboratory: Eurofins Chicago**

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**Narrative**

**Job Narrative  
500-223548-2**

**Comments**

No additional comments.

**Receipt**

The samples were received on 10/10/2022 3:00 PM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperature of the cooler at receipt was 3.9° C.

**GC Semi VOA**

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

**Organic Prep**

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

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# Detection Summary

Client: Civil & Environmental Consultants Inc  
Project/Site: Arconic - Elliot Ditch - Lafayette, IN

Job ID: 500-223548-2

**Client Sample ID: ED-R3SL-EB010**

**Lab Sample ID: 500-223548-14**

No Detections.

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This Detection Summary does not include radiochemical test results.

Eurofins Chicago

# Method Summary

Client: Civil & Environmental Consultants Inc  
Project/Site: Arconic - Elliot Ditch - Lafayette, IN

Job ID: 500-223548-2

Method	Method Description	Protocol	Laboratory
8082A	Polychlorinated Biphenyls (PCBs) by Gas Chromatography	SW846	EET CHI
3510C	Liquid-Liquid Extraction (Separatory Funnel)	SW846	EET CHI

**Protocol References:**

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

**Laboratory References:**

EET CHI = Eurofins Chicago, 2417 Bond Street, University Park, IL 60484, TEL (708)534-5200



# Sample Summary

Client: Civil & Environmental Consultants Inc  
Project/Site: Arconic - Elliot Ditch - Lafayette, IN

Job ID: 500-223548-2

---

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
500-223548-14	ED-R3SL-EB010	Water	10/10/22 13:45	10/10/22 15:00

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# Client Sample Results

Client: Civil & Environmental Consultants Inc  
 Project/Site: Arconic - Elliot Ditch - Lafayette, IN

Job ID: 500-223548-2

**Client Sample ID: ED-R3SL-EB010**

**Lab Sample ID: 500-223548-14**

**Date Collected: 10/10/22 13:45**

**Matrix: Water**

**Date Received: 10/10/22 15:00**

**Method: SW846 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<0.00039		0.00039		mg/L		10/11/22 07:41	10/11/22 19:52	1
PCB-1221	<0.00039		0.00039		mg/L		10/11/22 07:41	10/11/22 19:52	1
PCB-1232	<0.00039		0.00039		mg/L		10/11/22 07:41	10/11/22 19:52	1
PCB-1242	<0.00039		0.00039		mg/L		10/11/22 07:41	10/11/22 19:52	1
PCB-1248	<0.00039		0.00039		mg/L		10/11/22 07:41	10/11/22 19:52	1
PCB-1254	<0.00039		0.00039		mg/L		10/11/22 07:41	10/11/22 19:52	1
PCB-1260	<0.00039		0.00039		mg/L		10/11/22 07:41	10/11/22 19:52	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	63		30 - 120	10/11/22 07:41	10/11/22 19:52	1
DCB Decachlorobiphenyl	44		30 - 140	10/11/22 07:41	10/11/22 19:52	1

# Definitions/Glossary

Client: Civil & Environmental Consultants Inc  
Project/Site: Arconic - Elliot Ditch - Lafayette, IN

Job ID: 500-223548-2

## Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
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)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
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)
TNTC	Too Numerous To Count

# QC Association Summary

Client: Civil & Environmental Consultants Inc  
Project/Site: Arconic - Elliot Ditch - Lafayette, IN

Job ID: 500-223548-2

## GC Semi VOA

### Prep Batch: 678933

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-223548-14	ED-R3SL-EB010	Total/NA	Water	3510C	
MB 500-678933/1-A	Method Blank	Total/NA	Water	3510C	
LCS 500-678933/4-A	Lab Control Sample	Total/NA	Water	3510C	
LCSD 500-678933/5-A	Lab Control Sample Dup	Total/NA	Water	3510C	

### Analysis Batch: 679122

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-223548-14	ED-R3SL-EB010	Total/NA	Water	8082A	678933
MB 500-678933/1-A	Method Blank	Total/NA	Water	8082A	678933
LCS 500-678933/4-A	Lab Control Sample	Total/NA	Water	8082A	678933
LCSD 500-678933/5-A	Lab Control Sample Dup	Total/NA	Water	8082A	678933

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- 13
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# Surrogate Summary

Client: Civil & Environmental Consultants Inc  
Project/Site: Arconic - Elliot Ditch - Lafayette, IN

Job ID: 500-223548-2

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

Matrix: Water

Prep Type: Total/NA

### Percent Surrogate Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	TCX2	DCBP2
		(30-120)	(30-140)
500-223548-14	ED-R3SL-EB010	63	44
LCS 500-678933/4-A	Lab Control Sample	84	94
LCSD 500-678933/5-A	Lab Control Sample Dup	88	98
MB 500-678933/1-A	Method Blank	95	112

#### Surrogate Legend

TCX = Tetrachloro-m-xylene

DCBP = DCB Decachlorobiphenyl

# QC Sample Results

Client: Civil & Environmental Consultants Inc  
 Project/Site: Arconic - Elliot Ditch - Lafayette, IN

Job ID: 500-223548-2

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

**Lab Sample ID: MB 500-678933/1-A**  
**Matrix: Water**  
**Analysis Batch: 679122**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**  
**Prep Batch: 678933**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<0.00040		0.00040		mg/L		10/11/22 07:41	10/11/22 16:55	1
PCB-1221	<0.00040		0.00040		mg/L		10/11/22 07:41	10/11/22 16:55	1
PCB-1232	<0.00040		0.00040		mg/L		10/11/22 07:41	10/11/22 16:55	1
PCB-1242	<0.00040		0.00040		mg/L		10/11/22 07:41	10/11/22 16:55	1
PCB-1248	<0.00040		0.00040		mg/L		10/11/22 07:41	10/11/22 16:55	1
PCB-1254	<0.00040		0.00040		mg/L		10/11/22 07:41	10/11/22 16:55	1
PCB-1260	<0.00040		0.00040		mg/L		10/11/22 07:41	10/11/22 16:55	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	95		30 - 120	10/11/22 07:41	10/11/22 16:55	1
DCB Decachlorobiphenyl	112		30 - 140	10/11/22 07:41	10/11/22 16:55	1

**Lab Sample ID: LCS 500-678933/4-A**  
**Matrix: Water**  
**Analysis Batch: 679122**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**  
**Prep Batch: 678933**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
PCB-1016	0.00400	0.00378		mg/L		94	56 - 120
PCB-1260	0.00400	0.00401		mg/L		100	53 - 137

Surrogate	LCS %Recovery	LCS Qualifier	Limits
Tetrachloro-m-xylene	84		30 - 120
DCB Decachlorobiphenyl	94		30 - 140

**Lab Sample ID: LCSD 500-678933/5-A**  
**Matrix: Water**  
**Analysis Batch: 679122**

**Client Sample ID: Lab Control Sample Dup**  
**Prep Type: Total/NA**  
**Prep Batch: 678933**

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
PCB-1016	0.00400	0.00390		mg/L		97	56 - 120	3	20
PCB-1260	0.00400	0.00409		mg/L		102	53 - 137	2	20

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
Tetrachloro-m-xylene	88		30 - 120
DCB Decachlorobiphenyl	98		30 - 140

# Lab Chronicle

Client: Civil & Environmental Consultants Inc  
Project/Site: Arconic - Elliot Ditch - Lafayette, IN

Job ID: 500-223548-2

**Client Sample ID: ED-R3SL-EB010**

**Lab Sample ID: 500-223548-14**

**Date Collected: 10/10/22 13:45**

**Matrix: Water**

**Date Received: 10/10/22 15:00**

<u>Prep Type</u>	<u>Batch Type</u>	<u>Batch Method</u>	<u>Run</u>	<u>Dilution Factor</u>	<u>Batch Number</u>	<u>Analyst</u>	<u>Lab</u>	<u>Prepared or Analyzed</u>
Total/NA	Prep	3510C			678933	FRG	EET CHI	10/11/22 07:41
Total/NA	Analysis	8082A		1	679122	SS	EET CHI	10/11/22 19:52

**Laboratory References:**

EET CHI = Eurofins Chicago, 2417 Bond Street, University Park, IL 60484, TEL (708)534-5200

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# Accreditation/Certification Summary

Client: Civil & Environmental Consultants Inc  
Project/Site: Arconic - Elliot Ditch - Lafayette, IN

Job ID: 500-223548-2

## Laboratory: Eurofins Chicago

The accreditations/certifications listed below are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Illinois	NELAP	IL00035	04-30-23

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# Chain of Custody Record

524992



Environment Testing  
TestAmerica

TAL-8210

Address \_\_\_\_\_

Regulatory Program:  DW  NPDES  RCRA  Other

Client Contact		Project Manager: <i>G. Welch</i>		Site Contact: <i>G. Welch</i>		Date:		COC No					
Company Name: <i>CEC</i>		Tel/Email: <i>865-446-1655</i>		Lab Contact: <i>R. Kintz</i>		Carrier: <i>Courier</i>		_____ of _____ COCs					
Address: <i>2704 Cherokee Farm Way Suite 101</i>		Analysis Turnaround Time		Filtered Sample (Y/N) _____ Perform MS/MSD (Y/N) _____ <i>PLBS via BCBZ</i>		 500-223548 COC		Sampler					
City/State/Zip: <i>Knoxville, TN 37220</i>		<input type="checkbox"/> CALENDAR DAYS <input type="checkbox"/> WORKING DAYS						For Lab Use Only:		Walk-in Client		Lab Sampling	
Phone: <i>865-977-9497</i>		TAT if different from Below _____						Job / SDG No		_____		_____	
Fax: _____		<input type="checkbox"/> 2 weeks <input type="checkbox"/> 1 week <i>24 Hour*</i> <input type="checkbox"/> 2 days <i>Rush</i> <input checked="" type="checkbox"/> 1 day						500-223548		_____		_____	
Project Name: <i>Ellett Ditch IM Project</i>		Sample Identification		Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.	Sample Specific Notes				
Site: <i>Reach 3</i>		<i>ED-R3SL-059</i>		<i>10/10/22</i>	<i>0826</i>	<i>C</i>	<i>S</i>	<i>1</i>					
PO #: _____		<i>ED-R3SL-058</i>		<i>10/10/22</i>	<i>0833</i>	<i>C</i>	<i>S</i>	<i>1</i>					
		<i>ED-R3SL-003-3</i>		<i>10/10/22</i>	<i>0902</i>	<i>C</i>	<i>S</i>	<i>1</i>	<i>Prioritize</i>				
		<i>ED-R3SL-057</i>		<i>10/10/22</i>	<i>0911</i>	<i>C</i>	<i>S</i>	<i>1</i>					
		<i>ED-R3SL-SW016</i>		<i>10/10/22</i>	<i>0924</i>	<i>C</i>	<i>S</i>	<i>1</i>					
		<i>ED-R3SL-025-2</i>		<i>10/10/22</i>	<i>1102</i>	<i>C</i>	<i>S</i>	<i>1</i>	<i>Prioritize</i>				
		<i>ED-R3SL-026-2</i>		<i>10/10/22</i>	<i>1122</i>	<i>C</i>	<i>S</i>	<i>1</i>					
		<i>ED-R3SL-027-2</i>		<i>10/10/22</i>	<i>1154</i>	<i>C</i>	<i>S</i>	<i>1</i>					
		<i>ED-R3SL-SW005-2</i>		<i>10/10/22</i>	<i>1204</i>	<i>C</i>	<i>S</i>	<i>1</i>					
		<i>ED-R3SL-028-2</i>		<i>10/10/22</i>	<i>1231</i>	<i>C</i>	<i>S</i>	<i>1</i>					
		<i>ED-R3SL-029-2</i>		<i>10/10/22</i>	<i>1241</i>	<i>C</i>	<i>S</i>	<i>1</i>					
		<i>ED-R3SL-030-2</i>		<i>10/10/22</i>	<i>1255</i>	<i>C</i>	<i>S</i>	<i>1</i>					
Preservation Used: 1=Ice, 2=HCl, 3=H2SO4, 4=HNO3, 5=NaOH, 6=Other													
Possible Hazard Identification:					Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)								
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"/> Return to Client <input checked="" type="checkbox"/> Disposal by Lab <input type="checkbox"/> Archive for _____ Months								
<input checked="" type="checkbox"/> Non-Hazardous <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison B <input type="checkbox"/> Unknown													
Special Instructions/QC Requirements & Comments:													
Custody Seals Intact: <input type="checkbox"/> Yes <input type="checkbox"/> No		Custody Seal No		Cooler Temp (°C) Obs'd: <i>4.1</i>		Corr'd: <i>3.9</i>		Therm ID No					
Relinquished by: <i>[Signature]</i>		Company: <i>CEC</i>		Date/Time: <i>10/16/22 1355</i>		Received by: <i>[Signature]</i>		Company: <i>EETA</i>					
Relinquished by: <i>[Signature]</i>		Company: <i>EETA</i>		Date/Time: <i>10/10/22 1400 EST</i>		Received by: _____		Company: _____					
Relinquished by: _____		Company: _____		Date/Time: _____		Received in Laboratory by: <i>[Signature]</i>		Company: <i>EETA</i>					
								Date/Time: <i>10/10/22 1500</i>					

10-9-2022

# Chain of Custody Record

524992



Environment Testing  
TestAmerica

Address \_\_\_\_\_

Regulatory Program:  DW  NPDES  RCRA  Other

TAL-8210

<b>Client Contact</b>		<b>Project Manager:</b> G. Welch		<b>Site Contact:</b> G. Welch		<b>Date:</b>		<b>COC No</b>			
Company Name <b>CEC</b>		Tel/Email: <b>865-440-7655</b>		Lab Contact: <b>R Kintz</b>		Carrier: <b>Cowen</b>		_____ of _____ COCs			
Address <b>2704 Cherokee Farm Way Suite 101</b>		<b>Analysis Turnaround Time</b>									
City/State/Zip <b>Knoxville, TN 37920</b>		<input type="checkbox"/> CALENDAR DAYS <input type="checkbox"/> WORKING DAYS TAT if different from Below _____ <input type="checkbox"/> 2 weeks <input type="checkbox"/> 1 week <b>* 24 Hour *</b> <input type="checkbox"/> 2 days <b>RUSH</b> <input checked="" type="checkbox"/> 1 day									
Phone <b>865-977-9997</b>		Sample Identification Sample Date    Sample Time    Sample Type (C=Comp, G=Grab)    Matrix    # of Cont.		Filtered Sample (Y/N) Perform MS/MSD (Y/N) PCBs via 8082				For Lab Use Only: Walk-in Client Lab Sampling			
Fax _____										Job / SDG No <b>500-223548</b>	
Project Name <b>Elletts Ditch IM Project</b>											
Site <b>Reach 3</b>											
P O # _____								Sample Specific Notes			
		ED-R3SL-SW006-2		10/10/22 1310		C S 1		X		Prioritize	
		ED-R3SL-EB010		10/16/22 1345		G W S 2		X		No Rush required	
						CAW 10/10/22					
Preservation Used: 1=Ice, 2=HCl; 3=H2SO4; 4=HNO3; 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 checked="" type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison B <input type="checkbox"/> Unknown					Sample Disposal ( A fee may be assessed if samples are retained longer than 1 month) <input type="checkbox"/> Return to Client <input checked="" type="checkbox"/> Disposal by Lab <input type="checkbox"/> Archive for _____ Months						
Special Instructions/QC Requirements & Comments:											
Custody Seals Intact <input type="checkbox"/> Yes <input type="checkbox"/> No		Custody Seal No _____		Cooler Temp (°C) Obs'd <b>4.1</b> Corr'd <b>3.9</b>		Therm ID No _____					
Relinquished by <b>[Signature]</b>		Company: <b>CEC</b>		Date/Time: <b>10/10/22 1352</b>		Received by: <b>[Signature]</b>		Company: <b>EETA</b>			
Relinquished by <b>[Signature]</b>		Company: <b>EETA</b>		Date/Time: <b>10/10/22 1505 EST</b>		Received by: <b>[Signature]</b>		Company: <b>EETA</b>			
Relinquished by _____		Company: _____		Date/Time: _____		Received in Laboratory by: <b>[Signature]</b>		Company: <b>EETA</b>			
				10/10/22 1500							

13/24

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## Login Sample Receipt Checklist

Client: Civil & Environmental Consultants Inc

Job Number: 500-223548-2

**Login Number: 223548**

**List Number: 1**

**Creator: Scott, Sherri L**

**List Source: Eurofins Chicago**

Question	Answer	Comment
Radioactivity wasn't checked or is <math>\leq</math> background as measured by a survey meter.	True	
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	3.9
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 <math><6\text{mm}</math> (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	



## ANALYTICAL REPORT

Eurofins Chicago  
2417 Bond Street  
University Park, IL 60484  
Tel: (708)534-5200

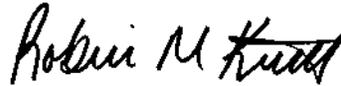
Laboratory Job ID: 500-223632-1

Client Project/Site: Arconic - Elliot Ditch - Lafayette, IN

**For:**

Civil & Environmental Consultants Inc  
2704 Cherokee Farm Way  
Suite 101  
Knoxville, Tennessee 37920

Attn: Garrett Welch



*Authorized for release by:  
10/12/2022 12:51:51 PM*

Robin Kintz, Project Manager II  
(708)534-5200

[Robin.Kintz@et.eurofinsus.com](mailto:Robin.Kintz@et.eurofinsus.com)

### LINKS

Review your project  
results through



Have a Question?



Visit us at:

[www.eurofinsus.com/Env](http://www.eurofinsus.com/Env)

The test results in this report meet all 2003 NELAC, 2009 TNI, and 2016 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.



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# Case Narrative

Client: Civil & Environmental Consultants Inc  
Project/Site: Arconic - Elliot Ditch - Lafayette, IN

Job ID: 500-223632-1

## Job ID: 500-223632-1

### Laboratory: Eurofins Chicago

#### Narrative

#### Job Narrative 500-223632-1

#### Comments

No additional comments.

#### Receipt

The samples were received on 10/11/2022 3:19 PM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperature of the cooler at receipt was 4.5° C.

#### GC Semi VOA

Method 8082A: Surrogates Tetrachloro-m-xylene and DCB Decachlorobiphenyl for (CCVIS 500-679147/3) are outside acceptable percent difference however Tetrachloro-m-xylene is within acceptable percent recovery; therefore re-analysis was not performed.

Method 8082A: Surrogate DCB Decachlorobiphenyl is outside acceptable control limits for ED-R3SL-056 (500-223632-1), ED-R3SL-055 (500-223632-3), ED-R3SL-055 (500-223632-3[MS]), ED-R3SL-055 (500-223632-3[MSD]), ED-R3SL-054 (500-223632-4), ED-R3SL-SW015 (500-223632-5), ED-R3SL-052 (500-223632-7), ED-R3SL-SW001-4 (500-223632-10), ED-R3SL-050 (500-223632-11), ED-R3SL-049 (500-223632-12), ED-R3SL-048 (500-223632-13), ED-R3SL-047 (500-223632-14), ED-R3SL-SW013 (500-223632-15), ED-R3SL-SW012 (500-223632-16), ED-R3SL-SW010 (500-223632-17), ED-R3SL-046 (500-223632-19), (LCS 500-679132/2-A) and (MB 500-679132/1-A) however Tetrachloro-m-xylene is within acceptable percent recovery; therefore re-extraction and/or re-analysis was not performed

Method 8082A: Surrogate Tetrachloro-m-xylene is outside acceptable control limits for ED-R3SL-SW011 (500-223632-21) however DCB Decachlorobiphenyl is within acceptable percent recovery; therefore re-extraction and/or re-analysis was not performed

Method 8082A: Surrogate Tetrachloro-m-xylene is outside acceptable control limits for (CCVIS 500-679183/3) however DCB Decachlorobiphenyl is within acceptable range; therefore re-analysis was not performed

Method 8082A: Surrogate recovery for the following sample was outside the upper control limit: ED-R3SL-051 (500-223632-8). This sample did not contain any target analytes; therefore, re-extraction and/or re-analysis was not performed.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

#### Metals

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

#### Organic Prep

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

# Detection Summary

Client: Civil & Environmental Consultants Inc  
Project/Site: Arconic - Elliot Ditch - Lafayette, IN

Job ID: 500-223632-1

## Client Sample ID: ED-R3SL-056

Lab Sample ID: 500-223632-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
PCB-1248	0.98		0.17		mg/Kg	10	✳	8082A	Total/NA

## Client Sample ID: ED-R3SL-DUP006

Lab Sample ID: 500-223632-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
PCB-1248	0.63		0.18		mg/Kg	10	✳	8082A	Total/NA

## Client Sample ID: ED-R3SL-055

Lab Sample ID: 500-223632-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
PCB-1248	0.32		0.18		mg/Kg	10	✳	8082A	Total/NA

## Client Sample ID: ED-R3SL-054

Lab Sample ID: 500-223632-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
PCB-1248	0.19		0.18		mg/Kg	10	✳	8082A	Total/NA

## Client Sample ID: ED-R3SL-SW015

Lab Sample ID: 500-223632-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
PCB-1248	0.19		0.18		mg/Kg	10	✳	8082A	Total/NA

## Client Sample ID: ED-R3SL-053

Lab Sample ID: 500-223632-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
PCB-1248	0.54		0.18		mg/Kg	10	✳	8082A	Total/NA

## Client Sample ID: ED-R3SL-052

Lab Sample ID: 500-223632-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
PCB-1248	1.0		0.17		mg/Kg	10	✳	8082A	Total/NA

## Client Sample ID: ED-R3SL-051

Lab Sample ID: 500-223632-8

No Detections.

## Client Sample ID: ED-R3SL-SW014

Lab Sample ID: 500-223632-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
PCB-1248	5.2		0.90		mg/Kg	50	✳	8082A	Total/NA

## Client Sample ID: ED-R3SL-SW001-4

Lab Sample ID: 500-223632-10

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
PCB-1248	0.69		0.18		mg/Kg	10	✳	8082A	Total/NA

## Client Sample ID: ED-R3SL-050

Lab Sample ID: 500-223632-11

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
PCB-1248	0.53		0.17		mg/Kg	10	✳	8082A	Total/NA

## Client Sample ID: ED-R3SL-049

Lab Sample ID: 500-223632-12

No Detections.

This Detection Summary does not include radiochemical test results.

Eurofins Chicago

# Detection Summary

Client: Civil & Environmental Consultants Inc  
Project/Site: Arconic - Elliot Ditch - Lafayette, IN

Job ID: 500-223632-1

## Client Sample ID: ED-R3SL-048

## Lab Sample ID: 500-223632-13

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
PCB-1248	0.55		0.16		mg/Kg	10	✳	8082A	Total/NA

## Client Sample ID: ED-R3SL-047

## Lab Sample ID: 500-223632-14

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
PCB-1248	0.61		0.18		mg/Kg	10	✳	8082A	Total/NA

## Client Sample ID: ED-R3SL-SW013

## Lab Sample ID: 500-223632-15

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
PCB-1248	0.62		0.17		mg/Kg	10	✳	8082A	Total/NA

## Client Sample ID: ED-R3SL-SW012

## Lab Sample ID: 500-223632-16

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
PCB-1248	0.28		0.18		mg/Kg	10	✳	8082A	Total/NA

## Client Sample ID: ED-R3SL-SW010

## Lab Sample ID: 500-223632-17

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
PCB-1248	0.77		0.18		mg/Kg	10	✳	8082A	Total/NA

## Client Sample ID: ED-R3SL-046

## Lab Sample ID: 500-223632-19

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
PCB-1248	1.2		0.18		mg/Kg	10	✳	8082A	Total/NA

## Client Sample ID: ED-R3SL-DUP007

## Lab Sample ID: 500-223632-20

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
PCB-1248	1.4		0.18		mg/Kg	10	✳	8082A	Total/NA

## Client Sample ID: ED-R3SL-SW011

## Lab Sample ID: 500-223632-21

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
PCB-1248	0.25		0.17		mg/Kg	10	✳	8082A	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins Chicago

# Method Summary

Client: Civil & Environmental Consultants Inc  
Project/Site: Arconic - Elliot Ditch - Lafayette, IN

Job ID: 500-223632-1

Method	Method Description	Protocol	Laboratory
8082A	Polychlorinated Biphenyls (PCBs) by Gas Chromatography	SW846	EET CHI
Moisture	Percent Moisture	EPA	EET CHI
3541	Automated Soxhlet Extraction	SW846	EET CHI

**Protocol References:**

EPA = US Environmental Protection Agency

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

**Laboratory References:**

EET CHI = Eurofins Chicago, 2417 Bond Street, University Park, IL 60484, TEL (708)534-5200



# Sample Summary

Client: Civil & Environmental Consultants Inc  
Project/Site: Arconic - Elliot Ditch - Lafayette, IN

Job ID: 500-223632-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
500-223632-1	ED-R3SL-056	Solid	10/10/22 14:46	10/11/22 15:19
500-223632-2	ED-R3SL-DUP006	Solid	10/10/22 00:00	10/11/22 15:19
500-223632-3	ED-R3SL-055	Solid	10/10/22 15:00	10/11/22 15:19
500-223632-4	ED-R3SL-054	Solid	10/10/22 15:10	10/11/22 15:19
500-223632-5	ED-R3SL-SW015	Solid	10/10/22 15:23	10/11/22 15:19
500-223632-6	ED-R3SL-053	Solid	10/10/22 15:37	10/11/22 15:19
500-223632-7	ED-R3SL-052	Solid	10/10/22 15:53	10/11/22 15:19
500-223632-8	ED-R3SL-051	Solid	10/10/22 16:41	10/11/22 15:19
500-223632-9	ED-R3SL-SW014	Solid	10/10/22 16:52	10/11/22 15:19
500-223632-10	ED-R3SL-SW001-4	Solid	10/11/22 09:09	10/11/22 15:19
500-223632-11	ED-R3SL-050	Solid	10/11/22 09:17	10/11/22 15:19
500-223632-12	ED-R3SL-049	Solid	10/11/22 09:26	10/11/22 15:19
500-223632-13	ED-R3SL-048	Solid	10/11/22 09:34	10/11/22 15:19
500-223632-14	ED-R3SL-047	Solid	10/11/22 09:45	10/11/22 15:19
500-223632-15	ED-R3SL-SW013	Solid	10/11/22 09:53	10/11/22 15:19
500-223632-16	ED-R3SL-SW012	Solid	10/11/22 10:01	10/11/22 15:19
500-223632-17	ED-R3SL-SW010	Solid	10/11/22 10:15	10/11/22 15:19
500-223632-19	ED-R3SL-046	Solid	10/11/22 12:00	10/11/22 15:19
500-223632-20	ED-R3SL-DUP007	Solid	10/11/22 00:00	10/11/22 15:19
500-223632-21	ED-R3SL-SW011	Solid	10/11/22 12:16	10/11/22 15:19



# Client Sample Results

Client: Civil & Environmental Consultants Inc  
 Project/Site: Arconic - Elliot Ditch - Lafayette, IN

Job ID: 500-223632-1

**Client Sample ID: ED-R3SL-056**

**Lab Sample ID: 500-223632-1**

**Date Collected: 10/10/22 14:46**

**Matrix: Solid**

**Date Received: 10/11/22 15:19**

**Percent Solids: 93.4**

**Method: SW846 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<0.17		0.17		mg/Kg	☼	10/11/22 16:16	10/12/22 01:06	10
PCB-1221	<0.17		0.17		mg/Kg	☼	10/11/22 16:16	10/12/22 01:06	10
PCB-1232	<0.17		0.17		mg/Kg	☼	10/11/22 16:16	10/12/22 01:06	10
PCB-1242	<0.17		0.17		mg/Kg	☼	10/11/22 16:16	10/12/22 01:06	10
PCB-1248	<b>0.98</b>		0.17		mg/Kg	☼	10/11/22 16:16	10/12/22 01:06	10
PCB-1254	<0.17		0.17		mg/Kg	☼	10/11/22 16:16	10/12/22 01:06	10
PCB-1260	<0.17		0.17		mg/Kg	☼	10/11/22 16:16	10/12/22 01:06	10

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	122		49 - 129	10/11/22 16:16	10/12/22 01:06	10
DCB Decachlorobiphenyl	154	S1+	37 - 121	10/11/22 16:16	10/12/22 01:06	10

# Client Sample Results

Client: Civil & Environmental Consultants Inc  
 Project/Site: Arconic - Elliot Ditch - Lafayette, IN

Job ID: 500-223632-1

**Client Sample ID: ED-R3SL-DUP006**

**Lab Sample ID: 500-223632-2**

**Date Collected: 10/10/22 00:00**

**Matrix: Solid**

**Date Received: 10/11/22 15:19**

**Percent Solids: 93.5**

**Method: SW846 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<0.18		0.18		mg/Kg	☼	10/11/22 16:16	10/12/22 01:21	10
PCB-1221	<0.18		0.18		mg/Kg	☼	10/11/22 16:16	10/12/22 01:21	10
PCB-1232	<0.18		0.18		mg/Kg	☼	10/11/22 16:16	10/12/22 01:21	10
PCB-1242	<0.18		0.18		mg/Kg	☼	10/11/22 16:16	10/12/22 01:21	10
PCB-1248	<b>0.63</b>		0.18		mg/Kg	☼	10/11/22 16:16	10/12/22 01:21	10
PCB-1254	<0.18		0.18		mg/Kg	☼	10/11/22 16:16	10/12/22 01:21	10
PCB-1260	<0.18		0.18		mg/Kg	☼	10/11/22 16:16	10/12/22 01:21	10

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	73		49 - 129	10/11/22 16:16	10/12/22 01:21	10
DCB Decachlorobiphenyl	106		37 - 121	10/11/22 16:16	10/12/22 01:21	10

# Client Sample Results

Client: Civil & Environmental Consultants Inc  
 Project/Site: Arconic - Elliot Ditch - Lafayette, IN

Job ID: 500-223632-1

**Client Sample ID: ED-R3SL-055**

**Lab Sample ID: 500-223632-3**

**Date Collected: 10/10/22 15:00**

**Matrix: Solid**

**Date Received: 10/11/22 15:19**

**Percent Solids: 89.5**

**Method: SW846 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<0.18		0.18		mg/Kg	☼	10/11/22 16:16	10/12/22 01:35	10
PCB-1221	<0.18		0.18		mg/Kg	☼	10/11/22 16:16	10/12/22 01:35	10
PCB-1232	<0.18		0.18		mg/Kg	☼	10/11/22 16:16	10/12/22 01:35	10
PCB-1242	<0.18		0.18		mg/Kg	☼	10/11/22 16:16	10/12/22 01:35	10
PCB-1248	<b>0.32</b>		0.18		mg/Kg	☼	10/11/22 16:16	10/12/22 01:35	10
PCB-1254	<0.18		0.18		mg/Kg	☼	10/11/22 16:16	10/12/22 01:35	10
PCB-1260	<0.18		0.18		mg/Kg	☼	10/11/22 16:16	10/12/22 01:35	10

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	92		49 - 129	10/11/22 16:16	10/12/22 01:35	10
DCB Decachlorobiphenyl	142	S1+	37 - 121	10/11/22 16:16	10/12/22 01:35	10

# Client Sample Results

Client: Civil & Environmental Consultants Inc  
 Project/Site: Arconic - Elliot Ditch - Lafayette, IN

Job ID: 500-223632-1

**Client Sample ID: ED-R3SL-054**

**Lab Sample ID: 500-223632-4**

**Date Collected: 10/10/22 15:10**

**Matrix: Solid**

**Date Received: 10/11/22 15:19**

**Percent Solids: 92.1**

**Method: SW846 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<0.18		0.18		mg/Kg	☼	10/11/22 16:16	10/12/22 02:20	10
PCB-1221	<0.18		0.18		mg/Kg	☼	10/11/22 16:16	10/12/22 02:20	10
PCB-1232	<0.18		0.18		mg/Kg	☼	10/11/22 16:16	10/12/22 02:20	10
PCB-1242	<0.18		0.18		mg/Kg	☼	10/11/22 16:16	10/12/22 02:20	10
PCB-1248	<b>0.19</b>		0.18		mg/Kg	☼	10/11/22 16:16	10/12/22 02:20	10
PCB-1254	<0.18		0.18		mg/Kg	☼	10/11/22 16:16	10/12/22 02:20	10
PCB-1260	<0.18		0.18		mg/Kg	☼	10/11/22 16:16	10/12/22 02:20	10

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	89		49 - 129	10/11/22 16:16	10/12/22 02:20	10
DCB Decachlorobiphenyl	132	S1+	37 - 121	10/11/22 16:16	10/12/22 02:20	10

# Client Sample Results

Client: Civil & Environmental Consultants Inc  
 Project/Site: Arconic - Elliot Ditch - Lafayette, IN

Job ID: 500-223632-1

**Client Sample ID: ED-R3SL-SW015**

**Lab Sample ID: 500-223632-5**

**Date Collected: 10/10/22 15:23**

**Matrix: Solid**

**Date Received: 10/11/22 15:19**

**Percent Solids: 94.4**

**Method: SW846 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<0.18		0.18		mg/Kg	☼	10/11/22 16:16	10/12/22 02:35	10
PCB-1221	<0.18		0.18		mg/Kg	☼	10/11/22 16:16	10/12/22 02:35	10
PCB-1232	<0.18		0.18		mg/Kg	☼	10/11/22 16:16	10/12/22 02:35	10
PCB-1242	<0.18		0.18		mg/Kg	☼	10/11/22 16:16	10/12/22 02:35	10
PCB-1248	<b>0.19</b>		0.18		mg/Kg	☼	10/11/22 16:16	10/12/22 02:35	10
PCB-1254	<0.18		0.18		mg/Kg	☼	10/11/22 16:16	10/12/22 02:35	10
PCB-1260	<0.18		0.18		mg/Kg	☼	10/11/22 16:16	10/12/22 02:35	10

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	98		49 - 129	10/11/22 16:16	10/12/22 02:35	10
DCB Decachlorobiphenyl	131	S1+	37 - 121	10/11/22 16:16	10/12/22 02:35	10

# Client Sample Results

Client: Civil & Environmental Consultants Inc  
 Project/Site: Arconic - Elliot Ditch - Lafayette, IN

Job ID: 500-223632-1

**Client Sample ID: ED-R3SL-053**

**Lab Sample ID: 500-223632-6**

**Date Collected: 10/10/22 15:37**

**Matrix: Solid**

**Date Received: 10/11/22 15:19**

**Percent Solids: 91.1**

**Method: SW846 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<0.18		0.18		mg/Kg	☼	10/11/22 16:16	10/12/22 02:49	10
PCB-1221	<0.18		0.18		mg/Kg	☼	10/11/22 16:16	10/12/22 02:49	10
PCB-1232	<0.18		0.18		mg/Kg	☼	10/11/22 16:16	10/12/22 02:49	10
PCB-1242	<0.18		0.18		mg/Kg	☼	10/11/22 16:16	10/12/22 02:49	10
PCB-1248	<b>0.54</b>		0.18		mg/Kg	☼	10/11/22 16:16	10/12/22 02:49	10
PCB-1254	<0.18		0.18		mg/Kg	☼	10/11/22 16:16	10/12/22 02:49	10
PCB-1260	<0.18		0.18		mg/Kg	☼	10/11/22 16:16	10/12/22 02:49	10

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	49		49 - 129	10/11/22 16:16	10/12/22 02:49	10
DCB Decachlorobiphenyl	94		37 - 121	10/11/22 16:16	10/12/22 02:49	10

# Client Sample Results

Client: Civil & Environmental Consultants Inc  
 Project/Site: Arconic - Elliot Ditch - Lafayette, IN

Job ID: 500-223632-1

**Client Sample ID: ED-R3SL-052**

**Lab Sample ID: 500-223632-7**

**Date Collected: 10/10/22 15:53**

**Matrix: Solid**

**Date Received: 10/11/22 15:19**

**Percent Solids: 94.6**

**Method: SW846 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<0.17		0.17		mg/Kg	☼	10/11/22 16:16	10/12/22 03:04	10
PCB-1221	<0.17		0.17		mg/Kg	☼	10/11/22 16:16	10/12/22 03:04	10
PCB-1232	<0.17		0.17		mg/Kg	☼	10/11/22 16:16	10/12/22 03:04	10
PCB-1242	<0.17		0.17		mg/Kg	☼	10/11/22 16:16	10/12/22 03:04	10
PCB-1248	<b>1.0</b>		0.17		mg/Kg	☼	10/11/22 16:16	10/12/22 03:04	10
PCB-1254	<0.17		0.17		mg/Kg	☼	10/11/22 16:16	10/12/22 03:04	10
PCB-1260	<0.17		0.17		mg/Kg	☼	10/11/22 16:16	10/12/22 03:04	10

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	77		49 - 129	10/11/22 16:16	10/12/22 03:04	10
DCB Decachlorobiphenyl	129	S1+	37 - 121	10/11/22 16:16	10/12/22 03:04	10

# Client Sample Results

Client: Civil & Environmental Consultants Inc  
 Project/Site: Arconic - Elliot Ditch - Lafayette, IN

Job ID: 500-223632-1

**Client Sample ID: ED-R3SL-051**

**Lab Sample ID: 500-223632-8**

**Date Collected: 10/10/22 16:41**

**Matrix: Solid**

**Date Received: 10/11/22 15:19**

**Percent Solids: 92.8**

**Method: SW846 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<0.18		0.18		mg/Kg	☼	10/11/22 16:16	10/12/22 09:06	10
PCB-1221	<0.18		0.18		mg/Kg	☼	10/11/22 16:16	10/12/22 09:06	10
PCB-1232	<0.18		0.18		mg/Kg	☼	10/11/22 16:16	10/12/22 09:06	10
PCB-1242	<0.18		0.18		mg/Kg	☼	10/11/22 16:16	10/12/22 09:06	10
PCB-1248	<0.18		0.18		mg/Kg	☼	10/11/22 16:16	10/12/22 09:06	10
PCB-1254	<0.18		0.18		mg/Kg	☼	10/11/22 16:16	10/12/22 09:06	10
PCB-1260	<0.18		0.18		mg/Kg	☼	10/11/22 16:16	10/12/22 09:06	10

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
<i>Tetrachloro-m-xylene</i>	130	S1+	49 - 129	10/11/22 16:16	10/12/22 09:06	10
<i>DCB Decachlorobiphenyl</i>	138	S1+	37 - 121	10/11/22 16:16	10/12/22 09:06	10

# Client Sample Results

Client: Civil & Environmental Consultants Inc  
 Project/Site: Arconic - Elliot Ditch - Lafayette, IN

Job ID: 500-223632-1

**Client Sample ID: ED-R3SL-SW014**

**Lab Sample ID: 500-223632-9**

Date Collected: 10/10/22 16:52

Matrix: Solid

Date Received: 10/11/22 15:19

Percent Solids: 92.5

**Method: SW846 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<0.90		0.90		mg/Kg	☼	10/11/22 16:16	10/12/22 09:21	50
PCB-1221	<0.90		0.90		mg/Kg	☼	10/11/22 16:16	10/12/22 09:21	50
PCB-1232	<0.90		0.90		mg/Kg	☼	10/11/22 16:16	10/12/22 09:21	50
PCB-1242	<0.90		0.90		mg/Kg	☼	10/11/22 16:16	10/12/22 09:21	50
PCB-1248	5.2		0.90		mg/Kg	☼	10/11/22 16:16	10/12/22 09:21	50
PCB-1254	<0.90		0.90		mg/Kg	☼	10/11/22 16:16	10/12/22 09:21	50
PCB-1260	<0.90		0.90		mg/Kg	☼	10/11/22 16:16	10/12/22 09:21	50

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	101		49 - 129	10/11/22 16:16	10/12/22 09:21	50
DCB Decachlorobiphenyl	111		37 - 121	10/11/22 16:16	10/12/22 09:21	50

# Client Sample Results

Client: Civil & Environmental Consultants Inc  
 Project/Site: Arconic - Elliot Ditch - Lafayette, IN

Job ID: 500-223632-1

**Client Sample ID: ED-R3SL-SW001-4**

**Lab Sample ID: 500-223632-10**

**Date Collected: 10/11/22 09:09**

**Matrix: Solid**

**Date Received: 10/11/22 15:19**

**Percent Solids: 90.0**

**Method: SW846 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<0.18		0.18		mg/Kg	☼	10/11/22 16:16	10/12/22 03:48	10
PCB-1221	<0.18		0.18		mg/Kg	☼	10/11/22 16:16	10/12/22 03:48	10
PCB-1232	<0.18		0.18		mg/Kg	☼	10/11/22 16:16	10/12/22 03:48	10
PCB-1242	<0.18		0.18		mg/Kg	☼	10/11/22 16:16	10/12/22 03:48	10
PCB-1248	<b>0.69</b>		0.18		mg/Kg	☼	10/11/22 16:16	10/12/22 03:48	10
PCB-1254	<0.18		0.18		mg/Kg	☼	10/11/22 16:16	10/12/22 03:48	10
PCB-1260	<0.18		0.18		mg/Kg	☼	10/11/22 16:16	10/12/22 03:48	10

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	92		49 - 129	10/11/22 16:16	10/12/22 03:48	10
DCB Decachlorobiphenyl	126	S1+	37 - 121	10/11/22 16:16	10/12/22 03:48	10

# Client Sample Results

Client: Civil & Environmental Consultants Inc  
 Project/Site: Arconic - Elliot Ditch - Lafayette, IN

Job ID: 500-223632-1

**Client Sample ID: ED-R3SL-050**

**Lab Sample ID: 500-223632-11**

**Date Collected: 10/11/22 09:17**

**Matrix: Solid**

**Date Received: 10/11/22 15:19**

**Percent Solids: 99.0**

**Method: SW846 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<0.17		0.17		mg/Kg	☼	10/11/22 16:16	10/12/22 04:03	10
PCB-1221	<0.17		0.17		mg/Kg	☼	10/11/22 16:16	10/12/22 04:03	10
PCB-1232	<0.17		0.17		mg/Kg	☼	10/11/22 16:16	10/12/22 04:03	10
PCB-1242	<0.17		0.17		mg/Kg	☼	10/11/22 16:16	10/12/22 04:03	10
PCB-1248	<b>0.53</b>		0.17		mg/Kg	☼	10/11/22 16:16	10/12/22 04:03	10
PCB-1254	<0.17		0.17		mg/Kg	☼	10/11/22 16:16	10/12/22 04:03	10
PCB-1260	<0.17		0.17		mg/Kg	☼	10/11/22 16:16	10/12/22 04:03	10

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	114		49 - 129	10/11/22 16:16	10/12/22 04:03	10
DCB Decachlorobiphenyl	166	S1+	37 - 121	10/11/22 16:16	10/12/22 04:03	10

# Client Sample Results

Client: Civil & Environmental Consultants Inc  
 Project/Site: Arconic - Elliot Ditch - Lafayette, IN

Job ID: 500-223632-1

**Client Sample ID: ED-R3SL-049**

**Lab Sample ID: 500-223632-12**

**Date Collected: 10/11/22 09:26**

**Matrix: Solid**

**Date Received: 10/11/22 15:19**

**Percent Solids: 89.5**

**Method: SW846 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<0.19		0.19		mg/Kg	☼	10/11/22 16:16	10/12/22 04:18	10
PCB-1221	<0.19		0.19		mg/Kg	☼	10/11/22 16:16	10/12/22 04:18	10
PCB-1232	<0.19		0.19		mg/Kg	☼	10/11/22 16:16	10/12/22 04:18	10
PCB-1242	<0.19		0.19		mg/Kg	☼	10/11/22 16:16	10/12/22 04:18	10
PCB-1248	<0.19		0.19		mg/Kg	☼	10/11/22 16:16	10/12/22 04:18	10
PCB-1254	<0.19		0.19		mg/Kg	☼	10/11/22 16:16	10/12/22 04:18	10
PCB-1260	<0.19		0.19		mg/Kg	☼	10/11/22 16:16	10/12/22 04:18	10

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	88		49 - 129	10/11/22 16:16	10/12/22 04:18	10
DCB Decachlorobiphenyl	132	S1+	37 - 121	10/11/22 16:16	10/12/22 04:18	10

# Client Sample Results

Client: Civil & Environmental Consultants Inc  
 Project/Site: Arconic - Elliot Ditch - Lafayette, IN

Job ID: 500-223632-1

**Client Sample ID: ED-R3SL-048**

**Lab Sample ID: 500-223632-13**

**Date Collected: 10/11/22 09:34**

**Matrix: Solid**

**Date Received: 10/11/22 15:19**

**Percent Solids: 98.9**

**Method: SW846 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<0.16		0.16		mg/Kg	☼	10/11/22 16:16	10/12/22 04:33	10
PCB-1221	<0.16		0.16		mg/Kg	☼	10/11/22 16:16	10/12/22 04:33	10
PCB-1232	<0.16		0.16		mg/Kg	☼	10/11/22 16:16	10/12/22 04:33	10
PCB-1242	<0.16		0.16		mg/Kg	☼	10/11/22 16:16	10/12/22 04:33	10
PCB-1248	<b>0.55</b>		0.16		mg/Kg	☼	10/11/22 16:16	10/12/22 04:33	10
PCB-1254	<0.16		0.16		mg/Kg	☼	10/11/22 16:16	10/12/22 04:33	10
PCB-1260	<0.16		0.16		mg/Kg	☼	10/11/22 16:16	10/12/22 04:33	10

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	98		49 - 129	10/11/22 16:16	10/12/22 04:33	10
DCB Decachlorobiphenyl	145	S1+	37 - 121	10/11/22 16:16	10/12/22 04:33	10

# Client Sample Results

Client: Civil & Environmental Consultants Inc  
 Project/Site: Arconic - Elliot Ditch - Lafayette, IN

Job ID: 500-223632-1

**Client Sample ID: ED-R3SL-047**

**Lab Sample ID: 500-223632-14**

**Date Collected: 10/11/22 09:45**

**Matrix: Solid**

**Date Received: 10/11/22 15:19**

**Percent Solids: 88.8**

**Method: SW846 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<0.18		0.18		mg/Kg	☼	10/11/22 16:16	10/12/22 04:47	10
PCB-1221	<0.18		0.18		mg/Kg	☼	10/11/22 16:16	10/12/22 04:47	10
PCB-1232	<0.18		0.18		mg/Kg	☼	10/11/22 16:16	10/12/22 04:47	10
PCB-1242	<0.18		0.18		mg/Kg	☼	10/11/22 16:16	10/12/22 04:47	10
PCB-1248	<b>0.61</b>		0.18		mg/Kg	☼	10/11/22 16:16	10/12/22 04:47	10
PCB-1254	<0.18		0.18		mg/Kg	☼	10/11/22 16:16	10/12/22 04:47	10
PCB-1260	<0.18		0.18		mg/Kg	☼	10/11/22 16:16	10/12/22 04:47	10

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	95		49 - 129	10/11/22 16:16	10/12/22 04:47	10
DCB Decachlorobiphenyl	134	S1+	37 - 121	10/11/22 16:16	10/12/22 04:47	10

# Client Sample Results

Client: Civil & Environmental Consultants Inc  
 Project/Site: Arconic - Elliot Ditch - Lafayette, IN

Job ID: 500-223632-1

**Client Sample ID: ED-R3SL-SW013**

**Lab Sample ID: 500-223632-15**

**Date Collected: 10/11/22 09:53**

**Matrix: Solid**

**Date Received: 10/11/22 15:19**

**Percent Solids: 92.8**

**Method: SW846 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<0.17		0.17		mg/Kg	☼	10/11/22 16:16	10/12/22 05:02	10
PCB-1221	<0.17		0.17		mg/Kg	☼	10/11/22 16:16	10/12/22 05:02	10
PCB-1232	<0.17		0.17		mg/Kg	☼	10/11/22 16:16	10/12/22 05:02	10
PCB-1242	<0.17		0.17		mg/Kg	☼	10/11/22 16:16	10/12/22 05:02	10
PCB-1248	<b>0.62</b>		0.17		mg/Kg	☼	10/11/22 16:16	10/12/22 05:02	10
PCB-1254	<0.17		0.17		mg/Kg	☼	10/11/22 16:16	10/12/22 05:02	10
PCB-1260	<0.17		0.17		mg/Kg	☼	10/11/22 16:16	10/12/22 05:02	10

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	113		49 - 129	10/11/22 16:16	10/12/22 05:02	10
DCB Decachlorobiphenyl	168	S1+	37 - 121	10/11/22 16:16	10/12/22 05:02	10

# Client Sample Results

Client: Civil & Environmental Consultants Inc  
 Project/Site: Arconic - Elliot Ditch - Lafayette, IN

Job ID: 500-223632-1

**Client Sample ID: ED-R3SL-SW012**

**Lab Sample ID: 500-223632-16**

**Date Collected: 10/11/22 10:01**

**Matrix: Solid**

**Date Received: 10/11/22 15:19**

**Percent Solids: 92.5**

**Method: SW846 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<0.18		0.18		mg/Kg	☼	10/11/22 16:16	10/12/22 05:17	10
PCB-1221	<0.18		0.18		mg/Kg	☼	10/11/22 16:16	10/12/22 05:17	10
PCB-1232	<0.18		0.18		mg/Kg	☼	10/11/22 16:16	10/12/22 05:17	10
PCB-1242	<0.18		0.18		mg/Kg	☼	10/11/22 16:16	10/12/22 05:17	10
PCB-1248	<b>0.28</b>		0.18		mg/Kg	☼	10/11/22 16:16	10/12/22 05:17	10
PCB-1254	<0.18		0.18		mg/Kg	☼	10/11/22 16:16	10/12/22 05:17	10
PCB-1260	<0.18		0.18		mg/Kg	☼	10/11/22 16:16	10/12/22 05:17	10

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	105		49 - 129	10/11/22 16:16	10/12/22 05:17	10
DCB Decachlorobiphenyl	154	S1+	37 - 121	10/11/22 16:16	10/12/22 05:17	10

# Client Sample Results

Client: Civil & Environmental Consultants Inc  
 Project/Site: Arconic - Elliot Ditch - Lafayette, IN

Job ID: 500-223632-1

**Client Sample ID: ED-R3SL-SW010**

**Lab Sample ID: 500-223632-17**

**Date Collected: 10/11/22 10:15**

**Matrix: Solid**

**Date Received: 10/11/22 15:19**

**Percent Solids: 89.4**

**Method: SW846 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<0.18		0.18		mg/Kg	☼	10/11/22 16:16	10/12/22 05:32	10
PCB-1221	<0.18		0.18		mg/Kg	☼	10/11/22 16:16	10/12/22 05:32	10
PCB-1232	<0.18		0.18		mg/Kg	☼	10/11/22 16:16	10/12/22 05:32	10
PCB-1242	<0.18		0.18		mg/Kg	☼	10/11/22 16:16	10/12/22 05:32	10
PCB-1248	<b>0.77</b>		0.18		mg/Kg	☼	10/11/22 16:16	10/12/22 05:32	10
PCB-1254	<0.18		0.18		mg/Kg	☼	10/11/22 16:16	10/12/22 05:32	10
PCB-1260	<0.18		0.18		mg/Kg	☼	10/11/22 16:16	10/12/22 05:32	10

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	114		49 - 129	10/11/22 16:16	10/12/22 05:32	10
DCB Decachlorobiphenyl	179	S1+	37 - 121	10/11/22 16:16	10/12/22 05:32	10

# Client Sample Results

Client: Civil & Environmental Consultants Inc  
 Project/Site: Arconic - Elliot Ditch - Lafayette, IN

Job ID: 500-223632-1

**Client Sample ID: ED-R3SL-046**

**Lab Sample ID: 500-223632-19**

**Date Collected: 10/11/22 12:00**

**Matrix: Solid**

**Date Received: 10/11/22 15:19**

**Percent Solids: 92.5**

**Method: SW846 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<0.18		0.18		mg/Kg	☼	10/11/22 16:16	10/12/22 05:46	10
PCB-1221	<0.18		0.18		mg/Kg	☼	10/11/22 16:16	10/12/22 05:46	10
PCB-1232	<0.18		0.18		mg/Kg	☼	10/11/22 16:16	10/12/22 05:46	10
PCB-1242	<0.18		0.18		mg/Kg	☼	10/11/22 16:16	10/12/22 05:46	10
PCB-1248	<b>1.2</b>		0.18		mg/Kg	☼	10/11/22 16:16	10/12/22 05:46	10
PCB-1254	<0.18		0.18		mg/Kg	☼	10/11/22 16:16	10/12/22 05:46	10
PCB-1260	<0.18		0.18		mg/Kg	☼	10/11/22 16:16	10/12/22 05:46	10

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	122		49 - 129	10/11/22 16:16	10/12/22 05:46	10
DCB Decachlorobiphenyl	174	S1+	37 - 121	10/11/22 16:16	10/12/22 05:46	10

# Client Sample Results

Client: Civil & Environmental Consultants Inc  
 Project/Site: Arconic - Elliot Ditch - Lafayette, IN

Job ID: 500-223632-1

**Client Sample ID: ED-R3SL-DUP007**

**Lab Sample ID: 500-223632-20**

**Date Collected: 10/11/22 00:00**

**Matrix: Solid**

**Date Received: 10/11/22 15:19**

**Percent Solids: 92.7**

**Method: SW846 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<0.18		0.18		mg/Kg	☼	10/11/22 16:16	10/12/22 06:01	10
PCB-1221	<0.18		0.18		mg/Kg	☼	10/11/22 16:16	10/12/22 06:01	10
PCB-1232	<0.18		0.18		mg/Kg	☼	10/11/22 16:16	10/12/22 06:01	10
PCB-1242	<0.18		0.18		mg/Kg	☼	10/11/22 16:16	10/12/22 06:01	10
PCB-1248	1.4		0.18		mg/Kg	☼	10/11/22 16:16	10/12/22 06:01	10
PCB-1254	<0.18		0.18		mg/Kg	☼	10/11/22 16:16	10/12/22 06:01	10
PCB-1260	<0.18		0.18		mg/Kg	☼	10/11/22 16:16	10/12/22 06:01	10

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	66		49 - 129	10/11/22 16:16	10/12/22 06:01	10
DCB Decachlorobiphenyl	94		37 - 121	10/11/22 16:16	10/12/22 06:01	10

# Client Sample Results

Client: Civil & Environmental Consultants Inc  
 Project/Site: Arconic - Elliot Ditch - Lafayette, IN

Job ID: 500-223632-1

**Client Sample ID: ED-R3SL-SW011**

**Lab Sample ID: 500-223632-21**

**Date Collected: 10/11/22 12:16**

**Matrix: Solid**

**Date Received: 10/11/22 15:19**

**Percent Solids: 93.4**

**Method: SW846 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<0.17		0.17		mg/Kg	☼	10/11/22 16:16	10/12/22 06:16	10
PCB-1221	<0.17		0.17		mg/Kg	☼	10/11/22 16:16	10/12/22 06:16	10
PCB-1232	<0.17		0.17		mg/Kg	☼	10/11/22 16:16	10/12/22 06:16	10
PCB-1242	<0.17		0.17		mg/Kg	☼	10/11/22 16:16	10/12/22 06:16	10
PCB-1248	<b>0.25</b>		0.17		mg/Kg	☼	10/11/22 16:16	10/12/22 06:16	10
PCB-1254	<0.17		0.17		mg/Kg	☼	10/11/22 16:16	10/12/22 06:16	10
PCB-1260	<0.17		0.17		mg/Kg	☼	10/11/22 16:16	10/12/22 06:16	10

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	43	S1-	49 - 129	10/11/22 16:16	10/12/22 06:16	10
DCB Decachlorobiphenyl	63		37 - 121	10/11/22 16:16	10/12/22 06:16	10

# Definitions/Glossary

Client: Civil & Environmental Consultants Inc  
Project/Site: Arconic - Elliot Ditch - Lafayette, IN

Job ID: 500-223632-1

## Qualifiers

### GC Semi VOA

Qualifier	Qualifier Description
F1	MS and/or MSD recovery exceeds control limits.
S1-	Surrogate recovery exceeds control limits, low biased.
S1+	Surrogate recovery exceeds control limits, high biased.

## Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
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)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
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)
TNTC	Too Numerous To Count

# QC Association Summary

Client: Civil & Environmental Consultants Inc  
 Project/Site: Arconic - Elliot Ditch - Lafayette, IN

Job ID: 500-223632-1

## GC Semi VOA

### Prep Batch: 679132

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-223632-1	ED-R3SL-056	Total/NA	Solid	3541	
500-223632-2	ED-R3SL-DUP006	Total/NA	Solid	3541	
500-223632-3	ED-R3SL-055	Total/NA	Solid	3541	
500-223632-4	ED-R3SL-054	Total/NA	Solid	3541	
500-223632-5	ED-R3SL-SW015	Total/NA	Solid	3541	
500-223632-6	ED-R3SL-053	Total/NA	Solid	3541	
500-223632-7	ED-R3SL-052	Total/NA	Solid	3541	
500-223632-8	ED-R3SL-051	Total/NA	Solid	3541	
500-223632-9	ED-R3SL-SW014	Total/NA	Solid	3541	
500-223632-10	ED-R3SL-SW001-4	Total/NA	Solid	3541	
500-223632-11	ED-R3SL-050	Total/NA	Solid	3541	
500-223632-12	ED-R3SL-049	Total/NA	Solid	3541	
500-223632-13	ED-R3SL-048	Total/NA	Solid	3541	
500-223632-14	ED-R3SL-047	Total/NA	Solid	3541	
500-223632-15	ED-R3SL-SW013	Total/NA	Solid	3541	
500-223632-16	ED-R3SL-SW012	Total/NA	Solid	3541	
500-223632-17	ED-R3SL-SW010	Total/NA	Solid	3541	
500-223632-19	ED-R3SL-046	Total/NA	Solid	3541	
500-223632-20	ED-R3SL-DUP007	Total/NA	Solid	3541	
500-223632-21	ED-R3SL-SW011	Total/NA	Solid	3541	
MB 500-679132/1-A	Method Blank	Total/NA	Solid	3541	
LCS 500-679132/2-A	Lab Control Sample	Total/NA	Solid	3541	
500-223632-3 MS	ED-R3SL-055	Total/NA	Solid	3541	
500-223632-3 MSD	ED-R3SL-055	Total/NA	Solid	3541	

### Analysis Batch: 679147

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-223632-1	ED-R3SL-056	Total/NA	Solid	8082A	679132
500-223632-2	ED-R3SL-DUP006	Total/NA	Solid	8082A	679132
500-223632-3	ED-R3SL-055	Total/NA	Solid	8082A	679132
500-223632-4	ED-R3SL-054	Total/NA	Solid	8082A	679132
500-223632-5	ED-R3SL-SW015	Total/NA	Solid	8082A	679132
500-223632-6	ED-R3SL-053	Total/NA	Solid	8082A	679132
500-223632-7	ED-R3SL-052	Total/NA	Solid	8082A	679132
500-223632-10	ED-R3SL-SW001-4	Total/NA	Solid	8082A	679132
500-223632-11	ED-R3SL-050	Total/NA	Solid	8082A	679132
500-223632-12	ED-R3SL-049	Total/NA	Solid	8082A	679132
500-223632-13	ED-R3SL-048	Total/NA	Solid	8082A	679132
500-223632-14	ED-R3SL-047	Total/NA	Solid	8082A	679132
500-223632-15	ED-R3SL-SW013	Total/NA	Solid	8082A	679132
500-223632-16	ED-R3SL-SW012	Total/NA	Solid	8082A	679132
500-223632-17	ED-R3SL-SW010	Total/NA	Solid	8082A	679132
500-223632-19	ED-R3SL-046	Total/NA	Solid	8082A	679132
500-223632-20	ED-R3SL-DUP007	Total/NA	Solid	8082A	679132
500-223632-21	ED-R3SL-SW011	Total/NA	Solid	8082A	679132
MB 500-679132/1-A	Method Blank	Total/NA	Solid	8082A	679132
LCS 500-679132/2-A	Lab Control Sample	Total/NA	Solid	8082A	679132
500-223632-3 MS	ED-R3SL-055	Total/NA	Solid	8082A	679132
500-223632-3 MSD	ED-R3SL-055	Total/NA	Solid	8082A	679132

# QC Association Summary

Client: Civil & Environmental Consultants Inc  
Project/Site: Arconic - Elliot Ditch - Lafayette, IN

Job ID: 500-223632-1

## GC Semi VOA

### Analysis Batch: 679183

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-223632-8	ED-R3SL-051	Total/NA	Solid	8082A	679132
500-223632-9	ED-R3SL-SW014	Total/NA	Solid	8082A	679132

## General Chemistry

### Analysis Batch: 679107

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-223632-1	ED-R3SL-056	Total/NA	Solid	Moisture	

### Analysis Batch: 679126

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-223632-2	ED-R3SL-DUP006	Total/NA	Solid	Moisture	
500-223632-3	ED-R3SL-055	Total/NA	Solid	Moisture	
500-223632-4	ED-R3SL-054	Total/NA	Solid	Moisture	
500-223632-5	ED-R3SL-SW015	Total/NA	Solid	Moisture	
500-223632-6	ED-R3SL-053	Total/NA	Solid	Moisture	
500-223632-7	ED-R3SL-052	Total/NA	Solid	Moisture	
500-223632-8	ED-R3SL-051	Total/NA	Solid	Moisture	
500-223632-9	ED-R3SL-SW014	Total/NA	Solid	Moisture	
500-223632-10	ED-R3SL-SW001-4	Total/NA	Solid	Moisture	
500-223632-11	ED-R3SL-050	Total/NA	Solid	Moisture	
500-223632-12	ED-R3SL-049	Total/NA	Solid	Moisture	
500-223632-13	ED-R3SL-048	Total/NA	Solid	Moisture	
500-223632-14	ED-R3SL-047	Total/NA	Solid	Moisture	
500-223632-15	ED-R3SL-SW013	Total/NA	Solid	Moisture	
500-223632-16	ED-R3SL-SW012	Total/NA	Solid	Moisture	
500-223632-17	ED-R3SL-SW010	Total/NA	Solid	Moisture	
500-223632-19	ED-R3SL-046	Total/NA	Solid	Moisture	
500-223632-20	ED-R3SL-DUP007	Total/NA	Solid	Moisture	
500-223632-21	ED-R3SL-SW011	Total/NA	Solid	Moisture	
500-223632-2 DU	ED-R3SL-DUP006	Total/NA	Solid	Moisture	

# Surrogate Summary

Client: Civil & Environmental Consultants Inc  
 Project/Site: Arconic - Elliot Ditch - Lafayette, IN

Job ID: 500-223632-1

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

Matrix: Solid

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)	
		TCX1 (49-129)	DCBP1 (37-121)
500-223632-1	ED-R3SL-056	122	154 S1+
500-223632-2	ED-R3SL-DUP006	73	106
500-223632-3	ED-R3SL-055	92	142 S1+
500-223632-3 MS	ED-R3SL-055	115	163 S1+
500-223632-3 MSD	ED-R3SL-055	107	143 S1+
500-223632-4	ED-R3SL-054	89	132 S1+
500-223632-5	ED-R3SL-SW015	98	131 S1+
500-223632-6	ED-R3SL-053	49	94
500-223632-7	ED-R3SL-052	77	129 S1+
500-223632-10	ED-R3SL-SW001-4	92	126 S1+
500-223632-11	ED-R3SL-050	114	166 S1+
500-223632-12	ED-R3SL-049	88	132 S1+
500-223632-13	ED-R3SL-048	98	145 S1+
500-223632-14	ED-R3SL-047	95	134 S1+
500-223632-15	ED-R3SL-SW013	113	168 S1+
500-223632-16	ED-R3SL-SW012	105	154 S1+
500-223632-17	ED-R3SL-SW010	114	179 S1+
500-223632-19	ED-R3SL-046	122	174 S1+
500-223632-20	ED-R3SL-DUP007	66	94
500-223632-21	ED-R3SL-SW011	43 S1-	63
LCS 500-679132/2-A	Lab Control Sample	128	164 S1+
MB 500-679132/1-A	Method Blank	93	137 S1+

**Surrogate Legend**

TCX = Tetrachloro-m-xylene  
 DCBP = DCB Decachlorobiphenyl

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

Matrix: Solid

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)	
		TCX2 (49-129)	DCBP2 (37-121)
500-223632-8	ED-R3SL-051	130 S1+	138 S1+
500-223632-9	ED-R3SL-SW014	101	111

**Surrogate Legend**

TCX = Tetrachloro-m-xylene  
 DCBP = DCB Decachlorobiphenyl

# QC Sample Results

Client: Civil & Environmental Consultants Inc  
 Project/Site: Arconic - Elliot Ditch - Lafayette, IN

Job ID: 500-223632-1

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

**Lab Sample ID: MB 500-679132/1-A**  
**Matrix: Solid**  
**Analysis Batch: 679147**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**  
**Prep Batch: 679132**

Analyte	MB MB		RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
PCB-1016	<0.17		0.17		mg/Kg		10/11/22 16:16	10/12/22 00:36	10
PCB-1221	<0.17		0.17		mg/Kg		10/11/22 16:16	10/12/22 00:36	10
PCB-1232	<0.17		0.17		mg/Kg		10/11/22 16:16	10/12/22 00:36	10
PCB-1242	<0.17		0.17		mg/Kg		10/11/22 16:16	10/12/22 00:36	10
PCB-1248	<0.17		0.17		mg/Kg		10/11/22 16:16	10/12/22 00:36	10
PCB-1254	<0.17		0.17		mg/Kg		10/11/22 16:16	10/12/22 00:36	10
PCB-1260	<0.17		0.17		mg/Kg		10/11/22 16:16	10/12/22 00:36	10

Surrogate	MB MB		Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
Tetrachloro-m-xylene	93		49 - 129	10/11/22 16:16	10/12/22 00:36	10
DCB Decachlorobiphenyl	137	S1+	37 - 121	10/11/22 16:16	10/12/22 00:36	10

**Lab Sample ID: LCS 500-679132/2-A**  
**Matrix: Solid**  
**Analysis Batch: 679147**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**  
**Prep Batch: 679132**

Analyte	Spike Added	LCS LCS		Unit	D	%Rec	%Rec Limits
		Result	Qualifier				
PCB-1016	1.67	1.84		mg/Kg		111	57 - 120
PCB-1260	1.67	1.79		mg/Kg		108	61 - 125

Surrogate	LCS LCS		Limits
	%Recovery	Qualifier	
Tetrachloro-m-xylene	128		49 - 129
DCB Decachlorobiphenyl	164	S1+	37 - 121

**Lab Sample ID: 500-223632-3 MS**  
**Matrix: Solid**  
**Analysis Batch: 679147**

**Client Sample ID: ED-R3SL-055**  
**Prep Type: Total/NA**  
**Prep Batch: 679132**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS MS		Unit	D	%Rec	%Rec Limits
				Result	Qualifier				
PCB-1016	<0.18		1.82	1.93		mg/Kg	⊛	106	57 - 120
PCB-1260	<0.18		1.82	2.06		mg/Kg	⊛	113	61 - 125

Surrogate	MS MS		Limits
	%Recovery	Qualifier	
Tetrachloro-m-xylene	115		49 - 129
DCB Decachlorobiphenyl	163	S1+	37 - 121

**Lab Sample ID: 500-223632-3 MSD**  
**Matrix: Solid**  
**Analysis Batch: 679147**

**Client Sample ID: ED-R3SL-055**  
**Prep Type: Total/NA**  
**Prep Batch: 679132**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD MSD		Unit	D	%Rec	%Rec Limits	RPD	
				Result	Qualifier					RPD	Limit
PCB-1016	<0.18		1.76	2.32	F1	mg/Kg	⊛	132	57 - 120	18	30
PCB-1260	<0.18		1.76	2.09		mg/Kg	⊛	119	61 - 125	2	30

Surrogate	MSD MSD		Limits
	%Recovery	Qualifier	
Tetrachloro-m-xylene	107		49 - 129
DCB Decachlorobiphenyl	143	S1+	37 - 121

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# Lab Chronicle

Client: Civil & Environmental Consultants Inc  
Project/Site: Arconic - Elliot Ditch - Lafayette, IN

Job ID: 500-223632-1

**Client Sample ID: ED-R3SL-056**

**Date Collected: 10/10/22 14:46**

**Date Received: 10/11/22 15:19**

**Lab Sample ID: 500-223632-1**

**Matrix: Solid**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Moisture		1	679107	LWN	EET CHI	10/11/22 15:39

**Client Sample ID: ED-R3SL-056**

**Date Collected: 10/10/22 14:46**

**Date Received: 10/11/22 15:19**

**Lab Sample ID: 500-223632-1**

**Matrix: Solid**

**Percent Solids: 93.4**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3541			679132	EK	EET CHI	10/11/22 16:16 - 10/11/22 19:00 <sup>1</sup>
Total/NA	Analysis	8082A		10	679147	WRE	EET CHI	10/12/22 01:06

**Client Sample ID: ED-R3SL-DUP006**

**Date Collected: 10/10/22 00:00**

**Date Received: 10/11/22 15:19**

**Lab Sample ID: 500-223632-2**

**Matrix: Solid**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Moisture		1	679126	LWN	EET CHI	10/11/22 15:57

**Client Sample ID: ED-R3SL-DUP006**

**Date Collected: 10/10/22 00:00**

**Date Received: 10/11/22 15:19**

**Lab Sample ID: 500-223632-2**

**Matrix: Solid**

**Percent Solids: 93.5**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3541			679132	EK	EET CHI	10/11/22 16:16 - 10/11/22 19:00 <sup>1</sup>
Total/NA	Analysis	8082A		10	679147	WRE	EET CHI	10/12/22 01:21

**Client Sample ID: ED-R3SL-055**

**Date Collected: 10/10/22 15:00**

**Date Received: 10/11/22 15:19**

**Lab Sample ID: 500-223632-3**

**Matrix: Solid**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Moisture		1	679126	LWN	EET CHI	10/11/22 15:57

**Client Sample ID: ED-R3SL-055**

**Date Collected: 10/10/22 15:00**

**Date Received: 10/11/22 15:19**

**Lab Sample ID: 500-223632-3**

**Matrix: Solid**

**Percent Solids: 89.5**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3541			679132	EK	EET CHI	10/11/22 16:16 - 10/11/22 19:00 <sup>1</sup>
Total/NA	Analysis	8082A		10	679147	WRE	EET CHI	10/12/22 01:35

**Client Sample ID: ED-R3SL-054**

**Date Collected: 10/10/22 15:10**

**Date Received: 10/11/22 15:19**

**Lab Sample ID: 500-223632-4**

**Matrix: Solid**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Moisture		1	679126	LWN	EET CHI	10/11/22 15:57

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# Lab Chronicle

Client: Civil & Environmental Consultants Inc  
Project/Site: Arconic - Elliot Ditch - Lafayette, IN

Job ID: 500-223632-1

**Client Sample ID: ED-R3SL-054**

**Lab Sample ID: 500-223632-4**

**Date Collected: 10/10/22 15:10**

**Matrix: Solid**

**Date Received: 10/11/22 15:19**

**Percent Solids: 92.1**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3541			679132	EK	EET CHI	10/11/22 16:16 - 10/11/22 19:00 <sup>1</sup>
Total/NA	Analysis	8082A		10	679147	WRE	EET CHI	10/12/22 02:20

**Client Sample ID: ED-R3SL-SW015**

**Lab Sample ID: 500-223632-5**

**Date Collected: 10/10/22 15:23**

**Matrix: Solid**

**Date Received: 10/11/22 15:19**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Moisture		1	679126	LWN	EET CHI	10/11/22 15:57

**Client Sample ID: ED-R3SL-SW015**

**Lab Sample ID: 500-223632-5**

**Date Collected: 10/10/22 15:23**

**Matrix: Solid**

**Date Received: 10/11/22 15:19**

**Percent Solids: 94.4**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3541			679132	EK	EET CHI	10/11/22 16:16 - 10/11/22 19:00 <sup>1</sup>
Total/NA	Analysis	8082A		10	679147	WRE	EET CHI	10/12/22 02:35

**Client Sample ID: ED-R3SL-053**

**Lab Sample ID: 500-223632-6**

**Date Collected: 10/10/22 15:37**

**Matrix: Solid**

**Date Received: 10/11/22 15:19**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Moisture		1	679126	LWN	EET CHI	10/11/22 15:57

**Client Sample ID: ED-R3SL-053**

**Lab Sample ID: 500-223632-6**

**Date Collected: 10/10/22 15:37**

**Matrix: Solid**

**Date Received: 10/11/22 15:19**

**Percent Solids: 91.1**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3541			679132	EK	EET CHI	10/11/22 16:16 - 10/11/22 19:00 <sup>1</sup>
Total/NA	Analysis	8082A		10	679147	WRE	EET CHI	10/12/22 02:49

**Client Sample ID: ED-R3SL-052**

**Lab Sample ID: 500-223632-7**

**Date Collected: 10/10/22 15:53**

**Matrix: Solid**

**Date Received: 10/11/22 15:19**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Moisture		1	679126	LWN	EET CHI	10/11/22 15:57

# Lab Chronicle

Client: Civil & Environmental Consultants Inc  
Project/Site: Arconic - Elliot Ditch - Lafayette, IN

Job ID: 500-223632-1

**Client Sample ID: ED-R3SL-052**

**Lab Sample ID: 500-223632-7**

Date Collected: 10/10/22 15:53

Matrix: Solid

Date Received: 10/11/22 15:19

Percent Solids: 94.6

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3541			679132	EK	EET CHI	10/11/22 16:16 - 10/11/22 19:00 <sup>1</sup>
Total/NA	Analysis	8082A		10	679147	WRE	EET CHI	10/12/22 03:04

**Client Sample ID: ED-R3SL-051**

**Lab Sample ID: 500-223632-8**

Date Collected: 10/10/22 16:41

Matrix: Solid

Date Received: 10/11/22 15:19

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Moisture		1	679126	LWN	EET CHI	10/11/22 15:57

**Client Sample ID: ED-R3SL-051**

**Lab Sample ID: 500-223632-8**

Date Collected: 10/10/22 16:41

Matrix: Solid

Date Received: 10/11/22 15:19

Percent Solids: 92.8

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3541			679132	EK	EET CHI	10/11/22 16:16 - 10/11/22 19:00 <sup>1</sup>
Total/NA	Analysis	8082A		10	679183	NB	EET CHI	10/12/22 09:06

**Client Sample ID: ED-R3SL-SW014**

**Lab Sample ID: 500-223632-9**

Date Collected: 10/10/22 16:52

Matrix: Solid

Date Received: 10/11/22 15:19

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Moisture		1	679126	LWN	EET CHI	10/11/22 15:57

**Client Sample ID: ED-R3SL-SW014**

**Lab Sample ID: 500-223632-9**

Date Collected: 10/10/22 16:52

Matrix: Solid

Date Received: 10/11/22 15:19

Percent Solids: 92.5

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3541			679132	EK	EET CHI	10/11/22 16:16 - 10/11/22 19:00 <sup>1</sup>
Total/NA	Analysis	8082A		50	679183	NB	EET CHI	10/12/22 09:21

**Client Sample ID: ED-R3SL-SW001-4**

**Lab Sample ID: 500-223632-10**

Date Collected: 10/11/22 09:09

Matrix: Solid

Date Received: 10/11/22 15:19

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Moisture		1	679126	LWN	EET CHI	10/11/22 15:57

# Lab Chronicle

Client: Civil & Environmental Consultants Inc  
Project/Site: Arconic - Elliot Ditch - Lafayette, IN

Job ID: 500-223632-1

**Client Sample ID: ED-R3SL-SW001-4**

**Lab Sample ID: 500-223632-10**

**Date Collected: 10/11/22 09:09**

**Matrix: Solid**

**Date Received: 10/11/22 15:19**

**Percent Solids: 90.0**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3541			679132	EK	EET CHI	10/11/22 16:16 - 10/11/22 19:00 <sup>1</sup>
Total/NA	Analysis	8082A		10	679147	WRE	EET CHI	10/12/22 03:48

**Client Sample ID: ED-R3SL-050**

**Lab Sample ID: 500-223632-11**

**Date Collected: 10/11/22 09:17**

**Matrix: Solid**

**Date Received: 10/11/22 15:19**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Moisture		1	679126	LWN	EET CHI	10/11/22 15:57

**Client Sample ID: ED-R3SL-050**

**Lab Sample ID: 500-223632-11**

**Date Collected: 10/11/22 09:17**

**Matrix: Solid**

**Date Received: 10/11/22 15:19**

**Percent Solids: 99.0**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3541			679132	EK	EET CHI	10/11/22 16:16 - 10/11/22 19:00 <sup>1</sup>
Total/NA	Analysis	8082A		10	679147	WRE	EET CHI	10/12/22 04:03

**Client Sample ID: ED-R3SL-049**

**Lab Sample ID: 500-223632-12**

**Date Collected: 10/11/22 09:26**

**Matrix: Solid**

**Date Received: 10/11/22 15:19**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Moisture		1	679126	LWN	EET CHI	10/11/22 15:57

**Client Sample ID: ED-R3SL-049**

**Lab Sample ID: 500-223632-12**

**Date Collected: 10/11/22 09:26**

**Matrix: Solid**

**Date Received: 10/11/22 15:19**

**Percent Solids: 89.5**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3541			679132	EK	EET CHI	10/11/22 16:16 - 10/11/22 19:00 <sup>1</sup>
Total/NA	Analysis	8082A		10	679147	WRE	EET CHI	10/12/22 04:18

**Client Sample ID: ED-R3SL-048**

**Lab Sample ID: 500-223632-13**

**Date Collected: 10/11/22 09:34**

**Matrix: Solid**

**Date Received: 10/11/22 15:19**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Moisture		1	679126	LWN	EET CHI	10/11/22 15:57

# Lab Chronicle

Client: Civil & Environmental Consultants Inc  
 Project/Site: Arconic - Elliot Ditch - Lafayette, IN

Job ID: 500-223632-1

**Client Sample ID: ED-R3SL-048**

**Lab Sample ID: 500-223632-13**

Date Collected: 10/11/22 09:34

Matrix: Solid

Date Received: 10/11/22 15:19

Percent Solids: 98.9

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3541			679132	EK	EET CHI	10/11/22 16:16 - 10/11/22 19:00 <sup>1</sup>
Total/NA	Analysis	8082A		10	679147	WRE	EET CHI	10/12/22 04:33

**Client Sample ID: ED-R3SL-047**

**Lab Sample ID: 500-223632-14**

Date Collected: 10/11/22 09:45

Matrix: Solid

Date Received: 10/11/22 15:19

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Moisture		1	679126	LWN	EET CHI	10/11/22 15:57

**Client Sample ID: ED-R3SL-047**

**Lab Sample ID: 500-223632-14**

Date Collected: 10/11/22 09:45

Matrix: Solid

Date Received: 10/11/22 15:19

Percent Solids: 88.8

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3541			679132	EK	EET CHI	10/11/22 16:16 - 10/11/22 19:00 <sup>1</sup>
Total/NA	Analysis	8082A		10	679147	WRE	EET CHI	10/12/22 04:47

**Client Sample ID: ED-R3SL-SW013**

**Lab Sample ID: 500-223632-15**

Date Collected: 10/11/22 09:53

Matrix: Solid

Date Received: 10/11/22 15:19

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Moisture		1	679126	LWN	EET CHI	10/11/22 15:57

**Client Sample ID: ED-R3SL-SW013**

**Lab Sample ID: 500-223632-15**

Date Collected: 10/11/22 09:53

Matrix: Solid

Date Received: 10/11/22 15:19

Percent Solids: 92.8

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3541			679132	EK	EET CHI	10/11/22 16:16 - 10/11/22 19:00 <sup>1</sup>
Total/NA	Analysis	8082A		10	679147	WRE	EET CHI	10/12/22 05:02

**Client Sample ID: ED-R3SL-SW012**

**Lab Sample ID: 500-223632-16**

Date Collected: 10/11/22 10:01

Matrix: Solid

Date Received: 10/11/22 15:19

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Moisture		1	679126	LWN	EET CHI	10/11/22 15:57

# Lab Chronicle

Client: Civil & Environmental Consultants Inc  
Project/Site: Arconic - Elliot Ditch - Lafayette, IN

Job ID: 500-223632-1

## Client Sample ID: ED-R3SL-SW012

Lab Sample ID: 500-223632-16

Date Collected: 10/11/22 10:01

Matrix: Solid

Date Received: 10/11/22 15:19

Percent Solids: 92.5

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3541			679132	EK	EET CHI	10/11/22 16:16 - 10/11/22 19:00 <sup>1</sup>
Total/NA	Analysis	8082A		10	679147	WRE	EET CHI	10/12/22 05:17

## Client Sample ID: ED-R3SL-SW010

Lab Sample ID: 500-223632-17

Date Collected: 10/11/22 10:15

Matrix: Solid

Date Received: 10/11/22 15:19

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Moisture		1	679126	LWN	EET CHI	10/11/22 15:57

## Client Sample ID: ED-R3SL-SW010

Lab Sample ID: 500-223632-17

Date Collected: 10/11/22 10:15

Matrix: Solid

Date Received: 10/11/22 15:19

Percent Solids: 89.4

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3541			679132	EK	EET CHI	10/11/22 16:16 - 10/11/22 19:00 <sup>1</sup>
Total/NA	Analysis	8082A		10	679147	WRE	EET CHI	10/12/22 05:32

## Client Sample ID: ED-R3SL-046

Lab Sample ID: 500-223632-19

Date Collected: 10/11/22 12:00

Matrix: Solid

Date Received: 10/11/22 15:19

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Moisture		1	679126	LWN	EET CHI	10/11/22 15:57

## Client Sample ID: ED-R3SL-046

Lab Sample ID: 500-223632-19

Date Collected: 10/11/22 12:00

Matrix: Solid

Date Received: 10/11/22 15:19

Percent Solids: 92.5

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3541			679132	EK	EET CHI	10/11/22 16:16 - 10/11/22 19:00 <sup>1</sup>
Total/NA	Analysis	8082A		10	679147	WRE	EET CHI	10/12/22 05:46

## Client Sample ID: ED-R3SL-DUP007

Lab Sample ID: 500-223632-20

Date Collected: 10/11/22 00:00

Matrix: Solid

Date Received: 10/11/22 15:19

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Moisture		1	679126	LWN	EET CHI	10/11/22 15:57

# Lab Chronicle

Client: Civil & Environmental Consultants Inc  
 Project/Site: Arconic - Elliot Ditch - Lafayette, IN

Job ID: 500-223632-1

**Client Sample ID: ED-R3SL-DUP007**

**Lab Sample ID: 500-223632-20**

**Date Collected: 10/11/22 00:00**

**Matrix: Solid**

**Date Received: 10/11/22 15:19**

**Percent Solids: 92.7**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3541			679132	EK	EET CHI	10/11/22 16:16 - 10/11/22 19:00 <sup>1</sup>
Total/NA	Analysis	8082A		10	679147	WRE	EET CHI	10/12/22 06:01

**Client Sample ID: ED-R3SL-SW011**

**Lab Sample ID: 500-223632-21**

**Date Collected: 10/11/22 12:16**

**Matrix: Solid**

**Date Received: 10/11/22 15:19**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Moisture		1	679126	LWN	EET CHI	10/11/22 15:57

**Client Sample ID: ED-R3SL-SW011**

**Lab Sample ID: 500-223632-21**

**Date Collected: 10/11/22 12:16**

**Matrix: Solid**

**Date Received: 10/11/22 15:19**

**Percent Solids: 93.4**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3541			679132	EK	EET CHI	10/11/22 16:16 - 10/11/22 19:00 <sup>1</sup>
Total/NA	Analysis	8082A		10	679147	WRE	EET CHI	10/12/22 06:16

<sup>1</sup> Completion dates and times are reported or not reported per method requirements or individual lab discretion.

**Laboratory References:**

EET CHI = Eurofins Chicago, 2417 Bond Street, University Park, IL 60484, TEL (708)534-5200

# Accreditation/Certification Summary

Client: Civil & Environmental Consultants Inc  
Project/Site: Arconic - Elliot Ditch - Lafayette, IN

Job ID: 500-223632-1

## Laboratory: Eurofins Chicago

The accreditations/certifications listed below are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Illinois	NELAP	IL00035	04-30-23

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# Chain of Custody Record

524992



Environment Testing  
TestAmerica

Address \_\_\_\_\_

Regulatory Program:  DW  NPDES  RCRA  Other

TAL-8210

Client Contact		Project Manager: <u>G. Welch</u>			Site Contact: <u>G. Welch</u>			Date:		COC No	
Company Name <u>CEC</u>		Tel/Email: <u>865-446-7655</u>			Lab Contact: <u>R. Kintz</u>			Carrier: <u>Courier</u>		1 of 2 COCs	
Address <u>2704 Cherokee Farm Way Suite 101</u>		Analysis Turnaround Time									
City/State/Zip <u>Knoxville, TN 37220</u>		<input type="checkbox"/> CALENDAR DAYS <input type="checkbox"/> WORKING DAYS TAT if different from Below _____ <input type="checkbox"/> 2 weeks <input type="checkbox"/> 1 week <u>*24 Hour*</u> <input type="checkbox"/> 2 days <u>Rush</u> <input checked="" type="checkbox"/> 1 day									
Phone <u>865-977-9497</u>		Filtered Sample (Y/N) _____ Perform MS / MSD (Y/N) _____ <u>PCBS via 808Z</u>  500-223632 COC									
Fax _____											
Project Name <u>Elliott Ditch IM Project</u>											
Site <u>Reach 3</u>											
PO# _____		For Lab Use Only: Walk-in Client _____ Lab Sampling _____ Job / SDG No <u>500-223632</u>									
Sample Specific Notes.											
Sample Identification		Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.	Filtered Sample (Y/N)	Perform MS / MSD (Y/N)			
<u>ED-R3SL-056</u>		<u>10/16/22</u>	<u>1446</u>	<u>C</u>	<u>S</u>	<u>1</u>		<u>X</u>			
<u>ED-R3SL-DUP006</u>		<u>10/16/22</u>	<u>/</u>	<u>C</u>	<u>S</u>	<u>1</u>		<u>X</u>			
<u>ED-R3SL-055</u>		<u>10/10/22</u>	<u>1500</u>	<u>C</u>	<u>S</u>	<u>3</u>	<u>X</u>	<u>X</u>			
<u>ED-R3SL-054</u>		<u>10/10/22</u>	<u>1510</u>	<u>C</u>	<u>S</u>	<u>1</u>		<u>X</u>			
<u>ED-R3SL-SW015</u>		<u>10/10/22</u>	<u>1523</u>	<u>C</u>	<u>S</u>	<u>1</u>		<u>X</u>			
<u>ED-R3SL-053</u>		<u>10/10/22</u>	<u>1537</u>	<u>C</u>	<u>S</u>	<u>1</u>		<u>X</u>			
<u>ED-R3SL-052</u>		<u>10/10/22</u>	<u>1553</u>	<u>C</u>	<u>S</u>	<u>1</u>		<u>X</u>			
<u>ED-R3SL-051</u>		<u>10/10/22</u>	<u>1641</u>	<u>C</u>	<u>S</u>	<u>1</u>		<u>X</u>			
<u>ED-R3SL-SW014</u>		<u>10/10/22</u>	<u>1652</u>	<u>C</u>	<u>S</u>	<u>1</u>		<u>X</u>			
<u>ED-R3SL-SW001-4</u>		<u>10/11/22</u> <u>10/10/22</u>	<u>0909</u>	<u>C</u>	<u>S</u>	<u>1</u>		<u>X</u>			
<u>ED-R3SL-050</u>		<u>10/11/22</u>	<u>0917</u>	<u>C</u>	<u>S</u>	<u>1</u>		<u>X</u>			
<u>ED-R3SL-049</u>		<u>10/11/22</u>	<u>0926</u>	<u>C</u>	<u>S</u>	<u>1</u>		<u>X</u>			
Preservation Used: 1=Ice, 2=HCl; 3=H2SO4; 4=HNO3; 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 checked="" type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison B <input type="checkbox"/> Unknown											
Sample Disposal (A fee may be assessed if samples are retained longer than 1 month) <input type="checkbox"/> Return to Client <input checked="" type="checkbox"/> Disposal by Lab <input type="checkbox"/> Archive for _____ Months											
Special Instructions/QC Requirements & Comments:											
Custody Seals Intact <input type="checkbox"/> Yes <input type="checkbox"/> No		Custody Seal No _____			Cooler Temp (°C) Obs'd: <u>43</u> Cor'd: <u>45</u>		Therm ID No: _____				
Relinquished by <u>[Signature]</u>		Company: <u>CEC</u>		Date/Time: <u>10/14/22 1357</u>		Received by <u>[Signature]</u>		Company: <u>EETA</u>		Date/Time: <u>10/14/22 1404 EST</u>	
Relinquished by <u>[Signature]</u>		Company: <u>EETA</u>		Date/Time: <u>10/11/22 1319 EST</u>		Received by _____		Company: _____		Date/Time: _____	
Relinquished by _____		Company: _____		Date/Time: _____		Received in Laboratory by <u>[Signature]</u>		Company: <u>EETA</u>		Date/Time: <u>10/11/22 1519</u>	

P-2000-150469

# Chain of Custody Record

524992



Environment Testing  
TestAmerica

Address \_\_\_\_\_

Regulatory Program:  DW  NPDES  RCRA  Other

TAL-8210

Client Contact		Project Manager: <u>G. Welch</u>		Site Contact: <u>G. Welch</u>		Date:		COC No											
Company Name <u>CEC</u>		Tel/Email: <u>865-446-7655</u>		Lab Contact: <u>R. Kintz</u>		Carrier: <u>Courier</u>		<u>2</u> of <u>2</u> COCs											
Address <u>2704 Cherokee Farm Way Suite 161</u>		<b>Analysis Turnaround Time</b>																	
City/State/Zip <u>Knoxville, TN 37920</u>		<input type="checkbox"/> CALENDAR DAYS <input type="checkbox"/> WORKING DAYS																	
Phone <u>865-977-9497</u>		TAT if different from Below _____																	
Fax _____		<input type="checkbox"/> 2 weeks <input type="checkbox"/> 1 week <u>*24 hour*</u> <input type="checkbox"/> 2 days <u>Rush</u> <input checked="" type="checkbox"/> 1 day																	
Project Name <u>Ellett Ditch IM Project</u>		Sample Date		Sample Time		Sample Type (C=Comp, G=Grab)		Matrix		# of Cont.		Filtered Sample (Y/N)		Perform MS/MSD (Y/N)		PCBs via 808Z		Sampler	
Site <u>Reach 3</u>																		Walk-in Client	
PO# _____		Job / SDG No		Sample Specific Notes.															
Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 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										Sample Disposal ( A fee may be assessed if samples are retained longer than 1 month)									
<input checked="" type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison B <input type="checkbox"/> Unknown										<input type="checkbox"/> Return to Client <input checked="" type="checkbox"/> Disposal by Lab <input type="checkbox"/> Archive for _____ Months									
Special Instructions/QC Requirements & Comments: <u>No push on ED-R3SL-EB011; standard turn for this sample</u>																			
Custody Seals Intact <input type="checkbox"/> Yes <input type="checkbox"/> No				Custody Seal No _____				Cooler Temp (°C) Obs'd _____				Corr'd _____				Therm ID No _____			
Relinquished by <u>[Signature]</u>		Company: <u>CEC</u>		Date/Time: <u>10/11/22 1357</u>		Received by <u>[Signature]</u>		Company: <u>EETA</u>		Date/Time: <u>10/11/22 1404 EST</u>									
Relinquished by <u>[Signature]</u>		Company: <u>EETA</u>		Date/Time: <u>10/11/22 1819 EST</u>		Received by _____		Company: _____		Date/Time: _____									
Relinquished by _____		Company: _____		Date/Time: _____		Received in Laboratory by <u>[Signature]</u>		Company: <u>EETA</u>		Date/Time: <u>10/11/22 1519</u>									

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# Login Sample Receipt Checklist

Client: Civil & Environmental Consultants Inc

Job Number: 500-223632-1

**Login Number: 223632**

**List Number: 1**

**Creator: Scott, Sherri L**

**List Source: Eurofins Chicago**

Question	Answer	Comment
Radioactivity wasn't checked or is <=/ background as measured by a survey meter.	True	
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	4.5
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").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	



## ANALYTICAL REPORT

Eurofins Chicago  
2417 Bond Street  
University Park, IL 60484  
Tel: (708)534-5200

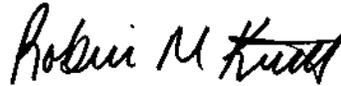
Laboratory Job ID: 500-223632-2

Client Project/Site: Arconic - Elliot Ditch - Lafayette, IN - EB

**For:**

Civil & Environmental Consultants Inc  
2704 Cherokee Farm Way  
Suite 101  
Knoxville, Tennessee 37920

Attn: Garrett Welch



Authorized for release by:  
10/18/2022 5:58:48 PM

Robin Kintz, Project Manager II  
(708)534-5200  
[Robin.Kintz@et.eurofinsus.com](mailto:Robin.Kintz@et.eurofinsus.com)

### LINKS

Review your project  
results through



Have a Question?



Visit us at:

[www.eurofinsus.com/Env](http://www.eurofinsus.com/Env)

The test results in this report meet all 2003 NELAC, 2009 TNI, and 2016 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.



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# Case Narrative

Client: Civil & Environmental Consultants Inc  
Project/Site: Arconic - Elliot Ditch - Lafayette, IN - EB

Job ID: 500-223632-2

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**Job ID: 500-223632-2**

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**Laboratory: Eurofins Chicago**

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**Narrative**

**Job Narrative  
500-223632-2**

**Comments**

No additional comments.

**Receipt**

The samples were received on 10/11/2022 3:19 PM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperature of the cooler at receipt was 4.5° C.

**GC Semi VOA**

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

**Organic Prep**

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

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# Detection Summary

Client: Civil & Environmental Consultants Inc  
Project/Site: Arconic - Elliot Ditch - Lafayette, IN - EB

Job ID: 500-223632-2

**Client Sample ID: ED-R3SL-EB011**

**Lab Sample ID: 500-223632-18**

No Detections.

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This Detection Summary does not include radiochemical test results.

Eurofins Chicago

# Method Summary

Client: Civil & Environmental Consultants Inc  
Project/Site: Arconic - Elliot Ditch - Lafayette, IN - EB

Job ID: 500-223632-2

Method	Method Description	Protocol	Laboratory
8082A	Polychlorinated Biphenyls (PCBs) by Gas Chromatography	SW846	EET CHI
3510C	Liquid-Liquid Extraction (Separatory Funnel)	SW846	EET CHI

**Protocol References:**

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

**Laboratory References:**

EET CHI = Eurofins Chicago, 2417 Bond Street, University Park, IL 60484, TEL (708)534-5200



# Sample Summary

Client: Civil & Environmental Consultants Inc  
Project/Site: Arconic - Elliot Ditch - Lafayette, IN - EB

Job ID: 500-223632-2

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Lab Sample ID	Client Sample ID	Matrix	Collected	Received
500-223632-18	ED-R3SL-EB011	Water	10/11/22 10:35	10/11/22 15:19

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# Client Sample Results

Client: Civil & Environmental Consultants Inc  
 Project/Site: Arconic - Elliot Ditch - Lafayette, IN - EB

Job ID: 500-223632-2

**Client Sample ID: ED-R3SL-EB011**

**Lab Sample ID: 500-223632-18**

Date Collected: 10/11/22 10:35

Matrix: Water

Date Received: 10/11/22 15:19

**Method: SW846 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<0.00040		0.00040		mg/L		10/14/22 13:39	10/17/22 13:22	1
PCB-1221	<0.00040		0.00040		mg/L		10/14/22 13:39	10/17/22 13:22	1
PCB-1232	<0.00040		0.00040		mg/L		10/14/22 13:39	10/17/22 13:22	1
PCB-1242	<0.00040		0.00040		mg/L		10/14/22 13:39	10/17/22 13:22	1
PCB-1248	<0.00040		0.00040		mg/L		10/14/22 13:39	10/17/22 13:22	1
PCB-1254	<0.00040		0.00040		mg/L		10/14/22 13:39	10/17/22 13:22	1
PCB-1260	<0.00040		0.00040		mg/L		10/14/22 13:39	10/17/22 13:22	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	80		30 - 120	10/14/22 13:39	10/17/22 13:22	1
DCB Decachlorobiphenyl	89		30 - 140	10/14/22 13:39	10/17/22 13:22	1

## Definitions/Glossary

Client: Civil & Environmental Consultants Inc  
Project/Site: Arconic - Elliot Ditch - Lafayette, IN - EB

Job ID: 500-223632-2

### Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
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)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
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)
TNTC	Too Numerous To Count

# QC Association Summary

Client: Civil & Environmental Consultants Inc  
Project/Site: Arconic - Elliot Ditch - Lafayette, IN - EB

Job ID: 500-223632-2

## GC Semi VOA

### Prep Batch: 679705

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-223632-18	ED-R3SL-EB011	Total/NA	Water	3510C	
MB 500-679705/1-A	Method Blank	Total/NA	Water	3510C	
LCS 500-679705/2-A	Lab Control Sample	Total/NA	Water	3510C	
LCSD 500-679705/3-A	Lab Control Sample Dup	Total/NA	Water	3510C	

### Analysis Batch: 679929

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-223632-18	ED-R3SL-EB011	Total/NA	Water	8082A	679705
MB 500-679705/1-A	Method Blank	Total/NA	Water	8082A	679705
LCS 500-679705/2-A	Lab Control Sample	Total/NA	Water	8082A	679705
LCSD 500-679705/3-A	Lab Control Sample Dup	Total/NA	Water	8082A	679705



# Surrogate Summary

Client: Civil & Environmental Consultants Inc  
Project/Site: Arconic - Elliot Ditch - Lafayette, IN - EB

Job ID: 500-223632-2

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

Matrix: Water

Prep Type: Total/NA

### Percent Surrogate Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	TCX1	DCBP1
		(30-120)	(30-140)
500-223632-18	ED-R3SL-EB011	80	89
LCS 500-679705/2-A	Lab Control Sample	85	113
LCSD 500-679705/3-A	Lab Control Sample Dup	81	105
MB 500-679705/1-A	Method Blank	89	121

#### Surrogate Legend

TCX = Tetrachloro-m-xylene

DCBP = DCB Decachlorobiphenyl

# QC Sample Results

Client: Civil & Environmental Consultants Inc  
 Project/Site: Arconic - Elliot Ditch - Lafayette, IN - EB

Job ID: 500-223632-2

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

**Lab Sample ID: MB 500-679705/1-A**  
**Matrix: Water**  
**Analysis Batch: 679929**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**  
**Prep Batch: 679705**

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
PCB-1016	<0.00040		0.00040		mg/L		10/14/22 13:39	10/17/22 12:34	1
PCB-1221	<0.00040		0.00040		mg/L		10/14/22 13:39	10/17/22 12:34	1
PCB-1232	<0.00040		0.00040		mg/L		10/14/22 13:39	10/17/22 12:34	1
PCB-1242	<0.00040		0.00040		mg/L		10/14/22 13:39	10/17/22 12:34	1
PCB-1248	<0.00040		0.00040		mg/L		10/14/22 13:39	10/17/22 12:34	1
PCB-1254	<0.00040		0.00040		mg/L		10/14/22 13:39	10/17/22 12:34	1
PCB-1260	<0.00040		0.00040		mg/L		10/14/22 13:39	10/17/22 12:34	1

Surrogate	MB	MB	Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
Tetrachloro-m-xylene	89		30 - 120	10/14/22 13:39	10/17/22 12:34	1
DCB Decachlorobiphenyl	121		30 - 140	10/14/22 13:39	10/17/22 12:34	1

**Lab Sample ID: LCS 500-679705/2-A**  
**Matrix: Water**  
**Analysis Batch: 679929**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**  
**Prep Batch: 679705**

Analyte	Spike Added	LCS	LCS	Unit	D	%Rec	%Rec Limits
		Result	Qualifier				
PCB-1016	0.00400	0.00351		mg/L		88	56 - 120
PCB-1260	0.00400	0.00428		mg/L		107	53 - 137

Surrogate	LCS	LCS	Limits
	%Recovery	Qualifier	
Tetrachloro-m-xylene	85		30 - 120
DCB Decachlorobiphenyl	113		30 - 140

**Lab Sample ID: LCSD 500-679705/3-A**  
**Matrix: Water**  
**Analysis Batch: 679929**

**Client Sample ID: Lab Control Sample Dup**  
**Prep Type: Total/NA**  
**Prep Batch: 679705**

Analyte	Spike Added	LCSD	LCSD	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
		Result	Qualifier						
PCB-1016	0.00400	0.00342		mg/L		86	56 - 120	3	20
PCB-1260	0.00400	0.00392		mg/L		98	53 - 137	9	20

Surrogate	LCSD	LCSD	Limits
	%Recovery	Qualifier	
Tetrachloro-m-xylene	81		30 - 120
DCB Decachlorobiphenyl	105		30 - 140

# Lab Chronicle

Client: Civil & Environmental Consultants Inc  
Project/Site: Arconic - Elliot Ditch - Lafayette, IN - EB

Job ID: 500-223632-2

**Client Sample ID: ED-R3SL-EB011**

**Lab Sample ID: 500-223632-18**

**Date Collected: 10/11/22 10:35**

**Matrix: Water**

**Date Received: 10/11/22 15:19**

<u>Prep Type</u>	<u>Batch Type</u>	<u>Batch Method</u>	<u>Run</u>	<u>Dilution Factor</u>	<u>Batch Number</u>	<u>Analyst</u>	<u>Lab</u>	<u>Prepared or Analyzed</u>
Total/NA	Prep	3510C			679705	DAK	EET CHI	10/14/22 13:39
Total/NA	Analysis	8082A		1	679929	SS	EET CHI	10/17/22 13:22

**Laboratory References:**

EET CHI = Eurofins Chicago, 2417 Bond Street, University Park, IL 60484, TEL (708)534-5200

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# Accreditation/Certification Summary

Client: Civil & Environmental Consultants Inc  
Project/Site: Arconic - Elliot Ditch - Lafayette, IN - EB

Job ID: 500-223632-2

## Laboratory: Eurofins Chicago

The accreditations/certifications listed below are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Illinois	NELAP	IL00035	04-30-23

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# Chain of Custody Record

524992



Environment Testing  
TestAmerica

TAL-8210

Address \_\_\_\_\_

Regulatory Program:  DW  NPDES  RCRA  Other

Client Contact		Project Manager: <u>G. Welch</u>		Site Contact: <u>G. Welch</u>		Date:		COC No	
Company Name <u>CEC</u>		Tel/Email: <u>865-446-7655</u>		Lab Contact: <u>R. Kintz</u>		Carrier: <u>Conier</u>		_____ of <u>2</u> COCs	
Address <u>2704 Cherokee Farm Way Suite 101</u>		Analysis Turnaround Time							
City/State/Zip <u>Knoxville, TN 37220</u>		<input type="checkbox"/> CALENDAR DAYS <input type="checkbox"/> WORKING DAYS TAT if different from Below _____ <input type="checkbox"/> 2 weeks <u>*24 Hour*</u> <input type="checkbox"/> 1 week <u>Rush</u> <input type="checkbox"/> 2 days <input checked="" type="checkbox"/> 1 day							
Phone <u>865-977-9997</u>		Filtered Sample (Y/N) _____ Perform MS / MSD (Y/N) _____ PCBs via <u>808Z</u>		500-223632 COC 		Sampler For Lab Use Only: Walk-in Client _____ Lab Sampling _____ Job / SDG No <u>500-223632</u>		Sample Specific Notes.	
Fax _____									
Project Name <u>Elliott Ditch IM Project</u>									
Site <u>Reach 3</u>									
P O # _____									
Sample Identification		Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.	Filtered Sample (Y/N)	Perform MS / MSD (Y/N)	PCBs via
<u>ED-R3SL-056</u>		<u>10/16/22</u>	<u>1446</u>	<u>C</u>	<u>S</u>	<u>1</u>		<u>X</u>	
<u>ED-R3SL-DUP006</u>		<u>10/16/22</u>	<u>/</u>	<u>C</u>	<u>S</u>	<u>1</u>		<u>X</u>	
<u>ED-R3SL-055</u>		<u>10/10/22</u>	<u>1500</u>	<u>C</u>	<u>S</u>	<u>3</u>	<u>X</u>	<u>X</u>	
<u>ED-R3SL-054</u>		<u>10/10/22</u>	<u>1510</u>	<u>C</u>	<u>S</u>	<u>1</u>		<u>X</u>	
<u>ED-R3SL-SW015</u>		<u>10/10/22</u>	<u>1523</u>	<u>C</u>	<u>S</u>	<u>1</u>		<u>X</u>	
<u>ED-R3SL-053</u>		<u>10/10/22</u>	<u>1537</u>	<u>C</u>	<u>S</u>	<u>1</u>		<u>X</u>	
<u>ED-R3SL-052</u>		<u>10/10/22</u>	<u>1553</u>	<u>C</u>	<u>S</u>	<u>1</u>		<u>X</u>	
<u>ED-R3SL-051</u>		<u>10/10/22</u>	<u>1641</u>	<u>C</u>	<u>S</u>	<u>1</u>		<u>X</u>	
<u>ED-R3SL-SW014</u>		<u>10/10/22</u>	<u>1652</u>	<u>C</u>	<u>S</u>	<u>1</u>		<u>X</u>	
<u>ED-R3SL-SW001-4</u>		<u>10/11/22</u> <u>10/10/22</u>	<u>0909</u>	<u>C</u>	<u>S</u>	<u>1</u>		<u>X</u>	
<u>ED-R3SL-050</u>		<u>10/11/22</u>	<u>0917</u>	<u>C</u>	<u>S</u>	<u>1</u>		<u>X</u>	
<u>ED-R3SL-049</u>		<u>10/11/22</u>	<u>0926</u>	<u>C</u>	<u>S</u>	<u>1</u>		<u>X</u>	
Preservation Used: 1=Ice, 2=HCl; 3=H2SO4; 4=HNO3; 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 checked="" type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison B <input type="checkbox"/> Unknown									
Sample Disposal (A fee may be assessed if samples are retained longer than 1 month) <input type="checkbox"/> Return to Client <input checked="" type="checkbox"/> Disposal by Lab <input type="checkbox"/> Archive for _____ Months									
Special Instructions/QC Requirements & Comments:									
Custody Seals Intact <input type="checkbox"/> Yes <input type="checkbox"/> No		Custody Seal No		Cooler Temp (°C) Obs'd: <u>43</u> Cor'd: <u>45</u>		Therm ID No: _____			
Relinquished by <u>[Signature]</u>		Company: <u>CEC</u>		Date/Time: <u>10/14/22 1355</u>		Received by <u>[Signature]</u>		Company: <u>EETA</u>	
Relinquished by <u>[Signature]</u>		Company: <u>EETA</u>		Date/Time: <u>10/11/22 1319 CST</u>		Received by _____		Company: _____	
Relinquished by _____		Company: _____		Date/Time: _____		Received in Laboratory by <u>[Signature]</u>		Company: <u>EETA</u>	
								Date/Time: <u>10/11/22 1519</u>	

P-2000-150169

# Chain of Custody Record

524992



Environment Testing  
TestAmerica

Address \_\_\_\_\_

Regulatory Program:  DW  NPDES  RCRA  Other

TAL-8210

Client Contact		Project Manager: <u>G. Welch</u>		Site Contact: <u>G. Welch</u>		Date:		COC No	
Company Name <u>CEC</u>		Tel/Email: <u>865-446-7655</u>		Lab Contact: <u>R. Kintz</u>		Carrier: <u>Courier</u>		<u>2</u> of <u>2</u> COCs	
Address <u>2704 Cherokee Farm Way Suite 161</u>		Analysis Turnaround Time							
City/State/Zip <u>Knoxville, TN 37920</u>		<input type="checkbox"/> CALENDAR DAYS <input type="checkbox"/> WORKING DAYS TAT if different from Below _____ <input type="checkbox"/> 2 weeks <input type="checkbox"/> 1 week <u>*24 hour*</u> <input type="checkbox"/> 2 days <u>Rush</u> <input checked="" type="checkbox"/> 1 day							
Phone <u>865-977-9497</u>		Filtered Sample (Y/N) Perform MS/MSD (Y/N) PCBs via <u>80BZ</u>							
Fax									
Project Name <u>Ellett Ditch IM Project</u>									
Site <u>Reach 3</u>									
PO#									
Sample Identification		Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.	Sample Specific Notes.		
<u>ED-R3SL-048</u>		<u>10/11/22</u>	<u>0934</u>	<u>C</u>	<u>S</u>	<u>1</u>			
<u>ED-R3SL-047</u>		<u>10/11/22</u>	<u>0945</u>	<u>C</u>	<u>S</u>	<u>1</u>			
<u>ED-R3SL-SW013</u>		<u>10/11/22</u>	<u>0953</u>	<u>C</u>	<u>S</u>	<u>1</u>			
<u>ED-R3SL-SW012</u>		<u>10/11/22</u>	<u>1001</u>	<u>C</u>	<u>S</u>	<u>1</u>			
<u>ED-R3SL-SW010</u>		<u>10/11/22</u>	<u>1015</u>	<u>C</u>	<u>S</u>	<u>1</u>			
<u>ED-R3SL-EB011</u>		<u>10/11/22</u>	<u>1035</u>	<u>G</u>	<u>W</u>	<u>2</u>			
<u>ED-R3SL-046</u>		<u>10/11/22</u>	<u>1200</u>	<u>C</u>	<u>S</u>	<u>1</u>			
<u>ED-R3SL-DUP007</u>		<u>10/11/22</u>	<u>/</u>	<u>C</u>	<u>S</u>	<u>1</u>			
<u>ED-R3SL-SW011</u>		<u>10/11/22</u>	<u>1216</u>	<u>C</u>	<u>S</u>	<u>1</u>			
Preservation Used: 1=Ice, 2=HCl; 3=H2SO4; 4=HNO3; 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					Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)				
<input checked="" type="checkbox"/> Non-Hazardous <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison B <input type="checkbox"/> Unknown					<input type="checkbox"/> Return to Client <input checked="" type="checkbox"/> Disposal by Lab <input type="checkbox"/> Archive for _____ Months				
Special Instructions/QC Requirements & Comments: <u>No push on ED-R3SL-EB011; standard turn for this sample</u>									
Custody Seals Intact <input type="checkbox"/> Yes <input type="checkbox"/> No		Custody Seal No		Cooler Temp (°C) Obs'd		Corr'd		Therm ID No	
Relinquished by <u>[Signature]</u>		Company: <u>CEC</u>		Date/Time: <u>10/11/22 1357</u>		Received by <u>[Signature]</u>		Company: <u>EETA</u>	
Relinquished by <u>[Signature]</u>		Company: <u>EETA</u>		Date/Time: <u>10/11/22 1819LST</u>		Received by		Company:	
Relinquished by		Company:		Date/Time:		Received in Laboratory by <u>[Signature]</u>		Company: <u>EETA</u>	
								Date/Time: <u>10/11/22 1519</u>	

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## Login Sample Receipt Checklist

Client: Civil & Environmental Consultants Inc

Job Number: 500-223632-2

**Login Number: 223632**

**List Number: 1**

**Creator: Scott, Sherri L**

**List Source: Eurofins Chicago**

Question	Answer	Comment
Radioactivity wasn't checked or is <=/ background as measured by a survey meter.	True	
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	4.5
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").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	



## ANALYTICAL REPORT

Eurofins Chicago  
2417 Bond Street  
University Park, IL 60484  
Tel: (708)534-5200

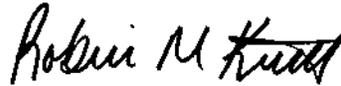
Laboratory Job ID: 500-223704-1

Client Project/Site: Arconic - Elliot Ditch - Lafayette, IN

**For:**

Civil & Environmental Consultants Inc  
2704 Cherokee Farm Way  
Suite 101  
Knoxville, Tennessee 37920

Attn: Garrett Welch



*Authorized for release by:  
10/13/2022 5:03:16 PM*

Robin Kintz, Project Manager II  
(708)534-5200  
[Robin.Kintz@et.eurofinsus.com](mailto:Robin.Kintz@et.eurofinsus.com)

### LINKS

Review your project  
results through



Have a Question?



Visit us at:

[www.eurofinsus.com/Env](http://www.eurofinsus.com/Env)

The test results in this report meet all 2003 NELAC, 2009 TNI, and 2016 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.



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# Case Narrative

Client: Civil & Environmental Consultants Inc  
Project/Site: Arconic - Elliot Ditch - Lafayette, IN

Job ID: 500-223704-1

**Job ID: 500-223704-1**

**Laboratory: Eurofins Chicago**

## Narrative

### Job Narrative 500-223704-1

#### Comments

No additional comments.

#### Receipt

The samples were received on 10/12/2022 3:05 PM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperature of the cooler at receipt was 4.2° C.

#### GC Semi VOA

Method 8082A: Tetrachloro-m-xylene surrogate recovery for the following sample was outside control limits: (CCVIS 500-679357/3). DCB Decachlorobiphenyl surrogate was within the control limits; therefore, re-extraction and/or re-analysis was not performed.

Method 8082A: DCB Decachlorobiphenyl surrogate recovery for the following sampleS was outside control limits: ED-R3SL-003-4 (500-223704-1), ED-R3SL-026-3 (500-223704-2), ED-R3SL-027-3 (500-223704-3), ED-R3SL-028-3 (500-223704-4), ED-R3SL-SW005-3 (500-223704-6) and (500-223704-A-1-B MS). Tetrachloro-m-xylene surrogate was within the control limits; therefore, re-extraction and/or re-analysis was not performed.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

#### Metals

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

#### Organic Prep

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

# Detection Summary

Client: Civil & Environmental Consultants Inc  
Project/Site: Arconic - Elliot Ditch - Lafayette, IN

Job ID: 500-223704-1

## Client Sample ID: ED-R3SL-003-4

Lab Sample ID: 500-223704-1

No Detections.

## Client Sample ID: ED-R3SL-026-3

Lab Sample ID: 500-223704-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
PCB-1248	2.4		0.86		mg/Kg	50	✳	8082A	Total/NA

## Client Sample ID: ED-R3SL-027-3

Lab Sample ID: 500-223704-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
PCB-1248	2.4		0.89		mg/Kg	50	✳	8082A	Total/NA

## Client Sample ID: ED-R3SL-028-3

Lab Sample ID: 500-223704-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
PCB-1248	1.5		0.17		mg/Kg	10	✳	8082A	Total/NA

## Client Sample ID: ED-R3SL-029-3

Lab Sample ID: 500-223704-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
PCB-1248	1.6		0.17		mg/Kg	10	✳	8082A	Total/NA

## Client Sample ID: ED-R3SL-SW005-3

Lab Sample ID: 500-223704-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
PCB-1248	1.1		0.17		mg/Kg	10	✳	8082A	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins Chicago

# Method Summary

Client: Civil & Environmental Consultants Inc  
Project/Site: Arconic - Elliot Ditch - Lafayette, IN

Job ID: 500-223704-1

Method	Method Description	Protocol	Laboratory
8082A	Polychlorinated Biphenyls (PCBs) by Gas Chromatography	SW846	EET CHI
Moisture	Percent Moisture	EPA	EET CHI
3541	Automated Soxhlet Extraction	SW846	EET CHI

**Protocol References:**

EPA = US Environmental Protection Agency

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

**Laboratory References:**

EET CHI = Eurofins Chicago, 2417 Bond Street, University Park, IL 60484, TEL (708)534-5200



# Sample Summary

Client: Civil & Environmental Consultants Inc  
Project/Site: Arconic - Elliot Ditch - Lafayette, IN

Job ID: 500-223704-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
500-223704-1	ED-R3SL-003-4	Solid	10/12/22 08:40	10/12/22 15:05
500-223704-2	ED-R3SL-026-3	Solid	10/12/22 08:55	10/12/22 15:05
500-223704-3	ED-R3SL-027-3	Solid	10/12/22 09:06	10/12/22 15:05
500-223704-4	ED-R3SL-028-3	Solid	10/12/22 09:15	10/12/22 15:05
500-223704-5	ED-R3SL-029-3	Solid	10/12/22 09:26	10/12/22 15:05
500-223704-6	ED-R3SL-SW005-3	Solid	10/12/22 09:35	10/12/22 15:05

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# Client Sample Results

Client: Civil & Environmental Consultants Inc  
 Project/Site: Arconic - Elliot Ditch - Lafayette, IN

Job ID: 500-223704-1

**Client Sample ID: ED-R3SL-003-4**

**Lab Sample ID: 500-223704-1**

**Date Collected: 10/12/22 08:40**

**Matrix: Solid**

**Date Received: 10/12/22 15:05**

**Percent Solids: 93.4**

**Method: SW846 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<0.18		0.18		mg/Kg	☼	10/12/22 15:39	10/13/22 08:53	10
PCB-1221	<0.18		0.18		mg/Kg	☼	10/12/22 15:39	10/13/22 08:53	10
PCB-1232	<0.18		0.18		mg/Kg	☼	10/12/22 15:39	10/13/22 08:53	10
PCB-1242	<0.18		0.18		mg/Kg	☼	10/12/22 15:39	10/13/22 08:53	10
PCB-1248	<0.18		0.18		mg/Kg	☼	10/12/22 15:39	10/13/22 08:53	10
PCB-1254	<0.18		0.18		mg/Kg	☼	10/12/22 15:39	10/13/22 08:53	10
PCB-1260	<0.18		0.18		mg/Kg	☼	10/12/22 15:39	10/13/22 08:53	10

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	92		49 - 129	10/12/22 15:39	10/13/22 08:53	10
DCB Decachlorobiphenyl	125	S1+	37 - 121	10/12/22 15:39	10/13/22 08:53	10

# Client Sample Results

Client: Civil & Environmental Consultants Inc  
 Project/Site: Arconic - Elliot Ditch - Lafayette, IN

Job ID: 500-223704-1

**Client Sample ID: ED-R3SL-026-3**

**Lab Sample ID: 500-223704-2**

**Date Collected: 10/12/22 08:55**

**Matrix: Solid**

**Date Received: 10/12/22 15:05**

**Percent Solids: 94.6**

**Method: SW846 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<0.86		0.86		mg/Kg	☼	10/12/22 15:39	10/13/22 11:18	50
PCB-1221	<0.86		0.86		mg/Kg	☼	10/12/22 15:39	10/13/22 11:18	50
PCB-1232	<0.86		0.86		mg/Kg	☼	10/12/22 15:39	10/13/22 11:18	50
PCB-1242	<0.86		0.86		mg/Kg	☼	10/12/22 15:39	10/13/22 11:18	50
PCB-1248	2.4		0.86		mg/Kg	☼	10/12/22 15:39	10/13/22 11:18	50
PCB-1254	<0.86		0.86		mg/Kg	☼	10/12/22 15:39	10/13/22 11:18	50
PCB-1260	<0.86		0.86		mg/Kg	☼	10/12/22 15:39	10/13/22 11:18	50

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	71		49 - 129	10/12/22 15:39	10/13/22 11:18	50
DCB Decachlorobiphenyl	132	S1+	37 - 121	10/12/22 15:39	10/13/22 11:18	50

# Client Sample Results

Client: Civil & Environmental Consultants Inc  
 Project/Site: Arconic - Elliot Ditch - Lafayette, IN

Job ID: 500-223704-1

**Client Sample ID: ED-R3SL-027-3**

**Lab Sample ID: 500-223704-3**

**Date Collected: 10/12/22 09:06**

**Matrix: Solid**

**Date Received: 10/12/22 15:05**

**Percent Solids: 93.9**

**Method: SW846 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<0.89		0.89		mg/Kg	☼	10/12/22 15:39	10/13/22 11:33	50
PCB-1221	<0.89		0.89		mg/Kg	☼	10/12/22 15:39	10/13/22 11:33	50
PCB-1232	<0.89		0.89		mg/Kg	☼	10/12/22 15:39	10/13/22 11:33	50
PCB-1242	<0.89		0.89		mg/Kg	☼	10/12/22 15:39	10/13/22 11:33	50
PCB-1248	2.4		0.89		mg/Kg	☼	10/12/22 15:39	10/13/22 11:33	50
PCB-1254	<0.89		0.89		mg/Kg	☼	10/12/22 15:39	10/13/22 11:33	50
PCB-1260	<0.89		0.89		mg/Kg	☼	10/12/22 15:39	10/13/22 11:33	50

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	89		49 - 129	10/12/22 15:39	10/13/22 11:33	50
DCB Decachlorobiphenyl	139	S1+	37 - 121	10/12/22 15:39	10/13/22 11:33	50

# Client Sample Results

Client: Civil & Environmental Consultants Inc  
 Project/Site: Arconic - Elliot Ditch - Lafayette, IN

Job ID: 500-223704-1

**Client Sample ID: ED-R3SL-028-3**

**Lab Sample ID: 500-223704-4**

**Date Collected: 10/12/22 09:15**

**Matrix: Solid**

**Date Received: 10/12/22 15:05**

**Percent Solids: 93.9**

**Method: SW846 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<0.17		0.17		mg/Kg	☼	10/12/22 15:39	10/13/22 10:07	10
PCB-1221	<0.17		0.17		mg/Kg	☼	10/12/22 15:39	10/13/22 10:07	10
PCB-1232	<0.17		0.17		mg/Kg	☼	10/12/22 15:39	10/13/22 10:07	10
PCB-1242	<0.17		0.17		mg/Kg	☼	10/12/22 15:39	10/13/22 10:07	10
PCB-1248	<b>1.5</b>		0.17		mg/Kg	☼	10/12/22 15:39	10/13/22 10:07	10
PCB-1254	<0.17		0.17		mg/Kg	☼	10/12/22 15:39	10/13/22 10:07	10
PCB-1260	<0.17		0.17		mg/Kg	☼	10/12/22 15:39	10/13/22 10:07	10

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	87		49 - 129	10/12/22 15:39	10/13/22 10:07	10
DCB Decachlorobiphenyl	125	S1+	37 - 121	10/12/22 15:39	10/13/22 10:07	10

# Client Sample Results

Client: Civil & Environmental Consultants Inc  
 Project/Site: Arconic - Elliot Ditch - Lafayette, IN

Job ID: 500-223704-1

**Client Sample ID: ED-R3SL-029-3**

**Lab Sample ID: 500-223704-5**

**Date Collected: 10/12/22 09:26**

**Matrix: Solid**

**Date Received: 10/12/22 15:05**

**Percent Solids: 94.2**

**Method: SW846 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<0.17		0.17		mg/Kg	☼	10/12/22 15:39	10/13/22 10:22	10
PCB-1221	<0.17		0.17		mg/Kg	☼	10/12/22 15:39	10/13/22 10:22	10
PCB-1232	<0.17		0.17		mg/Kg	☼	10/12/22 15:39	10/13/22 10:22	10
PCB-1242	<0.17		0.17		mg/Kg	☼	10/12/22 15:39	10/13/22 10:22	10
PCB-1248	<b>1.6</b>		0.17		mg/Kg	☼	10/12/22 15:39	10/13/22 10:22	10
PCB-1254	<0.17		0.17		mg/Kg	☼	10/12/22 15:39	10/13/22 10:22	10
PCB-1260	<0.17		0.17		mg/Kg	☼	10/12/22 15:39	10/13/22 10:22	10

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
<i>Tetrachloro-m-xylene</i>	86		49 - 129	10/12/22 15:39	10/13/22 10:22	10
<i>DCB Decachlorobiphenyl</i>	99		37 - 121	10/12/22 15:39	10/13/22 10:22	10

# Client Sample Results

Client: Civil & Environmental Consultants Inc  
 Project/Site: Arconic - Elliot Ditch - Lafayette, IN

Job ID: 500-223704-1

**Client Sample ID: ED-R3SL-SW005-3**

**Lab Sample ID: 500-223704-6**

**Date Collected: 10/12/22 09:35**

**Matrix: Solid**

**Date Received: 10/12/22 15:05**

**Percent Solids: 95.0**

**Method: SW846 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<0.17		0.17		mg/Kg	☼	10/12/22 15:39	10/13/22 10:37	10
PCB-1221	<0.17		0.17		mg/Kg	☼	10/12/22 15:39	10/13/22 10:37	10
PCB-1232	<0.17		0.17		mg/Kg	☼	10/12/22 15:39	10/13/22 10:37	10
PCB-1242	<0.17		0.17		mg/Kg	☼	10/12/22 15:39	10/13/22 10:37	10
PCB-1248	1.1		0.17		mg/Kg	☼	10/12/22 15:39	10/13/22 10:37	10
PCB-1254	<0.17		0.17		mg/Kg	☼	10/12/22 15:39	10/13/22 10:37	10
PCB-1260	<0.17		0.17		mg/Kg	☼	10/12/22 15:39	10/13/22 10:37	10

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	116		49 - 129	10/12/22 15:39	10/13/22 10:37	10
DCB Decachlorobiphenyl	130	S1+	37 - 121	10/12/22 15:39	10/13/22 10:37	10

# Definitions/Glossary

Client: Civil & Environmental Consultants Inc  
Project/Site: Arconic - Elliot Ditch - Lafayette, IN

Job ID: 500-223704-1

## Qualifiers

### GC Semi VOA

Qualifier	Qualifier Description
S1+	Surrogate recovery exceeds control limits, high biased.

## Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
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)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
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)
TNTC	Too Numerous To Count

# QC Association Summary

Client: Civil & Environmental Consultants Inc  
Project/Site: Arconic - Elliot Ditch - Lafayette, IN

Job ID: 500-223704-1

## GC Semi VOA

### Prep Batch: 679324

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-223704-1	ED-R3SL-003-4	Total/NA	Solid	3541	
500-223704-2	ED-R3SL-026-3	Total/NA	Solid	3541	
500-223704-3	ED-R3SL-027-3	Total/NA	Solid	3541	
500-223704-4	ED-R3SL-028-3	Total/NA	Solid	3541	
500-223704-5	ED-R3SL-029-3	Total/NA	Solid	3541	
500-223704-6	ED-R3SL-SW005-3	Total/NA	Solid	3541	
MB 500-679324/1-A	Method Blank	Total/NA	Solid	3541	
LCS 500-679324/2-A	Lab Control Sample	Total/NA	Solid	3541	
500-223704-1 MS	ED-R3SL-003-4	Total/NA	Solid	3541	
500-223704-1 MSD	ED-R3SL-003-4	Total/NA	Solid	3541	

### Analysis Batch: 679357

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-223704-1	ED-R3SL-003-4	Total/NA	Solid	8082A	679324
500-223704-2	ED-R3SL-026-3	Total/NA	Solid	8082A	679324
500-223704-3	ED-R3SL-027-3	Total/NA	Solid	8082A	679324
500-223704-4	ED-R3SL-028-3	Total/NA	Solid	8082A	679324
500-223704-5	ED-R3SL-029-3	Total/NA	Solid	8082A	679324
500-223704-6	ED-R3SL-SW005-3	Total/NA	Solid	8082A	679324
MB 500-679324/1-A	Method Blank	Total/NA	Solid	8082A	679324
LCS 500-679324/2-A	Lab Control Sample	Total/NA	Solid	8082A	679324
500-223704-1 MS	ED-R3SL-003-4	Total/NA	Solid	8082A	679324
500-223704-1 MSD	ED-R3SL-003-4	Total/NA	Solid	8082A	679324

## General Chemistry

### Analysis Batch: 679314

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-223704-1	ED-R3SL-003-4	Total/NA	Solid	Moisture	
500-223704-2	ED-R3SL-026-3	Total/NA	Solid	Moisture	
500-223704-3	ED-R3SL-027-3	Total/NA	Solid	Moisture	
500-223704-4	ED-R3SL-028-3	Total/NA	Solid	Moisture	
500-223704-5	ED-R3SL-029-3	Total/NA	Solid	Moisture	
500-223704-6	ED-R3SL-SW005-3	Total/NA	Solid	Moisture	

# Surrogate Summary

Client: Civil & Environmental Consultants Inc  
Project/Site: Arconic - Elliot Ditch - Lafayette, IN

Job ID: 500-223704-1

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

Matrix: Solid

Prep Type: Total/NA

### Percent Surrogate Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	TCX1	DCBP1
		(49-129)	(37-121)
500-223704-1	ED-R3SL-003-4	92	125 S1+
500-223704-1 MS	ED-R3SL-003-4	124	124 S1+
500-223704-1 MSD	ED-R3SL-003-4	84	109
500-223704-2	ED-R3SL-026-3	71	132 S1+
500-223704-3	ED-R3SL-027-3	89	139 S1+
500-223704-4	ED-R3SL-028-3	87	125 S1+
500-223704-5	ED-R3SL-029-3	86	99
500-223704-6	ED-R3SL-SW005-3	116	130 S1+
LCS 500-679324/2-A	Lab Control Sample	119	121
MB 500-679324/1-A	Method Blank	87	110

#### Surrogate Legend

TCX = Tetrachloro-m-xylene

DCBP = DCB Decachlorobiphenyl

# QC Sample Results

Client: Civil & Environmental Consultants Inc  
 Project/Site: Arconic - Elliot Ditch - Lafayette, IN

Job ID: 500-223704-1

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

**Lab Sample ID: MB 500-679324/1-A**  
**Matrix: Solid**  
**Analysis Batch: 679357**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**  
**Prep Batch: 679324**

Analyte	MB MB		RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
PCB-1016	<0.17		0.17		mg/Kg		10/12/22 15:39	10/13/22 08:24	10
PCB-1221	<0.17		0.17		mg/Kg		10/12/22 15:39	10/13/22 08:24	10
PCB-1232	<0.17		0.17		mg/Kg		10/12/22 15:39	10/13/22 08:24	10
PCB-1242	<0.17		0.17		mg/Kg		10/12/22 15:39	10/13/22 08:24	10
PCB-1248	<0.17		0.17		mg/Kg		10/12/22 15:39	10/13/22 08:24	10
PCB-1254	<0.17		0.17		mg/Kg		10/12/22 15:39	10/13/22 08:24	10
PCB-1260	<0.17		0.17		mg/Kg		10/12/22 15:39	10/13/22 08:24	10

Surrogate	MB MB		Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
Tetrachloro-m-xylene	87		49 - 129	10/12/22 15:39	10/13/22 08:24	10
DCB Decachlorobiphenyl	110		37 - 121	10/12/22 15:39	10/13/22 08:24	10

**Lab Sample ID: LCS 500-679324/2-A**  
**Matrix: Solid**  
**Analysis Batch: 679357**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**  
**Prep Batch: 679324**

Analyte	Spike Added	LCS LCS		Unit	D	%Rec	%Rec Limits
		Result	Qualifier				
PCB-1016	1.67	1.65		mg/Kg		99	57 - 120
PCB-1260	1.67	1.66		mg/Kg		99	61 - 125

Surrogate	LCS LCS		Limits
	%Recovery	Qualifier	
Tetrachloro-m-xylene	119		49 - 129
DCB Decachlorobiphenyl	121		37 - 121

**Lab Sample ID: 500-223704-1 MS**  
**Matrix: Solid**  
**Analysis Batch: 679357**

**Client Sample ID: ED-R3SL-003-4**  
**Prep Type: Total/NA**  
**Prep Batch: 679324**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS MS		Unit	D	%Rec	%Rec Limits
				Result	Qualifier				
PCB-1016	<0.18		1.69	1.70		mg/Kg	☼	100	57 - 120
PCB-1260	<0.18		1.69	1.74		mg/Kg	☼	103	61 - 125

Surrogate	MS MS		Limits
	%Recovery	Qualifier	
Tetrachloro-m-xylene	124		49 - 129
DCB Decachlorobiphenyl	124	S1+	37 - 121

**Lab Sample ID: 500-223704-1 MSD**  
**Matrix: Solid**  
**Analysis Batch: 679357**

**Client Sample ID: ED-R3SL-003-4**  
**Prep Type: Total/NA**  
**Prep Batch: 679324**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD MSD		Unit	D	%Rec	%Rec Limits	RPD	
				Result	Qualifier					RPD	Limit
PCB-1016	<0.18		1.75	1.48		mg/Kg	☼	85	57 - 120	14	30
PCB-1260	<0.18		1.75	1.68		mg/Kg	☼	96	61 - 125	4	30

Surrogate	MSD MSD		Limits
	%Recovery	Qualifier	
Tetrachloro-m-xylene	84		49 - 129
DCB Decachlorobiphenyl	109		37 - 121

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# Lab Chronicle

Client: Civil & Environmental Consultants Inc  
Project/Site: Arconic - Elliot Ditch - Lafayette, IN

Job ID: 500-223704-1

**Client Sample ID: ED-R3SL-003-4**

**Date Collected: 10/12/22 08:40**

**Date Received: 10/12/22 15:05**

**Lab Sample ID: 500-223704-1**

**Matrix: Solid**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Moisture		1	679314	LWN	EET CHI	10/12/22 15:27

**Client Sample ID: ED-R3SL-003-4**

**Date Collected: 10/12/22 08:40**

**Date Received: 10/12/22 15:05**

**Lab Sample ID: 500-223704-1**

**Matrix: Solid**

**Percent Solids: 93.4**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3541			679324	EK	EET CHI	10/12/22 15:39 - 10/12/22 18:00 <sup>1</sup>
Total/NA	Analysis	8082A		10	679357	SB	EET CHI	10/13/22 08:53

**Client Sample ID: ED-R3SL-026-3**

**Date Collected: 10/12/22 08:55**

**Date Received: 10/12/22 15:05**

**Lab Sample ID: 500-223704-2**

**Matrix: Solid**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Moisture		1	679314	LWN	EET CHI	10/12/22 15:27

**Client Sample ID: ED-R3SL-026-3**

**Date Collected: 10/12/22 08:55**

**Date Received: 10/12/22 15:05**

**Lab Sample ID: 500-223704-2**

**Matrix: Solid**

**Percent Solids: 94.6**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3541			679324	EK	EET CHI	10/12/22 15:39 - 10/12/22 18:00 <sup>1</sup>
Total/NA	Analysis	8082A		50	679357	SB	EET CHI	10/13/22 11:18

**Client Sample ID: ED-R3SL-027-3**

**Date Collected: 10/12/22 09:06**

**Date Received: 10/12/22 15:05**

**Lab Sample ID: 500-223704-3**

**Matrix: Solid**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Moisture		1	679314	LWN	EET CHI	10/12/22 15:27

**Client Sample ID: ED-R3SL-027-3**

**Date Collected: 10/12/22 09:06**

**Date Received: 10/12/22 15:05**

**Lab Sample ID: 500-223704-3**

**Matrix: Solid**

**Percent Solids: 93.9**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3541			679324	EK	EET CHI	10/12/22 15:39 - 10/12/22 18:00 <sup>1</sup>
Total/NA	Analysis	8082A		50	679357	SB	EET CHI	10/13/22 11:33

**Client Sample ID: ED-R3SL-028-3**

**Date Collected: 10/12/22 09:15**

**Date Received: 10/12/22 15:05**

**Lab Sample ID: 500-223704-4**

**Matrix: Solid**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Moisture		1	679314	LWN	EET CHI	10/12/22 15:27

Eurofins Chicago

# Lab Chronicle

Client: Civil & Environmental Consultants Inc  
 Project/Site: Arconic - Elliot Ditch - Lafayette, IN

Job ID: 500-223704-1

**Client Sample ID: ED-R3SL-028-3**

**Lab Sample ID: 500-223704-4**

Date Collected: 10/12/22 09:15

Matrix: Solid

Date Received: 10/12/22 15:05

Percent Solids: 93.9

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3541			679324	EK	EET CHI	10/12/22 15:39 - 10/12/22 18:00 <sup>1</sup>
Total/NA	Analysis	8082A		10	679357	SB	EET CHI	10/13/22 10:07

**Client Sample ID: ED-R3SL-029-3**

**Lab Sample ID: 500-223704-5**

Date Collected: 10/12/22 09:26

Matrix: Solid

Date Received: 10/12/22 15:05

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Moisture		1	679314	LWN	EET CHI	10/12/22 15:27

**Client Sample ID: ED-R3SL-029-3**

**Lab Sample ID: 500-223704-5**

Date Collected: 10/12/22 09:26

Matrix: Solid

Date Received: 10/12/22 15:05

Percent Solids: 94.2

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3541			679324	EK	EET CHI	10/12/22 15:39 - 10/12/22 18:00 <sup>1</sup>
Total/NA	Analysis	8082A		10	679357	SB	EET CHI	10/13/22 10:22

**Client Sample ID: ED-R3SL-SW005-3**

**Lab Sample ID: 500-223704-6**

Date Collected: 10/12/22 09:35

Matrix: Solid

Date Received: 10/12/22 15:05

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Moisture		1	679314	LWN	EET CHI	10/12/22 15:27

**Client Sample ID: ED-R3SL-SW005-3**

**Lab Sample ID: 500-223704-6**

Date Collected: 10/12/22 09:35

Matrix: Solid

Date Received: 10/12/22 15:05

Percent Solids: 95.0

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3541			679324	EK	EET CHI	10/12/22 15:39 - 10/12/22 18:00 <sup>1</sup>
Total/NA	Analysis	8082A		10	679357	SB	EET CHI	10/13/22 10:37

<sup>1</sup> Completion dates and times are reported or not reported per method requirements or individual lab discretion.

**Laboratory References:**

EET CHI = Eurofins Chicago, 2417 Bond Street, University Park, IL 60484, TEL (708)534-5200

# Accreditation/Certification Summary

Client: Civil & Environmental Consultants Inc  
Project/Site: Arconic - Elliot Ditch - Lafayette, IN

Job ID: 500-223704-1

## Laboratory: Eurofins Chicago

The accreditations/certifications listed below are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Illinois	NELAP	IL00035	04-30-23

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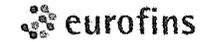
13

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# Chain of Custody Record

524992



Environment Testing  
TestAmerica

TAL-8210

Address \_\_\_\_\_

Regulatory Program:  DW  NPDES  RCRA  Other

Client Contact		Project Manager: <u>G. Welch</u>		Site Contact: <u>G. Welch</u>		Date:		COC No	
Company Name <u>CEC</u>		Tel/Email: <u>865-416-7655</u>		Lab Contact: <u>R. Kintz</u>		Carrier: <u>Courier</u>		_____ of _____ COCs	
Address <u>2704 Cherokee Farm Way Suite 101</u>		Analysis Turnaround Time		Filtered Sample (Y/N) Perform MS / MSD (Y/N) <u>PCBS via 802Z</u>		 500-223704 COC		Sampler	
City/State/Zip <u>Knoxville, TN 37920</u>		<input type="checkbox"/> CALENDAR DAYS <input type="checkbox"/> WORKING DAYS						For Lab Use Only:	
Phone <u>865-977-9497</u>		TAT if different from Below _____						Walk-in Client	
Fax _____		<input type="checkbox"/> 2 weeks <input type="checkbox"/> 1 week <u>24 Hour*</u> <input type="checkbox"/> 2 days <u>Rush</u> <input checked="" type="checkbox"/> 1 day						Lab Sampling	
Project Name <u>Elkitt Ditch IM Project</u>						Job / SDG No		<u>500-223704</u>	
Site <u>Reach 3</u>									
P O # _____									
Sample Identification		Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.	Filtered Sample (Y/N)	Perform MS / MSD (Y/N)	Sample Specific Notes
1 ED-R3SL-003-4		10/12/22	0840	C	S	1		X	
2 ED-R3SL-026-3		10/12/22	0855	C	S	1		X	
3 ED-R3SL-027-3		10/12/22	0906	C	S	1		X	
4 ED-R3SL-028-3		10/12/22	0915	C	S	1		X	
5 ED-R3SL-029-3		10/12/22	0926	C	S	1		X	
6 ED-R3SL-SW005-3		10/12/22	0935	C	S	1		X	
Preservation Used: 1=Ice, 2=HCl, 3=H2SO4, 4=HNO3, 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								Sample Disposal ( A fee may be assessed if samples are retained longer than 1 month)	
<input checked="" type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison B <input type="checkbox"/> Unknown								<input type="checkbox"/> Return to Client <input checked="" type="checkbox"/> Disposal by Lab <input type="checkbox"/> Archive for _____ Months	
Special Instructions/QC Requirements & Comments:								<u>4.0 + 4.2</u>	
Custody Seals Intact. <input type="checkbox"/> Yes <input type="checkbox"/> No		Custody Seal No		Cooler Temp (°C) Obs'd _____ Corr'd _____		Therm ID No _____			
Relinquished by <u>[Signature]</u>		Company <u>CEC</u>		Date/Time <u>10/12/22 1358</u>		Received by <u>[Signature]</u>		Company <u>EETA</u> Date/Time <u>10/12/22 1355 CST</u>	
Relinquished by <u>[Signature]</u>		Company <u>EETA</u>		Date/Time <u>10/12/22 1505 CST</u>		Received by:		Company _____ Date/Time _____	
Relinquished by _____		Company _____		Date/Time _____		Received in Laboratory by: <u>[Signature]</u>		Company <u>EETA</u> Date/Time <u>10/12/22 1505</u>	

# Login Sample Receipt Checklist

Client: Civil & Environmental Consultants Inc

Job Number: 500-223704-1

**Login Number: 223704**

**List Number: 1**

**Creator: Hernandez, Stephanie**

**List Source: Eurofins Chicago**

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
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	4.2
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").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	





# ANALYTICAL REPORT

## PREPARED FOR

Attn: Garrett Welch  
Civil & Environmental Consultants Inc  
2704 Cherokee Farm Way  
Suite 101  
Knoxville, Tennessee 37920

Generated 12/9/2022 3:54:18 PM Revision 1

## JOB DESCRIPTION

Arconic - Elliot Ditch - Lafayette, IN

## JOB NUMBER

500-223766-1

# Eurofins Chicago

## Job Notes

The test results in this report meet all NELAP requirements for parameters for which accreditation is required or available. Any exceptions to the NELAP requirements are noted in this report. Pursuant to NELAP, this report may not be reproduced, except in full, without the written approval of the laboratory. This report is confidential and is intended for the sole use of Eurofins Environment Testing North Central, LLC and its client. All questions regarding this report should be directed to the Eurofins Environment Testing North Central, LLC Project Manager who has signed this report.

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins Chicago Project Manager.

## Authorization



Generated  
12/9/2022 3:54:18 PM  
Revision 1

Authorized for release by  
Robin Kintz, Project Manager II  
[Robin.Kintz@et.eurofinsus.com](mailto:Robin.Kintz@et.eurofinsus.com)  
(708)534-5200



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# Case Narrative

Client: Civil & Environmental Consultants Inc  
Project/Site: Arconic - Elliot Ditch - Lafayette, IN

Job ID: 500-223766-1

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**Job ID: 500-223766-1**

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**Laboratory: Eurofins Chicago**

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**Narrative**

**Job Narrative  
500-223766-1**

**Comments**

No additional comments.

**Revision**

The report being provided is a revision of the original report sent on 10/14/2022. The report (revision 1) is being revised due to: Revised to correct sample ID's from: ED-R35L to: ED-R3SL per client request.

**Receipt**

The samples were received on 10/13/2022 3:12 PM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperature of the cooler at receipt was 2.8° C.

**GC Semi VOA**

Method 8082A: Tetrachloro-m-xylene surrogate recovery for the following sample was outside control limits: (CCVIS 500-679658/3). DCB Decachlorobiphenyl surrogate was within the control limits; therefore, re-extraction and/or re-analysis was not performed.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

**Metals**

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

**Organic Prep**

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.



# Detection Summary

Client: Civil & Environmental Consultants Inc  
Project/Site: Arconic - Elliot Ditch - Lafayette, IN

Job ID: 500-223766-1

**Client Sample ID: ED-R3SL-046-1**

**Lab Sample ID: 500-223766-1**

No Detections.

**Client Sample ID: ED-R3SL-SW014-1**

**Lab Sample ID: 500-223766-2**

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
PCB-1248	1.1		0.17		mg/Kg	10	✳	8082A	Total/NA

This Detection Summary does not include radiochemical test results.

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# Method Summary

Client: Civil & Environmental Consultants Inc  
Project/Site: Arconic - Elliot Ditch - Lafayette, IN

Job ID: 500-223766-1

Method	Method Description	Protocol	Laboratory
8082A	Polychlorinated Biphenyls (PCBs) by Gas Chromatography	SW846	EET CHI
Moisture	Percent Moisture	EPA	EET CHI
3541	Automated Soxhlet Extraction	SW846	EET CHI

**Protocol References:**

EPA = US Environmental Protection Agency

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

**Laboratory References:**

EET CHI = Eurofins Chicago, 2417 Bond Street, University Park, IL 60484, TEL (708)534-5200

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# Sample Summary

Client: Civil & Environmental Consultants Inc  
Project/Site: Arconic - Elliot Ditch - Lafayette, IN

Job ID: 500-223766-1

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Lab Sample ID	Client Sample ID	Matrix	Collected	Received
500-223766-1	ED-R3SL-046-1	Solid	10/13/22 09:19	10/13/22 15:12
500-223766-2	ED-R3SL-SW014-1	Solid	10/13/22 09:40	10/13/22 15:12

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# Client Sample Results

Client: Civil & Environmental Consultants Inc  
 Project/Site: Arconic - Elliot Ditch - Lafayette, IN

Job ID: 500-223766-1

**Client Sample ID: ED-R3SL-046-1**

**Lab Sample ID: 500-223766-1**

**Date Collected: 10/13/22 09:19**

**Matrix: Solid**

**Date Received: 10/13/22 15:12**

**Percent Solids: 92.3**

**Method: SW846 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<0.18		0.18		mg/Kg	☼	10/13/22 15:59	10/14/22 10:08	10
PCB-1221	<0.18		0.18		mg/Kg	☼	10/13/22 15:59	10/14/22 10:08	10
PCB-1232	<0.18		0.18		mg/Kg	☼	10/13/22 15:59	10/14/22 10:08	10
PCB-1242	<0.18		0.18		mg/Kg	☼	10/13/22 15:59	10/14/22 10:08	10
PCB-1248	<0.18		0.18		mg/Kg	☼	10/13/22 15:59	10/14/22 10:08	10
PCB-1254	<0.18		0.18		mg/Kg	☼	10/13/22 15:59	10/14/22 10:08	10
PCB-1260	<0.18		0.18		mg/Kg	☼	10/13/22 15:59	10/14/22 10:08	10

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	114		49 - 129	10/13/22 15:59	10/14/22 10:08	10
DCB Decachlorobiphenyl	109		37 - 121	10/13/22 15:59	10/14/22 10:08	10

# Client Sample Results

Client: Civil & Environmental Consultants Inc  
 Project/Site: Arconic - Elliot Ditch - Lafayette, IN

Job ID: 500-223766-1

**Client Sample ID: ED-R3SL-SW014-1**

**Lab Sample ID: 500-223766-2**

Date Collected: 10/13/22 09:40

Matrix: Solid

Date Received: 10/13/22 15:12

Percent Solids: 92.4

**Method: SW846 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<0.17		0.17		mg/Kg	☼	10/13/22 15:59	10/14/22 10:52	10
PCB-1221	<0.17		0.17		mg/Kg	☼	10/13/22 15:59	10/14/22 10:52	10
PCB-1232	<0.17		0.17		mg/Kg	☼	10/13/22 15:59	10/14/22 10:52	10
PCB-1242	<0.17		0.17		mg/Kg	☼	10/13/22 15:59	10/14/22 10:52	10
<b>PCB-1248</b>	<b>1.1</b>		0.17		mg/Kg	☼	10/13/22 15:59	10/14/22 10:52	10
PCB-1254	<0.17		0.17		mg/Kg	☼	10/13/22 15:59	10/14/22 10:52	10
PCB-1260	<0.17		0.17		mg/Kg	☼	10/13/22 15:59	10/14/22 10:52	10

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	107		49 - 129	10/13/22 15:59	10/14/22 10:52	10
DCB Decachlorobiphenyl	93		37 - 121	10/13/22 15:59	10/14/22 10:52	10

# Definitions/Glossary

Client: Civil & Environmental Consultants Inc  
Project/Site: Arconic - Elliot Ditch - Lafayette, IN

Job ID: 500-223766-1

## Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
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)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
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)
TNTC	Too Numerous To Count

# QC Association Summary

Client: Civil & Environmental Consultants Inc  
Project/Site: Arconic - Elliot Ditch - Lafayette, IN

Job ID: 500-223766-1

## GC Semi VOA

### Prep Batch: 679533

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-223766-1	ED-R3SL-046-1	Total/NA	Solid	3541	
500-223766-2	ED-R3SL-SW014-1	Total/NA	Solid	3541	
MB 500-679533/1-A	Method Blank	Total/NA	Solid	3541	
LCS 500-679533/2-A	Lab Control Sample	Total/NA	Solid	3541	
500-223766-1 MS	ED-R3SL-046-1	Total/NA	Solid	3541	
500-223766-1 MSD	ED-R3SL-046-1	Total/NA	Solid	3541	

### Analysis Batch: 679658

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-223766-1	ED-R3SL-046-1	Total/NA	Solid	8082A	679533
500-223766-2	ED-R3SL-SW014-1	Total/NA	Solid	8082A	679533
MB 500-679533/1-A	Method Blank	Total/NA	Solid	8082A	679533
LCS 500-679533/2-A	Lab Control Sample	Total/NA	Solid	8082A	679533
500-223766-1 MS	ED-R3SL-046-1	Total/NA	Solid	8082A	679533
500-223766-1 MSD	ED-R3SL-046-1	Total/NA	Solid	8082A	679533

## General Chemistry

### Analysis Batch: 679530

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-223766-1	ED-R3SL-046-1	Total/NA	Solid	Moisture	
500-223766-2	ED-R3SL-SW014-1	Total/NA	Solid	Moisture	
500-223766-1 DU	ED-R3SL-046-1	Total/NA	Solid	Moisture	

# Surrogate Summary

Client: Civil & Environmental Consultants Inc  
Project/Site: Arconic - Elliot Ditch - Lafayette, IN

Job ID: 500-223766-1

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

Matrix: Solid

Prep Type: Total/NA

### Percent Surrogate Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	TCX2	DCBP2
		(49-129)	(37-121)
500-223766-1	ED-R3SL-046-1	114	109
500-223766-1 MS	ED-R3SL-046-1	100	106
500-223766-1 MSD	ED-R3SL-046-1	117	108
500-223766-2	ED-R3SL-SW014-1	107	93
LCS 500-679533/2-A	Lab Control Sample	112	97
MB 500-679533/1-A	Method Blank	108	92

#### Surrogate Legend

TCX = Tetrachloro-m-xylene

DCBP = DCB Decachlorobiphenyl

# QC Sample Results

Client: Civil & Environmental Consultants Inc  
 Project/Site: Arconic - Elliot Ditch - Lafayette, IN

Job ID: 500-223766-1

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

**Lab Sample ID: MB 500-679533/1-A**  
**Matrix: Solid**  
**Analysis Batch: 679658**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**  
**Prep Batch: 679533**

Analyte	MB MB		RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
PCB-1016	<0.17		0.17		mg/Kg		10/13/22 15:59	10/14/22 09:38	10
PCB-1221	<0.17		0.17		mg/Kg		10/13/22 15:59	10/14/22 09:38	10
PCB-1232	<0.17		0.17		mg/Kg		10/13/22 15:59	10/14/22 09:38	10
PCB-1242	<0.17		0.17		mg/Kg		10/13/22 15:59	10/14/22 09:38	10
PCB-1248	<0.17		0.17		mg/Kg		10/13/22 15:59	10/14/22 09:38	10
PCB-1254	<0.17		0.17		mg/Kg		10/13/22 15:59	10/14/22 09:38	10
PCB-1260	<0.17		0.17		mg/Kg		10/13/22 15:59	10/14/22 09:38	10

Surrogate	MB MB		Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
Tetrachloro-m-xylene	108		49 - 129	10/13/22 15:59	10/14/22 09:38	10
DCB Decachlorobiphenyl	92		37 - 121	10/13/22 15:59	10/14/22 09:38	10

**Lab Sample ID: LCS 500-679533/2-A**  
**Matrix: Solid**  
**Analysis Batch: 679658**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**  
**Prep Batch: 679533**

Analyte	Spike Added	LCS LCS		Unit	D	%Rec	%Rec Limits
		Result	Qualifier				
PCB-1016	1.67	1.57		mg/Kg		94	57 - 120
PCB-1260	1.67	1.73		mg/Kg		104	61 - 125

Surrogate	LCS LCS		Limits
	%Recovery	Qualifier	
Tetrachloro-m-xylene	112		49 - 129
DCB Decachlorobiphenyl	97		37 - 121

**Lab Sample ID: 500-223766-1 MS**  
**Matrix: Solid**  
**Analysis Batch: 679658**

**Client Sample ID: ED-R3SL-046-1**  
**Prep Type: Total/NA**  
**Prep Batch: 679533**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS MS		Unit	D	%Rec	%Rec Limits
				Result	Qualifier				
PCB-1016	<0.18		1.79	1.83		mg/Kg	☼	102	57 - 120
PCB-1260	<0.18		1.79	2.06		mg/Kg	☼	115	61 - 125

Surrogate	MS MS		Limits
	%Recovery	Qualifier	
Tetrachloro-m-xylene	100		49 - 129
DCB Decachlorobiphenyl	106		37 - 121

**Lab Sample ID: 500-223766-1 MSD**  
**Matrix: Solid**  
**Analysis Batch: 679658**

**Client Sample ID: ED-R3SL-046-1**  
**Prep Type: Total/NA**  
**Prep Batch: 679533**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD MSD		Unit	D	%Rec	%Rec Limits	RPD	
				Result	Qualifier					RPD	Limit
PCB-1016	<0.18		1.72	1.81		mg/Kg	☼	105	57 - 120	1	30
PCB-1260	<0.18		1.72	1.98		mg/Kg	☼	115	61 - 125	4	30

Surrogate	MSD MSD		Limits
	%Recovery	Qualifier	
Tetrachloro-m-xylene	117		49 - 129
DCB Decachlorobiphenyl	108		37 - 121

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# Lab Chronicle

Client: Civil & Environmental Consultants Inc  
 Project/Site: Arconic - Elliot Ditch - Lafayette, IN

Job ID: 500-223766-1

**Client Sample ID: ED-R3SL-046-1**

**Lab Sample ID: 500-223766-1**

**Date Collected: 10/13/22 09:19**

**Matrix: Solid**

**Date Received: 10/13/22 15:12**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Moisture		1	679530	LWN	EET CHI	10/13/22 15:49

**Client Sample ID: ED-R3SL-046-1**

**Lab Sample ID: 500-223766-1**

**Date Collected: 10/13/22 09:19**

**Matrix: Solid**

**Date Received: 10/13/22 15:12**

**Percent Solids: 92.3**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3541			679533	EK	EET CHI	10/13/22 15:59 - 10/13/22 18:00 <sup>1</sup>
Total/NA	Analysis	8082A		10	679658	SB	EET CHI	10/14/22 10:08

**Client Sample ID: ED-R3SL-SW014-1**

**Lab Sample ID: 500-223766-2**

**Date Collected: 10/13/22 09:40**

**Matrix: Solid**

**Date Received: 10/13/22 15:12**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Moisture		1	679530	LWN	EET CHI	10/13/22 15:49

**Client Sample ID: ED-R3SL-SW014-1**

**Lab Sample ID: 500-223766-2**

**Date Collected: 10/13/22 09:40**

**Matrix: Solid**

**Date Received: 10/13/22 15:12**

**Percent Solids: 92.4**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3541			679533	EK	EET CHI	10/13/22 15:59 - 10/13/22 18:00 <sup>1</sup>
Total/NA	Analysis	8082A		10	679658	SB	EET CHI	10/14/22 10:52

<sup>1</sup> Completion dates and times are reported or not reported per method requirements or individual lab discretion.

**Laboratory References:**

EET CHI = Eurofins Chicago, 2417 Bond Street, University Park, IL 60484, TEL (708)534-5200

# Accreditation/Certification Summary

Client: Civil & Environmental Consultants Inc  
Project/Site: Arconic - Elliot Ditch - Lafayette, IN

Job ID: 500-223766-1

## Laboratory: Eurofins Chicago

The accreditations/certifications listed below are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Illinois	NELAP	IL00035	04-30-23

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# Chain of Custody Record

524992



Environment Testing  
TestAmerica

Address \_\_\_\_\_

Regulatory Program:  DW  NPDES  RCRA  Other

500-223766 COC

TAL-8210

Client Contact		Project Manager: <u>G. Welch</u>		Site Contact: <u>G. Welch</u>		Date: <u>10/13/22</u>	
Company Name: <u>CEC</u>		Tel/Email: <u>865-446-1655</u>		Lab Contact: <u>R. Kintz</u>		Carrier: <u>Courier</u>	
Address: <u>2704 Cherokee Farm Way Suite 101</u>		Analysis Turnaround Time					
City/State/Zip: <u>Knoxville, TN 37120</u>		<input type="checkbox"/> CALENDAR DAYS <input type="checkbox"/> WORKING DAYS TAT if different from Below _____ <input type="checkbox"/> 2 weeks <input type="checkbox"/> 1 week <u>*24 Hour*</u> <input type="checkbox"/> 2 days <u>RUSH</u> <input checked="" type="checkbox"/> 1 day					
Phone: <u>865-977-9997</u>		Filtered Sample (Y/N) _____ Perform MS / MSD (Y/N) _____ <u>PCBS via 802Z</u>					
Fax: _____							
Project Name: <u>Elliott Ditch IM Project</u>							
Site: <u>Reach 3</u>							
PO #: _____		For Lab Use Only: Walk-in Client _____ Lab Sampling _____ Job / SDG No _____ <u>500-223766</u> Sample Specific Notes					
Sample Identification		Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.	
<u>ED-R3SL-046-1</u>		<u>10/13/22</u>	<u>0919</u>	<u>C</u>	<u>S</u>	<u>1</u>	<u>X</u>
<u>ED-R3SL-SW014-1</u>		<u>10/13/22</u>	<u>0940</u>	<u>C</u>	<u>S</u>	<u>1</u>	<u>X</u>
Preservation Used: 1=Ice, 2=HCl, 3=H2SO4, 4=HNO3, 5=NaOH, 6=Other		Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)					
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"/> Return to Client <input checked="" type="checkbox"/> Disposal by Lab <input type="checkbox"/> Archive for _____ Months					
<input checked="" type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison B <input type="checkbox"/> Unknown		Special Instructions/QC Requirements & Comments:					
Custody Seals Intact: <input type="checkbox"/> Yes <input type="checkbox"/> No		Custody Seal No		Cooler Temp (°C) Obs'd <u>2.6</u> <u>2.8</u> Corr'd _____		Therm ID No _____	
Relinquished by: <u>[Signature]</u>		Company: <u>CEC</u>		Date/Time: <u>10/13/22 1400</u>		Received by: <u>[Signature]</u>	
Relinquished by: <u>[Signature]</u>		Company: <u>EETA</u>		Date/Time: <u>10/13/22 1512 EST</u>		Received by: <u>[Signature]</u>	
Relinquished by: _____		Company: _____		Date/Time: _____		Received in Laboratory by: _____	

## Login Sample Receipt Checklist

Client: Civil & Environmental Consultants Inc

Job Number: 500-223766-1

**Login Number: 223766**

**List Number: 1**

**Creator: Carbajal, Melina**

**List Source: Eurofins Chicago**

Question	Answer	Comment
Radioactivity wasn't checked or is <math>\leq</math> background as measured by a survey meter.	True	
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	2.8
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 <math><6\text{mm}</math> (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

## ANALYTICAL REPORT

Eurofins Chicago  
2417 Bond Street  
University Park, IL 60484  
Tel: (708)534-5200

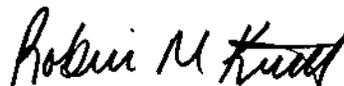
Laboratory Job ID: 500-223832-1

Client Project/Site: Arconic - Elliot Ditch - Lafayette, IN

**For:**

Civil & Environmental Consultants Inc  
2704 Cherokee Farm Way  
Suite 101  
Knoxville, Tennessee 37920

Attn: Garrett Welch



*Authorized for release by:  
10/17/2022 5:50:26 PM*

Robin Kintz, Project Manager II  
(708)534-5200

[Robin.Kintz@et.eurofinsus.com](mailto:Robin.Kintz@et.eurofinsus.com)

### LINKS

Review your project  
results through



Have a Question?



Visit us at:

[www.eurofinsus.com/Env](http://www.eurofinsus.com/Env)

The test results in this report meet all 2003 NELAC, 2009 TNI, and 2016 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.

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# Case Narrative

Client: Civil & Environmental Consultants Inc  
Project/Site: Arconic - Elliot Ditch - Lafayette, IN

Job ID: 500-223832-1

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**Job ID: 500-223832-1**

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**Laboratory: Eurofins Chicago**

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**Narrative**

**Job Narrative  
500-223832-1**

**Comments**

No additional comments.

**Receipt**

The sample was received on 10/14/2022 3:50 PM. Unless otherwise noted below, the sample arrived in good condition, and where required, properly preserved and on ice. The temperature of the cooler at receipt was 3.5° C.

**GC Semi VOA**

Method 8082A: Tetrachloro-m-xylene surrogate recovery for the following sample was outside control limits: (CCVIS 500-679954/3). DCB Decachlorobiphenyl surrogate was within the control limits; therefore, re-extraction and/or re-analysis was not performed.

Method 8082A: DCB Decachlorobiphenyl surrogate recovery for the following samples was outside control limits: ED-R3SL-026-4 (500-223832-1), (LCS 500-679736/2-A), (MB 500-679736/1-A) and (500-223832-A-1-B MS). Tetrachloro-m-xylene surrogate was within the control limits; therefore, re-extraction and/or re-analysis was not performed.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

**Metals**

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

**Organic Prep**

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.



# Detection Summary

Client: Civil & Environmental Consultants Inc  
Project/Site: Arconic - Elliot Ditch - Lafayette, IN

Job ID: 500-223832-1

**Client Sample ID: ED-R3SL-026-4**

**Lab Sample ID: 500-223832-1**

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
PCB-1248	2.6		0.86		mg/Kg	50	✳	8082A	Total/NA

This Detection Summary does not include radiochemical test results.

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# Method Summary

Client: Civil & Environmental Consultants Inc  
Project/Site: Arconic - Elliot Ditch - Lafayette, IN

Job ID: 500-223832-1

Method	Method Description	Protocol	Laboratory
8082A	Polychlorinated Biphenyls (PCBs) by Gas Chromatography	SW846	EET CHI
Moisture	Percent Moisture	EPA	EET CHI
3541	Automated Soxhlet Extraction	SW846	EET CHI

**Protocol References:**

EPA = US Environmental Protection Agency

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

**Laboratory References:**

EET CHI = Eurofins Chicago, 2417 Bond Street, University Park, IL 60484, TEL (708)534-5200



# Sample Summary

Client: Civil & Environmental Consultants Inc  
Project/Site: Arconic - Elliot Ditch - Lafayette, IN

Job ID: 500-223832-1

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Lab Sample ID	Client Sample ID	Matrix	Collected	Received
500-223832-1	ED-R3SL-026-4	Solid	10/14/22 11:15	10/14/22 15:50

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# Client Sample Results

Client: Civil & Environmental Consultants Inc  
 Project/Site: Arconic - Elliot Ditch - Lafayette, IN

Job ID: 500-223832-1

**Client Sample ID: ED-R3SL-026-4**

**Lab Sample ID: 500-223832-1**

**Date Collected: 10/14/22 11:15**

**Matrix: Solid**

**Date Received: 10/14/22 15:50**

**Percent Solids: 95.1**

**Method: SW846 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<0.86	F1	0.86		mg/Kg	☼	10/14/22 16:42	10/17/22 15:57	50
PCB-1221	<0.86		0.86		mg/Kg	☼	10/14/22 16:42	10/17/22 15:57	50
PCB-1232	<0.86		0.86		mg/Kg	☼	10/14/22 16:42	10/17/22 15:57	50
PCB-1242	<0.86		0.86		mg/Kg	☼	10/14/22 16:42	10/17/22 15:57	50
PCB-1248	<b>2.6</b>		0.86		mg/Kg	☼	10/14/22 16:42	10/17/22 15:57	50
PCB-1254	<0.86		0.86		mg/Kg	☼	10/14/22 16:42	10/17/22 15:57	50
PCB-1260	<0.86		0.86		mg/Kg	☼	10/14/22 16:42	10/17/22 15:57	50

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	107		49 - 129	10/14/22 16:42	10/17/22 15:57	50
DCB Decachlorobiphenyl	148	S1+	37 - 121	10/14/22 16:42	10/17/22 15:57	50

# Definitions/Glossary

Client: Civil & Environmental Consultants Inc  
Project/Site: Arconic - Elliot Ditch - Lafayette, IN

Job ID: 500-223832-1

## Qualifiers

### GC Semi VOA

Qualifier	Qualifier Description
F1	MS and/or MSD recovery exceeds control limits.
S1+	Surrogate recovery exceeds control limits, high biased.

## Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
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)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
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)
TNTC	Too Numerous To Count

# QC Association Summary

Client: Civil & Environmental Consultants Inc  
Project/Site: Arconic - Elliot Ditch - Lafayette, IN

Job ID: 500-223832-1

## GC Semi VOA

### Prep Batch: 679736

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-223832-1	ED-R3SL-026-4	Total/NA	Solid	3541	
MB 500-679736/1-A	Method Blank	Total/NA	Solid	3541	
LCS 500-679736/2-A	Lab Control Sample	Total/NA	Solid	3541	
500-223832-1 MS	ED-R3SL-026-4	Total/NA	Solid	3541	
500-223832-1 MSD	ED-R3SL-026-4	Total/NA	Solid	3541	

### Analysis Batch: 679954

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-223832-1	ED-R3SL-026-4	Total/NA	Solid	8082A	679736
MB 500-679736/1-A	Method Blank	Total/NA	Solid	8082A	679736
LCS 500-679736/2-A	Lab Control Sample	Total/NA	Solid	8082A	679736
500-223832-1 MS	ED-R3SL-026-4	Total/NA	Solid	8082A	679736
500-223832-1 MSD	ED-R3SL-026-4	Total/NA	Solid	8082A	679736

## General Chemistry

### Analysis Batch: 679680

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-223832-1	ED-R3SL-026-4	Total/NA	Solid	Moisture	

# Surrogate Summary

Client: Civil & Environmental Consultants Inc  
Project/Site: Arconic - Elliot Ditch - Lafayette, IN

Job ID: 500-223832-1

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

Matrix: Solid

Prep Type: Total/NA

### Percent Surrogate Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	TCX1	DCBP1
		(49-129)	(37-121)
500-223832-1	ED-R3SL-026-4	107	148 S1+
500-223832-1 MS	ED-R3SL-026-4	93	124 S1+
500-223832-1 MSD	ED-R3SL-026-4	80	118
LCS 500-679736/2-A	Lab Control Sample	121	122 S1+
MB 500-679736/1-A	Method Blank	118	123 S1+

#### Surrogate Legend

TCX = Tetrachloro-m-xylene

DCBP = DCB Decachlorobiphenyl

# QC Sample Results

Client: Civil & Environmental Consultants Inc  
 Project/Site: Arconic - Elliot Ditch - Lafayette, IN

Job ID: 500-223832-1

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

**Lab Sample ID: MB 500-679736/1-A**  
**Matrix: Solid**  
**Analysis Batch: 679954**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**  
**Prep Batch: 679736**

Analyte	MB MB		RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
PCB-1016	<0.17		0.17		mg/Kg		10/14/22 16:42	10/17/22 14:07	10
PCB-1221	<0.17		0.17		mg/Kg		10/14/22 16:42	10/17/22 14:07	10
PCB-1232	<0.17		0.17		mg/Kg		10/14/22 16:42	10/17/22 14:07	10
PCB-1242	<0.17		0.17		mg/Kg		10/14/22 16:42	10/17/22 14:07	10
PCB-1248	<0.17		0.17		mg/Kg		10/14/22 16:42	10/17/22 14:07	10
PCB-1254	<0.17		0.17		mg/Kg		10/14/22 16:42	10/17/22 14:07	10
PCB-1260	<0.17		0.17		mg/Kg		10/14/22 16:42	10/17/22 14:07	10

Surrogate	MB MB		Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
Tetrachloro-m-xylene	118		49 - 129	10/14/22 16:42	10/17/22 14:07	10
DCB Decachlorobiphenyl	123	S1+	37 - 121	10/14/22 16:42	10/17/22 14:07	10

**Lab Sample ID: LCS 500-679736/2-A**  
**Matrix: Solid**  
**Analysis Batch: 679954**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**  
**Prep Batch: 679736**

Analyte	Spike Added	LCS LCS		Unit	D	%Rec	%Rec Limits
		Result	Qualifier				
PCB-1016	1.67	1.58		mg/Kg		95	57 - 120
PCB-1260	1.67	1.64		mg/Kg		98	61 - 125

Surrogate	LCS LCS		Limits
	%Recovery	Qualifier	
Tetrachloro-m-xylene	121		49 - 129
DCB Decachlorobiphenyl	122	S1+	37 - 121

**Lab Sample ID: 500-223832-1 MS**  
**Matrix: Solid**  
**Analysis Batch: 679954**

**Client Sample ID: ED-R3SL-026-4**  
**Prep Type: Total/NA**  
**Prep Batch: 679736**

Analyte	Sample		Spike Added	MS MS		Unit	D	%Rec	%Rec Limits
	Result	Qualifier		Result	Qualifier				
PCB-1016	<0.86	F1	1.68	2.29	F1	mg/Kg	☼	136	57 - 120
PCB-1260	<0.86		1.68	1.82		mg/Kg	☼	108	61 - 125

Surrogate	MS MS		Limits
	%Recovery	Qualifier	
Tetrachloro-m-xylene	93		49 - 129
DCB Decachlorobiphenyl	124	S1+	37 - 121

**Lab Sample ID: 500-223832-1 MSD**  
**Matrix: Solid**  
**Analysis Batch: 679954**

**Client Sample ID: ED-R3SL-026-4**  
**Prep Type: Total/NA**  
**Prep Batch: 679736**

Analyte	Sample		Spike Added	MSD MSD		Unit	D	%Rec	%Rec Limits	RPD	
	Result	Qualifier		Result	Qualifier					RPD	Limit
PCB-1016	<0.86	F1	1.72	2.11	F1	mg/Kg	☼	122	57 - 120	8	30
PCB-1260	<0.86		1.72	1.71		mg/Kg	☼	99	61 - 125	6	30

Surrogate	MSD MSD		Limits
	%Recovery	Qualifier	
Tetrachloro-m-xylene	80		49 - 129
DCB Decachlorobiphenyl	118		37 - 121

Eurofins Chicago

# Lab Chronicle

Client: Civil & Environmental Consultants Inc  
 Project/Site: Arconic - Elliot Ditch - Lafayette, IN

Job ID: 500-223832-1

**Client Sample ID: ED-R3SL-026-4**

**Lab Sample ID: 500-223832-1**

**Date Collected: 10/14/22 11:15**

**Matrix: Solid**

**Date Received: 10/14/22 15:50**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Moisture		1	679680	LWN	EET CHI	10/14/22 16:38

**Client Sample ID: ED-R3SL-026-4**

**Lab Sample ID: 500-223832-1**

**Date Collected: 10/14/22 11:15**

**Matrix: Solid**

**Date Received: 10/14/22 15:50**

**Percent Solids: 95.1**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3541			679736	EK	EET CHI	10/14/22 16:42 - 10/14/22 19:00 <sup>1</sup>
Total/NA	Analysis	8082A		50	679954	SB	EET CHI	10/17/22 15:57

<sup>1</sup> Completion dates and times are reported or not reported per method requirements or individual lab discretion.

**Laboratory References:**

EET CHI = Eurofins Chicago, 2417 Bond Street, University Park, IL 60484, TEL (708)534-5200



# Accreditation/Certification Summary

Client: Civil & Environmental Consultants Inc  
Project/Site: Arconic - Elliot Ditch - Lafayette, IN

Job ID: 500-223832-1

## Laboratory: Eurofins Chicago

The accreditations/certifications listed below are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Illinois	NELAP	IL00035	04-30-23

1

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# Login Sample Receipt Checklist

Client: Civil & Environmental Consultants Inc

Job Number: 500-223832-1

**Login Number: 223832**

**List Number: 1**

**Creator: Carbajal, Melina**

**List Source: Eurofins Chicago**

Question	Answer	Comment
Radioactivity wasn't checked or is <math>\leq</math> background as measured by a survey meter.	True	
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	3.5
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 <math><6\text{mm}</math> (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

## ANALYTICAL REPORT

Eurofins Chicago  
2417 Bond Street  
University Park, IL 60484  
Tel: (708)534-5200

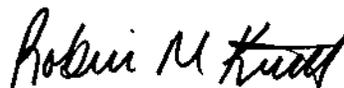
Laboratory Job ID: 500-223919-1

Client Project/Site: Arconic - Elliot Ditch - Lafayette, IN  
Revision: 1

**For:**

Civil & Environmental Consultants Inc  
2704 Cherokee Farm Way  
Suite 101  
Knoxville, Tennessee 37920

Attn: Garrett Welch



Authorized for release by:

10/18/2022 3:08:38 PM

Robin Kintz, Project Manager II  
(708)534-5200

[Robin.Kintz@et.eurofinsus.com](mailto:Robin.Kintz@et.eurofinsus.com)

### LINKS

Review your project  
results through



Have a Question?



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[www.eurofinsus.com/Env](http://www.eurofinsus.com/Env)

The test results in this report meet all 2003 NELAC, 2009 TNI, and 2016 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.

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# Case Narrative

Client: Civil & Environmental Consultants Inc  
Project/Site: Arconic - Elliot Ditch - Lafayette, IN

Job ID: 500-223919-1

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**Job ID: 500-223919-1**

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**Laboratory: Eurofins Chicago**

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**Narrative**

**Job Narrative  
500-223919-1**

**Comments**

No additional comments.

**Revision**

The report being provided is a revision of the original report sent on 10/18/2022. The report (revision 1) is being revised due to: The report was revised to update the client sample ID per request.

**Receipt**

The sample was received on 10/17/2022 3:20 PM. Unless otherwise noted below, the sample arrived in good condition, and where required, properly preserved and on ice. The temperature of the cooler at receipt was 2.6° C.

**GC Semi VOA**

Method 8082A: Tetrachloro-m-xylene surrogate recovery for the following samples was outside control limits: (CCVIS 500-680040/3) and (MB 500-680003/1-A). DCB Decachlorobiphenyl surrogate was within the control limits; therefore, re-extraction and/or re-analysis was not performed.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

**Metals**

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

**Organic Prep**

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.



# Detection Summary

Client: Civil & Environmental Consultants Inc  
Project/Site: Arconic - Elliot Ditch - Lafayette, IN

Job ID: 500-223919-1

**Client Sample ID: ED-R3SL-SW014-2**

**Lab Sample ID: 500-223919-1**

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
PCB-1248	1.3		0.17		mg/Kg	10	✳	8082A	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins Chicago

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# Method Summary

Client: Civil & Environmental Consultants Inc  
Project/Site: Arconic - Elliot Ditch - Lafayette, IN

Job ID: 500-223919-1

Method	Method Description	Protocol	Laboratory
8082A	Polychlorinated Biphenyls (PCBs) by Gas Chromatography	SW846	EET CHI
Moisture	Percent Moisture	EPA	EET CHI
3541	Automated Soxhlet Extraction	SW846	EET CHI

**Protocol References:**

EPA = US Environmental Protection Agency

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

**Laboratory References:**

EET CHI = Eurofins Chicago, 2417 Bond Street, University Park, IL 60484, TEL (708)534-5200



# Sample Summary

Client: Civil & Environmental Consultants Inc  
Project/Site: Arconic - Elliot Ditch - Lafayette, IN

Job ID: 500-223919-1

---

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
500-223919-1	ED-R3SL-SW014-2	Solid	10/17/22 08:50	10/17/22 15:20

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# Client Sample Results

Client: Civil & Environmental Consultants Inc  
 Project/Site: Arconic - Elliot Ditch - Lafayette, IN

Job ID: 500-223919-1

**Client Sample ID: ED-R3SL-SW014-2**

**Lab Sample ID: 500-223919-1**

Date Collected: 10/17/22 08:50

Matrix: Solid

Date Received: 10/17/22 15:20

Percent Solids: 91.0

**Method: SW846 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<0.17		0.17		mg/Kg	☼	10/17/22 16:53	10/18/22 09:31	10
PCB-1221	<0.17		0.17		mg/Kg	☼	10/17/22 16:53	10/18/22 09:31	10
PCB-1232	<0.17		0.17		mg/Kg	☼	10/17/22 16:53	10/18/22 09:31	10
PCB-1242	<0.17		0.17		mg/Kg	☼	10/17/22 16:53	10/18/22 09:31	10
<b>PCB-1248</b>	<b>1.3</b>		0.17		mg/Kg	☼	10/17/22 16:53	10/18/22 09:31	10
PCB-1254	<0.17		0.17		mg/Kg	☼	10/17/22 16:53	10/18/22 09:31	10
PCB-1260	<0.17		0.17		mg/Kg	☼	10/17/22 16:53	10/18/22 09:31	10

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	118		49 - 129	10/17/22 16:53	10/18/22 09:31	10
DCB Decachlorobiphenyl	116		37 - 121	10/17/22 16:53	10/18/22 09:31	10

# Definitions/Glossary

Client: Civil & Environmental Consultants Inc  
Project/Site: Arconic - Elliot Ditch - Lafayette, IN

Job ID: 500-223919-1

## Qualifiers

### GC Semi VOA

Qualifier	Qualifier Description
S1+	Surrogate recovery exceeds control limits, high biased.

## Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
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)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
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)
TNTC	Too Numerous To Count

# QC Association Summary

Client: Civil & Environmental Consultants Inc  
Project/Site: Arconic - Elliot Ditch - Lafayette, IN

Job ID: 500-223919-1

## GC Semi VOA

### Prep Batch: 680003

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-223919-1	ED-R3SL-SW014-2	Total/NA	Solid	3541	
MB 500-680003/1-A	Method Blank	Total/NA	Solid	3541	
LCS 500-680003/2-A	Lab Control Sample	Total/NA	Solid	3541	
500-223919-1 MS	ED-R3SL-SW014-2	Total/NA	Solid	3541	
500-223919-1 MSD	ED-R3SL-SW014-2	Total/NA	Solid	3541	

### Analysis Batch: 680040

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-223919-1	ED-R3SL-SW014-2	Total/NA	Solid	8082A	680003
MB 500-680003/1-A	Method Blank	Total/NA	Solid	8082A	680003
LCS 500-680003/2-A	Lab Control Sample	Total/NA	Solid	8082A	680003
500-223919-1 MS	ED-R3SL-SW014-2	Total/NA	Solid	8082A	680003
500-223919-1 MSD	ED-R3SL-SW014-2	Total/NA	Solid	8082A	680003

## General Chemistry

### Analysis Batch: 680002

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-223919-1	ED-R3SL-SW014-2	Total/NA	Solid	Moisture	
500-223919-1 DU	ED-R3SL-SW014-2	Total/NA	Solid	Moisture	

# Surrogate Summary

Client: Civil & Environmental Consultants Inc  
Project/Site: Arconic - Elliot Ditch - Lafayette, IN

Job ID: 500-223919-1

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

Matrix: Solid

Prep Type: Total/NA

### Percent Surrogate Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	TCX2	DCBP2
		(49-129)	(37-121)
500-223919-1	ED-R3SL-SW014-2	118	116
500-223919-1 MS	ED-R3SL-SW014-2	107	102
500-223919-1 MSD	ED-R3SL-SW014-2	117	114
LCS 500-680003/2-A	Lab Control Sample	115	104
MB 500-680003/1-A	Method Blank	134 S1+	114

#### Surrogate Legend

TCX = Tetrachloro-m-xylene

DCBP = DCB Decachlorobiphenyl

# QC Sample Results

Client: Civil & Environmental Consultants Inc  
 Project/Site: Arconic - Elliot Ditch - Lafayette, IN

Job ID: 500-223919-1

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

**Lab Sample ID: MB 500-680003/1-A**  
**Matrix: Solid**  
**Analysis Batch: 680040**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**  
**Prep Batch: 680003**

Analyte	MB MB		RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
PCB-1016	<0.17		0.17		mg/Kg		10/17/22 16:53	10/18/22 09:01	10
PCB-1221	<0.17		0.17		mg/Kg		10/17/22 16:53	10/18/22 09:01	10
PCB-1232	<0.17		0.17		mg/Kg		10/17/22 16:53	10/18/22 09:01	10
PCB-1242	<0.17		0.17		mg/Kg		10/17/22 16:53	10/18/22 09:01	10
PCB-1248	<0.17		0.17		mg/Kg		10/17/22 16:53	10/18/22 09:01	10
PCB-1254	<0.17		0.17		mg/Kg		10/17/22 16:53	10/18/22 09:01	10
PCB-1260	<0.17		0.17		mg/Kg		10/17/22 16:53	10/18/22 09:01	10

Surrogate	MB MB		Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
Tetrachloro-m-xylene	134	S1+	49 - 129	10/17/22 16:53	10/18/22 09:01	10
DCB Decachlorobiphenyl	114		37 - 121	10/17/22 16:53	10/18/22 09:01	10

**Lab Sample ID: LCS 500-680003/2-A**  
**Matrix: Solid**  
**Analysis Batch: 680040**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**  
**Prep Batch: 680003**

Analyte	Spike Added	LCS LCS		Unit	D	%Rec	%Rec Limits
		Result	Qualifier				
PCB-1016	1.67	1.70		mg/Kg		102	57 - 120
PCB-1260	1.67	1.94		mg/Kg		116	61 - 125

Surrogate	LCS LCS		Limits
	%Recovery	Qualifier	
Tetrachloro-m-xylene	115		49 - 129
DCB Decachlorobiphenyl	104		37 - 121

**Lab Sample ID: 500-223919-1 MS**  
**Matrix: Solid**  
**Analysis Batch: 680040**

**Client Sample ID: ED-R3SL-SW014-2**  
**Prep Type: Total/NA**  
**Prep Batch: 680003**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS MS		Unit	D	%Rec	%Rec Limits
				Result	Qualifier				
PCB-1016	<0.17		1.80	2.07		mg/Kg	☼	91	57 - 120
PCB-1260	<0.17		1.80	2.19		mg/Kg	☼	108	61 - 125

Surrogate	MS MS		Limits
	%Recovery	Qualifier	
Tetrachloro-m-xylene	107		49 - 129
DCB Decachlorobiphenyl	102		37 - 121

**Lab Sample ID: 500-223919-1 MSD**  
**Matrix: Solid**  
**Analysis Batch: 680040**

**Client Sample ID: ED-R3SL-SW014-2**  
**Prep Type: Total/NA**  
**Prep Batch: 680003**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD MSD		Unit	D	%Rec	%Rec Limits	RPD	
				Result	Qualifier					RPD	Limit
PCB-1016	<0.17		1.81	2.36		mg/Kg	☼	106	57 - 120	13	30
PCB-1260	<0.17		1.81	2.41		mg/Kg	☼	119	61 - 125	10	30

Surrogate	MSD MSD		Limits
	%Recovery	Qualifier	
Tetrachloro-m-xylene	117		49 - 129
DCB Decachlorobiphenyl	114		37 - 121

Eurofins Chicago

# Lab Chronicle

Client: Civil & Environmental Consultants Inc  
 Project/Site: Arconic - Elliot Ditch - Lafayette, IN

Job ID: 500-223919-1

**Client Sample ID: ED-R3SL-SW014-2**

**Lab Sample ID: 500-223919-1**

**Date Collected: 10/17/22 08:50**

**Matrix: Solid**

**Date Received: 10/17/22 15:20**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Moisture		1	680002	LWN	EET CHI	10/17/22 16:45

**Client Sample ID: ED-R3SL-SW014-2**

**Lab Sample ID: 500-223919-1**

**Date Collected: 10/17/22 08:50**

**Matrix: Solid**

**Date Received: 10/17/22 15:20**

**Percent Solids: 91.0**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3541			680003	EK	EET CHI	10/17/22 16:53 - 10/17/22 19:00 <sup>1</sup>
Total/NA	Analysis	8082A		10	680040	SB	EET CHI	10/18/22 09:31

<sup>1</sup> Completion dates and times are reported or not reported per method requirements or individual lab discretion.

**Laboratory References:**

EET CHI = Eurofins Chicago, 2417 Bond Street, University Park, IL 60484, TEL (708)534-5200



# Accreditation/Certification Summary

Client: Civil & Environmental Consultants Inc  
Project/Site: Arconic - Elliot Ditch - Lafayette, IN

Job ID: 500-223919-1

## Laboratory: Eurofins Chicago

The accreditations/certifications listed below are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Illinois	NELAP	IL00035	04-30-23

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# Login Sample Receipt Checklist

Client: Civil & Environmental Consultants Inc

Job Number: 500-223919-1

**Login Number: 223919**

**List Number: 1**

**Creator: Scott, Sherri L**

**List Source: Eurofins Chicago**

Question	Answer	Comment
Radioactivity wasn't checked or is <=/ background as measured by a survey meter.	True	
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	2.6
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").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

## ANALYTICAL REPORT

Eurofins Chicago  
2417 Bond Street  
University Park, IL 60484  
Tel: (708)534-5200

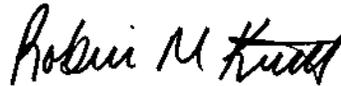
Laboratory Job ID: 500-223994-1

Client Project/Site: Arconic - Elliot Ditch - Lafayette, IN  
Revision: 1

**For:**

Civil & Environmental Consultants Inc  
2704 Cherokee Farm Way  
Suite 101  
Knoxville, Tennessee 37920

Attn: Garrett Welch



Authorized for release by:  
10/25/2022 11:39:57 AM

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The test results in this report meet all 2003 NELAC, 2009 TNI, and 2016 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.



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# Case Narrative

Client: Civil & Environmental Consultants Inc  
Project/Site: Arconic - Elliot Ditch - Lafayette, IN

Job ID: 500-223994-1

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**Job ID: 500-223994-1**

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**Laboratory: Eurofins Chicago**

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**Narrative**

**Job Narrative  
500-223994-1**

**Comments**

No additional comments.

**Revision**

The report being provided is a revision of the original report sent on 10/21/2022. The report (revision 1) is being revised due to: The report was revised to update the sample name per client request.

**Receipt**

The samples were received on 10/19/2022 8:04 AM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperature of the cooler at receipt was 3.3° C.

**GC Semi VOA**

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

**Metals**

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

**Organic Prep**

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.



# Detection Summary

Client: Civil & Environmental Consultants Inc  
Project/Site: Arconic - Elliot Ditch - Lafayette, IN

Job ID: 500-223994-1

## Client Sample ID: ED-R3SL-027-4

## Lab Sample ID: 500-223994-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
PCB-1248	0.57		0.18		mg/Kg	10	✳	8082A	Total/NA

## Client Sample ID: ED-R3SL-028-4

## Lab Sample ID: 500-223994-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
PCB-1248	0.62		0.17		mg/Kg	10	✳	8082A	Total/NA

## Client Sample ID: ED-R3SL-029-4

## Lab Sample ID: 500-223994-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
PCB-1248	1.4		0.18		mg/Kg	10	✳	8082A	Total/NA

## Client Sample ID: ED-R3SL-SW014-3

## Lab Sample ID: 500-223994-4

No Detections.

This Detection Summary does not include radiochemical test results.

Eurofins Chicago

# Method Summary

Client: Civil & Environmental Consultants Inc  
Project/Site: Arconic - Elliot Ditch - Lafayette, IN

Job ID: 500-223994-1

Method	Method Description	Protocol	Laboratory
8082A	Polychlorinated Biphenyls (PCBs) by Gas Chromatography	SW846	EET CHI
Moisture	Percent Moisture	EPA	EET CHI
3541	Automated Soxhlet Extraction	SW846	EET CHI

**Protocol References:**

EPA = US Environmental Protection Agency

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

**Laboratory References:**

EET CHI = Eurofins Chicago, 2417 Bond Street, University Park, IL 60484, TEL (708)534-5200



# Sample Summary

Client: Civil & Environmental Consultants Inc  
Project/Site: Arconic - Elliot Ditch - Lafayette, IN

Job ID: 500-223994-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
500-223994-1	ED-R3SL-027-4	Solid	10/18/22 10:00	10/19/22 08:04
500-223994-2	ED-R3SL-028-4	Solid	10/18/22 10:05	10/19/22 08:04
500-223994-3	ED-R3SL-029-4	Solid	10/18/22 10:10	10/19/22 08:04
500-223994-4	ED-R3SL-SW014-3	Solid	10/18/22 13:15	10/19/22 08:04

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# Client Sample Results

Client: Civil & Environmental Consultants Inc  
 Project/Site: Arconic - Elliot Ditch - Lafayette, IN

Job ID: 500-223994-1

**Client Sample ID: ED-R3SL-027-4**

**Lab Sample ID: 500-223994-1**

**Date Collected: 10/18/22 10:00**

**Matrix: Solid**

**Date Received: 10/19/22 08:04**

**Percent Solids: 93.3**

**Method: SW846 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<0.18		0.18		mg/Kg	☼	10/19/22 17:49	10/20/22 12:50	10
PCB-1221	<0.18		0.18		mg/Kg	☼	10/19/22 17:49	10/20/22 12:50	10
PCB-1232	<0.18		0.18		mg/Kg	☼	10/19/22 17:49	10/20/22 12:50	10
PCB-1242	<0.18		0.18		mg/Kg	☼	10/19/22 17:49	10/20/22 12:50	10
<b>PCB-1248</b>	<b>0.57</b>		0.18		mg/Kg	☼	10/19/22 17:49	10/20/22 12:50	10
PCB-1254	<0.18		0.18		mg/Kg	☼	10/19/22 17:49	10/20/22 12:50	10
PCB-1260	<0.18		0.18		mg/Kg	☼	10/19/22 17:49	10/20/22 12:50	10

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	71		49 - 129	10/19/22 17:49	10/20/22 12:50	10
DCB Decachlorobiphenyl	73		37 - 121	10/19/22 17:49	10/20/22 12:50	10

# Client Sample Results

Client: Civil & Environmental Consultants Inc  
 Project/Site: Arconic - Elliot Ditch - Lafayette, IN

Job ID: 500-223994-1

**Client Sample ID: ED-R3SL-028-4**

**Lab Sample ID: 500-223994-2**

Date Collected: 10/18/22 10:05

Matrix: Solid

Date Received: 10/19/22 08:04

Percent Solids: 92.9

**Method: SW846 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<0.17		0.17		mg/Kg	☼	10/19/22 17:49	10/20/22 13:05	10
PCB-1221	<0.17		0.17		mg/Kg	☼	10/19/22 17:49	10/20/22 13:05	10
PCB-1232	<0.17		0.17		mg/Kg	☼	10/19/22 17:49	10/20/22 13:05	10
PCB-1242	<0.17		0.17		mg/Kg	☼	10/19/22 17:49	10/20/22 13:05	10
<b>PCB-1248</b>	<b>0.62</b>		0.17		mg/Kg	☼	10/19/22 17:49	10/20/22 13:05	10
PCB-1254	<0.17		0.17		mg/Kg	☼	10/19/22 17:49	10/20/22 13:05	10
PCB-1260	<0.17		0.17		mg/Kg	☼	10/19/22 17:49	10/20/22 13:05	10

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	70		49 - 129	10/19/22 17:49	10/20/22 13:05	10
DCB Decachlorobiphenyl	72		37 - 121	10/19/22 17:49	10/20/22 13:05	10

# Client Sample Results

Client: Civil & Environmental Consultants Inc  
 Project/Site: Arconic - Elliot Ditch - Lafayette, IN

Job ID: 500-223994-1

**Client Sample ID: ED-R3SL-029-4**

**Lab Sample ID: 500-223994-3**

**Date Collected: 10/18/22 10:10**

**Matrix: Solid**

**Date Received: 10/19/22 08:04**

**Percent Solids: 92.3**

**Method: SW846 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<0.18		0.18		mg/Kg	☼	10/19/22 17:49	10/20/22 13:20	10
PCB-1221	<0.18		0.18		mg/Kg	☼	10/19/22 17:49	10/20/22 13:20	10
PCB-1232	<0.18		0.18		mg/Kg	☼	10/19/22 17:49	10/20/22 13:20	10
PCB-1242	<0.18		0.18		mg/Kg	☼	10/19/22 17:49	10/20/22 13:20	10
<b>PCB-1248</b>	<b>1.4</b>		0.18		mg/Kg	☼	10/19/22 17:49	10/20/22 13:20	10
PCB-1254	<0.18		0.18		mg/Kg	☼	10/19/22 17:49	10/20/22 13:20	10
PCB-1260	<0.18		0.18		mg/Kg	☼	10/19/22 17:49	10/20/22 13:20	10

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
<i>Tetrachloro-m-xylene</i>	60		49 - 129	10/19/22 17:49	10/20/22 13:20	10
<i>DCB Decachlorobiphenyl</i>	66		37 - 121	10/19/22 17:49	10/20/22 13:20	10

# Client Sample Results

Client: Civil & Environmental Consultants Inc  
 Project/Site: Arconic - Elliot Ditch - Lafayette, IN

Job ID: 500-223994-1

**Client Sample ID: ED-R3SL-SW014-3**

**Lab Sample ID: 500-223994-4**

**Date Collected: 10/18/22 13:15**

**Matrix: Solid**

**Date Received: 10/19/22 08:04**

**Percent Solids: 91.1**

**Method: SW846 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<0.18		0.18		mg/Kg	☼	10/19/22 17:49	10/20/22 13:34	10
PCB-1221	<0.18		0.18		mg/Kg	☼	10/19/22 17:49	10/20/22 13:34	10
PCB-1232	<0.18		0.18		mg/Kg	☼	10/19/22 17:49	10/20/22 13:34	10
PCB-1242	<0.18		0.18		mg/Kg	☼	10/19/22 17:49	10/20/22 13:34	10
PCB-1248	<0.18		0.18		mg/Kg	☼	10/19/22 17:49	10/20/22 13:34	10
PCB-1254	<0.18		0.18		mg/Kg	☼	10/19/22 17:49	10/20/22 13:34	10
PCB-1260	<0.18		0.18		mg/Kg	☼	10/19/22 17:49	10/20/22 13:34	10

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	74		49 - 129	10/19/22 17:49	10/20/22 13:34	10
DCB Decachlorobiphenyl	74		37 - 121	10/19/22 17:49	10/20/22 13:34	10

# Definitions/Glossary

Client: Civil & Environmental Consultants Inc  
Project/Site: Arconic - Elliot Ditch - Lafayette, IN

Job ID: 500-223994-1

## Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
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)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
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)
TNTC	Too Numerous To Count

# QC Association Summary

Client: Civil & Environmental Consultants Inc  
 Project/Site: Arconic - Elliot Ditch - Lafayette, IN

Job ID: 500-223994-1

## GC Semi VOA

### Prep Batch: 680469

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-223994-1	ED-R3SL-027-4	Total/NA	Solid	3541	
500-223994-2	ED-R3SL-028-4	Total/NA	Solid	3541	
500-223994-3	ED-R3SL-029-4	Total/NA	Solid	3541	
500-223994-4	ED-R3SL-SW014-3	Total/NA	Solid	3541	
MB 500-680469/1-A	Method Blank	Total/NA	Solid	3541	
LCS 500-680469/2-A	Lab Control Sample	Total/NA	Solid	3541	
500-223994-4 MS	ED-R3SL-SW014-3	Total/NA	Solid	3541	
500-223994-4 MSD	ED-R3SL-SW014-3	Total/NA	Solid	3541	

### Analysis Batch: 680619

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-223994-1	ED-R3SL-027-4	Total/NA	Solid	8082A	680469
500-223994-2	ED-R3SL-028-4	Total/NA	Solid	8082A	680469
500-223994-3	ED-R3SL-029-4	Total/NA	Solid	8082A	680469
500-223994-4	ED-R3SL-SW014-3	Total/NA	Solid	8082A	680469
MB 500-680469/1-A	Method Blank	Total/NA	Solid	8082A	680469
LCS 500-680469/2-A	Lab Control Sample	Total/NA	Solid	8082A	680469
500-223994-4 MS	ED-R3SL-SW014-3	Total/NA	Solid	8082A	680469
500-223994-4 MSD	ED-R3SL-SW014-3	Total/NA	Solid	8082A	680469

## General Chemistry

### Analysis Batch: 680300

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-223994-1	ED-R3SL-027-4	Total/NA	Solid	Moisture	
500-223994-2	ED-R3SL-028-4	Total/NA	Solid	Moisture	
500-223994-3	ED-R3SL-029-4	Total/NA	Solid	Moisture	
500-223994-4	ED-R3SL-SW014-3	Total/NA	Solid	Moisture	
500-223994-1 DU	ED-R3SL-027-4	Total/NA	Solid	Moisture	

# Surrogate Summary

Client: Civil & Environmental Consultants Inc  
Project/Site: Arconic - Elliot Ditch - Lafayette, IN

Job ID: 500-223994-1

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

Matrix: Solid

Prep Type: Total/NA

### Percent Surrogate Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	TCX1	DCBP1
		(49-129)	(37-121)
500-223994-1	ED-R3SL-027-4	71	73
500-223994-2	ED-R3SL-028-4	70	72
500-223994-3	ED-R3SL-029-4	60	66
500-223994-4	ED-R3SL-SW014-3	74	74
500-223994-4 MS	ED-R3SL-SW014-3	86	91
500-223994-4 MSD	ED-R3SL-SW014-3	65	72
LCS 500-680469/2-A	Lab Control Sample	69	75
MB 500-680469/1-A	Method Blank	78	81

#### Surrogate Legend

TCX = Tetrachloro-m-xylene

DCBP = DCB Decachlorobiphenyl

# QC Sample Results

Client: Civil & Environmental Consultants Inc  
 Project/Site: Arconic - Elliot Ditch - Lafayette, IN

Job ID: 500-223994-1

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

**Lab Sample ID: MB 500-680469/1-A**  
**Matrix: Solid**  
**Analysis Batch: 680619**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**  
**Prep Batch: 680469**

Analyte	MB MB		RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
PCB-1016	<0.17		0.17		mg/Kg		10/19/22 17:49	10/20/22 12:21	10
PCB-1221	<0.17		0.17		mg/Kg		10/19/22 17:49	10/20/22 12:21	10
PCB-1232	<0.17		0.17		mg/Kg		10/19/22 17:49	10/20/22 12:21	10
PCB-1242	<0.17		0.17		mg/Kg		10/19/22 17:49	10/20/22 12:21	10
PCB-1248	<0.17		0.17		mg/Kg		10/19/22 17:49	10/20/22 12:21	10
PCB-1254	<0.17		0.17		mg/Kg		10/19/22 17:49	10/20/22 12:21	10
PCB-1260	<0.17		0.17		mg/Kg		10/19/22 17:49	10/20/22 12:21	10

Surrogate	MB MB		Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
Tetrachloro-m-xylene	78		49 - 129	10/19/22 17:49	10/20/22 12:21	10
DCB Decachlorobiphenyl	81		37 - 121	10/19/22 17:49	10/20/22 12:21	10

**Lab Sample ID: LCS 500-680469/2-A**  
**Matrix: Solid**  
**Analysis Batch: 680619**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**  
**Prep Batch: 680469**

Analyte	Spike Added	LCS LCS		Unit	D	%Rec	%Rec Limits
		Result	Qualifier				
PCB-1016	1.67	1.10		mg/Kg		66	57 - 120
PCB-1260	1.67	1.36		mg/Kg		81	61 - 125

Surrogate	LCS LCS		Limits
	%Recovery	Qualifier	
Tetrachloro-m-xylene	69		49 - 129
DCB Decachlorobiphenyl	75		37 - 121

**Lab Sample ID: 500-223994-4 MS**  
**Matrix: Solid**  
**Analysis Batch: 680619**

**Client Sample ID: ED-R3SL-SW014-3**  
**Prep Type: Total/NA**  
**Prep Batch: 680469**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS MS		Unit	D	%Rec	%Rec Limits
				Result	Qualifier				
PCB-1016	<0.18		1.82	1.58		mg/Kg	☼	87	57 - 120
PCB-1260	<0.18		1.82	1.95		mg/Kg	☼	107	61 - 125

Surrogate	MS MS		Limits
	%Recovery	Qualifier	
Tetrachloro-m-xylene	86		49 - 129
DCB Decachlorobiphenyl	91		37 - 121

**Lab Sample ID: 500-223994-4 MSD**  
**Matrix: Solid**  
**Analysis Batch: 680619**

**Client Sample ID: ED-R3SL-SW014-3**  
**Prep Type: Total/NA**  
**Prep Batch: 680469**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD MSD		Unit	D	%Rec	%Rec Limits	RPD	
				Result	Qualifier					RPD	Limit
PCB-1016	<0.18		1.77	1.17		mg/Kg	☼	66	57 - 120	30	30
PCB-1260	<0.18		1.77	1.44		mg/Kg	☼	82	61 - 125	30	30

Surrogate	MSD MSD		Limits
	%Recovery	Qualifier	
Tetrachloro-m-xylene	65		49 - 129
DCB Decachlorobiphenyl	72		37 - 121

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# Lab Chronicle

Client: Civil & Environmental Consultants Inc  
Project/Site: Arconic - Elliot Ditch - Lafayette, IN

Job ID: 500-223994-1

**Client Sample ID: ED-R3SL-027-4**

**Date Collected: 10/18/22 10:00**

**Date Received: 10/19/22 08:04**

**Lab Sample ID: 500-223994-1**

**Matrix: Solid**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Moisture		1	680300	LWN	EET CHI	10/19/22 09:57

**Client Sample ID: ED-R3SL-027-4**

**Date Collected: 10/18/22 10:00**

**Date Received: 10/19/22 08:04**

**Lab Sample ID: 500-223994-1**

**Matrix: Solid**

**Percent Solids: 93.3**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3541			680469	DAK	EET CHI	10/19/22 17:49 - 10/20/22 15:00 <sup>1</sup>
Total/NA	Analysis	8082A		10	680619	SS	EET CHI	10/20/22 12:50

**Client Sample ID: ED-R3SL-028-4**

**Date Collected: 10/18/22 10:05**

**Date Received: 10/19/22 08:04**

**Lab Sample ID: 500-223994-2**

**Matrix: Solid**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Moisture		1	680300	LWN	EET CHI	10/19/22 09:57

**Client Sample ID: ED-R3SL-028-4**

**Date Collected: 10/18/22 10:05**

**Date Received: 10/19/22 08:04**

**Lab Sample ID: 500-223994-2**

**Matrix: Solid**

**Percent Solids: 92.9**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3541			680469	DAK	EET CHI	10/19/22 17:49 - 10/20/22 15:00 <sup>1</sup>
Total/NA	Analysis	8082A		10	680619	SS	EET CHI	10/20/22 13:05

**Client Sample ID: ED-R3SL-029-4**

**Date Collected: 10/18/22 10:10**

**Date Received: 10/19/22 08:04**

**Lab Sample ID: 500-223994-3**

**Matrix: Solid**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Moisture		1	680300	LWN	EET CHI	10/19/22 09:57

**Client Sample ID: ED-R3SL-029-4**

**Date Collected: 10/18/22 10:10**

**Date Received: 10/19/22 08:04**

**Lab Sample ID: 500-223994-3**

**Matrix: Solid**

**Percent Solids: 92.3**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3541			680469	DAK	EET CHI	10/19/22 17:49 - 10/20/22 15:00 <sup>1</sup>
Total/NA	Analysis	8082A		10	680619	SS	EET CHI	10/20/22 13:20

**Client Sample ID: ED-R3SL-SW014-3**

**Date Collected: 10/18/22 13:15**

**Date Received: 10/19/22 08:04**

**Lab Sample ID: 500-223994-4**

**Matrix: Solid**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Moisture		1	680300	LWN	EET CHI	10/19/22 09:57

Eurofins Chicago

# Lab Chronicle

Client: Civil & Environmental Consultants Inc  
Project/Site: Arconic - Elliot Ditch - Lafayette, IN

Job ID: 500-223994-1

**Client Sample ID: ED-R3SL-SW014-3**

**Lab Sample ID: 500-223994-4**

**Date Collected: 10/18/22 13:15**

**Matrix: Solid**

**Date Received: 10/19/22 08:04**

**Percent Solids: 91.1**

<u>Prep Type</u>	<u>Batch Type</u>	<u>Batch Method</u>	<u>Run</u>	<u>Dilution Factor</u>	<u>Batch Number</u>	<u>Analyst</u>	<u>Lab</u>	<u>Prepared or Analyzed</u>
Total/NA	Prep	3541			680469	DAK	EET CHI	10/19/22 17:49 - 10/20/22 15:00 <sup>1</sup>
Total/NA	Analysis	8082A		10	680619	SS	EET CHI	10/20/22 13:34

<sup>1</sup> Completion dates and times are reported or not reported per method requirements or individual lab discretion.

## Laboratory References:

EET CHI = Eurofins Chicago, 2417 Bond Street, University Park, IL 60484, TEL (708)534-5200

# Accreditation/Certification Summary

Client: Civil & Environmental Consultants Inc  
Project/Site: Arconic - Elliot Ditch - Lafayette, IN

Job ID: 500-223994-1

## Laboratory: Eurofins Chicago

The accreditations/certifications listed below are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Illinois	NELAP	IL00035	04-30-23

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# Chain of Custody Record

## 524992



5 | Environment Testing  
TestAmerica

Address \_\_\_\_\_

Regulatory Program:  DW  NPDES  RCRA  Other

500-223994 COC

TAL-8210

Client Contact		Project Manager: <u>G. Welch</u>		Site Contact: <u>G. Welch</u>		Date: <u>10-18-22</u>	
Company Name: <u>CEC</u>		Tel/Email: <u>865-410-1655</u>		Lab Contact: <u>R. Kintz</u>		Carrier: <u>Courier</u>	
Address: <u>2704 Cherokee Farm Way Suite 101</u>		Analysis Turnaround Time					
City/State/Zip: <u>Knoxville, TN 37820</u>		<input type="checkbox"/> CALENDAR DAYS <input type="checkbox"/> WORKING DAYS		Filtered Sample (Y/N) _____ Perform MS / MSD (Y/N) _____ <u>PCBs via 8082</u>			
Phone: <u>865-977-9497</u>		TAT if different from Below _____					
Fax: _____		<input type="checkbox"/> 2 weeks					
Project Name: <u>Ellicott Ditch IM Project</u>		<input checked="" type="checkbox"/> 24 Hour*					
Site: <u>Reach 3</u>		<input type="checkbox"/> 1 week		Sample Specific Notes: _____			
P O # _____		<input type="checkbox"/> 2 days					
<input checked="" type="checkbox"/> 1 day							
Sample Identification		Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.	
<u>ED-R3SL-027-4</u>		<u>10-18-22</u>	<u>10:00</u>	<u>C</u>	<u>S</u>	<u>1</u>	<u>X</u>
<u>ED-R3SL-028-4</u>		<u>10-18-22</u>	<u>10:05</u>	<u>C</u>	<u>S</u>	<u>1</u>	<u>X</u>
<u>ED-R3SL-029-4</u>		<u>10-18-22</u>	<u>10:10</u>	<u>C</u>	<u>S</u>	<u>1</u>	<u>X</u>
<u>ED-R3SL-SW14-3</u>		<u>10-18-22</u>	<u>13:15</u>	<u>C</u>	<u>S</u>	<u>1</u>	<u>X</u>
Preservation Used: 1=Ice, 2=HCl, 3=H2SO4, 4=HNO3, 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				Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)			
<input checked="" type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison B <input type="checkbox"/> Unknown				<input type="checkbox"/> Return to Client <input checked="" type="checkbox"/> Disposal by Lab <input type="checkbox"/> Archive for _____ Months			
Special Instructions/QC Requirements & Comments:							
Custody Seals Intact <input type="checkbox"/> Yes <input type="checkbox"/> No		Custody Seal No _____		Cooler Temp (°C) Obs'd <u>3.1</u> Corr'd <u>3.3</u>		Therm ID No _____	
Relinquished by <u>Justin Smith</u>		Company: _____		Date/Time: <u>10-19-22 8:04</u>		Received by: _____	
Relinquished by _____		Company: _____		Date/Time: _____		Received by: _____	
Relinquished by _____		Company: _____		Date/Time: _____		Received in Laboratory by <u>Justin Smith</u> Company: <u>EPTA</u> Date/Time: <u>10/19/22 0804</u>	

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## Login Sample Receipt Checklist

Client: Civil & Environmental Consultants Inc

Job Number: 500-223994-1

**Login Number: 223994**

**List Number: 1**

**Creator: James, Jeff A**

**List Source: Eurofins Chicago**

Question	Answer	Comment
Radioactivity wasn't checked or is <=/ background as measured by a survey meter.	True	
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	3.3
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").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

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**APPENDIX VI**  
**U.S. EPA REGION 5 EMAIL CORRESPONDENCE**

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**From:** [Welch, Garrett](#)  
**To:** [Jean Greensley \(jean.greensley@epa.gov\)](mailto:jean.greensley@epa.gov)  
**Cc:** [Robert Prezbindowski \(Robert.Prezbindowski@arconic.com\)](mailto:Robert.Prezbindowski@arconic.com); [Bruck, Matt](#)  
**Subject:** Arconic - Elliott Ditch - Reach 3 Sampling Update  
**Date:** Tuesday, October 18, 2022 4:10:00 PM  
**Attachments:** [image001.png](#)  
[R3 Sampling Figure 10.17.2022.pdf](#)

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Good afternoon, Jean

Per our discussion on October 17<sup>th</sup>, 2022, Arconic Lafayette, LLC (Arconic) is nearing the completion of the Elliott Ditch - Reach 3 Isolated Soil Interim Measures Project. The attached figure has been prepared to depict the remedial footprint overlaid by the confirmation sampling grids. The confirmation sampling results presented are as of October 14, 2022. Please note the following:

- Green indicates that the RBRO for total PCBs has been achieved in the bottom excavation and/or sidewall;
- Yellow indicates that laboratory analytical results are pending; and,
- Red indicates that the RBRO for total PCBs has not been achieved.

After three iterations of over-excavation and confirmation sampling in grids 026 thru 029, and SW005, the RBRO has not been achieved. Over-excavation confirmation sampling results have ranged from 1.1 to 2.6 mg/kg (all results are reported on a dry-weight basis). The excavations within these areas have been advanced to approximately 5.5 to 6 feet below ground surface (ft bs). The observed soil is fill-like material comprised of gravel (1 to 6 inch diameter throughout), sand, and some clay. This area appears to have been subjected to anthropogenic activities likely associated with the South 18<sup>th</sup> Street bridge crossing over Elliott Ditch and the presence of a sewer main.

Additional excavation may result in destabilizing the upgradient side slope and would further impede on private property resulting in damage and potential tree(s) removal. Without additional controls, personnel are unable to enter the excavation to perform the TSCA composite sampling procedure described in the IM Work Plan. As an alternative approach and given the low concentrations of total PCBs observed thus far, Arconic proposes to excavate each of the remaining grids (026 thru 029) down to below the observed fill material, to approximately 10 feet below grade. Excavated fill material will be disposed of in accordance with the IM Work Plan and a final confirmation sample from each grid will be collected from the excavator bucket to document conditions. Each grid will be excavated individually and backfilled immediately before proceeding to the next grid location in order to reduce the potential for slope failure. Finally, the fourth sidewall sample collected from SW005 slightly exceeded the RBRO at 1.1 mg/kg; as such, Arconic proposes to suspend additional excavation along the side wall to not further damage private property.

If you have any questions, please let us know.

Garrett

**Garrett A. Welch, L.P.G.\*** | *Project Manager*  
Civil & Environmental Consultants, Inc.

2704 Cherokee Farm Way, Suite 101, Knoxville, TN 37920  
**direct** 865.340.4914 **office** 865.977.9997 **mobile** 865.440.1655  
[www.cecinc.com](http://www.cecinc.com)

\*Licensed Professional Geologist in Tennessee & Indiana

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