AMI
Consulting Engineers P.A.

November 18, 2022

Ted Blenkush
1532 W. Michigan St.
Duluth, MN 55806

Re: Shoreline Stabilization – Lakewalk Phase IV – Change Order Request
AMI Project # 211009.1

Mr. Blenkush,

AMI Consulting Engineers (AMI) would like to thank you for the opportunity to submit this change order request for the Hidden Damages encountered at Site H of the Lakewalk Phase IV project, and also for the permitting fees associated with this project.

Attached are two supporting documents regarding the Hidden Damages with respect to this project. AMI is requesting a total of $2,383.75 for the additional effort required as a result of the Hidden Damages work at Site H.

Pursuant to the City of Duluth's (City) request, AMI is requesting $3,000.00 in permitting fees from the Minnesota Department of Natural Resources (reference attached email from DNR). AMI has traditionally always invoiced the City separately for permitting fees as they are always an unknown for projects. For the Lakewalk Phase IV, AMI understands that the City would like to add the permitting fees to AMI's contract.

Below is a breakdown of the total change order request:

Description	**Change Order Request**
Hidden Damages at Site H	$2,383.75
Permitting Fees	$3,000.00
Total Amount	**$5,383.75**

If you have any questions or comments regarding this proposal or find any information listed above in error, please contact me at (715) 718-5721.

Respectfully Submitted,

ZMorris
Zac

Zac Morris, PE
Coastal Department Manager

Attachments:

- Lakewalk Phase IV - Hidden Damages Memo dated January 7, 2022
- Hidden Damages Invoicing Emails dated May 11, 2022
- MN DNR Permit Fee Invoice and Payment dated June 17, 2021

Lakewalk Phase IV - Hidden Damages Memo dated January 7, 2022

MEMO

To: City of Duluth, Randall Rosandich
From: AMI Consulting Engineers, Zachary Morris
Date: January 7, 2022
Re: Lakewalk Phase IV – Contaminated Soil Hidden Damages

The City of Duluth Shoreline Rehab – Lakewalk Phase IV encountered hidden damages during construction on October 28, 2021. This memo aims to concisely summarize the discovery of the hidden damages, the responsive actions, and the costs incurred.

Discovery of Hidden Damages

On October 28, 2021, Rachel Contracting (Rachel), the prime contractor for the Lakewalk Phase IV Rehabilitation project, encountered petroleum contaminated soil while excavating in preparation for toe stone placement on the west end of Site H near station 0+00 and the existing structure (reference Figure 1). Rachel immediately contacted AMI Consulting Engineers P.A. (AMI), the engineer for the project, and AMI reported to the site for inspection.

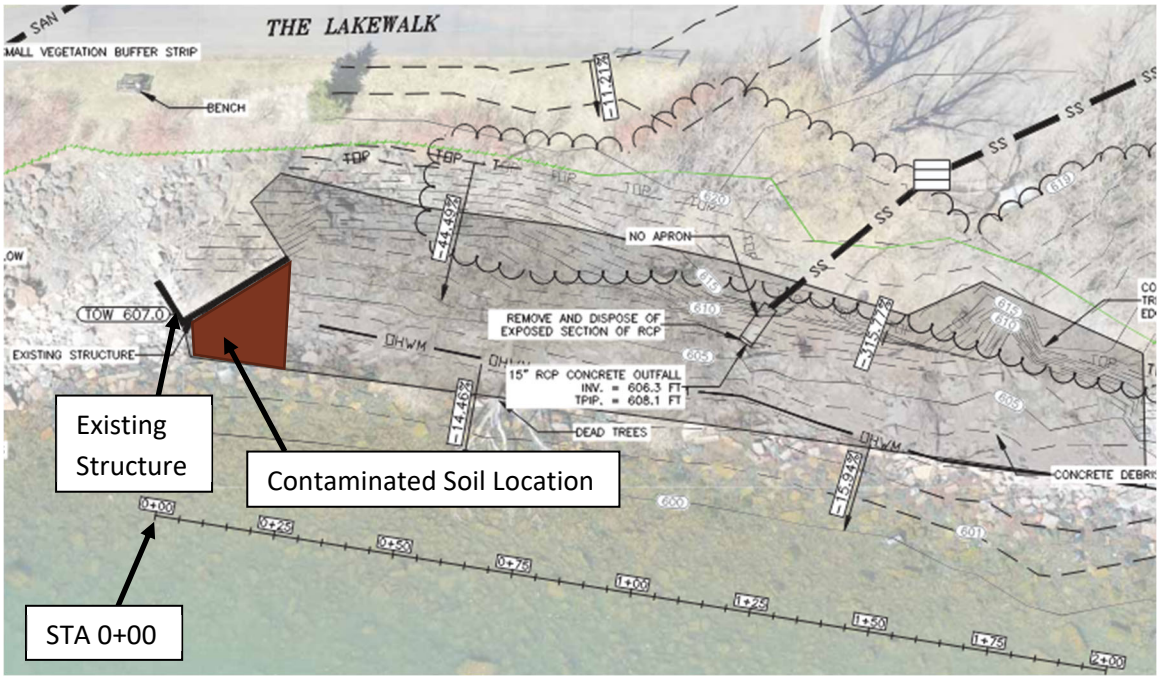


Figure 1: Plan view of existing conditions and stationing for Site H.

Responsive Actions

Upon discovery of the contaminated soil, Rachel and their subcontractor Wren Works, LLC (Wren Works) attempted to barricade the contaminated area and deployed absorbent booms and pads in the water (reference Figures 2 and 3).

Figure 2: Photo of contamination area and containment efforts.

Figure 3: Photo of contamination area and containment efforts, looking East.

Environmental Troubleshooters, Inc. (ET) was contracted by Rachel to coordinate an environmental response in coordination with the Minnesota Pollution Control Agency (MPCA). ET mobilized to the site on October 28, 2021 to assess the field conditions. ET identified a grey soil that was being excavated from approximately three feet below the water surface and riprap/sand along the shoreline as the apparent source of the observed contamination. ET collected three soil samples for field screening of gas using a photoionization detector (PID), yielding readings of 0.0, 0.0, and 2.1 parts per million (ppm). It was determined that the contamination was likely from a legacy source.

MPCA spill coordinator Kayla Hovde reviewed ET's initial assessment and presented a work plan allowing for excavation work to resume along with continued PID readings and visual inspections for contamination; it was requested that any excavated soils with a PID reading greater than 10 ppm or with visual indications of contamination be segregated and placed into a lined roll-off for disposal at a permitted facility.

Excavation work resumed on October 29, 2021, during which thirteen PID readings ranging from 0.1 to 1.9 ppm were recorded. As a result of visual assessment, approximately four cubic yards of impacted soil was containerized in the roll-off for disposal at Shamrock landfill in Cloquet, MN. One soil sample was collected from the roll-off and submitted to Eurofins laboratory testing services (Eurofins) for the following analyses: Diesel Range Organics, Gasoline Range Organics, Volatile Organic Compounds, and eight Resource Conservation and Recovery Act metals. A summary of the soil sample results is shown in Table 1. After the excavation work was complete, the spent absorbent booms and pads were containerized for off-site recycling at CRI. The full report from ET can be found attached to this summary memo.

Table 1: Summary of Soil Sample Results

Analyte	Result (mg/kg)
DRO	53.3
Arsenic	5.42
Barium	63.3
Chromium	20.8
Lead	48.8
Selenium	3.18
Silver	0.260

Costs Incurred

The unanticipated discovery of contaminated soil resulted in additional costs incurred by Rachel and AMI. Table 2 presents these costs.

Table 2: Hidden Damages Costs Incurred

Item	Description	Incremental Costs	Total Cost
Rachel Contracting, Inc			$12,891.91
Labor on 10/28/21	Labor dedicated to contaminated soil response	$1,545.00	
Labor on 10/29/21	Equipment and labor dedicated to contaminated soil response	$2,690.00	
Wren Works, LLC	Equipment, labor, and materials dedicated to containment/clean-up efforts, and standby time, on 10/28/21	$1,457.50	
Environmental Troubleshooters, Inc.	Labor, equipment, materials, and analytical testing services	$6,358.57	
Waste Connections	Materials and disposal fee associated with contaminated soil removal	$840.84	
AMI Consulting Engineers PA			$2,383.75
Engineering services	Labor dedicated to contaminated soil response	$2,383.75	
		Sum	$15,275.66

Summary

Hidden damages due to contaminated soil were encountered and addressed for the Lakewalk Phase IV project, Site H, as described above. No additional investigation or corrective action is planned by the MPCA, Rachel, AMI, ET, or the City of Duluth.

If you have any questions or comments regarding this memo or find any information listed above in error, please contact me at (715) 718-5721.

Respectfully submitted,

Zac Morris, PE
AMI Consulting Engineers, PA

Attachments:

- Environmental Troubleshooters Lakewalk Contaminated Materials Report
- Rachel Change Order Request
- AMI labor dedicated to Hidden Damages

Environmental Troubleshooters Lakewalk Contaminated Materials Report

ENVIRONMENTAL TROUBLESHOOTERS, INC.

3825 GRAND AVENUE
DULUTH, MN 55807
TEL: (218) 722-6013
FAX: (218) 722-6319
TOLL FREE: 1-800-470-3536

December 2, 2021

Mike Friend
Rachel Contracting
5819 US Highway 2
Hermantown, MN 55810

RE: Rachel Contracting Lakewalk Emergency Response, Duluth, MN
ET Project Number 21-1008

Dear Mr. Friend:

On October 28 and 29, 2021, Environmental Troubleshooters, Inc. (ET) mobilized to the City of Duluth's Lakewalk extension project at the southern terminus of East Water Street. Rachel Contracting (Rachel), under subcontract to AMI Consulting Engineers, PA (AMI), the prime contractor for the Lakewalk extension for the City of Duluth, had encountered petroleum contaminated soil while excavating for a shoreline fortification project at the water edge of Lake Superior. Figure 1 depicts the site location and Figure 2 depicts the site layout and area of concern.

ET was contracted by Rachel to coordinate an environmental response with the Minnesota Pollution Control Agency (MPCA) to allow for continued excavation to meet a Minnesota Department of Natural Resources (MDNR) open water permit scheduled to expire on October 30, 2021. Photographs documenting the work performed are attached.

ET mobilized to the project site on October 28, 2021, and reviewed the project work and site conditions. Field observations included:

- Rachel had deployed absorbent booms and pads in Lake Superior and a light sheen was observed within the boomed area.
- ET identified a grey clay soil that was being excavated from approximately three feet below the water surface and riprap/sand along the shoreline as the apparent source of observed contamination.
- ET collected representative soil samples for field screening with a photoionization detector (PID) with a 10.6 eV bulb. Source area sidewall samples (SW-1 and SW-2) were collected in beach sand/gravel and yielded PID readings of 0.0 parts per million (ppm). The excavation bottom sample (B-1) collected in a grey clay yielded 2.1 ppm. Table 1 summarizes headspace screening results.
- With no known proximal or upgradient contaminant sources, field observations suggest the contamination was from a legacy source. This is a reasonable interpretation as the length of shoreline area was historically used for industrial purposes including multiple railroad lines and spurs and many contamination hotspots were observed during the development of the nearby I-35 construction.
- Kayla Hovde, MPCA spill coordinator, arrived on-site and reviewed ET's initial assessment and discussed a work plan to allow for the continued excavation work. Ms. Hovde approved

continued excavation of a trench approximately five feet wide by four feet in depth continuing along the shoreline to the east for approximately 300 feet. Ms. Hovde requested continued headspace field screening with a PID and visual inspection of the excavated rock and soil with excavated soils with a headspace greater than 10 ppm or visual indications of contamination segregated and placed into a lined roll-off for disposal at a permitted facility.

On October 29, 2021, ET returned to the site to field screen soils and monitor the excavation work.

- Soils were field screening during excavation. Sample locations and PID readings are summarized in Table 1 and depicted on Figure 2. Material >10 ppm or visually impacted was segregated and containerized into the roll-off as the excavation progressed to the east.
- Approximately 50 feet east of the source area, near field screening sample S6, the bedrock elevation increased and the gray clay soil layer pinched out as did the observed contamination.
- Approximately four cubic yards of impacted soil was containerized in the roll-off for disposal at Vonco V landfill in Duluth, MN (Vonco). A soil sample (WP-1) was collected from the roll-off and submitted to Eurofins for disposal profiling. The sample was analyzed for Diesel Range Organics (DRO), Gasoline Range Organics (GRO), Volatile Organics Compounds (VOCs), and eight Resource Conservation and Recovery Act (RCRA) metals. Table 2 summarizes the detection results of the sample and the complete analytical results are attached.
- The laboratory results and material profile were submitted to and approved by Vonco. The manifest for hauling and disposal is attached.
- After the excavation was complete, the spent absorbent booms and pads were collected and containerized in two drums for off-site recycling at CRI. The drums are currently staged in ET's heated warehouse pending a milk run pick up by CRI.

ET performed field screening and soil segregation at the subject site in accordance with field direction from Ms. Hovde of the MPCA. Contaminated soils have been removed and properly disposed. No additional investigation or corrective action are planned for the site by the contractors or City of Duluth.

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

Sincerely,

Brian Hayden

Brian Hayden, Project Manager

Attachment: Figures
Tables
Photodocumentation
Eurofins analytical report
Vonco Waste Profile
Disposal Manifest & Weight Ticket

2,000 1,000 0 2,000 4,000 Feet

SCALE: 1/24000

1 inch = 2,000 feet

Source: USGS 7 1/2' Duluth Quadrangle Map

N

FIGURE 1

Site Location

Lakewalk Project
Duluth Minnesota

PROJECT #: 21-1008

DATE: 11/09/2021 **CREATED BY:** CGIS

FILE NAME: //GIS/2021 Projects/21-1008 /Projects/Figure1

● Sample Location

0.9 PID Reading at Sample Location (ppm)

0 10 20 40 Feet

SCALE: 1:240 1 inch = 20 feet

Image Source: St Louis County, Spring 2019

N

FIGURE 2

Sampling Locations & PID Readings

Lakewalk Project
Duluth Minnesota

PROJECT #: 21-1008

DATE: 11/30/2021 **CREATED BY:** CGIS

FILE NAME: //GIS/2021 Projects/21-1008 /Projects/Figure2L

Table 1
Lakewalk Extension Project
Headspace vapor screening results

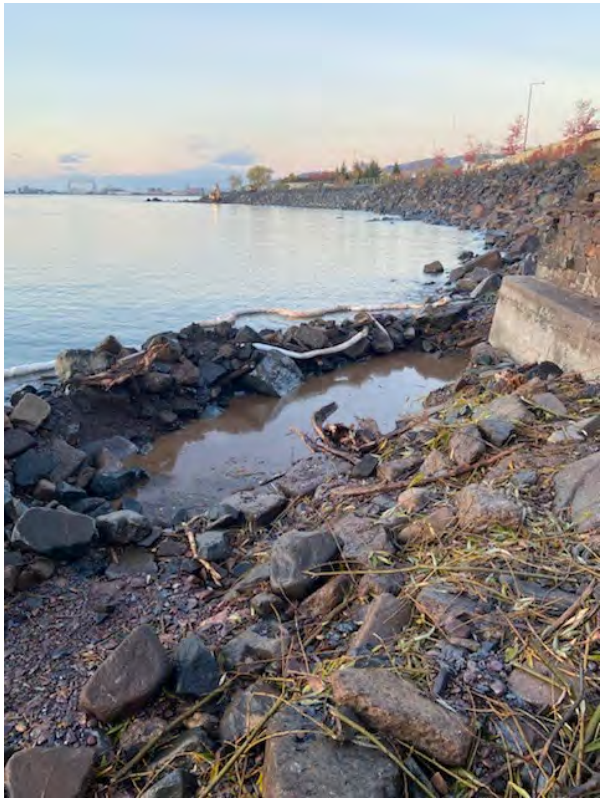
Sampling Location	PID Reading (ppm)
SW1 (sidewall)	0
SW2 (sidewall)	0
B1 (bottom)	2.1
S0	0.9
S1	0.4
S2	0.9
S3	0.4
S4	0.1
S5	1.9
S6	0.9
S7	0.5
S8	0.4
S9	0.6
S11	0.3
S12	1.1
S13	0.1

Table 2
WP-1 Analytical Results
Detection Summary

Analyte	Result (mg/kg)
DRO	53.3
Arsenic	5.42
Barium	63.3
Chromium	20.8
Lead	48.8
Selenium	3.18
Silver	0.260

Project location view from Lakewalk, looking west.

Initial area of impacted soils with booms and pads deployed, looking west.

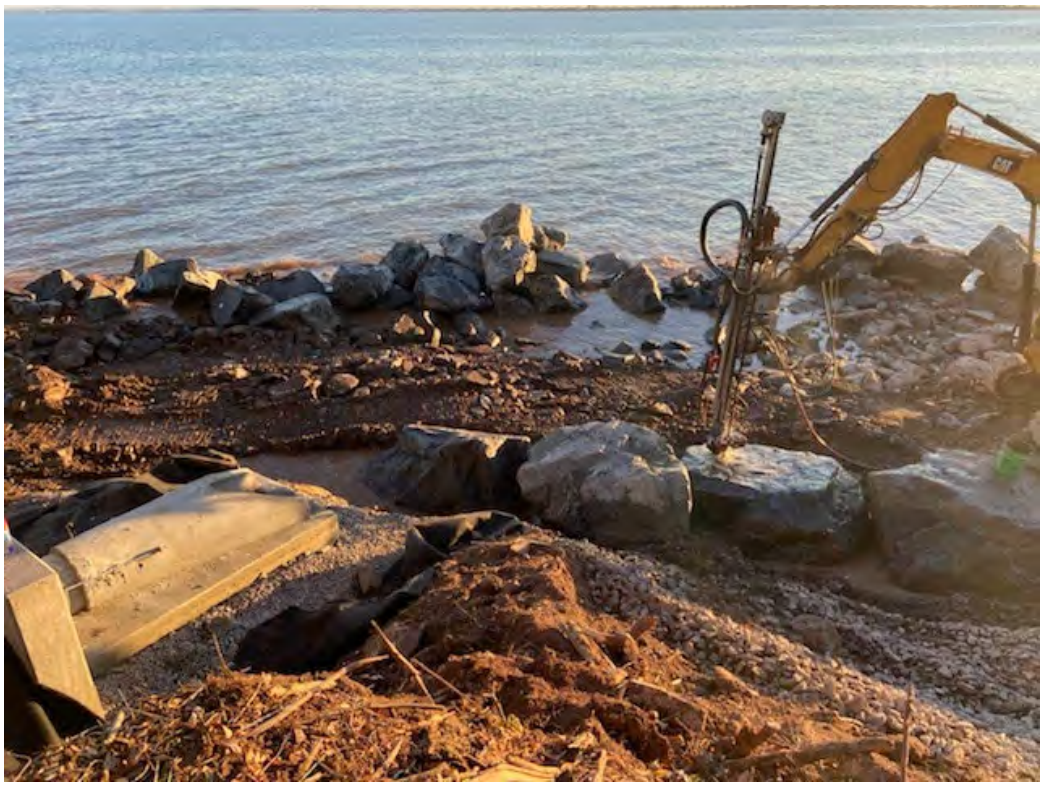


Excavation area, looking west.

Excavation activity progressing to east along shoreline, looking south.

Excavation activity, looking southeast.

Backfilling excavation with shoreland armor foundation boulders



Backfilled area with boulder placements, looking southeast.

Impacted soils containerized in roll-off.

eurofins | Environment Testing America

ANALYTICAL REPORT

Eurofins TestAmerica, Cedar Falls
3019 Venture Way
Cedar Falls, IA 50613
Tel: (319)277-2401

Laboratory Job ID: 310-218715-1
Client Project/Site: Lakewalk ER

For:
Environmental Troubleshooters
3825 Grand Avenue
Duluth, Minnesota 55807

Attn: John McCarthy

Authorized for release by:
11/9/2021 4:30:56 PM

Zach Bindert, Project Manager I
(319)277-2401
Zach.Bindert@Eurofinset.com

Table of Contents

Job ID: 310-218715-1

Laboratory: Eurofins TestAmerica, Cedar Falls

Narrative

Job Narrative
310-218715-1

Comments
No additional comments.

Receipt
The sample was received on 10/30/2021 9:30 AM. 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 2.6º C.

GC/MS VOA
Method 8260D: The continuing calibration verification (CCV) associated with batch 310-334244 recovered above the upper control limit for Dichlorofluoromethane(24.2%D). The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported. The associated sample is impacted: (CCV 310-334244/4).

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

GC VOA
Method WI-GRO: Significant peaks, readily distinguished from background, were detected in the following sample within five minutes after the end of the analytical window defined by the last component eluting in the Gasoline Range Organics (GRO) mix (i.e., Naphthalene): Lakewalk Composite (310-218715-1).

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

GC Semi VOA
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Metals
Method 6020B: The continuing calibration blank (CCB) for analytical batch 310-334789 contained Lead above the reporting limit (RL). All reported samples associated with this CCB were either ND for this analyte or contained this analyte at a concentration greater than 10X the value found in the CCB; therefore, re-analysis of samples was not performed.

Lakewalk Composite (310-218715-1)

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

General Chemistry
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.

VOA Prep
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Sample Summary

Client: Environmental Troubleshooters
Project/Site: Lakewalk ER

Job ID: 310-218715-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
310-218715-1	Lakewalk Composite	Solid	10/29/21 14:45	10/30/21 09:30

Detection Summary

Client: Environmental Troubleshooters
Project/Site: Lakewalk ER

Job ID: 310-218715-1

Client Sample ID: Lakewalk Composite — Lab Sample ID: 310-218715-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Diesel Range Organics (DRO)	53.3		6.35		mg/Kg	1	☼	WI-DRO	Total/NA
Arsenic	5.42		0.886		mg/Kg	5	☼	6020B	Total/NA
Barium	63.8	F1	0.886		mg/Kg	5	☼	6020B	Total/NA
Chromium	20.8	F1	1.33		mg/Kg	5	☼	6020B	Total/NA
Lead	48.8	F1 ^2	2.22		mg/Kg	5	☼	6020B	Total/NA
Selenium	3.18	F1	1.33		mg/Kg	5	☼	6020B	Total/NA
Silver	0.260		0.222		mg/Kg	5	☼	6020B	Total/NA

This Detection Summary does not include radiochemical test results.

Client: Environmental Troubleshooters
Project/Site: Lakewalk ER

Job ID: 310-218715-1

Client Sample ID: Lakewalk Composite

Date Collected: 10/29/21 14:45
Date Received: 10/30/21 09:30

Lab Sample ID: 310-218715-1

Matrix: Solid
Percent Solids: 90.6

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<0.580		0.580		mg/Kg	☼	11/04/21 07:46	11/04/21 12:36	1
Allyl chloride	<0.116		0.116		mg/Kg	☼	11/04/21 07:46	11/04/21 12:36	1
Benzene	<0.116		0.116		mg/Kg	☼	11/04/21 07:46	11/04/21 12:36	1
Bromobenzene	<0.116		0.116		mg/Kg	☼	11/04/21 07:46	11/04/21 12:36	1
Bromochloromethane	<0.116		0.116		mg/Kg	☼	11/04/21 07:46	11/04/21 12:36	1
Bromodichloromethane	<0.116		0.116		mg/Kg	☼	11/04/21 07:46	11/04/21 12:36	1
Bromoform	<0.116		0.116		mg/Kg	☼	11/04/21 07:46	11/04/21 12:36	1
Bromomethane	<0.580		0.580		mg/Kg	☼	11/04/21 07:46	11/04/21 12:36	1
2-Butanone (MEK)	<0.870		0.870		mg/Kg	☼	11/04/21 07:46	11/04/21 12:36	1
Carbon tetrachloride	<0.116		0.116		mg/Kg	☼	11/04/21 07:46	11/04/21 12:36	1
Chlorobenzene	<0.116		0.116		mg/Kg	☼	11/04/21 07:46	11/04/21 12:36	1
Chlorodibromomethane	<0.116		0.116		mg/Kg	☼	11/04/21 07:46	11/04/21 12:36	1
Chloroethane	<0.116		0.116		mg/Kg	☼	11/04/21 07:46	11/04/21 12:36	1
Chloroform	<0.116		0.116		mg/Kg	☼	11/04/21 07:46	11/04/21 12:36	1
Chloromethane	<0.290		0.290		mg/Kg	☼	11/04/21 07:46	11/04/21 12:36	1
2-Chlorotoluene	<0.116		0.116		mg/Kg	☼	11/04/21 07:46	11/04/21 12:36	1
4-Chlorotoluene	<0.116		0.116		mg/Kg	☼	11/04/21 07:46	11/04/21 12:36	1
cis-1,2-Dichloroethene	<0.116		0.116		mg/Kg	☼	11/04/21 07:46	11/04/21 12:36	1
cis-1,3-Dichloropropene	<0.116		0.116		mg/Kg	☼	11/04/21 07:46	11/04/21 12:36	1
1,2-Dibromo-3-chloropropane	<0.290		0.290		mg/Kg	☼	11/04/21 07:46	11/04/21 12:36	1
1,2-Dibromoethane (EDB)	<0.116		0.116		mg/Kg	☼	11/04/21 07:46	11/04/21 12:36	1
Dibromomethane	<0.116		0.116		mg/Kg	☼	11/04/21 07:46	11/04/21 12:36	1
1,2-Dichlorobenzene	<0.116		0.116		mg/Kg	☼	11/04/21 07:46	11/04/21 12:36	1
1,3-Dichlorobenzene	<0.116		0.116		mg/Kg	☼	11/04/21 07:46	11/04/21 12:36	1
1,4-Dichlorobenzene	<0.116		0.116		mg/Kg	☼	11/04/21 07:46	11/04/21 12:36	1
Dichlorodifluoromethane	<0.116		0.116		mg/Kg	☼	11/04/21 07:46	11/04/21 12:36	1
1,1-Dichloroethane	<0.116		0.116		mg/Kg	☼	11/04/21 07:46	11/04/21 12:36	1
1,2-Dichloroethane	<0.116		0.116		mg/Kg	☼	11/04/21 07:46	11/04/21 12:36	1
1,1-Dichloroethene	<0.116		0.116		mg/Kg	☼	11/04/21 07:46	11/04/21 12:36	1
Dichlorofluoromethane	<0.116		0.116		mg/Kg	☼	11/04/21 07:46	11/04/21 12:36	1
1,2-Dichloropropane	<0.116		0.116		mg/Kg	☼	11/04/21 07:46	11/04/21 12:36	1
1,3-Dichloropropane	<0.116		0.116		mg/Kg	☼	11/04/21 07:46	11/04/21 12:36	1
2,2-Dichloropropane	<0.116		0.116		mg/Kg	☼	11/04/21 07:46	11/04/21 12:36	1
1,1-Dichloropropene	<0.116		0.116		mg/Kg	☼	11/04/21 07:46	11/04/21 12:36	1
Diethyl ether	<0.116		0.116		mg/Kg	☼	11/04/21 07:46	11/04/21 12:36	1
Ethylbenzene	<0.116		0.116		mg/Kg	☼	11/04/21 07:46	11/04/21 12:36	1
Hexachlorobutadiene	<0.116		0.116		mg/Kg	☼	11/04/21 07:46	11/04/21 12:36	1
Isopropylbenzene	<0.116		0.116		mg/Kg	☼	11/04/21 07:46	11/04/21 12:36	1
Methylene chloride	<0.290		0.290		mg/Kg	☼	11/04/21 07:46	11/04/21 12:36	1
4-Methyl-2-pentanone (MIBK)	<0.232		0.232		mg/Kg	☼	11/04/21 07:46	11/04/21 12:36	1
Methyl tert-butyl ether	<0.116		0.116		mg/Kg	☼	11/04/21 07:46	11/04/21 12:36	1
Naphthalene	<0.290		0.290		mg/Kg	☼	11/04/21 07:46	11/04/21 12:36	1
n-Butylbenzene	<0.116		0.116		mg/Kg	☼	11/04/21 07:46	11/04/21 12:36	1
n-Propylbenzene	<0.116		0.116		mg/Kg	☼	11/04/21 07:46	11/04/21 12:36	1
p-Isopropyltoluene	<0.116		0.116		mg/Kg	☼	11/04/21 07:46	11/04/21 12:36	1
sec-Butylbenzene	<0.116		0.116		mg/Kg	☼	11/04/21 07:46	11/04/21 12:36	1
Styrene	<0.116		0.116		mg/Kg	☼	11/04/21 07:46	11/04/21 12:36	1
tert-Butylbenzene	<0.116		0.116		mg/Kg	☼	11/04/21 07:46	11/04/21 12:36	1
1,1,1,2-Tetrachloroethane	<0.116		0.116		mg/Kg	☼	11/04/21 07:46	11/04/21 12:36	1

Client Sample ID: Lakewalk Composite
Date Collected: 10/29/21 14:45
Date Received: 10/30/21 09:30

Lab Sample ID: 310-218715-1
Matrix: Solid
Percent Solids: 90.6

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2,2-Tetrachloroethane	<0.116		0.116		mg/Kg	☼	11/04/21 07:46	11/04/21 12:36	1
Tetrachloroethene	<0.116		0.116		mg/Kg	☼	11/04/21 07:46	11/04/21 12:36	1
Tetrahydrofuran	<0.580		0.580		mg/Kg	☼	11/04/21 07:46	11/04/21 12:36	1
Toluene	<0.116		0.116		mg/Kg	☼	11/04/21 07:46	11/04/21 12:36	1
trans-1,2-Dichloroethene	<0.116		0.116		mg/Kg	☼	11/04/21 07:46	11/04/21 12:36	1
trans-1,3-Dichloropropene	<0.116		0.116		mg/Kg	☼	11/04/21 07:46	11/04/21 12:36	1
1,2,3-Trichlorobenzene	<0.116		0.116		mg/Kg	☼	11/04/21 07:46	11/04/21 12:36	1
1,2,4-Trichlorobenzene	<0.116		0.116		mg/Kg	☼	11/04/21 07:46	11/04/21 12:36	1
1,1,1-Trichloroethane	<0.116		0.116		mg/Kg	☼	11/04/21 07:46	11/04/21 12:36	1
1,1,2-Trichloroethane	<0.116		0.116		mg/Kg	☼	11/04/21 07:46	11/04/21 12:36	1
Trichloroethene	<0.116		0.116		mg/Kg	☼	11/04/21 07:46	11/04/21 12:36	1
Trichlorofluoromethane	<0.116		0.116		mg/Kg	☼	11/04/21 07:46	11/04/21 12:36	1
1,2,3-Trichloropropane	<0.116		0.116		mg/Kg	☼	11/04/21 07:46	11/04/21 12:36	1
1,1,2-Trichlorotrifluoroethane	<0.116		0.116		mg/Kg	☼	11/04/21 07:46	11/04/21 12:36	1
1,2,4-Trimethylbenzene	<0.116		0.116		mg/Kg	☼	11/04/21 07:46	11/04/21 12:36	1
1,3,5-Trimethylbenzene	<0.116		0.116		mg/Kg	☼	11/04/21 07:46	11/04/21 12:36	1
Vinyl chloride	<0.116		0.116		mg/Kg	☼	11/04/21 07:46	11/04/21 12:36	1
Xylenes, Total	<0.174		0.174		mg/Kg	☼	11/04/21 07:46	11/04/21 12:36	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*99*		*80 - 124*	*11/04/21 07:46*	*11/04/21 12:36*	*1*
Toluene-d8 (Surr)	*103*		*78 - 120*	*11/04/21 07:46*	*11/04/21 12:36*	*1*
4-Bromofluorobenzene (Surr)	*108*		*79 - 120*	*11/04/21 07:46*	*11/04/21 12:36*	*1*

Method: WI-GRO - Wisconsin - Gasoline Range Organics (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Wisconsin GRO	<10.6		10.6		mg/Kg	☼	11/04/21 16:02	11/06/21 04:16	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*92*		*80 - 120*	*11/04/21 16:02*	*11/06/21 04:16*	*1*

Method: WI-DRO - Wisconsin - Diesel Range Organics (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics (DRO)	**53.3**		6.35		mg/Kg	☼	11/03/21 07:44	11/04/21 10:30	1

Method: 6020B - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**5.42**		0.886		mg/Kg	☼	11/04/21 10:00	11/09/21 00:17	5
Barium	**63.8**	**F1**	0.886		mg/Kg	☼	11/04/21 10:00	11/09/21 00:17	5
Cadmium	<0.443	F1	0.443		mg/Kg	☼	11/04/21 10:00	11/09/21 00:17	5
Chromium	**20.8**	**F1**	1.33		mg/Kg	☼	11/04/21 10:00	11/09/21 00:17	5
Lead	**48.8**	**F1 ^2**	2.22		mg/Kg	☼	11/04/21 10:00	11/09/21 00:17	5
Selenium	**3.18**	**F1**	1.33		mg/Kg	☼	11/04/21 10:00	11/09/21 00:17	5
Silver	**0.260**		0.222		mg/Kg	☼	11/04/21 10:00	11/09/21 00:17	5

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.0180		0.0180		mg/Kg	☼	11/03/21 11:52	11/05/21 15:06	1

Client Sample Results

Client: Environmental Troubleshooters
Project/Site: Lakewalk ER

Job ID: 310-218715-1

Client Sample ID: Lakewalk Composite
Date Collected: 10/29/21 14:45
Date Received: 10/30/21 09:30

Lab Sample ID: 310-218715-1
Matrix: Solid
Percent Solids: 90.6

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	9.4		0.1		%			11/01/21 15:14	1
Percent Solids	90.6		0.1		%			11/01/21 15:14	1

Definitions/Glossary

Client: Environmental Troubleshooters
Project/Site: Lakewalk ER

Job ID: 310-218715-1

Qualifiers

Metals

Qualifier	Qualifier Description
^2	Calibration Blank (ICB and/or CCB) is outside acceptance limits.
F1	MS and/or MSD recovery exceeds control limits.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
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

Surrogate Summary

Client: Environmental Troubleshooters
Project/Site: Lakewalk ER

Job ID: 310-218715-1

Method: 8260D - Volatile Organic Compounds by GC/MS

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)		
		DBFM	TOL	BFB
Lab Sample ID	Client Sample ID	(80-124)	(78-120)	(79-120)
310-218715-1	Lakewalk Composite	99	103	108
LCS 310-334241/2-A	Lab Control Sample	98	99	102
MB 310-334241/1-A	Method Blank	100	104	97

Surrogate Legend

DBFM = Dibromofluoromethane (Surr)
TOL = Toluene-d8 (Surr)
BFB = 4-Bromofluorobenzene (Surr)

Method: WI-GRO - Wisconsin - Gasoline Range Organics (GC)

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)
		BFB
Lab Sample ID	Client Sample ID	(80-120)
310-218715-1	Lakewalk Composite	92
LCS 310-334352/1-A	Lab Control Sample	95
LCSD 310-334352/25-A	Lab Control Sample Dup	94
MB 310-334352/2-A	Method Blank	90

Surrogate Legend

BFB = 4-Bromofluorobenzene (Surr)

Method: 8260D - Volatile Organic Compounds by GC/MS

Lab Sample ID: MB 310-334241/1-A
Matrix: Solid
Analysis Batch: 334244

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 334241

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<0.461		0.461		mg/Kg		11/04/21 07:46	11/04/21 09:12	1
Allyl chloride	<0.0921		0.0921		mg/Kg		11/04/21 07:46	11/04/21 09:12	1
Benzene	<0.0921		0.0921		mg/Kg		11/04/21 07:46	11/04/21 09:12	1
Bromobenzene	<0.0921		0.0921		mg/Kg		11/04/21 07:46	11/04/21 09:12	1
Bromochloromethane	<0.0921		0.0921		mg/Kg		11/04/21 07:46	11/04/21 09:12	1
Bromodichloromethane	<0.0921		0.0921		mg/Kg		11/04/21 07:46	11/04/21 09:12	1
Bromoform	<0.0921		0.0921		mg/Kg		11/04/21 07:46	11/04/21 09:12	1
Bromomethane	<0.461		0.461		mg/Kg		11/04/21 07:46	11/04/21 09:12	1
2-Butanone (MEK)	<0.691		0.691		mg/Kg		11/04/21 07:46	11/04/21 09:12	1
Carbon tetrachloride	<0.0921		0.0921		mg/Kg		11/04/21 07:46	11/04/21 09:12	1
Chlorobenzene	<0.0921		0.0921		mg/Kg		11/04/21 07:46	11/04/21 09:12	1
Chlorodibromomethane	<0.0921		0.0921		mg/Kg		11/04/21 07:46	11/04/21 09:12	1
Chloroethane	<0.0921		0.0921		mg/Kg		11/04/21 07:46	11/04/21 09:12	1
Chloroform	<0.0921		0.0921		mg/Kg		11/04/21 07:46	11/04/21 09:12	1
Chloromethane	<0.230		0.230		mg/Kg		11/04/21 07:46	11/04/21 09:12	1
2-Chlorotoluene	<0.0921		0.0921		mg/Kg		11/04/21 07:46	11/04/21 09:12	1
4-Chlorotoluene	<0.0921		0.0921		mg/Kg		11/04/21 07:46	11/04/21 09:12	1
cis-1,2-Dichloroethene	<0.0921		0.0921		mg/Kg		11/04/21 07:46	11/04/21 09:12	1
cis-1,3-Dichloropropene	<0.0921		0.0921		mg/Kg		11/04/21 07:46	11/04/21 09:12	1
1,2-Dibromo-3-chloropropane	<0.0921		0.0921		mg/Kg		11/04/21 07:46	11/04/21 09:12	1
1,2-Dibromoethane (EDB)	<0.0921		0.0921		mg/Kg		11/04/21 07:46	11/04/21 09:12	1
Dibromomethane	<0.0921		0.0921		mg/Kg		11/04/21 07:46	11/04/21 09:12	1
1,2-Dichlorobenzene	<0.0921		0.0921		mg/Kg		11/04/21 07:46	11/04/21 09:12	1
1,3-Dichlorobenzene	<0.0921		0.0921		mg/Kg		11/04/21 07:46	11/04/21 09:12	1
1,4-Dichlorobenzene	<0.0921		0.0921		mg/Kg		11/04/21 07:46	11/04/21 09:12	1
Dichlorodifluoromethane	<0.0921		0.0921		mg/Kg		11/04/21 07:46	11/04/21 09:12	1
1,1-Dichloroethane	<0.0921		0.0921		mg/Kg		11/04/21 07:46	11/04/21 09:12	1
1,2-Dichloroethane	<0.0921		0.0921		mg/Kg		11/04/21 07:46	11/04/21 09:12	1
1,1-Dichloroethene	<0.0921		0.0921		mg/Kg		11/04/21 07:46	11/04/21 09:12	1
Dichlorofluoromethane	<0.0921		0.0921		mg/Kg		11/04/21 07:46	11/04/21 09:12	1
1,2-Dichloropropane	<0.0921		0.0921		mg/Kg		11/04/21 07:46	11/04/21 09:12	1
1,3-Dichloropropane	<0.0921		0.0921		mg/Kg		11/04/21 07:46	11/04/21 09:12	1
2,2-Dichloropropane	<0.0921		0.0921		mg/Kg		11/04/21 07:46	11/04/21 09:12	1
1,1-Dichloropropene	<0.0921		0.0921		mg/Kg		11/04/21 07:46	11/04/21 09:12	1
Diethyl ether	<0.0921		0.0921		mg/Kg		11/04/21 07:46	11/04/21 09:12	1
Ethylbenzene	<0.0921		0.0921		mg/Kg		11/04/21 07:46	11/04/21 09:12	1
Hexachlorobutadiene	<0.0921		0.0921		mg/Kg		11/04/21 07:46	11/04/21 09:12	1
Isopropylbenzene	<0.0921		0.0921		mg/Kg		11/04/21 07:46	11/04/21 09:12	1
Methylene chloride	<0.230		0.230		mg/Kg		11/04/21 07:46	11/04/21 09:12	1
4-Methyl-2-pentanone (MIBK)	<0.0921		0.0921		mg/Kg		11/04/21 07:46	11/04/21 09:12	1
Methyl tert-butyl ether	<0.0921		0.0921		mg/Kg		11/04/21 07:46	11/04/21 09:12	1
Naphthalene	<0.230		0.230		mg/Kg		11/04/21 07:46	11/04/21 09:12	1
n-Butylbenzene	<0.0921		0.0921		mg/Kg		11/04/21 07:46	11/04/21 09:12	1
n-Propylbenzene	<0.0921		0.0921		mg/Kg		11/04/21 07:46	11/04/21 09:12	1
p-Isopropyltoluene	<0.0921		0.0921		mg/Kg		11/04/21 07:46	11/04/21 09:12	1
sec-Butylbenzene	<0.0921		0.0921		mg/Kg		11/04/21 07:46	11/04/21 09:12	1
Styrene	<0.0921		0.0921		mg/Kg		11/04/21 07:46	11/04/21 09:12	1
tert-Butylbenzene	<0.0921		0.0921		mg/Kg		11/04/21 07:46	11/04/21 09:12	1

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

Lab Sample ID: MB 310-334241/1-A
Matrix: Solid
Analysis Batch: 334244

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 334241

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<0.0921		0.0921		mg/Kg		11/04/21 07:46	11/04/21 09:12	1
1,1,2,2-Tetrachloroethane	<0.0921		0.0921		mg/Kg		11/04/21 07:46	11/04/21 09:12	1
Tetrachloroethene	<0.0921		0.0921		mg/Kg		11/04/21 07:46	11/04/21 09:12	1
Tetrahydrofuran	<0.0921		0.0921		mg/Kg		11/04/21 07:46	11/04/21 09:12	1
Toluene	<0.0921		0.0921		mg/Kg		11/04/21 07:46	11/04/21 09:12	1
trans-1,2-Dichloroethene	<0.0921		0.0921		mg/Kg		11/04/21 07:46	11/04/21 09:12	1
trans-1,3-Dichloropropene	<0.0921		0.0921		mg/Kg		11/04/21 07:46	11/04/21 09:12	1
1,2,3-Trichlorobenzene	<0.0921		0.0921		mg/Kg		11/04/21 07:46	11/04/21 09:12	1
1,2,4-Trichlorobenzene	<0.0921		0.0921		mg/Kg		11/04/21 07:46	11/04/21 09:12	1
1,1,1-Trichloroethane	<0.0921		0.0921		mg/Kg		11/04/21 07:46	11/04/21 09:12	1
1,1,2-Trichloroethane	<0.0921		0.0921		mg/Kg		11/04/21 07:46	11/04/21 09:12	1
Trichloroethene	<0.0921		0.0921		mg/Kg		11/04/21 07:46	11/04/21 09:12	1
Trichlorofluoromethane	<0.0921		0.0921		mg/Kg		11/04/21 07:46	11/04/21 09:12	1
1,2,3-Trichloropropane	<0.0921		0.0921		mg/Kg		11/04/21 07:46	11/04/21 09:12	1
1,1,2-Trichlorotrifluoroethane	<0.0921		0.0921		mg/Kg		11/04/21 07:46	11/04/21 09:12	1
1,2,4-Trimethylbenzene	<0.0921		0.0921		mg/Kg		11/04/21 07:46	11/04/21 09:12	1
1,3,5-Trimethylbenzene	<0.0921		0.0921		mg/Kg		11/04/21 07:46	11/04/21 09:12	1
Vinyl chloride	<0.0921		0.0921		mg/Kg		11/04/21 07:46	11/04/21 09:12	1
Xylenes, Total	<0.138		0.138		mg/Kg		11/04/21 07:46	11/04/21 09:12	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*100*		*80 - 124*	*11/04/21 07:46*	*11/04/21 09:12*	*1*
Toluene-d8 (Surr)	*104*		*78 - 120*	*11/04/21 07:46*	*11/04/21 09:12*	*1*
4-Bromofluorobenzene (Surr)	*97*		*79 - 120*	*11/04/21 07:46*	*11/04/21 09:12*	*1*

Lab Sample ID: LCS 310-334241/2-A
Matrix: Solid
Analysis Batch: 334244

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 334241

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	1.88	2.068		mg/Kg		110	44 - 150
Allyl chloride	0.942	0.9388		mg/Kg		100	62 - 150
Benzene	0.942	0.9779		mg/Kg		104	80 - 134
Bromobenzene	0.942	0.9129		mg/Kg		97	80 - 126
Bromochloromethane	0.942	0.8358		mg/Kg		89	80 - 144
Bromodichloromethane	0.942	0.8969		mg/Kg		95	75 - 132
Bromoform	0.942	0.8522		mg/Kg		90	62 - 131
2-Butanone (MEK)	1.88	1.749		mg/Kg		93	57 - 150
Carbon tetrachloride	0.942	0.9310		mg/Kg		99	78 - 132
Chlorobenzene	0.942	0.9572		mg/Kg		102	80 - 126
Chlorodibromomethane	0.942	0.9052		mg/Kg		96	74 - 128
Chloroform	0.942	0.8297		mg/Kg		88	80 - 138
2-Chlorotoluene	0.942	0.9534		mg/Kg		101	80 - 126
4-Chlorotoluene	0.942	0.8866		mg/Kg		94	80 - 125
cis-1,2-Dichloroethene	0.942	0.9951		mg/Kg		106	80 - 140
cis-1,3-Dichloropropene	0.942	0.9206		mg/Kg		98	80 - 127
1,2-Dibromo-3-chloropropane	0.942	0.6634		mg/Kg		70	45 - 145
1,2-Dibromoethane (EDB)	0.942	0.9632		mg/Kg		102	80 - 128

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

Lab Sample ID: LCS 310-334241/2-A
Matrix: Solid
Analysis Batch: 334244

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 334241

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Dibromomethane	0.942	0.8757		mg/Kg		93	80 - 139
1,2-Dichlorobenzene	0.942	0.8231		mg/Kg		87	80 - 121
1,3-Dichlorobenzene	0.942	0.8686		mg/Kg		92	80 - 122
1,4-Dichlorobenzene	0.942	0.9023		mg/Kg		96	80 - 121
1,1-Dichloroethane	0.942	0.9978		mg/Kg		106	75 - 150
1,2-Dichloroethane	0.942	0.8772		mg/Kg		93	79 - 141
1,1-Dichloroethene	0.942	1.050		mg/Kg		111	60 - 150
1,2-Dichloropropane	0.942	0.9171		mg/Kg		97	80 - 143
1,3-Dichloropropane	0.942	0.8846		mg/Kg		94	80 - 129
2,2-Dichloropropane	0.942	1.016		mg/Kg		108	64 - 150
1,1-Dichloropropene	0.942	0.9816		mg/Kg		104	80 - 137
Diethyl ether	0.942	0.9253		mg/Kg		98	75 - 146
Ethylbenzene	0.942	0.9746		mg/Kg		103	80 - 126
Hexachlorobutadiene	0.942	0.9236		mg/Kg		98	51 - 150
Isopropylbenzene	0.942	0.9525		mg/Kg		101	80 - 128
Methylene chloride	0.942	1.045		mg/Kg		111	62 - 150
4-Methyl-2-pentanone (MIBK)	1.88	1.521		mg/Kg		81	72 - 137
Methyl tert-butyl ether	0.942	0.9901		mg/Kg		105	73 - 147
Naphthalene	0.942	0.7252		mg/Kg		77	47 - 147
n-Butylbenzene	0.942	0.8979		mg/Kg		95	75 - 126
n-Propylbenzene	0.942	0.9813		mg/Kg		104	79 - 131
p-Isopropyltoluene	0.942	0.9145		mg/Kg		97	79 - 124
sec-Butylbenzene	0.942	0.9210		mg/Kg		98	79 - 122
Styrene	0.942	0.9384		mg/Kg		100	80 - 129
tert-Butylbenzene	0.942	0.8663		mg/Kg		92	79 - 124
1,1,1,2-Tetrachloroethane	0.942	0.9016		mg/Kg		96	78 - 125
1,1,2,2-Tetrachloroethane	0.942	0.8802		mg/Kg		93	74 - 133
Tetrachloroethene	0.942	0.8993		mg/Kg		95	80 - 129
Tetrahydrofuran	1.88	1.744		mg/Kg		93	68 - 150
Toluene	0.942	0.9327		mg/Kg		99	80 - 126
trans-1,2-Dichloroethene	0.942	1.001		mg/Kg		106	75 - 146
trans-1,3-Dichloropropene	0.942	0.9455		mg/Kg		100	80 - 129
1,2,3-Trichlorobenzene	0.942	0.9207		mg/Kg		98	48 - 148
1,2,4-Trichlorobenzene	0.942	0.8862		mg/Kg		94	70 - 125
1,1,1-Trichloroethane	0.942	0.9637		mg/Kg		102	79 - 136
1,1,2-Trichloroethane	0.942	0.9652		mg/Kg		102	80 - 130
Trichloroethene	0.942	0.9515		mg/Kg		101	80 - 137
1,2,3-Trichloropropane	0.942	0.9455		mg/Kg		100	66 - 142
1,1,2-Trichlorotrifluoroethane	0.942	0.9728		mg/Kg		103	64 - 150
1,2,4-Trimethylbenzene	0.942	0.8862		mg/Kg		94	79 - 128
1,3,5-Trimethylbenzene	0.942	0.9163		mg/Kg		97	80 - 125
Xylenes, Total	1.88	1.911		mg/Kg		101	80 - 132

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Dibromofluoromethane (Surr)	*98*		*80 - 124*
Toluene-d8 (Surr)	*99*		*78 - 120*
4-Bromofluorobenzene (Surr)	*102*		*79 - 120*

Method: WI-GRO - Wisconsin - Gasoline Range Organics (GC)

Lab Sample ID: MB 310-334352/2-A
Matrix: Solid
Analysis Batch: 334374

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 334352

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Wisconsin GRO	<9.48		9.48		mg/Kg		11/04/21 16:02	11/05/21 16:53	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*90*		*80 - 120*	*11/04/21 16:02*	*11/05/21 16:53*	*1*

Lab Sample ID: LCS 310-334352/1-A
Matrix: Solid
Analysis Batch: 334374

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 334352

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Wisconsin GRO	38.3	38.73		mg/Kg		101	80 - 120

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*95*		*80 - 120*

Lab Sample ID: LCSD 310-334352/25-A
Matrix: Solid
Analysis Batch: 334374

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 334352

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Wisconsin GRO	38.9	39.50		mg/Kg		102	80 - 120	2	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*94*		*80 - 120*

Method: WI-DRO - Wisconsin - Diesel Range Organics (GC)

Lab Sample ID: MB 310-334081/1-A
Matrix: Solid
Analysis Batch: 334222

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 334081

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics (DRO)	<6.88		6.88		mg/Kg		11/03/21 07:44	11/04/21 07:09	1

Lab Sample ID: LCS 310-334081/2-A
Matrix: Solid
Analysis Batch: 334222

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 334081

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Diesel Range Organics (DRO)	48.7	46.93		mg/Kg		96	70 - 120

Lab Sample ID: LCSD 310-334081/3-A
Matrix: Solid
Analysis Batch: 334222

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 334081

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Diesel Range Organics (DRO)	49.4	46.57		mg/Kg		94	70 - 120	1	20

Method: 6020B - Metals (ICP/MS)

Lab Sample ID: MB 310-334122/1-A ^5
Matrix: Solid
Analysis Batch: 334891

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 334122

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.903		0.903		mg/Kg		11/04/21 10:00	11/09/21 15:10	5
Barium	<0.903		0.903		mg/Kg		11/04/21 10:00	11/09/21 15:10	5
Cadmium	<0.452		0.452		mg/Kg		11/04/21 10:00	11/09/21 15:10	5
Chromium	<1.36		1.36		mg/Kg		11/04/21 10:00	11/09/21 15:10	5
Lead	<2.26		2.26		mg/Kg		11/04/21 10:00	11/09/21 15:10	5
Selenium	<1.36		1.36		mg/Kg		11/04/21 10:00	11/09/21 15:10	5
Silver	<0.226		0.226		mg/Kg		11/04/21 10:00	11/09/21 15:10	5

Lab Sample ID: LCS 310-334122/2-A
Matrix: Solid
Analysis Batch: 334789

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 334122

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	191	186.0		mg/Kg		97	80 - 120
Barium	95.6	85.05		mg/Kg		89	80 - 120
Cadmium	95.6	85.15		mg/Kg		89	80 - 120
Chromium	95.6	81.31		mg/Kg		85	80 - 120
Lead	191	182.8		mg/Kg		96	80 - 120
Selenium	382	336.6		mg/Kg		88	80 - 120
Silver	95.6	93.49		mg/Kg		98	80 - 120

Lab Sample ID: 310-218715-1 MS
Matrix: Solid
Analysis Batch: 334891

Client Sample ID: Lakewalk Composite
Prep Type: Total/NA
Prep Batch: 334122

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	5.42		189	186.4		mg/Kg	☼	96	75 - 125
Barium	63.8	F1	94.7	118.7	F1	mg/Kg	☼	58	75 - 125
Cadmium	<0.443	F1	94.7	93.04		mg/Kg	☼	98	75 - 125
Chromium	20.8	F1	94.7	96.64		mg/Kg	☼	80	75 - 125
Lead	48.8	F1 ^2	189	216.9		mg/Kg	☼	89	75 - 125
Selenium	3.18	F1	379	357.4		mg/Kg	☼	94	75 - 125
Silver	0.260		94.7	95.77		mg/Kg	☼	101	75 - 125

Lab Sample ID: 310-218715-1 MSD
Matrix: Solid
Analysis Batch: 334891

Client Sample ID: Lakewalk Composite
Prep Type: Total/NA
Prep Batch: 334122

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Arsenic	5.42		190	189.4		mg/Kg	☼	97	75 - 125	2	20
Barium	63.8	F1	95.2	129.4	F1	mg/Kg	☼	69	75 - 125	9	20
Cadmium	<0.443	F1	95.2	94.83		mg/Kg	☼	99	75 - 125	2	20
Chromium	20.8	F1	95.2	102.4		mg/Kg	☼	86	75 - 125	6	20
Lead	48.8	F1 ^2	190	217.2		mg/Kg	☼	88	75 - 125	0	20
Selenium	3.18	F1	381	365.0		mg/Kg	☼	95	75 - 125	2	20
Silver	0.260		95.2	97.67		mg/Kg	☼	102	75 - 125	2	20

Client: Environmental Troubleshooters
Project/Site: Lakewalk ER

Job ID: 310-218715-1

Method: 7471B - Mercury (CVAA)

Lab Sample ID: MB 310-334139/1-A
Matrix: Solid
Analysis Batch: 334556

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 334139

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.0154		0.0154		mg/Kg		11/03/21 11:52	11/05/21 13:44	1

Lab Sample ID: LCS 310-334139/2-A
Matrix: Solid
Analysis Batch: 334556

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 334139

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.145	0.1589		mg/Kg		110	80 - 120

QC Association Summary

Client: Environmental Troubleshooters
Project/Site: Lakewalk ER

Job ID: 310-218715-1

GC/MS VOA

Prep Batch: 334241

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-218715-1	Lakewalk Composite	Total/NA	Solid	5035	
MB 310-334241/1-A	Method Blank	Total/NA	Solid	5035	
LCS 310-334241/2-A	Lab Control Sample	Total/NA	Solid	5035	

Analysis Batch: 334244

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-218715-1	Lakewalk Composite	Total/NA	Solid	8260D	334241
MB 310-334241/1-A	Method Blank	Total/NA	Solid	8260D	334241
LCS 310-334241/2-A	Lab Control Sample	Total/NA	Solid	8260D	334241

GC VOA

Prep Batch: 334352

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-218715-1	Lakewalk Composite	Total/NA	Solid	WI GRO	
MB 310-334352/2-A	Method Blank	Total/NA	Solid	5035	
LCS 310-334352/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 310-334352/25-A	Lab Control Sample Dup	Total/NA	Solid	5035	

Analysis Batch: 334374

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-218715-1	Lakewalk Composite	Total/NA	Solid	WI-GRO	334352
MB 310-334352/2-A	Method Blank	Total/NA	Solid	WI-GRO	334352
LCS 310-334352/1-A	Lab Control Sample	Total/NA	Solid	WI-GRO	334352
LCSD 310-334352/25-A	Lab Control Sample Dup	Total/NA	Solid	WI-GRO	334352

GC Semi VOA

Prep Batch: 334081

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-218715-1	Lakewalk Composite	Total/NA	Solid	WI DRO PREP	
MB 310-334081/1-A	Method Blank	Total/NA	Solid	WI DRO PREP	
LCS 310-334081/2-A	Lab Control Sample	Total/NA	Solid	WI DRO PREP	
LCSD 310-334081/3-A	Lab Control Sample Dup	Total/NA	Solid	WI DRO PREP	

Analysis Batch: 334222

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-218715-1	Lakewalk Composite	Total/NA	Solid	WI-DRO	334081
MB 310-334081/1-A	Method Blank	Total/NA	Solid	WI-DRO	334081
LCS 310-334081/2-A	Lab Control Sample	Total/NA	Solid	WI-DRO	334081
LCSD 310-334081/3-A	Lab Control Sample Dup	Total/NA	Solid	WI-DRO	334081

Metals

Prep Batch: 334122

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-218715-1	Lakewalk Composite	Total/NA	Solid	3050B	
MB 310-334122/1-A ^5	Method Blank	Total/NA	Solid	3050B	
LCS 310-334122/2-A	Lab Control Sample	Total/NA	Solid	3050B	
310-218715-1 MS	Lakewalk Composite	Total/NA	Solid	3050B	
310-218715-1 MSD	Lakewalk Composite	Total/NA	Solid	3050B	

QC Association Summary

Client: Environmental Troubleshooters
Project/Site: Lakewalk ER

Job ID: 310-218715-1

Metals

Prep Batch: 334139

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-218715-1	Lakewalk Composite	Total/NA	Solid	7471B	
MB 310-334139/1-A	Method Blank	Total/NA	Solid	7471B	
LCS 310-334139/2-A	Lab Control Sample	Total/NA	Solid	7471B	

Analysis Batch: 334556

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-218715-1	Lakewalk Composite	Total/NA	Solid	7471B	334139
MB 310-334139/1-A	Method Blank	Total/NA	Solid	7471B	334139
LCS 310-334139/2-A	Lab Control Sample	Total/NA	Solid	7471B	334139

Analysis Batch: 334789

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-218715-1	Lakewalk Composite	Total/NA	Solid	6020B	334122
LCS 310-334122/2-A	Lab Control Sample	Total/NA	Solid	6020B	334122

Analysis Batch: 334891

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 310-334122/1-A ^5	Method Blank	Total/NA	Solid	6020B	334122
310-218715-1 MS	Lakewalk Composite	Total/NA	Solid	6020B	334122
310-218715-1 MSD	Lakewalk Composite	Total/NA	Solid	6020B	334122

General Chemistry

Analysis Batch: 333830

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-218715-1	Lakewalk Composite	Total/NA	Solid	Moisture	

Lab Chronicle

Client: Environmental Troubleshooters
Project/Site: Lakewalk ER

Job ID: 310-218715-1

Client Sample ID: Lakewalk Composite

Lab Sample ID: 310-218715-1
Date Collected: 10/29/21 14:45
Matrix: Solid
Date Received: 10/30/21 09:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	333830	11/01/21 15:14	SAS	TAL CF

Client Sample ID: Lakewalk Composite

Lab Sample ID: 310-218715-1
Date Collected: 10/29/21 14:45
Matrix: Solid
Date Received: 10/30/21 09:30
Percent Solids: 90.6

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			334241	11/04/21 07:46	TCH	TAL CF
Total/NA	Analysis	8260D		1	334244	11/04/21 12:36	TCH	TAL CF
Total/NA	Prep	WI GRO			334352	11/04/21 16:02	CMM	TAL CF
Total/NA	Analysis	WI-GRO		1	334374	11/06/21 04:16	CMM	TAL CF
Total/NA	Prep	WI DRO PREP			334081	11/03/21 07:44	KMH	TAL CF
Total/NA	Analysis	WI-DRO		1	334222	11/04/21 10:30	DLK	TAL CF
Total/NA	Prep	3050B			334122	11/04/21 10:00	ACM2	TAL CF
Total/NA	Analysis	6020B		5	334789	11/09/21 00:17	SAP	TAL CF
Total/NA	Prep	7471B			334139	11/03/21 11:52	EAM	TAL CF
Total/NA	Analysis	7471B		1	334556	11/05/21 15:06	JNR	TAL CF

Laboratory References:

TAL CF = Eurofins TestAmerica, Cedar Falls, 3019 Venture Way, Cedar Falls, IA 50613, TEL (319)277-2401

Accreditation/Certification Summary

Client: Environmental Troubleshooters
Job ID: 310-218715-1
Project/Site: Lakewalk ER

Laboratory: Eurofins TestAmerica, Cedar Falls

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

Authority	Program	Identification Number	Expiration Date
Minnesota	NELAP	019-999-319	12-31-21

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
Moisture		Solid	Percent Moisture
Moisture		Solid	Percent Solids

Method Summary

Client: Environmental Troubleshooters
Project/Site: Lakewalk ER

Job ID: 310-218715-1

Method	Method Description	Protocol	Laboratory
8260D	Volatile Organic Compounds by GC/MS	SW846	TAL CF
WI-GRO	Wisconsin - Gasoline Range Organics (GC)	WI-GRO	TAL CF
WI-DRO	Wisconsin - Diesel Range Organics (GC)	WI-DRO	TAL CF
6020B	Metals (ICP/MS)	SW846	TAL CF
7471B	Mercury (CVAA)	SW846	TAL CF
Moisture	Percent Moisture	EPA	TAL CF
3050B	Preparation, Metals	SW846	TAL CF
5035	Closed System Purge and Trap	SW846	TAL CF
7471B	Preparation, Mercury	SW846	TAL CF
WI DRO PREP	Wisconsin Extraction (Diesel Range Organics)	WI-DRO	TAL CF
WI GRO	Closed System Purge and Trap	WI-GRO	TAL CF

Protocol References:

EPA = US Environmental Protection Agency

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

WI-DRO = "Modified DRO: Method For Determining Diesel Range Organics", Wisconsin DNR, Publ-SW-141, September, 1995.

WI-GRO = "Modified GRO: Method For Determining Gasoline Range Organics", Wisconsin DNR, Publ-SW-140, September, 1995.

Laboratory References:

TAL CF = Eurofins TestAmerica, Cedar Falls, 3019 Venture Way, Cedar Falls, IA 50613, TEL (319)277-2401

eurofins | Environment Testing TestAmerica

Cooler/Sample Receipt and Temperature Log Form

Client Information

Client: Environmental Troubleshooters

City/State: CITY Duluth STATE MN Project:

Receipt Information

Date/Time Received: DATE 10/30/21 TIME 930 Received By: LR

Delivery Type: ☐ UPS ☒ FedEx SAT ☐ FedEx Ground ☐ US Mail ☐ Spee-Dee
☐ Lab Courier ☐ Lab Field Services ☐ Client Drop-off ☐ Other:_____

Condition of Cooler/Containers

Sample(s) received in Cooler?	☒ Yes	☐ No	*If yes:* Cooler ID:
Multiple Coolers?	☐ Yes	☒ No	*If yes:* Cooler # _____ of _____
Cooler Custody Seals Present?	☐ Yes	☒ No	*If yes:* Cooler custody seals intact? ☐ Yes ☐ No
Sample Custody Seals Present?	☐ Yes	☒ No	*If yes:* Sample custody seals intact? ☐ Yes ☐ No
Trip Blank Present?	☐ Yes	☒ No	*If yes:* Which VOA samples are in cooler? ↓

Temperature Record

Coolant: ☒ Wet ice ☐ Blue ice ☐ Dry ice ☐ Other:_____ ☐ NONE

Thermometer ID: 0 Correction Factor (°C): 0

Temp Blank Temperature – If no temp blank, or temp blank temperature above criteria, proceed to Sample Container Temperature

Uncorrected Temp (°C): 2.6 Corrected Temp (°C): 2.6

Sample Container Temperature

	CONTAINER 1	CONTAINER 2
Container(s) used:		
Uncorrected Temp (°C):		
Corrected Temp (°C):		

Exceptions Noted

1) If temperature exceeds criteria, was sample(s) received same day of sampling? ☐ Yes ☐ No
   a) *If yes:* Is there evidence that the chilling process began? ☐ Yes ☐ No

2) If temperature is <0°C, are there obvious signs that the integrity of sample containers is compromised? (e.g., bulging septa, broken/cracked bottles, frozen solid?) ☐ Yes ☐ No

NOTE: If yes, contact PM before proceeding. If no, proceed with login

Additional Comments

Eurofins TestAmerica, Cedar Falls
3019 Venture Way
Cedar Falls, IA 50613
Phone (319) 277-2401 Fax (319) 277-2425

Chain of Custody Record

TestAmerica Duluth SC
269

eurofins | Environment Testing America

Client Information	Sampler: Emma Burgeson	Lab PM:	Carrier Tracking No(s):	COC No:
Client Contact: John McCarthy	Phone: 218.722.6013	E-Mail:		Page: Page of
Company: Environmental Troubleshooters				Job #:
Address: 3825 Grand Ave	Due Date Requested:			
City: Duluth	TAT Requested (days):			
State, Zip: MN 55802				
Phone: 218.722.6013	PO #:			
Email: jmccarthy@etsmn.com	WO #:			
Project Name: Lakewalk ER	Project #:			
Site: Duluth MN	SSOW#:			

Analysis Requested

Preservation Codes:

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	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)	Dry Weight	GRO	DRO	VOC	RCA Metals									Total Number of containers	Special Instructions/Note:
Preservation Code:							N	F	N	F	N										
Lakewalk Composite	10.29.21	1445	C	S			X	X	X	X	X									2	

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	Date/Time	Company	Received by	Date/Time	Company
1	Emma Burgeson	1530 10.29.21	ET	Melissa	10/29/21 1530	Eurofins
2	Melissa	10/29/21 1630		[illegible]	10/30/21 930	ETA
3						

Custody Seals Intact:	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks:
Δ Yes Δ No		

Ver: 01/16/2019

11/9/2021

Login Sample Receipt Checklist

Client: Environmental Troubleshooters

Job Number: 310-218715-1
SDG Number:

Login Number: 218715
List Number: 1
Creator: Homolar, Dana J

List Source: Eurofins TestAmerica, Cedar Falls

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

Print Date: 11/30/2021

Start Date: 11/1/2021 Stop Date: 11/29/2021

BILL TO ACCOUNT

2101 SHAMROCK TRUCKING. LLC

CIT42

City of Duluth - Shoreside

of 4 East Water St

Duluth. MN 55812

TICKET	Manifest	DATE	Waste Stream	Waste Name	TONS
82560	72995 WO#5(	11/17/21	21-0057	Petroleum Contaminated Soil	8.57
	# of Loads: 1			**SUBTOTAL FOR Waste Stream**	**8.57**
		GRAND TOTALS			**8.57**

58460

Shamrock Landfill
761 Minnesota 45
Cloquet, MN 55720

INBOUND CHARGE

SITE	TICKET	GRID	WEIGHMASTER
01	00082560	LANDFILL	ALEXUS P

DATE IN	DATE OUT	TIME IN	TIME OUT	VEHICLE	ROLL OFF
11/17/21	11/17/21	13:33	13:33	102-20	21-0057

REFERENCE	ORIGIN
21-0057	VIN: YBN7242-MN-3AXLES

002101 SHAMROCK TRUCKING, LLC
PO BOX 2232
CLOQUET MN 55720

Scale 1 Gross Wt.	46060 LB
Stored Tare Wt.	28920 LB
Net Weight	17140 LB

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	FEE	TOTAL
8.57	TON	Industrial InterComp				

NET AMOUNT
TENDERED
CHANGE
CHECK NO.

Generator: CITY OF DULUTH - SHORESIDE
Address: OF 4 EAST WATER ST
City/ST: DULUTH, MN 55812
Manifest: 72995 WO#58460

SKB-WCI 4410

SIGNATURE _____

Shamrock Landfill
761 Minnesota 45
Cloquet, MN 55720

INBOUND CHARGE

SITE	TICKET	GRID	WEIGHMASTER
01	00082560	LANDFILL	ALEXUS P

DATE IN	DATE OUT	TIME IN	TIME OUT	VEHICLE	ROLL OFF
11/17/21	11/17/21	13:33	13:33	102-20	21-0057

REFERENCE	ORIGIN
21-0057	VIN: YBN7242-MN-3AXLES

002101 SHAMROCK TRUCKING, LLC
PO BOX 2232
CLOQUET MN 55720

Scale 1 Gross Wt.	46060 LB
Stored Tare Wt.	28920 LB
Net Weight	17140 LB

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	FEE	TOTAL
8.57	TON	Industrial InterComp				

NET AMOUNT
TENDERED
CHANGE
CHECK NO.

Generator: CITY OF DULUTH - SHORESIDE
Address: OF 4 EAST WATER ST
City/ST: DULUTH, MN 55812
Manifest: 72995 WO#58460

SKB-WCI 4410

SIGNATURE _____

SKB ENVIRONMENTAL

Shamrock Landfill

Non Hazardous Industrial Waste

584LD

72995

Shipping Manifest

1. Generator's US EPA ID No. *(if any)*

1. Page 1 of page(s)

GENERATOR

3. Generator's Name and Facility Address
City of Duluth
Shoreside of East Water Street Duluth, MN 55812

Mailing Address
City of Duluth
Shoreside of East Water Street Duluth, MN 55812

4. Generator's Phone: (218) 730-4434 Fax:

5. Transporter 1 Company Name
102-20 Phone:

6. Transporter 2 Company Name
Phone:

7. Designated Facility Name and Site Address
SKB/Shamrock Environmental, LLC
761 MN Highway 45
Cloquet, MN 55720 Phone: 218-878-0112

8. U.S. DOT Description (including Proper Shipping name)	9. Containers No.	9. Containers Type	10. Total Quantity	11. Unit Wt/Vol	12. Waste Profile Sheet#
a. Non Hazardous Industrial Waste - (Petroleum Contaminated Soil)					
b.					
c.					
d.					

13. Additional Descriptions for Materials Listed Above (Indicate waste stream Approval # below)
a. CL
b. CL CL21-0057 Petroleum Contaminated Soil
c. CL
d. CL

14. Special Handling Procedures for Wastes Listed Above

15. Special Handling Instructions and Additional Information
Emergency Contact:

SKB Use Only
Load # 82560

16. **GENERATOR'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 government regulations.

Printed/Typed Name: X Kevin Johnson Signature: X Kevin Johnson Month 1 Day 1 Year 21

TRANSPORTER

17. Transporter 1 Acknowledged of Receipt of Materials

Printed/Typed Name: Anthony Simonson Signature: X Month 1 Day 1 Year 21

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name Signature Month Day Year

FACILITY

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of non-hazardous materials covered by this Manifest except as noted in item 19.

Printed/Typed Name: Alexis Trulio Signature: Alexis Trulio Month 1 Day 1 Year 21

White - Return to Generator **Canary** - Facility Copy

Pink - Transporter **Goldenrod** - Generator Copy

Rachel Change Order Request

Change Order Request No. 4 - SITE H

Rachel Contracting, Inc.
5819 Highway 2
Hermantown, MN 55810
PH: 218.355.8487

Date: 10/07/21

Rachel Contracting
5819 Highway 2
Hermantown, MN 55810

Project Manager: Mike Friend
218.355.8487

Project Coordinator: Jennifer Amenrud
763.424.1506

TO: **AMI Consulting Engineers**
91 Main Street
Superior, WI 54880

ATTN:
Chase Dewhirst
651.263.9915

JOB NAME/LOCATION

Rachel Job # 21074
Name Lakewalk Phase IV

We hereby submit our price for the following pricing request reflecting the change(s) attached on the following Summary Sheet.

	Amount
EWA 005 and 006 ***SITE H*** Contaminated Soil	$12,891.91
Total CO Request	**$12,891.91**

ACCEPTED - The above prices and specifications of this Pricing Request are satisfactory and are hereby accepted. All work to be performed under same terms and conditions as specified in original contract unless otherwise stipulated.

Date: _____

Signature: _____

If you have any questions regarding this change order request, please call the Project Manager listed at the top of this page.

Thank you.

RACHEL | COMMITTED TO SAFETY

EXTRA WORK AUTHORIZATION

005

Owner/Contractor	City of Duluth /AMI - Zac Morris	**Date:**	10/28/21
Project Name	Lakewalk Phase IV	**Project Number**	21074
Project Location	10th - 21st Avenue East, Duluth Lakewalk	**Project Manager**	Mike Friend
		Report Number	1

Equipment/Operator

Equip #	ATTACH #	Cost Code	Description	Hours	Unit cost	Amount
						$ -
						$ -
						$ -
						$ -
						$ -
						$ -
						$ -
				Total Equipment Cost		$ -

Labor

QUANTITY	COST CODE	DESCRIPTION	HOURS	UNIT COST	AMOUNT
		Operator (Darin Jerikovsky)	4	$105.00	$ 420.00
		Operator OT	0	$35.00	$ -
		Labor (Kent Johnson)	4	$100.00	$ 400.00
		Labor OT	0	$35.00	$ -
		Foremen (Dan Erickson)	5	$145.00	$ 725.00
		Foremen OT	0	$35.00	$ -
				Total Labor Cost	**$ 1,545.00**

Material/Other

P.O.	VENDOR	DESCRIPTION	QUANTITY	UNIT COST	AMOUNT
		Wren Works Assistance and Standby time	1	$1,457.50	$ 1,457.50
					$ -
					$ -
					$ -
					$ -
				Total Material Cost	**$ 1,457.50**

Trucking

# TRUCKS	TRUCK TYPE	FROM	TO	HOURS	UNIT COST	AMOUNT
						$ -
						$ -
						$ -
						$ -
						$ -
						$ -
					Total Trucking Cost	**$ -**

Description of work

We found contaminated soil while digging for the Toe Stones on the west end of Site H by the old foundation which ended up creating a sheen of oil on the water, AMI was called immediately and came to the site to inspect. We placed oil booms as soon as possible and cleaned up the sheen with help from Wren Works and their work boat. We also placed a berm of dirt around the hole and waited for further direction. MPCA and Environmental troubleshooters came on site in the afternoon and discussed what to do. We ordered a dumpster with a liner and scheduled Environmental Troubleshooters to be on site tomorrow to work with us to abate the contaminated soil.

Work Authorized and approved by:

Owners Representative	DATE
Project Superintendent	
TITLE	
Dan Erickson	
Rachel Representative	DATE

Cost Summary

Equipment	$	-
Labor	$	1,545.00
Material	$	1,457.50
Trucking	$	-
Total Daily Cost	**$**	**3,002.50**

WREN WORKS, LLC
5753 South Forest Road
Poplar, WI 54864

Change Order Request

2

Application Date: 11/4/2021

To: Rachel Contracting (Owner): Mike Friend	From: Wren Works, llc 5733 S. Forest Road, Poplar, WI 54864	Via: (Engineer)
Project: Lake Walk Phase 4	Contract:	
Owner's Contract No.:	Contractor's Project No.: 15821	Engineer's Project No.:

Change Order Summary

Description	Additions	Deductions
Man hours	$900.00	
Equipment down time	$4,675.00	Remove.
Used equpment (work boat)	$325.00	
Oil boom and diapers	$150.00	
TOTALS	$6,050.00	
NET CHANGE BY CHANGE ORDERS	~~$6,050.00~~ 1,325 x 10% = 1,457.50	

Change in Contract Times

(note changes in Milestone if applicable)

Original Contract Times:

Substantial Completion: _____

[Increase] [Decrease] of this Change Order

Substantial Completion: _____

Change Order Detail

Fleet downtime, equipment, materials and man hours for assisting with oil released near site H.

Wren Works brought out our Jon boat, oil boom and diapers to assist with the unexpected release of "oil" at site H.
During this time the tug and barge were unable to complete primary project of delivering rock to site H until the release was dealt with.

By: _____
Engineer (if required)

Title: _____

By: _____
Owner (Authorized Signature)

Title: _____

By: Troy Burkhart
Wren Works, LLC

Title: Project Manager

10:33 AM - 3 from Wren Works in boat.

11:57 AM - barge delivering stone.

RACHEL | COMMITTED TO SAFETY

EXTRA WORK AUTHORIZATION

006

Owner/Contractor City of Duluth /AMI - Zac Morris
Project Name Lakewalk Phase IV
Project Location 10th - 21st Avenue East, Duluth Lakewalk

Date: 10/29/21
Project Number 21074
Project Manager Mike Friend
Report Number 1

Equipment/Operator

Equip #	ATTACH #	Cost Code	Description	Hours	Unit cost	Amount
			Cat 336FL H2 + G.C. Backhoe	3	$270.00	$ 810.00
OBC-000160		2-90-100	Cat 259D3 Pro Plus CTL Skidsteer	4	$175.00	$ 700.00
						$ -
						$ -
						$ -
						$ -
						$ -
					Total Equipment Cost	**$ 1,510.00**

Labor

QUANTITY	COST CODE	DESCRIPTION	HOURS	UNIT COST	AMOUNT
		Foremen (Dan Erickson)	4	$145.00	$ 580.00
		Labor (Kent Johnson)	6	$100.00	$ 600.00
					$ -
					$ -
					$ -
				Total Labor Cost	**$ 1,180.00**

Material/Other

P.O.	VENDOR	DESCRIPTION	QUANTITY	UNIT COST	AMOUNT
		Waste Connections (Disposal)	1	$840.84	$ 840.84
		Environmental Troubleshooters (see attached)	1	$6,358.57	$ 6,358.57
					$ -
					$ -
					$ -
				Total Material Cost	**$ 7,199.41**

Trucking

# TRUCKS	TRUCK TYPE	FROM	TO	HOURS	UNIT COST	AMOUNT
						$ -
						$ -
						$ -
						$ -
						$ -
						$ -
					Total Trucking Cost	**$ -**

Description of work

Worked with Environmental Troubleshooters on site H testing and cleaning up the contaminated soils. Hauled 10 skiddy buckets out and put in the lined dumpster.

Work Authorized and approved by:

Owners Representative — DATE

Project Superintendent
TITLE

Dan Erickson
Rachel Representative — DATE

Cost Summary

Equipment	$	1,510.00
Labor	$	1,180.00
Material	$	7,199.41
Trucking	$	-
Total Daily Cost	**$**	**9,889.41**

WASTE CONNECTIONS

SHAMROCK TRUCKING
A Waste Connections Company
251 STARKEY ST
SAINT PAUL, MN 55107-1821
DISTRICT NO. 3077

ACCOUNT NO.	3077-30-001
INVOICE NO.	11589
STATEMENT DATE	12/1/2021
DUE DATE	ON RECEIPT
BILLING PERIOD	11/1/2021-11/30/2021

RACHEL CONTRACTING
4180 NAPIER COURT NE
SAINT MICHAEL, MN 55376-9509

FOR ASSISTANCE CALL	
CUSTOMER SERVICE	218-878-0200
ONE TIME PAYMENTS	855-569-2719

INVOICE STATEMENT

Date	Description				Amount
	Previous Balance				**$689.70**
	Total Payments				**$0.00**
	Service Location		**RACHEL CONTRACTING PO#21074**		
	Acct #3077-30-020		**315 N. 8TH AVE EAST**		
11/19/2021	HAUL 20 YD	57615	21074	(1.00 @ $350.00)	$350.00
11/19/2021	FUEL AND MATERIAL SURCHARGE				$15.75
	3077-30-020 Charges and Taxes				**$365.75**
	Service Location		**RACHEL CONTRACTING 21ST AVE & WATER ST**		
	Acct #3077-30-022		**21ST AVE**		
11/17/2021	ROLL OFF RENTAL	BOX RENT NOV.	BOX RENT NOV.	(1.00 @ $100.00)	$100.00
11/17/2021	LINER FEE	58460	NO RETURN 20Y	(1.00 @ $75.00)	$75.00
11/17/2021	DISPOSAL INDUSTRIAL TON	58460	NO RETURN 20Y	(8.57 @ $20.00)	$171.40
11/17/2021	HAUL 20 YD	58460	NO RETURN 20Y	(1.00 @ $400.00)	$400.00
11/17/2021	FUEL AND MATERIAL SURCHARGE				$18.00
	3077-30-022 Charges and Taxes				**$764.40**
	Current Charges And Fees				**$1130.15**
	Total Due				**$1819.85**

Please remit to the address below and return your remit stub with your payment

WASTE CONNECTIONS

SHAMROCK TRUCKING
A Waste Connections Company
251 STARKEY ST
SAINT PAUL, MN 55107-1821

ACCOUNT NO.	3077-30-001
INVOICE NO.	11589
STATEMENT DATE	12/1/2021
DUE DATE	ON RECEIPT
PAY THIS AMOUNT	$1819.85

WRITE AMOUNT PAID $

RACHEL CONTRACTING
4180 NAPIER COURT NE
SAINT MICHAEL, MN 55376-9509

MAIL PAYMENTS TO:
SHAMROCK TRUCKING
A Waste Connections Company
251 STARKEY ST
SAINT PAUL, MN 55107-1821

Print Date: 11/30/2021

Start Date: 11/1/2021 Stop Date: 11/29/2021

BILL TO ACCOUNT
2101 SHAMROCK TRUCKING. LLC
2
City of Duluth - Shoreside
of 4 East Water St
Duluth. MN 55812

TICKET	Manifest	DATE	Waste Stream	Waste Name	TONS
82560	72995 WO#5	11/17/21	21-0057	Petroleum Contaminated Soil	8.57
	# of Loads: 1			**SUBTOTAL FOR Waste Stream**	**8.57**
		GRAND TOTALS			**8.57**

58460

Shamrock Landfill
761 Minnesota 45
Cloquet, MN 55720

INBOUND CHARGE

SITE	TICKET	GRID	WEIGHMASTER
01	00082560	LANDFILL	ALEXUS P

DATE IN	DATE OUT	TIME IN	TIME OUT	VEHICLE	ROLL OFF
11/17/21	11/17/21	13:33	13:33	102-20	21-0057

REFERENCE	ORIGIN
21-0057	VIN: YBN7242-MN-3AXLES

002101 SHAMROCK TRUCKING, LLC
PO BOX 2232
CLOQUET MN 55720

Scale 1 Gross Wt. 46060 LB
Stored Tare Wt. 28920 LB
Net Weight 17140 LB

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	FEE	TOTAL
8.57	TON	Industrial InterComp				

NET AMOUNT
TENDERED
CHANGE
CHECK NO.

Generator: CITY OF DULUTH - SHORESIDE
Address: OF 4 EAST WATER ST
City/ST: DULUTH, MN 55812
Manifest: 72995 WO#58460

SKB-WCI 4410

SIGNATURE _____

Shamrock Landfill
761 Minnesota 45
Cloquet, MN 55720

INBOUND CHARGE

SITE	TICKET	GRID	WEIGHMASTER
01	00082560	LANDFILL	ALEXUS P

DATE IN	DATE OUT	TIME IN	TIME OUT	VEHICLE	ROLL OFF
11/17/21	11/17/21	13:33	13:33	102-20	21-0057

REFERENCE	ORIGIN
21-0057	VIN: YBN7242-MN-3AXLES

002101 SHAMROCK TRUCKING, LLC
PO BOX 2232
CLOQUET MN 55720

Scale 1 Gross Wt. 46060 LB
Stored Tare Wt. 28920 LB
Net Weight 17140 LB

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	FEE	TOTAL
8.57	TON	Industrial InterComp				

NET AMOUNT
TENDERED
CHANGE
CHECK NO.

Generator: CITY OF DULUTH - SHORESIDE
Address: OF 4 EAST WATER ST
City/ST: DULUTH, MN 55812
Manifest: 72995 WO#58460

SKB-WCI 4410

SIGNATURE _____

SKB ENVIRONMENTAL

Shamrock Landfill

Non Hazardous Industrial Waste

8546D

72995

Shipping Manifest

1. Generator's US EPA ID No. *(If any)*

1. Page 1 of page(s)

GENERATOR

3. Generator's Name and Facility Address
City of Duluth
Shoreside of East Water Street Duluth, MN 55812

Mailing Address
City of Duluth
Shoreside of East Water Street Duluth, MN 55812

4. Generator's Phone: (218) 730-4434

Fax:

5. Transporter 1 Company Name

102-20

Phone:

6. Transporter 2 Company Name

Phone:

7. Designated Facility Name and Site Address
SKB/Shamrock Environmental, LLC
761 MN Highway 45
Cloquet, MN 55720
Phone: 218-878-0112

8. U.S. DOT Description (Including Proper Shipping name)	9. Containers No.	9. Containers Type	10. Total Quantity	11. Unit Wt/Vol	12. Waste Profile Sheet#
a. Non Hazardous Industrial Waste - (Petroleum Contaminated Soil)					
b.					
c.					
d.					

13. Additional Descriptions for Materials Listed Above (Indicate waste stream Approval # below)
a. CL
b. CL CL21-0057 Petroleum Contaminated Soil
c. CL
d. CL

14. Special Handling Procedures for Wastes Listed Above

15. Special Handling Instructions and Additional Information
Emergency Contact:

SKB Use Only
Load # 87560

16. **GENERATOR'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 government regulations.

Printed/Typed Name: X Kevin Johnson | Signature: X | Month 1 | Day 17 | Year 21

TRANSPORTER

17. Transporter 1 Acknowledged of Receipt of Materials

Printed/Typed Name: Anthony Simonson | Signature: X | Month 1 | Day 17 | Year 21

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name | Signature | Month | Day | Year

FACILITY

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of non-hazardous materials covered by this Manifest except as noted in Item 19.

Printed/Typed Name: Alexis Phillips | Signature | Month 1 | Day 17 | Year 21

White - Return to Generator

Canary - Facility Copy

Pink - Transporter

Goldenrod - Generator Copy

Environmental Troubleshooters, Inc.

3825 Grand Ave,
Duluth, MN 55810
Tel: 218-722-6013 Fax: 218-722-6319

Invoice

Rachel

Invoice Date: Dec 6, 2021
Invoice Num: 8754
Billing Through: Dec 6, 2021

Rachel Lakewalk ER (21-1008:) - Managed by (JJM)

Professional Services

Date	Employee	Description	Hours	Rate	Amount
10/28/2021	JJM	Project Mgmt. & Admin.	2.00	$175.00	$350.00
10/28/2021	BTH	Soil Field Screening & Sampling	3.00	$125.00	$375.00
10/29/2021	JJM	Project Mgmt. & Admin.	2.00	$175.00	$350.00
10/29/2021	EB	Excavation Soil Sampling	11.00	$125.00	$1,375.00
10/29/2021	BTH	Soil Field Screening & Sampling	5.00	$125.00	$625.00
11/2/2021	JJM	Site visit	1.00	$175.00	$175.00
11/9/2021	JJM	Lab calls & emails	1.00	$175.00	$175.00
11/9/2021	TK	CAD Drawing	1.50	$100.00	$150.00
11/22/2021	BTH	Report Preparation	0.50	$125.00	$62.50
11/23/2021	BTH	Report Preparation	2.00	$125.00	$250.00
11/23/2021	TK	CAD Drawing	1.00	$100.00	$100.00
12/2/2021	BTH	Report Preparation	0.50	$125.00	$62.50
12/2/2021	JJM	Report Preparation	2.00	$175.00	$350.00
12/3/2021	JJM	Report Preparation	2.00	$175.00	$350.00
				Total Service Amount:	**$4,750.00**

Reimbursable Expenses:

Date	Employee	Description	Units	Cost Rate	Cost Amt	Amount
10/28/2021	BTH	Light duty truck	1.00	$100.00	$100.00	$100.00
10/28/2021	BTH	Photo ionization detector	1.00	$100.00	$100.00	$100.00
10/28/2021	EB	Mileage	14.00	$0.54	$7.56	$7.56
10/28/2021	BTH	Sample kit	1.00	$50.00	$50.00	$50.00
10/29/2021	BTH	Light duty truck	1.00	$100.00	$100.00	$100.00
10/29/2021	BTH	Photo ionization detector	1.00	$100.00	$100.00	$100.00
10/29/2021	BTH	Mileage	14.00	$0.54	$7.56	$7.56
10/29/2021	EB	Sample kit	1.00	$50.00	$50.00	$50.00
10/29/2021	BTH	Steel open top drum	2.00	$145.00	$290.00	$290.00
11/11/2021	JJM	Test America - waste profile sample analytical testing	1.00	$196.00	$196.00	$225.40
					Total Expenses:	**$1,030.52**
					Amount Due This Invoice:	**$5,780.52**

This invoice is due upon receipt

AMI Labor Dedicated to Hidden Damages

211009 City of Duluth Lakewalk Shoreline Rehabilitation Phase IV

Task 4 - Construction Admin & Inspections

Field Work

Contaminated Material Response

Labor Group: Employee Type/Employee/Activity Expense & Consultant Group: Type/Vendor/Activity		Cost Hrs/Unts		Spent Amount	Billed Hrs/Unts		Billed Amount	WIP Amount
Labor		**18.00**		**2,383.75**			**0.00**	**150.00**
Engineer III		**11.75**		**1,762.50**			**0.00**	**150.00**
Chase A. Dewhirst		**1.25**		**187.50**	**0.00**		**0.00**	**0.00**
Engineering		**1.25**		**187.50**	**0.00**		**0.00**	**0.00**
	Date	Hrs/Unts	Spent Rate	Spent Amount	Billed Hrs/Unts	Billed Rate	Billed Amount	WIP Amount
1.25 = General Internal & External Discussions on Contamination Material Discovery	10/28/2021	1.25	150.00	187.50	0.00		0.00	0.00
Zachary L. Morris		**10.50**		**1,575.00**	**0.00**		**0.00**	**150.00**
Engineering		**10.50**		**1,575.00**	**0.00**		**0.00**	**150.00**
	Date	Hrs/Unts	Spent Rate	Spent Amount	Billed Hrs/Unts	Billed Rate	Billed Amount	WIP Amount
3.50 Contaminated material response *3.00 Contaminated material response*	10/28/2021	6.50	150.00	975.00	0.00		0.00	0.00
0.50 Contaminated Material Response followup	10/29/2021	0.50	150.00	75.00	0.00		0.00	0.00
0.50 Review of contaminated material documentation and requesting City to sign authorization form	11/10/2021	0.50	150.00	75.00	0.00		0.00	0.00
0.75 Third Party Authorization for Contaminated Materials and coordination *0.25 Reviewing contaminated materials sheets*	11/11/2021	1.00	150.00	150.00	0.00		0.00	0.00
1.00 Generating waste profile form and filing documentation	11/15/2021	1.00	150.00	150.00	0.00		0.00	0.00
Finalizing Hidden Damages Memo	1/7/2022	1.00	150.00	150.00	0.00		0.00	150.00
Engineer I		**6.25**		**621.25**			**0.00**	**0.00**
Afton M. Douville		**0.75**		**71.25**	**0.00**		**0.00**	**0.00**
Engineering		**0.75**		**71.25**	**0.00**		**0.00**	**0.00**
	Date	Hrs/Unts	Spent Rate	Spent Amount	Billed Hrs/Unts	Billed Rate	Billed Amount	WIP Amount
0.25 - find photos/documentation	11/11/2021	0.25	95.00	23.75	0.00		0.00	0.00
0.5 - hidden damages memo	12/21/2021	0.50	95.00	47.50	0.00		0.00	0.00
Nicole E. Peterson		**5.50**		**550.00**	**0.00**		**0.00**	**0.00**
Engineering		**5.50**		**550.00**	**0.00**		**0.00**	**0.00**
	Date	Hrs/Unts	Spent Rate	Spent Amount	Billed Hrs/Unts	Billed Rate	Billed Amount	WIP Amount
Drafting Hidden Damages memo	12/21/2021	5.50	100.00	550.00	0.00		0.00	0.00
		18.00		**2,383.75**			**0.00**	**150.00**

Hidden Damages Invoicing Emails dated May 11, 2022

Zac Morris

From: Randel Rosandich <rrosandich@DuluthMN.gov>
Sent: Wednesday, May 11, 2022 2:45 PM
To: Zac Morris
Cc: Mike LeBeau; Robert Hurd
Subject: RE: Phase IV Pay App 3 and Change Order No.1 Update

Zac,
The total amount for the hidden damages was approved by FEMA, including the $2383.75 for the engineering services. I think you should invoice for those services if you have not done so. Please let me know if you have any questions.
Thank you,

Randy Rosandich
218-626-5857

Construction Project Coordinator
Property & Facilities Management
1532 West Michigan Street
Duluth, MN 55806

From: Zac Morris <zac.morris@amiengineers.com>
Sent: Wednesday, May 11, 2022 2:27 PM
To: Randel Rosandich <rrosandich@DuluthMN.gov>
Cc: Mike LeBeau <mlebeau@DuluthMN.gov>; Robert Hurd <rhurd@DuluthMN.gov>
Subject: RE: Phase IV Pay App 3 and Change Order No.1 Update

Hey Randy,

Following up on the Hidden Damages (Contaminated Materials) which were encountered at Site H last year. Was this letter well-received with FEMA? It looks like we had $2,383.75 included in this memo for our efforts associated with the response. Not a huge amount but worth following up on.

Let me know your thoughts.

Thank you,

Zac

Zac Morris, PE (MN, WI, MI) – Coastal Department Manager
AMI Consulting Engineers, PA
P: 651.344.8783 Ext. 45

MN DNR Permit Fee Invoice and Payment
dated June 17, 2021

DEPARTMENT OF NATURAL RESOURCES

MNDNR PERMITTING AND REPORTING SYSTEM (MPARS)

WATER PERMIT INVOICE

Permit Number
2021-1705
Invoice Date
06/17/2021
Payment Due Date
07/17/2021

AMI CONSULTING ENGINEERS
ATTN: ANGLY ULSCHMID
91 MAIN STREET3276 FANUM ROAD
SUITE 100
ST. PAUL, MN 55110

PROJECT: COD Shoreline Rehabilitation Phase 4

**** PAYMENT DUE ****

Please pay the Total Due amount shown below:

#	Description	Amount
1	Application Fee - Public Waters Work Individual Permit Cost, Shoreline, and/or Volume Fee greater than $3,000.00 (maximum cap). Riprap (Natural Rock), Revetment, Recovery of Shoreline Lost by Erosion, Erosion Control/Stabilization Fill & Grading; T50N-R14E-S24, T50N-R14E-S23, T50N-R14W-S23SENE; St. Louis County	$3,000.00
Comments	- **TOTAL DUE**	**$3,000.00**

Payment for the Total Due amount is due within 30 days of the Invoice Date. If the due date falls on a weekend or holiday, payment must be received by the state's regular business day prior to the weekend and/or holiday. You can pay online or by mail.

Please be advised that payment must be received before we can take any further action on your permit application. Failure to pay within 60 days will result in your application being automatically withdrawn.

PAY ONLINE (Visa, MasterCard, Discover, or automatic transfer from checking account)

- ☞ Sign-In to your MPARS account or create an account at https://webapps11.dnr.state.mn.us/mpars/public
- ☞ Click on the Financial tab
- ☞ Find the permit number "2021-1705" and select "Make Online Payment" from the "Action" column

PAY BY MAIL

- ☞ Make checks payable to: **MN DNR Ecological and Water Resources**
- ☞ Mail a copy of this invoice and your payment of **$3,000.00** to:
  MINNESOTA DEPARTMENT OF NATURAL RESOURCES - OMB
  500 LAFAYETTE ROAD, BOX 10
  ST. PAUL, MN 55155-4010
- ☞ **A COPY OF THIS INVOICE MUST BE INCLUDED WITH YOUR CHECK**

DEPARTMENT OF NATURAL RESOURCES

DNR Use Only

Payment Method: R29029 OMB EWR Waters

Code	Amount
351	3,000.00

Received	*Deposited*	*Entered*

Permit #
2021-1705
Amount
Check #

If you have any questions, please contact the Minnesota DNR by telephone (651-259-5678) or by email - MPARS.dnr@state.mn.us

Zac Morris

From: Minnesota DNR <epaynoreply@usbank.com>
Sent: Thursday, June 17, 2021 1:59 PM
To: Zac Morris
Subject: Payment Confirmation for MPARS

*** PLEASE DO NOT RESPOND TO THIS EMAIL ***

Thank you for your payment.

This email is to confirm your payment submitted on Jun-17-2021 for fees associated with DNR Water Permits.

Confirmation Number: BURWAT000236465
Payment Amount: $3,000.00
Scheduled Payment Date: Jun-17-2021
Amount Due: $3,000.00

Payer Name: Zachary Morris
Credit Card Number: *2492
Credit Card Type: VISA
Approval Code: 01983G

Merchant: MNDNR Wtr Permits
Website: http://www.mndnr.gov/mpars/signin

If you have questions about this payment or need assistance, please view your MPARS account online at www.mndnr.gov/mpars/signin or send an email to mpars.dnr@state.mn.us.

Thank you for using the Minnesota DNR electronic payment system.

U.S. BANCORP made the following annotations
