August 18, 2021

The Wisconsin Department of Natural Resources
Remediation and Redevelopment Program
Attn: Maizie Reif
2984 Shawano Ave
Green Bay, WI 54913-6727
Maizie.reif@wisconsin.gov

RE: **Perimeter Solutions Gasoline Spill Report**
1520 Brookfield Avenue
Village of Howard, Brown County, Wisconsin
WDNR SERTS ID: 20210513NE05-1

Dear Ms. Reif:

Please find attached the Spill Report summarizing the Perimeter Solutions gasoline spill located at 1520 Brookfield Avenue, in the Village of Howard, Brown County, Wisconsin.

Valley Environmental Response appreciates the opportunity to provide this report to you. Please feel free to contact me with any questions.

Sincerely,

Chuck Anderson

Chuck Anderson
Valley Environmental Response

CC: Mitch Hubert – mitch.hubert@perimeter-solutions.com
Pamela Havelka-Rivard – pamela.havelka-rivard@perimeter-solutions.com
Wally Moore – wally.moore@perimeter-solutions.com
File

SPILL REPORT

PERIMETER SOLUTIONS GASOLINE SPILL

1520 Brookfield Avenue
Village of Howard
Brown County, Wisconsin

Prepared For: The Wisconsin Department of Natural Resources
Remediation and Redevelopment Program
Attn: Maizie Reif
2984 Shawano Ave
Green Bay, WI 54313-6727

Prepared By: Valley Environmental Response
2850 Jackson Street
Oshkosh, WI 54901

Report Date: August 18, 2020

WDNR Spill ID: 20210513NE05-1

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APPENDICES

1.0 INTRODUCTION

Valley Environmental Response (VER) was contracted by the Solberg Company/Perimeter Solutions to respond to and clean up impacts from a gasoline spill resulting from a line failure while transferring gasoline from an onsite underground storage tank (UST) into the site building. The spill occurred at 1520 Brookfield Avenue in the Village of Howard, Brown County, Wisconsin. More specifically, the spill occurred in the northwest ¼ of the southeast ¼ of Section 3, Township 24 North, Range 20 East at Wisconsin Transverse Mercator (WTM) Coordinates: 674299, 458552 as identified on the attached Figure 1 - Site Location Map and Figure 2 – Spill Location Map.

The gasoline spilled on to the ground north and west of the concrete pad located above the gasoline UST, and ran over ground to the west, toward the site building, and to the south around the edge of the concrete pad where it soaked into the ground surface. VER dispatched to the site May 13th, 2021, to evaluate the situation, surrounded the spill location with petroleum absorbent boom; and determined the resources that would be necessary to properly respond to the release.

It should be noted that this site is also the location of a previously closed gasoline release identified as Wisconsin Department of Natural Resources (WDNR) BRRTS 03-05-584180 The Solberg Co.; and that an active site investigation is underway at the site associated with a release of perfluoroalkyl and polyfuoroalkyl substances (PFAS), The Solberg Co – Site 2, WDNR BRRTS # 02-05-587486; both of which can be reviewed on the WDNR database.

On May 19th through the 27th, 2021, VER mobilized staff to the site to complete the response actions associated with the gasoline spill.

This report is written to summarize the response action and fulfill the reporting requirements associated with the release.

1.1 Nature and Duration of Discharge

Based on discussions with the facility staff, the gasoline spill was caused as the result of a failed line while pumping gasoline and water from the site gasoline UST into the facility building to be put back through their fuel water separator system. It is estimated that up to 300 gallons of gasoline mixed with some water was released from the broken line and spread over the ground surrounding the concrete pad located over the fuel water separator UST system.

VER arrived on site on May 13, 2021. Initial assessment of the spill identified that the gasoline and water had pumped on to the ground surface north, west and south of the concrete pad located over the UST system where it soaked into the ground surface. In response, VER surrounded the entire spill area with petroleum absorbent boom prior to spill excavation activities. The spill was contained at the time of the initial assessment by VER.

Cleanup efforts are described in detail in Section 2.0.

1.2 Prior Mitigation Efforts

Prior to VER arriving on site, facility staff utilized absorbent pads and pigs to collect fuel pooled on the ground surface. The absorbents used by the staff were containerized for disposal by facility staff.

1.3 Weather Conditions

Weather conditions over the duration of the discharge and subsequent response action to excavate the gasoline and diesel impacted soil varied from partly cloudy to rain, with temperatures between 50 and 90 degrees Fahrenheit. Wind was variable. Work was conducted during favorable weather (no lightening).

1.4 Migration Potential of Release

The following general site conditions were noted relative to potential migration issues that needed to be considered:

- Surface Conditions – The surface of the area within the vicinity of the spill consisted of a concrete pad located over the fuel water UST system which is surrounded by concrete bumpers and grass landscaping. The entire area where the fuel spilled onto the surface consisted of grass.

- Subsurface Soil Conditions – The soil encountered in the location of the spill outside the concrete bumpers consisted of sand and silty sand soils to the depth excavated at approximately 18 inches below ground surface (bgs). Pea gravel was also present along the edges and beneath the concrete pad and is associated with backfill of the USTs.

- Surface Water Bodies – The nearest surface water body is the facility stormwater retention pond locate approximately 150 feet south of the spill site. The gasoline spilled soaked into the ground around the concrete pad located over the UST system and therefore impacts to surface water do not appear to be a concern associated with this spill.

- Drains or Storm Sewers – The spill is located in a fairly rural area. No drains or storm sewers were present in the area of the spill.

- Depth to Groundwater – Depth to groundwater beneath the site is relatively shallow and appeared present at approximately 18 inches bgs just north of the concrete pad located over the UST system. Based on analytical results from the soil sample collected at depth north of the concrete pad over the UST system, further assessment of potential gasoline impacts to groundwater appears warranted.

- Integrity of Containment Area – Gasoline and water was released from the ruptured transfer line north and west of the concrete pad located over the UST system and soaked into the surrounding soils. The entire area was surrounded by petroleum absorbent boom at the time of the initial response.

The initial response appeared sufficient as no indication any impact to any of the boom occurred and no evidence of surficial fuel migration beyond the initial spill location was observed.

2.0 RESPONSE ACTION DOCUMENTATION

This section documents the response action performed by VER.

2.1 Initial Site Conditions

As noted in Section 1.0, VER arrived on site on May 13, 2021. Initial assessment of the spill identified that the gasoline and water had pumped on to the ground surface north, west and south of the concrete pad located over the UST system where it soaked into the ground surface. In response, VER surrounded the entire spill area with petroleum absorbent boom prior to spill excavation activities. The spill was contained at the time of the initial assessment by VER.

Following initial assessment and based on discussions with the WDNR, VER mobilized support staff and equipment to the site between May 19th and 27th, 2021 to complete the response actions.

2.2 Response Action Summary

Under direction of the WDNR, VER mobilized the necessary equipment, materials and personnel to properly mitigate the release. The following response actions were taken:

- Spill Containment Efforts – The entire area was surrounded by petroleum absorbent boom at the time of the initial response. The initial response appeared sufficient as no indication any impact to any of the boom occurred as the result of the spill soaking into site soils prior to VER's arrival and no evidence of surficial fuel migration beyond the initial spill location was observed.

- Surface Cleaning Efforts – Surface cleaning of the concrete pad, south of the UST system where the gasoline impacted soil that was excavated was surrounded by boom, staged on plastic and covered with plastic prior to disposal, was completed during the load out of the soil and sent for disposal. No other surface cleaning was warranted associated with this spill as the spill location was comprised of grass and soil excavated during the response activities and replaced with like material following excavation.

- Impacted Soil Excavation – On May 19th, 21st, 22nd, 26th and 27th, 2020, as directed by the WDNR, Northeast Region Spills Coordinator, Maizie Reif, gasoline impacted soil was assessed and excavated until there was no remaining evidence of the presence of gasoline in the samples, with the exception of the location just north of the UST system within the bunkers at sample location SS-4, where excavation to water occurred. The majority of the shallow soils in the location of the spill were assessed by using visual and olfactory evidence, by field screening soils utilizing a photoionization detector (PID). The samples just north of the UST system, where the vast majority of

the gasoline and water pooled during the spill, were also assessed by soil analytical sampling conducted from the sidewalls and bottom of the excavation. It was apparent during excavation in this location that complete excavation of impacted soils could not be completed.

The excavation limits extended north of the concrete pad located over the UST system, beyond the bumpers (approximately 20 feet north of the concrete), west to the site building (approximately 65 feet), south to the south side of the concrete pad where fuel had migrated during the spill (approximately 12 inches wide along the south side of the pad); and to a depth of approximately 18 inches bgs.

In total 17 soil samples were field screened, with 4 soil samples collected for laboratory analysis from the sidewalls and bottom of the excavation on the north side of the UST system where complete excavation of impacted soils could not be completed. The 4 samples were laboratory analyzed for the presence of petroleum volatile organic compounds (PVOCs) and naphthalene. Soil screening results are provided in Table A.1.

Analytical results collected from the sidewalls of the north side of the spill excavation did not identify any contaminant concentrations exceeding Wisconsin Administrative Code (WAC) NR 720 residual contaminant levels (RCLs). The soil sample SS-4 collected from the bottom of the excavation, between the concrete pad and the bumpers, at water, identified PVOCs exceeding both the WAC NR 720 soil to groundwater pathway and direct contact RCLs. A table summarizing the analytical results is provided as Table A.2. A copy of the soil analytical report and chain-of-custody (COC) are provided in Appendix C. A map identifying the location of the soil screening and analytical sample locations is included as Figure 3 – Excavation Limits Map.

Due to the known presence of PFAS at the site from The Solberg Co – Site 2, WDNR BRRTS # 02-05-587486, WDNR did not require PFAS soil sample analysis associated with this spill. A profile sample was collected for soil disposal and due to the presence of PFAS, soils were required to be disposed of as impacted with both gasoline and PFAS. A copy of the soil profile analytical results and COC are included in Appendix C of this report.

In total, approximately 94 tons of gasoline and PFAS impacted soil, was excavated and disposed of at Waste Management's Columbia Ridge Landfill. Additionally, three cubic yard boxes of gasoline and PFAS impacted absorbents and plastic was disposed of at Waste Management's Columbia Ridge Landfill. Further discussion of waste disposal is provided in Section 2.4 of this report.

- Restoration – Following impacted soil excavation, sand and topsoil were utilized to backfill the excavation, compacted as needed, graded, the entire area seeded and covered with grass matting to complete the restoration.

Photo documentation of the spill, response actions and restoration can be found in Appendix A.

2.3 Verification Sampling Summary

Based upon the cleanup objectives utilized by VER on similar cleanups of this type, prompt response minimizes infiltration of contaminants into the subsurface. Therefore, timely excavation of impacted soil was completed.

No migration of fuel or sheen was observed at or beyond the absorbent booms placed, during the initial response.

Based on the above, field screen results (utilizing a PID), the lack of visual and olfactory evidence of migration of gasoline beyond the limits of the excavation, and the soil analytical results provided, it appears the area impacted by the gasoline spill is isolated to the area just north of the UST system between the concrete pad and bumpers at the location of soil sample SS-4.

As the result of the relatively isolated area of residual gasoline impacted soil, the known historic gasoline contamination in this location and cost of disposal of PFAS impacted soil, further excavation was not conducted.

2.4 Waste Disposal

The following wastes were properly handled and disposed of as a result of this response effort:

- Gasoline and PFAS Impacted Soil, Absorbents and Plastic – A total of approximately 94 tons of gasoline and PFAS impacted soil; and three cubic yard boxes of absorbents and plastic was disposed of at Waste Management's Columbia Ridge Landfill located in Arlington, Oregon. Copies of the disposal documentation for the soil are provided in Appendix B. Disposal documentation for the disposal of the three cubic yard boxes of absorbents have not yet been received and will be forwarded when obtained from Waste Management. It should be noted it takes over 30 days to get the waste transported to Oregon for disposal, which is the reason for the delay in documentation.

3.0 ASSESSMENT OF RESPONSE ACTION EFFECTIVENESS

This section provides an assessment of the spill response action effectiveness relative to the items specified in NR 708.09 (i) through (m).

3.1 Response Effectiveness Evaluation

The following effectiveness evaluation is provided:

- Visual and Olfactory Evidence – There is no remaining visual or olfactory evidence of impacts associated with the release between the UST system and the building, or north of the concrete bumpers north of the system. Gasoline impacted soil remains present north of the UST system between the concrete pad and bumpers and VER recommends results be reviewed by WDNR to determine whether water should be evaluated.

- Actual or Potential Environmental Impacts – Gasoline impacted soil remains present north of the UST system between the concrete pad and bumpers and VER recommends results be reviewed by WDNR to determine whether water should be evaluated.

- Proximity of Contamination to Receptors

    - Human Direct Contact – Residual soil contamination exceeding WAC NR 720 direct contact RCLS is present at 18 inches and appears isolated to the location of SS-4 between the concrete pad and bumpers north of the UST system.

    - Surface Water – As noted in Section 1.4, the nearest surface water body is the facility stormwater retention pond locate approximately 150 feet south of the spill site. The gasoline spilled soaked into the ground around the concrete pad located over the UST system and therefore impacts to surface water do not appear to be a concern associated with this spill.

    - Groundwater – As noted in Section 1.4, depth to groundwater beneath the site is relatively shallow and appeared present at approximately 18 inches bgs just north of the concrete pad located over the UST system. Based on analytical results from the soil sample collected at depth north of the concrete, further assessment of potential gasoline impacts to groundwater appears warranted.

    - Soil – Soil impacted as a result of the spill have been excavated and properly disposed at a licensed landfill. An isolated area of residual saturate soil contamination is present north of the UST system between the concrete pad and bumpers.

- Exposure Route Assessment

    - Human Direct Contact – Residual soil contamination exceeding WAC NR 720 direct contact RCLS is present at 18 inches and appears isolated to the location of SS-4 between the concrete pad and bumpers north of the UST system.

    - Vapor Intrusion – Not applicable. The spilled material located adjacent to the building was excavated and disposed of at a licensed landfill.

    - Surface Water/Sediment – Not applicable. See discussion in Section 1.4.

    - Groundwater - Depth to groundwater beneath the site is relatively shallow and appeared present at approximately 18 inches bgs just north of the concrete pad located over the UST system. Based on analytical results from the soil sample collected at depth north of the concrete, further assessment of potential gasoline impacts to groundwater appears warranted.

3.2 Conclusion

A release to the environment, that has not been fully remediated, in an isolated area north of the UST system, has occurred as the result of this spill. Residual saturated soil contamination above the WAC NR 720 RCLs remains present in a relatively in the location of soil sample SS-4. VER recommends results be reviewed by WDNR to determine whether water should be evaluated.

Should evaluation be necessary it is recommended that this be completed utilizing the well network currently in place for The Solberg Co – Site 2, WDNR BRRTS # 02-05-587486.

FIGURES

Figure 1 - Site Location Map

Legend

2.0 0 1.00 2.0 Miles

NAD_1983_HARN_Wisconsin_TM

1:63,360

DISCLAIMER: The information shown on these maps has been obtained from various sources, and are of varying age, reliability and resolution. These maps are not intended to be used for navigation, nor are these maps an authoritative source of information about legal land ownership or public access. No warranty, expressed or implied, is made aregarding accuracy, applicability for a particular use, completemenss, or legality of the information depicted on this map. For more information, see the DNR Legal Notices web page: http://dnr.wi.gov/org/legal/

Note: Not all sites are mapped.

Notes

Red Dot: Spill Location

WTM: 674299, 458552

Figure 1 - Spill Location Map

Legend

0.0 0 0.01 0.0 Miles

NAD_1983_HARN_Wisconsin_TM

1:495

Note: Not all sites are mapped.

Notes

Red Dot: Spill Location

WTM: 674299, 458552

Figure 3 - Excavation Limits Map

Legend

0.0 0 0.00 0.0 Miles

NAD_1983_HARN_Wisconsin_TM

1:248

DISCLAIMER: The information shown on these maps has been obtained from various sources, and are of varying age, reliability and resolution. These maps are not intended to be used for navigation, nor are these maps an authoritative source of information about legal land ownership or public access. No warranty, expressed or implied, is made aregarding accuracy, applicability for a particular use, completemenss, or legality of the information depicted on this map. For more information, see the DNR Legal Notices web page: http://dnr.wi.gov/org/legal/

Note: Not all sites are mapped.

Notes

Red Polygon: Approximate Spill Excavation Limits
Black Dots: PID Screening Locations
Blue Dots: Soil Sample Locations

TABLES

TABLE A.1.
SOIL SCREENING RESULTS TABLE
VALLEY ENVIRONMENTAL - PERIMETER SOLUTIONS SPILL
SERTS#: 20210513NE05-1

Sample No.	S-1	S-2	S-3	S-4	S-5	S-6	S-7	S-8	S-9	S-10	S-11	S-12	S-13
Sampling Date	5/19/2021	5/19/2021	5/19/2021	5/19/2021	5/19/2021	5/19/2021	5/19/2021	5/19/2021	5/19/2021	5/19/2021	5/19/2021	5/19/2021	5/19/2021
PID (Instrument Units)	1.2	1.5	1.8	4.0	0.6	783	37.2	0.4	0.5	0.4	2.0	2.1	0.4
Sample Depth (inches)	5	6	6	10	10	12	12	10	4	4	12	14	4
Saturated (S)/Unsaturated (U	U	U	U	U	U	U	U	U	U	U	U	U	U
PETROLEUM VOLATILE ORGANIC COMPOUNDS (PVOCs) (µg/kg)													
Benzene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Ethylbenzene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Methyl tert-butyl ether	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Naphthalene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Toluene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,2,4-Trimethylbenzene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,3,5-Trimethylbenzene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Xylenes, -m, -p	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Xylenes, -o	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

J = Analyte detected above laboratory limit of detection but below limit of quantitation.
Bold indicates analytical results exceed NR 720 RCL
RCL = Residual Contaminant Level
DCL = Direct-Contact Levels
NA = Parameter not analyzed
NE = NR 720 RCL not established
PID = Photoionization Detector

TABLE A.2
SOIL ANALYTICAL RESULTS TABLE
VALLEY ENVIRONMENTAL - PERIMETER SOLUTIONS SPILL
SERTS#: 20210513NE05-1

Sample No.	Non Cancer RCL Non-Industrial	Cancer RCL Non-Industrial	WDNR Non-Industrial Direct Contact RCL	WDNR Soil to Groundwater RCL	Background Threshold Value (mg/kg)	SS-1	SS-2	SS-3	SS-4
Sampling Date						5/24/2021	5/24/2021	5/24/2021	5/24/2021
PID (Instrument Units)						3.0	8.9	4.3	1103
Sample Depth (inches)						10	10	12	18
Saturated (S)/Unsaturated (U						U	U	U	S
VOLATILE ORGANIC COMPOUNDS (VOCs) (µg/kg)									
Benzene	106000	1600	1600	5.1	NE	<25	<25	<25	***10,800***
Ethylbenzene	4080000	8020	8020	1570	NE	<25	<25	<25	***9600***
Methyl tert-butyl ether	22100000	63800	63800	27	NE	<25	<25	<25	<25
Naphthalene	178000	5520	5520	658	NE	<25	<25	<25	**3400**
Toluene	5240000	NE	818000	1107	NE	<25	<25	<25	**24,300**
1,2,4-Trimethylbenzene	373000	NE	219000	1382	NE	<25	<25	<25	**24,00**
1,3,5-Trimethylbenzene	339000	NE	182000		NE	<25	<25	<25	**6700**
Xylenes, -m, -p	818000	NE	260000	3960	NE	<50	<50	<50	**35,000**
Xylenes, -o						<25	<25	<25	**13,600**

J = Analyte detected above laboratory limit of detection but below limit of quantitation.
Italics indicates analytical results exceeding NR 720 direct contact RCL
Bold indicates analytical results exceeding NR 720 soil to groundwater RCL
RCL = Residual Contaminant Level
DCL = Direct-Contact Levels
NA = Parameter not analyzed
NE = NR 720 RCL not established
PID = Photoionization Detector

APPENDIX A
Photo Documentation

VER May 13, 2021, Initial Response Action

View of spill between the building and the concrete pad, looking north.

View of the spill, looking east from the northeast corner of the building.

View of the spill looking west from northeast of the UST system.

View along the south side of the concrete pad where the gasoline migrated around the pad, looking west.

View of the spill surrounded by petroleum absorbent boom looking west.

Photos of May 22 through 27, 2021 VER Response Action

View of the spill excavation looking west.
Note: Water present at shallow depths is the result of a rain event.

View of the excavation, looking southwest. Note the shallow scrape between the building and the UST system.

View of excavation on the north side of the concrete pad between the concrete and the bumpers. Pea gravel was present and coming out from beneath the pad. Groundwater is present adjacent to the bumpers

Photos of the Spill Excavation Restoration

View of the backfilled and graded spill location, looking north

View of the backfilled and graded spill location, east of the UST system, looking south

View of the backfilled and graded spill excavation locations, looking northeast

View of the restoration, looking north, northeast

View of the restoration, looking east

View of the restoration, looking north

View of the restoration, looking south

View of the restoration, looking south

APPENDIX B
Waste Disposal Documentation

Columbia Ridge
18177 Cedar Springs Lane
Arlington, OR, 97812
Ph: (541) 454-2030

Reprint
Ticket# 708956

Customer Name VALLEY ENVIRONMENTAL RESPONSE Carrier 620
Ticket Date 08/09/2021 Vehicle# 620115 Volume
Payment Type Credit Account Container 620115
Manual Ticket# 1025340 Billing # 0002847
Hauling Ticket# Manifest 019148497JJK
Destination UP/ZIRON PO
Profile 135624OR (LF01 Gasoline/PFAS Impacted Soil)
Generator 168-PERIMETER SOLUTIONS PERIMETER SOLUTIONS 1520 BROOKFIELD AVE GREEN BAY WI

	Time	Scale	Operator	Inbound	Gross	78520 lb*
In	08/07/2021 13:08:27	Front Scale	vmckinne		Tare	47280 lb*
Out	08/09/2021 13:08:27		vmckinne		Net	31240 lb
			* Manual Weight		Tons	15.62

Comments 7/9 - 8/7 = 29 Days

	Product	LD%	Qty	UOM	Rate	Tax	Amount	Origin
1	ContSoilPet-Tons-C	100	15.62	Tons				WI-GREEN B
2	EVF-P-Standard Env	100		%				
3	DEL U SPW-DELIVERY	100	1.00	Each				
4	LOC U SPW-LOCAL TR	100	1	Load				
5	RAIL U SPW-RAIL UN	100	1	Load				
6	RENT SPW DAILY-CAN	100	29.00	Each				

Driver`s Signature

Please print or type.

Form Approved. OMB No. 2050-0039

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator ID Number	2. Page 1 of	3. Emergency Response Phone	4. Manifest Tracking Number
N/A		1-800-424-9300	019148497 JJK

GENERATOR

5. Generator's Name and Mailing Address: Perimeter Solutions, 1520 Brookfield Ave, Green Bay, WI 54313 — Generator's Phone: (920) 593-9445

Generator's Site Address (if different than mailing address)

6. Transporter 1 Company Name: Ziron — U.S. EPA ID Number: ILR000107581

7. Transporter 2 Company Name: BNSF RAILWAY — U.S. EPA ID Number: MND048341788

8. Designated Facility Name and Site Address: Columbia Ridge landfill, 18177 Cedar Springs Lane, Arlington, OR 97812 — U.S. EPA ID Number: ORD 987173457 — Facility's Phone: (541) 454-2030

9a. HM	9b. U.S. DOT Description (Including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.	13. Waste Codes
	1. material Not regulated By D.O.T Non-Hazardous, Gasoline / PFAS Impacted 50:1	1	Con	33420	P	
	2.					
	3.					
	4.					

14. Special Handling Instructions and Additional Information

#620115 PROFILE 135624OR

P/C DTR-742229

15. **GENERATOR'S/OFFEROR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable International and national governmental regulations. If export shipment and I am the Primary Exporter, I certify that the contents of this consignment conform to the terms of the attached EPA Acknowledgment of Consent.
I certify that the waste minimization statement identified in 40 CFR 262.27(a) (if I am a large quantity generator) or (b) (if I am a small quantity generator) is true.

Generator's/Offeror's Printed/Typed Name: Chuck Anderson — Signature — Month / Day / Year

INTL

16. International Shipments ☐ Import to U.S. ☐ Export from U.S. — Port of entry/exit: — Transporter signature (for exports only): — Date leaving U.S.:

TRANSPORTER

17. Transporter Acknowledgment of Receipt of Materials

Transporter 1 Printed/Typed Name: Nick Hebel — Signature — Month 7 / Day 9 / Year 21

Transporter 2 Printed/Typed Name: Sarah Park for BNSF Railway — Signature — Month 07 / Day 21 / Year 21

DESIGNATED FACILITY

18. Discrepancy

18a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection

Manifest Reference Number:

18b. Alternate Facility (or Generator) — U.S. EPA ID Number — Facility's Phone:

18c. Signature of Alternate Facility (or Generator) — Month / Day / Year

19. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems)

1.	2.	3.	4.

20. Designated Facility Owner or Operator: Certification of receipt of hazardous materials covered by the manifest except as noted in Item 18a

Printed/Typed Name: Vicky McKinney — Signature — Month 8 / Day 19 / Year 21

EPA Form 8700-22 (Rev. 12-17) Previous editions are obsolete.

Columbia Ridge
18177 Cedar Springs Lane
Arlington, OR, 97812
Ph: (541) 454-2030

Reprint
Ticket# 709031

Customer Name VALLEY ENVIRONMENTAL RESPONSE Carrier 620
Ticket Date 08/02/2021 Vehicle# 620088 Volume
Payment Type Credit Account Container 620088
Manual Ticket# 1024692 Billing # 0002847
Hauling Ticket# Manifest 022006890JJK
Destination UP/ZIRON PO
Profile 135624OR (LF01 Gasoline/PFAS Impacted Soil)
Generator 168-PERIMETER SOLUTIONS PERIMETER SOLUTIONS 1520 BROOKFIELD AVE GREEN BAY WI

	Time	Scale	Operator	Inbound	Gross	80300 lb*
In	07/31/2021 16:41:42	Front Scale	vmckinne		Tare	47480 lb*
Out	08/02/2021 16:41:42		vmckinne		Net	32820 lb
			* Manual Weight		Tons	16.41

Comments 7/1 -7/31= 31 DAYS RENT

	Product	LD%	Qty	UOM	Rate	Tax	Amount	Origin
1	ContSoilPet-Tons-C	100	16.41	Tons				WI-GREEN B
2	EVF-P-Standard Env	100		%				
3	DEL U SPW-DELIVERY	100	1.00	Each				
4	LOC U SPW-LOCAL TR	100	1	Load				
5	RAIL U SPW-RAIL UN	100	1	Load				
6	RENT SPW DAILY-CAN	100	30.00	Each				

Driver`s Signature

Please print or type.

Form Approved. OMB No. 2050-0039

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator ID Number: [illegible]

2. Page 1 of: 1

3. Emergency Response Phone: [illegible]

4. Manifest Tracking Number: 022006890 JJK

5. Generator's Name and Mailing Address: [illegible]ER SOLUTIONS
7529 BROOKFIELD AVE
GREENBAY WI 54313 920-593-9445

Generator's Site Address (if different than mailing address):

Generator's Phone:

6. Transporter 1 Company Name: ZRON ENVIRONMENTAL SERVICES, INC. — U.S. EPA ID Number: [illegible]

7. Transporter 2 Company Name: UNION PACIFIC RAILROAD — U.S. EPA ID Number: NED001792910

8. Designated Facility Name and Site Address: COLUMBIA RIDGE LANDFILL
18177 CEDAR SPRINGS LANE
ARLINGTON OR 97812

Facility's Phone:

U.S. EPA ID Number: ORD987179457

9a. HM	9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.	13. Waste Codes
-	1. NOT REGULATED, BY DOT NON-HAZARDOUS MATERIAL GASOLINE / [illegible] IMPACTED SOIL	001	CM		P	
	2.					
	3.					
	4.					

14. Special Handling Instructions and Additional Information

Profile 1356240R

Railcar #CWMX100541 #620088

PROFILE [illegible] CHEMTREC [illegible]

15. **GENERATOR'S/OFFEROR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations. If export shipment and I am the Primary Exporter, I certify that the contents of this consignment conform to the terms of the attached EPA Acknowledgment of Consent.
I certify that the waste minimization statement identified in 40 CFR 262.27(a) (if I am a large quantity generator) or (b) (if I am a small quantity generator) is true.

Generator's/Offeror's Printed/Typed Name: Chelsea Anderson — Signature: [signature] — Month 7 Day 1 Year 21

16. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit: Date leaving U.S.:

Transporter signature (for exports only):

17. Transporter Acknowledgment of Receipt of Materials

Transporter 1 Printed/Typed Name: Nick Hobel — Signature: [signature] — Month 7 Day 1 Year 21

Transporter 2 Printed/Typed Name: Santha Krishnan for U.P.R.R — Signature: [signature] — Month 07 Day 30 Year 21

18. Discrepancy

18a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection

Manifest Reference Number:

18b. Alternate Facility (or Generator) — U.S. EPA ID Number

Facility's Phone:

18c. Signature of Alternate Facility (or Generator) — Month Day Year

19. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems)

1.	2.	3.	4.

20. Designated Facility Owner or Operator: Certification of receipt of hazardous materials covered by the manifest except as noted in Item 18a

Printed/Typed Name: Jessica M. [illegible] — Signature: [signature] — Month 8 Day 2 Year 21

GENERATOR | INT'L | TRANSPORTER | DESIGNATED FACILITY

EPA Form 8700-22 (Rev. 12-17) Previous editions are obsolete.

Columbia Ridge
18177 Cedar Springs Lane
Arlington, OR, 97812
Ph: (541) 454-2030

Reprint
Ticket# 709032

Customer Name VALLEY ENVIRONMENTAL RESPONSE Carrier 620
Ticket Date 08/02/2021 Vehicle# 620099 Volume
Payment Type Credit Account Container 620099
Manual Ticket# 1024693 Billing # 0002847
Hauling Ticket# Manifest 022006892JJK
Destination UP/ZIRON PO
Profile 135624OR (LF01 Gasoline/PFAS Impacted Soil)
Generator 168-PERIMETER SOLUTIONS PERIMETER SOLUTIONS 1520 BROOKFIELD AVE GREEN BAY WI

	Time	Scale	Operator	Inbound	Gross	78300 lb*
In	07/31/2021 16:46:01	Front Scale	vmckinne		Tare	47020 lb*
Out	08/02/2021 16:46:01		vmckinne		Net	31280 lb
			* Manual Weight		Tons	15.64

Comments 6/29 - 7/31 = 32 DAYS RENT

	Product	LD%	Qty	UOM	Rate	Tax	Amount	Origin
1	ContSoilPet-Tons-C	100	15.64	Tons				WI-GREEN B
2	EVF-P-Standard Env	100		%				WI-GREEN B
3	DEL U SPW-DELIVERY	100	1.00	Each				WI-GREEN B
4	LOC U SPW-LOCAL TR	100	1	Load				WI-GREEN B
5	RAIL U SPW-RAIL UN	100	1	Load				WI-GREEN B
6	RENT SPW DAILY-CAN	100	32.00	Each				WI-GREEN B

Driver`s Signature

Please print or type.

Form Approved. OMB No. 2050-0039

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator ID Number [illegible] | 2. Page 1 of 1 | 3. Emergency Response Phone [illegible] | 4. Manifest Tracking Number 022006892 JJK

GENERATOR

5. Generator's Name and Mailing Address: [illegible] SOLUTIONS
1320 BROOKFIELD AVE
GREENBAY WI 54313 [illegible]

Generator's Site Address (if different than mailing address)

Generator's Phone:

6. Transporter 1 Company Name: IRON ENVIRONMENTAL SERVICES, INC — U.S. EPA ID Number: ILR [illegible]

7. Transporter 2 Company Name: UNION PACIFIC RAILROAD — U.S. EPA ID Number: NED001792910

8. Designated Facility Name and Site Address: COLUMBIA RIDGE LANDFILL
9717 CEDAR SPRINGS LANE
ARLINGTON OR 97812 — U.S. EPA ID Number

Facility's Phone: [illegible] ORD987173457

9a. HM	9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.	13. Waste Codes
	1. NOT REGULATED, BY DOT NON-HAZARDOUS MATERIAL [illegible]	[illegible]	CM	32,660	P	
	2.					
	3.					
	4.					

14. Special Handling Instructions and Additional Information

Profile 1356240R — Box/Loaded — Railcar # CWMX 100547

15. GENERATOR'S/OFFEROR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations. If export shipment and I am the Primary Exporter, I certify that the contents of this consignment conform to the terms of the attached EPA Acknowledgment of Consent.
I certify that the waste minimization statement identified in 40 CFR 262.27(a) (if I am a large quantity generator) or (b) (if I am a small quantity generator) is true.

Generator's/Offeror's Printed/Typed Name: Chuck Anderson — Signature — Month 6 Day 29 Year 21

INTL

16. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit: Date leaving U.S.:

TRANSPORTER

Transporter signature (for exports only):

17. Transporter Acknowledgment of Receipt of Materials

Transporter 1 Printed/Typed Name: Nick Haberl — Signature — Month 6 Day 29 Year 21

Transporter 2 Printed/Typed Name: Santha Krishnan for U.P.R.R — Signature — Month 07 Day 30 Year 21

DESIGNATED FACILITY

18. Discrepancy

18a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection

Manifest Reference Number:

18b. Alternate Facility (or Generator) — U.S. EPA ID Number

Facility's Phone:

18c. Signature of Alternate Facility (or Generator) — Month Day Year

19. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems)

1.	2.	3.	4.

20. Designated Facility Owner or Operator: Certification of receipt of hazardous materials covered by the manifest except as noted in Item 18a

Printed/Typed Name: Jessica M. Ashley — Signature — Month 8 Day 2 Year 21

EPA Form 8700-22 (Rev. 12-17) Previous editions are obsolete.

Columbia Ridge
18177 Cedar Springs Lane
Arlington, OR, 97812
Ph: (541) 454-2030

Reprint
Ticket# 709033

Customer Name VALLEY ENVIRONMENTAL RESPONSE Carrier 620
Ticket Date 08/02/2021 Vehicle# 620152 Volume
Payment Type Credit Account Container 620152
Manual Ticket# 1024694 Billing # 0002847
Hauling Ticket# Manifest 022006891JJK
Destination UP/ZIRON PO
Profile 135624OR (LF01 Gasoline/PFAS Impacted Soil)
Generator 168-PERIMETER SOLUTIONS PERIMETER SOLUTIONS 1520 BROOKFIELD AVE GREEN BAY WI

	Time	Scale	Operator	Inbound	Gross	73440 lb*
In	07/31/2021 16:50:35	Front Scale	vmckinne		Tare	47340 lb*
Out	08/02/2021 16:50:35		vmckinne		Net	26100 lb
			* Manual Weight		Tons	13.05

Comments 7/6 -7/31=25 days

	Product	LD%	Qty	UOM	Rate	Tax	Amount	Origin
1	ContSoilPet-Tons-C	100	13.05	Tons				WI-GREEN B
2	EVF-P-Standard Env	100		%				WI-GREEN B
3	DEL U SPW-DELIVERY	100	1.00	Each				WI-GREEN B
4	LOC U SPW-LOCAL TR	100	1	Load				WI-GREEN B
5	RAIL U SPW-RAIL UN	100	1	Load				WI-GREEN B
6	RENT SPW DAILY-CAN	100	25.00	Each				WI-GREEN B

Driver`s Signature

Please print or type.

Form Approved. OMB No. 2050-0039

UNIFORM HAZARDOUS WASTE MANIFEST	1. Generator ID Number [illegible]	2. Page 1 of 1	3. Emergency Response Phone [illegible]
4. Manifest Tracking Number	022006891 JJK		

5. Generator's Name and Mailing Address
PERIMETER SOLUTIONS
1020 BROOKFIELD AVE
GREENBAY WI 54313   920-593-9445

Generator's Site Address (if different than mailing address)

Generator's Phone:

6. Transporter 1 Company Name: ARCON ENVIRONMENTAL SERVICES, INC. — U.S. EPA ID Number: [illegible]

7. Transporter 2 Company Name: UNION PACIFIC RAILROAD — U.S. EPA ID Number: NED001792910

8. Designated Facility Name and Site Address
COLUMBIA RIDGE LANDFILL
18177 CEDAR SPRINGS LANE
ARLINGTON OR 97812

Facility's Phone:

U.S. EPA ID Number: ORD987173457

9a. HM	9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.	13. Waste Codes
-	1. NOT REGULATED, BY DOT NON-HAZARDOUS MATERIAL ~~GASOLINE / PFAS IMPACTED SOIL~~	001	CM	27420	P	
	2.					
	3.					
	4.					

14. Special Handling Instructions and Additional Information

Profile 1356240R   Box # 420152
Rail Car # CWMX 100847

15. GENERATOR'S/OFFEROR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations. If export shipment and I am the Primary Exporter, I certify that the contents of this consignment conform to the terms of the attached EPA Acknowledgment of Consent.
I certify that the waste minimization statement identified in 40 CFR 262.27(a) (if I am a large quantity generator) or (b) (if I am a small quantity generator) is true.

Generator's/Offeror's Printed/Typed Name: Chuck Anderson — Signature: [signature] — Month Day Year: 7 6 21

16. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit: Date leaving U.S.:
Transporter signature (for exports only):

17. Transporter Acknowledgment of Receipt of Materials
Transporter 1 Printed/Typed Name: Nick Habel — Signature: [signature] — Month Day Year: 7 6 21
Transporter 2 Printed/Typed Name: Santha Krishnan for U.P.R.R — Signature: [signature] — Month Day Year: 07 30 21

18. Discrepancy
18a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection
Manifest Reference Number:
18b. Alternate Facility (or Generator) — U.S. EPA ID Number
Facility's Phone:
18c. Signature of Alternate Facility (or Generator) — Month Day Year

19. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems)
1. 2. 3. 4.

20. Designated Facility Owner or Operator: Certification of receipt of hazardous materials covered by the manifest except as noted in Item 18a
Printed/Typed Name: Jessica McHale — Signature: [signature] — Month Day Year: 8 2 21

EPA Form 8700-22 (Rev. 12-17) Previous editions are obsolete.

Columbia Ridge
18177 Cedar Springs Lane
Arlington, OR, 97812
Ph: (541) 454-2030

Reprint
Ticket# 709034

Customer Name VALLEY ENVIRONMENTAL RESPONSE Carrier 620
Ticket Date 08/02/2021 Vehicle# 620107 Volume
Payment Type Credit Account Container 620107
Manual Ticket# 1024695 Billing # 0002847
Hauling Ticket# Manifest 022006889jjk
Destination UP/ZIRON PO
Profile 135624OR (LF01 Gasoline/PFAS Impacted Soil)
Generator 168-PERIMETER SOLUTIONS PERIMETER SOLUTIONS 1520 BROOKFIELD AVE GREEN BAY WI

	Time	Scale	Operator	Inbound	Gross	82160 lb*
In	07/31/2021 16:54:38	Front Scale	vmckinne		Tare	48900 lb*
Out	08/02/2021 16:54:38		vmckinne		Net	33260 lb
			* Manual Weight		Tons	16.63

Comments 6/30 - 7/31 =31 days

	Product	LD%	Qty	UOM	Rate	Tax	Amount	Origin
1	ContSoilPet-Tons-C	100	16.63	Tons				WI-GREEN B
2	EVF-P-Standard Env	100		%				WI-GREEN B
3	DEL U SPW-DELIVERY	100	1.00	Each				WI-GREEN B
4	LOC U SPW-LOCAL TR	100	1	Load				WI-GREEN B
5	RAIL U SPW-RAIL UN	100	1	Load				WI-GREEN B
6	RENT SPW DAILY-CAN	100	31.00	Each				WI-GREEN B

Driver`s Signature

Please print or type.

Form Approved. OMB No. 2050-0039

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator ID Number: [illegible]
2. Page 1 of: 1
3. Emergency Response Phone: 800-424-9300
4. Manifest Tracking Number: 022006889 JJK

GENERATOR

5. Generator's Name and Mailing Address: PERIMETER SOLUTIONS, 1520 BROOKFIELD AVE, GREEN BAY WI 54313, 920-593-9445
Generator's Site Address (if different than mailing address):
Generator's Phone:

6. Transporter 1 Company Name: IRON ENVIRONMENTAL SERVICES, INC.
U.S. EPA ID Number: ILR [illegible]

7. Transporter 2 Company Name: UNION PACIFIC RAILROAD
U.S. EPA ID Number: NED001792910

8. Designated Facility Name and Site Address: COLUMBIA RIDGE LANDFILL, 19177 CEDAR SPRINGS LANE, ARLINGTON OR 97812
U.S. EPA ID Number: ORD987178457
Facility's Phone:

9a. HM	9b. U.S. DOT Description (Including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.	13. Waste Codes
	1. NOT REGULATED BY DOT NON-HAZARDOUS NATERIAL GASOLINE / PFAS IMPACTED SOIL	001	CM	24,980	P	
	2.					
	3.					
	4.					

14. Special Handling Instructions and Additional Information
Profile: 1356240R
Box # 620107
Railcar # CWMX 100547

15. GENERATOR'S/OFFEROR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations. If export shipment and I am the Primary Exporter, I certify that the contents of this consignment conform to the terms of the attached EPA Acknowledgment of Consent.
I certify that the waste minimization statement identified in 40 CFR 262.27(a) (if I am a large quantity generator) or (b) (if I am a small quantity generator) is true.

Generator's/Offeror's Printed/Typed Name: Chuck Ambrose
Signature: CA
Month: 6 Day: 30 Year: 21

INT'L

16. International Shipments: ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit:
Transporter signature (for exports only): Date leaving U.S.:

TRANSPORTER

17. Transporter Acknowledgment of Receipt of Materials
Transporter 1 Printed/Typed Name: Dick Hubel
Signature: Dick Hubel
Month: 6 Day: 30 Year: 21
Transporter 2 Printed/Typed Name: Santha Krishnan for U.P.R.R
Signature:
Month: 07 Day: 30 Year: 21

DESIGNATED FACILITY

18. Discrepancy
18a. Discrepancy Indication Space: ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection
Manifest Reference Number:
18b. Alternate Facility (or Generator)
U.S. EPA ID Number:
Facility's Phone:
18c. Signature of Alternate Facility (or Generator)
Month: Day: Year:

19. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems)
1. 2. 3. 4.

20. Designated Facility Owner or Operator: Certification of receipt of hazardous materials covered by the manifest except as noted in Item 18a
Printed/Typed Name: Jessica M. Ady
Signature:
Month: 8 Day: 12 Year: 21

EPA Form 8700-22 (Rev. 12-17) Previous editions are obsolete.

Columbia Ridge
18177 Cedar Springs Lane
Arlington, OR, 97812
Ph: (541) 454-2030

Reprint
Ticket# 709035

Customer Name VALLEY ENVIRONMENTAL RESPONSE Carrier 620
Ticket Date 08/02/2021 Vehicle# 620208 Volume
Payment Type Credit Account Container 620208
Manual Ticket# 1024696 Billing # 0002847
Hauling Ticket# Manifest 021985047JJK
Destination UP/ZIRON PO
Profile 135624OR (LF01 Gasoline/PFAS Impacted Soil)
Generator 168-PERIMETER SOLUTIONS PERIMETER SOLUTIONS 1520 BROOKFIELD AVE GREEN BAY WI

	Time	Scale	Operator	Inbound	Gross	81820 lb*
In	07/31/2021 16:58:07	Front Scale	vmckinne		Tare	47880 lb*
Out	08/02/2021 16:58:07		vmckinne		Net	33940 lb
			* Manual Weight		Tons	16.97

Comments 6/25 - 7/31 = 36 days

	Product	LD%	Qty	UOM	Rate	Tax	Amount	Origin
1	ContSoilPet-Tons-C	100	16.97	Tons				WI-GREEN B
2	EVF-P-Standard Env	100		%				WI-GREEN B
3	DEL U SPW-DELIVERY	100	1.00	Each				WI-GREEN B
4	LOC U SPW-LOCAL TR	100	1	Load				WI-GREEN B
5	RAIL U SPW-RAIL UN	100	1	Load				WI-GREEN B
6	RENT SPW DAILY-CAN	100	36.00	Each				WI-GREEN B

Driver`s Signature

Please print or type.

Form Approved. OMB No. 2050-0039

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator ID Number: 955001 9999
2. Page 1 of
3. Emergency Response Phone: 708-757-9601
4. Manifest Tracking Number: 021985047 JJK

GENERATOR

5. Generator's Name and Mailing Address
Generator's Site Address (if different than mailing address)
Generator's Phone:

6. Transporter 1 Company Name: ZiRon Environmental Services INC — U.S. EPA ID Number: ILR 000107581

7. Transporter 2 Company Name: UNION PACIFIC RAILROAD — U.S. EPA ID Number: NED001792910

8. Designated Facility Name and Site Address: Great Lakes Reloading, 13535 S torrence Ave, Chicago, IL 60633 — U.S. EPA ID Number
Facility's Phone:

9a. HM	9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.	13. Waste Codes
	1. NON-RCRA Regulated. NON Dot Hazarddus Material	001	22	35,040	lb	
	2.					
	3.					
	4.					

14. Special Handling Instructions and Additional Information
Box: 620208 1356240R Railcar # CWMX 100547

15. GENERATOR'S/OFFEROR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations. If export shipment and I am the Primary Exporter, I certify that the contents of this consignment conform to the terms of the attached EPA Acknowledgment of Consent.
I certify that the waste minimization statement identified in 40 CFR 262.27(a) (if I am a large quantity generator) or (b) (if I am a small quantity generator) is true.

Generator's/Offeror's Printed/Typed Name: Chuck Andersen — Signature — Month 6 Day 28 Year 21

INT'L

16. International Shipments: ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit:
Transporter signature (for exports only): Date leaving U.S.:

TRANSPORTER

17. Transporter Acknowledgment of Receipt of Materials
Transporter 1 Printed/Typed Name: Nick Hanbel — Signature — Month 6 Day 28 Year 21
Transporter 2 Printed/Typed Name: Santha Krishnan for U.P.R.R — Sig — Month 07 Day 30 Year 21

DESIGNATED FACILITY

18. Discrepancy
18a. Discrepancy Indication Space: ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejecton ☐ Full Rejection
Manifest Reference Number:
18b. Alternate Facility (or Generator) — U.S. EPA ID Number
Facility's Phone:
18c. Signature of Alternate Facility (or Generator) — Month Day Year

19. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems)
1. 2. 3. 4.

20. Designated Facility Owner or Operator: Certification of receipt of hazardous materials covered by the manifest except as noted in Item 18a
Printed/Typed Name: Jessica McCall — Signature — Month 8 Day 2 Year 21

EPA Form 8700-22 (Rev. 12-17) Previous editions are obsolete.

APPENDIX B
Soil Analytical Reports and Chains-of-Custody

Synergy Environmental Lab, INC

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

BETH ERDMAN
GENERAL ENGINEERING
916 SILVER LAKE DRIVE
PORTAGE, WI 53901

Report Date *03-Jun-21*

Project Name VER-PERIMETER SOLUTIONS **Invoice #** E39456
Project # 2-0121-56K

Lab Code 5039456A
Sample ID SS-1
Sample Matrix Soil
Sample Date 5/24/2021

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
General										
General										
Solids Percent	84.6	%			1	5021		5/25/2021	NJC	1
Organic										
PVOC + Naphthalene										
Benzene	< 0.025	mg/kg	0.016	0.062	1	GRO95/8021		6/3/2021	CJR	1
Ethylbenzene	< 0.025	mg/kg	0.015	0.059	1	GRO95/8021		6/3/2021	CJR	1
Methyl tert-butyl ether (MTBE)	< 0.025	mg/kg	0.018	0.071	1	GRO95/8021		6/3/2021	CJR	1
Naphthalene	< 0.025	mg/kg	0.017	0.065	1	GRO95/8021		6/3/2021	CJR	1
Toluene	< 0.025	mg/kg	0.016	0.061	1	GRO95/8021		6/3/2021	CJR	1
1,2,4-Trimethylbenzene	< 0.025	mg/kg	0.013	0.052	1	GRO95/8021		6/3/2021	CJR	1
1,3,5-Trimethylbenzene	< 0.025	mg/kg	0.017	0.066	1	GRO95/8021		6/3/2021	CJR	1
m&p-Xylene	< 0.05	mg/kg	0.039	0.15	1	GRO95/8021		6/3/2021	CJR	1
o-Xylene	< 0.025	mg/kg	0.014	0.055	1	GRO95/8021		6/3/2021	CJR	1

Project Name VER-PERIMETER SOLUTIONS **Invoice #** E39456
Project # 2-0121-56K

Lab Code 5039456B
Sample ID SS-2
Sample Matrix Soil
Sample Date 5/24/2021

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
General										
General										
Solids Percent	85.3	%			1	5021		5/25/2021	NJC	1
Organic										
PVOC + Naphthalene										
Benzene	< 0.025	mg/kg	0.016	0.062	1	GRO95/8021		6/3/2021	CJR	1
Ethylbenzene	< 0.025	mg/kg	0.015	0.059	1	GRO95/8021		6/3/2021	CJR	1
Methyl tert-butyl ether (MTBE)	< 0.025	mg/kg	0.018	0.071	1	GRO95/8021		6/3/2021	CJR	1
Naphthalene	< 0.025	mg/kg	0.017	0.065	1	GRO95/8021		6/3/2021	CJR	1
Toluene	< 0.025	mg/kg	0.016	0.061	1	GRO95/8021		6/3/2021	CJR	1
1,2,4-Trimethylbenzene	< 0.025	mg/kg	0.013	0.052	1	GRO95/8021		6/3/2021	CJR	1
1,3,5-Trimethylbenzene	< 0.025	mg/kg	0.017	0.066	1	GRO95/8021		6/3/2021	CJR	1
m&p-Xylene	< 0.05	mg/kg	0.039	0.15	1	GRO95/8021		6/3/2021	CJR	1
o-Xylene	< 0.025	mg/kg	0.014	0.055	1	GRO95/8021		6/3/2021	CJR	1

Lab Code 5039456C
Sample ID SS-3
Sample Matrix Soil
Sample Date 5/24/2021

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
General										
General										
Solids Percent	83.5	%			1	5021		5/25/2021	NJC	1
Organic										
PVOC + Naphthalene										
Benzene	< 0.025	mg/kg	0.016	0.062	1	GRO95/8021		6/3/2021	CJR	1
Ethylbenzene	< 0.025	mg/kg	0.015	0.059	1	GRO95/8021		6/3/2021	CJR	1
Methyl tert-butyl ether (MTBE)	< 0.025	mg/kg	0.018	0.071	1	GRO95/8021		6/3/2021	CJR	1
Naphthalene	< 0.025	mg/kg	0.017	0.065	1	GRO95/8021		6/3/2021	CJR	1
Toluene	< 0.025	mg/kg	0.016	0.061	1	GRO95/8021		6/3/2021	CJR	1
1,2,4-Trimethylbenzene	< 0.025	mg/kg	0.013	0.052	1	GRO95/8021		6/3/2021	CJR	1
1,3,5-Trimethylbenzene	< 0.025	mg/kg	0.017	0.066	1	GRO95/8021		6/3/2021	CJR	1
m&p-Xylene	< 0.05	mg/kg	0.039	0.15	1	GRO95/8021		6/3/2021	CJR	1
o-Xylene	< 0.025	mg/kg	0.014	0.055	1	GRO95/8021		6/3/2021	CJR	1

Project Name VER-PERIMETER SOLUTIONS **Invoice #** E39456
Project # 2-0121-56K

Lab Code 5039456D
Sample ID SS-4
Sample Matrix Soil
Sample Date 5/24/2021

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
General										
General										
Solids Percent	82.4	%			1	5021		5/25/2021	NJC	1
Organic										
PVOC + Naphthalene										
Benzene	10.8	mg/kg	0.016	0.062	1	GRO95/8021		6/3/2021	CJR	1
Ethylbenzene	9.6	mg/kg	0.015	0.059	1	GRO95/8021		6/3/2021	CJR	1
Methyl tert-butyl ether (MTBE)	< 0.025	mg/kg	0.018	0.071	1	GRO95/8021		6/3/2021	CJR	1
Naphthalene	3.4	mg/kg	0.017	0.065	1	GRO95/8021		6/3/2021	CJR	1
Toluene	24.3	mg/kg	0.016	0.061	1	GRO95/8021		6/3/2021	CJR	1
1,2,4-Trimethylbenzene	22.4	mg/kg	0.013	0.052	1	GRO95/8021		6/3/2021	CJR	1
1,3,5-Trimethylbenzene	6.7	mg/kg	0.017	0.066	1	GRO95/8021		6/3/2021	CJR	1
m&p-Xylene	35	mg/kg	0.039	0.15	1	GRO95/8021		6/3/2021	CJR	1
o-Xylene	13.6	mg/kg	0.014	0.055	1	GRO95/8021		6/3/2021	CJR	1

"J" Flag: Analyte detected between LOD and LOQ LOD Limit of Detection LOQ Limit of Quantitation

Code	*Comment*
1	Laboratory QC within limits.

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

Authorized Signature

CHAIN OF STODY RECORD

Synergy Environmental Lab, Inc.

www.synergy-lab.net
1990 Prospect Ct. • Appleton, WI 54914
920-830-2455 • mrsynergy@wi.twcbc.com

Chain # No 39113

Page ____ of ____

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

Lab I.D. #	
QUOTE # :	
Project #:	2-0121-50 K
Sampler: (signature)	Beth H Erdman
Project (Name / Location):	VEC - Perimeter Solutions
Reports To:	Beth
Company	GEC
Address	916 Silver Lake Dr
City State Zip	Portage, WI 53901
Phone	608-697-8004
Email	berdman@generalengineering.net
Invoice To:	Same
Company	
Address	
City State Zip	
Phone	
Email	

Lab I.D.	Sample I.D.	Collection Date	Collection Time	Filtered Y/N	No. of Containers	Sample Type (Matrix)*	Preservation	DRO (Mod DRO Sep 95)	GRO (Mod GRO Sep 95)	LEAD	NITRATE/NITRITE	OIL & GREASE	PAH (EPA 8270)	PCB	PVOC (EPA 8021)	PVOC + NAPHTHALENE	SULFATE	TOTAL SUSPENDED SOLIDS	VOC DW (EPA 524.2)	VOC (EPA 8260)	VOC AIR (TO - 15)	8-RCRA METALS	PID/ FID
503945 6A	SS-1	5/24	2:15	N	2	S	MEOH									X							
B	SS-2		2:17																				
C	SS-3		2:20																				
D	SS-4		2:22																				

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

Sample Integrity - To be completed by receiving lab.
Method of Shipment: _____
Temp. of Temp. Blank: _____ °C On Ice: _____
Cooler seal intact upon receipt: ___ Yes ___ No

Relinquished By: (sign)	Time	Date	Received By: (sign)	Time	Date
Beth H Erdman	3:03	5/24/21			

Received in Laboratory By: _____ Time: 3:03 Date: 5/24/21

Pace Analytical Services, LLC
1241 Bellevue Street - Suite 9
Green Bay, WI 54302
(920)469-2436

June 02, 2021

Beth Erdman
GENERAL ENGINEERING
916 Silver Lake Street
Portage, WI 53901

RE: Project: 2-0121-56K PERIMETER SOLUTIONS
Pace Project No.: 40227193

Dear Beth Erdman:

Enclosed are the analytical results for sample(s) received by the laboratory on May 19, 2021. The results relate only to the samples included in this report. Results reported herein conform to the applicable TNI/NELAC Standards and the laboratory's Quality Manual, where applicable, unless otherwise noted in the body of the report.

The test results provided in this final report were generated by each of the following laboratories within the Pace Network:
- Pace Analytical Services - Green Bay

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

Sincerely,

Dan Milewsky

Dan Milewsky
dan.milewsky@pacelabs.com
(920)469-2436
Project Manager

Enclosures

Pace Analytical Services, LLC
1241 Bellevue Street - Suite 9
Green Bay, WI 54302
(920)469-2436

CERTIFICATIONS

Project: 2-0121-56K PERIMETER SOLUTIONS
Pace Project No.: 40227193

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

Pace Analytical Services, LLC
1241 Bellevue Street - Suite 9
Green Bay, WI 54302
(920)469-2436

SAMPLE SUMMARY

Project: 2-0121-56K PERIMETER SOLUTIONS
Pace Project No.: 40227193

Lab ID	Sample ID	Matrix	Date Collected	Date Received
40227193001	PROFILE SAMPLE	Solid	05/19/21 08:45	05/19/21 09:50

Pace Analytical Services, LLC
1241 Bellevue Street - Suite 9
Green Bay, WI 54302
(920)469-2436

SAMPLE ANALYTE COUNT

Project: 2-0121-56K PERIMETER SOLUTIONS
Pace Project No.: 40227193

Lab ID	Sample ID	Method	Analysts	Analytes Reported
40227193001	**PROFILE SAMPLE**	EPA 8270E	RJN	71
		EPA 8260	SMT	65
		ASTM D2974-87	AH	1

PASI-G = Pace Analytical Services - Green Bay

Pace Analytical Services, LLC
1241 Bellevue Street - Suite 9
Green Bay, WI 54302
(920)469-2436

ANALYTICAL RESULTS

Project: 2-0121-56K PERIMETER SOLUTIONS
Pace Project No.: 40227193

Sample: PROFILE SAMPLE **Lab ID: 40227193001** Collected: 05/19/21 08:45 Received: 05/19/21 09:50 Matrix: Solid

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

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8270E MSSV FULL LIST MICROWAVE	Analytical Method: EPA 8270E Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,2,4-Trichlorobenzene	**<21.7**	ug/kg	72.2	21.7	1	05/24/21 11:25	05/25/21 12:50	120-82-1	
1,2-Dichlorobenzene	**<60.3**	ug/kg	201	60.3	1	05/24/21 11:25	05/25/21 12:50	95-50-1	
1,3-Dichlorobenzene	**<26.5**	ug/kg	88.5	26.5	1	05/24/21 11:25	05/25/21 12:50	541-73-1	
1,4-Dichlorobenzene	**<26.7**	ug/kg	89.0	26.7	1	05/24/21 11:25	05/25/21 12:50	106-46-7	
2,2'-Oxybis(1-chloropropane)	**<49.4**	ug/kg	165	49.4	1	05/24/21 11:25	05/25/21 12:50	108-60-1	
2,4,5-Trichlorophenol	**<33.9**	ug/kg	113	33.9	1	05/24/21 11:25	05/25/21 12:50	95-95-4	
2,4,6-Trichlorophenol	**<29.2**	ug/kg	97.4	29.2	1	05/24/21 11:25	05/25/21 12:50	88-06-2	
2,4-Dichlorophenol	**<51.2**	ug/kg	171	51.2	1	05/24/21 11:25	05/25/21 12:50	120-83-2	
2,4-Dimethylphenol	**<37.9**	ug/kg	126	37.9	1	05/24/21 11:25	05/25/21 12:50	105-67-9	
2,4-Dinitrophenol	**<58.4**	ug/kg	195	58.4	1	05/24/21 11:25	05/25/21 12:50	51-28-5	
2,4-Dinitrotoluene	**<27.4**	ug/kg	91.4	27.4	1	05/24/21 11:25	05/25/21 12:50	121-14-2	
2,6-Dinitrotoluene	**<36.4**	ug/kg	121	36.4	1	05/24/21 11:25	05/25/21 12:50	606-20-2	
2-Chloronaphthalene	**<24.6**	ug/kg	82.0	24.6	1	05/24/21 11:25	05/25/21 12:50	91-58-7	
2-Chlorophenol	**<47.8**	ug/kg	159	47.8	1	05/24/21 11:25	05/25/21 12:50	95-57-8	
2-Methylnaphthalene	**<49.8**	ug/kg	166	49.8	1	05/24/21 11:25	05/25/21 12:50	91-57-6	
2-Methylphenol(o-Cresol)	**<34.8**	ug/kg	116	34.8	1	05/24/21 11:25	05/25/21 12:50	95-48-7	
2-Nitroaniline	**<54.6**	ug/kg	182	54.6	1	05/24/21 11:25	05/25/21 12:50	88-74-4	
2-Nitrophenol	**<60.5**	ug/kg	202	60.5	1	05/24/21 11:25	05/25/21 12:50	88-75-5	
3&4-Methylphenol(m&p Cresol)	**<35.1**	ug/kg	117	35.1	1	05/24/21 11:25	05/25/21 12:50		
3,3'-Dichlorobenzidine	**<52.0**	ug/kg	173	52.0	1	05/24/21 11:25	05/25/21 12:50	91-94-1	1q
3-Nitroaniline	**<32.6**	ug/kg	109	32.6	1	05/24/21 11:25	05/25/21 12:50	99-09-2	
4,6-Dinitro-2-methylphenol	**<59.1**	ug/kg	197	59.1	1	05/24/21 11:25	05/25/21 12:50	534-52-1	
4-Bromophenylphenyl ether	**<40.1**	ug/kg	134	40.1	1	05/24/21 11:25	05/25/21 12:50	101-55-3	
4-Chloro-3-methylphenol	**<59.6**	ug/kg	199	59.6	1	05/24/21 11:25	05/25/21 12:50	59-50-7	
4-Chloroaniline	**<31.5**	ug/kg	105	31.5	1	05/24/21 11:25	05/25/21 12:50	106-47-8	1q
4-Chlorophenylphenyl ether	**<35.7**	ug/kg	119	35.7	1	05/24/21 11:25	05/25/21 12:50	7005-72-3	
4-Nitroaniline	**<79.5**	ug/kg	265	79.5	1	05/24/21 11:25	05/25/21 12:50	100-01-6	
4-Nitrophenol	**<48.3**	ug/kg	161	48.3	1	05/24/21 11:25	05/25/21 12:50	100-02-7	
Acenaphthene	**<68.0**	ug/kg	227	68.0	1	05/24/21 11:25	05/25/21 12:50	83-32-9	
Acenaphthylene	**<68.4**	ug/kg	228	68.4	1	05/24/21 11:25	05/25/21 12:50	208-96-8	
Anthracene	**<30.6**	ug/kg	102	30.6	1	05/24/21 11:25	05/25/21 12:50	120-12-7	
Benzo(a)anthracene	**<29.7**	ug/kg	98.9	29.7	1	05/24/21 11:25	05/25/21 12:50	56-55-3	
Benzo(a)pyrene	**<28.8**	ug/kg	96.1	28.8	1	05/24/21 11:25	05/25/21 12:50	50-32-8	
Benzo(b)fluoranthene	**<32.9**	ug/kg	110	32.9	1	05/24/21 11:25	05/25/21 12:50	205-99-2	
Benzo(g,h,i)perylene	**<50.1**	ug/kg	167	50.1	1	05/24/21 11:25	05/25/21 12:50	191-24-2	
Benzo(k)fluoranthene	**<45.9**	ug/kg	153	45.9	1	05/24/21 11:25	05/25/21 12:50	207-08-9	
Butylbenzylphthalate	**<30.7**	ug/kg	102	30.7	1	05/24/21 11:25	05/25/21 12:50	85-68-7	
Carbazole	**<30.0**	ug/kg	100	30.0	1	05/24/21 11:25	05/25/21 12:50	86-74-8	
Chrysene	**<28.7**	ug/kg	95.5	28.7	1	05/24/21 11:25	05/25/21 12:50	218-01-9	
Di-n-butylphthalate	**<28.6**	ug/kg	95.5	28.6	1	05/24/21 11:25	05/25/21 12:50	84-74-2	
Di-n-octylphthalate	**<43.1**	ug/kg	144	43.1	1	05/24/21 11:25	05/25/21 12:50	117-84-0	CH
Dibenz(a,h)anthracene	**<52.1**	ug/kg	174	52.1	1	05/24/21 11:25	05/25/21 12:50	53-70-3	
Dibenzofuran	**<23.2**	ug/kg	77.3	23.2	1	05/24/21 11:25	05/25/21 12:50	132-64-9	
Diethylphthalate	**<31.8**	ug/kg	106	31.8	1	05/24/21 11:25	05/25/21 12:50	84-66-2	

Pace Analytical Services, LLC
1241 Bellevue Street - Suite 9
Green Bay, WI 54302
(920)469-2436

ANALYTICAL RESULTS

Project: 2-0121-56K PERIMETER SOLUTIONS
Pace Project No.: 40227193

Sample: PROFILE SAMPLE **Lab ID: 40227193001** Collected: 05/19/21 08:45 Received: 05/19/21 09:50 Matrix: Solid

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

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8270E MSSV FULL LIST MICROWAVE	Analytical Method: EPA 8270E Preparation Method: EPA 3546 Pace Analytical Services - Green Bay								
Dimethylphthalate	**<24.9**	ug/kg	83.1	24.9	1	05/24/21 11:25	05/25/21 12:50	131-11-3	
Fluoranthene	**49.7J**	ug/kg	90.4	27.1	1	05/24/21 11:25	05/25/21 12:50	206-44-0	
Fluorene	**<22.4**	ug/kg	74.7	22.4	1	05/24/21 11:25	05/25/21 12:50	86-73-7	
Hexachloro-1,3-butadiene	**<48.8**	ug/kg	163	48.8	1	05/24/21 11:25	05/25/21 12:50	87-68-3	
Hexachlorobenzene	**<32.2**	ug/kg	107	32.2	1	05/24/21 11:25	05/25/21 12:50	118-74-1	
Hexachlorocyclopentadiene	**<45.4**	ug/kg	151	45.4	1	05/24/21 11:25	05/25/21 12:50	77-47-4	
Hexachloroethane	**<30.7**	ug/kg	102	30.7	1	05/24/21 11:25	05/25/21 12:50	67-72-1	
Indeno(1,2,3-cd)pyrene	**<41.5**	ug/kg	138	41.5	1	05/24/21 11:25	05/25/21 12:50	193-39-5	
Isophorone	**<29.5**	ug/kg	98.2	29.5	1	05/24/21 11:25	05/25/21 12:50	78-59-1	
N-Nitroso-di-n-propylamine	**<30.4**	ug/kg	101	30.4	1	05/24/21 11:25	05/25/21 12:50	621-64-7	
N-Nitrosodiphenylamine	**<260**	ug/kg	867	260	1	05/24/21 11:25	05/25/21 12:50	86-30-6	
Naphthalene	**<67.0**	ug/kg	223	67.0	1	05/24/21 11:25	05/25/21 12:50	91-20-3	
Nitrobenzene	**<38.9**	ug/kg	130	38.9	1	05/24/21 11:25	05/25/21 12:50	98-95-3	
Pentachlorophenol	**<42.2**	ug/kg	141	42.2	1	05/24/21 11:25	05/25/21 12:50	87-86-5	L2
Phenanthrene	**26.9J**	ug/kg	82.0	24.6	1	05/24/21 11:25	05/25/21 12:50	85-01-8	
Phenol	**<45.5**	ug/kg	152	45.5	1	05/24/21 11:25	05/25/21 12:50	108-95-2	
Pyrene	**<42.5**	ug/kg	142	42.5	1	05/24/21 11:25	05/25/21 12:50	129-00-0	
Pyridine	**<30.8**	ug/kg	103	30.8	1	05/24/21 11:25	05/25/21 12:50	110-86-1	
bis(2-Chloroethoxy)methane	**<51.6**	ug/kg	172	51.6	1	05/24/21 11:25	05/25/21 12:50	111-91-1	
bis(2-Chloroethyl) ether	**<59.8**	ug/kg	199	59.8	1	05/24/21 11:25	05/25/21 12:50	111-44-4	
bis(2-Ethylhexyl)phthalate	**40.1J**	ug/kg	106	31.9	1	05/24/21 11:25	05/25/21 12:50	117-81-7	
Surrogates									
Nitrobenzene-d5 (S)	48	%	40-96		1	05/24/21 11:25	05/25/21 12:50	4165-60-0	
2-Fluorobiphenyl (S)	49	%	14-110		1	05/24/21 11:25	05/25/21 12:50	321-60-8	
Terphenyl-d14 (S)	55	%	10-121		1	05/24/21 11:25	05/25/21 12:50	1718-51-0	
Phenol-d6 (S)	46	%	14-104		1	05/24/21 11:25	05/25/21 12:50	13127-88-3	
2-Fluorophenol (S)	44	%	10-112		1	05/24/21 11:25	05/25/21 12:50	367-12-4	
2,4,6-Tribromophenol (S)	51	%	10-128		1	05/24/21 11:25	05/25/21 12:50	118-79-6	
8260 MSV Med Level Normal List	Analytical Method: EPA 8260 Preparation Method: EPA 5035/5030B Pace Analytical Services - Green Bay								
Benzene	**77.3**	ug/kg	25.9	15.4	1	05/28/21 08:45	06/01/21 10:05	71-43-2	
Bromobenzene	**<25.3**	ug/kg	64.8	25.3	1	05/28/21 08:45	06/01/21 10:05	108-86-1	
Bromochloromethane	**<17.8**	ug/kg	64.8	17.8	1	05/28/21 08:45	06/01/21 10:05	74-97-5	
Bromodichloromethane	**<15.4**	ug/kg	64.8	15.4	1	05/28/21 08:45	06/01/21 10:05	75-27-4	
Bromoform	**<285**	ug/kg	324	285	1	05/28/21 08:45	06/01/21 10:05	75-25-2	
Bromomethane	**<90.9**	ug/kg	324	90.9	1	05/28/21 08:45	06/01/21 10:05	74-83-9	
2-Butanone (MEK)	**<205**	ug/kg	1620	205	1	05/28/21 08:45	06/01/21 10:05	78-93-3	
n-Butylbenzene	**<29.7**	ug/kg	64.8	29.7	1	05/28/21 08:45	06/01/21 10:05	104-51-8	
sec-Butylbenzene	**<15.8**	ug/kg	64.8	15.8	1	05/28/21 08:45	06/01/21 10:05	135-98-8	
tert-Butylbenzene	**<20.4**	ug/kg	64.8	20.4	1	05/28/21 08:45	06/01/21 10:05	98-06-6	
Carbon tetrachloride	**<14.3**	ug/kg	64.8	14.3	1	05/28/21 08:45	06/01/21 10:05	56-23-5	
Chlorobenzene	**<7.8**	ug/kg	64.8	7.8	1	05/28/21 08:45	06/01/21 10:05	108-90-7	
Chloroethane	**<27.4**	ug/kg	324	27.4	1	05/28/21 08:45	06/01/21 10:05	75-00-3	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
1241 Bellevue Street - Suite 9
Green Bay, WI 54302
(920)469-2436

ANALYTICAL RESULTS

Project: 2-0121-56K PERIMETER SOLUTIONS
Pace Project No.: 40227193

Sample: PROFILE SAMPLE **Lab ID: 40227193001** Collected: 05/19/21 08:45 Received: 05/19/21 09:50 Matrix: Solid

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

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Med Level Normal List	Analytical Method: EPA 8260 Preparation Method: EPA 5035/5030B Pace Analytical Services - Green Bay								
Chloroform	**<46.4**	ug/kg	324	46.4	1	05/28/21 08:45	06/01/21 10:05	67-66-3	
Chloromethane	**<24.6**	ug/kg	64.8	24.6	1	05/28/21 08:45	06/01/21 10:05	74-87-3	
2-Chlorotoluene	**<21.0**	ug/kg	64.8	21.0	1	05/28/21 08:45	06/01/21 10:05	95-49-8	
4-Chlorotoluene	**<24.6**	ug/kg	64.8	24.6	1	05/28/21 08:45	06/01/21 10:05	106-43-4	
1,2-Dibromo-3-chloropropane	**<50.3**	ug/kg	324	50.3	1	05/28/21 08:45	06/01/21 10:05	96-12-8	
Dibromochloromethane	**<222**	ug/kg	324	222	1	05/28/21 08:45	06/01/21 10:05	124-48-1	
1,2-Dibromoethane (EDB)	**<17.8**	ug/kg	64.8	17.8	1	05/28/21 08:45	06/01/21 10:05	106-93-4	
Dibromomethane	**<19.2**	ug/kg	64.8	19.2	1	05/28/21 08:45	06/01/21 10:05	74-95-3	
1,2-Dichlorobenzene	**<20.1**	ug/kg	64.8	20.1	1	05/28/21 08:45	06/01/21 10:05	95-50-1	
1,3-Dichlorobenzene	**<17.8**	ug/kg	64.8	17.8	1	05/28/21 08:45	06/01/21 10:05	541-73-1	
1,4-Dichlorobenzene	**<17.8**	ug/kg	64.8	17.8	1	05/28/21 08:45	06/01/21 10:05	106-46-7	
Dichlorodifluoromethane	**<27.9**	ug/kg	64.8	27.9	1	05/28/21 08:45	06/01/21 10:05	75-71-8	
1,1-Dichloroethane	**<16.6**	ug/kg	64.8	16.6	1	05/28/21 08:45	06/01/21 10:05	75-34-3	
1,2-Dichloroethane	**<14.9**	ug/kg	64.8	14.9	1	05/28/21 08:45	06/01/21 10:05	107-06-2	
1,1-Dichloroethene	**<21.5**	ug/kg	64.8	21.5	1	05/28/21 08:45	06/01/21 10:05	75-35-4	
cis-1,2-Dichloroethene	**<13.9**	ug/kg	64.8	13.9	1	05/28/21 08:45	06/01/21 10:05	156-59-2	
trans-1,2-Dichloroethene	**<14.0**	ug/kg	64.8	14.0	1	05/28/21 08:45	06/01/21 10:05	156-60-5	
1,2-Dichloropropane	**<15.4**	ug/kg	64.8	15.4	1	05/28/21 08:45	06/01/21 10:05	78-87-5	
1,3-Dichloropropane	**<14.1**	ug/kg	64.8	14.1	1	05/28/21 08:45	06/01/21 10:05	142-28-9	
2,2-Dichloropropane	**<17.5**	ug/kg	64.8	17.5	1	05/28/21 08:45	06/01/21 10:05	594-20-7	
1,1-Dichloropropene	**<21.0**	ug/kg	64.8	21.0	1	05/28/21 08:45	06/01/21 10:05	563-58-6	
cis-1,3-Dichloropropene	**<42.8**	ug/kg	324	42.8	1	05/28/21 08:45	06/01/21 10:05	10061-01-5	
trans-1,3-Dichloropropene	**<185**	ug/kg	324	185	1	05/28/21 08:45	06/01/21 10:05	10061-02-6	
Diisopropyl ether	**<16.1**	ug/kg	64.8	16.1	1	05/28/21 08:45	06/01/21 10:05	108-20-3	
Ethylbenzene	**26.7J**	ug/kg	64.8	15.4	1	05/28/21 08:45	06/01/21 10:05	100-41-4	
Hexachloro-1,3-butadiene	**<129**	ug/kg	324	129	1	05/28/21 08:45	06/01/21 10:05	87-68-3	
Isopropylbenzene (Cumene)	**<17.5**	ug/kg	64.8	17.5	1	05/28/21 08:45	06/01/21 10:05	98-82-8	
p-Isopropyltoluene	**<19.7**	ug/kg	64.8	19.7	1	05/28/21 08:45	06/01/21 10:05	99-87-6	
Methylene Chloride	**<18.0**	ug/kg	64.8	18.0	1	05/28/21 08:45	06/01/21 10:05	75-09-2	
Methyl-tert-butyl ether	**<19.1**	ug/kg	64.8	19.1	1	05/28/21 08:45	06/01/21 10:05	1634-04-4	
Naphthalene	**<20.2**	ug/kg	324	20.2	1	05/28/21 08:45	06/01/21 10:05	91-20-3	
n-Propylbenzene	**<15.6**	ug/kg	64.8	15.6	1	05/28/21 08:45	06/01/21 10:05	103-65-1	
Styrene	**<16.6**	ug/kg	64.8	16.6	1	05/28/21 08:45	06/01/21 10:05	100-42-5	
1,1,1,2-Tetrachloroethane	**<15.6**	ug/kg	64.8	15.6	1	05/28/21 08:45	06/01/21 10:05	630-20-6	
1,1,2,2-Tetrachloroethane	**<23.5**	ug/kg	64.8	23.5	1	05/28/21 08:45	06/01/21 10:05	79-34-5	
Tetrachloroethene	**<25.2**	ug/kg	64.8	25.2	1	05/28/21 08:45	06/01/21 10:05	127-18-4	
Toluene	**461**	ug/kg	64.8	16.3	1	05/28/21 08:45	06/01/21 10:05	108-88-3	
1,2,3-Trichlorobenzene	**<72.2**	ug/kg	324	72.2	1	05/28/21 08:45	06/01/21 10:05	87-61-6	
1,2,4-Trichlorobenzene	**<53.4**	ug/kg	324	53.4	1	05/28/21 08:45	06/01/21 10:05	120-82-1	
1,1,1-Trichloroethane	**<16.6**	ug/kg	64.8	16.6	1	05/28/21 08:45	06/01/21 10:05	71-55-6	
1,1,2-Trichloroethane	**<23.6**	ug/kg	64.8	23.6	1	05/28/21 08:45	06/01/21 10:05	79-00-5	
Trichloroethene	**<24.2**	ug/kg	64.8	24.2	1	05/28/21 08:45	06/01/21 10:05	79-01-6	
Trichlorofluoromethane	**<18.8**	ug/kg	64.8	18.8	1	05/28/21 08:45	06/01/21 10:05	75-69-4	
1,2,3-Trichloropropane	**<31.5**	ug/kg	64.8	31.5	1	05/28/21 08:45	06/01/21 10:05	96-18-4	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
1241 Bellevue Street - Suite 9
Green Bay, WI 54302
(920)469-2436

ANALYTICAL RESULTS

Project: 2-0121-56K PERIMETER SOLUTIONS
Pace Project No.: 40227193

Sample: PROFILE SAMPLE **Lab ID: 40227193001** Collected: 05/19/21 08:45 Received: 05/19/21 09:50 Matrix: Solid

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

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Med Level Normal List	Analytical Method: EPA 8260 Preparation Method: EPA 5035/5030B Pace Analytical Services - Green Bay								
1,2,4-Trimethylbenzene	**204**	ug/kg	64.8	19.3	1	05/28/21 08:45	06/01/21 10:05	95-63-6	
1,3,5-Trimethylbenzene	**86.5**	ug/kg	64.8	20.9	1	05/28/21 08:45	06/01/21 10:05	108-67-8	
Vinyl chloride	**<13.1**	ug/kg	64.8	13.1	1	05/28/21 08:45	06/01/21 10:05	75-01-4	
m&p-Xylene	**502**	ug/kg	130	27.4	1	05/28/21 08:45	06/01/21 10:05	179601-23-1	
o-Xylene	**309**	ug/kg	64.8	19.4	1	05/28/21 08:45	06/01/21 10:05	95-47-6	
Surrogates									
Toluene-d8 (S)	113	%	67-159		1	05/28/21 08:45	06/01/21 10:05	2037-26-5	
4-Bromofluorobenzene (S)	126	%	66-153		1	05/28/21 08:45	06/01/21 10:05	460-00-4	
1,2-Dichlorobenzene-d4 (S)	117	%	82-158		1	05/28/21 08:45	06/01/21 10:05	2199-69-1	
Percent Moisture	Analytical Method: ASTM D2974-87 Pace Analytical Services - Green Bay								
Percent Moisture	**12.9**	%	0.10	0.10	1		05/19/21 16:54		

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
1241 Bellevue Street - Suite 9
Green Bay, WI 54302
(920)469-2436

QUALITY CONTROL DATA

Project: 2-0121-56K PERIMETER SOLUTIONS
Pace Project No.: 40227193

QC Batch: 386670
QC Batch Method: EPA 5035/5030B
Analysis Method: EPA 8260
Analysis Description: 8260 MSV Med Level Normal List
Laboratory: Pace Analytical Services - Green Bay

Associated Lab Samples: 40227193001

METHOD BLANK: 2231114 Matrix: Solid
Associated Lab Samples: 40227193001

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1,1,2-Tetrachloroethane	ug/kg	<12.0	50.0	06/01/21 08:05	
1,1,1-Trichloroethane	ug/kg	<12.8	50.0	06/01/21 08:05	
1,1,2,2-Tetrachloroethane	ug/kg	<18.1	50.0	06/01/21 08:05	
1,1,2-Trichloroethane	ug/kg	<18.2	50.0	06/01/21 08:05	
1,1-Dichloroethane	ug/kg	<12.8	50.0	06/01/21 08:05	
1,1-Dichloroethene	ug/kg	<16.6	50.0	06/01/21 08:05	
1,1-Dichloropropene	ug/kg	<16.2	50.0	06/01/21 08:05	
1,2,3-Trichlorobenzene	ug/kg	<55.7	250	06/01/21 08:05	
1,2,3-Trichloropropane	ug/kg	<24.3	50.0	06/01/21 08:05	
1,2,4-Trichlorobenzene	ug/kg	<41.2	250	06/01/21 08:05	
1,2,4-Trimethylbenzene	ug/kg	<14.9	50.0	06/01/21 08:05	
1,2-Dibromo-3-chloropropane	ug/kg	<38.8	250	06/01/21 08:05	
1,2-Dibromoethane (EDB)	ug/kg	<13.7	50.0	06/01/21 08:05	
1,2-Dichlorobenzene	ug/kg	<15.5	50.0	06/01/21 08:05	
1,2-Dichloroethane	ug/kg	<11.5	50.0	06/01/21 08:05	
1,2-Dichloropropane	ug/kg	<11.9	50.0	06/01/21 08:05	
1,3,5-Trimethylbenzene	ug/kg	<16.1	50.0	06/01/21 08:05	
1,3-Dichlorobenzene	ug/kg	<13.7	50.0	06/01/21 08:05	
1,3-Dichloropropane	ug/kg	<10.9	50.0	06/01/21 08:05	
1,4-Dichlorobenzene	ug/kg	<13.7	50.0	06/01/21 08:05	
2,2-Dichloropropane	ug/kg	<13.5	50.0	06/01/21 08:05	
2-Butanone (MEK)	ug/kg	<158	1250	06/01/21 08:05	
2-Chlorotoluene	ug/kg	<16.2	50.0	06/01/21 08:05	
4-Chlorotoluene	ug/kg	<19.0	50.0	06/01/21 08:05	
Benzene	ug/kg	<11.9	20.0	06/01/21 08:05	
Bromobenzene	ug/kg	<19.5	50.0	06/01/21 08:05	
Bromochloromethane	ug/kg	<13.7	50.0	06/01/21 08:05	
Bromodichloromethane	ug/kg	<11.9	50.0	06/01/21 08:05	
Bromoform	ug/kg	<220	250	06/01/21 08:05	
Bromomethane	ug/kg	<70.1	250	06/01/21 08:05	
Carbon tetrachloride	ug/kg	<11.0	50.0	06/01/21 08:05	
Chlorobenzene	ug/kg	<6.0	50.0	06/01/21 08:05	
Chloroethane	ug/kg	<21.1	250	06/01/21 08:05	
Chloroform	ug/kg	<35.8	250	06/01/21 08:05	
Chloromethane	ug/kg	<19.0	50.0	06/01/21 08:05	
cis-1,2-Dichloroethene	ug/kg	<10.7	50.0	06/01/21 08:05	
cis-1,3-Dichloropropene	ug/kg	<33.0	250	06/01/21 08:05	
Dibromochloromethane	ug/kg	<171	250	06/01/21 08:05	
Dibromomethane	ug/kg	<14.8	50.0	06/01/21 08:05	
Dichlorodifluoromethane	ug/kg	<21.5	50.0	06/01/21 08:05	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
1241 Bellevue Street - Suite 9
Green Bay, WI 54302
(920)469-2436

QUALITY CONTROL DATA

Project: 2-0121-56K PERIMETER SOLUTIONS
Pace Project No.: 40227193

METHOD BLANK: 2231114 Matrix: Solid
Associated Lab Samples: 40227193001

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Diisopropyl ether	ug/kg	<12.4	50.0	06/01/21 08:05	
Ethylbenzene	ug/kg	<11.9	50.0	06/01/21 08:05	
Hexachloro-1,3-butadiene	ug/kg	<99.4	250	06/01/21 08:05	
Isopropylbenzene (Cumene)	ug/kg	<13.5	50.0	06/01/21 08:05	
m&p-Xylene	ug/kg	<21.1	100	06/01/21 08:05	
Methyl-tert-butyl ether	ug/kg	<14.7	50.0	06/01/21 08:05	
Methylene Chloride	ug/kg	<13.9	50.0	06/01/21 08:05	
n-Butylbenzene	ug/kg	<22.9	50.0	06/01/21 08:05	
n-Propylbenzene	ug/kg	<12.0	50.0	06/01/21 08:05	
Naphthalene	ug/kg	<15.6	250	06/01/21 08:05	
o-Xylene	ug/kg	<15.0	50.0	06/01/21 08:05	
p-Isopropyltoluene	ug/kg	<15.2	50.0	06/01/21 08:05	
sec-Butylbenzene	ug/kg	<12.2	50.0	06/01/21 08:05	
Styrene	ug/kg	<12.8	50.0	06/01/21 08:05	
tert-Butylbenzene	ug/kg	<15.7	50.0	06/01/21 08:05	
Tetrachloroethene	ug/kg	<19.4	50.0	06/01/21 08:05	
Toluene	ug/kg	<12.6	50.0	06/01/21 08:05	
trans-1,2-Dichloroethene	ug/kg	<10.8	50.0	06/01/21 08:05	
trans-1,3-Dichloropropene	ug/kg	<143	250	06/01/21 08:05	
Trichloroethene	ug/kg	<18.7	50.0	06/01/21 08:05	
Trichlorofluoromethane	ug/kg	<14.5	50.0	06/01/21 08:05	
Vinyl chloride	ug/kg	<10.1	50.0	06/01/21 08:05	
1,2-Dichlorobenzene-d4 (S)	%	99	82-158	06/01/21 08:05	
4-Bromofluorobenzene (S)	%	106	66-153	06/01/21 08:05	
Toluene-d8 (S)	%	96	67-159	06/01/21 08:05	

LABORATORY CONTROL SAMPLE: 2231115

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1-Trichloroethane	ug/kg	2500	2410	96	70-130	
1,1,2,2-Tetrachloroethane	ug/kg	2500	2400	96	65-129	
1,1,2-Trichloroethane	ug/kg	2500	2520	101	70-130	
1,1-Dichloroethane	ug/kg	2500	2540	101	70-130	
1,1-Dichloroethene	ug/kg	2500	2500	100	67-120	
1,2,4-Trichlorobenzene	ug/kg	2500	2400	96	64-130	
1,2-Dibromo-3-chloropropane	ug/kg	2500	2300	92	57-119	
1,2-Dibromoethane (EDB)	ug/kg	2500	2530	101	70-130	
1,2-Dichlorobenzene	ug/kg	2500	2540	101	70-130	
1,2-Dichloroethane	ug/kg	2500	2580	103	70-130	
1,2-Dichloropropane	ug/kg	2500	2580	103	72-118	
1,3-Dichlorobenzene	ug/kg	2500	2550	102	70-130	
1,4-Dichlorobenzene	ug/kg	2500	2500	100	70-130	
Benzene	ug/kg	2500	2540	102	70-130	
Bromodichloromethane	ug/kg	2500	2580	103	70-130	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
1241 Bellevue Street - Suite 9
Green Bay, WI 54302
(920)469-2436

QUALITY CONTROL DATA

Project: 2-0121-56K PERIMETER SOLUTIONS
Pace Project No.: 40227193

LABORATORY CONTROL SAMPLE: 2231115

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Bromoform	ug/kg	2500	2260	90	66-130	
Bromomethane	ug/kg	2500	2020	81	13-153	
Carbon tetrachloride	ug/kg	2500	2400	96	73-134	
Chlorobenzene	ug/kg	2500	2510	100	70-130	
Chloroethane	ug/kg	2500	2710	108	19-170	
Chloroform	ug/kg	2500	2470	99	79-120	
Chloromethane	ug/kg	2500	1990	80	45-117	
cis-1,2-Dichloroethene	ug/kg	2500	2400	96	70-130	
cis-1,3-Dichloropropene	ug/kg	2500	2480	99	68-130	
Dibromochloromethane	ug/kg	2500	2470	99	70-130	
Dichlorodifluoromethane	ug/kg	2500	1320	53	15-135	
Ethylbenzene	ug/kg	2500	2500	100	78-120	
Isopropylbenzene (Cumene)	ug/kg	2500	2580	103	70-130	
m&p-Xylene	ug/kg	5000	5140	103	70-130	
Methyl-tert-butyl ether	ug/kg	2500	2630	105	65-130	
Methylene Chloride	ug/kg	2500	2560	102	70-130	
o-Xylene	ug/kg	2500	2520	101	70-130	
Styrene	ug/kg	2500	2730	109	70-130	
Tetrachloroethene	ug/kg	2500	2330	93	70-130	
Toluene	ug/kg	2500	2480	99	76-120	
trans-1,2-Dichloroethene	ug/kg	2500	2590	104	70-130	
trans-1,3-Dichloropropene	ug/kg	2500	2410	96	70-130	
Trichloroethene	ug/kg	2500	2410	96	70-130	
Trichlorofluoromethane	ug/kg	2500	2620	105	49-153	
Vinyl chloride	ug/kg	2500	2180	87	58-121	
1,2-Dichlorobenzene-d4 (S)	%			96	82-158	
4-Bromofluorobenzene (S)	%			105	66-153	
Toluene-d8 (S)	%			94	67-159	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2231116 2231117

Parameter	Units	40227263002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
1,1,1-Trichloroethane	ug/kg	<16.7	1300	1300	1210	1170	93	90	70-130	4	20	
1,1,2,2-Tetrachloroethane	ug/kg	<23.6	1300	1300	1280	1290	98	99	65-129	1	20	
1,1,2-Trichloroethane	ug/kg	<23.7	1300	1300	1340	1280	103	98	70-130	4	20	
1,1-Dichloroethane	ug/kg	<16.7	1300	1300	1310	1320	101	101	70-130	1	20	
1,1-Dichloroethene	ug/kg	<21.6	1300	1300	1250	1230	96	94	64-120	1	20	
1,2,4-Trichlorobenzene	ug/kg	<53.6	1300	1300	1320	1260	101	97	64-130	4	20	
1,2-Dibromo-3-chloropropane	ug/kg	<50.5	1300	1300	1170	1200	90	92	57-130	3	21	
1,2-Dibromoethane (EDB)	ug/kg	<17.8	1300	1300	1270	1290	98	99	70-130	1	20	
1,2-Dichlorobenzene	ug/kg	<20.2	1300	1300	1330	1310	102	101	70-130	2	20	
1,2-Dichloroethane	ug/kg	<15.0	1300	1300	1360	1340	104	103	70-130	2	20	
1,2-Dichloropropane	ug/kg	<15.5	1300	1300	1300	1310	100	101	72-122	1	20	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
1241 Bellevue Street - Suite 9
Green Bay, WI 54302
(920)469-2436

QUALITY CONTROL DATA

Project: 2-0121-56K PERIMETER SOLUTIONS
Pace Project No.: 40227193

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2231116 2231117

Parameter	Units	40227263002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
1,3-Dichlorobenzene	ug/kg	<17.8	1300	1300	1330	1280	102	99	70-130	3	20	
1,4-Dichlorobenzene	ug/kg	<17.8	1300	1300	1310	1280	100	98	70-130	2	20	
Benzene	ug/kg	<15.5	1300	1300	1310	1320	100	101	70-130	1	20	
Bromodichloromethane	ug/kg	<15.5	1300	1300	1300	1290	100	99	70-130	1	20	
Bromoform	ug/kg	<286	1300	1300	1200	1180	92	90	66-130	2	20	
Bromomethane	ug/kg	<91.3	1300	1300	1280	1330	97	101	13-153	3	20	
Carbon tetrachloride	ug/kg	<14.3	1300	1300	1160	1120	89	86	67-134	3	20	
Chlorobenzene	ug/kg	<7.8	1300	1300	1260	1270	96	98	70-130	1	20	
Chloroethane	ug/kg	<27.5	1300	1300	1610	1480	123	114	11-195	8	20	
Chloroform	ug/kg	<46.6	1300	1300	1300	1280	100	98	79-120	1	20	
Chloromethane	ug/kg	<24.7	1300	1300	1180	1160	91	89	30-136	2	20	
cis-1,2-Dichloroethene	ug/kg	<13.9	1300	1300	1250	1200	96	92	70-130	4	20	
cis-1,3-Dichloropropene	ug/kg	<43.0	1300	1300	1210	1210	93	93	68-130	0	20	
Dibromochloromethane	ug/kg	<223	1300	1300	1250	1200	96	92	70-130	4	20	
Dichlorodifluoromethane	ug/kg	<28.0	1300	1300	836	775	64	60	10-158	8	25	
Ethylbenzene	ug/kg	<15.5	1300	1300	1250	1230	96	94	78-120	2	20	
Isopropylbenzene (Cumene)	ug/kg	<17.6	1300	1300	1270	1250	98	96	70-130	2	20	
m&p-Xylene	ug/kg	<27.5	2600	2600	2510	2420	96	93	70-130	4	20	
Methyl-tert-butyl ether	ug/kg	<19.1	1300	1300	1380	1380	106	106	65-130	0	20	
Methylene Chloride	ug/kg	<18.1	1300	1300	1360	1350	105	103	70-130	1	20	
o-Xylene	ug/kg	<19.5	1300	1300	1260	1260	97	97	70-130	0	20	
Styrene	ug/kg	<16.7	1300	1300	1290	1320	99	101	70-130	2	20	
Tetrachloroethene	ug/kg	<25.3	1300	1300	1160	1140	89	88	70-130	2	20	
Toluene	ug/kg	<16.4	1300	1300	1270	1240	98	95	76-120	3	20	
trans-1,2-Dichloroethene	ug/kg	<14.1	1300	1300	1360	1320	105	102	70-130	3	20	
trans-1,3-Dichloropropene	ug/kg	<186	1300	1300	1160	1160	89	89	70-130	0	20	
Trichloroethene	ug/kg	<24.3	1300	1300	1240	1240	95	95	70-130	0	20	
Trichlorofluoromethane	ug/kg	<18.9	1300	1300	1370	1290	105	99	42-159	6	21	
Vinyl chloride	ug/kg	<13.1	1300	1300	1260	1210	96	93	43-137	4	20	
1,2-Dichlorobenzene-d4 (S)	%						114	118	82-158			
4-Bromofluorobenzene (S)	%						124	127	66-153			
Toluene-d8 (S)	%						109	113	67-159			

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
1241 Bellevue Street - Suite 9
Green Bay, WI 54302
(920)469-2436

QUALITY CONTROL DATA

Project: 2-0121-56K PERIMETER SOLUTIONS
Pace Project No.: 40227193

QC Batch: 386063
QC Batch Method: EPA 3546
Analysis Method: EPA 8270E
Analysis Description: 8270E Solid MSSV Microwave
Laboratory: Pace Analytical Services - Green Bay
Associated Lab Samples: 40227193001

METHOD BLANK: 2228197
Matrix: Solid
Associated Lab Samples: 40227193001

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,2,4-Trichlorobenzene	ug/kg	<18.9	62.9	05/25/21 09:17	
1,2-Dichlorobenzene	ug/kg	<52.5	175	05/25/21 09:17	
1,3-Dichlorobenzene	ug/kg	<23.1	77.1	05/25/21 09:17	
1,4-Dichlorobenzene	ug/kg	<23.3	77.5	05/25/21 09:17	
2,2'-Oxybis(1-chloropropane)	ug/kg	<43.1	144	05/25/21 09:17	
2,4,5-Trichlorophenol	ug/kg	<29.5	98.3	05/25/21 09:17	
2,4,6-Trichlorophenol	ug/kg	<25.5	84.9	05/25/21 09:17	
2,4-Dichlorophenol	ug/kg	<44.6	149	05/25/21 09:17	
2,4-Dimethylphenol	ug/kg	<33.0	110	05/25/21 09:17	
2,4-Dinitrophenol	ug/kg	<50.9	170	05/25/21 09:17	
2,4-Dinitrotoluene	ug/kg	<23.9	79.6	05/25/21 09:17	
2,6-Dinitrotoluene	ug/kg	<31.7	106	05/25/21 09:17	
2-Chloronaphthalene	ug/kg	<21.4	71.5	05/25/21 09:17	
2-Chlorophenol	ug/kg	<41.7	139	05/25/21 09:17	
2-Methylnaphthalene	ug/kg	<43.4	145	05/25/21 09:17	
2-Methylphenol(o-Cresol)	ug/kg	<30.3	101	05/25/21 09:17	
2-Nitroaniline	ug/kg	<47.6	159	05/25/21 09:17	
2-Nitrophenol	ug/kg	<52.7	176	05/25/21 09:17	
3&4-Methylphenol(m&p Cresol)	ug/kg	<30.6	102	05/25/21 09:17	
3,3'-Dichlorobenzidine	ug/kg	<45.3	151	05/25/21 09:17	1q
3-Nitroaniline	ug/kg	<28.4	94.7	05/25/21 09:17	
4,6-Dinitro-2-methylphenol	ug/kg	<51.5	172	05/25/21 09:17	
4-Bromophenylphenyl ether	ug/kg	<35.0	117	05/25/21 09:17	
4-Chloro-3-methylphenol	ug/kg	<52.0	173	05/25/21 09:17	
4-Chloroaniline	ug/kg	<27.4	91.5	05/25/21 09:17	1q
4-Chlorophenylphenyl ether	ug/kg	<31.1	104	05/25/21 09:17	
4-Nitroaniline	ug/kg	<69.3	231	05/25/21 09:17	
4-Nitrophenol	ug/kg	<42.0	140	05/25/21 09:17	
Acenaphthene	ug/kg	<59.2	197	05/25/21 09:17	
Acenaphthylene	ug/kg	<59.6	199	05/25/21 09:17	
Anthracene	ug/kg	<26.7	88.9	05/25/21 09:17	
Benzo(a)anthracene	ug/kg	<25.9	86.2	05/25/21 09:17	
Benzo(a)pyrene	ug/kg	<25.1	83.7	05/25/21 09:17	
Benzo(b)fluoranthene	ug/kg	<28.7	95.6	05/25/21 09:17	
Benzo(g,h,i)perylene	ug/kg	<43.7	146	05/25/21 09:17	
Benzo(k)fluoranthene	ug/kg	<40.0	133	05/25/21 09:17	
bis(2-Chloroethoxy)methane	ug/kg	<45.0	150	05/25/21 09:17	
bis(2-Chloroethyl) ether	ug/kg	<52.1	174	05/25/21 09:17	
bis(2-Ethylhexyl)phthalate	ug/kg	<27.8	92.6	05/25/21 09:17	
Butylbenzylphthalate	ug/kg	<26.8	89.2	05/25/21 09:17	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
1241 Bellevue Street - Suite 9
Green Bay, WI 54302
(920)469-2436

QUALITY CONTROL DATA

Project: 2-0121-56K PERIMETER SOLUTIONS
Pace Project No.: 40227193

METHOD BLANK: 2228197 Matrix: Solid
Associated Lab Samples: 40227193001

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Carbazole	ug/kg	<26.1	87.1	05/25/21 09:17	
Chrysene	ug/kg	<25.0	83.2	05/25/21 09:17	
Di-n-butylphthalate	ug/kg	<25.0	83.2	05/25/21 09:17	
Di-n-octylphthalate	ug/kg	<37.5	125	05/25/21 09:17	CH
Dibenz(a,h)anthracene	ug/kg	<45.4	151	05/25/21 09:17	
Dibenzofuran	ug/kg	<20.2	67.4	05/25/21 09:17	
Diethylphthalate	ug/kg	<27.7	92.3	05/25/21 09:17	
Dimethylphthalate	ug/kg	<21.7	72.4	05/25/21 09:17	
Fluoranthene	ug/kg	<23.6	78.8	05/25/21 09:17	
Fluorene	ug/kg	<19.5	65.1	05/25/21 09:17	
Hexachloro-1,3-butadiene	ug/kg	<42.5	142	05/25/21 09:17	
Hexachlorobenzene	ug/kg	<28.1	93.6	05/25/21 09:17	
Hexachlorocyclopentadiene	ug/kg	<39.5	132	05/25/21 09:17	
Hexachloroethane	ug/kg	<26.7	89.1	05/25/21 09:17	
Indeno(1,2,3-cd)pyrene	ug/kg	<36.1	120	05/25/21 09:17	
Isophorone	ug/kg	<25.7	85.6	05/25/21 09:17	
N-Nitroso-di-n-propylamine	ug/kg	<26.5	88.3	05/25/21 09:17	
N-Nitrosodiphenylamine	ug/kg	<227	755	05/25/21 09:17	
Naphthalene	ug/kg	<58.4	195	05/25/21 09:17	
Nitrobenzene	ug/kg	<33.9	113	05/25/21 09:17	
Pentachlorophenol	ug/kg	<36.8	123	05/25/21 09:17	
Phenanthrene	ug/kg	<21.4	71.4	05/25/21 09:17	
Phenol	ug/kg	<39.6	132	05/25/21 09:17	
Pyrene	ug/kg	<37.0	123	05/25/21 09:17	
Pyridine	ug/kg	<26.9	89.6	05/25/21 09:17	
2,4,6-Tribromophenol (S)	%	83	10-128	05/25/21 09:17	
2-Fluorobiphenyl (S)	%	93	14-110	05/25/21 09:17	
2-Fluorophenol (S)	%	86	10-112	05/25/21 09:17	
Nitrobenzene-d5 (S)	%	92	40-96	05/25/21 09:17	
Phenol-d6 (S)	%	90	14-104	05/25/21 09:17	
Terphenyl-d14 (S)	%	103	10-121	05/25/21 09:17	

LABORATORY CONTROL SAMPLE: 2228198

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,2,4-Trichlorobenzene	ug/kg	1670	1610	96	57-130	
1,2-Dichlorobenzene	ug/kg	1670	1560	93	43-114	
1,3-Dichlorobenzene	ug/kg	1670	1500	90	31-115	
1,4-Dichlorobenzene	ug/kg	1670	1530	92	37-113	
2,2'-Oxybis(1-chloropropane)	ug/kg	1670	1520	91	54-142	
2,4,5-Trichlorophenol	ug/kg	1670	1580	95	70-130	
2,4,6-Trichlorophenol	ug/kg	1670	1580	95	73-118	
2,4-Dichlorophenol	ug/kg	1670	1600	96	78-120	
2,4-Dimethylphenol	ug/kg	1670	1550	93	50-116	

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Pace Analytical Services, LLC
1241 Bellevue Street - Suite 9
Green Bay, WI 54302
(920)469-2436

QUALITY CONTROL DATA

Project: 2-0121-56K PERIMETER SOLUTIONS
Pace Project No.: 40227193

LABORATORY CONTROL SAMPLE: 2228198

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
2,4-Dinitrophenol	ug/kg	1670	470	28	27-129	
2,4-Dinitrotoluene	ug/kg	1670	1730	103	70-130	
2,6-Dinitrotoluene	ug/kg	1670	1690	101	70-130	
2-Chloronaphthalene	ug/kg	1670	1590	95	70-130	
2-Chlorophenol	ug/kg	1670	1500	90	69-130	
2-Methylnaphthalene	ug/kg	1670	1570	94	70-130	
2-Methylphenol(o-Cresol)	ug/kg	1670	1690	101	56-116	
2-Nitroaniline	ug/kg	1670	1610	96	70-130	
2-Nitrophenol	ug/kg	1670	1680	101	70-120	
3&4-Methylphenol(m&p Cresol)	ug/kg	1670	1590	95	50-113	
3,3'-Dichlorobenzidine	ug/kg	1670	1320	79	45-117	1q
3-Nitroaniline	ug/kg	1670	1480	89	58-117	
4,6-Dinitro-2-methylphenol	ug/kg	1670	1110	67	65-115	
4-Bromophenylphenyl ether	ug/kg	1670	1500	90	70-130	
4-Chloro-3-methylphenol	ug/kg	1670	1690	101	76-120	
4-Chloroaniline	ug/kg	1670	1300	78	48-130	1q
4-Chlorophenylphenyl ether	ug/kg	1670	1580	94	70-130	
4-Nitroaniline	ug/kg	1670	1580	95	70-130	
4-Nitrophenol	ug/kg	1670	1610	96	10-133	
Acenaphthene	ug/kg	1670	1550	93	80-120	
Acenaphthylene	ug/kg	1670	1700	102	70-130	
Anthracene	ug/kg	1670	1680	101	70-130	
Benzo(a)anthracene	ug/kg	1670	1600	96	70-130	
Benzo(a)pyrene	ug/kg	1670	1710	103	80-120	
Benzo(b)fluoranthene	ug/kg	1670	1610	97	70-130	
Benzo(g,h,i)perylene	ug/kg	1670	1610	96	70-127	
Benzo(k)fluoranthene	ug/kg	1670	1690	101	70-130	
bis(2-Chloroethoxy)methane	ug/kg	1670	1730	104	70-130	
bis(2-Chloroethyl) ether	ug/kg	1670	1660	99	70-130	
bis(2-Ethylhexyl)phthalate	ug/kg	1670	1820	109	70-130	
Butylbenzylphthalate	ug/kg	1670	1740	104	70-130	
Carbazole	ug/kg	1670	1630	98	70-130	
Chrysene	ug/kg	1670	1630	97	70-130	
Di-n-butylphthalate	ug/kg	1670	1720	103	70-130	
Di-n-octylphthalate	ug/kg	1670	1870	112	71-123	CH
Dibenz(a,h)anthracene	ug/kg	1670	1680	101	70-130	
Dibenzofuran	ug/kg	1670	1610	96	70-130	
Diethylphthalate	ug/kg	1670	1640	98	70-130	
Dimethylphthalate	ug/kg	1670	1610	97	70-130	
Fluoranthene	ug/kg	1670	1680	100	80-120	
Fluorene	ug/kg	1670	1530	91	70-130	
Hexachloro-1,3-butadiene	ug/kg	1670	1620	97	26-130	
Hexachlorobenzene	ug/kg	1670	1620	97	70-130	
Hexachlorocyclopentadiene	ug/kg	1670	1390	83	10-139	
Hexachloroethane	ug/kg	1670	1500	90	12-128	
Indeno(1,2,3-cd)pyrene	ug/kg	1670	1640	98	70-131	
Isophorone	ug/kg	1670	1660	99	70-130	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
1241 Bellevue Street - Suite 9
Green Bay, WI 54302
(920)469-2436

QUALITY CONTROL DATA

Project: 2-0121-56K PERIMETER SOLUTIONS
Pace Project No.: 40227193

LABORATORY CONTROL SAMPLE: 2228198

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
N-Nitroso-di-n-propylamine	ug/kg	1670	1590	95	70-130	
N-Nitrosodiphenylamine	ug/kg	1670	1590	95	80-120	
Naphthalene	ug/kg	1670	1630	98	70-130	
Nitrobenzene	ug/kg	1670	1580	95	70-130	
Pentachlorophenol	ug/kg	1670	970	58	62-121	L2
Phenanthrene	ug/kg	1670	1610	96	70-130	
Phenol	ug/kg	1670	1550	93	31-130	
Pyrene	ug/kg	1670	1740	104	70-130	
Pyridine	ug/kg	1670	988	59	17-97	
2,4,6-Tribromophenol (S)	%			100	10-128	
2-Fluorobiphenyl (S)	%			96	14-110	
2-Fluorophenol (S)	%			94	10-112	
Nitrobenzene-d5 (S)	%			97	40-96	S0
Phenol-d6 (S)	%			93	14-104	
Terphenyl-d14 (S)	%			99	10-121	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2228199 2228200

Parameter	Units	40227193001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
1,2,4-Trichlorobenzene	ug/kg	<21.7	1920	1920	1450	1450	76	76	57-130	0	27	
1,2-Dichlorobenzene	ug/kg	<60.3	1920	1920	1450	1390	76	73	43-130	4	30	
1,3-Dichlorobenzene	ug/kg	<26.5	1920	1920	1450	1360	76	71	31-130	6	33	
1,4-Dichlorobenzene	ug/kg	<26.7	1920	1920	1450	1400	76	73	37-113	3	31	
2,2'-Oxybis(1-chloropropane)	ug/kg	<49.4	1920	1920	1450	1380	76	72	46-142	5	23	
2,4,5-Trichlorophenol	ug/kg	<33.9	1920	1920	1510	1390	79	73	10-138	8	28	
2,4,6-Trichlorophenol	ug/kg	<29.2	1920	1920	1460	1420	76	74	10-145	2	27	
2,4-Dichlorophenol	ug/kg	<51.2	1920	1920	1500	1450	78	76	19-128	3	27	
2,4-Dimethylphenol	ug/kg	<37.9	1920	1920	1500	1390	78	73	26-116	8	28	
2,4-Dinitrophenol	ug/kg	<58.4	1920	1920	210	182J	11	10	10-130		43	
2,4-Dinitrotoluene	ug/kg	<27.4	1920	1920	1560	1460	81	76	30-130	6	29	
2,6-Dinitrotoluene	ug/kg	<36.4	1920	1920	1600	1480	84	78	36-130	8	27	
2-Chloronaphthalene	ug/kg	<24.6	1920	1920	1480	1390	77	73	61-130	6	23	
2-Chlorophenol	ug/kg	<47.8	1920	1920	1450	1370	75	72	34-130	5	30	
2-Methylnaphthalene	ug/kg	<49.8	1920	1920	1460	1420	75	73	56-130	3	24	
2-Methylphenol(o-Cresol)	ug/kg	<34.8	1920	1920	1570	1450	82	76	36-116	7	24	
2-Nitroaniline	ug/kg	<54.6	1920	1920	1600	1570	84	82	29-131	2	29	
2-Nitrophenol	ug/kg	<60.5	1920	1920	1620	1600	85	83	12-135	1	32	
3&4-Methylphenol(m&p Cresol)	ug/kg	<35.1	1920	1920	1530	1420	80	74	25-123	7	25	
3,3'-Dichlorobenzidine	ug/kg	<52.0	1920	1920	1530	1400	80	73	18-117	9	30	1q
3-Nitroaniline	ug/kg	<32.6	1920	1920	1450	1380	76	72	18-117	5	35	
4,6-Dinitro-2-methylphenol	ug/kg	<59.1	1920	1920	657	668	34	35	10-115	2	50	
4-Bromophenylphenyl ether	ug/kg	<40.1	1920	1920	1480	1380	77	72	58-130	7	24	
4-Chloro-3-methylphenol	ug/kg	<59.6	1920	1920	1540	1490	81	78	29-121	3	27	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
1241 Bellevue Street - Suite 9
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(920)469-2436

QUALITY CONTROL DATA

Project: 2-0121-56K PERIMETER SOLUTIONS
Pace Project No.: 40227193

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2228199 2228200

Parameter	Units	40227193001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
4-Chloroaniline	ug/kg	<31.5	1920	1920	1250	1140	65	60	20-130	9	26	1q
4-Chlorophenylphenyl ether	ug/kg	<35.7	1920	1920	1450	1400	75	73	59-130	3	28	
4-Nitroaniline	ug/kg	<79.5	1920	1920	1530	1470	80	77	10-153	4	43	
4-Nitrophenol	ug/kg	<48.3	1920	1920	1240	1140	65	59	10-133	9	43	
Acenaphthene	ug/kg	<68.0	1920	1920	1470	1370	77	72	58-120	7	24	
Acenaphthylene	ug/kg	<68.4	1920	1920	1560	1480	82	77	61-130	6	25	
Anthracene	ug/kg	<30.6	1920	1920	1570	1480	82	77	67-130	6	27	
Benzo(a)anthracene	ug/kg	<29.7	1920	1920	1580	1430	82	74	62-130	10	24	
Benzo(a)pyrene	ug/kg	<28.8	1920	1920	1650	1530	85	79	63-120	7	24	
Benzo(b)fluoranthene	ug/kg	<32.9	1920	1920	1580	1450	81	75	61-130	9	27	
Benzo(g,h,i)perylene	ug/kg	<50.1	1920	1920	1700	1550	88	80	56-127	9	23	
Benzo(k)fluoranthene	ug/kg	<45.9	1920	1920	1610	1500	84	77	55-130	8	24	
bis(2-Chloroethoxy)methane	ug/kg	<51.6	1920	1920	1560	1520	81	80	48-130	2	27	
bis(2-Chloroethyl) ether	ug/kg	<59.8	1920	1920	1660	1530	86	80	33-130	8	30	
bis(2-Ethylhexyl)phthalate	ug/kg	40.1J	1920	1920	1740	1590	89	81	49-130	9	25	
Butylbenzylphthalate	ug/kg	<30.7	1920	1920	1770	1610	93	84	48-130	10	24	
Carbazole	ug/kg	<30.0	1920	1920	1590	1510	83	79	56-130	5	27	
Chrysene	ug/kg	<28.7	1920	1920	1570	1400	80	72	62-130	11	24	
Di-n-butylphthalate	ug/kg	<28.6	1920	1920	1710	1570	89	82	58-130	8	25	
Di-n-octylphthalate	ug/kg	<43.1	1920	1920	1850	1720	96	90	42-123	7	20	CH
Dibenz(a,h)anthracene	ug/kg	<52.1	1920	1920	1630	1480	85	77	51-130	10	29	
Dibenzofuran	ug/kg	<23.2	1920	1920	1510	1410	79	74	60-130	6	22	
Diethylphthalate	ug/kg	<31.8	1920	1920	1560	1470	81	77	57-130	6	22	
Dimethylphthalate	ug/kg	<24.9	1920	1920	1540	1430	81	75	55-130	7	22	
Fluoranthene	ug/kg	49.7J	1920	1920	1700	1550	86	78	59-120	9	29	
Fluorene	ug/kg	<22.4	1920	1920	1480	1380	77	72	60-130	7	20	
Hexachloro-1,3-butadiene	ug/kg	<48.8	1920	1920	1460	1450	76	76	26-130	1	28	
Hexachlorobenzene	ug/kg	<32.2	1920	1920	1500	1410	78	73	63-130	6	25	
Hexachlorocyclopentadiene	ug/kg	<45.4	1920	1920	904	966	47	50	10-139	7	50	
Hexachloroethane	ug/kg	<30.7	1920	1920	1440	1440	75	75	12-128	0	33	
Indeno(1,2,3-cd)pyrene	ug/kg	<41.5	1920	1920	1690	1560	87	80	47-148	8	29	
Isophorone	ug/kg	<29.5	1920	1920	1550	1480	81	77	52-130	5	25	
N-Nitroso-di-n-propylamine	ug/kg	<30.4	1920	1920	1540	1410	80	74	53-130	8	25	
N-Nitrosodiphenylamine	ug/kg	<260	1920	1920	1520	1430	79	75	53-120	5	28	
Naphthalene	ug/kg	<67.0	1920	1920	1500	1450	78	75	63-130	4	25	
Nitrobenzene	ug/kg	<38.9	1920	1920	1530	1460	80	76	44-130	4	29	
Pentachlorophenol	ug/kg	<42.2	1920	1920	442	388	23	20	10-121	13	48	
Phenanthrene	ug/kg	26.9J	1920	1920	1540	1410	79	72	65-130	9	27	
Phenol	ug/kg	<45.5	1920	1920	1480	1370	76	71	31-130	7	27	
Pyrene	ug/kg	<42.5	1920	1920	1690	1520	86	78	54-130	10	23	
Pyridine	ug/kg	<30.8	1920	1920	1300	1390	68	73	17-97	7	41	
2,4,6-Tribromophenol (S)	%						82	75	10-128			
2-Fluorobiphenyl (S)	%						81	73	14-110			
2-Fluorophenol (S)	%						81	75	10-112			
Nitrobenzene-d5 (S)	%						84	77	40-96			

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
1241 Bellevue Street - Suite 9
Green Bay, WI 54302
(920)469-2436

QUALITY CONTROL DATA

Project: 2-0121-56K PERIMETER SOLUTIONS
Pace Project No.: 40227193

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2228199 2228200

Parameter	Units	40227193001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Phenol-d6 (S)	%						79	73	14-104			
Terphenyl-d14 (S)	%						84	73	10-121			

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
1241 Bellevue Street - Suite 9
Green Bay, WI 54302
(920)469-2436

QUALITY CONTROL DATA

Project: 2-0121-56K PERIMETER SOLUTIONS
Pace Project No.: 40227193

QC Batch:	385795	Analysis Method:	ASTM D2974-87
QC Batch Method:	ASTM D2974-87	Analysis Description:	Dry Weight/Percent Moisture
		Laboratory:	Pace Analytical Services - Green Bay

Associated Lab Samples: 40227193001

SAMPLE DUPLICATE: 2226048

Parameter	Units	40227186003 Result	Dup Result	RPD	Max RPD	Qualifiers
Percent Moisture	%	15.7	15.6	1	10	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

Pace Analytical Services, LLC
1241 Bellevue Street - Suite 9
Green Bay, WI 54302
(920)469-2436

QUALIFIERS

Project: 2-0121-56K PERIMETER SOLUTIONS
Pace Project No.: 40227193

DEFINITIONS

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

ND - Not Detected at or above LOD.

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

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

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

S - Surrogate

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

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

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

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

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

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

TNI - The NELAC Institute.

ANALYTE QUALIFIERS

1q	The initial calibration verification for this compound was outside of method control limits.
CH	The continuing calibration for this compound is outside of Pace Analytical acceptance limits. The results may be biased high.
L2	Analyte recovery in the laboratory control sample (LCS) was below QC limits. Results may be biased low.
S0	Surrogate recovery outside laboratory control limits.

Pace Analytical Services, LLC
1241 Bellevue Street - Suite 9
Green Bay, WI 54302
(920)469-2436

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: 2-0121-56K PERIMETER SOLUTIONS
Pace Project No.: 40227193

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
40227193001	**PROFILE SAMPLE**	EPA 3546	386063	EPA 8270E	386166
40227193001	**PROFILE SAMPLE**	EPA 5035/5030B	386670	EPA 8260	386673
40227193001	**PROFILE SAMPLE**	ASTM D2974-87	385795		

(Please Print Clearly)

Pace Analytical®
www.pacelabs.com

CHAIN OF COUSTODY

UPPER MIDWEST REGION
MN: 612-607-1700 WI: 920-469-2436

40227193

Company Name:	General Engineering Co
Branch/Location:	—
Project Contact:	Beth Erdman
Phone:	608-697-8004
Project Number:	2-0121-56K
Project Name:	Perimeter Solutions
Project State:	WI
Sampled By (Print):	Beth Erdman
Sampled By (Sign):	Beth H Erdman
PO #:	
Regulatory Program:	

Quote #:	
Mail To Contact:	Beth Erdman
Mail To Company:	General Engineering
Mail To Address:	916 Silver Lake Dr Portage, WI 53901
Invoice To Contact:	Same
Invoice To Company:	
Invoice To Address:	Email Preferred
Invoice To Phone:	

*Preservation Codes
A=None B=HCL C=H2SO4 D=HNO3 E=DI Water F=Methanol G=NaOH
H=Sodium Bisulfate Solution I=Sodium Thiosulfate J=Other

Data Package Options (billable)
☐ EPA Level III
☐ EPA Level IV

MS/MSD
☐ On your sample (billable)
☐ NOT needed on your sample

Matrix Codes
A = Air, B = Biota, C = Charcoal, O = Oil, S = Soil, Sl = Sludge
W = Water, DW = Drinking Water, GW = Ground Water, SW = Surface Water, WW = Waste Water, WP = Wipe

				FILTERED? (YES/NO)	Y/N	N	N	N								
				PRESERVATION (CODE)*	Pick Letter	F	A	A								
PACE LAB #	CLIENT FIELD ID	COLLECTION DATE	COLLECTION TIME	MATRIX	Analyses Requested	VOC 8260	SVOC	PFAS (PFAS)						CLIENT COMMENTS	LAB COMMENTS (Lab Use Only)	Profile #
001	Profile Sample	5/19/21	8:45	Soil		X	X	X								

Rush Turnaround Time Requested - Prelims
(Rush TAT subject to approval/surcharge)
Date Needed:

Transmit Prelim Rush Results by (complete what you want):

Email #1:	berdman@generalengineering.net
Email #2:	
Telephone:	608-697-8004
Fax:	

Samples on HOLD are subject to special pricing and release of liability

Relinquished By:	Date/Time:	Received By:	Date/Time:
Beth H Erdman	5/19/21 9:58	Susan Kuffer	5/19/21 0950
Relinquished By:	Date/Time:	Received By: Pace	Date/Time:
Relinquished By:	Date/Time:	Received By:	Date/Time:
Relinquished By:	Date/Time:	Received By:	Date/Time:
Relinquished By:	Date/Time:	Received By:	Date/Time:

PACE Project No. 40227193

Receipt Temp = 4 °C

Sample Receipt pH
OK / Adjusted

Cooler Custody Seal
Present / Not Present (circled: Not Present)
Intact / Not Intact

Version 6.0 06/14/06

ORIGINAL

C019a(27Jun2006)

Sample Preservation Receipt Form

Pace Analytical Services, LLC
1241 Bellevue Street, Suite 9
Green Bay, WI 54302

Client Name: General Engineering Project # 40207193

All containers needing preservation have been checked and noted below: □Yes □No ☒N/A

Lab Lot# of pH paper: Lab Std #ID of preservation (if pH adjusted):

Initial when completed: Date/ Time:

Pace Lab #	Glass: AG1U	BG1U	AG1H	AG4S	AG4U	AG5U	AG2S	BG3U	Plastic: BP1U	BP3U	BP3B	BP3N	BP3S	Vials: VG9A	DG9T	VG9U	VG9H	VG9M	VG9D	Jars: JGFU	JG9U	WGFU	WPFU	General: SP5T	ZPLC	GN	VOA Vials (>6mm) *	H2SO4 pH ≤2	NaOH+Zn Act pH ≥9	NaOH pH ≥12	HNO3 pH ≤2	pH after adjusted	Volume (mL)
001										2								2		1													2.5 / 5 / 10
002																																	2.5 / 5 / 10
003																																	2.5 / 5 / 10
004																																	2.5 / 5 / 10
005																																	2.5 / 5 / 10
006																																	2.5 / 5 / 10
007																																	2.5 / 5 / 10
008																	5/19/21																2.5 / 5 / 10
009																																	2.5 / 5 / 10
010																		2		1													2.5 / 5 / 10
011																																	2.5 / 5 / 10
012																																	2.5 / 5 / 10
013																																	2.5 / 5 / 10
014																																	2.5 / 5 / 10
015																																	2.5 / 5 / 10
016																																	2.5 / 5 / 10
017																																	2.5 / 5 / 10
018																																	2.5 / 5 / 10
019																																	2.5 / 5 / 10
020																																	2.5 / 5 / 10

Exceptions to preservation check: VOA, Coliform, TOC, TOX, TOH, O&G, WI DRO, Phenolics, Other:_____ Headspace in VOA Vials (>6mm) : □Yes □No ☒N/A ***If yes look in headspace column**

AG1U	1 liter amber glass
BG1U	1 liter clear glass
AG1H	1 liter amber glass HCL
AG4S	125 mL amber glass H2SO4
AG4U	120 mL amber glass unpres
AG5U	100 mL amber glass unpres
AG2S	500 mL amber glass H2SO4
BG3U	250 mL clear glass unpres

BP1U	1 liter plastic unpres
BP3U	250 mL plastic unpres
BP3B	250 mL plastic NaOH
BP3N	250 mL plastic HNO3
BP3S	250 mL plastic H2SO4

VG9A	40 mL clear ascorbic
DG9T	40 mL amber Na Thio
VG9U	40 mL clear vial unpres
VG9H	40 mL clear vial HCL
VG9M	40 mL clear vial MeOH
VG9D	40 mL clear vial DI

JGFU	4 oz amber jar unpres
JG9U	9 oz amber jar unpres
WGFU	4 oz clear jar unpres
WPFU	4 oz plastic jar unpres
SP5T	120 mL plastic Na Thiosulfate
ZPLC	ziploc bag
GN	

Pace Analytical® 1241 Bellevue Street, Green Bay, WI 54302	Document Name: **Sample Condition Upon Receipt (SCUR)**	Document Revised: 26Mar2020
	Document No.: **ENV-FRM-GBAY-0014-Rev.00**	Author: Pace Green Bay Quality Office

Sample Condition Upon Receipt Form (SCUR)

Project #:

WO# : 40227193

40227193

Client Name: General Engineering

Courier: ☐ CS Logistics ☐ Fed Ex ☐ Speedee ☐ UPS ☐ Waltco
☒ Client ☐ Pace Other: _____

Tracking #: —

Custody Seal on Cooler/Box Present: ☐ yes ☒ no Seals intact: ☐ yes ☐ no

Custody Seal on Samples Present: ☐ yes ☒ no Seals intact: ☐ yes ☐ no

Packing Material: ☐ Bubble Wrap ☒ Bubble Bags ☐ None ☐ Other

Thermometer Used SR - 107 **Type of Ice:** (Wet) Blue Dry None ☒ Samples on ice, cooling process has begun

Cooler Temperature Uncorr: 4 /Corr: 4

Temp Blank Present: ☐ yes ☒ no **Biological Tissue is Frozen:** ☐ yes ☐ no

Person examining contents:
Date: 5/19/21 /Initials: AZS

Temp should be above freezing to 6°C.
Biota Samples may be received at ≤ 0°C if shipped on Dry Ice.

Labeled By Initials:

Chain of Custody Present:	☒Yes	☐No	☐N/A	1.
Chain of Custody Filled Out:	☐Yes	☒No	☐N/A	2. no inv. phone 5/19/21 AZS
Chain of Custody Relinquished:	☒Yes	☐No	☐N/A	3.
Sampler Name & Signature on COC:	☒Yes	☐No	☐N/A	4.
Samples Arrived within Hold Time:	☒Yes	☐No		5.
- VOA Samples frozen upon receipt	☐Yes	☐No		Date/Time:
Short Hold Time Analysis (<72hr):	☐Yes	☒No		6.
Rush Turn Around Time Requested:	☐Yes	☒No		7.
Sufficient Volume:				8.
For Analysis: ☒Yes ☐No MS/MSD:	☐Yes	☒No	☐N/A	
Correct Containers Used:	☒Yes	☐No		9.
-Pace Containers Used:	☐Yes	☒No	☐N/A	
-Pace IR Containers Used:	☐Yes	☐No	☒N/A	
Containers Intact:	☒Yes	☐No		10.
Filtered volume received for Dissolved tests	☐Yes	☐No	☒N/A	11.
Sample Labels match COC:	☒Yes	☐No	☐N/A	12.
-Includes date/time/ID/Analysis Matrix: S				
Trip Blank Present:	☐Yes	☒No	☐N/A	13.
Trip Blank Custody Seals Present	☐Yes	☐No	☒N/A	
Pace Trip Blank Lot # (if purchased): _____				

Client Notification/ Resolution: If checked, see attached form for additional comments ☐

Person Contacted: _____ Date/Time: _____

Comments/ Resolution: _____

PM Review is documented electronically in LIMs. By releasing the project, the PM acknowledges they have reviewed the sample logi

Case Narrative
Pace Analytical Services, LLC
Lot Number: WE21014

This Report of Analysis contains the analytical result(s) for the sample(s) listed on the Sample Summary following this Case Narrative. The sample receiving date is documented in the header information associated with each sample.

All results listed in this report relate only to the samples that are contained within this report.

Sample receipt, sample analysis, and data review have been performed in accordance with the most current approved The NELAC Institute (TNI) standards, the Pace Analytical Services, LLC ("Pace") Laboratory Quality Manual, standard operating procedures (SOPs), and Pace policies. Any exceptions to the TNI standards, the Laboratory Quality Manual, SOPs or policies are qualified on the results page or discussed below.

Where applicable, all soil sample results (including LOQ and DL if requested) are corrected for dry weight unless flagged with a "W" qualifier.

If you have any questions regarding this report please contact the Pace Project Manager listed on the cover page.

Sample Summary
Pace Analytical Services, LLC
Lot Number: WE21014
Project Name: 2-0121-56K
Project Number: 40227193

Sample Number	Sample ID	Matrix	Date Sampled	Date Received
001	PROFILE SAMPLE	Solid	05/19/2021 0845	05/21/2021

(1 sample)

Detection Summary
Pace Analytical Services, LLC
Lot Number: WE21014
Project Name: 2-0121-56K
Project Number: 40227193

Sample	Sample ID	Matrix	Parameter	Method	Result	Q	Units	Page
001	PROFILE SAMPLE	Solid	6:2 FTS	PFAS by ID	25		ug/kg	5
001	PROFILE SAMPLE	Solid	PFBA	PFAS by ID	3.9		ug/kg	5
001	PROFILE SAMPLE	Solid	PFHpA	PFAS by ID	6.7		ug/kg	5
001	PROFILE SAMPLE	Solid	PFHxA	PFAS by ID	23		ug/kg	5
001	PROFILE SAMPLE	Solid	PFOA	PFAS by ID	0.32	J	ug/kg	6
001	PROFILE SAMPLE	Solid	PFPeA	PFAS by ID	33		ug/kg	6

(6 detections)

PFAS by LC/MS/MS

Client: **Pace Analytical Services, LLC** | Laboratory ID: **WE21014-001**

Description: **PROFILE SAMPLE** | Matrix: **Solid**

Date Sampled: **05/19/2021 0845** | Project Name: **2-0121-56K** | % Solids: **84.5** **05/21/2021 2314**

Date Received: **05/21/2021** | Project Number: **40227193**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	SOP SPE	PFAS by ID SOP	1	05/22/2021 2022	SES	05/21/2021 1734	93100

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	MDL	Units	Run
9-chlorohexadecafluoro-3-oxanone-1-sulfonic acid (9Cl-PF3ONS)	756426-58-1	PFAS by ID SOP	ND		2.1	0.16	ug/kg	1
11-chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3...)	763051-92-9	PFAS by ID SOP	ND		2.1	0.18	ug/kg	1
1H, 1H, 2H, 2H-perfluorodecane sulfonic acid (8:2 FTS)	39108-34-4	PFAS by ID SOP	ND		2.1	0.28	ug/kg	1
1H, 1H, 2H, 2H-perfluorooctane sulfonic acid (6:2 FTS)	**27619-97-2**	**PFAS by ID SOP**	**25**		**2.1**	**0.32**	**ug/kg**	**1**
1H,1H,2H,2H-perfluorohexane sulfonic acid (4:2 FTS)	757124-72-4	PFAS by ID SOP	ND		2.1	0.23	ug/kg	1
Hexafluoropropylene oxide dimer acid (GenX)	13252-13-6	PFAS by ID SOP	ND		4.2	0.60	ug/kg	1
4,8-dioxa-3H-perfluorononanoic acid (ADONA)	919005-14-4	PFAS by ID SOP	ND		2.1	0.16	ug/kg	1
N-ethylperfluoro-1-octanesulfonamide (EtFOSA)	4151-50-2	PFAS by ID SOP	ND		2.1	0.37	ug/kg	1
N-ethylperfluoro-1-octanesulfonamidoacetic acid (EtFOSAA)	2991-50-6	PFAS by ID SOP	ND		2.1	0.30	ug/kg	1
2-N-ethylperfluoro-1-octanesulfonamido-ethanol (EtFOSE)	1691-99-2	PFAS by ID SOP	ND		2.1	0.24	ug/kg	1
N-methylperfluoro-1-octanesulfonamide (MeFOSA)	31506-32-8	PFAS by ID SOP	ND		2.1	0.36	ug/kg	1
N-methylperfluoro-1-octanesulfonamidoacetic acid (MeFOSAA)	2355-31-9	PFAS by ID SOP	ND		2.1	0.41	ug/kg	1
2-N-methylperfluoro-1-octanesulfonamido-ethanol (MeFOSE)	24448-09-7	PFAS by ID SOP	ND		2.1	0.35	ug/kg	1
Perfluoro-1-butanesulfonic acid (PFBS)	375-73-5	PFAS by ID SOP	ND		1.0	0.14	ug/kg	1
Perfluoro-1-decanesulfonic acid (PFDS)	335-77-3	PFAS by ID SOP	ND		1.0	0.23	ug/kg	1
Perfluoro-1-heptanesulfonic acid (PFHpS)	375-92-8	PFAS by ID SOP	ND		1.0	0.18	ug/kg	1
Perfluoro-1-nonanesulfonic acid (PFNS)	68259-12-1	PFAS by ID SOP	ND		1.0	0.23	ug/kg	1
Perfluoro-1-octanesulfonamide (PFOSA)	754-91-6	PFAS by ID SOP	ND		1.0	0.18	ug/kg	1
Perfluoro-1-pentanesulfonic acid (PFPeS)	2706-91-4	PFAS by ID SOP	ND		1.0	0.19	ug/kg	1
Perfluorododecanesulfonic acid (PFDOS)	79780-39-5	PFAS by ID SOP	ND		1.0	0.27	ug/kg	1
Perfluorohexanesulfonic acid (PFHxS)	355-46-4	PFAS by ID SOP	ND		1.0	0.18	ug/kg	1
Perfluoro-n-butanoic acid (PFBA)	**375-22-4**	**PFAS by ID SOP**	**3.9**		**1.0**	**0.43**	**ug/kg**	**1**
Perfluoro-n-decanoic acid (PFDA)	335-76-2	PFAS by ID SOP	ND		1.0	0.16	ug/kg	1
Perfluoro-n-dodecanoic acid (PFDoA)	307-55-1	PFAS by ID SOP	ND		1.0	0.18	ug/kg	1
Perfluoro-n-heptanoic acid (PFHpA)	**375-85-9**	**PFAS by ID SOP**	**6.7**		**1.0**	**0.15**	**ug/kg**	**1**
Perfluoro-n-hexanoic acid (PFHxA)	**307-24-4**	**PFAS by ID SOP**	**23**		**1.0**	**0.19**	**ug/kg**	**1**
Perfluoro-n-nonanoic acid (PFNA)	375-95-1	PFAS by ID SOP	ND		1.0	0.15	ug/kg	1
Perfluoro-n-octanoic acid (PFOA)	**335-67-1**	**PFAS by ID SOP**	**0.32**	**J**	**1.0**	**0.22**	**ug/kg**	**1**
Perfluoro-n-pentanoic acid (PFPeA)	**2706-90-3**	**PFAS by ID SOP**	**33**		**1.0**	**0.16**	**ug/kg**	**1**
Perfluoro-n-tetradecanoic acid (PFTeDA)	376-06-7	PFAS by ID SOP	ND		1.0	0.20	ug/kg	1
Perfluoro-n-tridecanoic acid (PFTrDA)	72629-94-8	PFAS by ID SOP	ND		1.0	0.18	ug/kg	1
Perfluoro-n-undecanoic acid (PFUdA)	2058-94-8	PFAS by ID SOP	ND		1.0	0.19	ug/kg	1
Perfluorooctanesulfonic acid (PFOS)	1763-23-1	PFAS by ID SOP	ND		1.0	0.37	ug/kg	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
13C2_4:2FTS		85	25-150
13C2_6:2FTS		89	25-150
13C2_8:2FTS		94	25-150
13C2_PFDoA		92	25-150
13C2_PFTeDA		99	25-150
13C3_PFBS		89	25-150
13C3_PFHxS		82	25-150
13C3-HFPO-DA		89	25-150
13C4_PFBA		92	25-150

LOQ = Limit of Quantitation | B = Detected in the method blank | E = Quantitation of compound exceeded the calibration range | DL = Detection Limit | Q = Surrogate failure

ND = Not detected at or above the DL | N = Recovery is out of criteria | P = The RPD between two GC columns exceeds 40% | J = Estimated result < LOQ and ≥ DL | L = LCS/LCSD failure

H = Out of holding time | W = Reported on wet weight basis | S = MS/MSD failure

Pace Analytical Services, LLC *(formerly Shealy Environmental Services, Inc.)*
106 Vantage Point Drive West Columbia, SC 29172 (803) 791-9700 Fax (803) 791-9111 www.pacelabs.com

PFAS by LC/MS/MS

Client: **Pace Analytical Services, LLC**			Laboratory ID: **WE21014-001**
Description: **PROFILE SAMPLE**			Matrix: **Solid**
Date Sampled: **05/19/2021 0845**	Project Name: **2-0121-56K**		% Solids: **84.5** **05/21/2021 2314**
Date Received: **05/21/2021**	Project Number: **40227193**		

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
13C4_PFHpA		91	25-150
13C5_PFHxA		93	25-150
13C5_PFPeA		89	25-150
13C6_PFDA		96	25-150
13C7_PFUdA		88	25-150
13C8_PFOA		88	25-150
13C8_PFOS		100	25-150
13C8_PFOSA		95	10-150
13C9_PFNA		93	25-150
d-EtFOSA		106	10-150
d5-EtFOSAA		94	25-150
d9-EtFOSE		87	10-150
d-MeFOSA		95	10-150
d3-MeFOSAA		99	25-150
d7-MeFOSE		104	10-150

LOQ = Limit of Quantitation | B = Detected in the method blank | E = Quantitation of compound exceeded the calibration range | DL = Detection Limit | Q = Surrogate failure
ND = Not detected at or above the DL | N = Recovery is out of criteria | P = The RPD between two GC columns exceeds 40% | J = Estimated result < LOQ and ≥ DL | L = LCS/LCSD failure
H = Out of holding time | W = Reported on wet weight basis | | | S = MS/MSD failure

QC Summary

PFAS by LC/MS/MS - MB

Sample ID: WQ93100-001
Batch: 93100
Analytical Method: PFAS by ID SOP

Matrix: Solid
Prep Method: SOP SPE
Prep Date: 05/21/2021 1734

Parameter	Result	Q	Dil	LOQ	MDL	Units	Analysis Date
9Cl-PF3ONS	ND		1	2.0	0.16	ug/kg	05/22/2021 1836
11Cl-PF3OUdS	ND		1	2.0	0.17	ug/kg	05/22/2021 1836
8:2 FTS	ND		1	2.0	0.27	ug/kg	05/22/2021 1836
6:2 FTS	ND		1	2.0	0.31	ug/kg	05/22/2021 1836
4:2 FTS	ND		1	2.0	0.22	ug/kg	05/22/2021 1836
GenX	ND		1	4.0	0.58	ug/kg	05/22/2021 1836
ADONA	ND		1	2.0	0.15	ug/kg	05/22/2021 1836
EtFOSA	ND		1	2.0	0.36	ug/kg	05/22/2021 1836
EtFOSAA	ND		1	2.0	0.29	ug/kg	05/22/2021 1836
EtFOSE	ND		1	2.0	0.23	ug/kg	05/22/2021 1836
MeFOSA	ND		1	2.0	0.35	ug/kg	05/22/2021 1836
MeFOSAA	ND		1	2.0	0.40	ug/kg	05/22/2021 1836
MeFOSE	ND		1	2.0	0.33	ug/kg	05/22/2021 1836
PFBS	ND		1	1.0	0.13	ug/kg	05/22/2021 1836
PFDS	ND		1	1.0	0.22	ug/kg	05/22/2021 1836
PFHpS	ND		1	1.0	0.18	ug/kg	05/22/2021 1836
PFNS	ND		1	1.0	0.22	ug/kg	05/22/2021 1836
PFOSA	ND		1	1.0	0.18	ug/kg	05/22/2021 1836
PFPeS	ND		1	1.0	0.19	ug/kg	05/22/2021 1836
PFDOS	ND		1	1.0	0.26	ug/kg	05/22/2021 1836
PFHxS	ND		1	1.0	0.18	ug/kg	05/22/2021 1836
PFBA	ND		1	1.0	0.42	ug/kg	05/22/2021 1836
PFDA	ND		1	1.0	0.16	ug/kg	05/22/2021 1836
PFDoA	ND		1	1.0	0.18	ug/kg	05/22/2021 1836
PFHpA	ND		1	1.0	0.14	ug/kg	05/22/2021 1836
PFHxA	ND		1	1.0	0.18	ug/kg	05/22/2021 1836
PFNA	ND		1	1.0	0.15	ug/kg	05/22/2021 1836
PFOA	ND		1	1.0	0.21	ug/kg	05/22/2021 1836
PFPeA	ND		1	1.0	0.16	ug/kg	05/22/2021 1836
PFTeDA	ND		1	1.0	0.19	ug/kg	05/22/2021 1836
PFTrDA	ND		1	1.0	0.17	ug/kg	05/22/2021 1836
PFUdA	ND		1	1.0	0.18	ug/kg	05/22/2021 1836
PFOS	ND		1	1.0	0.36	ug/kg	05/22/2021 1836

Surrogate	Q	% Rec	Acceptance Limit
13C2_4:2FTS		94	25-150
13C2_6:2FTS		100	25-150
13C2_8:2FTS		100	25-150
13C2_PFDoA		101	25-150
13C2_PFTeDA		105	25-150
13C3_PFBS		96	25-150
13C3_PFHxS		92	25-150
13C3-HFPO-DA		93	25-150

LOQ = Limit of Quantitation
DL = Detection Limit
ND = Not detected at or above the DL
J = Estimated result < LOQ and ≥ DL
* = RSD is out of criteria
N = Recovery is out of criteria
P = The RPD between two GC columns exceeds 40%
+ = RPD is out of criteria

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

PFAS by LC/MS/MS - MB

Sample ID: WQ93100-001
Batch: 93100
Analytical Method: PFAS by ID SOP

Matrix: Solid
Prep Method: SOP SPE
Prep Date: 05/21/2021 1734

Surrogate	Q	% Rec	Acceptance Limit
13C4_PFBA		97	25-150
13C4_PFHpA		102	25-150
13C5_PFHxA		104	25-150
13C5_PFPeA		94	25-150
13C6_PFDA		106	25-150
13C7_PFUdA		97	25-150
13C8_PFOA		92	25-150
13C8_PFOS		101	25-150
13C8_PFOSA		101	10-150
13C9_PFNA		97	25-150
d-EtFOSA		111	10-150
d5-EtFOSAA		105	25-150
d9-EtFOSE		93	10-150
d-MeFOSA		93	10-150
d3-MeFOSAA		111	25-150
d7-MeFOSE		117	10-150

LOQ = Limit of Quantitation
DL = Detection Limit

ND = Not detected at or above the DL
J = Estimated result < LOQ and ≥ DL
* = RSD is out of criteria

N = Recovery is out of criteria
P = The RPD between two GC columns exceeds 40%
+ = RPD is out of criteria

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

PFAS by LC/MS/MS - LCS

Sample ID: WQ93100-002
Batch: 93100
Analytical Method: PFAS by ID SOP

Matrix: Solid
Prep Method: SOP SPE
Prep Date: 05/21/2021 1734

Parameter	Spike Amount (ug/kg)	Result (ug/kg)	Q	Dil	% Rec	%Rec Limit	Analysis Date
9Cl-PF3ONS	1.9	1.7		1	92	50-150	05/22/2021 1846
11Cl-PF3OUdS	1.9	1.9		1	103	50-150	05/22/2021 1846
8:2 FTS	1.9	1.7		1	87	50-150	05/22/2021 1846
6:2 FTS	1.9	1.7		1	92	50-150	05/22/2021 1846
4:2 FTS	1.9	1.9		1	104	50-150	05/22/2021 1846
GenX	4.0	4.0		1	100	50-150	05/22/2021 1846
ADONA	1.9	1.8		1	95	50-150	05/22/2021 1846
EtFOSA	2.0	2.0		1	100	50-150	05/22/2021 1846
EtFOSAA	2.0	2.3		1	115	50-150	05/22/2021 1846
EtFOSE	2.0	2.0		1	100	50-150	05/22/2021 1846
MeFOSA	2.0	2.3		1	114	50-150	05/22/2021 1846
MeFOSAA	2.0	2.0		1	101	50-150	05/22/2021 1846
MeFOSE	2.0	1.9		1	97	50-150	05/22/2021 1846
PFBS	1.8	1.7		1	97	50-150	05/22/2021 1846
PFDS	1.9	2.1		1	110	50-150	05/22/2021 1846
PFHpS	1.9	1.8		1	96	50-150	05/22/2021 1846
PFNS	1.9	2.0		1	105	50-150	05/22/2021 1846
PFOSA	2.0	2.0		1	99	50-150	05/22/2021 1846
PFPeS	1.9	2.0		1	107	50-150	05/22/2021 1846
PFDOS	1.9	1.9		1	99	50-150	05/22/2021 1846
PFHxS	1.8	1.6		1	91	50-150	05/22/2021 1846
PFBA	2.0	2.0		1	100	50-150	05/22/2021 1846
PFDA	2.0	1.9		1	95	50-150	05/22/2021 1846
PFDoA	2.0	2.1		1	104	50-150	05/22/2021 1846
PFHpA	2.0	2.0		1	99	50-150	05/22/2021 1846
PFHxA	2.0	2.0		1	102	50-150	05/22/2021 1846
PFNA	2.0	2.1		1	106	50-150	05/22/2021 1846
PFOA	2.0	2.2		1	110	50-150	05/22/2021 1846
PFPeA	2.0	1.9		1	97	50-150	05/22/2021 1846
PFTeDA	2.0	2.0		1	102	50-150	05/22/2021 1846
PFTrDA	2.0	2.2		1	111	50-150	05/22/2021 1846
PFUdA	2.0	1.9		1	95	50-150	05/22/2021 1846
PFOS	1.9	1.5		1	84	50-150	05/22/2021 1846

Surrogate	Q	% Rec	Acceptance Limit
13C2_4:2FTS		87	25-150
13C2_6:2FTS		92	25-150
13C2_8:2FTS		98	25-150
13C2_PFDoA		90	25-150
13C2_PFTeDA		94	25-150
13C3_PFBS		86	25-150
13C3_PFHxS		85	25-150
13C3-HFPO-DA		90	25-150

LOQ = Limit of Quantitation
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N = Recovery is out of criteria
P = The RPD between two GC columns exceeds 40%
+ = RPD is out of criteria

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

PFAS by LC/MS/MS - LCS

Sample ID: WQ93100-002
Batch: 93100
Analytical Method: PFAS by ID SOP

Matrix: Solid
Prep Method: SOP SPE
Prep Date: 05/21/2021 1734

Surrogate	Q	% Rec	Acceptance Limit
13C4_PFBA		89	25-150
13C4_PFHpA		96	25-150
13C5_PFHxA		88	25-150
13C5_PFPeA		90	25-150
13C6_PFDA		95	25-150
13C7_PFUdA		93	25-150
13C8_PFOA		83	25-150
13C8_PFOS		93	25-150
13C8_PFOSA		92	10-150
13C9_PFNA		86	25-150
d-EtFOSA		106	10-150
d5-EtFOSAA		95	25-150
d9-EtFOSE		93	10-150
d-MeFOSA		84	10-150
d3-MeFOSAA		95	25-150
d7-MeFOSE		104	10-150

LOQ = Limit of Quantitation
DL = Detection Limit

ND = Not detected at or above the DL
J = Estimated result < LOQ and ≥ DL
* = RSD is out of criteria

N = Recovery is out of criteria
P = The RPD between two GC columns exceeds 40%
+ = RPD is out of criteria

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

Chain of Custody
and
Miscellaneous Documents

Internal Transfer Chain of Custody

Pace Analytical
www.pacelabs.com

☐ Samples Pre-Logged Into eCOC.

State Of Origin: WI
Cert. Needed: [x] Yes ☐ No
Owner Received Date: 5/19/2021 Results Requested By: 6/0/2021

Workorder: 40227193 Workorder Name: 2-0121-56K

WE21014
KLC2

Report To	Subcontract To
Dan Milewsky Pace Analytical Green Bay 1241 Bellevue Street Suite 9 Green Bay, WI 54302 Phone (920)469-2436	Pace Analytical West Columbia 106 Vantage Point Drive West Columbia, SC 29172 Phone (803)791-9700

Item	Sample ID	Sample Type	Collect Date/Time	Lab ID	Matrix	Container	Preserved	Confidential	PFAS (33 cmpds WDNR Guidance)	Requested Analysis	LAB USE ONLY
1	PROFILE SAMPLE	PS	5/19/2021 08:45	40227193001	Solid	1			X		
2											
3											
4											
5											

Transfers	Released By	Date/Time	Received By	Date/Time
1		5/20/21 1600		
2				
3	UPS	5/21/21 0900		5/21/21 0900

Cooler Temperature on Receipt 2.1 °C | Custody Seal (Y) or N | Received on Ice (Y) or N | Samples Intact (Y) or N

***In order to maintain client confidentiality, location/name of the sampling site, sampler's name and signature may not be provided on this COC document. This chain of custody is considered complete as is since this information is available in the owner laboratory.

Pace Analytical Services, LLC (formerly Shealy Environmental Services, Inc.)
106 Vantage Point Drive West Columbia, SC 29172 (803)791-9700 Fax (803)791-9111 www.pacelabs.com

(Please Print Clearly)

Company Name:	General Engineering Co
Branch/Location:	—
Project Contact:	Beth Edman
Phone:	608-697-8004
Project Number:	2-0121-56K
Project Name:	Perimeter Solutions
Project State:	WI
Sampled By (Print):	Beth Edman
Sampled By (Sign):	Beth H Edman
PO #:	
Regulatory Program:	

Pace Analytical® www.pacelabs.com

CHAIN OF CUSTODY

UPPER MIDWEST REGION
MN: 612-607-1700 WI: 920-469-2436

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40227193

*Preservation Codes
A=None B=HCL C=H2SO4 D=HNO3 E=DI Water F=Methanol G=NaOH H=Sodium Bisulfate Solution I=Sodium Thiosulfate J=Other

Quote #:	
Mail To Contact:	Beth Edman
Mail To Company:	General Engineering
Mail To Address:	916 Silver Lake Dr Portage, WI 53901
Invoice To Contact:	Same
Invoice To Company:	
Invoice To Address:	Email Preferred
Invoice To Phone:	

Data Package Options (billable)
- ☐ EPA Level III
- ☐ EPA Level IV

MS/MSD
- ☐ On your sample (billable)
- ☐ NOT needed on your sample

Matrix Codes
A = Air, B = Biota, C = Charcoal, O = Oil, S = Soil, Sl = Sludge, W = Water, DW = Drinking Water, GW = Ground Water, SW = Surface Water, WW = Waste Water, WP = Wipe

PACE LAB #	CLIENT FIELD ID	COLLECTION DATE	COLLECTION TIME	MATRIX	VOC 8260	SVOC	PFAS (PFAS)	CLIENT COMMENTS	LAB COMMENTS (Lab Use Only)	Profile #
FILTERED? (YES/NO)					N	N	N			
PRESERVATION (CODE)*					F	A	A			
001	Profile Sample	5/19/21	8:45	Soil	X	X	X			

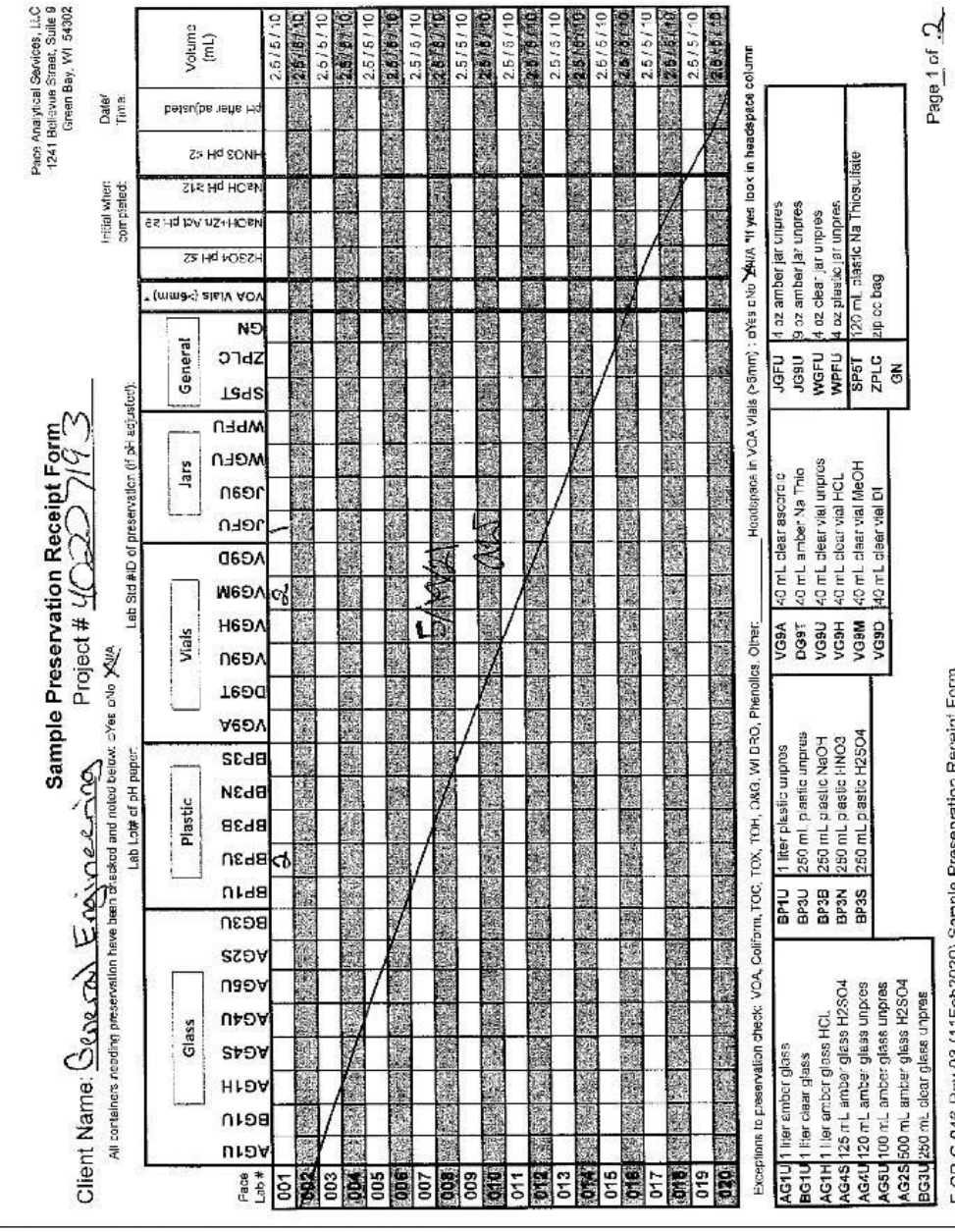
Rush Turnaround Time Requested - Prelims
(Rush TAT subject to approval/surcharge)
Date Needed:

Transmit Prelim Rush Results by (complete what you want):
Email #1: bedman@generalengineering.net
Email #2:
Telephone: 608-697-8004
Fax:

Samples on HOLD are subject to special pricing and release of liability

Relinquished By:	Date/Time:	Received By:	Date/Time:
Beth H Edman	5/19/21 9:50	Susan Kluber [illegible]	5/19/21 0950

PACE Project No. 40227193
Receipt Temp = 4 °C
Sample Receipt pH
OK / Adjusted
Cooler Custody Seal
Present / Not Present
Intact / Not Intact


Pace Analytical Services, LLC
1241 Bellevue Street, Suite 9
Green Bay, WI 54302
Sample Preservation Receipt Form
Client Name: General Engineering
Project # 40220793
All containers needing preservation have been checked and noted below: Yes No N/A
Lab Lot# of pH paper:
Lab Std #ID of preservation (if pH adjusted):
Initial when completed:
Date/ Time:
Glass
Plastic
Vials
Jars
General
VOA Vials (<6mm)
H2SO4 pH ≤2
NaOH+Zn Act pH: ≥9
NaOH pH ≥12
HNO3 pH ≤2
pH after adjusted
Volume (mL)
Face Lab #
Exceptions to preservation check: VOA, Coliform, TOC, TOX, TOH, DRO, Phenolics. Other:
Headspace in VOA Vials (>6mm): Yes No N/A *If yes look in headspace column
AG1U 1 liter amber glass
BG1U 1 liter clear glass
AG1H 1 liter amber glass HCL
AG4S 125 mL amber glass H2SO4
AG4U 120 mL amber glass unpres
AG5U 100 mL amber glass unpres
AG2S 500 mL amber glass H2SO4
BG3U 250 mL clear glass unpres
BP1U 1 liter plastic unpres
BP3U 250 mL plastic unpres
BP3B 250 mL plastic NaOH
BP3N 250 mL plastic HNO3
BP3S 250 mL plastic H2SO4
VG9A 40 mL clear ascorbic
DG9T 40 mL amber Na Thio
VG9U 40 mL clear vial unpres
VG9H 40 mL clear vial HCL
VG9M 40 mL clear vial MeOH
VG9D 40 mL clear vial DI
JGFU 4 oz amber jar unpres
JG9U 9 oz amber jar unpres
WGFU 4 oz clear jar unpres
WPFU 4 oz plastic jar unpres
SP5T 120 mL plastic Na Thiosulfate
ZPLC Ziploc bag
GN
Page 1 of 2
F-GB-C-046-Rev.03 (11Feb2020) Sample Preservation Receipt Form

Pace Analytical® 1241 Bellevue Street, Green Bay, WI 54302	Document Name: Sample Condition Upon Receipt (SCUR)	Document Revised: 26Mar2020
	Document No.: ENV-FRM-GBAY-0014-Rev.00	Author: Pace Green Bay Quality Office

Sample Condition Upon Receipt Form (SCUR)

Project #:

WO# : 40227193

40227193

Client Name: General Engineering

Courier: ☐ CS Logistics ☐ Fed Ex ☐ Speedee ☐ UPS ☐ Waltco
☒ Client ☐ Pace Other:

Tracking #: —

Custody Seal on Cooler/Box Present: ☐ yes ☒ no Seals intact: ☐ yes ☐ no

Custody Seal on Samples Present: ☐ yes ☒ no Seals intact: ☐ yes ☐ no

Packing Material: ☐ Bubble Wrap ☒ Bubble Bags ☐ None ☐ Other

Thermometer Used SR - 107 Type of Ice: (Wet) Blue Dry None ☒ Samples on ice, cooling process has begun

Cooler Temperature Uncorr: 4 /Corr: 4

Temp Blank Present: ☐ yes ☒ no **Biological Tissue is Frozen:** ☐ yes ☐ no

Person examining contents:
Date: 5/19/21 /Initials: AES

Labeled By Initials:

Temp should be above freezing to 6°C
Biota Samples may be received at ≤ 0°C if shipped on Dry Ice.

Chain of Custody Present:	☒Yes ☐No ☐N/A	1.
Chain of Custody Filled Out:	☐Yes ☒No ☐N/A	2. no inv. phone 5/19/21 AES
Chain of Custody Relinquished	☒Yes ☐No ☐N/A	3.
Sampler Name & Signature on COC:	☒Yes ☐No ☐N/A	4.
Samples Arrived within Hold Time:	☒Yes ☐No	5.
- VOA Samples frozen upon receipt	☐Yes ☐No	Date/Time:
Short Hold Time Analysis (<72hr):	☐Yes ☒No	6.
Rush Turn Around Time Requested:	☐Yes ☒No	7.
Sufficient Volume: For Analysis: ☒Yes ☐No MS/MSD: ☐Yes ☒No ☐N/A		8.
Correct Containers Used:	☒Yes ☐No	9.
-Pace Containers Used.	☐Yes ☒No ☐N/A	
-Pace IR Containers Used:	☐Yes ☐No ☒N/A	
Containers Intact:	☒Yes ☐No	10.
Filtered volume received for Dissolved tests	☐Yes ☐No ☒N/A	11.
Sample Labels match COC: -Includes date/time/ID/Analysis Matrix: S	☒Yes ☐No ☐N/A	12.
Trip Blank Present:	☐Yes ☒No ☐N/A	13.
Trip Blank Custody Seals Present	☐Yes ☐No ☒N/A	
Pace Trip Blank Lot # (if purchased)		

Client Notification/ Resolution: If checked, see attached form for additional comments ☐

Person Contacted: Date/Time:

Comments/ Resolution:

PM Review is documented electronically in LIMs. By releasing the project, the PM acknowledges they have reviewed the sample logir

Page 2 of 2

Pace Analytical

Samples Receipt Checklist (SRC) (ME0018C-15)
Issuing Authority: Pace ENV - WCOL

Revised:9/29/2020
Page 1 of 1

Sample Receipt Checklist (SRC)

Client: Pace Cooler Inspected by/date: JRG2 / 05/21/2021 Lot #: WE23014

Means of receipt: ☐ Pace ☐ Client ☑ UPS ☐ FedEx ☐ Other:

☑ Yes	☐ No		1. Were custody seals present on the cooler?
☑ Yes	☐ No	☐ NA	2. If custody seals were present, were they intact and unbroken?

pH Strip ID: NA Chlorine Strip ID: NA Tested by: NA

Original temperature upon receipt / Derived (Corrected) temperature upon receipt %Solid Snap-Cup ID: NA

2.7 / 2.7 °C NA / NA °C NA / NA °C NA / NA °C

Method: ☑ Temperature Blank ☐ Against Bottles IR Gun ID: 5 IR Gun Correction Factor: 0 °C

Method of coolant: ☑ Wet Ice ☐ Ice Packs ☐ Dry Ice ☐ None

☐ Yes	☐ No	☑ NA	3. If temperature of any cooler exceeded 6.0°C, was Project Manager Notified? PM was Notified by: phone / email / face-to-face (circle one).
☑ Yes	☐ No	☐ NA	4. Is the commercial courier's packing slip attached to this form?
☑ Yes	☐ No		5. Were proper custody procedures (relinquished/received) followed?
☑ Yes	☐ No		6. Were sample IDs listed on the COC?
☑ Yes	☐ No		7. Were sample IDs listed on all sample containers?
☑ Yes	☐ No		8. Was collection date & time listed on the COC?
☑ Yes	☐ No		9. Was collection date & time listed on all sample containers?
☑ Yes	☐ No		10. Did all container label information (ID, date, time) agree with the COC?
☑ Yes	☐ No		11. Were tests to be performed listed on the COC?
☑ Yes	☐ No		12. Did all samples arrive in the proper containers for each test and/or in good condition (unbroken, lids on, etc.)?
☑ Yes	☐ No		13. Was adequate sample volume available?
☐ Yes	☑ No		14. Were all samples received within ½ the holding time or 48 hours, whichever comes first?
☐ Yes	☑ No		15. Were any samples containers missing/excess (circle one) samples Not Listed on COC?
☐ Yes	☐ No	☑ NA	16. For VOA and RSK-175 samples, were bubbles present >"pea-size" (¼"or 6mm in diameter) in any of the VOA vials?
☐ Yes	☐ No	☑ NA	17. Were all DRO/metals/nutrient samples received at a pH of < 2?
☐ Yes	☐ No	☑ NA	18. Were all cyanide samples received at a pH > 12 and sulfide samples received at a pH > 9?
☐ Yes	☐ No	☑ NA	19. Were all applicable NH_3/TKN/cyanide/phenol/625.1/608.3 (< 0.5mg/L) samples free of residual chlorine?
☐ Yes	☐ No	☑ NA	20. Were client remarks/requests (i.e. requested dilutions, MS/MSD designations, etc...) correctly transcribed from the COC into the comment section in LIMS?
☐ Yes	☑ No		21. Was the quote number listed on the container label? If yes, Quote #

Sample Preservation (Must be completed for any sample(s) incorrectly preserved or with headspace.)

Sample(s) NA were received incorrectly preserved and were adjusted accordingly in sample receiving with NA mL of circle one: H_2SO_4, HNO_3, HCl, NaOH using SR # NA.

Time of preservation NA. If more than one preservative is needed, please note in the comments below.

Sample(s) NA were received with bubbles >6 mm in diameter.

Samples(s) NA were received with TRC > 0.5 mg/L (If #19 is *no*) and were adjusted accordingly in sample receiving with sodium thiosulfate ($Na_2S_2O_3$) with Shealy ID: NA.

SR barcode labels applied by: JRG2 Date: 05/21/2021

Comments: