

Changes to RCRA Site Components Due to ChemDesign New Water Line

Date:	January 16, 2024	Jacobs Engineering Group, Inc.
Project name:	Tyco Fire Products LP, One Stanton Street, Marinette, Wisconsin	1610 N 2nd Street
Project no:	D3766600	Suite 201
Attention:	Andrew Kleinberg /U.S. Environmental Protection Agency (EPA)	Milwaukee, WI 53212
Company:	Tyco Fire Products LP (Tyco)	United States
Prepared by:	Jacobs	T +1.414.272.2426
Document no:	D3766600.308	F +1.414.272.4408
Copies to:	Sara Krueger/Wisconsin Department of Natural Resources (WDNR) Angela Carey, WDNR Ryan Suennen, Tyco Fire Products Denice Nelson, Johnson Controls Scott Wahl, Tyco Fire Products Tom Willis, ChemDesign	www.jacobs.com

Tyco Fire Products, LP (Tyco) operates on the property at One Stanton Street in Marinette, Wisconsin (site) in compliance with a 2009 Administrative Order on Consent (AOC; EPA 2009). Under the AOC, Tyco submitted and EPA approved a Cover Maintenance Plan which requires EPA's prior written approval for certain activities.

Tyco leases a portion of the site to ChemDesign. ChemDesign has proposed to construct a new water line on the site to provide water to a new building constructed by ChemDesign. Because the new water line will impact a small portion of the cover on the site in Area J, Tyco is requesting EPA's written approval for this work under Section 13 of the Cover Maintenance Plan.

As detailed more fully in this Memorandum, ChemDesign's work will only impact a small area of the cover, any cover material that is disturbed will be replaced, and all soil materials generated from the work will either be replaced in the associated excavation or will be properly disposed offsite. ChemDesign will separately submit to the Wisconsin Department of Natural Resources (WDNR), working with Tyco, a Material Management Plan for approval to reuse of the soil onsite in accordance with WDNR NR 718.

ChemDesign's Proposed Water Line Work

The new water line proposed by ChemDesign will be in the southern central portion of the site within the southern portion of Area J, as shown in Figure 1. The construction is anticipated to impact and intersect a small portion of the cover in Area J. No other AOC remedy components will be impacted.

ChemDesign proposes to install a new 6-inch water line to connect the water line for Building 1 to the ChemDesign water line source installed in 2022 (discussed in Section 5.1.1 in the 2022 Annual Report [Jacobs 2023]) as shown in Figure 1.

ChemDesign proposes to install the 6-inch water line using directional drilling. The underground boring for the 6-inch ductile iron pipe is anticipated to generate approximately 25 cubic yards of soil and

Memorandum

bentonite slurry. This will be collected with a vacuum truck and directly placed into rolloffs. The material will be solidified with saw dust and ChemDesign will dispose of it offsite as indicated below.

Trench boxes will be used at each end of the new water line down to approximately 6 feet below ground surface to facilitate the directional drilling. At the west end, the trench box is anticipated to intersect cover Area J and will displace approximately 30 cubic yards of soil. The top six inches of clean soil will be placed on an impervious liner material and set aside for reuse. The demarcation fabric will be cut and removed. The soil beneath the demarcation fabric will be temporarily placed on an impervious liner material and the soil will then be placed back into the excavation upon completion of the work. The demarcation fabric will be replaced and the six inches of clean top soil will be put back in-place and seeded with grass.

At the east end of the water line, the trench box will not impact any AOC remedy components, as shown on Figure 1. This work will displace approximately 30 cubic yards of soil. The soil will be temporarily placed on an impermeable barrier and the material will be put back into the excavation on completion of the work. The area will be covered with six inches of clean topsoil.

Waste Management

ChemDesign proposes that the soil and bentonite slurry from the direction drilling and soil that is not able to be reused during the backfilling of the trench box areas will be placed in rolloffs. The rolloffs will be manifested and shipped to the Waste Management Columbia Ridge Landfill located in Arlington, Oregon.

ChemDesign collected one composite soil sample. Soil was collected with a hand auger at 4 feet and 7 feet below the ground surface at each of the proposed trench box locations at the ends of the blue line as shown on Figure 1. The soil was combined in a clean stainless steel bowl. The sample was then placed in appropriate bottles, sent to Pace Analytical Services, LLC, and analyzed using toxicity characteristic leaching procedure (SW846 1311) for Resource Conservation and Recovery Act metals (SW846 6010D and SW846 7470), volatile organic compounds (SW846 8260), and semi-volatile organic compounds (SW846 8270E) and also analyzed for per- and polyfluoroalkyl substances (EPA 537 modified). The laboratory report for this sampling is included as Attachment 1. As noted previously, ChemDesign will separately submit to WDNR, working with Tyco, a Material Management Plan for reuse of the soil onsite in accordance with WDNR NR 718.

ChemDesign's Proposed Schedule

ChemDesign anticipates starting the new water line work in spring 2024. The work is anticipated to take one to two days to complete. Agency approval of the recommended approach described herein and WDNR approval of the Material Management Plan for soil reuse will be required before ChemDesign begins this work.

Tyco will include a copy of ChemDesign's written documentation of the work, as required as part of the Material Management Plan and as requested by EPA during previous site activities to document soil management (including field notes, photo log and waste manifests – the waste characterization laboratory data is included as Attachment 1), in the quarterly report or annual report after ChemDesign completes the project.

If you have any questions about this request, please contact Denice Nelson of Johnson Controls at 651.280.7259.

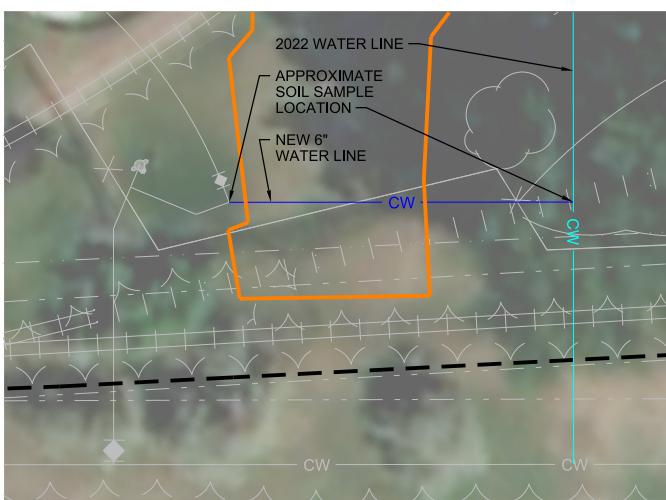
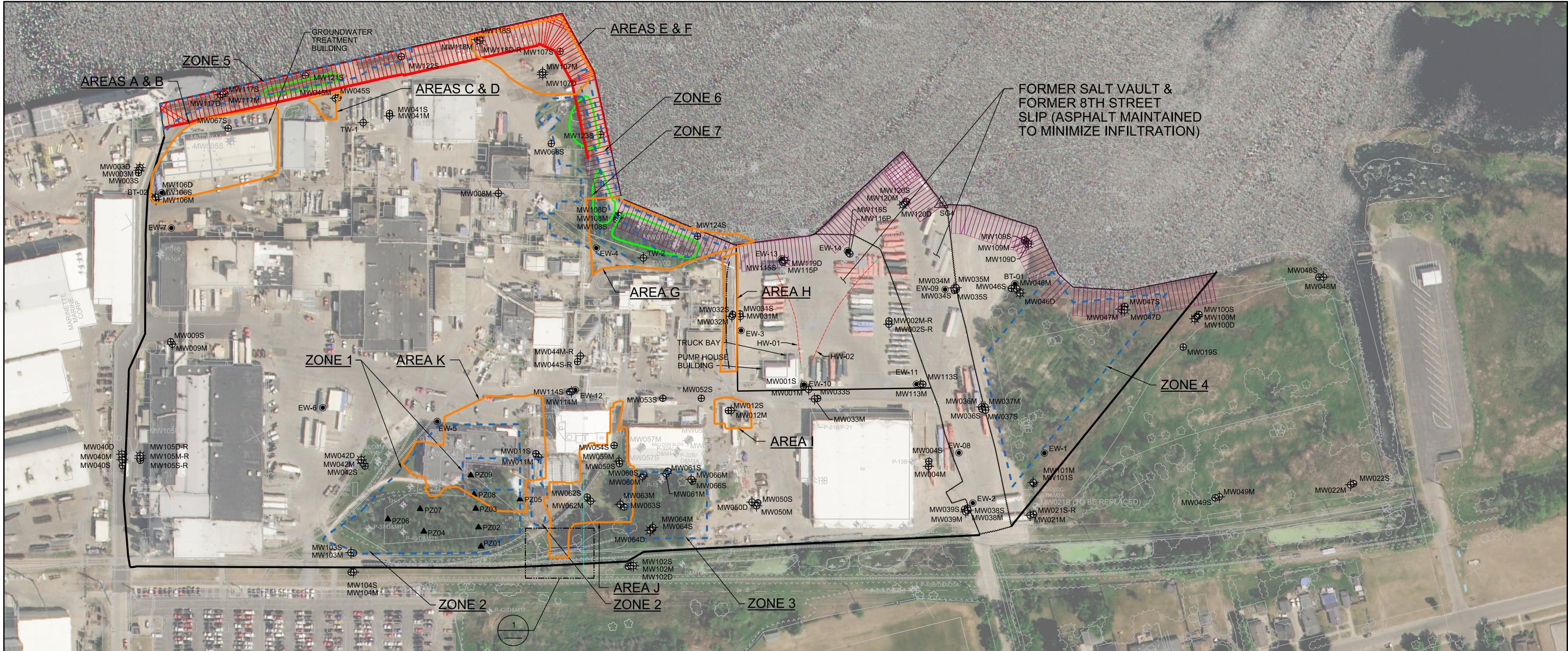
References

CH2M HILL Engineers, Inc. (CH2M). 2010. *Draft Cover Maintenance Plan – Revision 1, Onsite Soil Areas*. Submitted to USEPA. December 22. This was approved by EPA/WDNR in 2011.

Jacobs Engineering Group, Inc. (Jacobs). 2023. *2022 Barrier Wall Groundwater Monitoring Annual Report*. April 15.

U.S. Environmental Protection Agency (EPA). 2009. Resource Conservation and Recovery Act Administrative Order on Consent, Ansul, Incorporated. EPA Docket No. RCRA-05-2009-0007542-S-02-001. February 26.

Figure



1 ENLARGED PLAN

0 20 40 60
SCALE IN FEET

LEGEND	
EW-5 OR BT-02	EXTRACTION WELL OR TEST WELL
MW002S OR MW115P	MONITORING WELL - SHALLOW OR PEAT
MW002M	MONITORING WELL - MEDIUM
MW002D	MONITORING WELL - DEEP (BEDROCK)
PZ04	PIEZOMETER
VW-TB01	VIBRATING WIRE PIEZOMETER
SG1	STAFF GAUGE
WELLS PREVIOUSLY ABANDONED OR DESTROYED	
GRAB GROUNDWATER SAMPLE LOCATION	
SHEET PILE WALL	
SLURRY WALL	
HORIZONTAL WELL (SCREEN)	
HORIZONTAL WELL (RISER)	
PHYTO-PUMPING AREAS	
COVER AREA LOCATIONS	
SOIL BERM	

FIGURE 1
SITE PLAN WITH RCRA COMPONENTS
AND CHEMDesign's PROPOSED WATER LINE
TYCO FIRE PRODUCTS LP
MARINETTE, WISCONSIN

Attachment 1

Laboratory Analytical Data Report



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

October 09, 2023

Matthew Smiley
ChemDesign Products Inc
2 Stanton St
Marinette, WI 54143

RE: Project: TCLP & PFAs Testing
Pace Project No.: 40268330

Dear Matthew Smiley:

Enclosed are the analytical results for sample(s) received by the laboratory on September 20, 2023. 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
- Pace Analytical Services - Minneapolis

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

Sincerely,

Angela Lane
angela.lane@pacelabs.com
(920)469-2436
Project Manager

Enclosures

cc: Tom Willis, ChemDesign Products Inc



REPORT OF LABORATORY ANALYSIS

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CERTIFICATIONS

Project: TCLP & PFAs Testing
 Pace Project No.: 40268330

Pace Analytical Services, LLC - Minneapolis MN

1700 Elm Street SE, Minneapolis, MN 55414
 A2LA Certification #: 2926.01
 Alabama Certification #: 40770
 Alaska Contaminated Sites Certification #: 17-009
 Alaska DW Certification #: MN00064
 Arizona Certification #: AZ0014
 Arkansas DW Certification #: MN00064
 Arkansas WW Certification #: 88-0680
 California Certification #: 2929
 Colorado Certification #: MN00064
 Connecticut Certification #: PH-0256
 EPA Region 8 Tribal Water Systems+Wyoming DW Certification #: via MN 027-053-137
 Florida Certification #: E87605
 Georgia Certification #: 959
 GMP+ Certification #: GMP050884
 Hawaii Certification #: MN00064
 Idaho Certification #: MN00064
 Illinois Certification #: 200011
 Indiana Certification #: C-MN-01
 Iowa Certification #: 368
 Kansas Certification #: E-10167
 Kentucky DW Certification #: 90062
 Kentucky WW Certification #: 90062
 Louisiana DEQ Certification #: AI-03086
 Louisiana DW Certification #: MN00064
 Maine Certification #: MN00064
 Maryland Certification #: 322
 Michigan Certification #: 9909
 Minnesota Certification #: 027-053-137
 Minnesota Dept of Ag Approval: via MN 027-053-137
 Minnesota Petrofund Registration #: 1240

Mississippi Certification #: MN00064
 Missouri Certification #: 10100
 Montana Certification #: CERT0092
 Nebraska Certification #: NE-OS-18-06
 Nevada Certification #: MN00064
 New Hampshire Certification #: 2081
 New Jersey Certification #: MN002
 New York Certification #: 11647
 North Carolina DW Certification #: 27700
 North Carolina WW Certification #: 530
 North Dakota Certification (A2LA) #: R-036
 North Dakota Certification (MN) #: R-036
 Ohio DW Certification #: 41244
 Ohio VAP Certification (1700) #: CL101
 Oklahoma Certification #: 9507
 Oregon Primary Certification #: MN300001
 Oregon Secondary Certification #: MN200001
 Pennsylvania Certification #: 68-00563
 Puerto Rico Certification #: MN00064
 South Carolina Certification #: 74003001
 Tennessee Certification #: TN02818
 Texas Certification #: T104704192
 Utah Certification #: MN00064
 Vermont Certification #: VT-027053137
 Virginia Certification #: 460163
 Washington Certification #: C486
 West Virginia DEP Certification #: 382
 West Virginia DW Certification #: 9952 C
 Wisconsin Certification #: 999407970
 Wyoming UST Certification #: via A2LA 2926.01
 USDA Permit #: P330-19-00208

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

South Carolina Certification #: 83006001
 Texas Certification #: T104704529-21-8
 Virginia VELAP Certification ID: 11873
 Wisconsin Certification #: 405132750
 Wisconsin DATCP Certification #: 105-444
 USDA Soil Permit #: P330-21-00008
 Federal Fish & Wildlife Permit #: 51774A

REPORT OF LABORATORY ANALYSIS

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

SAMPLE SUMMARY

Project: TCLP & PFAs Testing

Pace Project No.: 40268330

Lab ID	Sample ID	Matrix	Date Collected	Date Received
40268330001	91520 TCLP & PFAs	Solid	09/15/23 12:00	09/20/23 09:45

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Green Bay, WI 54302
(920)469-2436

SAMPLE ANALYTE COUNT

Project: TCLP & PFAs Testing
Pace Project No.: 40268330

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
40268330001	91520 TCLP & PFAs	EPA 6010D	SIS	7	PASI-G
		EPA 7470	YER	1	PASI-G
		ASTM D2974	JDL	1	PASI-M
		EPA 8270E	RJN	16	PASI-G
		EPA 8260	CXJ	13	PASI-G
		ENV-SOP-MIN4-0178	NF1	58	PASI-M

PASI-G = Pace Analytical Services - Green Bay

PASI-M = Pace Analytical Services - Minneapolis

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: TCLP & PFAs Testing
Pace Project No.: 40268330

Sample: 91520 TCLP & PFAs Lab ID: 40268330001 Collected: 09/15/23 12:00 Received: 09/20/23 09:45 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
6010D MET ICP, TCLP	Analytical Method: EPA 6010D Preparation Method: EPA 3015A Leachate Method/Date: EPA 1311; 09/25/23 14:50 Pace Analytical Services - Green Bay								
Arsenic	0.15	mg/L	0.050	0.017	2	09/26/23 10:40	09/27/23 13:26	7440-38-2	
Barium	0.32	mg/L	0.010	0.0030	2	09/26/23 10:40	09/27/23 13:26	7440-39-3	
Cadmium	0.0079J	mg/L	0.010	0.0027	2	09/26/23 10:40	09/27/23 13:26	7440-43-9	D3
Chromium	<0.0051	mg/L	0.020	0.0051	2	09/26/23 10:40	09/27/23 13:26	7440-47-3	D3
Lead	0.055	mg/L	0.040	0.012	2	09/26/23 10:40	09/27/23 13:26	7439-92-1	
Selenium	<0.024	mg/L	0.080	0.024	2	09/26/23 10:40	09/27/23 13:26	7782-49-2	D3
Silver	<0.0064	mg/L	0.020	0.0064	2	09/26/23 10:40	09/27/23 13:26	7440-22-4	D3
7470 Mercury, TCLP	Analytical Method: EPA 7470 Preparation Method: EPA 7470 Leachate Method/Date: EPA 1311; 09/25/23 14:50 Pace Analytical Services - Green Bay								
Mercury	<0.066	ug/L	0.20	0.066	1	09/27/23 13:01	09/28/23 06:55	7439-97-6	
Dry Weight / %M by ASTM D2974	Analytical Method: ASTM D2974 Pace Analytical Services - Minneapolis								
Percent Moisture	16.6	%	0.10	0.10	1		10/06/23 13:07		N2
8270E MSSV TCLP Sep Funnel	Analytical Method: EPA 8270E Preparation Method: EPA 3510 Leachate Method/Date: EPA 1311; 09/25/23 14:50 Pace Analytical Services - Green Bay								
1,4-Dichlorobenzene	<17.8	ug/L	50.0	17.8	1	09/26/23 10:07	09/27/23 10:57	106-46-7	
2,4-Dinitrotoluene	<11.9	ug/L	50.0	11.9	1	09/26/23 10:07	09/27/23 10:57	121-14-2	
Hexachloro-1,3-butadiene	<16.4	ug/L	50.0	16.4	1	09/26/23 10:07	09/27/23 10:57	87-68-3	
Hexachlorobenzene	<25.2	ug/L	100	25.2	1	09/26/23 10:07	09/27/23 10:57	118-74-1	
Hexachloroethane	<15.1	ug/L	50.0	15.1	1	09/26/23 10:07	09/27/23 10:57	67-72-1	
2-Methylphenol(o-Cresol)	<7.7	ug/L	50.0	7.7	1	09/26/23 10:07	09/27/23 10:57	95-48-7	
3&4-Methylphenol(m&p Cresol)	<6.0	ug/L	50.0	6.0	1	09/26/23 10:07	09/27/23 10:57		
Nitrobenzene	<15.7	ug/L	50.0	15.7	1	09/26/23 10:07	09/27/23 10:57	98-95-3	
Pentachlorophenol	<16.3	ug/L	50.0	16.3	1	09/26/23 10:07	09/27/23 10:57	87-86-5	
Pyridine	<73.0	ug/L	100	73.0	1	09/26/23 10:07	09/27/23 10:57	110-86-1	
2,4,5-Trichlorophenol	<18.2	ug/L	50.0	18.2	1	09/26/23 10:07	09/27/23 10:57	95-95-4	
2,4,6-Trichlorophenol	<20.0	ug/L	50.0	20.0	1	09/26/23 10:07	09/27/23 10:57	88-06-2	
Surrogates									
Nitrobenzene-d5 (S)	73	%	38-130		1	09/26/23 10:07	09/27/23 10:57	4165-60-0	
2-Fluorobiphenyl (S)	51	%	23-130		1	09/26/23 10:07	09/27/23 10:57	321-60-8	
2,4,6-Tribromophenol (S)	46	%	10-141		1	09/26/23 10:07	09/27/23 10:57	118-79-6	
Phenol-d6 (S)	19	%	11-130		1	09/26/23 10:07	09/27/23 10:57	13127-88-3	
8260 MSV TCLP	Analytical Method: EPA 8260 Leachate Method/Date: EPA 1311; 09/21/23 13:35 Pace Analytical Services - Green Bay								
Benzene	<3.0	ug/L	10.0	3.0	10		09/25/23 11:35	71-43-2	
2-Butanone (MEK)	<65.2	ug/L	250	65.2	10		09/25/23 11:35	78-93-3	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: TCLP & PFAs Testing

Pace Project No.: 40268330

Sample: 91520 TCLP & PFAs Lab ID: 40268330001 Collected: 09/15/23 12:00 Received: 09/20/23 09:45 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 TCLP		Analytical Method: EPA 8260 Leachate Method/Date: EPA 1311; 09/21/23 13:35							
		Pace Analytical Services - Green Bay							
Carbon tetrachloride	<3.7	ug/L	10.0	3.7	10		09/25/23 11:35	56-23-5	
Chlorobenzene	<8.6	ug/L	10.0	8.6	10		09/25/23 11:35	108-90-7	
Chloroform	<5.0	ug/L	50.0	5.0	10		09/25/23 11:35	67-66-3	
1,2-Dichloroethane	<2.9	ug/L	10.0	2.9	10		09/25/23 11:35	107-06-2	
1,1-Dichloroethene	<5.8	ug/L	10.0	5.8	10		09/25/23 11:35	75-35-4	
Tetrachloroethylene	<4.1	ug/L	10.0	4.1	10		09/25/23 11:35	127-18-4	
Trichloroethylene	<3.2	ug/L	10.0	3.2	10		09/25/23 11:35	79-01-6	
Vinyl chloride	<1.7	ug/L	10.0	1.7	10		09/25/23 11:35	75-01-4	
Surrogates									
Toluene-d8 (S)	100	%	70-130		10		09/25/23 11:35	2037-26-5	
4-Bromofluorobenzene (S)	99	%	70-130		10		09/25/23 11:35	460-00-4	
1,2-Dichlorobenzene-d4 (S)	103	%	70-130		10		09/25/23 11:35	2199-69-1	
WI ID SL		Analytical Method: ENV-SOP-MIN4-0178 Preparation Method: ENV-SOP-MIN4-0178							
		Pace Analytical Services - Minneapolis							
11CI-PF3OUdS	<0.030	ug/kg	0.11	0.030	1	09/27/23 09:20	09/28/23 21:24	763051-92-9	
4:2 FTS	<0.028	ug/kg	0.11	0.028	1	09/27/23 09:20	09/28/23 21:24	757124-72-4	
6:2 FTS	1.3	ug/kg	0.11	0.050	1	09/27/23 09:20	09/28/23 21:24	27619-97-2	
8:2 FTS	0.14	ug/kg	0.12	0.053	1	09/27/23 09:20	09/28/23 21:24	39108-34-4	
9Cl-PF3ONS	<0.030	ug/kg	0.11	0.030	1	09/27/23 09:20	09/28/23 21:24	756426-58-1	
ADONA	<0.043	ug/kg	0.11	0.043	1	09/27/23 09:20	09/28/23 21:24	919005-14-4	
HFPO-DA	<0.033	ug/kg	0.12	0.033	1	09/27/23 09:20	09/28/23 21:24	13252-13-6	
NEtFOSAA	<0.048	ug/kg	0.12	0.048	1	09/27/23 09:20	09/28/23 21:24	2991-50-6	
NEtFOSA	<0.031	ug/kg	0.12	0.031	1	09/27/23 09:20	09/28/23 21:24	4151-50-2	
NEtFOSE	<0.039	ug/kg	0.12	0.039	1	09/27/23 09:20	09/28/23 21:24	1691-99-2	
NMeFOSAA	<0.034	ug/kg	0.12	0.034	1	09/27/23 09:20	09/28/23 21:24	2355-31-9	
NMeFOSA	<0.033	ug/kg	0.12	0.033	1	09/27/23 09:20	09/28/23 21:24	31506-32-8	
NMeFOSE	<0.036	ug/kg	0.12	0.036	1	09/27/23 09:20	09/28/23 21:24	24448-09-7	
Perfluorobutanesulfonic acid	<0.031	ug/kg	0.11	0.031	1	09/27/23 09:20	09/28/23 21:24	375-73-5	
Perfluorodecanoic acid	1.0	ug/kg	0.12	0.027	1	09/27/23 09:20	09/28/23 21:24	335-76-2	
Perfluorohexanoic acid	2.7	ug/kg	0.12	0.033	1	09/27/23 09:20	09/28/23 21:24	307-24-4	
PFBA	1.4	ug/kg	0.12	0.034	1	09/27/23 09:20	09/28/23 21:24	375-22-4	
PFDS	<0.034	ug/kg	0.12	0.034	1	09/27/23 09:20	09/28/23 21:24	335-77-3	
PFDoS	<0.031	ug/kg	0.12	0.031	1	09/27/23 09:20	09/28/23 21:24	79780-39-5	
PFHpS	<0.033	ug/kg	0.11	0.033	1	09/27/23 09:20	09/28/23 21:24	375-92-8	
PFNS	<0.042	ug/kg	0.11	0.042	1	09/27/23 09:20	09/28/23 21:24	68259-12-1	
PFOSA	<0.035	ug/kg	0.12	0.035	1	09/27/23 09:20	09/28/23 21:24	754-91-6	
PPPeA	4.6	ug/kg	0.12	0.034	1	09/27/23 09:20	09/28/23 21:24	2706-90-3	
PPPeS	<0.029	ug/kg	0.11	0.029	1	09/27/23 09:20	09/28/23 21:24	2706-91-4	
Perfluorododecanoic acid	0.16	ug/kg	0.12	0.039	1	09/27/23 09:20	09/28/23 21:24	307-55-1	
Perfluoroheptanoic acid	2.9	ug/kg	0.12	0.042	1	09/27/23 09:20	09/28/23 21:24	375-85-9	
Perfluorohexanesulfonic acid	0.046J	ug/kg	0.11	0.026	1	09/27/23 09:20	09/28/23 21:24	355-46-4	B
Perfluorononanoic acid	4.0	ug/kg	0.12	0.037	1	09/27/23 09:20	09/28/23 21:24	375-95-1	
Perfluorooctanesulfonic acid	0.62	ug/kg	0.11	0.035	1	09/27/23 09:20	09/28/23 21:24	1763-23-1	B

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: TCLP & PFAs Testing

Pace Project No.: 40268330

Sample: 91520 TCLP & PFAs Lab ID: 40268330001 Collected: 09/15/23 12:00 Received: 09/20/23 09:45 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
WI ID SL	Analytical Method: ENV-SOP-MIN4-0178 Preparation Method: ENV-SOP-MIN4-0178								
	Pace Analytical Services - Minneapolis								
Perfluorooctanoic acid	1.8	ug/kg	0.12	0.037	1	09/27/23 09:20	09/28/23 21:24	335-67-1	
Perfluorotetradecanoic acid	<0.041	ug/kg	0.12	0.041	1	09/27/23 09:20	09/28/23 21:24	376-06-7	
Perfluorotridecanoic acid	0.065J	ug/kg	0.12	0.038	1	09/27/23 09:20	09/28/23 21:24	72629-94-8	
Perfluoroundecanoic acid	0.95	ug/kg	0.12	0.036	1	09/27/23 09:20	09/28/23 21:24	2058-94-8	
Surrogates									
13C2-PFDoA (S)	75	%.	25-150		1	09/27/23 09:20	09/28/23 21:24		
13C2-PFTA (S)	69	%.	25-150		1	09/27/23 09:20	09/28/23 21:24		
13C24:2FTS (S)	76	%.	25-150		1	09/27/23 09:20	09/28/23 21:24		
13C26:2FTS (S)	131	%.	25-150		1	09/27/23 09:20	09/28/23 21:24		
13C28:2FTS (S)	176	%.	25-150		1	09/27/23 09:20	09/28/23 21:24		S0
13C2PFHxDa (S)	63	%.	25-150		1	09/27/23 09:20	09/28/23 21:24		
13C3-PFBS (S)	74	%.	25-150		1	09/27/23 09:20	09/28/23 21:24	375-73-5	
13C3-PFHxS (S)	75	%.	25-150		1	09/27/23 09:20	09/28/23 21:24	355-46-4	
13C3HFPO-DA (S)	43	%.	25-150		1	09/27/23 09:20	09/28/23 21:24		
13C4-PFBA (S)	82	%.	25-150		1	09/27/23 09:20	09/28/23 21:24	375-22-4	
13C4-PFHpA (S)	73	%.	25-150		1	09/27/23 09:20	09/28/23 21:24	375-85-9	
13C5-PFHxA (S)	74	%.	25-150		1	09/27/23 09:20	09/28/23 21:24	307-24-4	
13C5-PFPeA (S)	75	%.	25-150		1	09/27/23 09:20	09/28/23 21:24	2706-90-3	
13C6-PFDA (S)	77	%.	25-150		1	09/27/23 09:20	09/28/23 21:24	335-76-2	
13C7-PFUdA (S)	73	%.	25-150		1	09/27/23 09:20	09/28/23 21:24	2058-94-8	
13C8-PFOA (S)	71	%.	25-150		1	09/27/23 09:20	09/28/23 21:24	335-67-1	
13C8-PFOS (S)	84	%.	25-150		1	09/27/23 09:20	09/28/23 21:24	1763-23-1	
13C8-PFOSA (S)	67	%.	25-150		1	09/27/23 09:20	09/28/23 21:24	754-91-6	
13C9-PFNA (S)	69	%.	25-150		1	09/27/23 09:20	09/28/23 21:24	375-95-1	
d3-MeFOSAA (S)	84	%.	25-150		1	09/27/23 09:20	09/28/23 21:24	2355-31-9	
d3-NMeFOSA (S)	25	%.	10-150		1	09/27/23 09:20	09/28/23 21:24	31506-32-8	
d5-EtFOSAA (S)	88	%.	25-150		1	09/27/23 09:20	09/28/23 21:24	2991-50-6	
d5-NEtFOSA (S)	26	%.	10-150		1	09/27/23 09:20	09/28/23 21:24	4151-50-2	
d7-NMeFOSE (S)	50	%.	10-150		1	09/27/23 09:20	09/28/23 21:24	24448-09-7	
d9-NEtFOSE (S)	53	%.	10-150		1	09/27/23 09:20	09/28/23 21:24	1691-99-2	

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: TCLP & PFAs Testing
Pace Project No.: 40268330

QC Batch: 455937 Analysis Method: EPA 7470
QC Batch Method: EPA 7470 Analysis Description: 7470 Mercury TCLP
Associated Lab Samples: 40268330001 Laboratory: Pace Analytical Services - Green Bay

METHOD BLANK: 2618484 Matrix: Water

Associated Lab Samples: 40268330001

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Mercury	ug/L	<0.066	0.20	09/28/23 06:46	

METHOD BLANK: 2617498 Matrix: Water

Associated Lab Samples: 40268330001

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Mercury	ug/L	<0.066	0.20	09/28/23 07:23	

METHOD BLANK: 2617499 Matrix: Water

Associated Lab Samples: 40268330001

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Mercury	ug/L	<0.066	0.20	09/28/23 07:04	

LABORATORY CONTROL SAMPLE: 2618485

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Mercury	ug/L	5	5.1	101	85-115	

MATRIX SPIKE SAMPLE: 2618486

Parameter	Units	40268563001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Mercury	ug/L	<0.000066 mg/L	5	5.7	113	85-115	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2618487 2618488

Parameter	Units	40268330001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	Max RPD	Max RPD	Qual
Mercury	ug/L	<0.066	5	5	5.3	5.5	105	110	85-115	4	20	

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

QUALITY CONTROL DATA

Project: TCLP & PFAs Testing

Pace Project No.: 40268330

MATRIX SPIKE SAMPLE:		2618489	40268428001	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Parameter	Units	Result						
Mercury	ug/L	<0.066		5	5.0	101	85-115	

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QUALITY CONTROL DATA

Project: TCLP & PFAs Testing

Pace Project No.: 40268330

QC Batch:	455795	Analysis Method:	EPA 6010D
QC Batch Method:	EPA 3015A	Analysis Description:	6010D MET TCLP
		Laboratory:	Pace Analytical Services - Green Bay
Associated Lab Samples:	40268330001		

METHOD BLANK: 2617793 Matrix: Water

Associated Lab Samples: 40268330001

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Arsenic	mg/L	<0.0083	0.025	09/26/23 18:31	
Barium	mg/L	<0.0015	0.0050	09/26/23 18:31	
Cadmium	mg/L	<0.0013	0.0050	09/26/23 18:31	
Chromium	mg/L	<0.0025	0.010	09/26/23 18:31	
Lead	mg/L	<0.0059	0.020	09/26/23 18:31	
Selenium	mg/L	<0.012	0.040	09/26/23 18:31	
Silver	mg/L	<0.0032	0.010	09/26/23 18:31	

METHOD BLANK: 2617494 Matrix: Solid

Associated Lab Samples: 40268330001

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Arsenic	mg/L	<0.0083	0.025	09/26/23 19:21	
Barium	mg/L	<0.0015	0.0050	09/26/23 19:21	
Cadmium	mg/L	<0.0013	0.0050	09/26/23 19:21	
Chromium	mg/L	<0.0025	0.010	09/26/23 19:21	
Lead	mg/L	<0.0059	0.020	09/26/23 19:21	
Selenium	mg/L	<0.012	0.040	09/26/23 19:21	
Silver	mg/L	<0.0032	0.010	09/26/23 19:21	

METHOD BLANK: 2617495 Matrix: Solid

Associated Lab Samples: 40268330001

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Arsenic	mg/L	<0.0083	0.025	09/26/23 19:29	
Barium	mg/L	0.0020J	0.0050	09/26/23 19:29	
Cadmium	mg/L	<0.0013	0.0050	09/26/23 19:29	
Chromium	mg/L	<0.0025	0.010	09/26/23 19:29	
Lead	mg/L	<0.0059	0.020	09/26/23 19:29	
Selenium	mg/L	<0.012	0.040	09/26/23 19:29	
Silver	mg/L	<0.0032	0.010	09/26/23 19:29	

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QUALITY CONTROL DATA

Project: TCLP & PFAs Testing

Pace Project No.: 40268330

METHOD BLANK: 2617496

Matrix: Solid

Associated Lab Samples: 40268330001

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Arsenic	mg/L	<0.0083	0.025	09/26/23 18:47	
Barium	mg/L	0.0019J	0.0050	09/26/23 18:47	
Cadmium	mg/L	<0.0013	0.0050	09/26/23 18:47	
Chromium	mg/L	<0.0025	0.010	09/26/23 18:47	
Lead	mg/L	<0.0059	0.020	09/26/23 18:47	
Selenium	mg/L	<0.012	0.040	09/26/23 18:47	
Silver	mg/L	<0.0032	0.010	09/26/23 18:47	

LABORATORY CONTROL SAMPLE: 2617794

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Arsenic	mg/L	0.28	0.27	97	80-120	
Barium	mg/L	0.28	0.28	101	80-120	
Cadmium	mg/L	0.28	0.28	101	80-120	
Chromium	mg/L	0.28	0.28	99	80-120	
Lead	mg/L	0.28	0.29	104	80-120	
Selenium	mg/L	0.28	0.28	101	80-120	
Silver	mg/L	0.14	0.14	99	80-120	

MATRIX SPIKE SAMPLE: 2617795

Parameter	Units	40268428001		Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
		Result	Conc.					
Arsenic	mg/L	<0.0083	0.28	0.27	97	75-125		
Barium	mg/L	2.5	0.28	2.8	98	75-125		
Cadmium	mg/L	<0.0013	0.28	0.28	102	75-125		
Chromium	mg/L	<0.0025	0.28	0.28	101	75-125		
Lead	mg/L	<0.0059	0.28	0.29	104	75-125		
Selenium	mg/L	<0.012	0.28	0.28	102	75-125		
Silver	mg/L	0.018	0.14	0.16	99	75-125		

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2617796

2617797

Parameter	Units	40268493001		MS Spike Conc.	MS Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
		Result	Conc.								
Arsenic	mg/L	<0.017	0.28	0.28	0.28	95	96	75-125	2	20	
Barium	mg/L	0.60	0.28	0.28	0.88	0.88	98	99	75-125	0	20
Cadmium	mg/L	0.0047J	0.28	0.28	0.29	0.29	103	102	75-125	1	20
Chromium	mg/L	<0.0051	0.28	0.28	0.28	0.28	99	99	75-125	0	20
Lead	mg/L	<0.012	0.28	0.28	0.29	0.28	103	101	75-125	1	20
Selenium	mg/L	<0.024	0.28	0.28	0.30	0.30	106	105	75-125	1	20
Silver	mg/L	<0.0064	0.14	0.14	0.14	0.14	102	102	75-125	0	20

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QUALITY CONTROL DATA

Project: TCLP & PFAs Testing

Pace Project No.: 40268330

MATRIX SPIKE SAMPLE: 2617798

Parameter	Units	40268563001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Arsenic	mg/L	<0.042	0.28	0.30	95	75-125	
Barium	mg/L	1.4	0.28	1.7	90	75-125	
Cadmium	mg/L	<0.0067	0.28	0.28	101	75-125	
Chromium	mg/L	0.023J	0.28	0.30	101	75-125	
Lead	mg/L	117	0.28	114	-1050	75-125	P6
Selenium	mg/L	<0.061	0.28	0.30	108	75-125	
Silver	mg/L	<0.016	0.14	0.14	102	75-125	

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QUALITY CONTROL DATA

Project: TCLP & PFAs Testing

Pace Project No.: 40268330

QC Batch: 909800 Analysis Method: ASTM D2974
QC Batch Method: ASTM D2974 Analysis Description: Dry Weight / %M by ASTM D2974
Associated Lab Samples: 40268330001 Laboratory: Pace Analytical Services - Minneapolis

SAMPLE DUPLICATE: 4789312

Parameter	Units	Result	Dup Result	RPD	Max RPD	Qualifiers
Percent Moisture	%	19.5	20.6	6	30	N2

SAMPLE DUPLICATE: 4791727

Parameter	Units	Result	Dup Result	RPD	Max RPD	Qualifiers
Percent Moisture	%	23.0	22.4	2	30	N2

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QUALITY CONTROL DATA

Project: TCLP & PFAs Testing

Pace Project No.: 40268330

QC Batch:	455574	Analysis Method:	EPA 8260
QC Batch Method:	EPA 8260	Analysis Description:	8260 MSV TCLP
		Laboratory:	Pace Analytical Services - Green Bay
Associated Lab Samples:	40268330001		

METHOD BLANK: 2616375 Matrix: Water

Associated Lab Samples: 40268330001

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1-Dichloroethene	ug/L	<0.58	1.0	09/25/23 08:25	
1,2-Dichloroethane	ug/L	<0.29	1.0	09/25/23 08:25	
2-Butanone (MEK)	ug/L	<6.5	25.0	09/25/23 08:25	
Benzene	ug/L	<0.30	1.0	09/25/23 08:25	
Carbon tetrachloride	ug/L	<0.37	1.0	09/25/23 08:25	
Chlorobenzene	ug/L	<0.86	1.0	09/25/23 08:25	
Chloroform	ug/L	<0.50	5.0	09/25/23 08:25	
Tetrachloroethene	ug/L	<0.41	1.0	09/25/23 08:25	
Trichloroethene	ug/L	<0.32	1.0	09/25/23 08:25	
Vinyl chloride	ug/L	<0.17	1.0	09/25/23 08:25	
1,2-Dichlorobenzene-d4 (S)	%	102	70-130	09/25/23 08:25	
4-Bromofluorobenzene (S)	%	100	70-130	09/25/23 08:25	
Toluene-d8 (S)	%	100	70-130	09/25/23 08:25	

METHOD BLANK: 2615200 Matrix: Solid

Associated Lab Samples: 40268330001

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1-Dichloroethene	ug/L	<5.8	10.0	09/25/23 08:42	
1,2-Dichloroethane	ug/L	<2.9	10.0	09/25/23 08:42	
2-Butanone (MEK)	ug/L	<65.2	250	09/25/23 08:42	
Benzene	ug/L	<3.0	10.0	09/25/23 08:42	
Carbon tetrachloride	ug/L	<3.7	10.0	09/25/23 08:42	
Chlorobenzene	ug/L	<8.6	10.0	09/25/23 08:42	
Chloroform	ug/L	<5.0	50.0	09/25/23 08:42	
Tetrachloroethene	ug/L	<4.1	10.0	09/25/23 08:42	
Trichloroethene	ug/L	<3.2	10.0	09/25/23 08:42	
Vinyl chloride	ug/L	<1.7	10.0	09/25/23 08:42	
1,2-Dichlorobenzene-d4 (S)	%	101	70-130	09/25/23 08:42	
4-Bromofluorobenzene (S)	%	100	70-130	09/25/23 08:42	
Toluene-d8 (S)	%	99	70-130	09/25/23 08:42	

LABORATORY CONTROL SAMPLE: 2616376

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1-Dichloroethene	ug/L	50	52.6	105	73-140	
1,2-Dichloroethane	ug/L	50	51.6	103	70-130	

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QUALITY CONTROL DATA

Project: TCLP & PFAs Testing

Pace Project No.: 40268330

LABORATORY CONTROL SAMPLE: 2616376

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Benzene	ug/L	50	51.5	103	70-130	
Carbon tetrachloride	ug/L	50	48.3	97	70-135	
Chlorobenzene	ug/L	50	52.0	104	70-130	
Chloroform	ug/L	50	49.2	98	80-124	
Tetrachloroethene	ug/L	50	48.7	97	70-130	
Trichloroethene	ug/L	50	49.6	99	70-130	
Vinyl chloride	ug/L	50	49.7	99	51-145	
1,2-Dichlorobenzene-d4 (S)	%			99	70-130	
4-Bromofluorobenzene (S)	%			100	70-130	
Toluene-d8 (S)	%			101	70-130	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2617282 2617283

Parameter	Units	MS		MSD		MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
		40268341001	Result	Spike Conc.	MSD Spike Conc.						
1,1-Dichloroethene	ug/L	<5.8	500	500	458	491	92	98	69-146	7	20
1,2-Dichloroethane	ug/L	<2.9	500	500	445	480	89	96	70-130	8	20
Benzene	ug/L	<3.0	500	500	449	481	90	96	70-130	7	20
Carbon tetrachloride	ug/L	<3.7	500	500	419	455	84	91	70-135	8	20
Chlorobenzene	ug/L	<8.6	500	500	450	484	90	97	70-130	7	20
Chloroform	ug/L	<5.0	500	500	432	467	86	93	80-126	8	20
Tetrachloroethene	ug/L	<4.1	500	500	422	446	84	89	70-131	6	20
Trichloroethene	ug/L	<3.2	500	500	432	467	86	93	70-130	8	20
Vinyl chloride	ug/L	<1.7	500	500	425	459	85	92	45-147	8	20
1,2-Dichlorobenzene-d4 (S)	%						99	100	70-130		
4-Bromofluorobenzene (S)	%						100	101	70-130		
Toluene-d8 (S)	%						101	100	70-130		

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QUALITY CONTROL DATA

Project: TCLP & PFAs Testing

Pace Project No.: 40268330

QC Batch:	455790	Analysis Method:	EPA 8270E
QC Batch Method:	EPA 3510	Analysis Description:	8270E TCLP MSSV
		Laboratory:	Pace Analytical Services - Green Bay
Associated Lab Samples:	40268330001		

METHOD BLANK: 2617774

Matrix: Water

Associated Lab Samples: 40268330001

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,4-Dichlorobenzene	ug/L	<3.6	10.0	09/27/23 08:02	
2,4,5-Trichlorophenol	ug/L	<3.6	10.0	09/27/23 08:02	
2,4,6-Trichlorophenol	ug/L	<4.0	10.0	09/27/23 08:02	
2,4-Dinitrotoluene	ug/L	<2.4	10.0	09/27/23 08:02	
2-Methylphenol(o-Cresol)	ug/L	<1.5	10.0	09/27/23 08:02	
3&4-Methylphenol(m&p Cresol)	ug/L	<1.2	10.0	09/27/23 08:02	
Hexachloro-1,3-butadiene	ug/L	<3.3	10.0	09/27/23 08:02	
Hexachlorobenzene	ug/L	<5.0	20.0	09/27/23 08:02	
Hexachloroethane	ug/L	<3.0	10.0	09/27/23 08:02	
Nitrobenzene	ug/L	<3.1	10.0	09/27/23 08:02	
Pentachlorophenol	ug/L	<3.3	10.0	09/27/23 08:02	
Pyridine	ug/L	<14.6	20.0	09/27/23 08:02	
2,4,6-Tribromophenol (S)	%	85	10-141	09/27/23 08:02	
2-Fluorobiphenyl (S)	%	51	23-130	09/27/23 08:02	
Nitrobenzene-d5 (S)	%	70	38-130	09/27/23 08:02	
Phenol-d6 (S)	%	30	11-130	09/27/23 08:02	

METHOD BLANK: 2617500

Matrix: Water

Associated Lab Samples: 40268330001

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,4-Dichlorobenzene	ug/L	<17.8	50.0	09/27/23 12:03	
2,4,5-Trichlorophenol	ug/L	<18.2	50.0	09/27/23 12:03	
2,4,6-Trichlorophenol	ug/L	<20.0	50.0	09/27/23 12:03	
2,4-Dinitrotoluene	ug/L	<11.9	50.0	09/27/23 12:03	
2-Methylphenol(o-Cresol)	ug/L	<7.7	50.0	09/27/23 12:03	
3&4-Methylphenol(m&p Cresol)	ug/L	<6.0	50.0	09/27/23 12:03	
Hexachloro-1,3-butadiene	ug/L	<16.4	50.0	09/27/23 12:03	
Hexachlorobenzene	ug/L	<25.2	100	09/27/23 12:03	
Hexachloroethane	ug/L	<15.1	50.0	09/27/23 12:03	
Nitrobenzene	ug/L	<15.7	50.0	09/27/23 12:03	
Pentachlorophenol	ug/L	<16.3	50.0	09/27/23 12:03	
Pyridine	ug/L	<73.0	100	09/27/23 12:03	
2,4,6-Tribromophenol (S)	%	86	10-141	09/27/23 12:03	
2-Fluorobiphenyl (S)	%	46	23-130	09/27/23 12:03	
Nitrobenzene-d5 (S)	%	69	38-130	09/27/23 12:03	
Phenol-d6 (S)	%	30	11-130	09/27/23 12:03	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: TCLP & PFAs Testing

Pace Project No.: 40268330

LABORATORY CONTROL SAMPLE: 2617775

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,4-Dichlorobenzene	ug/L	50	26.4	53	30-130	
2,4,5-Trichlorophenol	ug/L	50	35.7	71	47-130	
2,4,6-Trichlorophenol	ug/L	50	35.4	71	53-130	
2,4-Dinitrotoluene	ug/L	50	38.1	76	61-130	
2-Methylphenol(o-Cresol)	ug/L	50	34.4	69	63-130	
3&4-Methylphenol(m&p Cresol)	ug/L	50	31.7	63	58-130	
Hexachloro-1,3-butadiene	ug/L	50	22.1	44	10-130	
Hexachlorobenzene	ug/L	50	43.8	88	61-130	
Hexachloroethane	ug/L	50	21.0	42	12-130	
Nitrobenzene	ug/L	50	40.0	80	70-130	
Pentachlorophenol	ug/L	50	34.6	69	29-130	
Pyridine	ug/L	50	22.9	46	24-130	
2,4,6-Tribromophenol (S)	%			91	10-141	
2-Fluorobiphenyl (S)	%			52	23-130	
Nitrobenzene-d5 (S)	%			74	38-130	
Phenol-d6 (S)	%			35	11-130	

MATRIX SPIKE SAMPLE: 2617776

Parameter	Units	40268330001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
1,4-Dichlorobenzene	ug/L	<17.8	250	146	58	30-130	
2,4,5-Trichlorophenol	ug/L	<18.2	250	92.0	37	10-136	
2,4,6-Trichlorophenol	ug/L	<20.0	250	87.5	35	10-131	
2,4-Dinitrotoluene	ug/L	<11.9	250	192	77	15-142	
2-Methylphenol(o-Cresol)	ug/L	<7.7	250	159	64	36-130	
3&4-Methylphenol(m&p Cresol)	ug/L	<6.0	250	140	56	35-130	
Hexachloro-1,3-butadiene	ug/L	<16.4	250	101	41	10-130	
Hexachlorobenzene	ug/L	<25.2	250	199	80	58-130	
Hexachloroethane	ug/L	<15.1	250	96.8	39	12-130	
Nitrobenzene	ug/L	<15.7	250	194	78	64-130	
Pentachlorophenol	ug/L	<16.3	250	58.5	23	10-147	
Pyridine	ug/L	<73.0	250	132	53	10-130	
2,4,6-Tribromophenol (S)	%				50	10-141	
2-Fluorobiphenyl (S)	%				56	23-130	
Nitrobenzene-d5 (S)	%				73	38-130	
Phenol-d6 (S)	%				24	11-130	

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QUALITY CONTROL DATA

Project: TCLP & PFAs Testing

Pace Project No.: 40268330

QC Batch: 907953 Analysis Method: ENV-SOP-MIN4-0178

QC Batch Method: ENV-SOP-MIN4-0178 Analysis Description: WI ID SL

Laboratory: Pace Analytical Services - Minneapolis

Associated Lab Samples: 40268330001

METHOD BLANK: 4780263

Matrix: Solid

Associated Lab Samples: 40268330001

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
11Cl-PF3OUdS	ug/kg	<0.025	0.093	09/28/23 20:55	
4:2 FTS	ug/kg	<0.023	0.093	09/28/23 20:55	
6:2 FTS	ug/kg	<0.041	0.094	09/28/23 20:55	
8:2 FTS	ug/kg	<0.043	0.096	09/28/23 20:55	
9Cl-PF3ONS	ug/kg	<0.025	0.092	09/28/23 20:55	
ADONA	ug/kg	<0.036	0.094	09/28/23 20:55	
HFPO-DA	ug/kg	<0.027	0.099	09/28/23 20:55	
NETFOSA	ug/kg	<0.025	0.099	09/28/23 20:55	
NETFOSAA	ug/kg	<0.040	0.099	09/28/23 20:55	
NETFOSE	ug/kg	<0.032	0.099	09/28/23 20:55	
NMeFOSA	ug/kg	<0.027	0.099	09/28/23 20:55	
NMeFOSAA	ug/kg	<0.028	0.099	09/28/23 20:55	
NMeFOSE	ug/kg	<0.030	0.099	09/28/23 20:55	
Perfluorobutanesulfonic acid	ug/kg	<0.026	0.088	09/28/23 20:55	
Perfluorodecanoic acid	ug/kg	<0.023	0.099	09/28/23 20:55	
Perfluorododecanoic acid	ug/kg	<0.033	0.099	09/28/23 20:55	
Perfluoroheptanoic acid	ug/kg	<0.034	0.099	09/28/23 20:55	
Perfluorohexanesulfonic acid	ug/kg	0.023J	0.090	09/28/23 20:55	
Perfluorohexanoic acid	ug/kg	<0.027	0.099	09/28/23 20:55	
Perfluorononanoic acid	ug/kg	<0.031	0.099	09/28/23 20:55	
Perfluoroctanesulfonic acid	ug/kg	0.056J	0.092	09/28/23 20:55	
Perfluoroctanoic acid	ug/kg	<0.031	0.099	09/28/23 20:55	
Perfluorotetradecanoic acid	ug/kg	<0.034	0.099	09/28/23 20:55	
Perfluorotridecanoic acid	ug/kg	<0.032	0.099	09/28/23 20:55	
Perfluoroundecanoic acid	ug/kg	<0.030	0.099	09/28/23 20:55	
PFBA	ug/kg	<0.028	0.099	09/28/23 20:55	
PFDsO	ug/kg	<0.026	0.096	09/28/23 20:55	
PFDS	ug/kg	<0.028	0.096	09/28/23 20:55	
PFHpS	ug/kg	<0.027	0.094	09/28/23 20:55	
PFNS	ug/kg	<0.034	0.095	09/28/23 20:55	
PFOSA	ug/kg	<0.029	0.099	09/28/23 20:55	
PFPeA	ug/kg	<0.028	0.099	09/28/23 20:55	
PFPeS	ug/kg	<0.024	0.093	09/28/23 20:55	
13C2-PFDsO (S)	%.	90	25-150	09/28/23 20:55	
13C2-PFTA (S)	%.	81	25-150	09/28/23 20:55	
13C24:2FTS (S)	%.	101	25-150	09/28/23 20:55	
13C26:2FTS (S)	%.	123	25-150	09/28/23 20:55	
13C28:2FTS (S)	%.	105	25-150	09/28/23 20:55	
13C2PFHxDa (S)	%.	86	25-150	09/28/23 20:55	
13C3-PFBS (S)	%.	82	25-150	09/28/23 20:55	

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QUALITY CONTROL DATA

Project: TCLP & PFAs Testing

Pace Project No.: 40268330

METHOD BLANK: 4780263

Matrix: Solid

Associated Lab Samples: 40268330001

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
13C3-PFHxS (S)	%.	84	25-150	09/28/23 20:55	
13C3HFPO-DA (S)	%.	66	25-150	09/28/23 20:55	
13C4-PFBA (S)	%.	88	25-150	09/28/23 20:55	
13C4-PFHpA (S)	%.	85	25-150	09/28/23 20:55	
13C5-PFHxA (S)	%.	82	25-150	09/28/23 20:55	
13C5-PFPeA (S)	%.	81	25-150	09/28/23 20:55	
13C6-PFDA (S)	%.	88	25-150	09/28/23 20:55	
13C7-PFUdA (S)	%.	89	25-150	09/28/23 20:55	
13C8-PFOA (S)	%.	85	25-150	09/28/23 20:55	
13C8-PFOS (S)	%.	93	25-150	09/28/23 20:55	
13C8-PFOSA (S)	%.	79	25-150	09/28/23 20:55	
13C9-PFNA (S)	%.	81	25-150	09/28/23 20:55	
d3-MeFOSAA (S)	%.	90	25-150	09/28/23 20:55	
d3-NMeFOSA (S)	%.	77	20-150	09/28/23 20:55	
d5-EtFOSAA (S)	%.	91	25-150	09/28/23 20:55	
d5-NEtFOSA (S)	%.	81	20-150	09/28/23 20:55	
d7-NMeFOSE (S)	%.	77	20-150	09/28/23 20:55	
d9-NEtFOSE (S)	%.	80	20-150	09/28/23 20:55	

LABORATORY CONTROL SAMPLE & LCSD: 4780264

4780265

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limits	RPD	Max RPD	Qualifiers
11CI-PF3OUdS	ug/kg	0.19	0.15	0.15	83	81	50-150	2	30	
4:2 FTS	ug/kg	0.18	0.16	0.16	89	87	50-150	2	30	
6:2 FTS	ug/kg	0.19	0.17	0.16	92	85	50-150	7	30	
8:2 FTS	ug/kg	0.19	0.19	0.17	100	90	50-150	11	30	
9CI-PF3ONS	ug/kg	0.18	0.15	0.15	82	79	50-150	3	30	
ADONA	ug/kg	0.19	0.16	0.16	86	84	50-150	2	30	
HFPO-DA	ug/kg	0.2	0.18	0.16	91	83	50-150	9	30	
NEtFOSA	ug/kg	0.2	0.17	0.16	84	81	50-150	4	30	
NEtFOSAA	ug/kg	0.2	0.18	0.17	93	86	50-150	8	30	
NETFOSE	ug/kg	0.2	0.17	0.16	84	79	50-150	5	30	
NMeFOSA	ug/kg	0.2	0.15	0.18	78	89	50-150	13	30	
NMeFOSAA	ug/kg	0.2	0.17	0.18	87	91	50-150	5	30	
NMeFOSE	ug/kg	0.2	0.17	0.16	86	80	50-150	7	30	
Perfluorobutanesulfonic acid	ug/kg	0.17	0.16	0.16	92	90	50-150	2	30	
Perfluorodecanoic acid	ug/kg	0.2	0.18	0.17	92	84	50-150	8	30	
Perfluorododecanoic acid	ug/kg	0.2	0.21	0.18	104	91	50-150	12	30	
Perfluoroheptanoic acid	ug/kg	0.2	0.17	0.17	88	85	50-150	4	30	
Perfluorohexanesulfonic acid	ug/kg	0.18	0.20	0.20	108	109	50-150	1	30	
Perfluorohexanoic acid	ug/kg	0.2	0.18	0.17	92	86	50-150	7	30	
Perfluorononanoic acid	ug/kg	0.2	0.19	0.17	95	87	50-150	8	30	
Perfluorooctanesulfonic acid	ug/kg	0.18	0.22	0.22	122	120	50-150	1	30	
Perfluorooctanoic acid	ug/kg	0.2	0.19	0.18	96	90	50-150	6	30	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: TCLP & PFAs Testing

Pace Project No.: 40268330

LABORATORY CONTROL SAMPLE & LCSD: 4780264

4780265

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limits	RPD	Max RPD	Qualifiers
Perfluorotetradecanoic acid	ug/kg	0.2	0.18	0.17	90	86	50-150	3	30	
Perfluorotridecanoic acid	ug/kg	0.2	0.19	0.17	94	87	50-150	7	30	
Perfluoroundecanoic acid	ug/kg	0.2	0.18	0.18	93	92	50-150	0	30	
PFBA	ug/kg	0.2	0.22	0.21	112	104	50-150	7	30	
PFDoS	ug/kg	0.19	0.17	0.16	89	83	50-150	6	30	
PFDS	ug/kg	0.19	0.16	0.17	82	90	50-150	10	30	
PFHpS	ug/kg	0.19	0.17	0.15	93	82	50-150	12	30	
PFNS	ug/kg	0.19	0.16	0.16	85	82	50-150	3	30	
PFOSA	ug/kg	0.2	0.19	0.19	98	94	50-150	4	30	
PFPeA	ug/kg	0.2	0.18	0.18	93	89	50-150	5	30	
PFPeS	ug/kg	0.19	0.18	0.16	98	86	50-150	12	30	
13C2-PFDoA (S)	%.				84	87	25-150			
13C2-PFTA (S)	%.				77	83	25-150			
13C24:2FTS (S)	%.				93	92	25-150			
13C26:2FTS (S)	%.				112	111	25-150			
13C28:2FTS (S)	%.				100	102	25-150			
13C2PFHxDA (S)	%.				84	81	25-150			
13C3-PFBS (S)	%.				79	81	25-150			
13C3-PFHxS (S)	%.				77	82	25-150			
13C3HFPO-DA (S)	%.				64	67	25-150			
13C4-PFBA (S)	%.				84	87	25-150			
13C4-PFHxA (S)	%.				81	82	25-150			
13C5-PFHxA (S)	%.				78	81	25-150			
13C5-PFPeA (S)	%.				78	80	25-150			
13C6-PFDA (S)	%.				85	89	25-150			
13C7-PFUdA (S)	%.				82	79	25-150			
13C8-PFOA (S)	%.				80	81	25-150			
13C8-PFOS (S)	%.				80	86	25-150			
13C8-PFOSA (S)	%.				79	80	25-150			
13C9-PFNA (S)	%.				82	81	25-150			
d3-MeFOSAA (S)	%.				86	79	25-150			
d3-NMeFOSA (S)	%.				79	76	20-150			
d5-EtFOSAA (S)	%.				80	86	25-150			
d5-NEtFOSA (S)	%.				80	76	20-150			
d7-NMeFOSE (S)	%.				74	74	20-150			
d9-NEtFOSE (S)	%.				78	79	20-150			

SAMPLE DUPLICATE: 4781045

Parameter	Units	40268330001 Result	Dup Result	RPD	Max RPD	Qualifiers
11CI-PF3OUdS	ug/kg	<0.030	<0.030		30	
4:2 FTS	ug/kg	<0.028	<0.028		30	
6:2 FTS	ug/kg	1.3	1.3	2	30	
8:2 FTS	ug/kg	0.14	0.14	5	30	
9CI-PF3ONS	ug/kg	<0.030	<0.030		30	

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QUALITY CONTROL DATA

Project: TCLP & PFAs Testing

Pace Project No.: 40268330

SAMPLE DUPLICATE: 4781045

Parameter	Units	40268330001 Result	Dup Result	RPD	Max RPD	Qualifiers
ADONA	ug/kg	<0.043	<0.043		30	
HFPO-DA	ug/kg	<0.033	<0.033		30	
NETFOSA	ug/kg	<0.031	<0.031		30	
NETFOSAA	ug/kg	<0.048	<0.048		30	
NETFOSE	ug/kg	<0.039	<0.039		30	
NMeFOSA	ug/kg	<0.033	<0.033		30	
NMeFOSAA	ug/kg	<0.034	<0.034		30	
NMeFOSE	ug/kg	<0.036	<0.036		30	
Perfluorobutanesulfonic acid	ug/kg	<0.031	<0.032		30	
Perfluorodecanoic acid	ug/kg	1.0	0.99	3	30	
Perfluorododecanoic acid	ug/kg	0.16	0.16	3	30	
Perfluoroheptanoic acid	ug/kg	2.9	2.9	2	30	
Perfluorohexanesulfonic acid	ug/kg	0.046J	0.047J		30	
Perfluorohexanoic acid	ug/kg	2.7	2.5	8	30	
Perfluorononanoic acid	ug/kg	4.0	3.6	10	30	
Perfluoroctanesulfonic acid	ug/kg	0.62	0.60	3	30	
Perfluoroctanoic acid	ug/kg	1.8	1.7	1	30	
Perfluorotetradecanoic acid	ug/kg	<0.041	<0.041		30	
Perfluorotridecanoic acid	ug/kg	0.065J	0.065J		30	
Perfluoroundecanoic acid	ug/kg	0.95	0.92	4	30	
PFBA	ug/kg	1.4	1.3	8	30	
PFDoS	ug/kg	<0.031	<0.031		30	
PFDS	ug/kg	<0.034	<0.034		30	
PFHpS	ug/kg	<0.033	<0.033		30	
PFNS	ug/kg	<0.042	<0.042		30	
PFOSA	ug/kg	<0.035	<0.035		30	
PFPeA	ug/kg	4.6	4.3	7	30	
PFPeS	ug/kg	<0.029	<0.029		30	
13C2-PFDoA (S)	%.	75	80			
13C2-PFTA (S)	%.	69	75			
13C24:2FTS (S)	%.	76	76			
13C26:2FTS (S)	%.	131	136			
13C28:2FTS (S)	%.	176	168			S0
13C2PFHxDa (S)	%.	63	69			
13C3-PFBs (S)	%.	74	75			
13C3-PFHxS (S)	%.	75	77			
13C3HFPO-DA (S)	%.	43	45			
13C4-PFBA (S)	%.	82	83			
13C4-PFHxA (S)	%.	73	75			
13C5-PFHxA (S)	%.	74	75			
13C5-PFPeA (S)	%.	75	76			
13C6-PFDA (S)	%.	77	78			
13C7-PFUDa (S)	%.	73	75			
13C8-PFOA (S)	%.	71	72			
13C8-PFOS (S)	%.	84	83			
13C8-PFOSA (S)	%.	67	61			
13C9-PFNA (S)	%.	69	76			

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QUALITY CONTROL DATA

Project: TCLP & PFAs Testing

Pace Project No.: 40268330

SAMPLE DUPLICATE: 4781045

Parameter	Units	Result	Dup Result	RPD	Max RPD	Qualifiers
d3-MeFOSAA (S)	%.	84	88			
d3-NMeFOSA (S)	%.	25	32			
d5-EtFOSAA (S)	%.	88	91			
d5-NEtFOSA (S)	%.	26	33			
d7-NMeFOSE (S)	%.	50	49			
d9-NEtFOSE (S)	%.	53	48			

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REPORT OF LABORATORY ANALYSIS

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QUALIFIERS

Project: TCLP & PFAs Testing

Pace Project No.: 40268330

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.

DL - Adjusted Method Detection Limit.

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

B Analyte was detected in the associated method blank.

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

N2 The lab does not hold NELAC/TNI accreditation for this parameter but other accreditations/certifications may apply. A complete list of accreditations/certifications is available upon request.

P6 Matrix spike recovery was outside laboratory control limits due to a parent sample concentration notably higher than the spike level.

S0 Surrogate recovery outside laboratory control limits.

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: TCLP & PFAs Testing
Pace Project No.: 40268330

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
40268330001	91520 TCLP & PFAs	EPA 3015A	455795	EPA 6010D	455851
40268330001	91520 TCLP & PFAs	EPA 7470	455937	EPA 7470	455989
40268330001	91520 TCLP & PFAs	ASTM D2974	909800		
40268330001	91520 TCLP & PFAs	EPA 3510	455790	EPA 8270E	455819
40268330001	91520 TCLP & PFAs	EPA 8260	455574		
40268330001	91520 TCLP & PFAs	ENV-SOP-MIN4-0178	907953	ENV-SOP-MIN4-0178	909006

REPORT OF LABORATORY ANALYSIS

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CHAIN-OF-CUSTODY Analytical Request Document

Chain-of-Custody is a LEGAL DOCUMENT - Complete all relevant fields

Company: ChemDesign Products, Inc

Address: 2 Stanton Street

Report To: Thomas Wills

Copy To:

Customer Project Name/Number:

Phone: (715) 735-8263
Email: t.wills@chemdesign.com

Collected By (print):
Thomas Wills

Collected By (signature):

Sample Disposal:
[] Dispose as appropriate [] Return
[] Archive:
[] Hold:

Billing Information:

Email To: t.wills@chemdesign.com

Site Collection Info/Address:

State: WI County/City: Marinette Time Zone Collected:
WI Marinette [] PT [] MT [] CT [] ET

LAB USE ONLY- Affix Workorder/Login Label Here or List Pace Workorder Number or
MTJL Log-in Number Here

40268330

ALL SHADED AREAS are for LAB USE ONLY

Container Preservative Type **

Lab Project Manager:

** Preservative Types: (1) nitric acid, (2) sulfuric acid, (3) hydrochloric acid, (4) sodium hydroxide, (5) zinc acetate, (6) methanol, (7) sodium bisulfate, (8) sodium thiosulfate, (9) hexane, (A) ascorbic acid, (B) ammonium sulfate, (C) ammonium hydroxide, (D) TSP, (U) Unpreserved, (O) Other

Analyses

Lab Profile/Line:

Lab Sample Receipt Checklist:

Custody Seals Present/Intact Y N NA
Custody Signatures Present Y N NA
Collector Signature Present Y N NA
Bottles Intact Y N NA
Correct Bottles Y N NA
Sufficient Volume Y N NA
Samples Received on Ice Y N NA
VOA - Headspace Acceptable Y N NA
USDA Regulated Spills Y N NA
Samples in Holding Time Y N NA
Residual Chlorine Present Y N NA
Cl Strips Y N NA
Sample pH Acceptable Y N NA
pH Strips: Y N NA
Sulfide Present Y N NA
Lead Acetate Strips: Y N NA

LAB USE ONLY:

Lab Sample # Comments:

001

Customer Sample ID	Matrix *	Comp / Grab	Collected (or Composite Start)		Composite End		Res Cl	# of Ctns	TCLP - VOC	TCLP - SVOC	TCLP & RCRA Metals	PFAS WT 1033
			Date	Time	Date	Time						
91520-VOC	Bulk	C	9/15/23	12 pm			X					
91520-SVOC	Bulk	C	9/15/23	12 pm					X			
91520-RCRA MT	Bulk	C	9/15/23	12 pm					X			
91520-PFAS 33	Bulk	C	9/15/23	12 pm					X			

Customer Remarks / Special Conditions / Possible Hazards:

Type of Ice Used: Wet Blue Dry None SHORT HOLDS PRESENT (<72 hours): Y N NA

Packing Material Used: Lab Tracking #:

2909312

Radchem sample(s) screened (<500 cpm): Y N NA

Samples received via:
FEDEX UPS Client Courier Pace Courier

Lab Sample Temperature Info:

Temp Blank Received: Y N NA

Therm ID#:

Cooler 1 Temp Upon Receipt: oC

Cooler 1 Therm Corr. Factor: oC

Cooler 1 Corrected Temp: oC

Comments:

Relinquished by/Company: (Signature)
ChemDesign

Date/Time: 9/18/2023 1200

Received by/Company: (Signature)

Date/Time:

MTJL LAB USE ONLY

Table #:

Acctnum:

Template:

Prelogin:

PM:

PB:

Relinquished by/Company: (Signature)
WPS

Date/Time: 9/20/23 0945

Received by/Company: (Signature)
pace

Date/Time: 9/20/23 0940

Date/Time:

PM:

PB:

Trip Blank Received: Y N NA

HCl MeOH TSP Other

Non Conformance(s): YES / NO
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of:

40268330



CHEMDESIGN PRODUCTS INC

WE MAKE CHEMISTRY WORK

Packing Slip

Date: 09/18/23

REQUISITION: Willis Pace Environmental 09/18/23

Ship to: Pace Environmental
Pace Environmental Lab
1241 Bellevue St, Suite 9

Green Bay, WI 54302

From: Tom Willis
CHEMDESIGN PRODUCTS INC
2 Stanton Street
Marinette, WI 54143
(715)735-8263

Receives from: VELIA

Ship To:

Bill To:

Address:

FEDEX Priority Overnight

Prepaid by CDPI

24 HOUR EMERGENCY RESPONSE NUMBER 1-800-688-4005 FOR VELIA ENVIRONMENTAL SERVICES CONTRACT #201205-024

Quantity	Ship To	Bill To	Address
4	Soil Samples		

Received By:

Date:

Please contact Customer Service at 715-735-8270 with any questions or concerns.

Thank you for your business!

2 Stanton Street, Marinette WI 715-735-9033 fax 715-735-5304

Client Name: Chem Design Products

All containers needing preservation have been checked and noted below.

Lab Lot# of pH paper:

Sample Preservation Receipt Form

Project #

 Yes No N/A

U0268330

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

Initial when completed

Date/
Time:

Pace Lab #	AG1U	BG1U	AG1H	AG4S	AG5U	AG2S	BG3U	BP1U	BP3U	BP3B	BP3N	BP3S	BP2Z	VG9C	DG9T	VG9U	VG9H	VG9M	VG9D	JGFU	JG9U	WGFU	WPFU	SP5T	ZPLC	GN 1	GN 2	VOA Vials (>6mm)*	H2SO4 pH ≤2	NaOH+Zn Act pH ≥9	NaOH pH ≥12	HNO3 pH ≤2	pH after adjusted	Volume (mL)
001																				2											2.5 / 5			
002																															2.5 / 5			
003																															2.5 / 5			
004																															2.5 / 5			
005																															2.5 / 5			
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019																															2.5 / 5			
020																															2.5 / 5			

Exceptions to preservation check VOA, Coliform, TOC, TOX, TOH, O&G, WI DRO, Phenolics, Other.

Headspace in VOA Vials (>6mm) : Yes No N/A

*If yes look in headspace column

AG1U	1 liter amber glass	BP1U	1 liter plastic unpres	VG9C	40 mL clear ascorbic w/ HCl	JGFU	4 oz amber jar unpres
BG1U	1 liter clear glass	BP3U	250 mL plastic unpres	DG9T	40 mL amber Na Thio	JG9U	9 oz amber jar unpres
AG1H	1 liter amber glass HCL	BP3B	250 mL plastic NaOH	VG9U	40 mL clear vial unpres	WGFU	4 oz clear jar unpres
AG4S	125 mL amber glass H2SO4	BP3N	250 mL plastic HNO3	VG9H	40 mL clear vial HCL	WPFU	4 oz plastic jar unpres
AG5U	100 mL amber glass unpres	BP3S	250 mL plastic H2SO4	VG9M	40 mL clear vial MeOH	SP5T	120 mL plastic Na Thiosulfate
AG2S	500 mL amber glass H2SO4	BP2Z	500 mL plastic NaOH + Zn	VG9D	40 mL clear vial DI	ZPLC	ziploc bag
BG3U	250 mL clear glass unpres					GN 1	125ml poly unpres.
						GN 2	

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Sample Condition Upon Receipt Form (SCUR)

Project #:

Client Name: ChemDesign ProductsCourier: CS Logistics Fed Ex Speedee UPS Waltco Client Pace Other:Tracking #: 125929100391525470WO# : **40268330**

40268330

Custody Seal on Cooler/Box Present: yes no Seals intact: yes noCustody Seal on Samples Present: yes no Seals intact: yes noPacking Material: Bubble Wrap Bubble Bags None OtherThermometer Used SR - 131 Type of Ice: Wet Blue Dry None Meltwater OnlyCooler Temperature Uncorr: 17.5 /Corr: 17.0Temp Blank Present: yes noBiological Tissue is Frozen: yes no

Temp should be above freezing to 6°C.

Biota Samples may be received at ≤ 0°C if shipped on Dry Ice.

Person examining contents:

Date: 9/20/23 Initials: NKLabeled By Initials: mjt

Chain of Custody Present:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	1.
Chain of Custody Filled Out:	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	2. <u>pg#, proj.name/H, preserv</u> <u>9/20/23 NK</u>
Chain of Custody Relinquished:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	3.
Sampler Name & Signature on COC:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	4.
Samples Arrived within Hold Time: - DI VOA Samples frozen upon receipt	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	5. Date/Time:
Short Hold Time Analysis (<72hr):	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	6.
Rush Turn Around Time Requested:	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	7.
Sufficient Volume: For Analysis: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No MS/MSD: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A		8.
Correct Containers Used:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	9.
Correct Type: <u>Pace Green Bay, Pace IR, Non-Pace</u>		
Containers Intact:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	10.
Filtered volume received for Dissolved tests	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	11.
Sample Labels match COC: -Includes date/time/ID/Analysis	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	12. <u>no date/time</u> <u>ID is 91523 instead of 91520</u> <u>mjt 9/20/23</u> <u>9/20/23 NK</u>
Trip Blank Present.	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	13.
Trip Blank Custody Seals Present	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> 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: notified Pm of over temp 9/20/23 NKPer client (TDM willis), OK to run over temp ALane 9/20/23

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

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