Schmenk, Colin R -DNR

From: Jacobs, Makayla <Makayla.Jacobs@us.fincantieri.com>
Sent: Thursday, May 6, 2021 8:08 AM
To: Neste, David E - DNR
Cc: Carow, Tom; Munoz, Antonio
Subject: Soil Sample Results
Attachments: #2 Above.pdf; #3 Above and Below.pdf; #4 Below.pdf; South End Samples.pdf; #1 Below.pdf

**Please Read Disclaimer(s) at the end of this email

Dave,

Attached are some more soil sample results. Thank you!

FINCANTIERI
MARINETTE MARINE

Makayla Jacobs
Environmental Engineering Specalist
FINCANTIERI MARINETTE MARINE
1600 Ely Street
Marinette, Wisconsin 54143
P: 715-735-9341, x6834
C: 715-245-1931

www.fincantierimarinettemarine.com

a FINCANTIERI company

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

April 22, 2021

Makayla Jacobs
Fincantieri Marinette Marine
1600 Ely Street
Marinette, WI 54143

RE: Project: #1 BELOW
Pace Project No.: 40224522

Dear Makayla Jacobs:

Enclosed are the analytical results for sample(s) received by the laboratory on April 06, 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

Samples received at 11 degrees C. SVM 4/6/2021

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

Sincerely,

Brian Basten
brian.basten@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: #1 BELOW
Pace Project No.: 40224522

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: #1 BELOW
Pace Project No.: 40224522

Lab ID	Sample ID	Matrix	Date Collected	Date Received
40224522001	**#1 BELOW**	Solid	04/01/21 09:45	04/06/21 10:00

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

SAMPLE ANALYTE COUNT

Project: #1 BELOW
Pace Project No.: 40224522

Lab ID	Sample ID	Method	Analysts	Analytes Reported
40224522001	**#1 BELOW**	EPA 8082	BLM	10
		EPA 6010	TXW	7
		EPA 7471	AJT	1
		EPA 8270E by SIM	JJB	20
		EPA 8260	MDS	64
		ASTM D2974-87	MMX	1

PASI-G = Pace Analytical Services - Green Bay

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

SUMMARY OF DETECTION

Project: #1 BELOW
Pace Project No.: 40224522

Lab Sample ID / Method	Client Sample ID / Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
40224522001	**#1 BELOW**					
EPA 6010	Arsenic	8.0	mg/kg	3.0	04/07/21 17:18	
EPA 6010	Barium	49.3	mg/kg	0.60	04/07/21 17:18	
EPA 6010	Cadmium	0.30J	mg/kg	0.60	04/07/21 17:18	
EPA 6010	Chromium	9.8	mg/kg	1.2	04/07/21 17:18	
EPA 6010	Lead	62.6	mg/kg	2.4	04/07/21 17:18	
EPA 7471	Mercury	0.21	mg/kg	0.040	04/14/21 12:25	
EPA 8270E by SIM	Acenaphthene	21.8J	ug/kg	105	04/14/21 22:54	
EPA 8270E by SIM	Acenaphthylene	68.1J	ug/kg	105	04/14/21 22:54	
EPA 8270E by SIM	Anthracene	101J	ug/kg	105	04/14/21 22:54	
EPA 8270E by SIM	Benzo(a)anthracene	372	ug/kg	105	04/14/21 22:54	
EPA 8270E by SIM	Benzo(a)pyrene	417	ug/kg	105	04/14/21 22:54	
EPA 8270E by SIM	Benzo(b)fluoranthene	540	ug/kg	105	04/14/21 22:54	
EPA 8270E by SIM	Benzo(g,h,i)perylene	149	ug/kg	105	04/14/21 22:54	
EPA 8270E by SIM	Benzo(k)fluoranthene	224	ug/kg	105	04/14/21 22:54	
EPA 8270E by SIM	Chrysene	411	ug/kg	105	04/14/21 22:54	L2
EPA 8270E by SIM	Dibenz(a,h)anthracene	43.5J	ug/kg	105	04/14/21 22:54	
EPA 8270E by SIM	Fluoranthene	763	ug/kg	105	04/14/21 22:54	
EPA 8270E by SIM	Fluorene	32.1J	ug/kg	105	04/14/21 22:54	
EPA 8270E by SIM	Indeno(1,2,3-cd)pyrene	148	ug/kg	105	04/14/21 22:54	
EPA 8270E by SIM	1-Methylnaphthalene	24.8J	ug/kg	105	04/14/21 22:54	
EPA 8270E by SIM	2-Methylnaphthalene	35.1J	ug/kg	105	04/14/21 22:54	
EPA 8270E by SIM	Naphthalene	69.0J	ug/kg	105	04/14/21 22:54	
EPA 8270E by SIM	Phenanthrene	303	ug/kg	105	04/14/21 22:54	
EPA 8270E by SIM	Pyrene	652	ug/kg	105	04/14/21 22:54	
EPA 8260	Methylene Chloride	54.8J	ug/kg	75.6	04/09/21 23:12	
ASTM D2974-87	Percent Moisture	20.4	%	0.10	04/06/21 16:36	

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: #1 BELOW
Pace Project No.: 40224522

Sample: #1 BELOW **Lab ID: 40224522001** Collected: 04/01/21 09:45 Received: 04/06/21 10:00 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
8082 GCS PCB	Analytical Method: EPA 8082 Preparation Method: EPA 3541 Pace Analytical Services - Green Bay								
PCB-1016 (Aroclor 1016)	**<19.1**	ug/kg	62.8	19.1	1	04/08/21 17:54	04/12/21 15:27	12674-11-2	
PCB-1221 (Aroclor 1221)	**<19.1**	ug/kg	62.8	19.1	1	04/08/21 17:54	04/12/21 15:27	11104-28-2	
PCB-1232 (Aroclor 1232)	**<19.1**	ug/kg	62.8	19.1	1	04/08/21 17:54	04/12/21 15:27	11141-16-5	
PCB-1242 (Aroclor 1242)	**<19.1**	ug/kg	62.8	19.1	1	04/08/21 17:54	04/12/21 15:27	53469-21-9	
PCB-1248 (Aroclor 1248)	**<19.1**	ug/kg	62.8	19.1	1	04/08/21 17:54	04/12/21 15:27	12672-29-6	
PCB-1254 (Aroclor 1254)	**<19.1**	ug/kg	62.8	19.1	1	04/08/21 17:54	04/12/21 15:27	11097-69-1	
PCB-1260 (Aroclor 1260)	**<19.1**	ug/kg	62.8	19.1	1	04/08/21 17:54	04/12/21 15:27	11096-82-5	
PCB, Total	**<19.1**	ug/kg	62.8	19.1	1	04/08/21 17:54	04/12/21 15:27	1336-36-3	
Surrogates									
Tetrachloro-m-xylene (S)	79	%	67-102		1	04/08/21 17:54	04/12/21 15:27	877-09-8	
Decachlorobiphenyl (S)	60	%	47-114		1	04/08/21 17:54	04/12/21 15:27	2051-24-3	
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3050 Pace Analytical Services - Green Bay								
Arsenic	**8.0**	mg/kg	3.0	1.8	1	04/07/21 07:02	04/07/21 17:18	7440-38-2	
Barium	**49.3**	mg/kg	0.60	0.18	1	04/07/21 07:02	04/07/21 17:18	7440-39-3	
Cadmium	**0.30J**	mg/kg	0.60	0.16	1	04/07/21 07:02	04/07/21 17:18	7440-43-9	
Chromium	**9.8**	mg/kg	1.2	0.33	1	04/07/21 07:02	04/07/21 17:18	7440-47-3	
Lead	**62.6**	mg/kg	2.4	0.72	1	04/07/21 07:02	04/07/21 17:18	7439-92-1	
Selenium	**<1.6**	mg/kg	4.8	1.6	1	04/07/21 07:02	04/07/21 17:18	7782-49-2	
Silver	**<0.37**	mg/kg	1.2	0.37	1	04/07/21 07:02	04/07/21 17:18	7440-22-4	
7471 Mercury	Analytical Method: EPA 7471 Preparation Method: EPA 7471 Pace Analytical Services - Green Bay								
Mercury	**0.21**	mg/kg	0.040	0.011	1	04/14/21 07:31	04/14/21 12:25	7439-97-6	
8270E MSSV PAH by SIM	Analytical Method: EPA 8270E by SIM Preparation Method: EPA 3546 Pace Analytical Services - Green Bay								
Acenaphthene	**21.8J**	ug/kg	105	13.6	5	04/14/21 08:29	04/14/21 22:54	83-32-9	
Acenaphthylene	**68.1J**	ug/kg	105	13.2	5	04/14/21 08:29	04/14/21 22:54	208-96-8	
Anthracene	**101J**	ug/kg	105	13.0	5	04/14/21 08:29	04/14/21 22:54	120-12-7	
Benzo(a)anthracene	**372**	ug/kg	105	13.6	5	04/14/21 08:29	04/14/21 22:54	56-55-3	
Benzo(a)pyrene	**417**	ug/kg	105	11.9	5	04/14/21 08:29	04/14/21 22:54	50-32-8	
Benzo(b)fluoranthene	**540**	ug/kg	105	14.6	5	04/14/21 08:29	04/14/21 22:54	205-99-2	
Benzo(g,h,i)perylene	**149**	ug/kg	105	18.4	5	04/14/21 08:29	04/14/21 22:54	191-24-2	
Benzo(k)fluoranthene	**224**	ug/kg	105	13.4	5	04/14/21 08:29	04/14/21 22:54	207-08-9	
Chrysene	**411**	ug/kg	105	19.8	5	04/14/21 08:29	04/14/21 22:54	218-01-9	L2
Dibenz(a,h)anthracene	**43.5J**	ug/kg	105	14.5	5	04/14/21 08:29	04/14/21 22:54	53-70-3	
Fluoranthene	**763**	ug/kg	105	12.4	5	04/14/21 08:29	04/14/21 22:54	206-44-0	
Fluorene	**32.1J**	ug/kg	105	12.6	5	04/14/21 08:29	04/14/21 22:54	86-73-7	
Indeno(1,2,3-cd)pyrene	**148**	ug/kg	105	21.9	5	04/14/21 08:29	04/14/21 22:54	193-39-5	
1-Methylnaphthalene	**24.8J**	ug/kg	105	15.3	5	04/14/21 08:29	04/14/21 22:54	90-12-0	
2-Methylnaphthalene	**35.1J**	ug/kg	105	15.4	5	04/14/21 08:29	04/14/21 22:54	91-57-6	
Naphthalene	**69.0J**	ug/kg	105	10.2	5	04/14/21 08:29	04/14/21 22:54	91-20-3	

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: #1 BELOW
Pace Project No.: 40224522

Sample: #1 BELOW **Lab ID: 40224522001** Collected: 04/01/21 09:45 Received: 04/06/21 10:00 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 PAH by SIM	Analytical Method: EPA 8270E by SIM Preparation Method: EPA 3546 Pace Analytical Services - Green Bay								
Phenanthrene	**303**	ug/kg	105	12.0	5	04/14/21 08:29	04/14/21 22:54	85-01-8	
Pyrene	**652**	ug/kg	105	15.4	5	04/14/21 08:29	04/14/21 22:54	129-00-0	
Surrogates									
2-Fluorobiphenyl (S)	46	%	36-86		5	04/14/21 08:29	04/14/21 22:54	321-60-8	
Terphenyl-d14 (S)	52	%	41-97		5	04/14/21 08:29	04/14/21 22:54	1718-51-0	
8260 MSV Med Level Normal List	Analytical Method: EPA 8260 Preparation Method: EPA 5035/5030B Pace Analytical Services - Green Bay								
1,1,1,2-Tetrachloroethane	**<18.1**	ug/kg	75.6	18.1	1	04/09/21 10:15	04/09/21 23:12	630-20-6	
1,1,1-Trichloroethane	**<19.4**	ug/kg	75.6	19.4	1	04/09/21 10:15	04/09/21 23:12	71-55-6	
1,1,2,2-Tetrachloroethane	**<27.4**	ug/kg	75.6	27.4	1	04/09/21 10:15	04/09/21 23:12	79-34-5	
1,1,2-Trichloroethane	**<27.5**	ug/kg	75.6	27.5	1	04/09/21 10:15	04/09/21 23:12	79-00-5	
1,1-Dichloroethane	**<19.4**	ug/kg	75.6	19.4	1	04/09/21 10:15	04/09/21 23:12	75-34-3	
1,1-Dichloroethene	**<25.1**	ug/kg	75.6	25.1	1	04/09/21 10:15	04/09/21 23:12	75-35-4	
1,1-Dichloropropene	**<24.5**	ug/kg	75.6	24.5	1	04/09/21 10:15	04/09/21 23:12	563-58-6	
1,2,3-Trichlorobenzene	**<84.2**	ug/kg	378	84.2	1	04/09/21 10:15	04/09/21 23:12	87-61-6	
1,2,3-Trichloropropane	**<36.7**	ug/kg	75.6	36.7	1	04/09/21 10:15	04/09/21 23:12	96-18-4	
1,2,4-Trichlorobenzene	**<62.3**	ug/kg	378	62.3	1	04/09/21 10:15	04/09/21 23:12	120-82-1	
1,2,4-Trimethylbenzene	**<22.5**	ug/kg	75.6	22.5	1	04/09/21 10:15	04/09/21 23:12	95-63-6	
1,2-Dibromo-3-chloropropane	**<58.7**	ug/kg	378	58.7	1	04/09/21 10:15	04/09/21 23:12	96-12-8	
1,2-Dibromoethane (EDB)	**<20.7**	ug/kg	75.6	20.7	1	04/09/21 10:15	04/09/21 23:12	106-93-4	
1,2-Dichlorobenzene	**<23.4**	ug/kg	75.6	23.4	1	04/09/21 10:15	04/09/21 23:12	95-50-1	
1,2-Dichloroethane	**<17.4**	ug/kg	75.6	17.4	1	04/09/21 10:15	04/09/21 23:12	107-06-2	
1,2-Dichloropropane	**<18.0**	ug/kg	75.6	18.0	1	04/09/21 10:15	04/09/21 23:12	78-87-5	
1,3,5-Trimethylbenzene	**<24.3**	ug/kg	75.6	24.3	1	04/09/21 10:15	04/09/21 23:12	108-67-8	
1,3-Dichlorobenzene	**<20.7**	ug/kg	75.6	20.7	1	04/09/21 10:15	04/09/21 23:12	541-73-1	
1,3-Dichloropropane	**<16.5**	ug/kg	75.6	16.5	1	04/09/21 10:15	04/09/21 23:12	142-28-9	
1,4-Dichlorobenzene	**<20.7**	ug/kg	75.6	20.7	1	04/09/21 10:15	04/09/21 23:12	106-46-7	
2,2-Dichloropropane	**<20.4**	ug/kg	75.6	20.4	1	04/09/21 10:15	04/09/21 23:12	594-20-7	
2-Chlorotoluene	**<24.5**	ug/kg	75.6	24.5	1	04/09/21 10:15	04/09/21 23:12	95-49-8	
4-Chlorotoluene	**<28.7**	ug/kg	75.6	28.7	1	04/09/21 10:15	04/09/21 23:12	106-43-4	
Benzene	**<18.0**	ug/kg	30.2	18.0	1	04/09/21 10:15	04/09/21 23:12	71-43-2	
Bromobenzene	**<29.5**	ug/kg	75.6	29.5	1	04/09/21 10:15	04/09/21 23:12	108-86-1	
Bromochloromethane	**<20.7**	ug/kg	75.6	20.7	1	04/09/21 10:15	04/09/21 23:12	74-97-5	
Bromodichloromethane	**<18.0**	ug/kg	75.6	18.0	1	04/09/21 10:15	04/09/21 23:12	75-27-4	
Bromoform	**<333**	ug/kg	378	333	1	04/09/21 10:15	04/09/21 23:12	75-25-2	
Bromomethane	**<106**	ug/kg	378	106	1	04/09/21 10:15	04/09/21 23:12	74-83-9	
Carbon tetrachloride	**<16.6**	ug/kg	75.6	16.6	1	04/09/21 10:15	04/09/21 23:12	56-23-5	
Chlorobenzene	**<9.1**	ug/kg	75.6	9.1	1	04/09/21 10:15	04/09/21 23:12	108-90-7	
Chloroethane	**<31.9**	ug/kg	378	31.9	1	04/09/21 10:15	04/09/21 23:12	75-00-3	
Chloroform	**<54.1**	ug/kg	378	54.1	1	04/09/21 10:15	04/09/21 23:12	67-66-3	
Chloromethane	**<28.7**	ug/kg	75.6	28.7	1	04/09/21 10:15	04/09/21 23:12	74-87-3	
Dibromochloromethane	**<258**	ug/kg	378	258	1	04/09/21 10:15	04/09/21 23:12	124-48-1	
Dibromomethane	**<22.4**	ug/kg	75.6	22.4	1	04/09/21 10:15	04/09/21 23:12	74-95-3	

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: #1 BELOW
Pace Project No.: 40224522

Sample: #1 BELOW **Lab ID: 40224522001** Collected: 04/01/21 09:45 Received: 04/06/21 10:00 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								
Dichlorodifluoromethane	**<32.5**	ug/kg	75.6	32.5	1	04/09/21 10:15	04/09/21 23:12	75-71-8	
Diisopropyl ether	**<18.7**	ug/kg	75.6	18.7	1	04/09/21 10:15	04/09/21 23:12	108-20-3	
Ethylbenzene	**<18.0**	ug/kg	75.6	18.0	1	04/09/21 10:15	04/09/21 23:12	100-41-4	
Hexachloro-1,3-butadiene	**<150**	ug/kg	378	150	1	04/09/21 10:15	04/09/21 23:12	87-68-3	
Isopropylbenzene (Cumene)	**<20.4**	ug/kg	75.6	20.4	1	04/09/21 10:15	04/09/21 23:12	98-82-8	
Methyl-tert-butyl ether	**<22.2**	ug/kg	75.6	22.2	1	04/09/21 10:15	04/09/21 23:12	1634-04-4	
Methylene Chloride	**54.8J**	ug/kg	75.6	21.0	1	04/09/21 10:15	04/09/21 23:12	75-09-2	
Naphthalene	**<23.6**	ug/kg	378	23.6	1	04/09/21 10:15	04/09/21 23:12	91-20-3	
Styrene	**<19.4**	ug/kg	75.6	19.4	1	04/09/21 10:15	04/09/21 23:12	100-42-5	
Tetrachloroethene	**<29.3**	ug/kg	75.6	29.3	1	04/09/21 10:15	04/09/21 23:12	127-18-4	
Toluene	**<19.1**	ug/kg	75.6	19.1	1	04/09/21 10:15	04/09/21 23:12	108-88-3	
Trichloroethene	**<28.3**	ug/kg	75.6	28.3	1	04/09/21 10:15	04/09/21 23:12	79-01-6	
Trichlorofluoromethane	**<21.9**	ug/kg	75.6	21.9	1	04/09/21 10:15	04/09/21 23:12	75-69-4	
Vinyl chloride	**<15.3**	ug/kg	75.6	15.3	1	04/09/21 10:15	04/09/21 23:12	75-01-4	
cis-1,2-Dichloroethene	**<16.2**	ug/kg	75.6	16.2	1	04/09/21 10:15	04/09/21 23:12	156-59-2	
cis-1,3-Dichloropropene	**<49.9**	ug/kg	378	49.9	1	04/09/21 10:15	04/09/21 23:12	10061-01-5	
m&p-Xylene	**<31.9**	ug/kg	151	31.9	1	04/09/21 10:15	04/09/21 23:12	179601-23-1	
n-Butylbenzene	**<34.6**	ug/kg	75.6	34.6	1	04/09/21 10:15	04/09/21 23:12	104-51-8	
n-Propylbenzene	**<18.1**	ug/kg	75.6	18.1	1	04/09/21 10:15	04/09/21 23:12	103-65-1	
o-Xylene	**<22.7**	ug/kg	75.6	22.7	1	04/09/21 10:15	04/09/21 23:12	95-47-6	
p-Isopropyltoluene	**<23.0**	ug/kg	75.6	23.0	1	04/09/21 10:15	04/09/21 23:12	99-87-6	
sec-Butylbenzene	**<18.4**	ug/kg	75.6	18.4	1	04/09/21 10:15	04/09/21 23:12	135-98-8	
tert-Butylbenzene	**<23.7**	ug/kg	75.6	23.7	1	04/09/21 10:15	04/09/21 23:12	98-06-6	
trans-1,2-Dichloroethene	**<16.3**	ug/kg	75.6	16.3	1	04/09/21 10:15	04/09/21 23:12	156-60-5	
trans-1,3-Dichloropropene	**<216**	ug/kg	378	216	1	04/09/21 10:15	04/09/21 23:12	10061-02-6	
Surrogates									
Toluene-d8 (S)	125	%	67-159		1	04/09/21 10:15	04/09/21 23:12	2037-26-5	
4-Bromofluorobenzene (S)	119	%	66-153		1	04/09/21 10:15	04/09/21 23:12	460-00-4	
1,2-Dichlorobenzene-d4 (S)	117	%	82-158		1	04/09/21 10:15	04/09/21 23:12	2199-69-1	
Percent Moisture	Analytical Method: ASTM D2974-87 Pace Analytical Services - Green Bay								
Percent Moisture	**20.4**	%	0.10	0.10	1		04/06/21 16:36		

REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL DATA

Project: #1 BELOW
Pace Project No.: 40224522

QC Batch: 382313
QC Batch Method: EPA 7471
Analysis Method: EPA 7471
Analysis Description: 7471 Mercury
Laboratory: Pace Analytical Services - Green Bay
Associated Lab Samples: 40224522001

METHOD BLANK: 2205177 Matrix: Solid
Associated Lab Samples: 40224522001

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Mercury	mg/kg	<0.010	0.035	04/14/21 11:22	

LABORATORY CONTROL SAMPLE: 2205178

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Mercury	mg/kg	0.83	0.82	98	85-115	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2205179 2205180

Parameter	Units	40224520001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Mercury	mg/kg	0.32	0.92	0.9	1.3	1.1	107	89	85-115	14	20	

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: #1 BELOW
Pace Project No.: 40224522

QC Batch: 381698
QC Batch Method: EPA 3050
Analysis Method: EPA 6010
Analysis Description: 6010 MET
Laboratory: Pace Analytical Services - Green Bay
Associated Lab Samples: 40224522001

METHOD BLANK: 2201365 Matrix: Solid
Associated Lab Samples: 40224522001

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Arsenic	mg/kg	<1.5	2.5	04/07/21 16:31	
Barium	mg/kg	<0.15	0.50	04/07/21 16:31	
Cadmium	mg/kg	<0.13	0.50	04/07/21 16:31	
Chromium	mg/kg	<0.28	1.0	04/07/21 16:31	
Lead	mg/kg	<0.60	2.0	04/07/21 16:31	
Selenium	mg/kg	<1.3	4.0	04/07/21 16:31	
Silver	mg/kg	<0.31	1.0	04/07/21 16:31	

LABORATORY CONTROL SAMPLE: 2201366

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Arsenic	mg/kg	50	52.0	104	80-120	
Barium	mg/kg	50	51.2	102	80-120	
Cadmium	mg/kg	50	50.3	101	80-120	
Chromium	mg/kg	50	50.0	100	80-120	
Lead	mg/kg	50	50.5	101	80-120	
Selenium	mg/kg	50	51.1	102	80-120	
Silver	mg/kg	25	23.3	93	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2201367 2201368

Parameter	Units	40224520001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Arsenic	mg/kg	30.1	54.9	55	93.6	89.6	116	108	75-125	4	20	
Barium	mg/kg	96.9	54.9	55	168	143	130	83	75-125	16	20	M0
Cadmium	mg/kg	1.2	54.9	55	54.5	56.6	97	101	75-125	4	20	
Chromium	mg/kg	23.7	54.9	55	114	70.8	165	86	75-125	47	20	M0,R1
Lead	mg/kg	217	54.9	55	1840	231	2960	25	75-125	155	20	M0,R1
Selenium	mg/kg	<2.9	54.9	55	54.1	55.5	99	101	75-125	3	20	
Silver	mg/kg	<0.67	27.5	27.5	26.6	27.0	95	96	75-125	1	20	

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: #1 BELOW
Pace Project No.: 40224522

QC Batch: 382037
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: 40224522001

METHOD BLANK: 2203495 Matrix: Solid
Associated Lab Samples: 40224522001

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1,1,2-Tetrachloroethane	ug/kg	<12.0	50.0	04/09/21 16:29	
1,1,1-Trichloroethane	ug/kg	<12.8	50.0	04/09/21 16:29	
1,1,2,2-Tetrachloroethane	ug/kg	<18.1	50.0	04/09/21 16:29	
1,1,2-Trichloroethane	ug/kg	<18.2	50.0	04/09/21 16:29	
1,1-Dichloroethane	ug/kg	<12.8	50.0	04/09/21 16:29	
1,1-Dichloroethene	ug/kg	<16.6	50.0	04/09/21 16:29	
1,1-Dichloropropene	ug/kg	<16.2	50.0	04/09/21 16:29	
1,2,3-Trichlorobenzene	ug/kg	<55.7	250	04/09/21 16:29	
1,2,3-Trichloropropane	ug/kg	<24.3	50.0	04/09/21 16:29	
1,2,4-Trichlorobenzene	ug/kg	<41.2	250	04/09/21 16:29	
1,2,4-Trimethylbenzene	ug/kg	<14.9	50.0	04/09/21 16:29	
1,2-Dibromo-3-chloropropane	ug/kg	<38.8	250	04/09/21 16:29	
1,2-Dibromoethane (EDB)	ug/kg	<13.7	50.0	04/09/21 16:29	
1,2-Dichlorobenzene	ug/kg	<15.5	50.0	04/09/21 16:29	
1,2-Dichloroethane	ug/kg	<11.5	50.0	04/09/21 16:29	
1,2-Dichloropropane	ug/kg	<11.9	50.0	04/09/21 16:29	
1,3,5-Trimethylbenzene	ug/kg	<16.1	50.0	04/09/21 16:29	
1,3-Dichlorobenzene	ug/kg	<13.7	50.0	04/09/21 16:29	
1,3-Dichloropropane	ug/kg	<10.9	50.0	04/09/21 16:29	
1,4-Dichlorobenzene	ug/kg	<13.7	50.0	04/09/21 16:29	
2,2-Dichloropropane	ug/kg	<13.5	50.0	04/09/21 16:29	
2-Chlorotoluene	ug/kg	<16.2	50.0	04/09/21 16:29	
4-Chlorotoluene	ug/kg	<19.0	50.0	04/09/21 16:29	
Benzene	ug/kg	<11.9	20.0	04/09/21 16:29	
Bromobenzene	ug/kg	<19.5	50.0	04/09/21 16:29	
Bromochloromethane	ug/kg	<13.7	50.0	04/09/21 16:29	
Bromodichloromethane	ug/kg	<11.9	50.0	04/09/21 16:29	
Bromoform	ug/kg	<220	250	04/09/21 16:29	
Bromomethane	ug/kg	<70.1	250	04/09/21 16:29	
Carbon tetrachloride	ug/kg	<11.0	50.0	04/09/21 16:29	
Chlorobenzene	ug/kg	<6.0	50.0	04/09/21 16:29	
Chloroethane	ug/kg	<21.1	250	04/09/21 16:29	
Chloroform	ug/kg	<35.8	250	04/09/21 16:29	
Chloromethane	ug/kg	<19.0	50.0	04/09/21 16:29	
cis-1,2-Dichloroethene	ug/kg	<10.7	50.0	04/09/21 16:29	
cis-1,3-Dichloropropene	ug/kg	<33.0	250	04/09/21 16:29	
Dibromochloromethane	ug/kg	<171	250	04/09/21 16:29	
Dibromomethane	ug/kg	<14.8	50.0	04/09/21 16:29	
Dichlorodifluoromethane	ug/kg	<21.5	50.0	04/09/21 16:29	
Diisopropyl ether	ug/kg	<12.4	50.0	04/09/21 16:29	

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: #1 BELOW
Pace Project No.: 40224522

METHOD BLANK: 2203495 Matrix: Solid
Associated Lab Samples: 40224522001

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Ethylbenzene	ug/kg	<11.9	50.0	04/09/21 16:29	
Hexachloro-1,3-butadiene	ug/kg	<99.4	250	04/09/21 16:29	
Isopropylbenzene (Cumene)	ug/kg	<13.5	50.0	04/09/21 16:29	
m&p-Xylene	ug/kg	<21.1	100	04/09/21 16:29	
Methyl-tert-butyl ether	ug/kg	<14.7	50.0	04/09/21 16:29	
Methylene Chloride	ug/kg	<13.9	50.0	04/09/21 16:29	
n-Butylbenzene	ug/kg	<22.9	50.0	04/09/21 16:29	
n-Propylbenzene	ug/kg	<12.0	50.0	04/09/21 16:29	
Naphthalene	ug/kg	<15.6	250	04/09/21 16:29	
o-Xylene	ug/kg	<15.0	50.0	04/09/21 16:29	
p-Isopropyltoluene	ug/kg	<15.2	50.0	04/09/21 16:29	
sec-Butylbenzene	ug/kg	<12.2	50.0	04/09/21 16:29	
Styrene	ug/kg	<12.8	50.0	04/09/21 16:29	
tert-Butylbenzene	ug/kg	<15.7	50.0	04/09/21 16:29	
Tetrachloroethene	ug/kg	<19.4	50.0	04/09/21 16:29	
Toluene	ug/kg	<12.6	50.0	04/09/21 16:29	
trans-1,2-Dichloroethene	ug/kg	<10.8	50.0	04/09/21 16:29	
trans-1,3-Dichloropropene	ug/kg	<143	250	04/09/21 16:29	
Trichloroethene	ug/kg	<18.7	50.0	04/09/21 16:29	
Trichlorofluoromethane	ug/kg	<14.5	50.0	04/09/21 16:29	
Vinyl chloride	ug/kg	<10.1	50.0	04/09/21 16:29	
1,2-Dichlorobenzene-d4 (S)	%	89	82-158	04/09/21 16:29	
4-Bromofluorobenzene (S)	%	91	66-153	04/09/21 16:29	
Toluene-d8 (S)	%	95	67-159	04/09/21 16:29	

LABORATORY CONTROL SAMPLE: 2203496

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1-Trichloroethane	ug/kg	2500	2380	95	70-130	
1,1,2,2-Tetrachloroethane	ug/kg	2500	2400	96	65-129	
1,1,2-Trichloroethane	ug/kg	2500	2450	98	70-130	
1,1-Dichloroethane	ug/kg	2500	2480	99	70-130	
1,1-Dichloroethene	ug/kg	2500	1840	73	67-120	
1,2,4-Trichlorobenzene	ug/kg	2500	1800	72	64-130	
1,2-Dibromo-3-chloropropane	ug/kg	2500	2520	101	57-119	
1,2-Dibromoethane (EDB)	ug/kg	2500	2430	97	70-130	
1,2-Dichlorobenzene	ug/kg	2500	2310	92	70-130	
1,2-Dichloroethane	ug/kg	2500	2500	100	70-130	
1,2-Dichloropropane	ug/kg	2500	2410	96	72-118	
1,3-Dichlorobenzene	ug/kg	2500	2180	87	70-130	
1,4-Dichlorobenzene	ug/kg	2500	2170	87	70-130	
Benzene	ug/kg	2500	2280	91	70-130	
Bromodichloromethane	ug/kg	2500	2370	95	70-130	
Bromoform	ug/kg	2500	2270	91	66-130	

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: #1 BELOW
Pace Project No.: 40224522

LABORATORY CONTROL SAMPLE: 2203496

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Bromomethane	ug/kg	2500	1270	51	13-153	
Carbon tetrachloride	ug/kg	2500	2330	93	73-134	
Chlorobenzene	ug/kg	2500	2320	93	70-130	
Chloroethane	ug/kg	2500	1730	69	19-170	
Chloroform	ug/kg	2500	2430	97	79-120	
Chloromethane	ug/kg	2500	1860	75	45-117	
cis-1,2-Dichloroethene	ug/kg	2500	2200	88	70-130	
cis-1,3-Dichloropropene	ug/kg	2500	2310	92	68-130	
Dibromochloromethane	ug/kg	2500	2180	87	70-130	
Dichlorodifluoromethane	ug/kg	2500	1670	67	15-135	
Ethylbenzene	ug/kg	2500	2280	91	78-120	
Isopropylbenzene (Cumene)	ug/kg	2500	2410	96	70-130	
m&p-Xylene	ug/kg	5000	4490	90	70-130	
Methyl-tert-butyl ether	ug/kg	2500	2390	96	65-130	
Methylene Chloride	ug/kg	2500	2260	90	70-130	
o-Xylene	ug/kg	2500	2290	92	70-130	
Styrene	ug/kg	2500	2460	99	70-130	
Tetrachloroethene	ug/kg	2500	1900	76	70-130	
Toluene	ug/kg	2500	2220	89	76-120	
trans-1,2-Dichloroethene	ug/kg	2500	2310	92	70-130	
trans-1,3-Dichloropropene	ug/kg	2500	2460	98	70-130	
Trichloroethene	ug/kg	2500	2270	91	70-130	
Trichlorofluoromethane	ug/kg	2500	1970	79	49-153	
Vinyl chloride	ug/kg	2500	1890	76	58-121	
1,2-Dichlorobenzene-d4 (S)	%			98	82-158	
4-Bromofluorobenzene (S)	%			102	66-153	
Toluene-d8 (S)	%			101	67-159	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2203497 2203498

Parameter	Units	40224684001 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	<13.9			1040	1100				6	20	
1,1,2,2-Tetrachloroethane	ug/kg	<19.6			1060	1100				4	20	
1,1,2-Trichloroethane	ug/kg	<19.7			1190	1140				4	20	
1,1-Dichloroethane	ug/kg	<13.9			1200	1200				0	20	
1,1-Dichloroethene	ug/kg	<18.0			837	968				15	20	
1,2,4-Trichlorobenzene	ug/kg	<44.6			997	971				3	20	
1,2-Dibromo-3-chloropropane	ug/kg	<42.0			1170	1180				1	21	
1,2-Dibromoethane (EDB)	ug/kg	<14.8			1130	1130				0	20	
1,2-Dichlorobenzene	ug/kg	<16.8			1160	1180				2	20	
1,2-Dichloroethane	ug/kg	<12.5			1230	1180				5	20	
1,2-Dichloropropane	ug/kg	<12.9			1160	1120				3	20	
1,3-Dichlorobenzene	ug/kg	<14.8			1130	1140				1	20	

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: #1 BELOW
Pace Project No.: 40224522

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2203497 2203498

Parameter	Units	40224684001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
1,4-Dichlorobenzene	ug/kg	<14.8			1070	1170				9	20	
Benzene	ug/kg	<12.9			1100	1090				1	20	
Bromodichloromethane	ug/kg	<12.9			1070	1080				1	20	
Bromoform	ug/kg	<238			1040	1050				1	20	
Bromomethane	ug/kg	<75.9			701	672				4	20	
Carbon tetrachloride	ug/kg	<11.9			1000	1090				9	20	
Chlorobenzene	ug/kg	<6.5			1130	1130				0	20	
Chloroethane	ug/kg	<22.9			1140	1020				11	20	
Chloroform	ug/kg	<38.8			1160	1160				0	20	
Chloromethane	ug/kg	<20.6			1150	1180				3	20	
cis-1,2-Dichloroethene	ug/kg	<11.6			1060	1040				2	20	
cis-1,3-Dichloropropene	ug/kg	<35.7			1080	1080				0	20	
Dibromochloromethane	ug/kg	<185			978	994				2	20	
Dichlorodifluoromethane	ug/kg	<23.3			1040	1360				26	25	R1
Ethylbenzene	ug/kg	<12.9			1120	1110				1	20	
Isopropylbenzene (Cumene)	ug/kg	<14.6			1170	1190				2	20	
m&p-Xylene	ug/kg	<22.9			2210	2350				6	20	
Methyl-tert-butyl ether	ug/kg	<15.9			1090	1120				2	20	
Methylene Chloride	ug/kg	24.7J			1150	1140				1	20	
o-Xylene	ug/kg	<16.2			1170	1130				3	20	
Styrene	ug/kg	<13.9			1190	1220				2	20	
Tetrachloroethene	ug/kg	<21.0			896	911				2	20	
Toluene	ug/kg	<13.6			1090	1060				3	20	
trans-1,2-Dichloroethene	ug/kg	<11.7			1100	1110				0	20	
trans-1,3-Dichloropropene	ug/kg	<155			1180	1180				0	20	
Trichloroethene	ug/kg	<20.3			1020	1050				3	20	
Trichlorofluoromethane	ug/kg	<15.7			907	1040				14	21	
Vinyl chloride	ug/kg	<10.9			1010	1080				7	20	
1,2-Dichlorobenzene-d4 (S)	%						94	105	82-158			
4-Bromofluorobenzene (S)	%						104	114	66-153			
Toluene-d8 (S)	%						109	110	67-159			

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: #1 BELOW
Pace Project No.: 40224522

QC Batch: 381958
QC Batch Method: EPA 3541
Analysis Method: EPA 8082
Analysis Description: 8082 GCS PCB
Laboratory: Pace Analytical Services - Green Bay

Associated Lab Samples: 40224522001

METHOD BLANK: 2202967 Matrix: Solid
Associated Lab Samples: 40224522001

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
PCB-1016 (Aroclor 1016)	ug/kg	<15.2	50.0	04/12/21 11:03	
PCB-1221 (Aroclor 1221)	ug/kg	<15.2	50.0	04/12/21 11:03	
PCB-1232 (Aroclor 1232)	ug/kg	<15.2	50.0	04/12/21 11:03	
PCB-1242 (Aroclor 1242)	ug/kg	<15.2	50.0	04/12/21 11:03	
PCB-1248 (Aroclor 1248)	ug/kg	<15.2	50.0	04/12/21 11:03	
PCB-1254 (Aroclor 1254)	ug/kg	<15.2	50.0	04/12/21 11:03	
PCB-1260 (Aroclor 1260)	ug/kg	<15.2	50.0	04/12/21 11:03	
Decachlorobiphenyl (S)	%	79	47-114	04/12/21 11:03	
Tetrachloro-m-xylene (S)	%	87	67-102	04/12/21 11:03	

LABORATORY CONTROL SAMPLE: 2202968

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
PCB-1016 (Aroclor 1016)	ug/kg		<15.2			
PCB-1221 (Aroclor 1221)	ug/kg		<15.2			
PCB-1232 (Aroclor 1232)	ug/kg		<15.2			
PCB-1242 (Aroclor 1242)	ug/kg		<15.2			
PCB-1248 (Aroclor 1248)	ug/kg		<15.2			
PCB-1254 (Aroclor 1254)	ug/kg		<15.2			
PCB-1260 (Aroclor 1260)	ug/kg	500	411	82	69-115	
Decachlorobiphenyl (S)	%			78	47-114	
Tetrachloro-m-xylene (S)	%			89	67-102	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2202969 2202970

Parameter	Units	40224684001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
PCB-1016 (Aroclor 1016)	ug/kg	<15.8			<15.8	<15.8					20	
PCB-1221 (Aroclor 1221)	ug/kg	<15.8			<15.8	<15.8					20	
PCB-1232 (Aroclor 1232)	ug/kg	<15.8			<15.8	<15.8					20	
PCB-1242 (Aroclor 1242)	ug/kg	<15.8			<15.8	<15.8					20	
PCB-1248 (Aroclor 1248)	ug/kg	<15.8			<15.8	<15.8					20	
PCB-1254 (Aroclor 1254)	ug/kg	<15.8			<15.8	<15.8					20	
PCB-1260 (Aroclor 1260)	ug/kg	<15.8	520	519	401	398	77	77	45-120	1	20	
Decachlorobiphenyl (S)	%						74	75	47-114			
Tetrachloro-m-xylene (S)	%						87	87	67-102			

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: #1 BELOW
Pace Project No.: 40224522

QC Batch: 382393
QC Batch Method: EPA 3546
Analysis Method: EPA 8270E by SIM
Analysis Description: 8270E/3546 MSSV PAH by SIM
Laboratory: Pace Analytical Services - Green Bay

Associated Lab Samples: 40224522001

METHOD BLANK: 2205462 Matrix: Solid
Associated Lab Samples: 40224522001

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1-Methylnaphthalene	ug/kg	<2.4	16.7	04/14/21 11:58	
2-Methylnaphthalene	ug/kg	<2.4	16.7	04/14/21 11:58	
Acenaphthene	ug/kg	<2.2	16.7	04/14/21 11:58	
Acenaphthylene	ug/kg	<2.1	16.7	04/14/21 11:58	
Anthracene	ug/kg	<2.1	16.7	04/14/21 11:58	
Benzo(a)anthracene	ug/kg	<2.2	16.7	04/14/21 11:58	
Benzo(a)pyrene	ug/kg	<1.9	16.7	04/14/21 11:58	
Benzo(b)fluoranthene	ug/kg	<2.3	16.7	04/14/21 11:58	
Benzo(g,h,i)perylene	ug/kg	<2.9	16.7	04/14/21 11:58	
Benzo(k)fluoranthene	ug/kg	<2.1	16.7	04/14/21 11:58	
Chrysene	ug/kg	<3.1	16.7	04/14/21 11:58	
Dibenz(a,h)anthracene	ug/kg	<2.3	16.7	04/14/21 11:58	
Fluoranthene	ug/kg	<2.0	16.7	04/14/21 11:58	
Fluorene	ug/kg	<2.0	16.7	04/14/21 11:58	
Indeno(1,2,3-cd)pyrene	ug/kg	<3.5	16.7	04/14/21 11:58	
Naphthalene	ug/kg	<1.6	16.7	04/14/21 11:58	
Phenanthrene	ug/kg	<1.9	16.7	04/14/21 11:58	
Pyrene	ug/kg	<2.5	16.7	04/14/21 11:58	
2-Fluorobiphenyl (S)	%	65	36-86	04/14/21 11:58	
Terphenyl-d14 (S)	%	95	41-97	04/14/21 11:58	

LABORATORY CONTROL SAMPLE: 2205463

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1-Methylnaphthalene	ug/kg	333	259	78	53-100	
2-Methylnaphthalene	ug/kg	333	257	77	51-97	
Acenaphthene	ug/kg	333	236	71	62-120	
Acenaphthylene	ug/kg	333	241	72	61-120	
Anthracene	ug/kg	333	271	81	62-111	
Benzo(a)anthracene	ug/kg	333	259	78	61-120	
Benzo(a)pyrene	ug/kg	333	270	81	65-120	
Benzo(b)fluoranthene	ug/kg	333	260	78	64-108	
Benzo(g,h,i)perylene	ug/kg	333	257	77	71-120	
Benzo(k)fluoranthene	ug/kg	333	255	76	76-120	
Chrysene	ug/kg	333	242	73	74-120	L2
Dibenz(a,h)anthracene	ug/kg	333	257	77	71-120	
Fluoranthene	ug/kg	333	275	83	67-112	
Fluorene	ug/kg	333	269	81	65-120	
Indeno(1,2,3-cd)pyrene	ug/kg	333	270	81	74-120	

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: #1 BELOW
Pace Project No.: 40224522

LABORATORY CONTROL SAMPLE: 2205463

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Naphthalene	ug/kg	333	226	68	53-120	
Phenanthrene	ug/kg	333	262	79	67-120	
Pyrene	ug/kg	333	281	84	60-103	
2-Fluorobiphenyl (S)	%			71	36-86	
Terphenyl-d14 (S)	%			83	41-97	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2205464 2205465

Parameter	Units	40224771003 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
1-Methylnaphthalene	ug/kg	<2.6	352	352	229	207	65	58	41-100	10	29	
2-Methylnaphthalene	ug/kg	<2.6	352	352	230	200	65	56	42-97	14	21	
Acenaphthene	ug/kg	<2.3	352	352	210	190	60	54	43-120	10	27	
Acenaphthylene	ug/kg	<2.2	352	352	212	191	60	54	51-120	10	26	
Anthracene	ug/kg	<2.2	352	352	214	225	60	64	46-111	5	29	
Benzo(a)anthracene	ug/kg	6.9J	352	352	217	247	60	68	48-120	13	23	
Benzo(a)pyrene	ug/kg	8.3J	352	352	233	263	64	72	46-108	12	30	
Benzo(b)fluoranthene	ug/kg	11.8J	352	352	291	298	79	81	45-108	2	30	
Benzo(g,h,i)perylene	ug/kg	13.5J	352	352	213	454	57	125	39-120	72	37	M1,R1
Benzo(k)fluoranthene	ug/kg	4.8J	352	352	264	200	74	56	47-120	27	31	
Chrysene	ug/kg	10.5J	352	352	222	278	60	76	54-120	22	21	R1
Dibenz(a,h)anthracene	ug/kg	<2.4	352	352	204	222	57	63	46-120	8	34	
Fluoranthene	ug/kg	17.6J	352	352	249	296	66	79	53-112	17	27	
Fluorene	ug/kg	<2.1	352	352	213	188	61	53	48-120	13	29	
Indeno(1,2,3-cd)pyrene	ug/kg	6.9J	352	352	217	415	60	116	40-120	63	34	R1
Naphthalene	ug/kg	<1.7	352	352	211	195	60	55	47-120	8	25	
Phenanthrene	ug/kg	13.8J	352	352	234	237	62	63	49-120	1	28	
Pyrene	ug/kg	15.4J	352	352	214	236	56	63	43-103	10	31	
2-Fluorobiphenyl (S)	%						60	54	36-86			
Terphenyl-d14 (S)	%						54	45	41-97			

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: #1 BELOW
Pace Project No.: 40224522

QC Batch: 381678
QC Batch Method: ASTM D2974-87
Analysis Method: ASTM D2974-87
Analysis Description: Dry Weight/Percent Moisture
Laboratory: Pace Analytical Services - Green Bay

Associated Lab Samples: 40224522001

SAMPLE DUPLICATE: 2201298

Parameter	Units	40224501003 Result	Dup Result	RPD	Max RPD	Qualifiers
Percent Moisture	%	4.7	4.5	4	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.

REPORT OF LABORATORY ANALYSIS

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

QUALIFIERS

Project: #1 BELOW
Pace Project No.: 40224522

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

L2	Analyte recovery in the laboratory control sample (LCS) was below QC limits. Results may be biased low.
M0	Matrix spike recovery and/or matrix spike duplicate recovery was outside laboratory control limits.
M1	Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.
R1	RPD value was outside 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: #1 BELOW
Pace Project No.: 40224522

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
40224522001	**#1 BELOW**	EPA 3541	381958	EPA 8082	381959
40224522001	**#1 BELOW**	EPA 3050	381698	EPA 6010	381803
40224522001	**#1 BELOW**	EPA 7471	382313	EPA 7471	382422
40224522001	**#1 BELOW**	EPA 3546	382393	EPA 8270E by SIM	382442
40224522001	**#1 BELOW**	EPA 5035/5030B	382037	EPA 8260	382038
40224522001	**#1 BELOW**	ASTM D2974-87	381678		

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

L022452

Pace Analytical®
www.pacelabs.com

CHAIN OF CUSTODY

*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

(Please Print Clearly)	
Company Name:	Marinette Marine
Branch/Location:	
Project Contact:	MaKayla Jacobs
Phone:	715-245-1931
Project Number:	#1 below
Project Name:	
Project State:	WI
Sampled By (Print):	Warren & Makayla
Sampled By (Sign):	
PO #:	Regulatory Program:

Quote #:	
Mail To Contact:	
Mail To Company:	
Mail To Address:	
Invoice To Contact:	
Invoice To Company:	
Invoice To Address:	
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, W = Water
B = Biota, DW = Drinking Water
C = Charcoal, GW = Ground Water
O = Oil, SW = Surface Water
S = Soil, WW = Waste Water
SI = Sludge, WP = Wipe

PACE LAB #	CLIENT FIELD ID	COLLECTION DATE	COLLECTION TIME	MATRIX	FILTERED? (YES/NO) Y/N	PRESERVATION (CODE)* Pick Letter	Analyses Requested: PVOC/VOC	RCRA metals	PAHs	PCBs	PFAS	CLIENT COMMENTS	LAB COMMENTS (Lab Use Only)	Profile #
001	#1 below	4-1-21	9:45	S			X	X	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:	
Email #2:	
Telephone:	
Fax:	

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

Relinquished By:	Date/Time:	Received By:	Date/Time:
MaKayla Jacobs	4-5-21 1:30pm		
UPS	4-6-21 1000		4-6-21 1000
		Pace	

PACE Project No.: L022452

Receipt Temp = 11 °C

Sample Receipt pH OK / Adjusted

Cooler Custody Seal Present / Not Present
Intact / Not Intact

Version 6.0 06/14/06

C019a(27Jun2006)

ORIGINAL

Sample Preservation Receipt Form

Client Name: Marinette Marine Project # 46224522

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

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								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)
	AG1U	BG1U	AG1H	AG4S	AG4U	AG5U	AG2S	BG3U	BP1U	BP3U	BP3B	BP3N	BP3S	VG9A	DG9T	VG9U	VG9H	VG9M	VG9D	JGFU	JG9U	WGFU	WPFU	SP5T	ZPLC	GN							
001										1								1		1			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																																	2.5 / 5 / 10
009																																	2.5 / 5 / 10
010																																	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

4/14/21 SLC

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)

Client Name: Marinette Marine Project #:

WO#: 40224522

40224522

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

Tracking #: 1Z 578 899 01 6555 8376

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 (1) Melt water only 4-6-21 SW

Thermometer Used SR - 104 **Type of Ice:** Wet Blue Dry (None) ☒ Samples on ice, cooling process has begun

Cooler Temperature Uncorr: 11 /Corr: 11 MLY 4-6-21

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

Person examining contents: Date: 4-6-21 /Initials: SW

Labeled By Initials: MLR

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. +CC 4-6-21 SW
Chain of Custody Filled Out:	☐Yes ☑No ☐N/A	2. Pg #, Filter, Preserve, Mail+Inv. Info 4-6-21 SW
Chain of Custody Relinquished:	☑Yes ☐No ☐N/A	3. proj # MLY 4-6-21
Sampler Name & Signature on COC:	☑Yes ☐No ☐N/A	4. Signature MLY 4-6-21
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:	☐Yes ☑No ☐N/A	12. See Comments. 4-6-21 SW
-Includes date/time/ID/Analysis Matrix: S		BP3U: illegible label writing MLY 4-6-21
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: Client had 1 sandwich size bag of melt water. Client used water soluable ink - majority of labels relied on indentation S+R managers determined add verified placement. PM informed. 4/6/21 SW

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

Report of Analysis

Pace Analytical Services, LLC
1241 Bellevue Street
Suite 9
Green Bay, WI 54302
Attention: Brian Basten

Project Name: #1 Below

Project Number: 40224522

Lot Number:**WD08014**

Date Completed:04/21/2021

04/21/2021 5:22 PM
Approved and released by:
Project Manager II: **Karen L. Coonan**

Case Narrative
Pace Analytical Services, LLC
Lot Number: WD08014

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: WD08014
Project Name: #1 Below
Project Number: 40224522

Sample Number	Sample ID	Matrix	Date Sampled	Date Received
001	#1 BELOW	Solid	04/01/2021 0945	04/07/2021

(1 sample)

Detection Summary

Pace Analytical Services, LLC

Lot Number: WD08014

Project Name: #1 Below

Project Number: 40224522

Sample	Sample ID	Matrix	Parameter	Method	Result	Q	Units	Page
001	#1 BELOW	Solid	PFHxA	PFAS by ID	0.30	J	ug/kg	5
001	#1 BELOW	Solid	PFOA	PFAS by ID	0.64	J	ug/kg	6
001	#1 BELOW	Solid	PFPeA	PFAS by ID	0.31	J	ug/kg	6
001	#1 BELOW	Solid	PFOS	PFAS by ID	1.1	J	ug/kg	6

(4 detections)

PFAS by LC/MS/MS

Client: **Pace Analytical Services, LLC** Laboratory ID: **WD08014-001**

Description: **#1 BELOW** Matrix: **Solid**

Date Sampled: **04/01/2021 0945** Project Name: **#1 Below** % Solids: **76.3** **04/09/2021 0019**

Date Received: **04/07/2021** Project Number: **40224522**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	SOP SPE	PFAS by ID SOP	1	04/11/2021 0106	MMM	04/09/2021 1154	88507

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run
9-chlorohexadecafluoro-3-oxanone-1-sulfonic acid (9Cl-PF3ONS)	756426-58-1	PFAS by ID SOP	ND		2.4	0.60	ug/kg	1
11-chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3...)	763051-92-9	PFAS by ID SOP	ND		2.4	0.60	ug/kg	1
1H, 1H, 2H, 2H-perfluorodecane sulfonic acid (8:2 FTS)	39108-34-4	PFAS by ID SOP	ND		2.4	0.60	ug/kg	1
1H, 1H, 2H, 2H-perfluorooctane sulfonic acid (6:2 FTS)	27619-97-2	PFAS by ID SOP	ND		2.4	0.60	ug/kg	1
1H,1H,2H,2H-perfluorohexane sulfonic acid (4:2 FTS)	757124-72-4	PFAS by ID SOP	ND		2.4	0.60	ug/kg	1
Hexafluoropropylene oxide dimer acid (GenX)	13252-13-6	PFAS by ID SOP	ND		4.8	1.2	ug/kg	1
4,8-dioxa-3H-perfluorononanoic acid (ADONA)	919005-14-4	PFAS by ID SOP	ND		2.4	0.60	ug/kg	1
N-ethylperfluoro-1-octanesulfonamide (EtFOSA)	4151-50-2	PFAS by ID SOP	ND		2.4	0.60	ug/kg	1
N-ethylperfluoro-1-octanesulfonamidoacetic acid (EtFOSAA)	2991-50-6	PFAS by ID SOP	ND		2.4	0.60	ug/kg	1
2-N-ethylperfluoro-1-octanesulfonamido-ethanol (EtFOSE)	1691-99-2	PFAS by ID SOP	ND		2.4	0.60	ug/kg	1
N-methylperfluoro-1-octanesulfonamide (MeFOSA)	31506-32-8	PFAS by ID SOP	ND		2.4	0.60	ug/kg	1
N-methylperfluoro-1-octanesulfonamidoacetic acid (MeFOSAA)	2355-31-9	PFAS by ID SOP	ND		2.4	0.60	ug/kg	1
2-N-methylperfluoro-1-octanesulfonamido-ethanol (MeFOSE)	24448-09-7	PFAS by ID SOP	ND		2.4	0.60	ug/kg	1
Perfluoro-1-butanesulfonic acid (PFBS)	375-73-5	PFAS by ID SOP	ND		1.2	0.24	ug/kg	1
Perfluoro-1-decanesulfonic acid (PFDS)	335-77-3	PFAS by ID SOP	ND		1.2	0.24	ug/kg	1
Perfluoro-1-heptanesulfonic acid (PFHpS)	375-92-8	PFAS by ID SOP	ND		1.2	0.24	ug/kg	1
Perfluoro-1-nonanesulfonic acid (PFNS)	68259-12-1	PFAS by ID SOP	ND		1.2	0.24	ug/kg	1
Perfluoro-1-octanesulfonamide (PFOSA)	754-91-6	PFAS by ID SOP	ND		1.2	0.24	ug/kg	1
Perfluoro-1-pentanesulfonic acid (PFPeS)	2706-91-4	PFAS by ID SOP	ND		1.2	0.24	ug/kg	1
Perfluorododecanesulfonic acid (PFDOS)	79780-39-5	PFAS by ID SOP	ND		1.2	0.24	ug/kg	1
Perfluorohexanesulfonic acid (PFHxS)	355-46-4	PFAS by ID SOP	ND		1.2	0.24	ug/kg	1
Perfluoro-n-butanoic acid (PFBA)	375-22-4	PFAS by ID SOP	ND		1.2	0.24	ug/kg	1
Perfluoro-n-decanoic acid (PFDA)	335-76-2	PFAS by ID SOP	ND		1.2	0.24	ug/kg	1
Perfluoro-n-dodecanoic acid (PFDoA)	307-55-1	PFAS by ID SOP	ND		1.2	0.24	ug/kg	1
Perfluoro-n-heptanoic acid (PFHpA)	375-85-9	PFAS by ID SOP	ND		1.2	0.24	ug/kg	1
Perfluoro-n-hexanoic acid (PFHxA)	**307-24-4**	**PFAS by ID SOP**	**0.30**	**J**	**1.2**	**0.24**	**ug/kg**	**1**
Perfluoro-n-nonanoic acid (PFNA)	375-95-1	PFAS by ID SOP	ND		1.2	0.24	ug/kg	1
Perfluoro-n-octanoic acid (PFOA)	**335-67-1**	**PFAS by ID SOP**	**0.64**	**J**	**1.2**	**0.24**	**ug/kg**	**1**
Perfluoro-n-pentanoic acid (PFPeA)	**2706-90-3**	**PFAS by ID SOP**	**0.31**	**J**	**1.2**	**0.24**	**ug/kg**	**1**
Perfluoro-n-tetradecanoic acid (PFTeDA)	376-06-7	PFAS by ID SOP	ND		1.2	0.24	ug/kg	1
Perfluoro-n-tridecanoic acid (PFTrDA)	72629-94-8	PFAS by ID SOP	ND		1.2	0.24	ug/kg	1
Perfluoro-n-undecanoic acid (PFUdA)	2058-94-8	PFAS by ID SOP	ND		1.2	0.24	ug/kg	1
Perfluorooctanesulfonic acid (PFOS)	**1763-23-1**	**PFAS by ID SOP**	**1.1**	**J**	**1.2**	**0.24**	**ug/kg**	**1**

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
13C2_4:2FTS		85	25-150
13C2_6:2FTS		96	25-150
13C2_8:2FTS		99	25-150
13C2_PFDoA		89	25-150
13C2_PFTeDA		87	25-150
13C3_PFBS		77	25-150
13C3_PFHxS		89	25-150
13C3-HFPO-DA		82	25-150
13C4_PFBA		89	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: **WD08014-001**	
Description: **#1 BELOW**		Matrix: **Solid**	
Date Sampled: **04/01/2021 0945**	Project Name: **#1 Below**	% Solids: **76.3**	**04/09/2021 0019**
Date Received: **04/07/2021**	Project Number: **40224522**		

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
13C4_PFHpA		95	25-150
13C5_PFHxA		92	25-150
13C5_PFPeA		91	25-150
13C6_PFDA		98	25-150
13C7_PFUdA		98	25-150
13C8_PFOA		93	25-150
13C8_PFOS		96	25-150
13C8_PFOSA		91	10-150
13C9_PFNA		91	25-150
d-EtFOSA		116	10-150
d5-EtFOSAA		93	25-150
d9-EtFOSE		90	10-150
d-MeFOSA		89	10-150
d3-MeFOSAA		92	25-150
d7-MeFOSE		99	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

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

QC Summary

PFAS by LC/MS/MS - MB

Sample ID: WQ88507-001
Batch: 88507
Analytical Method: PFAS by ID SOP

Matrix: Solid
Prep Method: SOP SPE
Prep Date: 04/09/2021 1154

Parameter	Result	Q	Dil	LOQ	DL	Units	Analysis Date
9Cl-PF3ONS	ND		1	2.0	0.50	ug/kg	04/11/2021 0023
11Cl-PF3OUdS	ND		1	2.0	0.50	ug/kg	04/11/2021 0023
8:2 FTS	ND		1	2.0	0.50	ug/kg	04/11/2021 0023
6:2 FTS	ND		1	2.0	0.50	ug/kg	04/11/2021 0023
4:2 FTS	ND		1	2.0	0.50	ug/kg	04/11/2021 0023
GenX	ND		1	4.0	1.0	ug/kg	04/11/2021 0023
ADONA	ND		1	2.0	0.50	ug/kg	04/11/2021 0023
EtFOSA	ND		1	2.0	0.50	ug/kg	04/11/2021 0023
EtFOSAA	ND		1	2.0	0.50	ug/kg	04/11/2021 0023
EtFOSE	ND		1	2.0	0.50	ug/kg	04/11/2021 0023
MeFOSA	ND		1	2.0	0.50	ug/kg	04/11/2021 0023
MeFOSAA	ND		1	2.0	0.50	ug/kg	04/11/2021 0023
MeFOSE	ND		1	2.0	0.50	ug/kg	04/11/2021 0023
PFBS	ND		1	1.0	0.20	ug/kg	04/11/2021 0023
PFDS	ND		1	1.0	0.20	ug/kg	04/11/2021 0023
PFHpS	ND		1	1.0	0.20	ug/kg	04/11/2021 0023
PFNS	ND		1	1.0	0.20	ug/kg	04/11/2021 0023
PFOSA	ND		1	1.0	0.20	ug/kg	04/11/2021 0023
PFPeS	ND		1	1.0	0.20	ug/kg	04/11/2021 0023
PFDOS	ND		1	1.0	0.20	ug/kg	04/11/2021 0023
PFHxS	ND		1	1.0	0.20	ug/kg	04/11/2021 0023
PFBA	ND		1	1.0	0.20	ug/kg	04/11/2021 0023
PFDA	ND		1	1.0	0.20	ug/kg	04/11/2021 0023
PFDoA	ND		1	1.0	0.20	ug/kg	04/11/2021 0023
PFHpA	ND		1	1.0	0.20	ug/kg	04/11/2021 0023
PFHxA	ND		1	1.0	0.20	ug/kg	04/11/2021 0023
PFNA	ND		1	1.0	0.20	ug/kg	04/11/2021 0023
PFOA	ND		1	1.0	0.20	ug/kg	04/11/2021 0023
PFPeA	ND		1	1.0	0.20	ug/kg	04/11/2021 0023
PFTeDA	ND		1	1.0	0.20	ug/kg	04/11/2021 0023
PFTrDA	ND		1	1.0	0.20	ug/kg	04/11/2021 0023
PFUdA	ND		1	1.0	0.20	ug/kg	04/11/2021 0023
PFOS	ND		1	1.0	0.20	ug/kg	04/11/2021 0023

Surrogate	Q	% Rec	Acceptance Limit
13C2_4:2FTS		91	25-150
13C2_6:2FTS		96	25-150
13C2_8:2FTS		96	25-150
13C2_PFDoA		92	25-150
13C2_PFTeDA		88	25-150
13C3_PFBS		72	25-150
13C3_PFHxS		86	25-150
13C3-HFPO-DA		88	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: WQ88507-001
Batch: 88507
Analytical Method: PFAS by ID SOP

Matrix: Solid
Prep Method: SOP SPE
Prep Date: 04/09/2021 1154

Surrogate	Q	% Rec	Acceptance Limit
13C4_PFBA		89	25-150
13C4_PFHpA		101	25-150
13C5_PFHxA		89	25-150
13C5_PFPeA		96	25-150
13C6_PFDA		91	25-150
13C7_PFUdA		98	25-150
13C8_PFOA		94	25-150
13C8_PFOS		96	25-150
13C8_PFOSA		87	10-150
13C9_PFNA		90	25-150
d-EtFOSA		111	10-150
d5-EtFOSAA		90	25-150
d9-EtFOSE		101	10-150
d-MeFOSA		102	10-150
d3-MeFOSAA		90	25-150
d7-MeFOSE		106	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: WQ88507-002
Batch: 88507
Analytical Method: PFAS by ID SOP
Matrix: Solid
Prep Method: SOP SPE
Prep Date: 04/09/2021 1154

Parameter	Spike Amount (ug/kg)	Result (ug/kg)	Q	Dil	% Rec	%Rec Limit	Analysis Date
9Cl-PF3ONS	1.9	1.7		1	93	50-150	04/11/2021 0034
11Cl-PF3OUdS	1.9	1.7		1	88	50-150	04/11/2021 0034
8:2 FTS	1.9	2.3		1	122	50-150	04/11/2021 0034
6:2 FTS	1.9	1.9		1	101	50-150	04/11/2021 0034
4:2 FTS	1.9	2.0		1	108	50-150	04/11/2021 0034
GenX	4.0	4.0		1	100	50-150	04/11/2021 0034
ADONA	1.9	1.8		1	94	50-150	04/11/2021 0034
EtFOSA	2.0	1.7		1	86	50-150	04/11/2021 0034
EtFOSAA	2.0	2.0		1	101	50-150	04/11/2021 0034
EtFOSE	2.0	1.7		1	83	50-150	04/11/2021 0034
MeFOSA	2.0	2.0		1	102	50-150	04/11/2021 0034
MeFOSAA	2.0	1.8		1	91	50-150	04/11/2021 0034
MeFOSE	2.0	2.0		1	101	50-150	04/11/2021 0034
PFBS	1.8	2.0		1	111	50-150	04/11/2021 0034
PFDS	1.9	1.6		1	81	50-150	04/11/2021 0034
PFHpS	1.9	1.7		1	92	50-150	04/11/2021 0034
PFNS	1.9	1.9		1	98	50-150	04/11/2021 0034
PFOSA	2.0	1.9		1	93	50-150	04/11/2021 0034
PFPeS	1.9	2.3		1	121	50-150	04/11/2021 0034
PFDOS	1.9	2.1		1	106	50-150	04/11/2021 0034
PFHxS	1.8	1.8		1	98	50-150	04/11/2021 0034
PFBA	2.0	2.0		1	102	50-150	04/11/2021 0034
PFDA	2.0	1.8		1	91	50-150	04/11/2021 0034
PFDoA	2.0	1.8		1	92	50-150	04/11/2021 0034
PFHpA	2.0	1.8		1	90	50-150	04/11/2021 0034
PFHxA	2.0	1.9		1	94	50-150	04/11/2021 0034
PFNA	2.0	2.0		1	98	50-150	04/11/2021 0034
PFOA	2.0	2.0		1	101	50-150	04/11/2021 0034
PFPeA	2.0	1.8		1	91	50-150	04/11/2021 0034
PFTeDA	2.0	2.0		1	99	50-150	04/11/2021 0034
PFTrDA	2.0	2.0		1	102	50-150	04/11/2021 0034
PFUdA	2.0	2.0		1	99	50-150	04/11/2021 0034
PFOS	1.9	1.6		1	86	50-150	04/11/2021 0034

Surrogate	Q	% Rec	Acceptance Limit
13C2_4:2FTS		85	25-150
13C2_6:2FTS		86	25-150
13C2_8:2FTS		85	25-150
13C2_PFDoA		87	25-150
13C2_PFTeDA		82	25-150
13C3_PFBS		70	25-150
13C3_PFHxS		83	25-150
13C3-HFPO-DA		84	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 - LCS

Sample ID: WQ88507-002
Batch: 88507
Analytical Method: PFAS by ID SOP

Matrix: Solid
Prep Method: SOP SPE
Prep Date: 04/09/2021 1154

Surrogate	Q	% Rec	Acceptance Limit
13C4_PFBA		87	25-150
13C4_PFHpA		96	25-150
13C5_PFHxA		91	25-150
13C5_PFPeA		92	25-150
13C6_PFDA		89	25-150
13C7_PFUdA		94	25-150
13C8_PFOA		92	25-150
13C8_PFOS		89	25-150
13C8_PFOSA		87	10-150
13C9_PFNA		87	25-150
d-EtFOSA		101	10-150
d5-EtFOSAA		84	25-150
d9-EtFOSE		90	10-150
d-MeFOSA		92	10-150
d3-MeFOSAA		85	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: 4/6/2021 Results Requested By: 4/20/2021

Workorder: 40224522 Workorder Name: #1 BELOW

Report To	Subcontract To
Brian Basten 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

WD08014
KLC2

Item	Sample ID	Sample Type	Collect Date/Time	Lab ID	Matrix	Preserved Containers: Unpreserved						Requested Analysis: WI 33 PFAS												LAB USE ONLY
1	#1 BELOW	PS	4/1/2021 09:45	40224522001	Solid	1						X												
2																								
3																								
4																								
5																								

Transfers	Released By	Date/Time	Received By	Date/Time
1	[signature]	4/6/21 1600		
2				
3	UPS	4/7/21 1148	Gary Hardwick	4/7/21 1148

Comments

Cooler Temperature on Receipt 2.7 °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

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

Pace Analytical®
www.pacelabs.com

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

Page 1 of

CHAIN OF CUSTODY

*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

(Please Print Clearly)	
Company Name:	Marinette Marine
Branch/Location:	
Project Contact:	Makayla Jacobs
Phone:	715-245-1931
Project Number:	#1 below
Project Name:	
Project State:	WI
Sampled By (Print):	Warren & Makayla
Sampled By (Sign):	
PO #:	Regulatory Programs

Quote #:	4022522
Mail To Contact:	
Mail To Company:	
Mail To Address:	
Invoice To Contact:	
Invoice To Company:	
Invoice To Address:	
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	FILTERED? (YES/NO)	PRESERVATION (CODE)*	Analysis Requested: PVOC/VOC	RCRA metals	PAHs	PCBs	PFAS	CLIENT COMMENTS	LAB COMMENTS (Lab Use Only)	Profile #
001	#1 below	4-1-21	9:45	S			X	X	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:	
Email #2:	
Telephone:	
Fax:	

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

Relinquished By:	Date/Time:	Received By:	Date/Time:
Makayla Jacobs	4-5-21 1:30pm		
Relinquished By: UPS	Date/Time: 4-6-21 1000	Received By:	Date/Time: 4-6-21 1000
Relinquished By:	Date/Time:	Received By: Fax	Date/Time:
Relinquished By:	Date/Time:	Received By:	Date/Time:
Relinquished By:	Date/Time:	Received By:	Date/Time:

PACE Project No.: 4022522
Receipt Temp = 11 °C
Sample Receipt pH: OK / Adjusted
Cooler Custody Seal: Present / Not Present
Intact / Not Intact

Version 5.0 08/14/06

ORIGINAL

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

Sample Preservation Receipt Form

Client Name: Marinette Marine Project # 46224522

All containers needing preservation have been checked and noted below: oYes oNo ✓N/A Initial when completed: Date/ Time:

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

	Glass							Plastic					Vials						Jars				General							
Pace Lab #	AG1U	BG1U	AG1H	AG4S	AG4U	AG5U	AG2S	BG3U	BP1U	BP3U	BP3B	BP3N	BP3S	VG9A	DG9T	VG9U	VG9H	VG9M	VG9D	JGFU	JG9U	WGFU	WPFU	SP5T	ZPLC	GN	VOA Vials (>6mm) *	H2SO4 pH ≤2	NaOH+Zn Acet pH ≥9	NaOH pH ≥12	HNO3 pH ≤2	pH after adjusted	Volume (mL)
001										✓								✓		✓			✓										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																																	2.5 / 5 / 10
009																																	2.5 / 5 / 10
010																																	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) : oYes oNo ✓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
SP6T	120 mL plastic Na Thiosulfate
ZPLC	ziploc bag
GN	

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

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)

Client Name: Marinette Marine Project #:

WO# : 40224522

40224522

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

Tracking #: 1Z 578 899 01 6555 8376

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 ① Melt water only 4-6-21

Thermometer Used SR - 104 **Type of Ice:** Wet Blue Dry (None) ① ☐ Samples on ice, cooling process has begun SW

Cooler Temperature Uncorr: 11 /Corr: 11

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

Person examining contents: Date: 4-6-21 Initials: SW

Temp should be above freezing to 5°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. 4CC 4-6-21 SW
Chain of Custody Filled Out:	☐Yes ☒No ☐N/A	2. Pg#, Filter, Preserve, Mail+Inv. Info 4-6-21 SW
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:	☐Yes ☒No ☐N/A	12. See Comments. 4-6-21 SW
-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: Client had 1 sandwich size bag of melt water. Client used water soluble ink - majority of labels rubbed. SW+RG managed / determined and verified placement. PM informed.

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

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 / 04/08/2021 Lot #: WD08014

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: 21-443

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: H2SO4, HNO3, 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: XSC Date: 04/08/2021

Comments:

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

April 15, 2021

Makayla Jacobs
Fincantieri Marinette Marine
1600 Ely Street
Marinette, WI 54143

RE: Project: #2 ABOVE
Pace Project No.: 40224473

Dear Makayla Jacobs:

Enclosed are the analytical results for sample(s) received by the laboratory on April 03, 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,

Brian Basten
brian.basten@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 ABOVE
Pace Project No.: 40224473

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

REPORT OF LABORATORY ANALYSIS

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

SAMPLE SUMMARY

Project: #2 ABOVE
Pace Project No.: 40224473

Lab ID	Sample ID	Matrix	Date Collected	Date Received
40224473001	**#2 ABOVE**	Solid	04/01/21 09:30	04/03/21 10:35

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

SAMPLE ANALYTE COUNT

Project: #2 ABOVE
Pace Project No.: 40224473

Lab ID	Sample ID	Method	Analysts	Analytes Reported
40224473001	**#2 ABOVE**	EPA 8082	BLM	10
		EPA 6010	TXW	7
		EPA 7471	AJT	1
		EPA 8270E by SIM	JJB	20
		EPA 8260	MDS	64
		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

SUMMARY OF DETECTION

Project: #2 ABOVE
Pace Project No.: 40224473

Lab Sample ID / Method	Client Sample ID / Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
40224473001	**#2 ABOVE**					
EPA 8082	PCB-1242 (Aroclor 1242)	107	ug/kg	60.2	04/10/21 15:37	
EPA 8082	PCB-1254 (Aroclor 1254)	42.5J	ug/kg	60.2	04/10/21 15:37	
EPA 8082	PCB, Total	150	ug/kg	60.2	04/10/21 15:37	
EPA 6010	Arsenic	18.5	mg/kg	3.0	04/07/21 11:48	
EPA 6010	Barium	26.8	mg/kg	0.60	04/07/21 11:48	
EPA 6010	Cadmium	0.29J	mg/kg	0.60	04/07/21 11:48	
EPA 6010	Chromium	8.5	mg/kg	1.2	04/07/21 11:48	
EPA 6010	Lead	62.9	mg/kg	2.4	04/07/21 11:48	
EPA 7471	Mercury	0.13	mg/kg	0.038	04/14/21 11:59	
EPA 8270E by SIM	Acenaphthylene	197J	ug/kg	404	04/14/21 20:01	
EPA 8270E by SIM	Anthracene	295J	ug/kg	404	04/14/21 20:01	
EPA 8270E by SIM	Benzo(a)anthracene	1170	ug/kg	404	04/14/21 20:01	
EPA 8270E by SIM	Benzo(a)pyrene	973	ug/kg	404	04/14/21 20:01	
EPA 8270E by SIM	Benzo(b)fluoranthene	1100	ug/kg	404	04/14/21 20:01	
EPA 8270E by SIM	Benzo(g,h,i)perylene	537	ug/kg	404	04/14/21 20:01	
EPA 8270E by SIM	Benzo(k)fluoranthene	636	ug/kg	404	04/14/21 20:01	
EPA 8270E by SIM	Chrysene	1010	ug/kg	404	04/14/21 20:01	
EPA 8270E by SIM	Dibenz(a,h)anthracene	166J	ug/kg	404	04/14/21 20:01	
EPA 8270E by SIM	Fluoranthene	2440	ug/kg	404	04/14/21 20:01	
EPA 8270E by SIM	Indeno(1,2,3-cd)pyrene	498	ug/kg	404	04/14/21 20:01	
EPA 8270E by SIM	Naphthalene	99.6J	ug/kg	404	04/14/21 20:01	
EPA 8270E by SIM	Phenanthrene	355J	ug/kg	404	04/14/21 20:01	
EPA 8270E by SIM	Pyrene	2270	ug/kg	404	04/14/21 20:01	
EPA 8260	Methylene Chloride	52.1J	ug/kg	71.0	04/10/21 00:33	
ASTM D2974-87	Percent Moisture	17.3	%	0.10	04/05/21 14:08	

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: #2 ABOVE
Pace Project No.: 40224473

Sample: #2 ABOVE **Lab ID: 40224473001** Collected: 04/01/21 09:30 Received: 04/03/21 10:35 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
8082 GCS PCB	Analytical Method: EPA 8082 Preparation Method: EPA 3541 Pace Analytical Services - Green Bay								
PCB-1016 (Aroclor 1016)	**<18.3**	ug/kg	60.2	18.3	1	04/06/21 13:31	04/10/21 15:37	12674-11-2	
PCB-1221 (Aroclor 1221)	**<18.3**	ug/kg	60.2	18.3	1	04/06/21 13:31	04/10/21 15:37	11104-28-2	
PCB-1232 (Aroclor 1232)	**<18.3**	ug/kg	60.2	18.3	1	04/06/21 13:31	04/10/21 15:37	11141-16-5	
PCB-1242 (Aroclor 1242)	**107**	ug/kg	60.2	18.3	1	04/06/21 13:31	04/10/21 15:37	53469-21-9	
PCB-1248 (Aroclor 1248)	**<18.3**	ug/kg	60.2	18.3	1	04/06/21 13:31	04/10/21 15:37	12672-29-6	
PCB-1254 (Aroclor 1254)	**42.5J**	ug/kg	60.2	18.3	1	04/06/21 13:31	04/10/21 15:37	11097-69-1	
PCB-1260 (Aroclor 1260)	**<18.3**	ug/kg	60.2	18.3	1	04/06/21 13:31	04/10/21 15:37	11096-82-5	
PCB, Total	**150**	ug/kg	60.2	18.3	1	04/06/21 13:31	04/10/21 15:37	1336-36-3	
Surrogates									
Tetrachloro-m-xylene (S)	68	%	67-102		1	04/06/21 13:31	04/10/21 15:37	877-09-8	
Decachlorobiphenyl (S)	38	%	47-114		1	04/06/21 13:31	04/10/21 15:37	2051-24-3	S0
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3050 Pace Analytical Services - Green Bay								
Arsenic	**18.5**	mg/kg	3.0	1.8	1	04/06/21 07:42	04/07/21 11:48	7440-38-2	
Barium	**26.8**	mg/kg	0.60	0.18	1	04/06/21 07:42	04/07/21 11:48	7440-39-3	
Cadmium	**0.29J**	mg/kg	0.60	0.16	1	04/06/21 07:42	04/07/21 11:48	7440-43-9	
Chromium	**8.5**	mg/kg	1.2	0.34	1	04/06/21 07:42	04/07/21 11:48	7440-47-3	
Lead	**62.9**	mg/kg	2.4	0.72	1	04/06/21 07:42	04/07/21 11:48	7439-92-1	
Selenium	**<1.6**	mg/kg	4.8	1.6	1	04/06/21 07:42	04/07/21 11:48	7782-49-2	
Silver	**<0.37**	mg/kg	1.2	0.37	1	04/06/21 07:42	04/07/21 11:48	7440-22-4	
7471 Mercury	Analytical Method: EPA 7471 Preparation Method: EPA 7471 Pace Analytical Services - Green Bay								
Mercury	**0.13**	mg/kg	0.038	0.011	1	04/14/21 07:31	04/14/21 11:59	7439-97-6	
8270E MSSV PAH by SIM	Analytical Method: EPA 8270E by SIM Preparation Method: EPA 3546 Pace Analytical Services - Green Bay								
Acenaphthene	**<52.4**	ug/kg	404	52.4	20	04/13/21 09:46	04/14/21 20:01	83-32-9	
Acenaphthylene	**197J**	ug/kg	404	50.9	20	04/13/21 09:46	04/14/21 20:01	208-96-8	
Anthracene	**295J**	ug/kg	404	50.1	20	04/13/21 09:46	04/14/21 20:01	120-12-7	
Benzo(a)anthracene	**1170**	ug/kg	404	52.2	20	04/13/21 09:46	04/14/21 20:01	56-55-3	
Benzo(a)pyrene	**973**	ug/kg	404	45.9	20	04/13/21 09:46	04/14/21 20:01	50-32-8	
Benzo(b)fluoranthene	**1100**	ug/kg	404	56.0	20	04/13/21 09:46	04/14/21 20:01	205-99-2	
Benzo(g,h,i)perylene	**537**	ug/kg	404	70.8	20	04/13/21 09:46	04/14/21 20:01	191-24-2	
Benzo(k)fluoranthene	**636**	ug/kg	404	51.6	20	04/13/21 09:46	04/14/21 20:01	207-08-9	
Chrysene	**1010**	ug/kg	404	76.1	20	04/13/21 09:46	04/14/21 20:01	218-01-9	
Dibenz(a,h)anthracene	**166J**	ug/kg	404	55.9	20	04/13/21 09:46	04/14/21 20:01	53-70-3	
Fluoranthene	**2440**	ug/kg	404	47.8	20	04/13/21 09:46	04/14/21 20:01	206-44-0	
Fluorene	**<48.4**	ug/kg	404	48.4	20	04/13/21 09:46	04/14/21 20:01	86-73-7	
Indeno(1,2,3-cd)pyrene	**498**	ug/kg	404	84.1	20	04/13/21 09:46	04/14/21 20:01	193-39-5	
1-Methylnaphthalene	**<59.0**	ug/kg	404	59.0	20	04/13/21 09:46	04/14/21 20:01	90-12-0	
2-Methylnaphthalene	**<59.0**	ug/kg	404	59.0	20	04/13/21 09:46	04/14/21 20:01	91-57-6	
Naphthalene	**99.6J**	ug/kg	404	39.3	20	04/13/21 09:46	04/14/21 20:01	91-20-3	

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: #2 ABOVE
Pace Project No.: 40224473

Sample: #2 ABOVE **Lab ID: 40224473001** Collected: 04/01/21 09:30 Received: 04/03/21 10:35 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 PAH by SIM	Analytical Method: EPA 8270E by SIM Preparation Method: EPA 3546 Pace Analytical Services - Green Bay								
Phenanthrene	**355J**	ug/kg	404	46.2	20	04/13/21 09:46	04/14/21 20:01	85-01-8	
Pyrene	**2270**	ug/kg	404	59.3	20	04/13/21 09:46	04/14/21 20:01	129-00-0	
Surrogates									
2-Fluorobiphenyl (S)	0	%	36-86		20	04/13/21 09:46	04/14/21 20:01	321-60-8	S4
Terphenyl-d14 (S)	0	%	41-97		20	04/13/21 09:46	04/14/21 20:01	1718-51-0	S4
8260 MSV Med Level Normal List	Analytical Method: EPA 8260 Preparation Method: EPA 5035/5030B Pace Analytical Services - Green Bay								
1,1,1,2-Tetrachloroethane	**<17.0**	ug/kg	71.0	17.0	1	04/09/21 10:15	04/10/21 00:33	630-20-6	
1,1,1-Trichloroethane	**<18.2**	ug/kg	71.0	18.2	1	04/09/21 10:15	04/10/21 00:33	71-55-6	
1,1,2,2-Tetrachloroethane	**<25.7**	ug/kg	71.0	25.7	1	04/09/21 10:15	04/10/21 00:33	79-34-5	
1,1,2-Trichloroethane	**<25.8**	ug/kg	71.0	25.8	1	04/09/21 10:15	04/10/21 00:33	79-00-5	
1,1-Dichloroethane	**<18.2**	ug/kg	71.0	18.2	1	04/09/21 10:15	04/10/21 00:33	75-34-3	
1,1-Dichloroethene	**<23.6**	ug/kg	71.0	23.6	1	04/09/21 10:15	04/10/21 00:33	75-35-4	
1,1-Dichloropropene	**<23.0**	ug/kg	71.0	23.0	1	04/09/21 10:15	04/10/21 00:33	563-58-6	
1,2,3-Trichlorobenzene	**<79.1**	ug/kg	355	79.1	1	04/09/21 10:15	04/10/21 00:33	87-61-6	
1,2,3-Trichloropropane	**<34.5**	ug/kg	71.0	34.5	1	04/09/21 10:15	04/10/21 00:33	96-18-4	
1,2,4-Trichlorobenzene	**<58.5**	ug/kg	355	58.5	1	04/09/21 10:15	04/10/21 00:33	120-82-1	
1,2,4-Trimethylbenzene	**<21.2**	ug/kg	71.0	21.2	1	04/09/21 10:15	04/10/21 00:33	95-63-6	
1,2-Dibromo-3-chloropropane	**<55.1**	ug/kg	355	55.1	1	04/09/21 10:15	04/10/21 00:33	96-12-8	
1,2-Dibromoethane (EDB)	**<19.4**	ug/kg	71.0	19.4	1	04/09/21 10:15	04/10/21 00:33	106-93-4	
1,2-Dichlorobenzene	**<22.0**	ug/kg	71.0	22.0	1	04/09/21 10:15	04/10/21 00:33	95-50-1	
1,2-Dichloroethane	**<16.3**	ug/kg	71.0	16.3	1	04/09/21 10:15	04/10/21 00:33	107-06-2	
1,2-Dichloropropane	**<16.9**	ug/kg	71.0	16.9	1	04/09/21 10:15	04/10/21 00:33	78-87-5	
1,3,5-Trimethylbenzene	**<22.9**	ug/kg	71.0	22.9	1	04/09/21 10:15	04/10/21 00:33	108-67-8	
1,3-Dichlorobenzene	**<19.4**	ug/kg	71.0	19.4	1	04/09/21 10:15	04/10/21 00:33	541-73-1	
1,3-Dichloropropane	**<15.5**	ug/kg	71.0	15.5	1	04/09/21 10:15	04/10/21 00:33	142-28-9	
1,4-Dichlorobenzene	**<19.4**	ug/kg	71.0	19.4	1	04/09/21 10:15	04/10/21 00:33	106-46-7	
2,2-Dichloropropane	**<19.2**	ug/kg	71.0	19.2	1	04/09/21 10:15	04/10/21 00:33	594-20-7	
2-Chlorotoluene	**<23.0**	ug/kg	71.0	23.0	1	04/09/21 10:15	04/10/21 00:33	95-49-8	
4-Chlorotoluene	**<27.0**	ug/kg	71.0	27.0	1	04/09/21 10:15	04/10/21 00:33	106-43-4	
Benzene	**<16.9**	ug/kg	28.4	16.9	1	04/09/21 10:15	04/10/21 00:33	71-43-2	
Bromobenzene	**<27.7**	ug/kg	71.0	27.7	1	04/09/21 10:15	04/10/21 00:33	108-86-1	
Bromochloromethane	**<19.4**	ug/kg	71.0	19.4	1	04/09/21 10:15	04/10/21 00:33	74-97-5	
Bromodichloromethane	**<16.9**	ug/kg	71.0	16.9	1	04/09/21 10:15	04/10/21 00:33	75-27-4	
Bromoform	**<312**	ug/kg	355	312	1	04/09/21 10:15	04/10/21 00:33	75-25-2	
Bromomethane	**<99.5**	ug/kg	355	99.5	1	04/09/21 10:15	04/10/21 00:33	74-83-9	
Carbon tetrachloride	**<15.6**	ug/kg	71.0	15.6	1	04/09/21 10:15	04/10/21 00:33	56-23-5	
Chlorobenzene	**<8.5**	ug/kg	71.0	8.5	1	04/09/21 10:15	04/10/21 00:33	108-90-7	
Chloroethane	**<30.0**	ug/kg	355	30.0	1	04/09/21 10:15	04/10/21 00:33	75-00-3	
Chloroform	**<50.8**	ug/kg	355	50.8	1	04/09/21 10:15	04/10/21 00:33	67-66-3	
Chloromethane	**<27.0**	ug/kg	71.0	27.0	1	04/09/21 10:15	04/10/21 00:33	74-87-3	
Dibromochloromethane	**<243**	ug/kg	355	243	1	04/09/21 10:15	04/10/21 00:33	124-48-1	
Dibromomethane	**<21.0**	ug/kg	71.0	21.0	1	04/09/21 10:15	04/10/21 00:33	74-95-3	

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: #2 ABOVE
Pace Project No.: 40224473

Sample: #2 ABOVE **Lab ID: 40224473001** Collected: 04/01/21 09:30 Received: 04/03/21 10:35 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								
Dichlorodifluoromethane	**<30.5**	ug/kg	71.0	30.5	1	04/09/21 10:15	04/10/21 00:33	75-71-8	
Diisopropyl ether	**<17.6**	ug/kg	71.0	17.6	1	04/09/21 10:15	04/10/21 00:33	108-20-3	
Ethylbenzene	**<16.9**	ug/kg	71.0	16.9	1	04/09/21 10:15	04/10/21 00:33	100-41-4	
Hexachloro-1,3-butadiene	**<141**	ug/kg	355	141	1	04/09/21 10:15	04/10/21 00:33	87-68-3	
Isopropylbenzene (Cumene)	**<19.2**	ug/kg	71.0	19.2	1	04/09/21 10:15	04/10/21 00:33	98-82-8	
Methyl-tert-butyl ether	**<20.9**	ug/kg	71.0	20.9	1	04/09/21 10:15	04/10/21 00:33	1634-04-4	
Methylene Chloride	**52.1J**	ug/kg	71.0	19.7	1	04/09/21 10:15	04/10/21 00:33	75-09-2	
Naphthalene	**<22.1**	ug/kg	355	22.1	1	04/09/21 10:15	04/10/21 00:33	91-20-3	
Styrene	**<18.2**	ug/kg	71.0	18.2	1	04/09/21 10:15	04/10/21 00:33	100-42-5	
Tetrachloroethene	**<27.5**	ug/kg	71.0	27.5	1	04/09/21 10:15	04/10/21 00:33	127-18-4	
Toluene	**<17.9**	ug/kg	71.0	17.9	1	04/09/21 10:15	04/10/21 00:33	108-88-3	
Trichloroethene	**<26.5**	ug/kg	71.0	26.5	1	04/09/21 10:15	04/10/21 00:33	79-01-6	
Trichlorofluoromethane	**<20.6**	ug/kg	71.0	20.6	1	04/09/21 10:15	04/10/21 00:33	75-69-4	
Vinyl chloride	**<14.3**	ug/kg	71.0	14.3	1	04/09/21 10:15	04/10/21 00:33	75-01-4	
cis-1,2-Dichloroethene	**<15.2**	ug/kg	71.0	15.2	1	04/09/21 10:15	04/10/21 00:33	156-59-2	
cis-1,3-Dichloropropene	**<46.8**	ug/kg	355	46.8	1	04/09/21 10:15	04/10/21 00:33	10061-01-5	
m&p-Xylene	**<30.0**	ug/kg	142	30.0	1	04/09/21 10:15	04/10/21 00:33	179601-23-1	
n-Butylbenzene	**<32.5**	ug/kg	71.0	32.5	1	04/09/21 10:15	04/10/21 00:33	104-51-8	
n-Propylbenzene	**<17.0**	ug/kg	71.0	17.0	1	04/09/21 10:15	04/10/21 00:33	103-65-1	
o-Xylene	**<21.3**	ug/kg	71.0	21.3	1	04/09/21 10:15	04/10/21 00:33	95-47-6	
p-Isopropyltoluene	**<21.6**	ug/kg	71.0	21.6	1	04/09/21 10:15	04/10/21 00:33	99-87-6	
sec-Butylbenzene	**<17.3**	ug/kg	71.0	17.3	1	04/09/21 10:15	04/10/21 00:33	135-98-8	
tert-Butylbenzene	**<22.3**	ug/kg	71.0	22.3	1	04/09/21 10:15	04/10/21 00:33	98-06-6	
trans-1,2-Dichloroethene	**<15.3**	ug/kg	71.0	15.3	1	04/09/21 10:15	04/10/21 00:33	156-60-5	
trans-1,3-Dichloropropene	**<203**	ug/kg	355	203	1	04/09/21 10:15	04/10/21 00:33	10061-02-6	
Surrogates									
Toluene-d8 (S)	126	%	67-159		1	04/09/21 10:15	04/10/21 00:33	2037-26-5	
4-Bromofluorobenzene (S)	125	%	66-153		1	04/09/21 10:15	04/10/21 00:33	460-00-4	
1,2-Dichlorobenzene-d4 (S)	125	%	82-158		1	04/09/21 10:15	04/10/21 00:33	2199-69-1	
Percent Moisture	Analytical Method: ASTM D2974-87 Pace Analytical Services - Green Bay								
Percent Moisture	**17.3**	%	0.10	0.10	1		04/05/21 14:08		

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 ABOVE
Pace Project No.: 40224473

QC Batch: 382313
QC Batch Method: EPA 7471
Analysis Method: EPA 7471
Analysis Description: 7471 Mercury
Laboratory: Pace Analytical Services - Green Bay
Associated Lab Samples: 40224473001

METHOD BLANK: 2205177 Matrix: Solid
Associated Lab Samples: 40224473001

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Mercury	mg/kg	<0.010	0.035	04/14/21 11:22	

LABORATORY CONTROL SAMPLE: 2205178

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Mercury	mg/kg	0.83	0.82	98	85-115	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2205179 2205180

Parameter	Units	40224520001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Mercury	mg/kg	0.32	0.92	0.9	1.3	1.1	107	89	85-115	14	20	

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 ABOVE
Pace Project No.: 40224473

QC Batch: 381497
QC Batch Method: EPA 3050
Analysis Method: EPA 6010
Analysis Description: 6010 MET
Laboratory: Pace Analytical Services - Green Bay

Associated Lab Samples: 40224473001

METHOD BLANK: 2200434 Matrix: Solid
Associated Lab Samples: 40224473001

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Arsenic	mg/kg	<1.5	2.5	04/07/21 11:43	
Barium	mg/kg	<0.15	0.50	04/07/21 11:43	
Cadmium	mg/kg	<0.13	0.50	04/07/21 11:43	
Chromium	mg/kg	<0.28	1.0	04/07/21 11:43	
Lead	mg/kg	<0.60	2.0	04/07/21 11:43	
Selenium	mg/kg	<1.3	4.0	04/07/21 11:43	
Silver	mg/kg	<0.31	1.0	04/07/21 11:43	

LABORATORY CONTROL SAMPLE: 2200435

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Arsenic	mg/kg	50	50.8	102	80-120	
Barium	mg/kg	50	49.6	99	80-120	
Cadmium	mg/kg	50	50.0	100	80-120	
Chromium	mg/kg	50	51.9	104	80-120	
Lead	mg/kg	50	51.0	102	80-120	
Selenium	mg/kg	50	51.3	103	80-120	
Silver	mg/kg	25	23.7	95	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2200436 2200437

Parameter	Units	40224473001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Arsenic	mg/kg	18.5	60	60.2	77.7	77.6	99	98	75-125	0	20	
Barium	mg/kg	26.8	60	60.2	88.1	87.6	102	101	75-125	1	20	
Cadmium	mg/kg	0.29J	60	60.2	59.2	59.1	98	98	75-125	0	20	
Chromium	mg/kg	8.5	60	60.2	68.4	69.6	100	101	75-125	2	20	
Lead	mg/kg	62.9	60	60.2	119	116	94	89	75-125	3	20	
Selenium	mg/kg	<1.6	60	60.2	60.5	61.4	101	102	75-125	1	20	
Silver	mg/kg	<0.37	30	30.1	28.2	28.3	93	94	75-125	0	20	

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 ABOVE
Pace Project No.: 40224473

QC Batch: 382037
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: 40224473001

METHOD BLANK: 2203495 Matrix: Solid
Associated Lab Samples: 40224473001

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1,1,2-Tetrachloroethane	ug/kg	<12.0	50.0	04/09/21 16:29	
1,1,1-Trichloroethane	ug/kg	<12.8	50.0	04/09/21 16:29	
1,1,2,2-Tetrachloroethane	ug/kg	<18.1	50.0	04/09/21 16:29	
1,1,2-Trichloroethane	ug/kg	<18.2	50.0	04/09/21 16:29	
1,1-Dichloroethane	ug/kg	<12.8	50.0	04/09/21 16:29	
1,1-Dichloroethene	ug/kg	<16.6	50.0	04/09/21 16:29	
1,1-Dichloropropene	ug/kg	<16.2	50.0	04/09/21 16:29	
1,2,3-Trichlorobenzene	ug/kg	<55.7	250	04/09/21 16:29	
1,2,3-Trichloropropane	ug/kg	<24.3	50.0	04/09/21 16:29	
1,2,4-Trichlorobenzene	ug/kg	<41.2	250	04/09/21 16:29	
1,2,4-Trimethylbenzene	ug/kg	<14.9	50.0	04/09/21 16:29	
1,2-Dibromo-3-chloropropane	ug/kg	<38.8	250	04/09/21 16:29	
1,2-Dibromoethane (EDB)	ug/kg	<13.7	50.0	04/09/21 16:29	
1,2-Dichlorobenzene	ug/kg	<15.5	50.0	04/09/21 16:29	
1,2-Dichloroethane	ug/kg	<11.5	50.0	04/09/21 16:29	
1,2-Dichloropropane	ug/kg	<11.9	50.0	04/09/21 16:29	
1,3,5-Trimethylbenzene	ug/kg	<16.1	50.0	04/09/21 16:29	
1,3-Dichlorobenzene	ug/kg	<13.7	50.0	04/09/21 16:29	
1,3-Dichloropropane	ug/kg	<10.9	50.0	04/09/21 16:29	
1,4-Dichlorobenzene	ug/kg	<13.7	50.0	04/09/21 16:29	
2,2-Dichloropropane	ug/kg	<13.5	50.0	04/09/21 16:29	
2-Chlorotoluene	ug/kg	<16.2	50.0	04/09/21 16:29	
4-Chlorotoluene	ug/kg	<19.0	50.0	04/09/21 16:29	
Benzene	ug/kg	<11.9	20.0	04/09/21 16:29	
Bromobenzene	ug/kg	<19.5	50.0	04/09/21 16:29	
Bromochloromethane	ug/kg	<13.7	50.0	04/09/21 16:29	
Bromodichloromethane	ug/kg	<11.9	50.0	04/09/21 16:29	
Bromoform	ug/kg	<220	250	04/09/21 16:29	
Bromomethane	ug/kg	<70.1	250	04/09/21 16:29	
Carbon tetrachloride	ug/kg	<11.0	50.0	04/09/21 16:29	
Chlorobenzene	ug/kg	<6.0	50.0	04/09/21 16:29	
Chloroethane	ug/kg	<21.1	250	04/09/21 16:29	
Chloroform	ug/kg	<35.8	250	04/09/21 16:29	
Chloromethane	ug/kg	<19.0	50.0	04/09/21 16:29	
cis-1,2-Dichloroethene	ug/kg	<10.7	50.0	04/09/21 16:29	
cis-1,3-Dichloropropene	ug/kg	<33.0	250	04/09/21 16:29	
Dibromochloromethane	ug/kg	<171	250	04/09/21 16:29	
Dibromomethane	ug/kg	<14.8	50.0	04/09/21 16:29	
Dichlorodifluoromethane	ug/kg	<21.5	50.0	04/09/21 16:29	
Diisopropyl ether	ug/kg	<12.4	50.0	04/09/21 16:29	

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 ABOVE
Pace Project No.: 40224473

METHOD BLANK: 2203495 Matrix: Solid
Associated Lab Samples: 40224473001

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Ethylbenzene	ug/kg	<11.9	50.0	04/09/21 16:29	
Hexachloro-1,3-butadiene	ug/kg	<99.4	250	04/09/21 16:29	
Isopropylbenzene (Cumene)	ug/kg	<13.5	50.0	04/09/21 16:29	
m&p-Xylene	ug/kg	<21.1	100	04/09/21 16:29	
Methyl-tert-butyl ether	ug/kg	<14.7	50.0	04/09/21 16:29	
Methylene Chloride	ug/kg	<13.9	50.0	04/09/21 16:29	
n-Butylbenzene	ug/kg	<22.9	50.0	04/09/21 16:29	
n-Propylbenzene	ug/kg	<12.0	50.0	04/09/21 16:29	
Naphthalene	ug/kg	<15.6	250	04/09/21 16:29	
o-Xylene	ug/kg	<15.0	50.0	04/09/21 16:29	
p-Isopropyltoluene	ug/kg	<15.2	50.0	04/09/21 16:29	
sec-Butylbenzene	ug/kg	<12.2	50.0	04/09/21 16:29	
Styrene	ug/kg	<12.8	50.0	04/09/21 16:29	
tert-Butylbenzene	ug/kg	<15.7	50.0	04/09/21 16:29	
Tetrachloroethene	ug/kg	<19.4	50.0	04/09/21 16:29	
Toluene	ug/kg	<12.6	50.0	04/09/21 16:29	
trans-1,2-Dichloroethene	ug/kg	<10.8	50.0	04/09/21 16:29	
trans-1,3-Dichloropropene	ug/kg	<143	250	04/09/21 16:29	
Trichloroethene	ug/kg	<18.7	50.0	04/09/21 16:29	
Trichlorofluoromethane	ug/kg	<14.5	50.0	04/09/21 16:29	
Vinyl chloride	ug/kg	<10.1	50.0	04/09/21 16:29	
1,2-Dichlorobenzene-d4 (S)	%	89	82-158	04/09/21 16:29	
4-Bromofluorobenzene (S)	%	91	66-153	04/09/21 16:29	
Toluene-d8 (S)	%	95	67-159	04/09/21 16:29	

LABORATORY CONTROL SAMPLE: 2203496

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1-Trichloroethane	ug/kg	2500	2380	95	70-130	
1,1,2,2-Tetrachloroethane	ug/kg	2500	2400	96	65-129	
1,1,2-Trichloroethane	ug/kg	2500	2450	98	70-130	
1,1-Dichloroethane	ug/kg	2500	2480	99	70-130	
1,1-Dichloroethene	ug/kg	2500	1840	73	67-120	
1,2,4-Trichlorobenzene	ug/kg	2500	1800	72	64-130	
1,2-Dibromo-3-chloropropane	ug/kg	2500	2520	101	57-119	
1,2-Dibromoethane (EDB)	ug/kg	2500	2430	97	70-130	
1,2-Dichlorobenzene	ug/kg	2500	2310	92	70-130	
1,2-Dichloroethane	ug/kg	2500	2500	100	70-130	
1,2-Dichloropropane	ug/kg	2500	2410	96	72-118	
1,3-Dichlorobenzene	ug/kg	2500	2180	87	70-130	
1,4-Dichlorobenzene	ug/kg	2500	2170	87	70-130	
Benzene	ug/kg	2500	2280	91	70-130	
Bromodichloromethane	ug/kg	2500	2370	95	70-130	
Bromoform	ug/kg	2500	2270	91	66-130	

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 ABOVE
Pace Project No.: 40224473

LABORATORY CONTROL SAMPLE: 2203496

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Bromomethane	ug/kg	2500	1270	51	13-153	
Carbon tetrachloride	ug/kg	2500	2330	93	73-134	
Chlorobenzene	ug/kg	2500	2320	93	70-130	
Chloroethane	ug/kg	2500	1730	69	19-170	
Chloroform	ug/kg	2500	2430	97	79-120	
Chloromethane	ug/kg	2500	1860	75	45-117	
cis-1,2-Dichloroethene	ug/kg	2500	2200	88	70-130	
cis-1,3-Dichloropropene	ug/kg	2500	2310	92	68-130	
Dibromochloromethane	ug/kg	2500	2180	87	70-130	
Dichlorodifluoromethane	ug/kg	2500	1670	67	15-135	
Ethylbenzene	ug/kg	2500	2280	91	78-120	
Isopropylbenzene (Cumene)	ug/kg	2500	2410	96	70-130	
m&p-Xylene	ug/kg	5000	4490	90	70-130	
Methyl-tert-butyl ether	ug/kg	2500	2390	96	65-130	
Methylene Chloride	ug/kg	2500	2260	90	70-130	
o-Xylene	ug/kg	2500	2290	92	70-130	
Styrene	ug/kg	2500	2460	99	70-130	
Tetrachloroethene	ug/kg	2500	1900	76	70-130	
Toluene	ug/kg	2500	2220	89	76-120	
trans-1,2-Dichloroethene	ug/kg	2500	2310	92	70-130	
trans-1,3-Dichloropropene	ug/kg	2500	2460	98	70-130	
Trichloroethene	ug/kg	2500	2270	91	70-130	
Trichlorofluoromethane	ug/kg	2500	1970	79	49-153	
Vinyl chloride	ug/kg	2500	1890	76	58-121	
1,2-Dichlorobenzene-d4 (S)	%			98	82-158	
4-Bromofluorobenzene (S)	%			102	66-153	
Toluene-d8 (S)	%			101	67-159	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2203497 2203498

Parameter	Units	40224684001 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	<13.9			1040	1100				6	20	
1,1,2,2-Tetrachloroethane	ug/kg	<19.6			1060	1100				4	20	
1,1,2-Trichloroethane	ug/kg	<19.7			1190	1140				4	20	
1,1-Dichloroethane	ug/kg	<13.9			1200	1200				0	20	
1,1-Dichloroethene	ug/kg	<18.0			837	968				15	20	
1,2,4-Trichlorobenzene	ug/kg	<44.6			997	971				3	20	
1,2-Dibromo-3-chloropropane	ug/kg	<42.0			1170	1180				1	21	
1,2-Dibromoethane (EDB)	ug/kg	<14.8			1130	1130				0	20	
1,2-Dichlorobenzene	ug/kg	<16.8			1160	1180				2	20	
1,2-Dichloroethane	ug/kg	<12.5			1230	1180				5	20	
1,2-Dichloropropane	ug/kg	<12.9			1160	1120				3	20	
1,3-Dichlorobenzene	ug/kg	<14.8			1130	1140				1	20	

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 ABOVE
Pace Project No.: 40224473

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2203497 2203498

Parameter	Units	40224684001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
1,4-Dichlorobenzene	ug/kg	<14.8			1070	1170				9	20	
Benzene	ug/kg	<12.9			1100	1090				1	20	
Bromodichloromethane	ug/kg	<12.9			1070	1080				1	20	
Bromoform	ug/kg	<238			1040	1050				1	20	
Bromomethane	ug/kg	<75.9			701	672				4	20	
Carbon tetrachloride	ug/kg	<11.9			1000	1090				9	20	
Chlorobenzene	ug/kg	<6.5			1130	1130				0	20	
Chloroethane	ug/kg	<22.9			1140	1020				11	20	
Chloroform	ug/kg	<38.8			1160	1160				0	20	
Chloromethane	ug/kg	<20.6			1150	1180				3	20	
cis-1,2-Dichloroethene	ug/kg	<11.6			1060	1040				2	20	
cis-1,3-Dichloropropene	ug/kg	<35.7			1080	1080				0	20	
Dibromochloromethane	ug/kg	<185			978	994				2	20	
Dichlorodifluoromethane	ug/kg	<23.3			1040	1360				26	25	R1
Ethylbenzene	ug/kg	<12.9			1120	1110				1	20	
Isopropylbenzene (Cumene)	ug/kg	<14.6			1170	1190				2	20	
m&p-Xylene	ug/kg	<22.9			2210	2350				6	20	
Methyl-tert-butyl ether	ug/kg	<15.9			1090	1120				2	20	
Methylene Chloride	ug/kg	24.7J			1150	1140				1	20	
o-Xylene	ug/kg	<16.2			1170	1130				3	20	
Styrene	ug/kg	<13.9			1190	1220				2	20	
Tetrachloroethene	ug/kg	<21.0			896	911				2	20	
Toluene	ug/kg	<13.6			1090	1060				3	20	
trans-1,2-Dichloroethene	ug/kg	<11.7			1100	1110				0	20	
trans-1,3-Dichloropropene	ug/kg	<155			1180	1180				0	20	
Trichloroethene	ug/kg	<20.3			1020	1050				3	20	
Trichlorofluoromethane	ug/kg	<15.7			907	1040				14	21	
Vinyl chloride	ug/kg	<10.9			1010	1080				7	20	
1,2-Dichlorobenzene-d4 (S)	%						94	105	82-158			
4-Bromofluorobenzene (S)	%						104	114	66-153			
Toluene-d8 (S)	%						109	110	67-159			

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 ABOVE
Pace Project No.: 40224473

QC Batch: 381655
QC Batch Method: EPA 3541
Analysis Method: EPA 8082
Analysis Description: 8082 GCS PCB
Laboratory: Pace Analytical Services - Green Bay
Associated Lab Samples: 40224473001

METHOD BLANK: 2201076 Matrix: Solid
Associated Lab Samples: 40224473001

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
PCB-1016 (Aroclor 1016)	ug/kg	<15.2	50.0	04/07/21 09:45	
PCB-1221 (Aroclor 1221)	ug/kg	<15.2	50.0	04/07/21 09:45	
PCB-1232 (Aroclor 1232)	ug/kg	<15.2	50.0	04/07/21 09:45	
PCB-1242 (Aroclor 1242)	ug/kg	<15.2	50.0	04/07/21 09:45	
PCB-1248 (Aroclor 1248)	ug/kg	<15.2	50.0	04/07/21 09:45	
PCB-1254 (Aroclor 1254)	ug/kg	<15.2	50.0	04/07/21 09:45	
PCB-1260 (Aroclor 1260)	ug/kg	<15.2	50.0	04/07/21 09:45	
Decachlorobiphenyl (S)	%	79	47-114	04/07/21 09:45	
Tetrachloro-m-xylene (S)	%	82	67-102	04/07/21 09:45	

LABORATORY CONTROL SAMPLE: 2201077

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
PCB-1016 (Aroclor 1016)	ug/kg		<15.2			
PCB-1221 (Aroclor 1221)	ug/kg		<15.2			
PCB-1232 (Aroclor 1232)	ug/kg		<15.2			
PCB-1242 (Aroclor 1242)	ug/kg		<15.2			
PCB-1248 (Aroclor 1248)	ug/kg		<15.2			
PCB-1254 (Aroclor 1254)	ug/kg		<15.2			
PCB-1260 (Aroclor 1260)	ug/kg	500	405	81	69-115	
Decachlorobiphenyl (S)	%			80	47-114	
Tetrachloro-m-xylene (S)	%			85	67-102	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2201078 2201079

Parameter	Units	40224365039 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
PCB-1016 (Aroclor 1016)	ug/kg	<0.018 mg/kg			<17.7	<17.6					20	
PCB-1221 (Aroclor 1221)	ug/kg	<0.018 mg/kg			<17.7	<17.6					20	
PCB-1232 (Aroclor 1232)	ug/kg	<0.018 mg/kg			<17.7	<17.6					20	
PCB-1242 (Aroclor 1242)	ug/kg	<0.018 mg/kg			<17.7	<17.6					20	
PCB-1248 (Aroclor 1248)	ug/kg	<0.018 mg/kg			<17.7	<17.6					20	
PCB-1254 (Aroclor 1254)	ug/kg	<0.018 mg/kg			<17.7	<17.6					20	

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 ABOVE
Pace Project No.: 40224473

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2201078 2201079

Parameter	Units	40224365039 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
PCB-1260 (Aroclor 1260)	ug/kg	<0.018 mg/kg	581	577	443	439	76	76	45-120	1	20	
Decachlorobiphenyl (S)	%						75	75	47-114			
Tetrachloro-m-xylene (S)	%						80	78	67-102			

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 ABOVE
Pace Project No.: 40224473

QC Batch: 382236
QC Batch Method: EPA 3546
Analysis Method: EPA 8270E by SIM
Analysis Description: 8270E/3546 MSSV PAH by SIM
Laboratory: Pace Analytical Services - Green Bay

Associated Lab Samples: 40224473001

METHOD BLANK: 2204839 Matrix: Solid
Associated Lab Samples: 40224473001

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1-Methylnaphthalene	ug/kg	<2.4	16.7	04/13/21 12:33	
2-Methylnaphthalene	ug/kg	<2.4	16.7	04/13/21 12:33	
Acenaphthene	ug/kg	<2.2	16.7	04/13/21 12:33	
Acenaphthylene	ug/kg	<2.1	16.7	04/13/21 12:33	
Anthracene	ug/kg	<2.1	16.7	04/13/21 12:33	
Benzo(a)anthracene	ug/kg	<2.2	16.7	04/13/21 12:33	
Benzo(a)pyrene	ug/kg	<1.9	16.7	04/13/21 12:33	
Benzo(b)fluoranthene	ug/kg	<2.3	16.7	04/13/21 12:33	
Benzo(g,h,i)perylene	ug/kg	<2.9	16.7	04/13/21 12:33	
Benzo(k)fluoranthene	ug/kg	<2.1	16.7	04/13/21 12:33	
Chrysene	ug/kg	<3.2	16.7	04/13/21 12:33	
Dibenz(a,h)anthracene	ug/kg	<2.3	16.7	04/13/21 12:33	
Fluoranthene	ug/kg	<2.0	16.7	04/13/21 12:33	
Fluorene	ug/kg	<2.0	16.7	04/13/21 12:33	
Indeno(1,2,3-cd)pyrene	ug/kg	<3.5	16.7	04/13/21 12:33	
Naphthalene	ug/kg	<1.6	16.7	04/13/21 12:33	
Phenanthrene	ug/kg	<1.9	16.7	04/13/21 12:33	
Pyrene	ug/kg	<2.5	16.7	04/13/21 12:33	
2-Fluorobiphenyl (S)	%	72	36-86	04/13/21 12:33	
Terphenyl-d14 (S)	%	86	41-97	04/13/21 12:33	

LABORATORY CONTROL SAMPLE: 2204840

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1-Methylnaphthalene	ug/kg	334	251	75	53-100	
2-Methylnaphthalene	ug/kg	334	253	76	51-97	
Acenaphthene	ug/kg	334	259	78	62-120	
Acenaphthylene	ug/kg	334	264	79	61-120	
Anthracene	ug/kg	334	275	82	62-111	
Benzo(a)anthracene	ug/kg	334	281	84	61-120	
Benzo(a)pyrene	ug/kg	334	299	90	65-120	
Benzo(b)fluoranthene	ug/kg	334	278	83	64-108	
Benzo(g,h,i)perylene	ug/kg	334	260	78	71-120	
Benzo(k)fluoranthene	ug/kg	334	286	86	76-120	
Chrysene	ug/kg	334	261	78	74-120	
Dibenz(a,h)anthracene	ug/kg	334	283	85	71-120	
Fluoranthene	ug/kg	334	291	87	67-112	
Fluorene	ug/kg	334	265	79	65-120	
Indeno(1,2,3-cd)pyrene	ug/kg	334	299	90	74-120	

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 ABOVE
Pace Project No.: 40224473

LABORATORY CONTROL SAMPLE: 2204840

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Naphthalene	ug/kg	334	254	76	53-120	
Phenanthrene	ug/kg	334	278	83	67-120	
Pyrene	ug/kg	334	304	91	60-103	
2-Fluorobiphenyl (S)	%			75	36-86	
Terphenyl-d14 (S)	%			89	41-97	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2204841 2204842

Parameter	Units	40224481008 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
1-Methylnaphthalene	ug/kg	<0.029 mg/kg	390	391	270	241	69	62	41-100	11	29	
2-Methylnaphthalene	ug/kg	<0.029 mg/kg	390	391	274	237	70	61	42-97	14	21	
Acenaphthene	ug/kg	<0.025 mg/kg	390	391	262	246	67	63	43-120	6	27	
Acenaphthylene	ug/kg	<0.025 mg/kg	390	391	265	241	68	62	51-120	9	26	
Anthracene	ug/kg	<0.024 mg/kg	390	391	271	261	69	67	46-111	4	29	
Benzo(a)anthracene	ug/kg	0.033J mg/kg	390	391	304	307	70	70	48-120	1	23	
Benzo(a)pyrene	ug/kg	<0.022 mg/kg	390	391	287	290	70	70	46-108	1	30	
Benzo(b)fluoranthene	ug/kg	<0.027 mg/kg	390	391	287	296	69	71	45-108	3	30	
Benzo(g,h,i)perylene	ug/kg	<0.034 mg/kg	390	391	231	221	56	53	39-120	4	37	
Benzo(k)fluoranthene	ug/kg	<0.025 mg/kg	390	391	304	289	75	71	47-120	5	31	
Chrysene	ug/kg	<0.037 mg/kg	390	391	282	276	68	66	54-120	2	21	
Dibenz(a,h)anthracene	ug/kg	<0.027 mg/kg	390	391	230	218	59	56	46-120	5	34	
Fluoranthene	ug/kg	0.027J mg/kg	390	391	301	312	70	73	53-112	4	27	
Fluorene	ug/kg	<0.023 mg/kg	390	391	257	269	66	69	48-120	5	29	
Indeno(1,2,3-cd)pyrene	ug/kg	<0.041 mg/kg	390	391	241	233	60	58	40-120	3	34	
Naphthalene	ug/kg	<0.019 mg/kg	390	391	267	258	69	66	47-120	4	25	D3
Phenanthrene	ug/kg	<0.022 mg/kg	390	391	279	269	68	66	49-120	4	28	
Pyrene	ug/kg	0.031J mg/kg	390	391	289	275	66	62	43-103	5	31	
2-Fluorobiphenyl (S)	%						64	59	36-86			
Terphenyl-d14 (S)	%						61	54	41-97			

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 ABOVE
Pace Project No.: 40224473

QC Batch: 381548
QC Batch Method: ASTM D2974-87
Analysis Method: ASTM D2974-87
Analysis Description: Dry Weight/Percent Moisture
Laboratory: Pace Analytical Services - Green Bay

Associated Lab Samples: 40224473001

SAMPLE DUPLICATE: 2200632

Parameter	Units	40224456016 Result	Dup Result	RPD	Max RPD	Qualifiers
Percent Moisture	%	13.3	12.7	4	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.

REPORT OF LABORATORY ANALYSIS

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

QUALIFIERS

Project: #2 ABOVE
Pace Project No.: 40224473

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

D3	Sample was diluted due to the presence of high levels of non-target analytes or other matrix interference.
R1	RPD value was outside control limits.
S0	Surrogate recovery outside laboratory control limits.
S4	Surrogate recovery not evaluated against control limits due to sample dilution.

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

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: #2 ABOVE
Pace Project No.: 40224473

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
40224473001	**#2 ABOVE**	EPA 3541	381655	EPA 8082	381671
40224473001	**#2 ABOVE**	EPA 3050	381497	EPA 6010	381704
40224473001	**#2 ABOVE**	EPA 7471	382313	EPA 7471	382422
40224473001	**#2 ABOVE**	EPA 3546	382236	EPA 8270E by SIM	382305
40224473001	**#2 ABOVE**	EPA 5035/5030B	382037	EPA 8260	382038
40224473001	**#2 ABOVE**	ASTM D2974-87	381548		

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

Page 1 of

40224473

Pace Analytical®
www.pacelabs.com

CHAIN OF CUSTODY

*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

(Please Print Clearly)	
Company Name:	Marinette Marine
Branch/Location:	Marinette
Project Contact:	Makayla Jacobs
Phone:	715-245-1931
Project Number:	
Project Name:	#2 above
Project State:	WI
Sampled By (Print):	Warren / Makayla
Sampled By (Sign):	
PO #:	Regulatory Program:

Quote #:	
Mail To Contact:	
Mail To Company:	
Mail To Address:	
Invoice To Contact:	
Invoice To Company:	
Invoice To Address:	
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	W = Water
B = Biota	DW = Drinking Water
C = Charcoal	GW = Ground Water
O = Oil	SW = Surface Water
S = Soil	WW = Waste Water
SI = Sludge	WP = Wipe

PACE LAB #	CLIENT FIELD ID	COLLECTION DATE	COLLECTION TIME	MATRIX	FILTERED? (YES/NO) Y/N	PRESERVATION (CODE)* Pick Letter	Analyses Requested: PVOC / VOC	RCRA Metals	PAHs	PCBs	CLIENT COMMENTS	LAB COMMENTS (Lab Use Only)	Profile #
001	#2 above	4-1-21	9:30	S			X	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:	
Email #2:	
Telephone:	
Fax:	

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

Relinquished By:	Date/Time:	Received By:	Date/Time:
Makayla Jacobs	4-2-21 8:50		
UPS	4/3/21 1035		4/3/21 1035

PACE Project No.
40224473

Receipt Temp = 2.5 °C

Sample Receipt pH
OK / Adjusted

Cooler Custody Seal
Present / Not Present
Intact / Not Intact

Version 6.0 06/14/06

C019a(27Jun2006)

ORIGINAL

Client Name: Marinette Marine

Sample Preservation Receipt Form

Project # U0224473

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

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								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)
	AG1U	BG1U	AG1H	AG4S	AG4U	AG5U	AG2S	BG3U	BP1U	BP3U	BP3B	BP3N	BP3S	VG9A	DG9T	VG9U	VG9H	VG9M	VG9D	JGFU	JG9U	WGFU	WPFU	SP5T	ZPLC	GN							
001																																	
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																																	2.5 / 5 / 10
009																																	2.5 / 5 / 10
010																																	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)

Client Name: Marinette Marine

Project #:

WO# : 40224473

40224473

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

Tracking #: 12 578 899 44 6652 2545

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

Cooler Temperature Uncorr: 3 /Corr: 2.5

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

Person examining contents:
Date: 4/3/21 /Initials: [illegible]
Labeled By Initials: [illegible]

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. PV #, mail, Invoice, pg # 4/3/21
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:	☒ Yes ☐ No ☐ N/A	12.
-Includes date/time/ID/Analysis Matrix: S		Ink Smeared off, half ledgible.
Trip Blank Present:	☐ Yes ☒ No ☐ N/A	13. 4/3/21
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

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

April 22, 2021

Makayla Jacobs
Fincantieri Marinette Marine
1600 Ely Street
Marinette, WI 54143

RE: Project: #3 BELOW, #3 ABOVE
Pace Project No.: 40224531

Dear Makayla Jacobs:

Enclosed are the analytical results for sample(s) received by the laboratory on April 06, 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

Samples received at 11 degrees C. SVM 4/6/2021

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

Sincerely,

Brian Basten
brian.basten@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: #3 BELOW, #3 ABOVE
Pace Project No.: 40224531

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: #3 BELOW, #3 ABOVE
Pace Project No.: 40224531

Lab ID	Sample ID	Matrix	Date Collected	Date Received
40224531001	**#3 BELOW**	Solid	04/01/21 09:40	04/06/21 10:00
40224531002	**#3 ABOVE**	Solid	04/01/21 09:40	04/06/21 10:00

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

SAMPLE ANALYTE COUNT

Project: #3 BELOW, #3 ABOVE
Pace Project No.: 40224531

Lab ID	Sample ID	Method	Analysts	Analytes Reported
40224531001	**#3 BELOW**	EPA 8082	BLM	10
		EPA 6010	TXW	7
		EPA 7471	AJT	1
		EPA 8270E by SIM	JJB	20
		EPA 8260	MDS	64
		ASTM D2974-87	MMX	1
40224531002	**#3 ABOVE**	EPA 8082	BLM	10
		EPA 6010	TXW	7
		EPA 7471	AJT	1
		EPA 8270E by SIM	JJB	20
		EPA 8260	MDS	64
		ASTM D2974-87	MMX	1

PASI-G = Pace Analytical Services - Green Bay

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

SUMMARY OF DETECTION

Project: #3 BELOW, #3 ABOVE
Pace Project No.: 40224531

Lab Sample ID / Method	Client Sample ID / Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
40224531001	**#3 BELOW**					
EPA 6010	Arsenic	4.4	mg/kg	2.9	04/07/21 17:25	
EPA 6010	Barium	16.6	mg/kg	0.58	04/07/21 17:25	
EPA 6010	Chromium	8.6	mg/kg	1.2	04/07/21 17:25	
EPA 6010	Lead	15.3	mg/kg	2.3	04/07/21 17:25	
EPA 7471	Mercury	0.022J	mg/kg	0.041	04/14/21 13:04	
EPA 8270E by SIM	Benzo(a)anthracene	7.4J	ug/kg	20.7	04/14/21 15:24	
EPA 8270E by SIM	Benzo(a)pyrene	6.6J	ug/kg	20.7	04/14/21 15:24	
EPA 8270E by SIM	Benzo(b)fluoranthene	8.4J	ug/kg	20.7	04/14/21 15:24	
EPA 8270E by SIM	Benzo(g,h,i)perylene	5.9J	ug/kg	20.7	04/14/21 15:24	
EPA 8270E by SIM	Benzo(k)fluoranthene	3.9J	ug/kg	20.7	04/14/21 15:24	
EPA 8270E by SIM	Chrysene	6.4J	ug/kg	20.7	04/14/21 15:24	L2
EPA 8270E by SIM	Fluoranthene	10.6J	ug/kg	20.7	04/14/21 15:24	
EPA 8270E by SIM	Indeno(1,2,3-cd)pyrene	4.5J	ug/kg	20.7	04/14/21 15:24	
EPA 8270E by SIM	Naphthalene	2.3J	ug/kg	20.7	04/14/21 15:24	
EPA 8270E by SIM	Phenanthrene	5.3J	ug/kg	20.7	04/14/21 15:24	
EPA 8270E by SIM	Pyrene	10.4J	ug/kg	20.7	04/14/21 15:24	
EPA 8260	Methylene Chloride	70.5J	ug/kg	73.8	04/09/21 23:32	
ASTM D2974-87	Percent Moisture	19.2	%	0.10	04/06/21 16:36	
40224531002	**#3 ABOVE**					
EPA 6010	Barium	22.8	mg/kg	0.56	04/07/21 17:27	
EPA 6010	Cadmium	0.15J	mg/kg	0.56	04/07/21 17:27	
EPA 6010	Chromium	7.2	mg/kg	1.1	04/07/21 17:27	
EPA 6010	Lead	50.5	mg/kg	2.2	04/07/21 17:27	
EPA 7471	Mercury	0.043	mg/kg	0.039	04/14/21 13:06	
EPA 8270E by SIM	Acenaphthene	9.3J	ug/kg	37.9	04/14/21 23:12	
EPA 8270E by SIM	Acenaphthylene	73.8	ug/kg	37.9	04/14/21 23:12	
EPA 8270E by SIM	Anthracene	65.2	ug/kg	37.9	04/14/21 23:12	
EPA 8270E by SIM	Benzo(a)anthracene	230	ug/kg	37.9	04/14/21 23:12	
EPA 8270E by SIM	Benzo(a)pyrene	282	ug/kg	37.9	04/14/21 23:12	
EPA 8270E by SIM	Benzo(b)fluoranthene	394	ug/kg	37.9	04/14/21 23:12	
EPA 8270E by SIM	Benzo(g,h,i)perylene	134	ug/kg	37.9	04/14/21 23:12	
EPA 8270E by SIM	Benzo(k)fluoranthene	168	ug/kg	37.9	04/14/21 23:12	
EPA 8270E by SIM	Chrysene	285	ug/kg	37.9	04/14/21 23:12	L2
EPA 8270E by SIM	Dibenz(a,h)anthracene	42.6	ug/kg	37.9	04/14/21 23:12	
EPA 8270E by SIM	Fluoranthene	425	ug/kg	37.9	04/14/21 23:12	
EPA 8270E by SIM	Fluorene	22.5J	ug/kg	37.9	04/14/21 23:12	
EPA 8270E by SIM	Indeno(1,2,3-cd)pyrene	123	ug/kg	37.9	04/14/21 23:12	
EPA 8270E by SIM	1-Methylnaphthalene	21.2J	ug/kg	37.9	04/14/21 23:12	
EPA 8270E by SIM	2-Methylnaphthalene	36.3J	ug/kg	37.9	04/14/21 23:12	
EPA 8270E by SIM	Naphthalene	52.9	ug/kg	37.9	04/14/21 23:12	
EPA 8270E by SIM	Phenanthrene	162	ug/kg	37.9	04/14/21 23:12	
EPA 8270E by SIM	Pyrene	331	ug/kg	37.9	04/14/21 23:12	
EPA 8260	Diisopropyl ether	17.2J	ug/kg	63.5	04/09/21 23:52	
EPA 8260	Methylene Chloride	48.7J	ug/kg	63.5	04/09/21 23:52	
ASTM D2974-87	Percent Moisture	11.9	%	0.10	04/06/21 16:36	

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: #3 BELOW, #3 ABOVE
Pace Project No.: 40224531

Sample: #3 BELOW **Lab ID: 40224531001** Collected: 04/01/21 09:40 Received: 04/06/21 10:00 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
8082 GCS PCB	Analytical Method: EPA 8082 Preparation Method: EPA 3541 Pace Analytical Services - Green Bay								
PCB-1016 (Aroclor 1016)	**<18.9**	ug/kg	61.9	18.9	1	04/08/21 17:54	04/12/21 15:49	12674-11-2	
PCB-1221 (Aroclor 1221)	**<18.9**	ug/kg	61.9	18.9	1	04/08/21 17:54	04/12/21 15:49	11104-28-2	
PCB-1232 (Aroclor 1232)	**<18.9**	ug/kg	61.9	18.9	1	04/08/21 17:54	04/12/21 15:49	11141-16-5	
PCB-1242 (Aroclor 1242)	**<18.9**	ug/kg	61.9	18.9	1	04/08/21 17:54	04/12/21 15:49	53469-21-9	
PCB-1248 (Aroclor 1248)	**<18.9**	ug/kg	61.9	18.9	1	04/08/21 17:54	04/12/21 15:49	12672-29-6	
PCB-1254 (Aroclor 1254)	**<18.9**	ug/kg	61.9	18.9	1	04/08/21 17:54	04/12/21 15:49	11097-69-1	
PCB-1260 (Aroclor 1260)	**<18.9**	ug/kg	61.9	18.9	1	04/08/21 17:54	04/12/21 15:49	11096-82-5	
PCB, Total	**<18.9**	ug/kg	61.9	18.9	1	04/08/21 17:54	04/12/21 15:49	1336-36-3	
Surrogates									
Tetrachloro-m-xylene (S)	86	%	67-102		1	04/08/21 17:54	04/12/21 15:49	877-09-8	
Decachlorobiphenyl (S)	68	%	47-114		1	04/08/21 17:54	04/12/21 15:49	2051-24-3	
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3050 Pace Analytical Services - Green Bay								
Arsenic	**4.4**	mg/kg	2.9	1.7	1	04/07/21 07:02	04/07/21 17:25	7440-38-2	
Barium	**16.6**	mg/kg	0.58	0.17	1	04/07/21 07:02	04/07/21 17:25	7440-39-3	
Cadmium	**<0.16**	mg/kg	0.58	0.16	1	04/07/21 07:02	04/07/21 17:25	7440-43-9	
Chromium	**8.6**	mg/kg	1.2	0.32	1	04/07/21 07:02	04/07/21 17:25	7440-47-3	
Lead	**15.3**	mg/kg	2.3	0.70	1	04/07/21 07:02	04/07/21 17:25	7439-92-1	
Selenium	**<1.5**	mg/kg	4.7	1.5	1	04/07/21 07:02	04/07/21 17:25	7782-49-2	
Silver	**<0.36**	mg/kg	1.2	0.36	1	04/07/21 07:02	04/07/21 17:25	7440-22-4	
7471 Mercury	Analytical Method: EPA 7471 Preparation Method: EPA 7471 Pace Analytical Services - Green Bay								
Mercury	**0.022J**	mg/kg	0.041	0.012	1	04/14/21 07:48	04/14/21 13:04	7439-97-6	
8270E MSSV PAH by SIM	Analytical Method: EPA 8270E by SIM Preparation Method: EPA 3546 Pace Analytical Services - Green Bay								
Acenaphthene	**<2.7**	ug/kg	20.7	2.7	1	04/14/21 08:29	04/14/21 15:24	83-32-9	
Acenaphthylene	**<2.6**	ug/kg	20.7	2.6	1	04/14/21 08:29	04/14/21 15:24	208-96-8	
Anthracene	**<2.6**	ug/kg	20.7	2.6	1	04/14/21 08:29	04/14/21 15:24	120-12-7	
Benzo(a)anthracene	**7.4J**	ug/kg	20.7	2.7	1	04/14/21 08:29	04/14/21 15:24	56-55-3	
Benzo(a)pyrene	**6.6J**	ug/kg	20.7	2.4	1	04/14/21 08:29	04/14/21 15:24	50-32-8	
Benzo(b)fluoranthene	**8.4J**	ug/kg	20.7	2.9	1	04/14/21 08:29	04/14/21 15:24	205-99-2	
Benzo(g,h,i)perylene	**5.9J**	ug/kg	20.7	3.6	1	04/14/21 08:29	04/14/21 15:24	191-24-2	
Benzo(k)fluoranthene	**3.9J**	ug/kg	20.7	2.6	1	04/14/21 08:29	04/14/21 15:24	207-08-9	
Chrysene	**6.4J**	ug/kg	20.7	3.9	1	04/14/21 08:29	04/14/21 15:24	218-01-9	L2
Dibenz(a,h)anthracene	**<2.9**	ug/kg	20.7	2.9	1	04/14/21 08:29	04/14/21 15:24	53-70-3	
Fluoranthene	**10.6J**	ug/kg	20.7	2.4	1	04/14/21 08:29	04/14/21 15:24	206-44-0	
Fluorene	**<2.5**	ug/kg	20.7	2.5	1	04/14/21 08:29	04/14/21 15:24	86-73-7	
Indeno(1,2,3-cd)pyrene	**4.5J**	ug/kg	20.7	4.3	1	04/14/21 08:29	04/14/21 15:24	193-39-5	
1-Methylnaphthalene	**<3.0**	ug/kg	20.7	3.0	1	04/14/21 08:29	04/14/21 15:24	90-12-0	
2-Methylnaphthalene	**<3.0**	ug/kg	20.7	3.0	1	04/14/21 08:29	04/14/21 15:24	91-57-6	
Naphthalene	**2.3J**	ug/kg	20.7	2.0	1	04/14/21 08:29	04/14/21 15:24	91-20-3	

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: #3 BELOW, #3 ABOVE
Pace Project No.: 40224531

Sample: #3 BELOW **Lab ID: 40224531001** Collected: 04/01/21 09:40 Received: 04/06/21 10:00 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 PAH by SIM	Analytical Method: EPA 8270E by SIM Preparation Method: EPA 3546 Pace Analytical Services - Green Bay								
Phenanthrene	**5.3J**	ug/kg	20.7	2.4	1	04/14/21 08:29	04/14/21 15:24	85-01-8	
Pyrene	**10.4J**	ug/kg	20.7	3.0	1	04/14/21 08:29	04/14/21 15:24	129-00-0	
Surrogates									
2-Fluorobiphenyl (S)	63	%	36-86		1	04/14/21 08:29	04/14/21 15:24	321-60-8	
Terphenyl-d14 (S)	77	%	41-97		1	04/14/21 08:29	04/14/21 15:24	1718-51-0	
8260 MSV Med Level Normal List	Analytical Method: EPA 8260 Preparation Method: EPA 5035/5030B Pace Analytical Services - Green Bay								
1,1,1,2-Tetrachloroethane	**<17.7**	ug/kg	73.8	17.7	1	04/09/21 10:15	04/09/21 23:32	630-20-6	
1,1,1-Trichloroethane	**<18.9**	ug/kg	73.8	18.9	1	04/09/21 10:15	04/09/21 23:32	71-55-6	
1,1,2,2-Tetrachloroethane	**<26.7**	ug/kg	73.8	26.7	1	04/09/21 10:15	04/09/21 23:32	79-34-5	
1,1,2-Trichloroethane	**<26.9**	ug/kg	73.8	26.9	1	04/09/21 10:15	04/09/21 23:32	79-00-5	
1,1-Dichloroethane	**<18.9**	ug/kg	73.8	18.9	1	04/09/21 10:15	04/09/21 23:32	75-34-3	
1,1-Dichloroethene	**<24.5**	ug/kg	73.8	24.5	1	04/09/21 10:15	04/09/21 23:32	75-35-4	
1,1-Dichloropropene	**<23.9**	ug/kg	73.8	23.9	1	04/09/21 10:15	04/09/21 23:32	563-58-6	
1,2,3-Trichlorobenzene	**<82.2**	ug/kg	369	82.2	1	04/09/21 10:15	04/09/21 23:32	87-61-6	
1,2,3-Trichloropropane	**<35.9**	ug/kg	73.8	35.9	1	04/09/21 10:15	04/09/21 23:32	96-18-4	
1,2,4-Trichlorobenzene	**<60.8**	ug/kg	369	60.8	1	04/09/21 10:15	04/09/21 23:32	120-82-1	
1,2,4-Trimethylbenzene	**<22.0**	ug/kg	73.8	22.0	1	04/09/21 10:15	04/09/21 23:32	95-63-6	
1,2-Dibromo-3-chloropropane	**<57.3**	ug/kg	369	57.3	1	04/09/21 10:15	04/09/21 23:32	96-12-8	
1,2-Dibromoethane (EDB)	**<20.2**	ug/kg	73.8	20.2	1	04/09/21 10:15	04/09/21 23:32	106-93-4	
1,2-Dichlorobenzene	**<22.9**	ug/kg	73.8	22.9	1	04/09/21 10:15	04/09/21 23:32	95-50-1	
1,2-Dichloroethane	**<17.0**	ug/kg	73.8	17.0	1	04/09/21 10:15	04/09/21 23:32	107-06-2	
1,2-Dichloropropane	**<17.6**	ug/kg	73.8	17.6	1	04/09/21 10:15	04/09/21 23:32	78-87-5	
1,3,5-Trimethylbenzene	**<23.8**	ug/kg	73.8	23.8	1	04/09/21 10:15	04/09/21 23:32	108-67-8	
1,3-Dichlorobenzene	**<20.2**	ug/kg	73.8	20.2	1	04/09/21 10:15	04/09/21 23:32	541-73-1	
1,3-Dichloropropane	**<16.1**	ug/kg	73.8	16.1	1	04/09/21 10:15	04/09/21 23:32	142-28-9	
1,4-Dichlorobenzene	**<20.2**	ug/kg	73.8	20.2	1	04/09/21 10:15	04/09/21 23:32	106-46-7	
2,2-Dichloropropane	**<19.9**	ug/kg	73.8	19.9	1	04/09/21 10:15	04/09/21 23:32	594-20-7	
2-Chlorotoluene	**<23.9**	ug/kg	73.8	23.9	1	04/09/21 10:15	04/09/21 23:32	95-49-8	
4-Chlorotoluene	**<28.0**	ug/kg	73.8	28.0	1	04/09/21 10:15	04/09/21 23:32	106-43-4	
Benzene	**<17.6**	ug/kg	29.5	17.6	1	04/09/21 10:15	04/09/21 23:32	71-43-2	
Bromobenzene	**<28.8**	ug/kg	73.8	28.8	1	04/09/21 10:15	04/09/21 23:32	108-86-1	
Bromochloromethane	**<20.2**	ug/kg	73.8	20.2	1	04/09/21 10:15	04/09/21 23:32	74-97-5	
Bromodichloromethane	**<17.6**	ug/kg	73.8	17.6	1	04/09/21 10:15	04/09/21 23:32	75-27-4	
Bromoform	**<325**	ug/kg	369	325	1	04/09/21 10:15	04/09/21 23:32	75-25-2	
Bromomethane	**<103**	ug/kg	369	103	1	04/09/21 10:15	04/09/21 23:32	74-83-9	
Carbon tetrachloride	**<16.2**	ug/kg	73.8	16.2	1	04/09/21 10:15	04/09/21 23:32	56-23-5	
Chlorobenzene	**<8.8**	ug/kg	73.8	8.8	1	04/09/21 10:15	04/09/21 23:32	108-90-7	
Chloroethane	**<31.1**	ug/kg	369	31.1	1	04/09/21 10:15	04/09/21 23:32	75-00-3	
Chloroform	**<52.8**	ug/kg	369	52.8	1	04/09/21 10:15	04/09/21 23:32	67-66-3	
Chloromethane	**<28.0**	ug/kg	73.8	28.0	1	04/09/21 10:15	04/09/21 23:32	74-87-3	
Dibromochloromethane	**<252**	ug/kg	369	252	1	04/09/21 10:15	04/09/21 23:32	124-48-1	
Dibromomethane	**<21.8**	ug/kg	73.8	21.8	1	04/09/21 10:15	04/09/21 23:32	74-95-3	

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: #3 BELOW, #3 ABOVE
Pace Project No.: 40224531

Sample: #3 BELOW **Lab ID: 40224531001** Collected: 04/01/21 09:40 Received: 04/06/21 10:00 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								
Dichlorodifluoromethane	**<31.7**	ug/kg	73.8	31.7	1	04/09/21 10:15	04/09/21 23:32	75-71-8	
Diisopropyl ether	**<18.3**	ug/kg	73.8	18.3	1	04/09/21 10:15	04/09/21 23:32	108-20-3	
Ethylbenzene	**<17.6**	ug/kg	73.8	17.6	1	04/09/21 10:15	04/09/21 23:32	100-41-4	
Hexachloro-1,3-butadiene	**<147**	ug/kg	369	147	1	04/09/21 10:15	04/09/21 23:32	87-68-3	
Isopropylbenzene (Cumene)	**<19.9**	ug/kg	73.8	19.9	1	04/09/21 10:15	04/09/21 23:32	98-82-8	
Methyl-tert-butyl ether	**<21.7**	ug/kg	73.8	21.7	1	04/09/21 10:15	04/09/21 23:32	1634-04-4	
Methylene Chloride	**70.5J**	ug/kg	73.8	20.5	1	04/09/21 10:15	04/09/21 23:32	75-09-2	
Naphthalene	**<23.0**	ug/kg	369	23.0	1	04/09/21 10:15	04/09/21 23:32	91-20-3	
Styrene	**<18.9**	ug/kg	73.8	18.9	1	04/09/21 10:15	04/09/21 23:32	100-42-5	
Tetrachloroethene	**<28.6**	ug/kg	73.8	28.6	1	04/09/21 10:15	04/09/21 23:32	127-18-4	
Toluene	**<18.6**	ug/kg	73.8	18.6	1	04/09/21 10:15	04/09/21 23:32	108-88-3	
Trichloroethene	**<27.6**	ug/kg	73.8	27.6	1	04/09/21 10:15	04/09/21 23:32	79-01-6	
Trichlorofluoromethane	**<21.4**	ug/kg	73.8	21.4	1	04/09/21 10:15	04/09/21 23:32	75-69-4	
Vinyl chloride	**<14.9**	ug/kg	73.8	14.9	1	04/09/21 10:15	04/09/21 23:32	75-01-4	
cis-1,2-Dichloroethene	**<15.8**	ug/kg	73.8	15.8	1	04/09/21 10:15	04/09/21 23:32	156-59-2	
cis-1,3-Dichloropropene	**<48.7**	ug/kg	369	48.7	1	04/09/21 10:15	04/09/21 23:32	10061-01-5	
m&p-Xylene	**<31.1**	ug/kg	148	31.1	1	04/09/21 10:15	04/09/21 23:32	179601-23-1	
n-Butylbenzene	**<33.8**	ug/kg	73.8	33.8	1	04/09/21 10:15	04/09/21 23:32	104-51-8	
n-Propylbenzene	**<17.7**	ug/kg	73.8	17.7	1	04/09/21 10:15	04/09/21 23:32	103-65-1	
o-Xylene	**<22.1**	ug/kg	73.8	22.1	1	04/09/21 10:15	04/09/21 23:32	95-47-6	
p-Isopropyltoluene	**<22.4**	ug/kg	73.8	22.4	1	04/09/21 10:15	04/09/21 23:32	99-87-6	
sec-Butylbenzene	**<18.0**	ug/kg	73.8	18.0	1	04/09/21 10:15	04/09/21 23:32	135-98-8	
tert-Butylbenzene	**<23.2**	ug/kg	73.8	23.2	1	04/09/21 10:15	04/09/21 23:32	98-06-6	
trans-1,2-Dichloroethene	**<15.9**	ug/kg	73.8	15.9	1	04/09/21 10:15	04/09/21 23:32	156-60-5	
trans-1,3-Dichloropropene	**<211**	ug/kg	369	211	1	04/09/21 10:15	04/09/21 23:32	10061-02-6	
Surrogates									
Toluene-d8 (S)	117	%	67-159		1	04/09/21 10:15	04/09/21 23:32	2037-26-5	
4-Bromofluorobenzene (S)	117	%	66-153		1	04/09/21 10:15	04/09/21 23:32	460-00-4	
1,2-Dichlorobenzene-d4 (S)	110	%	82-158		1	04/09/21 10:15	04/09/21 23:32	2199-69-1	
Percent Moisture	Analytical Method: ASTM D2974-87 Pace Analytical Services - Green Bay								
Percent Moisture	**19.2**	%	0.10	0.10	1		04/06/21 16:36		

Sample: #3 ABOVE **Lab ID: 40224531002** Collected: 04/01/21 09:40 Received: 04/06/21 10:00 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
8082 GCS PCB	Analytical Method: EPA 8082 Preparation Method: EPA 3541 Pace Analytical Services - Green Bay								
PCB-1016 (Aroclor 1016)	**<17.3**	ug/kg	56.9	17.3	1	04/08/21 17:54	04/12/21 16:10	12674-11-2	
PCB-1221 (Aroclor 1221)	**<17.3**	ug/kg	56.9	17.3	1	04/08/21 17:54	04/12/21 16:10	11104-28-2	

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: #3 BELOW, #3 ABOVE
Pace Project No.: 40224531

Sample: #3 ABOVE **Lab ID: 40224531002** Collected: 04/01/21 09:40 Received: 04/06/21 10:00 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
8082 GCS PCB	Analytical Method: EPA 8082 Preparation Method: EPA 3541 Pace Analytical Services - Green Bay								
PCB-1232 (Aroclor 1232)	**<17.3**	ug/kg	56.9	17.3	1	04/08/21 17:54	04/12/21 16:10	11141-16-5	
PCB-1242 (Aroclor 1242)	**<17.3**	ug/kg	56.9	17.3	1	04/08/21 17:54	04/12/21 16:10	53469-21-9	
PCB-1248 (Aroclor 1248)	**<17.3**	ug/kg	56.9	17.3	1	04/08/21 17:54	04/12/21 16:10	12672-29-6	
PCB-1254 (Aroclor 1254)	**<17.3**	ug/kg	56.9	17.3	1	04/08/21 17:54	04/12/21 16:10	11097-69-1	
PCB-1260 (Aroclor 1260)	**<17.3**	ug/kg	56.9	17.3	1	04/08/21 17:54	04/12/21 16:10	11096-82-5	
PCB, Total	**<17.3**	ug/kg	56.9	17.3	1	04/08/21 17:54	04/12/21 16:10	1336-36-3	
Surrogates									
Tetrachloro-m-xylene (S)	88	%	67-102		1	04/08/21 17:54	04/12/21 16:10	877-09-8	
Decachlorobiphenyl (S)	66	%	47-114		1	04/08/21 17:54	04/12/21 16:10	2051-24-3	
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3050 Pace Analytical Services - Green Bay								
Arsenic	**<1.6**	mg/kg	2.8	1.6	1	04/07/21 07:02	04/07/21 17:27	7440-38-2	
Barium	**22.8**	mg/kg	0.56	0.17	1	04/07/21 07:02	04/07/21 17:27	7440-39-3	
Cadmium	**0.15J**	mg/kg	0.56	0.15	1	04/07/21 07:02	04/07/21 17:27	7440-43-9	
Chromium	**7.2**	mg/kg	1.1	0.31	1	04/07/21 07:02	04/07/21 17:27	7440-47-3	
Lead	**50.5**	mg/kg	2.2	0.67	1	04/07/21 07:02	04/07/21 17:27	7439-92-1	
Selenium	**<1.5**	mg/kg	4.5	1.5	1	04/07/21 07:02	04/07/21 17:27	7782-49-2	
Silver	**<0.34**	mg/kg	1.1	0.34	1	04/07/21 07:02	04/07/21 17:27	7440-22-4	
7471 Mercury	Analytical Method: EPA 7471 Preparation Method: EPA 7471 Pace Analytical Services - Green Bay								
Mercury	**0.043**	mg/kg	0.039	0.011	1	04/14/21 07:48	04/14/21 13:06	7439-97-6	
8270E MSSV PAH by SIM	Analytical Method: EPA 8270E by SIM Preparation Method: EPA 3546 Pace Analytical Services - Green Bay								
Acenaphthene	**9.3J**	ug/kg	37.9	4.9	2	04/14/21 08:29	04/14/21 23:12	83-32-9	
Acenaphthylene	**73.8**	ug/kg	37.9	4.8	2	04/14/21 08:29	04/14/21 23:12	208-96-8	
Anthracene	**65.2**	ug/kg	37.9	4.7	2	04/14/21 08:29	04/14/21 23:12	120-12-7	
Benzo(a)anthracene	**230**	ug/kg	37.9	4.9	2	04/14/21 08:29	04/14/21 23:12	56-55-3	
Benzo(a)pyrene	**282**	ug/kg	37.9	4.3	2	04/14/21 08:29	04/14/21 23:12	50-32-8	
Benzo(b)fluoranthene	**394**	ug/kg	37.9	5.3	2	04/14/21 08:29	04/14/21 23:12	205-99-2	
Benzo(g,h,i)perylene	**134**	ug/kg	37.9	6.6	2	04/14/21 08:29	04/14/21 23:12	191-24-2	
Benzo(k)fluoranthene	**168**	ug/kg	37.9	4.8	2	04/14/21 08:29	04/14/21 23:12	207-08-9	
Chrysene	**285**	ug/kg	37.9	7.1	2	04/14/21 08:29	04/14/21 23:12	218-01-9	L2
Dibenz(a,h)anthracene	**42.6**	ug/kg	37.9	5.2	2	04/14/21 08:29	04/14/21 23:12	53-70-3	
Fluoranthene	**425**	ug/kg	37.9	4.5	2	04/14/21 08:29	04/14/21 23:12	206-44-0	
Fluorene	**22.5J**	ug/kg	37.9	4.5	2	04/14/21 08:29	04/14/21 23:12	86-73-7	
Indeno(1,2,3-cd)pyrene	**123**	ug/kg	37.9	7.9	2	04/14/21 08:29	04/14/21 23:12	193-39-5	
1-Methylnaphthalene	**21.2J**	ug/kg	37.9	5.5	2	04/14/21 08:29	04/14/21 23:12	90-12-0	
2-Methylnaphthalene	**36.3J**	ug/kg	37.9	5.5	2	04/14/21 08:29	04/14/21 23:12	91-57-6	
Naphthalene	**52.9**	ug/kg	37.9	3.7	2	04/14/21 08:29	04/14/21 23:12	91-20-3	
Phenanthrene	**162**	ug/kg	37.9	4.3	2	04/14/21 08:29	04/14/21 23:12	85-01-8	
Pyrene	**331**	ug/kg	37.9	5.6	2	04/14/21 08:29	04/14/21 23:12	129-00-0	

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: #3 BELOW, #3 ABOVE
Pace Project No.: 40224531

Sample: #3 ABOVE **Lab ID: 40224531002** Collected: 04/01/21 09:40 Received: 04/06/21 10:00 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 PAH by SIM	Analytical Method: EPA 8270E by SIM Preparation Method: EPA 3546 Pace Analytical Services - Green Bay								
Surrogates									
2-Fluorobiphenyl (S)	48	%	36-86		2	04/14/21 08:29	04/14/21 23:12	321-60-8	
Terphenyl-d14 (S)	43	%	41-97		2	04/14/21 08:29	04/14/21 23:12	1718-51-0	
8260 MSV Med Level Normal List	Analytical Method: EPA 8260 Preparation Method: EPA 5035/5030B Pace Analytical Services - Green Bay								
1,1,1,2-Tetrachloroethane	**<15.2**	ug/kg	63.5	15.2	1	04/09/21 10:15	04/09/21 23:52	630-20-6	
1,1,1-Trichloroethane	**<16.3**	ug/kg	63.5	16.3	1	04/09/21 10:15	04/09/21 23:52	71-55-6	
1,1,2,2-Tetrachloroethane	**<23.0**	ug/kg	63.5	23.0	1	04/09/21 10:15	04/09/21 23:52	79-34-5	
1,1,2-Trichloroethane	**<23.1**	ug/kg	63.5	23.1	1	04/09/21 10:15	04/09/21 23:52	79-00-5	
1,1-Dichloroethane	**<16.3**	ug/kg	63.5	16.3	1	04/09/21 10:15	04/09/21 23:52	75-34-3	
1,1-Dichloroethene	**<21.1**	ug/kg	63.5	21.1	1	04/09/21 10:15	04/09/21 23:52	75-35-4	
1,1-Dichloropropene	**<20.6**	ug/kg	63.5	20.6	1	04/09/21 10:15	04/09/21 23:52	563-58-6	
1,2,3-Trichlorobenzene	**<70.7**	ug/kg	318	70.7	1	04/09/21 10:15	04/09/21 23:52	87-61-6	
1,2,3-Trichloropropane	**<30.9**	ug/kg	63.5	30.9	1	04/09/21 10:15	04/09/21 23:52	96-18-4	
1,2,4-Trichlorobenzene	**<52.3**	ug/kg	318	52.3	1	04/09/21 10:15	04/09/21 23:52	120-82-1	
1,2,4-Trimethylbenzene	**<18.9**	ug/kg	63.5	18.9	1	04/09/21 10:15	04/09/21 23:52	95-63-6	
1,2-Dibromo-3-chloropropane	**<49.3**	ug/kg	318	49.3	1	04/09/21 10:15	04/09/21 23:52	96-12-8	
1,2-Dibromoethane (EDB)	**<17.4**	ug/kg	63.5	17.4	1	04/09/21 10:15	04/09/21 23:52	106-93-4	
1,2-Dichlorobenzene	**<19.7**	ug/kg	63.5	19.7	1	04/09/21 10:15	04/09/21 23:52	95-50-1	
1,2-Dichloroethane	**<14.6**	ug/kg	63.5	14.6	1	04/09/21 10:15	04/09/21 23:52	107-06-2	
1,2-Dichloropropane	**<15.1**	ug/kg	63.5	15.1	1	04/09/21 10:15	04/09/21 23:52	78-87-5	
1,3,5-Trimethylbenzene	**<20.4**	ug/kg	63.5	20.4	1	04/09/21 10:15	04/09/21 23:52	108-67-8	
1,3-Dichlorobenzene	**<17.4**	ug/kg	63.5	17.4	1	04/09/21 10:15	04/09/21 23:52	541-73-1	
1,3-Dichloropropane	**<13.8**	ug/kg	63.5	13.8	1	04/09/21 10:15	04/09/21 23:52	142-28-9	
1,4-Dichlorobenzene	**<17.4**	ug/kg	63.5	17.4	1	04/09/21 10:15	04/09/21 23:52	106-46-7	
2,2-Dichloropropane	**<17.1**	ug/kg	63.5	17.1	1	04/09/21 10:15	04/09/21 23:52	594-20-7	
2-Chlorotoluene	**<20.6**	ug/kg	63.5	20.6	1	04/09/21 10:15	04/09/21 23:52	95-49-8	
4-Chlorotoluene	**<24.1**	ug/kg	63.5	24.1	1	04/09/21 10:15	04/09/21 23:52	106-43-4	
Benzene	**<15.1**	ug/kg	25.4	15.1	1	04/09/21 10:15	04/09/21 23:52	71-43-2	
Bromobenzene	**<24.8**	ug/kg	63.5	24.8	1	04/09/21 10:15	04/09/21 23:52	108-86-1	
Bromochloromethane	**<17.4**	ug/kg	63.5	17.4	1	04/09/21 10:15	04/09/21 23:52	74-97-5	
Bromodichloromethane	**<15.1**	ug/kg	63.5	15.1	1	04/09/21 10:15	04/09/21 23:52	75-27-4	
Bromoform	**<279**	ug/kg	318	279	1	04/09/21 10:15	04/09/21 23:52	75-25-2	
Bromomethane	**<89.0**	ug/kg	318	89.0	1	04/09/21 10:15	04/09/21 23:52	74-83-9	
Carbon tetrachloride	**<14.0**	ug/kg	63.5	14.0	1	04/09/21 10:15	04/09/21 23:52	56-23-5	
Chlorobenzene	**<7.6**	ug/kg	63.5	7.6	1	04/09/21 10:15	04/09/21 23:52	108-90-7	
Chloroethane	**<26.8**	ug/kg	318	26.8	1	04/09/21 10:15	04/09/21 23:52	75-00-3	
Chloroform	**<45.5**	ug/kg	318	45.5	1	04/09/21 10:15	04/09/21 23:52	67-66-3	
Chloromethane	**<24.1**	ug/kg	63.5	24.1	1	04/09/21 10:15	04/09/21 23:52	74-87-3	
Dibromochloromethane	**<217**	ug/kg	318	217	1	04/09/21 10:15	04/09/21 23:52	124-48-1	
Dibromomethane	**<18.8**	ug/kg	63.5	18.8	1	04/09/21 10:15	04/09/21 23:52	74-95-3	
Dichlorodifluoromethane	**<27.3**	ug/kg	63.5	27.3	1	04/09/21 10:15	04/09/21 23:52	75-71-8	
Diisopropyl ether	**17.2J**	ug/kg	63.5	15.7	1	04/09/21 10:15	04/09/21 23:52	108-20-3	

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: #3 BELOW, #3 ABOVE
Pace Project No.: 40224531

Sample: #3 ABOVE **Lab ID: 40224531002** Collected: 04/01/21 09:40 Received: 04/06/21 10:00 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								
Ethylbenzene	**<15.1**	ug/kg	63.5	15.1	1	04/09/21 10:15	04/09/21 23:52	100-41-4	
Hexachloro-1,3-butadiene	**<126**	ug/kg	318	126	1	04/09/21 10:15	04/09/21 23:52	87-68-3	
Isopropylbenzene (Cumene)	**<17.1**	ug/kg	63.5	17.1	1	04/09/21 10:15	04/09/21 23:52	98-82-8	
Methyl-tert-butyl ether	**<18.7**	ug/kg	63.5	18.7	1	04/09/21 10:15	04/09/21 23:52	1634-04-4	
Methylene Chloride	**48.7J**	ug/kg	63.5	17.7	1	04/09/21 10:15	04/09/21 23:52	75-09-2	
Naphthalene	**<19.8**	ug/kg	318	19.8	1	04/09/21 10:15	04/09/21 23:52	91-20-3	
Styrene	**<16.3**	ug/kg	63.5	16.3	1	04/09/21 10:15	04/09/21 23:52	100-42-5	
Tetrachloroethene	**<24.6**	ug/kg	63.5	24.6	1	04/09/21 10:15	04/09/21 23:52	127-18-4	
Toluene	**<16.0**	ug/kg	63.5	16.0	1	04/09/21 10:15	04/09/21 23:52	108-88-3	
Trichloroethene	**<23.8**	ug/kg	63.5	23.8	1	04/09/21 10:15	04/09/21 23:52	79-01-6	
Trichlorofluoromethane	**<18.4**	ug/kg	63.5	18.4	1	04/09/21 10:15	04/09/21 23:52	75-69-4	
Vinyl chloride	**<12.8**	ug/kg	63.5	12.8	1	04/09/21 10:15	04/09/21 23:52	75-01-4	
cis-1,2-Dichloroethene	**<13.6**	ug/kg	63.5	13.6	1	04/09/21 10:15	04/09/21 23:52	156-59-2	
cis-1,3-Dichloropropene	**<41.9**	ug/kg	318	41.9	1	04/09/21 10:15	04/09/21 23:52	10061-01-5	
m&p-Xylene	**<26.8**	ug/kg	127	26.8	1	04/09/21 10:15	04/09/21 23:52	179601-23-1	
n-Butylbenzene	**<29.1**	ug/kg	63.5	29.1	1	04/09/21 10:15	04/09/21 23:52	104-51-8	
n-Propylbenzene	**<15.2**	ug/kg	63.5	15.2	1	04/09/21 10:15	04/09/21 23:52	103-65-1	
o-Xylene	**<19.1**	ug/kg	63.5	19.1	1	04/09/21 10:15	04/09/21 23:52	95-47-6	
p-Isopropyltoluene	**<19.3**	ug/kg	63.5	19.3	1	04/09/21 10:15	04/09/21 23:52	99-87-6	
sec-Butylbenzene	**<15.5**	ug/kg	63.5	15.5	1	04/09/21 10:15	04/09/21 23:52	135-98-8	
tert-Butylbenzene	**<19.9**	ug/kg	63.5	19.9	1	04/09/21 10:15	04/09/21 23:52	98-06-6	
trans-1,2-Dichloroethene	**<13.7**	ug/kg	63.5	13.7	1	04/09/21 10:15	04/09/21 23:52	156-60-5	
trans-1,3-Dichloropropene	**<182**	ug/kg	318	182	1	04/09/21 10:15	04/09/21 23:52	10061-02-6	
Surrogates									
Toluene-d8 (S)	125	%	67-159		1	04/09/21 10:15	04/09/21 23:52	2037-26-5	
4-Bromofluorobenzene (S)	125	%	66-153		1	04/09/21 10:15	04/09/21 23:52	460-00-4	
1,2-Dichlorobenzene-d4 (S)	120	%	82-158		1	04/09/21 10:15	04/09/21 23:52	2199-69-1	
Percent Moisture	Analytical Method: ASTM D2974-87 Pace Analytical Services - Green Bay								
Percent Moisture	**11.9**	%	0.10	0.10	1		04/06/21 16:36		

REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL DATA

Project: #3 BELOW, #3 ABOVE
Pace Project No.: 40224531

QC Batch: 382314
QC Batch Method: EPA 7471
Analysis Method: EPA 7471
Analysis Description: 7471 Mercury
Laboratory: Pace Analytical Services - Green Bay
Associated Lab Samples: 40224531001, 40224531002

METHOD BLANK: 2205181 Matrix: Solid
Associated Lab Samples: 40224531001, 40224531002

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Mercury	mg/kg	<0.010	0.035	04/14/21 12:27	

LABORATORY CONTROL SAMPLE: 2205182

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Mercury	mg/kg	0.83	0.88	106	85-115	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2205183 2205184

Parameter	Units	40224829001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Mercury	mg/kg	0.038J	1.1	1.1	1.2	1.2	102	99	85-115	3	20	

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: #3 BELOW, #3 ABOVE
Pace Project No.: 40224531

QC Batch: 381698
QC Batch Method: EPA 3050
Analysis Method: EPA 6010
Analysis Description: 6010 MET
Laboratory: Pace Analytical Services - Green Bay
Associated Lab Samples: 40224531001, 40224531002

METHOD BLANK: 2201365 Matrix: Solid
Associated Lab Samples: 40224531001, 40224531002

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Arsenic	mg/kg	<1.5	2.5	04/07/21 16:31	
Barium	mg/kg	<0.15	0.50	04/07/21 16:31	
Cadmium	mg/kg	<0.13	0.50	04/07/21 16:31	
Chromium	mg/kg	<0.28	1.0	04/07/21 16:31	
Lead	mg/kg	<0.60	2.0	04/07/21 16:31	
Selenium	mg/kg	<1.3	4.0	04/07/21 16:31	
Silver	mg/kg	<0.31	1.0	04/07/21 16:31	

LABORATORY CONTROL SAMPLE: 2201366

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Arsenic	mg/kg	50	52.0	104	80-120	
Barium	mg/kg	50	51.2	102	80-120	
Cadmium	mg/kg	50	50.3	101	80-120	
Chromium	mg/kg	50	50.0	100	80-120	
Lead	mg/kg	50	50.5	101	80-120	
Selenium	mg/kg	50	51.1	102	80-120	
Silver	mg/kg	25	23.3	93	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2201367 2201368

Parameter	Units	40224520001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Arsenic	mg/kg	30.1	54.9	55	93.6	89.6	116	108	75-125	4	20	
Barium	mg/kg	96.9	54.9	55	168	143	130	83	75-125	16	20	M0
Cadmium	mg/kg	1.2	54.9	55	54.5	56.6	97	101	75-125	4	20	
Chromium	mg/kg	23.7	54.9	55	114	70.8	165	86	75-125	47	20	M0,R1
Lead	mg/kg	217	54.9	55	1840	231	2960	25	75-125	155	20	M0,R1
Selenium	mg/kg	<2.9	54.9	55	54.1	55.5	99	101	75-125	3	20	
Silver	mg/kg	<0.67	27.5	27.5	26.6	27.0	95	96	75-125	1	20	

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: #3 BELOW, #3 ABOVE
Pace Project No.: 40224531

QC Batch: 382037
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: 40224531001, 40224531002

METHOD BLANK: 2203495 Matrix: Solid
Associated Lab Samples: 40224531001, 40224531002

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1,1,2-Tetrachloroethane	ug/kg	<12.0	50.0	04/09/21 16:29	
1,1,1-Trichloroethane	ug/kg	<12.8	50.0	04/09/21 16:29	
1,1,2,2-Tetrachloroethane	ug/kg	<18.1	50.0	04/09/21 16:29	
1,1,2-Trichloroethane	ug/kg	<18.2	50.0	04/09/21 16:29	
1,1-Dichloroethane	ug/kg	<12.8	50.0	04/09/21 16:29	
1,1-Dichloroethene	ug/kg	<16.6	50.0	04/09/21 16:29	
1,1-Dichloropropene	ug/kg	<16.2	50.0	04/09/21 16:29	
1,2,3-Trichlorobenzene	ug/kg	<55.7	250	04/09/21 16:29	
1,2,3-Trichloropropane	ug/kg	<24.3	50.0	04/09/21 16:29	
1,2,4-Trichlorobenzene	ug/kg	<41.2	250	04/09/21 16:29	
1,2,4-Trimethylbenzene	ug/kg	<14.9	50.0	04/09/21 16:29	
1,2-Dibromo-3-chloropropane	ug/kg	<38.8	250	04/09/21 16:29	
1,2-Dibromoethane (EDB)	ug/kg	<13.7	50.0	04/09/21 16:29	
1,2-Dichlorobenzene	ug/kg	<15.5	50.0	04/09/21 16:29	
1,2-Dichloroethane	ug/kg	<11.5	50.0	04/09/21 16:29	
1,2-Dichloropropane	ug/kg	<11.9	50.0	04/09/21 16:29	
1,3,5-Trimethylbenzene	ug/kg	<16.1	50.0	04/09/21 16:29	
1,3-Dichlorobenzene	ug/kg	<13.7	50.0	04/09/21 16:29	
1,3-Dichloropropane	ug/kg	<10.9	50.0	04/09/21 16:29	
1,4-Dichlorobenzene	ug/kg	<13.7	50.0	04/09/21 16:29	
2,2-Dichloropropane	ug/kg	<13.5	50.0	04/09/21 16:29	
2-Chlorotoluene	ug/kg	<16.2	50.0	04/09/21 16:29	
4-Chlorotoluene	ug/kg	<19.0	50.0	04/09/21 16:29	
Benzene	ug/kg	<11.9	20.0	04/09/21 16:29	
Bromobenzene	ug/kg	<19.5	50.0	04/09/21 16:29	
Bromochloromethane	ug/kg	<13.7	50.0	04/09/21 16:29	
Bromodichloromethane	ug/kg	<11.9	50.0	04/09/21 16:29	
Bromoform	ug/kg	<220	250	04/09/21 16:29	
Bromomethane	ug/kg	<70.1	250	04/09/21 16:29	
Carbon tetrachloride	ug/kg	<11.0	50.0	04/09/21 16:29	
Chlorobenzene	ug/kg	<6.0	50.0	04/09/21 16:29	
Chloroethane	ug/kg	<21.1	250	04/09/21 16:29	
Chloroform	ug/kg	<35.8	250	04/09/21 16:29	
Chloromethane	ug/kg	<19.0	50.0	04/09/21 16:29	
cis-1,2-Dichloroethene	ug/kg	<10.7	50.0	04/09/21 16:29	
cis-1,3-Dichloropropene	ug/kg	<33.0	250	04/09/21 16:29	
Dibromochloromethane	ug/kg	<171	250	04/09/21 16:29	
Dibromomethane	ug/kg	<14.8	50.0	04/09/21 16:29	
Dichlorodifluoromethane	ug/kg	<21.5	50.0	04/09/21 16:29	
Diisopropyl ether	ug/kg	<12.4	50.0	04/09/21 16:29	

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: #3 BELOW, #3 ABOVE
Pace Project No.: 40224531

METHOD BLANK: 2203495 Matrix: Solid
Associated Lab Samples: 40224531001, 40224531002

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Ethylbenzene	ug/kg	<11.9	50.0	04/09/21 16:29	
Hexachloro-1,3-butadiene	ug/kg	<99.4	250	04/09/21 16:29	
Isopropylbenzene (Cumene)	ug/kg	<13.5	50.0	04/09/21 16:29	
m&p-Xylene	ug/kg	<21.1	100	04/09/21 16:29	
Methyl-tert-butyl ether	ug/kg	<14.7	50.0	04/09/21 16:29	
Methylene Chloride	ug/kg	<13.9	50.0	04/09/21 16:29	
n-Butylbenzene	ug/kg	<22.9	50.0	04/09/21 16:29	
n-Propylbenzene	ug/kg	<12.0	50.0	04/09/21 16:29	
Naphthalene	ug/kg	<15.6	250	04/09/21 16:29	
o-Xylene	ug/kg	<15.0	50.0	04/09/21 16:29	
p-Isopropyltoluene	ug/kg	<15.2	50.0	04/09/21 16:29	
sec-Butylbenzene	ug/kg	<12.2	50.0	04/09/21 16:29	
Styrene	ug/kg	<12.8	50.0	04/09/21 16:29	
tert-Butylbenzene	ug/kg	<15.7	50.0	04/09/21 16:29	
Tetrachloroethene	ug/kg	<19.4	50.0	04/09/21 16:29	
Toluene	ug/kg	<12.6	50.0	04/09/21 16:29	
trans-1,2-Dichloroethene	ug/kg	<10.8	50.0	04/09/21 16:29	
trans-1,3-Dichloropropene	ug/kg	<143	250	04/09/21 16:29	
Trichloroethene	ug/kg	<18.7	50.0	04/09/21 16:29	
Trichlorofluoromethane	ug/kg	<14.5	50.0	04/09/21 16:29	
Vinyl chloride	ug/kg	<10.1	50.0	04/09/21 16:29	
1,2-Dichlorobenzene-d4 (S)	%	89	82-158	04/09/21 16:29	
4-Bromofluorobenzene (S)	%	91	66-153	04/09/21 16:29	
Toluene-d8 (S)	%	95	67-159	04/09/21 16:29	

LABORATORY CONTROL SAMPLE: 2203496

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1-Trichloroethane	ug/kg	2500	2380	95	70-130	
1,1,2,2-Tetrachloroethane	ug/kg	2500	2400	96	65-129	
1,1,2-Trichloroethane	ug/kg	2500	2450	98	70-130	
1,1-Dichloroethane	ug/kg	2500	2480	99	70-130	
1,1-Dichloroethene	ug/kg	2500	1840	73	67-120	
1,2,4-Trichlorobenzene	ug/kg	2500	1800	72	64-130	
1,2-Dibromo-3-chloropropane	ug/kg	2500	2520	101	57-119	
1,2-Dibromoethane (EDB)	ug/kg	2500	2430	97	70-130	
1,2-Dichlorobenzene	ug/kg	2500	2310	92	70-130	
1,2-Dichloroethane	ug/kg	2500	2500	100	70-130	
1,2-Dichloropropane	ug/kg	2500	2410	96	72-118	
1,3-Dichlorobenzene	ug/kg	2500	2180	87	70-130	
1,4-Dichlorobenzene	ug/kg	2500	2170	87	70-130	
Benzene	ug/kg	2500	2280	91	70-130	
Bromodichloromethane	ug/kg	2500	2370	95	70-130	
Bromoform	ug/kg	2500	2270	91	66-130	

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: #3 BELOW, #3 ABOVE
Pace Project No.: 40224531

LABORATORY CONTROL SAMPLE: 2203496

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Bromomethane	ug/kg	2500	1270	51	13-153	
Carbon tetrachloride	ug/kg	2500	2330	93	73-134	
Chlorobenzene	ug/kg	2500	2320	93	70-130	
Chloroethane	ug/kg	2500	1730	69	19-170	
Chloroform	ug/kg	2500	2430	97	79-120	
Chloromethane	ug/kg	2500	1860	75	45-117	
cis-1,2-Dichloroethene	ug/kg	2500	2200	88	70-130	
cis-1,3-Dichloropropene	ug/kg	2500	2310	92	68-130	
Dibromochloromethane	ug/kg	2500	2180	87	70-130	
Dichlorodifluoromethane	ug/kg	2500	1670	67	15-135	
Ethylbenzene	ug/kg	2500	2280	91	78-120	
Isopropylbenzene (Cumene)	ug/kg	2500	2410	96	70-130	
m&p-Xylene	ug/kg	5000	4490	90	70-130	
Methyl-tert-butyl ether	ug/kg	2500	2390	96	65-130	
Methylene Chloride	ug/kg	2500	2260	90	70-130	
o-Xylene	ug/kg	2500	2290	92	70-130	
Styrene	ug/kg	2500	2460	99	70-130	
Tetrachloroethene	ug/kg	2500	1900	76	70-130	
Toluene	ug/kg	2500	2220	89	76-120	
trans-1,2-Dichloroethene	ug/kg	2500	2310	92	70-130	
trans-1,3-Dichloropropene	ug/kg	2500	2460	98	70-130	
Trichloroethene	ug/kg	2500	2270	91	70-130	
Trichlorofluoromethane	ug/kg	2500	1970	79	49-153	
Vinyl chloride	ug/kg	2500	1890	76	58-121	
1,2-Dichlorobenzene-d4 (S)	%			98	82-158	
4-Bromofluorobenzene (S)	%			102	66-153	
Toluene-d8 (S)	%			101	67-159	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2203497 2203498

Parameter	Units	40224684001 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	<13.9			1040	1100				6	20	
1,1,2,2-Tetrachloroethane	ug/kg	<19.6			1060	1100				4	20	
1,1,2-Trichloroethane	ug/kg	<19.7			1190	1140				4	20	
1,1-Dichloroethane	ug/kg	<13.9			1200	1200				0	20	
1,1-Dichloroethene	ug/kg	<18.0			837	968				15	20	
1,2,4-Trichlorobenzene	ug/kg	<44.6			997	971				3	20	
1,2-Dibromo-3-chloropropane	ug/kg	<42.0			1170	1180				1	21	
1,2-Dibromoethane (EDB)	ug/kg	<14.8			1130	1130				0	20	
1,2-Dichlorobenzene	ug/kg	<16.8			1160	1180				2	20	
1,2-Dichloroethane	ug/kg	<12.5			1230	1180				5	20	
1,2-Dichloropropane	ug/kg	<12.9			1160	1120				3	20	
1,3-Dichlorobenzene	ug/kg	<14.8			1130	1140				1	20	

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: #3 BELOW, #3 ABOVE
Pace Project No.: 40224531

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2203497 2203498

Parameter	Units	40224684001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
1,4-Dichlorobenzene	ug/kg	<14.8			1070	1170				9	20	
Benzene	ug/kg	<12.9			1100	1090				1	20	
Bromodichloromethane	ug/kg	<12.9			1070	1080				1	20	
Bromoform	ug/kg	<238			1040	1050				1	20	
Bromomethane	ug/kg	<75.9			701	672				4	20	
Carbon tetrachloride	ug/kg	<11.9			1000	1090				9	20	
Chlorobenzene	ug/kg	<6.5			1130	1130				0	20	
Chloroethane	ug/kg	<22.9			1140	1020				11	20	
Chloroform	ug/kg	<38.8			1160	1160				0	20	
Chloromethane	ug/kg	<20.6			1150	1180				3	20	
cis-1,2-Dichloroethene	ug/kg	<11.6			1060	1040				2	20	
cis-1,3-Dichloropropene	ug/kg	<35.7			1080	1080				0	20	
Dibromochloromethane	ug/kg	<185			978	994				2	20	
Dichlorodifluoromethane	ug/kg	<23.3			1040	1360				26	25	R1
Ethylbenzene	ug/kg	<12.9			1120	1110				1	20	
Isopropylbenzene (Cumene)	ug/kg	<14.6			1170	1190				2	20	
m&p-Xylene	ug/kg	<22.9			2210	2350				6	20	
Methyl-tert-butyl ether	ug/kg	<15.9			1090	1120				2	20	
Methylene Chloride	ug/kg	24.7J			1150	1140				1	20	
o-Xylene	ug/kg	<16.2			1170	1130				3	20	
Styrene	ug/kg	<13.9			1190	1220				2	20	
Tetrachloroethene	ug/kg	<21.0			896	911				2	20	
Toluene	ug/kg	<13.6			1090	1060				3	20	
trans-1,2-Dichloroethene	ug/kg	<11.7			1100	1110				0	20	
trans-1,3-Dichloropropene	ug/kg	<155			1180	1180				0	20	
Trichloroethene	ug/kg	<20.3			1020	1050				3	20	
Trichlorofluoromethane	ug/kg	<15.7			907	1040				14	21	
Vinyl chloride	ug/kg	<10.9			1010	1080				7	20	
1,2-Dichlorobenzene-d4 (S)	%						94	105	82-158			
4-Bromofluorobenzene (S)	%						104	114	66-153			
Toluene-d8 (S)	%						109	110	67-159			

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: #3 BELOW, #3 ABOVE
Pace Project No.: 40224531

QC Batch: 381958
QC Batch Method: EPA 3541
Analysis Method: EPA 8082
Analysis Description: 8082 GCS PCB
Laboratory: Pace Analytical Services - Green Bay
Associated Lab Samples: 40224531001, 40224531002

METHOD BLANK: 2202967 Matrix: Solid
Associated Lab Samples: 40224531001, 40224531002

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
PCB-1016 (Aroclor 1016)	ug/kg	<15.2	50.0	04/12/21 11:03	
PCB-1221 (Aroclor 1221)	ug/kg	<15.2	50.0	04/12/21 11:03	
PCB-1232 (Aroclor 1232)	ug/kg	<15.2	50.0	04/12/21 11:03	
PCB-1242 (Aroclor 1242)	ug/kg	<15.2	50.0	04/12/21 11:03	
PCB-1248 (Aroclor 1248)	ug/kg	<15.2	50.0	04/12/21 11:03	
PCB-1254 (Aroclor 1254)	ug/kg	<15.2	50.0	04/12/21 11:03	
PCB-1260 (Aroclor 1260)	ug/kg	<15.2	50.0	04/12/21 11:03	
Decachlorobiphenyl (S)	%	79	47-114	04/12/21 11:03	
Tetrachloro-m-xylene (S)	%	87	67-102	04/12/21 11:03	

LABORATORY CONTROL SAMPLE: 2202968

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
PCB-1016 (Aroclor 1016)	ug/kg		<15.2			
PCB-1221 (Aroclor 1221)	ug/kg		<15.2			
PCB-1232 (Aroclor 1232)	ug/kg		<15.2			
PCB-1242 (Aroclor 1242)	ug/kg		<15.2			
PCB-1248 (Aroclor 1248)	ug/kg		<15.2			
PCB-1254 (Aroclor 1254)	ug/kg		<15.2			
PCB-1260 (Aroclor 1260)	ug/kg	500	411	82	69-115	
Decachlorobiphenyl (S)	%			78	47-114	
Tetrachloro-m-xylene (S)	%			89	67-102	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2202969 2202970

Parameter	Units	40224684001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
PCB-1016 (Aroclor 1016)	ug/kg	<15.8			<15.8	<15.8					20	
PCB-1221 (Aroclor 1221)	ug/kg	<15.8			<15.8	<15.8					20	
PCB-1232 (Aroclor 1232)	ug/kg	<15.8			<15.8	<15.8					20	
PCB-1242 (Aroclor 1242)	ug/kg	<15.8			<15.8	<15.8					20	
PCB-1248 (Aroclor 1248)	ug/kg	<15.8			<15.8	<15.8					20	
PCB-1254 (Aroclor 1254)	ug/kg	<15.8			<15.8	<15.8					20	
PCB-1260 (Aroclor 1260)	ug/kg	<15.8	520	519	401	398	77	77	45-120	1	20	
Decachlorobiphenyl (S)	%						74	75	47-114			
Tetrachloro-m-xylene (S)	%						87	87	67-102			

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: #3 BELOW, #3 ABOVE
Pace Project No.: 40224531

QC Batch: 382393
QC Batch Method: EPA 3546
Analysis Method: EPA 8270E by SIM
Analysis Description: 8270E/3546 MSSV PAH by SIM
Laboratory: Pace Analytical Services - Green Bay
Associated Lab Samples: 40224531001, 40224531002

METHOD BLANK: 2205462 Matrix: Solid
Associated Lab Samples: 40224531001, 40224531002

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1-Methylnaphthalene	ug/kg	<2.4	16.7	04/14/21 11:58	
2-Methylnaphthalene	ug/kg	<2.4	16.7	04/14/21 11:58	
Acenaphthene	ug/kg	<2.2	16.7	04/14/21 11:58	
Acenaphthylene	ug/kg	<2.1	16.7	04/14/21 11:58	
Anthracene	ug/kg	<2.1	16.7	04/14/21 11:58	
Benzo(a)anthracene	ug/kg	<2.2	16.7	04/14/21 11:58	
Benzo(a)pyrene	ug/kg	<1.9	16.7	04/14/21 11:58	
Benzo(b)fluoranthene	ug/kg	<2.3	16.7	04/14/21 11:58	
Benzo(g,h,i)perylene	ug/kg	<2.9	16.7	04/14/21 11:58	
Benzo(k)fluoranthene	ug/kg	<2.1	16.7	04/14/21 11:58	
Chrysene	ug/kg	<3.1	16.7	04/14/21 11:58	
Dibenz(a,h)anthracene	ug/kg	<2.3	16.7	04/14/21 11:58	
Fluoranthene	ug/kg	<2.0	16.7	04/14/21 11:58	
Fluorene	ug/kg	<2.0	16.7	04/14/21 11:58	
Indeno(1,2,3-cd)pyrene	ug/kg	<3.5	16.7	04/14/21 11:58	
Naphthalene	ug/kg	<1.6	16.7	04/14/21 11:58	
Phenanthrene	ug/kg	<1.9	16.7	04/14/21 11:58	
Pyrene	ug/kg	<2.5	16.7	04/14/21 11:58	
2-Fluorobiphenyl (S)	%	65	36-86	04/14/21 11:58	
Terphenyl-d14 (S)	%	95	41-97	04/14/21 11:58	

LABORATORY CONTROL SAMPLE: 2205463

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1-Methylnaphthalene	ug/kg	333	259	78	53-100	
2-Methylnaphthalene	ug/kg	333	257	77	51-97	
Acenaphthene	ug/kg	333	236	71	62-120	
Acenaphthylene	ug/kg	333	241	72	61-120	
Anthracene	ug/kg	333	271	81	62-111	
Benzo(a)anthracene	ug/kg	333	259	78	61-120	
Benzo(a)pyrene	ug/kg	333	270	81	65-120	
Benzo(b)fluoranthene	ug/kg	333	260	78	64-108	
Benzo(g,h,i)perylene	ug/kg	333	257	77	71-120	
Benzo(k)fluoranthene	ug/kg	333	255	76	76-120	
Chrysene	ug/kg	333	242	73	74-120	L2
Dibenz(a,h)anthracene	ug/kg	333	257	77	71-120	
Fluoranthene	ug/kg	333	275	83	67-112	
Fluorene	ug/kg	333	269	81	65-120	
Indeno(1,2,3-cd)pyrene	ug/kg	333	270	81	74-120	

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: #3 BELOW, #3 ABOVE
Pace Project No.: 40224531

LABORATORY CONTROL SAMPLE: 2205463

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Naphthalene	ug/kg	333	226	68	53-120	
Phenanthrene	ug/kg	333	262	79	67-120	
Pyrene	ug/kg	333	281	84	60-103	
2-Fluorobiphenyl (S)	%			71	36-86	
Terphenyl-d14 (S)	%			83	41-97	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2205464 2205465

Parameter	Units	40224771003 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
1-Methylnaphthalene	ug/kg	<2.6	352	352	229	207	65	58	41-100	10	29	
2-Methylnaphthalene	ug/kg	<2.6	352	352	230	200	65	56	42-97	14	21	
Acenaphthene	ug/kg	<2.3	352	352	210	190	60	54	43-120	10	27	
Acenaphthylene	ug/kg	<2.2	352	352	212	191	60	54	51-120	10	26	
Anthracene	ug/kg	<2.2	352	352	214	225	60	64	46-111	5	29	
Benzo(a)anthracene	ug/kg	6.9J	352	352	217	247	60	68	48-120	13	23	
Benzo(a)pyrene	ug/kg	8.3J	352	352	233	263	64	72	46-108	12	30	
Benzo(b)fluoranthene	ug/kg	11.8J	352	352	291	298	79	81	45-108	2	30	
Benzo(g,h,i)perylene	ug/kg	13.5J	352	352	213	454	57	125	39-120	72	37	M1,R1
Benzo(k)fluoranthene	ug/kg	4.8J	352	352	264	200	74	56	47-120	27	31	
Chrysene	ug/kg	10.5J	352	352	222	278	60	76	54-120	22	21	R1
Dibenz(a,h)anthracene	ug/kg	<2.4	352	352	204	222	57	63	46-120	8	34	
Fluoranthene	ug/kg	17.6J	352	352	249	296	66	79	53-112	17	27	
Fluorene	ug/kg	<2.1	352	352	213	188	61	53	48-120	13	29	
Indeno(1,2,3-cd)pyrene	ug/kg	6.9J	352	352	217	415	60	116	40-120	63	34	R1
Naphthalene	ug/kg	<1.7	352	352	211	195	60	55	47-120	8	25	
Phenanthrene	ug/kg	13.8J	352	352	234	237	62	63	49-120	1	28	
Pyrene	ug/kg	15.4J	352	352	214	236	56	63	43-103	10	31	
2-Fluorobiphenyl (S)	%						60	54	36-86			
Terphenyl-d14 (S)	%						54	45	41-97			

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: #3 BELOW, #3 ABOVE
Pace Project No.: 40224531

QC Batch: 381678
QC Batch Method: ASTM D2974-87
Analysis Method: ASTM D2974-87
Analysis Description: Dry Weight/Percent Moisture
Laboratory: Pace Analytical Services - Green Bay

Associated Lab Samples: 40224531001, 40224531002

SAMPLE DUPLICATE: 2201298

Parameter	Units	40224501003 Result	Dup Result	RPD	Max RPD	Qualifiers
Percent Moisture	%	4.7	4.5	4	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.

REPORT OF LABORATORY ANALYSIS

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

QUALIFIERS

Project: #3 BELOW, #3 ABOVE
Pace Project No.: 40224531

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

L2	Analyte recovery in the laboratory control sample (LCS) was below QC limits. Results may be biased low.
M0	Matrix spike recovery and/or matrix spike duplicate recovery was outside laboratory control limits.
M1	Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.
R1	RPD value was outside 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: #3 BELOW, #3 ABOVE
Pace Project No.: 40224531

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
40224531001	**#3 BELOW**	EPA 3541	381958	EPA 8082	381959
40224531002	**#3 ABOVE**	EPA 3541	381958	EPA 8082	381959
40224531001	**#3 BELOW**	EPA 3050	381698	EPA 6010	381803
40224531002	**#3 ABOVE**	EPA 3050	381698	EPA 6010	381803
40224531001	**#3 BELOW**	EPA 7471	382314	EPA 7471	382424
40224531002	**#3 ABOVE**	EPA 7471	382314	EPA 7471	382424
40224531001	**#3 BELOW**	EPA 3546	382393	EPA 8270E by SIM	382442
40224531002	**#3 ABOVE**	EPA 3546	382393	EPA 8270E by SIM	382442
40224531001	**#3 BELOW**	EPA 5035/5030B	382037	EPA 8260	382038
40224531002	**#3 ABOVE**	EPA 5035/5030B	382037	EPA 8260	382038
40224531001	**#3 BELOW**	ASTM D2974-87	381678		
40224531002	**#3 ABOVE**	ASTM D2974-87	381678		

(Please Print Clearly)

Company Name:	Marinette Marine
Branch/Location:	
Project Contact:	MaKayla Jacobs
Phone:	715-245-1931
Project Number:	
Project Name:	
Project State:	WI
Sampled By (Print):	Warren & MaKayla
Sampled By (Sign):	
PO #:	Regulatory Program:

Pace Analytical®
www.pacelabs.com

CHAIN OF CUSTODY

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

Page 1 of

40224531

*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:	
Mail To Company:	
Mail To Address:	
Invoice To Contact:	
Invoice To Company:	
Invoice To Address:	
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

FILTERED? (YES/NO): Y/N
PRESERVATION (CODE)*: Pick Letter

PACE LAB #	CLIENT FIELD ID	COLLECTION DATE	COLLECTION TIME	MATRIX	Analyses Requested	PVOC/VOC	RCRA metals	PAHs	PCBs	PFAS				CLIENT COMMENTS	LAB COMMENTS (Lab Use Only)	Profile #
001	#3 below	4-1-21	9:40	S		X	X	X	X	X						
002	#3 above	4-1-21	9:40	S		X	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:	
Email #2:	
Telephone:	
Fax:	

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

Relinquished By:	Date/Time:	Received By:	Date/Time:
MaKayla Jacobs	4-5-21 1:30p.m		
UPS	4/6/21 1000	Susan K Pay	4/6/21 1000

PACE Project No. 40224531

Receipt Temp = 11 °C

Sample Receipt pH
OK / Adjusted

Cooler Custody Seal
Present / Not Present
Intact / Not Intact

Version 6.0 06/14/06

C019a(27Jun2006)

ORIGINAL

Sample Preservation Receipt Form

Client Name: Marinette Marine Project # 40224531

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

Pace Lab #	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)
	AG1U	BG1U	AG1H	AG4S	AG4U	AG5U	AG2S	BG3U	BP1U	BP3U	BP3B	BP3N	BP3S	VG9A	DG9T	VG9U	VG9H	VG9M	VG9D	JGFU	JG9U	WGFU	WPFU	SP5T	ZPLC	GN							
001										1								1		1			1										2.5 / 5 / 10
002										1								1		1			1										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																																	2.5 / 5 / 10
009																																	2.5 / 5 / 10
010																																	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																												4/6/21 SW					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)

Client Name: Marinette Marine Project #:

WO#: 40224531

40224531

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

Tracking #: 1Z 578 899 01 6555 8376

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 Melt water only 4-6-21 SW

Thermometer Used SR - 104 **Type of Ice:** Wet Blue Dry (None) ☒ Samples on ice, cooling process has begun MLR 4-6-21

Cooler Temperature Uncorr: 11 /Corr: 11

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

Person examining contents: Date: 4-6-21 /Initials: SW

Labeled By Initials: MLR

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. ✓ CC 4-6-21 SW
Chain of Custody Filled Out:	☐Yes ☑No ☐N/A	2. Pg #, Filter, Preserve, Mail + Inv. Info 4-6-21 SW
Chain of Custody Relinquished:	☑Yes ☐No ☐N/A	3. Proj. name/# MLR 4-6-21
Sampler Name & Signature on COC:	☑Yes ☐No ☐N/A	4. Signature MLR 4-6-21
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. Lab received extra PFAS bottle PFS 002. MLR 4-6-21
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. See Comments. 4-6-21 SW
-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: Client had 1 sandwich size bag of melt water. Client used water soluble ink - majority of labels relied on indentation. S+R managers determined and verified placement. PM informed. 4/6/21 SW

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

Report of Analysis

Pace Analytical Services, LLC
1241 Bellevue Street
Suite 9
Green Bay, WI 54302
Attention: Brian Basten

Project Name: #3 Below #3 Above

Project Number: 40224531

Lot Number:**WD08015**

Date Completed:04/21/2021

04/21/2021 5:54 PM
Approved and released by:
Project Manager II: **Karen L. Coonan**

Case Narrative
Pace Analytical Services, LLC
Lot Number: WD08015

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: WD08015
Project Name: #3 Below #3 Above
Project Number: 40224531

Sample Number	Sample ID	Matrix	Date Sampled	Date Received
001	#3 BELOW	Solid	04/01/2021 0940	04/07/2021

(1 sample)

Detection Summary

Pace Analytical Services, LLC

Lot Number: WD08015

Project Name: #3 Below #3 Above

Project Number: 40224531

Sample	Sample ID	Matrix	Parameter	Method	Result	Q	Units	Page

(0 detections)

PFAS by LC/MS/MS

Client: Pace Analytical Services, LLC | Laboratory ID: WD08015-001
Description: #3 BELOW | Matrix: Solid
Date Sampled: 04/01/2021 0940 | Project Name: #3 Below #3 Above | % Solids: 83.4 04/09/2021 0019
Date Received: 04/07/2021 | Project Number: 40224531

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	SOP SPE	PFAS by ID SOP	1	04/11/2021 0116	MMM	04/09/2021 1154	88507

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run
9-chlorohexadecafluoro-3-oxanone-1-sulfonic acid (9Cl-PF3ONS)	756426-58-1	PFAS by ID SOP	ND		2.2	0.54	ug/kg	1
11-chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3...)	763051-92-9	PFAS by ID SOP	ND		2.2	0.54	ug/kg	1
1H, 1H, 2H, 2H-perfluorodecane sulfonic acid (8:2 FTS)	39108-34-4	PFAS by ID SOP	ND		2.2	0.54	ug/kg	1
1H, 1H, 2H, 2H-perfluorooctane sulfonic acid (6:2 FTS)	27619-97-2	PFAS by ID SOP	ND		2.2	0.54	ug/kg	1
1H,1H,2H,2H-perfluorohexane sulfonic acid (4:2 FTS)	757124-72-4	PFAS by ID SOP	ND		2.2	0.54	ug/kg	1
Hexafluoropropylene oxide dimer acid (GenX)	13252-13-6	PFAS by ID SOP	ND		4.4	1.1	ug/kg	1
4,8-dioxa-3H-perfluorononanoic acid (ADONA)	919005-14-4	PFAS by ID SOP	ND		2.2	0.54	ug/kg	1
N-ethylperfluoro-1-octanesulfonamide (EtFOSA)	4151-50-2	PFAS by ID SOP	ND		2.2	0.54	ug/kg	1
N-ethylperfluoro-1-octanesulfonamidoacetic acid (EtFOSAA)	2991-50-6	PFAS by ID SOP	ND		2.2	0.54	ug/kg	1
2-N-ethylperfluoro-1-octanesulfonamido-ethanol (EtFOSE)	1691-99-2	PFAS by ID SOP	ND		2.2	0.54	ug/kg	1
N-methylperfluoro-1-octanesulfonamide (MeFOSA)	31506-32-8	PFAS by ID SOP	ND		2.2	0.54	ug/kg	1
N-methylperfluoro-1-octanesulfonamidoacetic acid (MeFOSAA)	2355-31-9	PFAS by ID SOP	ND		2.2	0.54	ug/kg	1
2-N-methylperfluoro-1-octanesulfonamido-ethanol (MeFOSE)	24448-09-7	PFAS by ID SOP	ND		2.2	0.54	ug/kg	1
Perfluoro-1-butanesulfonic acid (PFBS)	375-73-5	PFAS by ID SOP	ND		1.1	0.22	ug/kg	1
Perfluoro-1-decanesulfonic acid (PFDS)	335-77-3	PFAS by ID SOP	ND		1.1	0.22	ug/kg	1
Perfluoro-1-heptanesulfonic acid (PFHpS)	375-92-8	PFAS by ID SOP	ND		1.1	0.22	ug/kg	1
Perfluoro-1-nonanesulfonic acid (PFNS)	68259-12-1	PFAS by ID SOP	ND		1.1	0.22	ug/kg	1
Perfluoro-1-octanesulfonamide (PFOSA)	754-91-6	PFAS by ID SOP	ND		1.1	0.22	ug/kg	1
Perfluoro-1-pentanesulfonic acid (PFPeS)	2706-91-4	PFAS by ID SOP	ND		1.1	0.22	ug/kg	1
Perfluorododecanesulfonic acid (PFDOS)	79780-39-5	PFAS by ID SOP	ND		1.1	0.22	ug/kg	1
Perfluorohexanesulfonic acid (PFHxS)	355-46-4	PFAS by ID SOP	ND		1.1	0.22	ug/kg	1
Perfluoro-n-butanoic acid (PFBA)	375-22-4	PFAS by ID SOP	ND		1.1	0.22	ug/kg	1
Perfluoro-n-decanoic acid (PFDA)	335-76-2	PFAS by ID SOP	ND		1.1	0.22	ug/kg	1
Perfluoro-n-dodecanoic acid (PFDoA)	307-55-1	PFAS by ID SOP	ND		1.1	0.22	ug/kg	1
Perfluoro-n-heptanoic acid (PFHpA)	375-85-9	PFAS by ID SOP	ND		1.1	0.22	ug/kg	1
Perfluoro-n-hexanoic acid (PFHxA)	307-24-4	PFAS by ID SOP	ND		1.1	0.22	ug/kg	1
Perfluoro-n-nonanoic acid (PFNA)	375-95-1	PFAS by ID SOP	ND		1.1	0.22	ug/kg	1
Perfluoro-n-octanoic acid (PFOA)	335-67-1	PFAS by ID SOP	ND		1.1	0.22	ug/kg	1
Perfluoro-n-pentanoic acid (PFPeA)	2706-90-3	PFAS by ID SOP	ND		1.1	0.22	ug/kg	1
Perfluoro-n-tetradecanoic acid (PFTeDA)	376-06-7	PFAS by ID SOP	ND		1.1	0.22	ug/kg	1
Perfluoro-n-tridecanoic acid (PFTrDA)	72629-94-8	PFAS by ID SOP	ND		1.1	0.22	ug/kg	1
Perfluoro-n-undecanoic acid (PFUdA)	2058-94-8	PFAS by ID SOP	ND		1.1	0.22	ug/kg	1
Perfluorooctanesulfonic acid (PFOS)	1763-23-1	PFAS by ID SOP	ND		1.1	0.22	ug/kg	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
13C2_4:2FTS		84	25-150
13C2_6:2FTS		91	25-150
13C2_8:2FTS		100	25-150
13C2_PFDoA		90	25-150
13C2_PFTeDA		88	25-150
13C3_PFBS		84	25-150
13C3_PFHxS		93	25-150
13C3-HFPO-DA		88	25-150
13C4_PFBA		93	25-150

LOQ = Limit of Quantitation
ND = Not detected at or above the DL
H = Out of holding time
B = Detected in the method blank
N = Recovery is out of criteria
W = Reported on wet weight basis
E = Quantitation of compound exceeded the calibration range
P = The RPD between two GC columns exceeds 40%
DL = Detection Limit
J = Estimated result < LOQ and ≥ DL
Q = Surrogate failure
L = LCS/LCSD failure
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: WD08015-001
Description: #3 BELOW			Matrix: Solid
Date Sampled: 04/01/2021 0940	Project Name: #3 Below #3 Above		% Solids: 83.4 04/09/2021 0019
Date Received: 04/07/2021	Project Number: 40224531		

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
13C4_PFHpA		102	25-150
13C5_PFHxA		91	25-150
13C5_PFPeA		98	25-150
13C6_PFDA		96	25-150
13C7_PFUdA		106	25-150
13C8_PFOA		95	25-150
13C8_PFOS		103	25-150
13C8_PFOSA		97	10-150
13C9_PFNA		96	25-150
d-EtFOSA		135	10-150
d5-EtFOSAA		94	25-150
d9-EtFOSE		95	10-150
d-MeFOSA		111	10-150
d3-MeFOSAA		92	25-150
d7-MeFOSE		105	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

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

QC Summary

PFAS by LC/MS/MS - MB

Sample ID: WQ88507-001
Batch: 88507
Analytical Method: PFAS by ID SOP

Matrix: Solid
Prep Method: SOP SPE
Prep Date: 04/09/2021 1154

Parameter	Result	Q	Dil	LOQ	DL	Units	Analysis Date
9Cl-PF3ONS	ND		1	2.0	0.50	ug/kg	04/11/2021 0023
11Cl-PF3OUdS	ND		1	2.0	0.50	ug/kg	04/11/2021 0023
8:2 FTS	ND		1	2.0	0.50	ug/kg	04/11/2021 0023
6:2 FTS	ND		1	2.0	0.50	ug/kg	04/11/2021 0023
4:2 FTS	ND		1	2.0	0.50	ug/kg	04/11/2021 0023
GenX	ND		1	4.0	1.0	ug/kg	04/11/2021 0023
ADONA	ND		1	2.0	0.50	ug/kg	04/11/2021 0023
EtFOSA	ND		1	2.0	0.50	ug/kg	04/11/2021 0023
EtFOSAA	ND		1	2.0	0.50	ug/kg	04/11/2021 0023
EtFOSE	ND		1	2.0	0.50	ug/kg	04/11/2021 0023
MeFOSA	ND		1	2.0	0.50	ug/kg	04/11/2021 0023
MeFOSAA	ND		1	2.0	0.50	ug/kg	04/11/2021 0023
MeFOSE	ND		1	2.0	0.50	ug/kg	04/11/2021 0023
PFBS	ND		1	1.0	0.20	ug/kg	04/11/2021 0023
PFDS	ND		1	1.0	0.20	ug/kg	04/11/2021 0023
PFHpS	ND		1	1.0	0.20	ug/kg	04/11/2021 0023
PFNS	ND		1	1.0	0.20	ug/kg	04/11/2021 0023
PFOSA	ND		1	1.0	0.20	ug/kg	04/11/2021 0023
PFPeS	ND		1	1.0	0.20	ug/kg	04/11/2021 0023
PFDOS	ND		1	1.0	0.20	ug/kg	04/11/2021 0023
PFHxS	ND		1	1.0	0.20	ug/kg	04/11/2021 0023
PFBA	ND		1	1.0	0.20	ug/kg	04/11/2021 0023
PFDA	ND		1	1.0	0.20	ug/kg	04/11/2021 0023
PFDoA	ND		1	1.0	0.20	ug/kg	04/11/2021 0023
PFHpA	ND		1	1.0	0.20	ug/kg	04/11/2021 0023
PFHxA	ND		1	1.0	0.20	ug/kg	04/11/2021 0023
PFNA	ND		1	1.0	0.20	ug/kg	04/11/2021 0023
PFOA	ND		1	1.0	0.20	ug/kg	04/11/2021 0023
PFPeA	ND		1	1.0	0.20	ug/kg	04/11/2021 0023
PFTeDA	ND		1	1.0	0.20	ug/kg	04/11/2021 0023
PFTrDA	ND		1	1.0	0.20	ug/kg	04/11/2021 0023
PFUdA	ND		1	1.0	0.20	ug/kg	04/11/2021 0023
PFOS	ND		1	1.0	0.20	ug/kg	04/11/2021 0023

Surrogate	Q	% Rec	Acceptance Limit
13C2_4:2FTS		91	25-150
13C2_6:2FTS		96	25-150
13C2_8:2FTS		96	25-150
13C2_PFDoA		92	25-150
13C2_PFTeDA		88	25-150
13C3_PFBS		72	25-150
13C3_PFHxS		86	25-150
13C3-HFPO-DA		88	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: WQ88507-001
Batch: 88507
Analytical Method: PFAS by ID SOP

Matrix: Solid
Prep Method: SOP SPE
Prep Date: 04/09/2021 1154

Surrogate	Q	% Rec	Acceptance Limit
13C4_PFBA		89	25-150
13C4_PFHpA		101	25-150
13C5_PFHxA		89	25-150
13C5_PFPeA		96	25-150
13C6_PFDA		91	25-150
13C7_PFUdA		98	25-150
13C8_PFOA		94	25-150
13C8_PFOS		96	25-150
13C8_PFOSA		87	10-150
13C9_PFNA		90	25-150
d-EtFOSA		111	10-150
d5-EtFOSAA		90	25-150
d9-EtFOSE		101	10-150
d-MeFOSA		102	10-150
d3-MeFOSAA		90	25-150
d7-MeFOSE		106	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: WQ88507-002
Batch: 88507
Analytical Method: PFAS by ID SOP

Matrix: Solid
Prep Method: SOP SPE
Prep Date: 04/09/2021 1154

Parameter	Spike Amount (ug/kg)	Result (ug/kg)	Q	Dil	% Rec	%Rec Limit	Analysis Date
9Cl-PF3ONS	1.9	1.7		1	93	50-150	04/11/2021 0034
11Cl-PF3OUdS	1.9	1.7		1	88	50-150	04/11/2021 0034
8:2 FTS	1.9	2.3		1	122	50-150	04/11/2021 0034
6:2 FTS	1.9	1.9		1	101	50-150	04/11/2021 0034
4:2 FTS	1.9	2.0		1	108	50-150	04/11/2021 0034
GenX	4.0	4.0		1	100	50-150	04/11/2021 0034
ADONA	1.9	1.8		1	94	50-150	04/11/2021 0034
EtFOSA	2.0	1.7		1	86	50-150	04/11/2021 0034
EtFOSAA	2.0	2.0		1	101	50-150	04/11/2021 0034
EtFOSE	2.0	1.7		1	83	50-150	04/11/2021 0034
MeFOSA	2.0	2.0		1	102	50-150	04/11/2021 0034
MeFOSAA	2.0	1.8		1	91	50-150	04/11/2021 0034
MeFOSE	2.0	2.0		1	101	50-150	04/11/2021 0034
PFBS	1.8	2.0		1	111	50-150	04/11/2021 0034
PFDS	1.9	1.6		1	81	50-150	04/11/2021 0034
PFHpS	1.9	1.7		1	92	50-150	04/11/2021 0034
PFNS	1.9	1.9		1	98	50-150	04/11/2021 0034
PFOSA	2.0	1.9		1	93	50-150	04/11/2021 0034
PFPeS	1.9	2.3		1	121	50-150	04/11/2021 0034
PFDOS	1.9	2.1		1	106	50-150	04/11/2021 0034
PFHxS	1.8	1.8		1	98	50-150	04/11/2021 0034
PFBA	2.0	2.0		1	102	50-150	04/11/2021 0034
PFDA	2.0	1.8		1	91	50-150	04/11/2021 0034
PFDoA	2.0	1.8		1	92	50-150	04/11/2021 0034
PFHpA	2.0	1.8		1	90	50-150	04/11/2021 0034
PFHxA	2.0	1.9		1	94	50-150	04/11/2021 0034
PFNA	2.0	2.0		1	98	50-150	04/11/2021 0034
PFOA	2.0	2.0		1	101	50-150	04/11/2021 0034
PFPeA	2.0	1.8		1	91	50-150	04/11/2021 0034
PFTeDA	2.0	2.0		1	99	50-150	04/11/2021 0034
PFTrDA	2.0	2.0		1	102	50-150	04/11/2021 0034
PFUdA	2.0	2.0		1	99	50-150	04/11/2021 0034
PFOS	1.9	1.6		1	86	50-150	04/11/2021 0034

Surrogate	Q	% Rec	Acceptance Limit
13C2_4:2FTS		85	25-150
13C2_6:2FTS		86	25-150
13C2_8:2FTS		85	25-150
13C2_PFDoA		87	25-150
13C2_PFTeDA		82	25-150
13C3_PFBS		70	25-150
13C3_PFHxS		83	25-150
13C3-HFPO-DA		84	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 - LCS

Sample ID: WQ88507-002
Batch: 88507
Analytical Method: PFAS by ID SOP

Matrix: Solid
Prep Method: SOP SPE
Prep Date: 04/09/2021 1154

Surrogate	Q	% Rec	Acceptance Limit
13C4_PFBA		87	25-150
13C4_PFHpA		96	25-150
13C5_PFHxA		91	25-150
13C5_PFPeA		92	25-150
13C6_PFDA		89	25-150
13C7_PFUdA		94	25-150
13C8_PFOA		92	25-150
13C8_PFOS		89	25-150
13C8_PFOSA		87	10-150
13C9_PFNA		87	25-150
d-EtFOSA		101	10-150
d5-EtFOSAA		84	25-150
d9-EtFOSE		90	10-150
d-MeFOSA		92	10-150
d3-MeFOSAA		85	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: 4/6/2021
Results Requested By: 4/20/2021

Workorder: 40224531 Workorder Name: #3 BELOW, #3 ABOVE

Report To

Brian Basten
Pace Analytical Green Bay
1241 Bellevue Street
Suite 9
Green Bay, WI 54302
Phone (920)469-2436

Subcontract To

Pace Analytical West Columbia
106 Vantage Point Drive
West Columbia, SC 29172
Phone (803)791-9700

WD08015

KLC2

Item	Sample ID	Sample Type	Collect Date/Time	Lab ID	Matrix	Preserved Containers: Unpreserved						Requested Analysis: SVOC 8270 SIM	LAB USE ONLY
1	#3 BELOW	PS	4/1/2021 09:40	40224531001	Solid	1						X	
2													
3													
4													
5													

Comments

Transfers	Released By	Date/Time	Received By	Date/Time
1	[signature]	4/6/21 1600		
2				
3	UPS	4/7/21 1148	[signature]	4/7/21 1148

Cooler Temperature on Receipt 2.7 °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

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

Pace Analytical®
www.pacelabs.com

CHAIN OF CUSTODY

402245 31

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

(Please Print Clearly)	
Company Name:	Marinette Marine
Branch/Location:	
Project Contact:	MaKayla Jacobs
Phone:	715-245-1931
Project Number:	
Project Name:	
Project State:	WI
Sampled By (Print):	Warren & MaKayla
Sampled By (Sign):	
PO #:	Regulatory Program:

Quote #:	
Mail To Contact:	
Mail To Company:	
Mail To Address:	
Invoice To Contact:	
Invoice To Company:	
Invoice To Address:	
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

FILTERED? (YES/NO)
PRESERVATION (CODE)*

PACE LAB #	CLIENT FIELD ID	COLLECTION DATE	COLLECTION TIME	MATRIX	Analyses Requested: PVOC/VOC	PCRA metals	PAHs	PCBs	PFAS	CLIENT COMMENTS	LAB COMMENTS (Lab Use Only)	Profile #
001	#3 below	4-1-21	9:40	S	X	X	X	X	X			
002	#3 above	4-1-21	9:40	S	X	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:
Email #2:
Telephone:
Fax:

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

Relinquished By:	Date/Time:	Received By:	Date/Time:
MaKayla Jacobs	4-5-21 1:30pm		
UPS	4/6/21 1000		4/6/21 1000

PACE Project No.: 402245 31
Receipt Temp = 11 °C
Sample Receipt pH OK / Adjusted
Cooler Custody Seal Present / Not Present
Intact / Not Intact

Version 6.0 06/14/20
ORIGINAL

PACE ANALYTICAL SERVICES, LLC

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

Sample Preservation Receipt Form

Client Name: Marinette Marine Project # 40224531

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

Initial when completed: Date/ Time:

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

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										1								1		1			1										2.5 / 5 / 10
002										1								1		1			1										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																																	2.5 / 5 / 10
009																																	2.5 / 5 / 10
010																																	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																													4	1			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	

F-GB-C-046-Rev.03 (11Feb2020) Sample Preservation Receipt Form

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

PaceAnalytical® 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)

Client Name: Marinette Marine Project #:

WO#: 40224531

40224531

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

Tracking #: 12 578 899 01 6555 8376

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 ① Melt water only 4-6-21 SW

Thermometer Used SR - 104 Type of Ice: Wet Blue Dry (None) ① ☐ Samples on ice, cooling process has begun

Cooler Temperature Uncorr: 11 /Corr: 11

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

Person examining contents: Date: 4-6-21 /Initials: SW

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. 4 CC 4-6-21
Chain of Custody Filled Out:	☐Yes ☒No ☐N/A	2. Pg#, Filter, Preserve, Mail Inv. Info 4-6-21 SW
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. See Comments. 4-6-21 SW
-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:

Person Contacted: Date/Time: If checked, see attached form for additional comments ☐

Comments/ Resolution: Client had 1 sandwich size bag of melt water. Client used water soluble ink - majority of labels relied on indentation. S+R managers determined and verified placement. PM informed.

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

Page 2 of 2

PaceAnalytical

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 / 04/08/2021 Lot #: WD08015

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: 21-443

2.7 / 2.7 °C NA / NA °C NA / MA °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: H2SO4, HNO3, 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: 04/08/2021

Comments:

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

April 19, 2021

Makayla Jacobs
Fincantieri Marinette Marine
1600 Ely Street
Marinette, WI 54143

RE: Project: #4 BELOW
Pace Project No.: 40224476

Dear Makayla Jacobs:

Enclosed are the analytical results for sample(s) received by the laboratory on April 03, 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,

Steven Mleczko for
Brian Basten
brian.basten@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: #4 BELOW
Pace Project No.: 40224476

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: #4 BELOW
Pace Project No.: 40224476

Lab ID	Sample ID	Matrix	Date Collected	Date Received
40224476001	**#4 BELOW**	Solid	04/01/21 09:00	04/03/21 10:35

REPORT OF LABORATORY ANALYSIS

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

SAMPLE ANALYTE COUNT

Project: #4 BELOW
Pace Project No.: 40224476

Lab ID	Sample ID	Method	Analysts	Analytes Reported
40224476001	**#4 BELOW**	EPA 8082	BLM	10
		EPA 6010	TXW	7
		EPA 7471	AJT	1
		EPA 8270E by SIM	JJB	20
		EPA 8260	MDS	64
		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

SUMMARY OF DETECTION

Project: #4 BELOW
Pace Project No.: 40224476

Lab Sample ID / Method	Client Sample ID / Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
40224476001	**#4 BELOW**					
EPA 8082	PCB-1242 (Aroclor 1242)	110	ug/kg	75.2	04/10/21 18:48	
EPA 8082	PCB-1254 (Aroclor 1254)	58.5J	ug/kg	75.2	04/10/21 18:48	
EPA 8082	PCB, Total	169	ug/kg	75.2	04/10/21 18:48	
EPA 6010	Arsenic	18.1	mg/kg	3.6	04/07/21 13:33	
EPA 6010	Barium	178	mg/kg	0.72	04/07/21 13:33	
EPA 6010	Cadmium	0.88	mg/kg	0.72	04/07/21 13:33	
EPA 6010	Chromium	16.1	mg/kg	1.4	04/07/21 13:33	
EPA 6010	Lead	182	mg/kg	2.9	04/07/21 13:33	
EPA 6010	Silver	0.65J	mg/kg	1.4	04/07/21 13:33	
EPA 7471	Mercury	0.30	mg/kg	0.047	04/13/21 13:06	
EPA 8270E by SIM	Acenaphthene	88.9J	ug/kg	125	04/14/21 18:00	
EPA 8270E by SIM	Acenaphthylene	123J	ug/kg	125	04/14/21 18:00	
EPA 8270E by SIM	Anthracene	273	ug/kg	125	04/14/21 18:00	
EPA 8270E by SIM	Benzo(a)anthracene	615	ug/kg	125	04/14/21 18:00	
EPA 8270E by SIM	Benzo(a)pyrene	579	ug/kg	125	04/14/21 18:00	
EPA 8270E by SIM	Benzo(b)fluoranthene	715	ug/kg	125	04/14/21 18:00	
EPA 8270E by SIM	Benzo(g,h,i)perylene	386	ug/kg	125	04/14/21 18:00	
EPA 8270E by SIM	Benzo(k)fluoranthene	323	ug/kg	125	04/14/21 18:00	
EPA 8270E by SIM	Chrysene	644	ug/kg	125	04/14/21 18:00	L2
EPA 8270E by SIM	Dibenz(a,h)anthracene	89.6J	ug/kg	125	04/14/21 18:00	
EPA 8270E by SIM	Fluoranthene	1310	ug/kg	125	04/14/21 18:00	
EPA 8270E by SIM	Fluorene	151	ug/kg	125	04/14/21 18:00	
EPA 8270E by SIM	Indeno(1,2,3-cd)pyrene	337	ug/kg	125	04/14/21 18:00	
EPA 8270E by SIM	1-Methylnaphthalene	170	ug/kg	125	04/14/21 18:00	
EPA 8270E by SIM	2-Methylnaphthalene	201	ug/kg	125	04/14/21 18:00	
EPA 8270E by SIM	Naphthalene	371	ug/kg	125	04/14/21 18:00	
EPA 8270E by SIM	Phenanthrene	943	ug/kg	125	04/14/21 18:00	
EPA 8270E by SIM	Pyrene	1130	ug/kg	125	04/14/21 18:00	
EPA 8260	1,2,4-Trimethylbenzene	181	ug/kg	100	04/09/21 21:11	
EPA 8260	1,3,5-Trimethylbenzene	39.4J	ug/kg	100	04/09/21 21:11	
EPA 8260	1,4-Dichlorobenzene	76.2J	ug/kg	100	04/09/21 21:11	
EPA 8260	Chlorobenzene	162	ug/kg	100	04/09/21 21:11	
EPA 8260	Methylene Chloride	64.3J	ug/kg	100	04/09/21 21:11	
EPA 8260	Naphthalene	80.5J	ug/kg	501	04/09/21 21:11	
EPA 8260	Toluene	51.4J	ug/kg	100	04/09/21 21:11	
EPA 8260	m&p-Xylene	147J	ug/kg	200	04/09/21 21:11	
EPA 8260	o-Xylene	33.7J	ug/kg	100	04/09/21 21:11	
EPA 8260	sec-Butylbenzene	35.2J	ug/kg	100	04/09/21 21:11	
ASTM D2974-87	Percent Moisture	33.4	%	0.10	04/05/21 14:08	

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

ANALYTICAL RESULTS

Project: #4 BELOW
Pace Project No.: 40224476

Sample: #4 BELOW **Lab ID: 40224476001** Collected: 04/01/21 09:00 Received: 04/03/21 10:35 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
8082 GCS PCB	Analytical Method: EPA 8082 Preparation Method: EPA 3541 Pace Analytical Services - Green Bay								
PCB-1016 (Aroclor 1016)	**<22.9**	ug/kg	75.2	22.9	1	04/06/21 13:31	04/10/21 18:48	12674-11-2	
PCB-1221 (Aroclor 1221)	**<22.9**	ug/kg	75.2	22.9	1	04/06/21 13:31	04/10/21 18:48	11104-28-2	
PCB-1232 (Aroclor 1232)	**<22.9**	ug/kg	75.2	22.9	1	04/06/21 13:31	04/10/21 18:48	11141-16-5	
PCB-1242 (Aroclor 1242)	**110**	ug/kg	75.2	22.9	1	04/06/21 13:31	04/10/21 18:48	53469-21-9	
PCB-1248 (Aroclor 1248)	**<22.9**	ug/kg	75.2	22.9	1	04/06/21 13:31	04/10/21 18:48	12672-29-6	
PCB-1254 (Aroclor 1254)	**58.5J**	ug/kg	75.2	22.9	1	04/06/21 13:31	04/10/21 18:48	11097-69-1	
PCB-1260 (Aroclor 1260)	**<22.9**	ug/kg	75.2	22.9	1	04/06/21 13:31	04/10/21 18:48	11096-82-5	
PCB, Total	**169**	ug/kg	75.2	22.9	1	04/06/21 13:31	04/10/21 18:48	1336-36-3	
Surrogates									
Tetrachloro-m-xylene (S)	77	%	67-102		1	04/06/21 13:31	04/10/21 18:48	877-09-8	
Decachlorobiphenyl (S)	46	%	47-114		1	04/06/21 13:31	04/10/21 18:48	2051-24-3	S0
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3050 Pace Analytical Services - Green Bay								
Arsenic	**18.1**	mg/kg	3.6	2.1	1	04/06/21 07:42	04/07/21 13:33	7440-38-2	
Barium	**178**	mg/kg	0.72	0.22	1	04/06/21 07:42	04/07/21 13:33	7440-39-3	
Cadmium	**0.88**	mg/kg	0.72	0.19	1	04/06/21 07:42	04/07/21 13:33	7440-43-9	
Chromium	**16.1**	mg/kg	1.4	0.40	1	04/06/21 07:42	04/07/21 13:33	7440-47-3	
Lead	**182**	mg/kg	2.9	0.86	1	04/06/21 07:42	04/07/21 13:33	7439-92-1	
Selenium	**<1.9**	mg/kg	5.7	1.9	1	04/06/21 07:42	04/07/21 13:33	7782-49-2	
Silver	**0.65J**	mg/kg	1.4	0.44	1	04/06/21 07:42	04/07/21 13:33	7440-22-4	
7471 Mercury	Analytical Method: EPA 7471 Preparation Method: EPA 7471 Pace Analytical Services - Green Bay								
Mercury	**0.30**	mg/kg	0.047	0.013	1	04/13/21 08:56	04/13/21 13:06	7439-97-6	
8270E MSSV PAH by SIM	Analytical Method: EPA 8270E by SIM Preparation Method: EPA 3546 Pace Analytical Services - Green Bay								
Acenaphthene	**88.9J**	ug/kg	125	16.3	5	04/14/21 08:29	04/14/21 18:00	83-32-9	
Acenaphthylene	**123J**	ug/kg	125	15.8	5	04/14/21 08:29	04/14/21 18:00	208-96-8	
Anthracene	**273**	ug/kg	125	15.6	5	04/14/21 08:29	04/14/21 18:00	120-12-7	
Benzo(a)anthracene	**615**	ug/kg	125	16.2	5	04/14/21 08:29	04/14/21 18:00	56-55-3	
Benzo(a)pyrene	**579**	ug/kg	125	14.2	5	04/14/21 08:29	04/14/21 18:00	50-32-8	
Benzo(b)fluoranthene	**715**	ug/kg	125	17.4	5	04/14/21 08:29	04/14/21 18:00	205-99-2	
Benzo(g,h,i)perylene	**386**	ug/kg	125	22.0	5	04/14/21 08:29	04/14/21 18:00	191-24-2	
Benzo(k)fluoranthene	**323**	ug/kg	125	16.0	5	04/14/21 08:29	04/14/21 18:00	207-08-9	
Chrysene	**644**	ug/kg	125	23.6	5	04/14/21 08:29	04/14/21 18:00	218-01-9	L2
Dibenz(a,h)anthracene	**89.6J**	ug/kg	125	17.4	5	04/14/21 08:29	04/14/21 18:00	53-70-3	
Fluoranthene	**1310**	ug/kg	125	14.8	5	04/14/21 08:29	04/14/21 18:00	206-44-0	
Fluorene	**151**	ug/kg	125	15.0	5	04/14/21 08:29	04/14/21 18:00	86-73-7	
Indeno(1,2,3-cd)pyrene	**337**	ug/kg	125	26.1	5	04/14/21 08:29	04/14/21 18:00	193-39-5	
1-Methylnaphthalene	**170**	ug/kg	125	18.3	5	04/14/21 08:29	04/14/21 18:00	90-12-0	
2-Methylnaphthalene	**201**	ug/kg	125	18.3	5	04/14/21 08:29	04/14/21 18:00	91-57-6	
Naphthalene	**371**	ug/kg	125	12.2	5	04/14/21 08:29	04/14/21 18:00	91-20-3	

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: #4 BELOW
Pace Project No.: 40224476

Sample: #4 BELOW **Lab ID: 40224476001** Collected: 04/01/21 09:00 Received: 04/03/21 10:35 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 PAH by SIM	Analytical Method: EPA 8270E by SIM Preparation Method: EPA 3546 Pace Analytical Services - Green Bay								
Phenanthrene	**943**	ug/kg	125	14.4	5	04/14/21 08:29	04/14/21 18:00	85-01-8	
Pyrene	**1130**	ug/kg	125	18.4	5	04/14/21 08:29	04/14/21 18:00	129-00-0	
Surrogates									
2-Fluorobiphenyl (S)	51	%	36-86		5	04/14/21 08:29	04/14/21 18:00	321-60-8	
Terphenyl-d14 (S)	54	%	41-97		5	04/14/21 08:29	04/14/21 18:00	1718-51-0	
8260 MSV Med Level Normal List	Analytical Method: EPA 8260 Preparation Method: EPA 5035/5030B Pace Analytical Services - Green Bay								
1,1,1,2-Tetrachloroethane	**<24.1**	ug/kg	100	24.1	1	04/09/21 10:15	04/09/21 21:11	630-20-6	
1,1,1-Trichloroethane	**<25.7**	ug/kg	100	25.7	1	04/09/21 10:15	04/09/21 21:11	71-55-6	
1,1,2,2-Tetrachloroethane	**<36.3**	ug/kg	100	36.3	1	04/09/21 10:15	04/09/21 21:11	79-34-5	
1,1,2-Trichloroethane	**<36.5**	ug/kg	100	36.5	1	04/09/21 10:15	04/09/21 21:11	79-00-5	
1,1-Dichloroethane	**<25.7**	ug/kg	100	25.7	1	04/09/21 10:15	04/09/21 21:11	75-34-3	
1,1-Dichloroethene	**<33.3**	ug/kg	100	33.3	1	04/09/21 10:15	04/09/21 21:11	75-35-4	
1,1-Dichloropropene	**<32.5**	ug/kg	100	32.5	1	04/09/21 10:15	04/09/21 21:11	563-58-6	
1,2,3-Trichlorobenzene	**<112**	ug/kg	501	112	1	04/09/21 10:15	04/09/21 21:11	87-61-6	
1,2,3-Trichloropropane	**<48.7**	ug/kg	100	48.7	1	04/09/21 10:15	04/09/21 21:11	96-18-4	
1,2,4-Trichlorobenzene	**<82.6**	ug/kg	501	82.6	1	04/09/21 10:15	04/09/21 21:11	120-82-1	
1,2,4-Trimethylbenzene	**181**	ug/kg	100	29.9	1	04/09/21 10:15	04/09/21 21:11	95-63-6	
1,2-Dibromo-3-chloropropane	**<77.8**	ug/kg	501	77.8	1	04/09/21 10:15	04/09/21 21:11	96-12-8	
1,2-Dibromoethane (EDB)	**<27.5**	ug/kg	100	27.5	1	04/09/21 10:15	04/09/21 21:11	106-93-4	
1,2-Dichlorobenzene	**<31.1**	ug/kg	100	31.1	1	04/09/21 10:15	04/09/21 21:11	95-50-1	
1,2-Dichloroethane	**<23.1**	ug/kg	100	23.1	1	04/09/21 10:15	04/09/21 21:11	107-06-2	
1,2-Dichloropropane	**<23.9**	ug/kg	100	23.9	1	04/09/21 10:15	04/09/21 21:11	78-87-5	
1,3,5-Trimethylbenzene	**39.4J**	ug/kg	100	32.3	1	04/09/21 10:15	04/09/21 21:11	108-67-8	
1,3-Dichlorobenzene	**<27.5**	ug/kg	100	27.5	1	04/09/21 10:15	04/09/21 21:11	541-73-1	
1,3-Dichloropropane	**<21.8**	ug/kg	100	21.8	1	04/09/21 10:15	04/09/21 21:11	142-28-9	
1,4-Dichlorobenzene	**76.2J**	ug/kg	100	27.5	1	04/09/21 10:15	04/09/21 21:11	106-46-7	
2,2-Dichloropropane	**<27.1**	ug/kg	100	27.1	1	04/09/21 10:15	04/09/21 21:11	594-20-7	
2-Chlorotoluene	**<32.5**	ug/kg	100	32.5	1	04/09/21 10:15	04/09/21 21:11	95-49-8	
4-Chlorotoluene	**<38.1**	ug/kg	100	38.1	1	04/09/21 10:15	04/09/21 21:11	106-43-4	
Benzene	**<23.9**	ug/kg	40.1	23.9	1	04/09/21 10:15	04/09/21 21:11	71-43-2	
Bromobenzene	**<39.1**	ug/kg	100	39.1	1	04/09/21 10:15	04/09/21 21:11	108-86-1	
Bromochloromethane	**<27.5**	ug/kg	100	27.5	1	04/09/21 10:15	04/09/21 21:11	74-97-5	
Bromodichloromethane	**<23.9**	ug/kg	100	23.9	1	04/09/21 10:15	04/09/21 21:11	75-27-4	
Bromoform	**<441**	ug/kg	501	441	1	04/09/21 10:15	04/09/21 21:11	75-25-2	
Bromomethane	**<141**	ug/kg	501	141	1	04/09/21 10:15	04/09/21 21:11	74-83-9	
Carbon tetrachloride	**<22.0**	ug/kg	100	22.0	1	04/09/21 10:15	04/09/21 21:11	56-23-5	
Chlorobenzene	**162**	ug/kg	100	12.0	1	04/09/21 10:15	04/09/21 21:11	108-90-7	
Chloroethane	**<42.3**	ug/kg	501	42.3	1	04/09/21 10:15	04/09/21 21:11	75-00-3	
Chloroform	**<71.8**	ug/kg	501	71.8	1	04/09/21 10:15	04/09/21 21:11	67-66-3	
Chloromethane	**<38.1**	ug/kg	100	38.1	1	04/09/21 10:15	04/09/21 21:11	74-87-3	
Dibromochloromethane	**<343**	ug/kg	501	343	1	04/09/21 10:15	04/09/21 21:11	124-48-1	
Dibromomethane	**<29.7**	ug/kg	100	29.7	1	04/09/21 10:15	04/09/21 21:11	74-95-3	

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: #4 BELOW
Pace Project No.: 40224476

Sample: #4 BELOW **Lab ID: 40224476001** Collected: 04/01/21 09:00 Received: 04/03/21 10:35 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								
Dichlorodifluoromethane	**<43.1**	ug/kg	100	43.1	1	04/09/21 10:15	04/09/21 21:11	75-71-8	
Diisopropyl ether	**<24.9**	ug/kg	100	24.9	1	04/09/21 10:15	04/09/21 21:11	108-20-3	
Ethylbenzene	**<23.9**	ug/kg	100	23.9	1	04/09/21 10:15	04/09/21 21:11	100-41-4	
Hexachloro-1,3-butadiene	**<199**	ug/kg	501	199	1	04/09/21 10:15	04/09/21 21:11	87-68-3	
Isopropylbenzene (Cumene)	**<27.1**	ug/kg	100	27.1	1	04/09/21 10:15	04/09/21 21:11	98-82-8	
Methyl-tert-butyl ether	**<29.5**	ug/kg	100	29.5	1	04/09/21 10:15	04/09/21 21:11	1634-04-4	
Methylene Chloride	**64.3J**	ug/kg	100	27.9	1	04/09/21 10:15	04/09/21 21:11	75-09-2	
Naphthalene	**80.5J**	ug/kg	501	31.3	1	04/09/21 10:15	04/09/21 21:11	91-20-3	
Styrene	**<25.7**	ug/kg	100	25.7	1	04/09/21 10:15	04/09/21 21:11	100-42-5	
Tetrachloroethene	**<38.9**	ug/kg	100	38.9	1	04/09/21 10:15	04/09/21 21:11	127-18-4	
Toluene	**51.4J**	ug/kg	100	25.3	1	04/09/21 10:15	04/09/21 21:11	108-88-3	
Trichloroethene	**<37.5**	ug/kg	100	37.5	1	04/09/21 10:15	04/09/21 21:11	79-01-6	
Trichlorofluoromethane	**<29.1**	ug/kg	100	29.1	1	04/09/21 10:15	04/09/21 21:11	75-69-4	
Vinyl chloride	**<20.2**	ug/kg	100	20.2	1	04/09/21 10:15	04/09/21 21:11	75-01-4	
cis-1,2-Dichloroethene	**<21.4**	ug/kg	100	21.4	1	04/09/21 10:15	04/09/21 21:11	156-59-2	
cis-1,3-Dichloropropene	**<66.1**	ug/kg	501	66.1	1	04/09/21 10:15	04/09/21 21:11	10061-01-5	
m&p-Xylene	**147J**	ug/kg	200	42.3	1	04/09/21 10:15	04/09/21 21:11	179601-23-1	
n-Butylbenzene	**<45.9**	ug/kg	100	45.9	1	04/09/21 10:15	04/09/21 21:11	104-51-8	
n-Propylbenzene	**<24.1**	ug/kg	100	24.1	1	04/09/21 10:15	04/09/21 21:11	103-65-1	
o-Xylene	**33.7J**	ug/kg	100	30.1	1	04/09/21 10:15	04/09/21 21:11	95-47-6	
p-Isopropyltoluene	**<30.5**	ug/kg	100	30.5	1	04/09/21 10:15	04/09/21 21:11	99-87-6	
sec-Butylbenzene	**35.2J**	ug/kg	100	24.5	1	04/09/21 10:15	04/09/21 21:11	135-98-8	
tert-Butylbenzene	**<31.5**	ug/kg	100	31.5	1	04/09/21 10:15	04/09/21 21:11	98-06-6	
trans-1,2-Dichloroethene	**<21.6**	ug/kg	100	21.6	1	04/09/21 10:15	04/09/21 21:11	156-60-5	
trans-1,3-Dichloropropene	**<287**	ug/kg	501	287	1	04/09/21 10:15	04/09/21 21:11	10061-02-6	
Surrogates									
Toluene-d8 (S)	124	%	67-159		1	04/09/21 10:15	04/09/21 21:11	2037-26-5	
4-Bromofluorobenzene (S)	125	%	66-153		1	04/09/21 10:15	04/09/21 21:11	460-00-4	
1,2-Dichlorobenzene-d4 (S)	116	%	82-158		1	04/09/21 10:15	04/09/21 21:11	2199-69-1	
Percent Moisture	Analytical Method: ASTM D2974-87 Pace Analytical Services - Green Bay								
Percent Moisture	**33.4**	%	0.10	0.10	1		04/05/21 14:08		

REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL DATA

Project: #4 BELOW
Pace Project No.: 40224476

QC Batch: 382137
QC Batch Method: EPA 7471
Analysis Method: EPA 7471
Analysis Description: 7471 Mercury
Laboratory: Pace Analytical Services - Green Bay
Associated Lab Samples: 40224476001

METHOD BLANK: 2204424 Matrix: Solid
Associated Lab Samples: 40224476001

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Mercury	mg/kg	<0.010	0.035	04/13/21 12:06	

LABORATORY CONTROL SAMPLE: 2204425

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Mercury	mg/kg	0.83	0.83	99	85-115	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2204426 2204427

Parameter	Units	40224820013 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Mercury	mg/kg	0.014J	1	1.1	1.0	1.0	98	97	85-115	1	20	

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: #4 BELOW
Pace Project No.: 40224476

QC Batch: 381497
QC Batch Method: EPA 3050
Analysis Method: EPA 6010
Analysis Description: 6010 MET
Laboratory: Pace Analytical Services - Green Bay
Associated Lab Samples: 40224476001

METHOD BLANK: 2200434 Matrix: Solid
Associated Lab Samples: 40224476001

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Arsenic	mg/kg	<1.5	2.5	04/07/21 11:43	
Barium	mg/kg	<0.15	0.50	04/07/21 11:43	
Cadmium	mg/kg	<0.13	0.50	04/07/21 11:43	
Chromium	mg/kg	<0.28	1.0	04/07/21 11:43	
Lead	mg/kg	<0.60	2.0	04/07/21 11:43	
Selenium	mg/kg	<1.3	4.0	04/07/21 11:43	
Silver	mg/kg	<0.31	1.0	04/07/21 11:43	

LABORATORY CONTROL SAMPLE: 2200435

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Arsenic	mg/kg	50	50.8	102	80-120	
Barium	mg/kg	50	49.6	99	80-120	
Cadmium	mg/kg	50	50.0	100	80-120	
Chromium	mg/kg	50	51.9	104	80-120	
Lead	mg/kg	50	51.0	102	80-120	
Selenium	mg/kg	50	51.3	103	80-120	
Silver	mg/kg	25	23.7	95	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2200436 2200437

Parameter	Units	40224473001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Arsenic	mg/kg	18.5	60	60.2	77.7	77.6	99	98	75-125	0	20	
Barium	mg/kg	26.8	60	60.2	88.1	87.6	102	101	75-125	1	20	
Cadmium	mg/kg	0.29J	60	60.2	59.2	59.1	98	98	75-125	0	20	
Chromium	mg/kg	8.5	60	60.2	68.4	69.6	100	101	75-125	2	20	
Lead	mg/kg	62.9	60	60.2	119	116	94	89	75-125	3	20	
Selenium	mg/kg	<1.6	60	60.2	60.5	61.4	101	102	75-125	1	20	
Silver	mg/kg	<0.37	30	30.1	28.2	28.3	93	94	75-125	0	20	

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: #4 BELOW
Pace Project No.: 40224476

QC Batch: 382037
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: 40224476001

METHOD BLANK: 2203495 Matrix: Solid
Associated Lab Samples: 40224476001

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1,1,2-Tetrachloroethane	ug/kg	<12.0	50.0	04/09/21 16:29	
1,1,1-Trichloroethane	ug/kg	<12.8	50.0	04/09/21 16:29	
1,1,2,2-Tetrachloroethane	ug/kg	<18.1	50.0	04/09/21 16:29	
1,1,2-Trichloroethane	ug/kg	<18.2	50.0	04/09/21 16:29	
1,1-Dichloroethane	ug/kg	<12.8	50.0	04/09/21 16:29	
1,1-Dichloroethene	ug/kg	<16.6	50.0	04/09/21 16:29	
1,1-Dichloropropene	ug/kg	<16.2	50.0	04/09/21 16:29	
1,2,3-Trichlorobenzene	ug/kg	<55.7	250	04/09/21 16:29	
1,2,3-Trichloropropane	ug/kg	<24.3	50.0	04/09/21 16:29	
1,2,4-Trichlorobenzene	ug/kg	<41.2	250	04/09/21 16:29	
1,2,4-Trimethylbenzene	ug/kg	<14.9	50.0	04/09/21 16:29	
1,2-Dibromo-3-chloropropane	ug/kg	<38.8	250	04/09/21 16:29	
1,2-Dibromoethane (EDB)	ug/kg	<13.7	50.0	04/09/21 16:29	
1,2-Dichlorobenzene	ug/kg	<15.5	50.0	04/09/21 16:29	
1,2-Dichloroethane	ug/kg	<11.5	50.0	04/09/21 16:29	
1,2-Dichloropropane	ug/kg	<11.9	50.0	04/09/21 16:29	
1,3,5-Trimethylbenzene	ug/kg	<16.1	50.0	04/09/21 16:29	
1,3-Dichlorobenzene	ug/kg	<13.7	50.0	04/09/21 16:29	
1,3-Dichloropropane	ug/kg	<10.9	50.0	04/09/21 16:29	
1,4-Dichlorobenzene	ug/kg	<13.7	50.0	04/09/21 16:29	
2,2-Dichloropropane	ug/kg	<13.5	50.0	04/09/21 16:29	
2-Chlorotoluene	ug/kg	<16.2	50.0	04/09/21 16:29	
4-Chlorotoluene	ug/kg	<19.0	50.0	04/09/21 16:29	
Benzene	ug/kg	<11.9	20.0	04/09/21 16:29	
Bromobenzene	ug/kg	<19.5	50.0	04/09/21 16:29	
Bromochloromethane	ug/kg	<13.7	50.0	04/09/21 16:29	
Bromodichloromethane	ug/kg	<11.9	50.0	04/09/21 16:29	
Bromoform	ug/kg	<220	250	04/09/21 16:29	
Bromomethane	ug/kg	<70.1	250	04/09/21 16:29	
Carbon tetrachloride	ug/kg	<11.0	50.0	04/09/21 16:29	
Chlorobenzene	ug/kg	<6.0	50.0	04/09/21 16:29	
Chloroethane	ug/kg	<21.1	250	04/09/21 16:29	
Chloroform	ug/kg	<35.8	250	04/09/21 16:29	
Chloromethane	ug/kg	<19.0	50.0	04/09/21 16:29	
cis-1,2-Dichloroethene	ug/kg	<10.7	50.0	04/09/21 16:29	
cis-1,3-Dichloropropene	ug/kg	<33.0	250	04/09/21 16:29	
Dibromochloromethane	ug/kg	<171	250	04/09/21 16:29	
Dibromomethane	ug/kg	<14.8	50.0	04/09/21 16:29	
Dichlorodifluoromethane	ug/kg	<21.5	50.0	04/09/21 16:29	
Diisopropyl ether	ug/kg	<12.4	50.0	04/09/21 16:29	

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: #4 BELOW
Pace Project No.: 40224476

METHOD BLANK: 2203495 Matrix: Solid
Associated Lab Samples: 40224476001

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Ethylbenzene	ug/kg	<11.9	50.0	04/09/21 16:29	
Hexachloro-1,3-butadiene	ug/kg	<99.4	250	04/09/21 16:29	
Isopropylbenzene (Cumene)	ug/kg	<13.5	50.0	04/09/21 16:29	
m&p-Xylene	ug/kg	<21.1	100	04/09/21 16:29	
Methyl-tert-butyl ether	ug/kg	<14.7	50.0	04/09/21 16:29	
Methylene Chloride	ug/kg	<13.9	50.0	04/09/21 16:29	
n-Butylbenzene	ug/kg	<22.9	50.0	04/09/21 16:29	
n-Propylbenzene	ug/kg	<12.0	50.0	04/09/21 16:29	
Naphthalene	ug/kg	<15.6	250	04/09/21 16:29	
o-Xylene	ug/kg	<15.0	50.0	04/09/21 16:29	
p-Isopropyltoluene	ug/kg	<15.2	50.0	04/09/21 16:29	
sec-Butylbenzene	ug/kg	<12.2	50.0	04/09/21 16:29	
Styrene	ug/kg	<12.8	50.0	04/09/21 16:29	
tert-Butylbenzene	ug/kg	<15.7	50.0	04/09/21 16:29	
Tetrachloroethene	ug/kg	<19.4	50.0	04/09/21 16:29	
Toluene	ug/kg	<12.6	50.0	04/09/21 16:29	
trans-1,2-Dichloroethene	ug/kg	<10.8	50.0	04/09/21 16:29	
trans-1,3-Dichloropropene	ug/kg	<143	250	04/09/21 16:29	
Trichloroethene	ug/kg	<18.7	50.0	04/09/21 16:29	
Trichlorofluoromethane	ug/kg	<14.5	50.0	04/09/21 16:29	
Vinyl chloride	ug/kg	<10.1	50.0	04/09/21 16:29	
1,2-Dichlorobenzene-d4 (S)	%	89	82-158	04/09/21 16:29	
4-Bromofluorobenzene (S)	%	91	66-153	04/09/21 16:29	
Toluene-d8 (S)	%	95	67-159	04/09/21 16:29	

LABORATORY CONTROL SAMPLE: 2203496

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1-Trichloroethane	ug/kg	2500	2380	95	70-130	
1,1,2,2-Tetrachloroethane	ug/kg	2500	2400	96	65-129	
1,1,2-Trichloroethane	ug/kg	2500	2450	98	70-130	
1,1-Dichloroethane	ug/kg	2500	2480	99	70-130	
1,1-Dichloroethene	ug/kg	2500	1840	73	67-120	
1,2,4-Trichlorobenzene	ug/kg	2500	1800	72	64-130	
1,2-Dibromo-3-chloropropane	ug/kg	2500	2520	101	57-119	
1,2-Dibromoethane (EDB)	ug/kg	2500	2430	97	70-130	
1,2-Dichlorobenzene	ug/kg	2500	2310	92	70-130	
1,2-Dichloroethane	ug/kg	2500	2500	100	70-130	
1,2-Dichloropropane	ug/kg	2500	2410	96	72-118	
1,3-Dichlorobenzene	ug/kg	2500	2180	87	70-130	
1,4-Dichlorobenzene	ug/kg	2500	2170	87	70-130	
Benzene	ug/kg	2500	2280	91	70-130	
Bromodichloromethane	ug/kg	2500	2370	95	70-130	
Bromoform	ug/kg	2500	2270	91	66-130	

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: #4 BELOW
Pace Project No.: 40224476

LABORATORY CONTROL SAMPLE: 2203496

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Bromomethane	ug/kg	2500	1270	51	13-153	
Carbon tetrachloride	ug/kg	2500	2330	93	73-134	
Chlorobenzene	ug/kg	2500	2320	93	70-130	
Chloroethane	ug/kg	2500	1730	69	19-170	
Chloroform	ug/kg	2500	2430	97	79-120	
Chloromethane	ug/kg	2500	1860	75	45-117	
cis-1,2-Dichloroethene	ug/kg	2500	2200	88	70-130	
cis-1,3-Dichloropropene	ug/kg	2500	2310	92	68-130	
Dibromochloromethane	ug/kg	2500	2180	87	70-130	
Dichlorodifluoromethane	ug/kg	2500	1670	67	15-135	
Ethylbenzene	ug/kg	2500	2280	91	78-120	
Isopropylbenzene (Cumene)	ug/kg	2500	2410	96	70-130	
m&p-Xylene	ug/kg	5000	4490	90	70-130	
Methyl-tert-butyl ether	ug/kg	2500	2390	96	65-130	
Methylene Chloride	ug/kg	2500	2260	90	70-130	
o-Xylene	ug/kg	2500	2290	92	70-130	
Styrene	ug/kg	2500	2460	99	70-130	
Tetrachloroethene	ug/kg	2500	1900	76	70-130	
Toluene	ug/kg	2500	2220	89	76-120	
trans-1,2-Dichloroethene	ug/kg	2500	2310	92	70-130	
trans-1,3-Dichloropropene	ug/kg	2500	2460	98	70-130	
Trichloroethene	ug/kg	2500	2270	91	70-130	
Trichlorofluoromethane	ug/kg	2500	1970	79	49-153	
Vinyl chloride	ug/kg	2500	1890	76	58-121	
1,2-Dichlorobenzene-d4 (S)	%			98	82-158	
4-Bromofluorobenzene (S)	%			102	66-153	
Toluene-d8 (S)	%			101	67-159	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2203497 2203498

Parameter	Units	40224684001 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	<13.9			1040	1100				6	20	
1,1,2,2-Tetrachloroethane	ug/kg	<19.6			1060	1100				4	20	
1,1,2-Trichloroethane	ug/kg	<19.7			1190	1140				4	20	
1,1-Dichloroethane	ug/kg	<13.9			1200	1200				0	20	
1,1-Dichloroethene	ug/kg	<18.0			837	968				15	20	
1,2,4-Trichlorobenzene	ug/kg	<44.6			997	971				3	20	
1,2-Dibromo-3-chloropropane	ug/kg	<42.0			1170	1180				1	21	
1,2-Dibromoethane (EDB)	ug/kg	<14.8			1130	1130				0	20	
1,2-Dichlorobenzene	ug/kg	<16.8			1160	1180				2	20	
1,2-Dichloroethane	ug/kg	<12.5			1230	1180				5	20	
1,2-Dichloropropane	ug/kg	<12.9			1160	1120				3	20	
1,3-Dichlorobenzene	ug/kg	<14.8			1130	1140				1	20	

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: #4 BELOW
Pace Project No.: 40224476

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2203497 2203498

Parameter	Units	40224684001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
1,4-Dichlorobenzene	ug/kg	<14.8			1070	1170				9	20	
Benzene	ug/kg	<12.9			1100	1090				1	20	
Bromodichloromethane	ug/kg	<12.9			1070	1080				1	20	
Bromoform	ug/kg	<238			1040	1050				1	20	
Bromomethane	ug/kg	<75.9			701	672				4	20	
Carbon tetrachloride	ug/kg	<11.9			1000	1090				9	20	
Chlorobenzene	ug/kg	<6.5			1130	1130				0	20	
Chloroethane	ug/kg	<22.9			1140	1020				11	20	
Chloroform	ug/kg	<38.8			1160	1160				0	20	
Chloromethane	ug/kg	<20.6			1150	1180				3	20	
cis-1,2-Dichloroethene	ug/kg	<11.6			1060	1040				2	20	
cis-1,3-Dichloropropene	ug/kg	<35.7			1080	1080				0	20	
Dibromochloromethane	ug/kg	<185			978	994				2	20	
Dichlorodifluoromethane	ug/kg	<23.3			1040	1360				26	25	R1
Ethylbenzene	ug/kg	<12.9			1120	1110				1	20	
Isopropylbenzene (Cumene)	ug/kg	<14.6			1170	1190				2	20	
m&p-Xylene	ug/kg	<22.9			2210	2350				6	20	
Methyl-tert-butyl ether	ug/kg	<15.9			1090	1120				2	20	
Methylene Chloride	ug/kg	24.7J			1150	1140				1	20	
o-Xylene	ug/kg	<16.2			1170	1130				3	20	
Styrene	ug/kg	<13.9			1190	1220				2	20	
Tetrachloroethene	ug/kg	<21.0			896	911				2	20	
Toluene	ug/kg	<13.6			1090	1060				3	20	
trans-1,2-Dichloroethene	ug/kg	<11.7			1100	1110				0	20	
trans-1,3-Dichloropropene	ug/kg	<155			1180	1180				0	20	
Trichloroethene	ug/kg	<20.3			1020	1050				3	20	
Trichlorofluoromethane	ug/kg	<15.7			907	1040				14	21	
Vinyl chloride	ug/kg	<10.9			1010	1080				7	20	
1,2-Dichlorobenzene-d4 (S)	%						94	105	82-158			
4-Bromofluorobenzene (S)	%						104	114	66-153			
Toluene-d8 (S)	%						109	110	67-159			

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: #4 BELOW
Pace Project No.: 40224476

QC Batch: 381655
QC Batch Method: EPA 3541
Analysis Method: EPA 8082
Analysis Description: 8082 GCS PCB
Laboratory: Pace Analytical Services - Green Bay
Associated Lab Samples: 40224476001

METHOD BLANK: 2201076 Matrix: Solid
Associated Lab Samples: 40224476001

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
PCB-1016 (Aroclor 1016)	ug/kg	<15.2	50.0	04/07/21 09:45	
PCB-1221 (Aroclor 1221)	ug/kg	<15.2	50.0	04/07/21 09:45	
PCB-1232 (Aroclor 1232)	ug/kg	<15.2	50.0	04/07/21 09:45	
PCB-1242 (Aroclor 1242)	ug/kg	<15.2	50.0	04/07/21 09:45	
PCB-1248 (Aroclor 1248)	ug/kg	<15.2	50.0	04/07/21 09:45	
PCB-1254 (Aroclor 1254)	ug/kg	<15.2	50.0	04/07/21 09:45	
PCB-1260 (Aroclor 1260)	ug/kg	<15.2	50.0	04/07/21 09:45	
Decachlorobiphenyl (S)	%	79	47-114	04/07/21 09:45	
Tetrachloro-m-xylene (S)	%	82	67-102	04/07/21 09:45	

LABORATORY CONTROL SAMPLE: 2201077

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
PCB-1016 (Aroclor 1016)	ug/kg		<15.2			
PCB-1221 (Aroclor 1221)	ug/kg		<15.2			
PCB-1232 (Aroclor 1232)	ug/kg		<15.2			
PCB-1242 (Aroclor 1242)	ug/kg		<15.2			
PCB-1248 (Aroclor 1248)	ug/kg		<15.2			
PCB-1254 (Aroclor 1254)	ug/kg		<15.2			
PCB-1260 (Aroclor 1260)	ug/kg	500	405	81	69-115	
Decachlorobiphenyl (S)	%			80	47-114	
Tetrachloro-m-xylene (S)	%			85	67-102	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2201078 2201079

Parameter	Units	40224365039 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
PCB-1016 (Aroclor 1016)	ug/kg	<0.018 mg/kg			<17.7	<17.6					20	
PCB-1221 (Aroclor 1221)	ug/kg	<0.018 mg/kg			<17.7	<17.6					20	
PCB-1232 (Aroclor 1232)	ug/kg	<0.018 mg/kg			<17.7	<17.6					20	
PCB-1242 (Aroclor 1242)	ug/kg	<0.018 mg/kg			<17.7	<17.6					20	
PCB-1248 (Aroclor 1248)	ug/kg	<0.018 mg/kg			<17.7	<17.6					20	
PCB-1254 (Aroclor 1254)	ug/kg	<0.018 mg/kg			<17.7	<17.6					20	

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: #4 BELOW
Pace Project No.: 40224476

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2201078 2201079

Parameter	Units	40224365039 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
PCB-1260 (Aroclor 1260)	ug/kg	<0.018 mg/kg	581	577	443	439	76	76	45-120	1	20	
Decachlorobiphenyl (S)	%						75	75	47-114			
Tetrachloro-m-xylene (S)	%						80	78	67-102			

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: #4 BELOW
Pace Project No.: 40224476

QC Batch: 382393
QC Batch Method: EPA 3546
Analysis Method: EPA 8270E by SIM
Analysis Description: 8270E/3546 MSSV PAH by SIM
Laboratory: Pace Analytical Services - Green Bay

Associated Lab Samples: 40224476001

METHOD BLANK: 2205462 Matrix: Solid
Associated Lab Samples: 40224476001

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1-Methylnaphthalene	ug/kg	<2.4	16.7	04/14/21 11:58	
2-Methylnaphthalene	ug/kg	<2.4	16.7	04/14/21 11:58	
Acenaphthene	ug/kg	<2.2	16.7	04/14/21 11:58	
Acenaphthylene	ug/kg	<2.1	16.7	04/14/21 11:58	
Anthracene	ug/kg	<2.1	16.7	04/14/21 11:58	
Benzo(a)anthracene	ug/kg	<2.2	16.7	04/14/21 11:58	
Benzo(a)pyrene	ug/kg	<1.9	16.7	04/14/21 11:58	
Benzo(b)fluoranthene	ug/kg	<2.3	16.7	04/14/21 11:58	
Benzo(g,h,i)perylene	ug/kg	<2.9	16.7	04/14/21 11:58	
Benzo(k)fluoranthene	ug/kg	<2.1	16.7	04/14/21 11:58	
Chrysene	ug/kg	<3.1	16.7	04/14/21 11:58	
Dibenz(a,h)anthracene	ug/kg	<2.3	16.7	04/14/21 11:58	
Fluoranthene	ug/kg	<2.0	16.7	04/14/21 11:58	
Fluorene	ug/kg	<2.0	16.7	04/14/21 11:58	
Indeno(1,2,3-cd)pyrene	ug/kg	<3.5	16.7	04/14/21 11:58	
Naphthalene	ug/kg	<1.6	16.7	04/14/21 11:58	
Phenanthrene	ug/kg	<1.9	16.7	04/14/21 11:58	
Pyrene	ug/kg	<2.5	16.7	04/14/21 11:58	
2-Fluorobiphenyl (S)	%	65	36-86	04/14/21 11:58	
Terphenyl-d14 (S)	%	95	41-97	04/14/21 11:58	

LABORATORY CONTROL SAMPLE: 2205463

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1-Methylnaphthalene	ug/kg	333	259	78	53-100	
2-Methylnaphthalene	ug/kg	333	257	77	51-97	
Acenaphthene	ug/kg	333	236	71	62-120	
Acenaphthylene	ug/kg	333	241	72	61-120	
Anthracene	ug/kg	333	271	81	62-111	
Benzo(a)anthracene	ug/kg	333	259	78	61-120	
Benzo(a)pyrene	ug/kg	333	270	81	65-120	
Benzo(b)fluoranthene	ug/kg	333	260	78	64-108	
Benzo(g,h,i)perylene	ug/kg	333	257	77	71-120	
Benzo(k)fluoranthene	ug/kg	333	255	76	76-120	
Chrysene	ug/kg	333	242	73	74-120	L2
Dibenz(a,h)anthracene	ug/kg	333	257	77	71-120	
Fluoranthene	ug/kg	333	275	83	67-112	
Fluorene	ug/kg	333	269	81	65-120	
Indeno(1,2,3-cd)pyrene	ug/kg	333	270	81	74-120	

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: #4 BELOW
Pace Project No.: 40224476

LABORATORY CONTROL SAMPLE: 2205463

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Naphthalene	ug/kg	333	226	68	53-120	
Phenanthrene	ug/kg	333	262	79	67-120	
Pyrene	ug/kg	333	281	84	60-103	
2-Fluorobiphenyl (S)	%			71	36-86	
Terphenyl-d14 (S)	%			83	41-97	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2205464 2205465

Parameter	Units	40224771003 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
1-Methylnaphthalene	ug/kg	<2.6	352	352	229	207	65	58	41-100	10	29	
2-Methylnaphthalene	ug/kg	<2.6	352	352	230	200	65	56	42-97	14	21	
Acenaphthene	ug/kg	<2.3	352	352	210	190	60	54	43-120	10	27	
Acenaphthylene	ug/kg	<2.2	352	352	212	191	60	54	51-120	10	26	
Anthracene	ug/kg	<2.2	352	352	214	225	60	64	46-111	5	29	
Benzo(a)anthracene	ug/kg	6.9J	352	352	217	247	60	68	48-120	13	23	
Benzo(a)pyrene	ug/kg	8.3J	352	352	233	263	64	72	46-108	12	30	
Benzo(b)fluoranthene	ug/kg	11.8J	352	352	291	298	79	81	45-108	2	30	
Benzo(g,h,i)perylene	ug/kg	13.5J	352	352	213	454	57	125	39-120	72	37	M1,R1
Benzo(k)fluoranthene	ug/kg	4.8J	352	352	264	200	74	56	47-120	27	31	
Chrysene	ug/kg	10.5J	352	352	222	278	60	76	54-120	22	21	R1
Dibenz(a,h)anthracene	ug/kg	<2.4	352	352	204	222	57	63	46-120	8	34	
Fluoranthene	ug/kg	17.6J	352	352	249	296	66	79	53-112	17	27	
Fluorene	ug/kg	<2.1	352	352	213	188	61	53	48-120	13	29	
Indeno(1,2,3-cd)pyrene	ug/kg	6.9J	352	352	217	415	60	116	40-120	63	34	R1
Naphthalene	ug/kg	<1.7	352	352	211	195	60	55	47-120	8	25	
Phenanthrene	ug/kg	13.8J	352	352	234	237	62	63	49-120	1	28	
Pyrene	ug/kg	15.4J	352	352	214	236	56	63	43-103	10	31	
2-Fluorobiphenyl (S)	%						60	54	36-86			
Terphenyl-d14 (S)	%						54	45	41-97			

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: #4 BELOW
Pace Project No.: 40224476

QC Batch: 381548
QC Batch Method: ASTM D2974-87
Analysis Method: ASTM D2974-87
Analysis Description: Dry Weight/Percent Moisture
Laboratory: Pace Analytical Services - Green Bay

Associated Lab Samples: 40224476001

SAMPLE DUPLICATE: 2200632

Parameter	Units	40224456016 Result	Dup Result	RPD	Max RPD	Qualifiers
Percent Moisture	%	13.3	12.7	4	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.

REPORT OF LABORATORY ANALYSIS

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

QUALIFIERS

Project: #4 BELOW
Pace Project No.: 40224476

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

L2	Analyte recovery in the laboratory control sample (LCS) was below QC limits. Results may be biased low.
M1	Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.
R1	RPD value was outside control limits.
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: #4 BELOW
Pace Project No.: 40224476

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
40224476001	**#4 BELOW**	EPA 3541	381655	EPA 8082	381671
40224476001	**#4 BELOW**	EPA 3050	381497	EPA 6010	381704
40224476001	**#4 BELOW**	EPA 7471	382137	EPA 7471	382281
40224476001	**#4 BELOW**	EPA 3546	382393	EPA 8270E by SIM	382442
40224476001	**#4 BELOW**	EPA 5035/5030B	382037	EPA 8260	382038
40224476001	**#4 BELOW**	ASTM D2974-87	381548		

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

Page 1 of

40224476

Pace Analytical®
www.pacelabs.com

CHAIN OF CUSTODY

*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

(Please Print Clearly)	
Company Name:	Fincantieri Marinette Marine
Branch/Location:	Marinette
Project Contact:	MaKayla Jacobs
Phone:	715-245-1931
Project Number:	#4 below
Project Name:	
Project State:	WI
Sampled By (Print):	Warren & MaKayla
Sampled By (Sign):	
PO #:	Regulatory Program:

Quote #:	
Mail To Contact:	
Mail To Company:	
Mail To Address:	
Invoice To Contact:	
Invoice To Company:	
Invoice To Address:	
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, W = Water, B = Biota, DW = Drinking Water, C = Charcoal, GW = Ground Water, O = Oil, SW = Surface Water, S = Soil, WW = Waste Water, SI = Sludge, WP = Wipe

PACE LAB #	CLIENT FIELD ID	COLLECTION DATE	COLLECTION TIME	MATRIX	FILTERED? (YES/NO) Y/N	PRESERVATION (CODE)* Pick Letter	Analyses Requested: PVOC/VOC	RCRA Metals	PAHs	PCBs	PFAS	CLIENT COMMENTS	LAB COMMENTS (Lab Use Only)	Profile #
001	#4 below	4-1-21	9:00am	S			X	X	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:	
Email #2:	
Telephone:	
Fax:	

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

Relinquished By:	Date/Time:	Received By:	Date/Time:
MaKayla Jacobs	4-2-21 / 7:00am		
UPS	4/3/21 1035		4/3/21 1035

PACE Project No.: 40224476

Receipt Temp = 4.5 °C

Sample Receipt pH OK / Adjusted

Cooler Custody Seal Present / Not Present
Intact / Not Intact

Version 6.0 06/14/06

C019a(27Jun2006)

ORIGINAL

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

Sample Preservation Receipt Form

Client Name: Marinette Marine Project # 40224476

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								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)
	AG1U	BG1U	AG1H	AG4S	AG4U	AG5U	AG2S	BG3U	BP1U	BP3U	BP3B	BP3N	BP3S	VG9A	DG9T	VG9U	VG9H	VG9M	VG9D	JGFU	JG9U	WGFU	WPFU	SP5T	ZPLC	GN							
001										1								1		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																																	2.5 / 5 / 10
009																																	2.5 / 5 / 10
010																																	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																													4/3/21				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# : 40224476

40224476

Client Name: Marinette Marine

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

Tracking #: 1z 578 899 44 6665 4855

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 - 90 **Type of Ice:** Wet Blue Dry None ☒ Samples on ice, cooling process has begun

Cooler Temperature Uncorr: 5 /Corr: 4.5

Temp Blank Present: ☒ yes ☐ no **Biological 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: 4/3/21 /Initials: MLR
Labeled By Initials: MLR

Chain of Custody Present:	☒ Yes ☐ No ☐ N/A	1. +CC pres. MLR 4-3-21 MLR 4-3-21
Chain of Custody Filled Out:	☐ Yes ☒ No ☐ N/A	2. PM name, mail, Invoice, pg #
Chain of Custody Relinquished:	☒ Yes ☐ No ☐ N/A	3. 4/3/21 MLR
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. ~7 oz in BP3U MLR 4-3-21
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. IDs/dates/times MLR 4-3-21 Ink smeared off half legible
Trip Blank Present:	☐ Yes ☒ No ☐ N/A	13. 4/3/21 MP
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

Report of Analysis

Pace Analytical Services, LLC
1241 Bellevue Street
Suite 9
Green Bay, WI 54302
Attention: Brian Basten

Project Name: #4 BELOW

Project Number: 40224476

Lot Number:**WD06012**

Date Completed:04/17/2021

04/18/2021 10:39 PM
Approved and released by:
Project Manager II: **Karen L. Coonan**

Case Narrative
Pace Analytical Services, LLC
Lot Number: WD06012

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: WD06012
Project Name: #4 BELOW
Project Number: 40224476

Sample Number	Sample ID	Matrix	Date Sampled	Date Received
001	#4 BELOW	Solid	04/01/2021 0900	04/06/2021

(1 sample)

Detection Summary

Pace Analytical Services, LLC

Lot Number: WD06012

Project Name: #4 BELOW

Project Number: 40224476

Sample	Sample ID	Matrix	Parameter	Method	Result	Q	Units	Page
001	#4 BELOW	Solid	EtFOSAA	PFAS by ID	2.1	J	ug/kg	5
001	#4 BELOW	Solid	PFHxS	PFAS by ID	1.1	J	ug/kg	5
001	#4 BELOW	Solid	PFBA	PFAS by ID	0.32	J	ug/kg	5
001	#4 BELOW	Solid	PFOA	PFAS by ID	1.1	J	ug/kg	6
001	#4 BELOW	Solid	PFPeA	PFAS by ID	0.67	J	ug/kg	6
001	#4 BELOW	Solid	PFOS	PFAS by ID	4.1		ug/kg	6

(6 detections)

PFAS by LC/MS/MS

Client: Pace Analytical Services, LLC | Laboratory ID: WD06012-001
Description: #4 BELOW | Matrix: Solid
Date Sampled: 04/01/2021 0900 | Project Name: #4 BELOW | % Solids: 61.8 04/06/2021 2311
Date Received: 04/06/2021 | Project Number: 40224476

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	SOP SPE	PFAS by ID SOP	1	04/08/2021 1826	JJG	04/07/2021 1150	88226

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run
9-chlorohexadecafluoro-3-oxanone-1-sulfonic acid (9Cl-PF3ONS)	756426-58-1	PFAS by ID SOP	ND		3.0	0.76	ug/kg	1
11-chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3...)	763051-92-9	PFAS by ID SOP	ND		3.0	0.76	ug/kg	1
1H, 1H, 2H, 2H-perfluorodecane sulfonic acid (8:2 FTS)	39108-34-4	PFAS by ID SOP	ND		3.0	0.76	ug/kg	1
1H, 1H, 2H, 2H-perfluorooctane sulfonic acid (6:2 FTS)	27619-97-2	PFAS by ID SOP	ND		3.0	0.76	ug/kg	1
1H,1H,2H,2H-perfluorohexane sulfonic acid (4:2 FTS)	757124-72-4	PFAS by ID SOP	ND		3.0	0.76	ug/kg	1
Hexafluoropropylene oxide dimer acid (GenX)	13252-13-6	PFAS by ID SOP	ND		6.0	1.5	ug/kg	1
4,8-dioxa-3H-perfluorononanoic acid (ADONA)	919005-14-4	PFAS by ID SOP	ND		3.0	0.76	ug/kg	1
N-ethylperfluoro-1-octanesulfonamide (EtFOSA)	4151-50-2	PFAS by ID SOP	ND		3.0	0.76	ug/kg	1
N-ethylperfluoro-1-octanesulfonamidoacetic acid (EtFOSAA)	2991-50-6	PFAS by ID SOP	2.1	J	3.0	0.76	ug/kg	1
2-N-ethylperfluoro-1-octanesulfonamido-ethanol (EtFOSE)	1691-99-2	PFAS by ID SOP	ND		3.0	0.76	ug/kg	1
N-methylperfluoro-1-octanesulfonamide (MeFOSA)	31506-32-8	PFAS by ID SOP	ND		3.0	0.76	ug/kg	1
N-methylperfluoro-1-octanesulfonamidoacetic acid (MeFOSAA)	2355-31-9	PFAS by ID SOP	ND		3.0	0.76	ug/kg	1
2-N-methylperfluoro-1-octanesulfonamido-ethanol (MeFOSE)	24448-09-7	PFAS by ID SOP	ND		3.0	0.76	ug/kg	1
Perfluoro-1-butanesulfonic acid (PFBS)	375-73-5	PFAS by ID SOP	ND		1.5	0.30	ug/kg	1
Perfluoro-1-decanesulfonic acid (PFDS)	335-77-3	PFAS by ID SOP	ND		1.5	0.30	ug/kg	1
Perfluoro-1-heptanesulfonic acid (PFHpS)	375-92-8	PFAS by ID SOP	ND		1.5	0.30	ug/kg	1
Perfluoro-1-nonanesulfonic acid (PFNS)	68259-12-1	PFAS by ID SOP	ND		1.5	0.30	ug/kg	1
Perfluoro-1-octanesulfonamide (PFOSA)	754-91-6	PFAS by ID SOP	ND		1.5	0.30	ug/kg	1
Perfluoro-1-pentanesulfonic acid (PFPeS)	2706-91-4	PFAS by ID SOP	ND		1.5	0.30	ug/kg	1
Perfluorododecanesulfonic acid (PFDOS)	79780-39-5	PFAS by ID SOP	ND		1.5	0.30	ug/kg	1
Perfluorohexanesulfonic acid (PFHxS)	355-46-4	PFAS by ID SOP	1.1	J	1.5	0.30	ug/kg	1
Perfluoro-n-butanoic acid (PFBA)	375-22-4	PFAS by ID SOP	0.32	J	1.5	0.30	ug/kg	1
Perfluoro-n-decanoic acid (PFDA)	335-76-2	PFAS by ID SOP	ND		1.5	0.30	ug/kg	1
Perfluoro-n-dodecanoic acid (PFDoA)	307-55-1	PFAS by ID SOP	ND		1.5	0.30	ug/kg	1
Perfluoro-n-heptanoic acid (PFHpA)	375-85-9	PFAS by ID SOP	ND		1.5	0.30	ug/kg	1
Perfluoro-n-hexanoic acid (PFHxA)	307-24-4	PFAS by ID SOP	ND		1.5	0.30	ug/kg	1
Perfluoro-n-nonanoic acid (PFNA)	375-95-1	PFAS by ID SOP	ND		1.5	0.30	ug/kg	1
Perfluoro-n-octanoic acid (PFOA)	335-67-1	PFAS by ID SOP	1.1	J	1.5	0.30	ug/kg	1
Perfluoro-n-pentanoic acid (PFPeA)	2706-90-3	PFAS by ID SOP	0.67	J	1.5	0.30	ug/kg	1
Perfluoro-n-tetradecanoic acid (PFTeDA)	376-06-7	PFAS by ID SOP	ND		1.5	0.30	ug/kg	1
Perfluoro-n-tridecanoic acid (PFTrDA)	72629-94-8	PFAS by ID SOP	ND		1.5	0.30	ug/kg	1
Perfluoro-n-undecanoic acid (PFUdA)	2058-94-8	PFAS by ID SOP	ND		1.5	0.30	ug/kg	1
Perfluorooctanesulfonic acid (PFOS)	1763-23-1	PFAS by ID SOP	4.1		1.5	0.30	ug/kg	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
13C2_4:2FTS		95	25-150
13C2_6:2FTS		101	25-150
13C2_8:2FTS		113	25-150
13C2_PFDoA		112	25-150
13C2_PFTeDA		103	25-150
13C3_PFBS		84	25-150
13C3_PFHxS		97	25-150
13C3-HFPO-DA		85	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: WD06012-001
Description: #4 BELOW		Matrix: Solid
Date Sampled: 04/01/2021 0900	Project Name: #4 BELOW	% Solids: 61.8 04/06/2021 2311
Date Received: 04/06/2021	Project Number: 40224476	

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
13C4_PFHpA		101	25-150
13C5_PFHxA		96	25-150
13C5_PFPeA		91	25-150
13C6_PFDA		99	25-150
13C7_PFUdA		107	25-150
13C8_PFOA		92	25-150
13C8_PFOS		98	25-150
13C8_PFOSA		93	10-150
13C9_PFNA		93	25-150
d-EtFOSA		113	10-150
d5-EtFOSAA		105	25-150
d9-EtFOSE		94	10-150
d-MeFOSA		92	10-150
d3-MeFOSAA		101	25-150
d7-MeFOSE		84	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

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

QC Summary

PFAS by LC/MS/MS - MB

Sample ID: WQ88226-001
Batch: 88226
Analytical Method: PFAS by ID SOP

Matrix: Solid
Prep Method: SOP SPE
Prep Date: 04/07/2021 1150

Parameter	Result	Q	Dil	LOQ	DL	Units	Analysis Date
9Cl-PF3ONS	ND		1	2.0	0.50	ug/kg	04/08/2021 1639
11Cl-PF3OUdS	ND		1	2.0	0.50	ug/kg	04/08/2021 1639
8:2 FTS	ND		1	2.0	0.50	ug/kg	04/08/2021 1639
6:2 FTS	ND		1	2.0	0.50	ug/kg	04/08/2021 1639
4:2 FTS	ND		1	2.0	0.50	ug/kg	04/08/2021 1639
GenX	ND		1	4.0	1.0	ug/kg	04/08/2021 1639
ADONA	ND		1	2.0	0.50	ug/kg	04/08/2021 1639
EtFOSA	ND		1	2.0	0.50	ug/kg	04/08/2021 1639
EtFOSAA	ND		1	2.0	0.50	ug/kg	04/08/2021 1639
EtFOSE	ND		1	2.0	0.50	ug/kg	04/08/2021 1639
MeFOSA	ND		1	2.0	0.50	ug/kg	04/08/2021 1639
MeFOSAA	ND		1	2.0	0.50	ug/kg	04/08/2021 1639
MeFOSE	ND		1	2.0	0.50	ug/kg	04/08/2021 1639
PFBS	ND		1	1.0	0.20	ug/kg	04/08/2021 1639
PFDS	ND		1	1.0	0.20	ug/kg	04/08/2021 1639
PFHpS	ND		1	1.0	0.20	ug/kg	04/08/2021 1639
PFNS	ND		1	1.0	0.20	ug/kg	04/08/2021 1639
PFOSA	ND		1	1.0	0.20	ug/kg	04/08/2021 1639
PFPeS	ND		1	1.0	0.20	ug/kg	04/08/2021 1639
PFDOS	ND		1	1.0	0.20	ug/kg	04/08/2021 1639
PFHxS	ND		1	1.0	0.20	ug/kg	04/08/2021 1639
PFBA	ND		1	1.0	0.20	ug/kg	04/08/2021 1639
PFDA	ND		1	1.0	0.20	ug/kg	04/08/2021 1639
PFDoA	ND		1	1.0	0.20	ug/kg	04/08/2021 1639
PFHpA	ND		1	1.0	0.20	ug/kg	04/08/2021 1639
PFHxA	ND		1	1.0	0.20	ug/kg	04/08/2021 1639
PFNA	ND		1	1.0	0.20	ug/kg	04/08/2021 1639
PFOA	ND		1	1.0	0.20	ug/kg	04/08/2021 1639
PFPeA	ND		1	1.0	0.20	ug/kg	04/08/2021 1639
PFTeDA	ND		1	1.0	0.20	ug/kg	04/08/2021 1639
PFTrDA	ND		1	1.0	0.20	ug/kg	04/08/2021 1639
PFUdA	ND		1	1.0	0.20	ug/kg	04/08/2021 1639
PFOS	ND		1	1.0	0.20	ug/kg	04/08/2021 1639

Surrogate	Q	% Rec	Acceptance Limit
13C2_4:2FTS		102	25-150
13C2_6:2FTS		94	25-150
13C2_8:2FTS		99	25-150
13C2_PFDoA		104	25-150
13C2_PFTeDA		101	25-150
13C3_PFBS		77	25-150
13C3_PFHxS		90	25-150
13C3-HFPO-DA		88	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: WQ88226-001
Batch: 88226
Analytical Method: PFAS by ID SOP

Matrix: Solid
Prep Method: SOP SPE
Prep Date: 04/07/2021 1150

Surrogate	Q	% Rec	Acceptance Limit
13C4_PFBA		91	25-150
13C4_PFHpA		96	25-150
13C5_PFHxA		98	25-150
13C5_PFPeA		94	25-150
13C6_PFDA		98	25-150
13C7_PFUdA		101	25-150
13C8_PFOA		91	25-150
13C8_PFOS		93	25-150
13C8_PFOSA		88	10-150
13C9_PFNA		96	25-150
d-EtFOSA		134	10-150
d5-EtFOSAA		99	25-150
d9-EtFOSE		102	10-150
d-MeFOSA		95	10-150
d3-MeFOSAA		91	25-150
d7-MeFOSE		105	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: WQ88226-002
Batch: 88226
Analytical Method: PFAS by ID SOP

Matrix: Solid
Prep Method: SOP SPE
Prep Date: 04/07/2021 1150

Parameter	Spike Amount (ug/kg)	Result (ug/kg)	Q	Dil	% Rec	%Rec Limit	Analysis Date
9Cl-PF3ONS	1.9	1.8		1	95	50-150	04/08/2021 1650
11Cl-PF3OUdS	1.9	1.7		1	89	50-150	04/08/2021 1650
8:2 FTS	1.9	2.2		1	116	50-150	04/08/2021 1650
6:2 FTS	1.9	1.6		1	86	50-150	04/08/2021 1650
4:2 FTS	1.9	1.9		1	101	50-150	04/08/2021 1650
GenX	4.0	3.9		1	99	50-150	04/08/2021 1650
ADONA	1.9	1.6		1	87	50-150	04/08/2021 1650
EtFOSA	2.0	1.8		1	88	50-150	04/08/2021 1650
EtFOSAA	2.0	1.8		1	90	50-150	04/08/2021 1650
EtFOSE	2.0	1.8		1	88	50-150	04/08/2021 1650
MeFOSA	2.0	1.7		1	85	50-150	04/08/2021 1650
MeFOSAA	2.0	1.6		1	79	50-150	04/08/2021 1650
MeFOSE	2.0	2.0		1	101	50-150	04/08/2021 1650
PFBS	1.8	1.8		1	104	50-150	04/08/2021 1650
PFDS	1.9	1.9		1	97	50-150	04/08/2021 1650
PFHpS	1.9	1.8		1	96	50-150	04/08/2021 1650
PFNS	1.9	1.8		1	92	50-150	04/08/2021 1650
PFOSA	2.0	1.9		1	97	50-150	04/08/2021 1650
PFPeS	1.9	2.0		1	109	50-150	04/08/2021 1650
PFDOS	1.9	2.0		1	105	50-150	04/08/2021 1650
PFHxS	1.8	1.8		1	101	50-150	04/08/2021 1650
PFBA	2.0	1.9		1	95	50-150	04/08/2021 1650
PFDA	2.0	1.8		1	90	50-150	04/08/2021 1650
PFDoA	2.0	1.9		1	96	50-150	04/08/2021 1650
PFHpA	2.0	1.8		1	88	50-150	04/08/2021 1650
PFHxA	2.0	1.9		1	95	50-150	04/08/2021 1650
PFNA	2.0	1.9		1	94	50-150	04/08/2021 1650
PFOA	2.0	2.1		1	103	50-150	04/08/2021 1650
PFPeA	2.0	1.7		1	86	50-150	04/08/2021 1650
PFTeDA	2.0	1.8		1	91	50-150	04/08/2021 1650
PFTrDA	2.0	2.2		1	108	50-150	04/08/2021 1650
PFUdA	2.0	2.0		1	99	50-150	04/08/2021 1650
PFOS	1.9	1.7		1	92	50-150	04/08/2021 1650

Surrogate	Q	% Rec	Acceptance Limit
13C2_4:2FTS		88	25-150
13C2_6:2FTS		92	25-150
13C2_8:2FTS		96	25-150
13C2_PFDoA		98	25-150
13C2_PFTeDA		98	25-150
13C3_PFBS		76	25-150
13C3_PFHxS		91	25-150
13C3-HFPO-DA		87	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 - LCS

Sample ID: WQ88226-002
Batch: 88226
Analytical Method: PFAS by ID SOP

Matrix: Solid
Prep Method: SOP SPE
Prep Date: 04/07/2021 1150

Surrogate	Q	% Rec	Acceptance Limit
13C4_PFBA		90	25-150
13C4_PFHpA		95	25-150
13C5_PFHxA		91	25-150
13C5_PFPeA		95	25-150
13C6_PFDA		95	25-150
13C7_PFUdA		99	25-150
13C8_PFOA		93	25-150
13C8_PFOS		87	25-150
13C8_PFOSA		85	10-150
13C9_PFNA		90	25-150
d-EtFOSA		127	10-150
d5-EtFOSAA		96	25-150
d9-EtFOSE		95	10-150
d-MeFOSA		99	10-150
d3-MeFOSAA		95	25-150
d7-MeFOSE		100	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: 4/3/2021 Results Requested By: 4/19/2021

Workorder: 40224476 **Workorder Name:** #4 BELOW

WD06012

KLC2

Report To	Subcontract To	Requested Analysis
Brian Basten 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	Preserved Containers: Unpreserved						WI 33 PFAS	LAB USE ONLY
1	#4 BELOW	PS	4/1/2021 09:00	40224476001	Solid	1						X	
2													
3													
4													
5													

Transfers	Released By	Date/Time	Received By	Date/Time
1	[signature]	4/5/21 1600		
2				
3	UPS	4/6/21 9471	[signature]	4/6/21 947

Comments

Cooler Temperature on Receipt 1.1°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

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

Pace Analytical® www.pacelabs.com

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

Page 1 of

40224476

CHAIN OF CUSTODY

*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

(Please Print Clearly)	
Company Name:	Fincantieri Marinette Marine
Branch/Location:	Marinette
Project Contact:	MaKayla Jacobs
Phone:	715-245-1931
Project Number:	#4 below
Project Name:	
Project State:	WI
Sampled By (Print):	Warren & MaKayla
Sampled By (Sign):	
PO #:	Regulatory Program:

Quote #:	
Mail To Contact:	
Mail To Company:	
Mail To Address:	
Invoice To Contact:	
Invoice To Company:	
Invoice To Address:	
Invoice To Phone:	

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

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

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

PACE LAB #	CLIENT FIELD ID	COLLECTION DATE	COLLECTION TIME	MATRIX	FILTERED? (YES/NO)	PRESERVATION (CODE)*	Analyses Requested: VOC	RCRA Metals	PAHs	PCBs	PFAS	CLIENT COMMENTS	LAB COMMENTS (Lab Use Only)	Profile #
*	#4 below	4-1-21	9:00am	S			X	X	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:
Email #2:
Telephone:
Fax:

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

Relinquished By:	Date/Time:	Received By:	Date/Time:
MaKayla Jacobs	4-2-21 / 7:00am		
Relinquished By:	Date/Time:	Received By:	Date/Time:
UPS	4/3/21 1035		4/3/21 1035
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.: 40224476
Receipt Temp = 4.5 °C
Sample Receipt pH OK / Adjusted
Cooler Custody Seal Present / Not Present Intact / Not Intact

Version 6.0 08/14/08

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

Sample Preservation Receipt Form

Client Name: Marinette Marine Project # 40224476

All containers needing preservation have been checked and noted below: ☐Yes ☐No ☒N/A Initial when completed: Date/ Time:

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

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										1								1		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																																	2.5 / 5 / 10
009																																	2.5 / 5 / 10
010																																	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	

F-GB-C-046-Rev.03 (11Feb2020) Sample Preservation Receipt Form

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

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 4/16/21 Lot #: WD0602

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: 21-443

1.2 / 1.4 °C NA °C NA °C 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: H2SO4, HNO3, 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: 4/16/21

Comments:

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

May 03, 2021

Makayla Jacobs
Fincantieri Marinette Marine
1600 Ely Street
Marinette, WI 54143

RE: Project: B.34 & B.35
Pace Project No.: 40225623

Dear Makayla Jacobs:

Enclosed are the analytical results for sample(s) received by the laboratory on April 22, 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,

Brian Basten
brian.basten@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: B.34 & B.35
Pace Project No.: 40225623

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

REPORT OF LABORATORY ANALYSIS

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

SAMPLE SUMMARY

Project: B.34 & B.35
Pace Project No.: 40225623

Lab ID	Sample ID	Matrix	Date Collected	Date Received
40225623001	**SOUTH END B.34 (1)**	Solid	04/20/21 11:15	04/22/21 11:10
40225623002	**SOUTH END B.34 (2)**	Solid	04/20/21 11:15	04/22/21 11:10
40225623003	**SOUTH END B.34 (3)**	Solid	04/20/21 11:15	04/22/21 11:10
40225623004	**TRIP BLANK**	Solid	04/20/21 11:15	04/22/21 11:10

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

SAMPLE ANALYTE COUNT

Project: B.34 & B.35
Pace Project No.: 40225623

Lab ID	Sample ID	Method	Analysts	Analytes Reported
40225623001	**SOUTH END B.34 (1)**	EPA 8082	BLM	10
		EPA 6010	TXW	7
		EPA 7471	AJT	1
		EPA 8270E by SIM	JJB	20
		EPA 8260	MDS	64
		ASTM D2974-87	MMX	1
40225623002	**SOUTH END B.34 (2)**	EPA 8082	BLM	10
		EPA 6010	TXW	7
		EPA 7471	AJT	1
		EPA 8270E by SIM	JJB	20
		EPA 8260	MDS	64
		ASTM D2974-87	MMX	1
40225623003	**SOUTH END B.34 (3)**	EPA 8082	BLM	10
		EPA 6010	TXW	7
		EPA 7471	AJT	1
		EPA 8270E by SIM	JJB	20
		EPA 8260	MDS	64
		ASTM D2974-87	MMX	1
40225623004	**TRIP BLANK**	EPA 8260	MDS	64

PASI-G = Pace Analytical Services - Green Bay

REPORT OF LABORATORY ANALYSIS

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

SUMMARY OF DETECTION

Project: B.34 & B.35
Pace Project No.: 40225623

Lab Sample ID / Method	Client Sample ID / Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
40225623001	**SOUTH END B.34 (1)**					
EPA 8082	PCB-1242 (Aroclor 1242)	390	ug/kg	55.7	04/26/21 21:19	
EPA 8082	PCB-1254 (Aroclor 1254)	129	ug/kg	55.7	04/26/21 21:19	
EPA 8082	PCB-1260 (Aroclor 1260)	42.9J	ug/kg	55.7	04/26/21 21:19	
EPA 8082	PCB, Total	562	ug/kg	55.7	04/26/21 21:19	
EPA 6010	Arsenic	20.1	mg/kg	5.5	04/28/21 12:32	
EPA 6010	Barium	142	mg/kg	1.1	04/28/21 12:32	
EPA 6010	Cadmium	0.63J	mg/kg	1.1	04/28/21 12:32	D3
EPA 6010	Chromium	28.1	mg/kg	2.2	04/28/21 12:32	
EPA 6010	Lead	134	mg/kg	4.4	04/28/21 12:32	
EPA 6010	Silver	1.4J	mg/kg	2.2	04/28/21 12:32	D3
EPA 7471	Mercury	0.59	mg/kg	0.037	05/03/21 10:00	
EPA 8270E by SIM	Acenaphthene	80.7J	ug/kg	93.0	04/28/21 19:33	
EPA 8270E by SIM	Acenaphthylene	135	ug/kg	93.0	04/28/21 19:33	
EPA 8270E by SIM	Anthracene	174	ug/kg	93.0	04/28/21 19:33	
EPA 8270E by SIM	Benzo(a)anthracene	538	ug/kg	93.0	04/28/21 19:33	
EPA 8270E by SIM	Benzo(a)pyrene	525	ug/kg	93.0	04/28/21 19:33	
EPA 8270E by SIM	Benzo(b)fluoranthene	677	ug/kg	93.0	04/28/21 19:33	
EPA 8270E by SIM	Benzo(g,h,i)perylene	383	ug/kg	93.0	04/28/21 19:33	
EPA 8270E by SIM	Benzo(k)fluoranthene	308	ug/kg	93.0	04/28/21 19:33	
EPA 8270E by SIM	Chrysene	560	ug/kg	93.0	04/28/21 19:33	
EPA 8270E by SIM	Dibenz(a,h)anthracene	95.3	ug/kg	93.0	04/28/21 19:33	
EPA 8270E by SIM	Fluoranthene	1120	ug/kg	93.0	04/28/21 19:33	
EPA 8270E by SIM	Fluorene	86.1J	ug/kg	93.0	04/28/21 19:33	
EPA 8270E by SIM	Indeno(1,2,3-cd)pyrene	307	ug/kg	93.0	04/28/21 19:33	
EPA 8270E by SIM	1-Methylnaphthalene	122	ug/kg	93.0	04/28/21 19:33	
EPA 8270E by SIM	2-Methylnaphthalene	168	ug/kg	93.0	04/28/21 19:33	
EPA 8270E by SIM	Naphthalene	279	ug/kg	93.0	04/28/21 19:33	
EPA 8270E by SIM	Phenanthrene	573	ug/kg	93.0	04/28/21 19:33	
EPA 8270E by SIM	Pyrene	38.9J	ug/kg	93.0	04/28/21 19:33	
EPA 8260	1,2,4-Trimethylbenzene	71.8	ug/kg	61.2	04/27/21 01:36	
EPA 8260	1,4-Dichlorobenzene	245	ug/kg	61.2	04/27/21 01:36	
EPA 8260	Chlorobenzene	53.7J	ug/kg	61.2	04/27/21 01:36	
EPA 8260	Ethylbenzene	18.5J	ug/kg	61.2	04/27/21 01:36	
EPA 8260	Naphthalene	100J	ug/kg	306	04/27/21 01:36	
EPA 8260	Toluene	42.0J	ug/kg	61.2	04/27/21 01:36	
EPA 8260	m&p-Xylene	46.5J	ug/kg	122	04/27/21 01:36	
EPA 8260	o-Xylene	20.0J	ug/kg	61.2	04/27/21 01:36	
EPA 8260	p-Isopropyltoluene	77.1	ug/kg	61.2	04/27/21 01:36	
ASTM D2974-87	Percent Moisture	10.1	%	0.10	04/22/21 17:16	
40225623002	**SOUTH END B.34 (2)**					
EPA 8082	PCB-1242 (Aroclor 1242)	314	ug/kg	82.0	04/26/21 22:07	
EPA 8082	PCB-1254 (Aroclor 1254)	140	ug/kg	82.0	04/26/21 22:07	
EPA 8082	PCB-1260 (Aroclor 1260)	47.5J	ug/kg	82.0	04/26/21 22:07	
EPA 8082	PCB, Total	502	ug/kg	82.0	04/26/21 22:07	
EPA 6010	Arsenic	62.7	mg/kg	4.0	04/27/21 14:18	
EPA 6010	Barium	328	mg/kg	0.80	04/27/21 14:18	
EPA 6010	Cadmium	2.4	mg/kg	0.80	04/27/21 14:18	

REPORT OF LABORATORY ANALYSIS

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

SUMMARY OF DETECTION

Project: B.34 & B.35
Pace Project No.: 40225623

Lab Sample ID / Method	Client Sample ID / Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
40225623002	**SOUTH END B.34 (2)**					
EPA 6010	Chromium	36.8	mg/kg	1.6	04/27/21 14:18	
EPA 6010	Lead	232	mg/kg	3.2	04/27/21 14:18	
EPA 6010	Silver	1.9	mg/kg	1.6	04/27/21 14:18	
EPA 7471	Mercury	1.7	mg/kg	0.057	05/03/21 10:07	
EPA 8270E by SIM	Acenaphthene	156	ug/kg	54.7	04/28/21 19:50	
EPA 8270E by SIM	Acenaphthylene	19.9J	ug/kg	54.7	04/28/21 19:50	
EPA 8270E by SIM	Anthracene	66.6	ug/kg	54.7	04/28/21 19:50	
EPA 8270E by SIM	Benzo(a)anthracene	213	ug/kg	54.7	04/28/21 19:50	
EPA 8270E by SIM	Benzo(a)pyrene	160	ug/kg	54.7	04/28/21 19:50	
EPA 8270E by SIM	Benzo(b)fluoranthene	207	ug/kg	54.7	04/28/21 19:50	
EPA 8270E by SIM	Benzo(g,h,i)perylene	123	ug/kg	54.7	04/28/21 19:50	
EPA 8270E by SIM	Benzo(k)fluoranthene	126	ug/kg	54.7	04/28/21 19:50	
EPA 8270E by SIM	Chrysene	166	ug/kg	54.7	04/28/21 19:50	
EPA 8270E by SIM	Dibenz(a,h)anthracene	19.0J	ug/kg	54.7	04/28/21 19:50	
EPA 8270E by SIM	Fluoranthene	345	ug/kg	54.7	04/28/21 19:50	
EPA 8270E by SIM	Fluorene	140	ug/kg	54.7	04/28/21 19:50	
EPA 8270E by SIM	Indeno(1,2,3-cd)pyrene	79.2	ug/kg	54.7	04/28/21 19:50	
EPA 8270E by SIM	1-Methylnaphthalene	488	ug/kg	54.7	04/28/21 19:50	
EPA 8270E by SIM	2-Methylnaphthalene	545	ug/kg	54.7	04/28/21 19:50	
EPA 8270E by SIM	Naphthalene	1260	ug/kg	54.7	04/28/21 19:50	
EPA 8270E by SIM	Phenanthrene	490	ug/kg	54.7	04/28/21 19:50	
EPA 8270E by SIM	Pyrene	304	ug/kg	54.7	04/28/21 19:50	
EPA 8260	1,2,4-Trimethylbenzene	295	ug/kg	125	04/27/21 01:16	
EPA 8260	1,3,5-Trimethylbenzene	47.1J	ug/kg	125	04/27/21 01:16	
EPA 8260	1,4-Dichlorobenzene	363	ug/kg	125	04/27/21 01:16	
EPA 8260	Chlorobenzene	117J	ug/kg	125	04/27/21 01:16	
EPA 8260	Ethylbenzene	59.6J	ug/kg	125	04/27/21 01:16	
EPA 8260	Naphthalene	423J	ug/kg	625	04/27/21 01:16	
EPA 8260	Toluene	105J	ug/kg	125	04/27/21 01:16	
EPA 8260	m&p-Xylene	192J	ug/kg	250	04/27/21 01:16	
EPA 8260	o-Xylene	40.9J	ug/kg	125	04/27/21 01:16	
EPA 8260	p-Isopropyltoluene	192	ug/kg	125	04/27/21 01:16	
ASTM D2974-87	Percent Moisture	39.0	%	0.10	04/22/21 17:16	
40225623003	**SOUTH END B.34 (3)**					
EPA 8082	PCB-1242 (Aroclor 1242)	269	ug/kg	59.0	04/26/21 22:56	
EPA 8082	PCB-1254 (Aroclor 1254)	91.2	ug/kg	59.0	04/26/21 22:56	
EPA 8082	PCB-1260 (Aroclor 1260)	34.4J	ug/kg	59.0	04/26/21 22:56	
EPA 8082	PCB, Total	395	ug/kg	59.0	04/26/21 22:56	
EPA 6010	Arsenic	9.8	mg/kg	2.8	04/27/21 14:21	
EPA 6010	Barium	113	mg/kg	0.56	04/27/21 14:21	
EPA 6010	Cadmium	0.64	mg/kg	0.56	04/27/21 14:21	
EPA 6010	Chromium	18.0	mg/kg	1.1	04/27/21 14:21	
EPA 6010	Lead	106	mg/kg	2.3	04/27/21 14:21	
EPA 6010	Silver	0.60J	mg/kg	1.1	04/27/21 14:21	
EPA 7471	Mercury	0.34	mg/kg	0.039	05/03/21 10:09	
EPA 8270E by SIM	Acenaphthene	144J	ug/kg	197	04/30/21 13:25	
EPA 8270E by SIM	Acenaphthylene	52.8J	ug/kg	197	04/30/21 13:25	

REPORT OF LABORATORY ANALYSIS

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

SUMMARY OF DETECTION

Project: B.34 & B.35
Pace Project No.: 40225623

Lab Sample ID / Method	Client Sample ID / Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
40225623003	**SOUTH END B.34 (3)**					
EPA 8270E by SIM	Anthracene	367	ug/kg	197	04/30/21 13:25	
EPA 8270E by SIM	Benzo(a)anthracene	659	ug/kg	197	04/30/21 13:25	
EPA 8270E by SIM	Benzo(a)pyrene	594	ug/kg	197	04/30/21 13:25	
EPA 8270E by SIM	Benzo(b)fluoranthene	843	ug/kg	197	04/30/21 13:25	
EPA 8270E by SIM	Benzo(g,h,i)perylene	425	ug/kg	197	04/30/21 13:25	
EPA 8270E by SIM	Benzo(k)fluoranthene	356	ug/kg	197	04/30/21 13:25	
EPA 8270E by SIM	Chrysene	819	ug/kg	197	04/30/21 13:25	
EPA 8270E by SIM	Dibenz(a,h)anthracene	89.8J	ug/kg	197	04/30/21 13:25	
EPA 8270E by SIM	Fluoranthene	1680	ug/kg	197	04/30/21 13:25	
EPA 8270E by SIM	Fluorene	159J	ug/kg	197	04/30/21 13:25	
EPA 8270E by SIM	Indeno(1,2,3-cd)pyrene	344	ug/kg	197	04/30/21 13:25	
EPA 8270E by SIM	1-Methylnaphthalene	96.1J	ug/kg	197	04/30/21 13:25	
EPA 8270E by SIM	2-Methylnaphthalene	122J	ug/kg	197	04/30/21 13:25	
EPA 8270E by SIM	Naphthalene	208	ug/kg	197	04/30/21 13:25	
EPA 8270E by SIM	Phenanthrene	1160	ug/kg	197	04/30/21 13:25	
EPA 8270E by SIM	Pyrene	1430	ug/kg	197	04/30/21 13:25	
EPA 8260	1,2,4-Trimethylbenzene	38.9J	ug/kg	73.4	04/27/21 01:56	
EPA 8260	1,4-Dichlorobenzene	113	ug/kg	73.4	04/27/21 01:56	
EPA 8260	Chlorobenzene	30.8J	ug/kg	73.4	04/27/21 01:56	
EPA 8260	Toluene	40.0J	ug/kg	73.4	04/27/21 01:56	
EPA 8260	m&p-Xylene	40.0J	ug/kg	147	04/27/21 01:56	
EPA 8260	p-Isopropyltoluene	45.2J	ug/kg	73.4	04/27/21 01:56	
ASTM D2974-87	Percent Moisture	15.4	%	0.10	04/22/21 17:16	

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

ANALYTICAL RESULTS

Project: B.34 & B.35
Pace Project No.: 40225623

Sample: SOUTH END B.34 (1) **Lab ID: 40225623001** Collected: 04/20/21 11:15 Received: 04/22/21 11:10 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
8082 GCS PCB	Analytical Method: EPA 8082 Preparation Method: EPA 3541 Pace Analytical Services - Green Bay								
PCB-1016 (Aroclor 1016)	**<17.0**	ug/kg	55.7	17.0	1	04/26/21 06:02	04/26/21 21:19	12674-11-2	
PCB-1221 (Aroclor 1221)	**<17.0**	ug/kg	55.7	17.0	1	04/26/21 06:02	04/26/21 21:19	11104-28-2	
PCB-1232 (Aroclor 1232)	**<17.0**	ug/kg	55.7	17.0	1	04/26/21 06:02	04/26/21 21:19	11141-16-5	
PCB-1242 (Aroclor 1242)	**390**	ug/kg	55.7	17.0	1	04/26/21 06:02	04/26/21 21:19	53469-21-9	
PCB-1248 (Aroclor 1248)	**<17.0**	ug/kg	55.7	17.0	1	04/26/21 06:02	04/26/21 21:19	12672-29-6	
PCB-1254 (Aroclor 1254)	**129**	ug/kg	55.7	17.0	1	04/26/21 06:02	04/26/21 21:19	11097-69-1	
PCB-1260 (Aroclor 1260)	**42.9J**	ug/kg	55.7	17.0	1	04/26/21 06:02	04/26/21 21:19	11096-82-5	
PCB, Total	**562**	ug/kg	55.7	17.0	1	04/26/21 06:02	04/26/21 21:19	1336-36-3	
Surrogates									
Tetrachloro-m-xylene (S)	70	%	67-102		1	04/26/21 06:02	04/26/21 21:19	877-09-8	
Decachlorobiphenyl (S)	51	%	47-114		1	04/26/21 06:02	04/26/21 21:19	2051-24-3	
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3050 Pace Analytical Services - Green Bay								
Arsenic	**20.1**	mg/kg	5.5	3.2	2	04/27/21 06:55	04/28/21 12:32	7440-38-2	
Barium	**142**	mg/kg	1.1	0.33	2	04/27/21 06:55	04/28/21 12:32	7440-39-3	
Cadmium	**0.63J**	mg/kg	1.1	0.29	2	04/27/21 06:55	04/28/21 12:32	7440-43-9	D3
Chromium	**28.1**	mg/kg	2.2	0.61	2	04/27/21 06:55	04/28/21 12:32	7440-47-3	
Lead	**134**	mg/kg	4.4	1.3	2	04/27/21 06:55	04/28/21 12:32	7439-92-1	
Selenium	**<2.9**	mg/kg	8.8	2.9	2	04/27/21 06:55	04/28/21 12:32	7782-49-2	D3
Silver	**1.4J**	mg/kg	2.2	0.67	2	04/27/21 06:55	04/28/21 12:32	7440-22-4	D3
7471 Mercury	Analytical Method: EPA 7471 Preparation Method: EPA 7471 Pace Analytical Services - Green Bay								
Mercury	**0.59**	mg/kg	0.037	0.011	1	04/30/21 08:44	05/03/21 10:00	7439-97-6	
8270E MSSV PAH by SIM	Analytical Method: EPA 8270E by SIM Preparation Method: EPA 3546 Pace Analytical Services - Green Bay								
Acenaphthene	**80.7J**	ug/kg	93.0	12.1	5	04/27/21 07:39	04/28/21 19:33	83-32-9	
Acenaphthylene	**135**	ug/kg	93.0	11.7	5	04/27/21 07:39	04/28/21 19:33	208-96-8	
Anthracene	**174**	ug/kg	93.0	11.5	5	04/27/21 07:39	04/28/21 19:33	120-12-7	
Benzo(a)anthracene	**538**	ug/kg	93.0	12.0	5	04/27/21 07:39	04/28/21 19:33	56-55-3	
Benzo(a)pyrene	**525**	ug/kg	93.0	10.6	5	04/27/21 07:39	04/28/21 19:33	50-32-8	
Benzo(b)fluoranthene	**677**	ug/kg	93.0	12.9	5	04/27/21 07:39	04/28/21 19:33	205-99-2	
Benzo(g,h,i)perylene	**383**	ug/kg	93.0	16.3	5	04/27/21 07:39	04/28/21 19:33	191-24-2	
Benzo(k)fluoranthene	**308**	ug/kg	93.0	11.9	5	04/27/21 07:39	04/28/21 19:33	207-08-9	
Chrysene	**560**	ug/kg	93.0	17.5	5	04/27/21 07:39	04/28/21 19:33	218-01-9	
Dibenz(a,h)anthracene	**95.3**	ug/kg	93.0	12.9	5	04/27/21 07:39	04/28/21 19:33	53-70-3	
Fluoranthene	**1120**	ug/kg	93.0	11.0	5	04/27/21 07:39	04/28/21 19:33	206-44-0	
Fluorene	**86.1J**	ug/kg	93.0	11.2	5	04/27/21 07:39	04/28/21 19:33	86-73-7	
Indeno(1,2,3-cd)pyrene	**307**	ug/kg	93.0	19.4	5	04/27/21 07:39	04/28/21 19:33	193-39-5	
1-Methylnaphthalene	**122**	ug/kg	93.0	13.6	5	04/27/21 07:39	04/28/21 19:33	90-12-0	
2-Methylnaphthalene	**168**	ug/kg	93.0	13.6	5	04/27/21 07:39	04/28/21 19:33	91-57-6	
Naphthalene	**279**	ug/kg	93.0	9.1	5	04/27/21 07:39	04/28/21 19:33	91-20-3	

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: B.34 & B.35
Pace Project No.: 40225623

Sample: SOUTH END B.34 (1) **Lab ID: 40225623001** Collected: 04/20/21 11:15 Received: 04/22/21 11:10 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 PAH by SIM	Analytical Method: EPA 8270E by SIM Preparation Method: EPA 3546 Pace Analytical Services - Green Bay								
Phenanthrene	**573**	ug/kg	93.0	10.7	5	04/27/21 07:39	04/28/21 19:33	85-01-8	
Pyrene	**38.9J**	ug/kg	93.0	13.7	5	04/27/21 07:39	04/28/21 19:33	129-00-0	
Surrogates									
2-Fluorobiphenyl (S)	54	%	36-86		5	04/27/21 07:39	04/28/21 19:33	321-60-8	
Terphenyl-d14 (S)	51	%	41-97		5	04/27/21 07:39	04/28/21 19:33	1718-51-0	
8260 MSV Med Level Normal List	Analytical Method: EPA 8260 Preparation Method: EPA 5035/5030B Pace Analytical Services - Green Bay								
1,1,1,2-Tetrachloroethane	**<14.7**	ug/kg	61.2	14.7	1	04/26/21 09:00	04/27/21 01:36	630-20-6	
1,1,1-Trichloroethane	**<15.7**	ug/kg	61.2	15.7	1	04/26/21 09:00	04/27/21 01:36	71-55-6	
1,1,2,2-Tetrachloroethane	**<22.2**	ug/kg	61.2	22.2	1	04/26/21 09:00	04/27/21 01:36	79-34-5	
1,1,2-Trichloroethane	**<22.3**	ug/kg	61.2	22.3	1	04/26/21 09:00	04/27/21 01:36	79-00-5	
1,1-Dichloroethane	**<15.7**	ug/kg	61.2	15.7	1	04/26/21 09:00	04/27/21 01:36	75-34-3	
1,1-Dichloroethene	**<20.3**	ug/kg	61.2	20.3	1	04/26/21 09:00	04/27/21 01:36	75-35-4	
1,1-Dichloropropene	**<19.8**	ug/kg	61.2	19.8	1	04/26/21 09:00	04/27/21 01:36	563-58-6	
1,2,3-Trichlorobenzene	**<68.2**	ug/kg	306	68.2	1	04/26/21 09:00	04/27/21 01:36	87-61-6	
1,2,3-Trichloropropane	**<29.8**	ug/kg	61.2	29.8	1	04/26/21 09:00	04/27/21 01:36	96-18-4	
1,2,4-Trichlorobenzene	**<50.5**	ug/kg	306	50.5	1	04/26/21 09:00	04/27/21 01:36	120-82-1	
1,2,4-Trimethylbenzene	**71.8**	ug/kg	61.2	18.2	1	04/26/21 09:00	04/27/21 01:36	95-63-6	
1,2-Dibromo-3-chloropropane	**<47.5**	ug/kg	306	47.5	1	04/26/21 09:00	04/27/21 01:36	96-12-8	
1,2-Dibromoethane (EDB)	**<16.8**	ug/kg	61.2	16.8	1	04/26/21 09:00	04/27/21 01:36	106-93-4	
1,2-Dichlorobenzene	**<19.0**	ug/kg	61.2	19.0	1	04/26/21 09:00	04/27/21 01:36	95-50-1	
1,2-Dichloroethane	**<14.1**	ug/kg	61.2	14.1	1	04/26/21 09:00	04/27/21 01:36	107-06-2	
1,2-Dichloropropane	**<14.6**	ug/kg	61.2	14.6	1	04/26/21 09:00	04/27/21 01:36	78-87-5	
1,3,5-Trimethylbenzene	**<19.7**	ug/kg	61.2	19.7	1	04/26/21 09:00	04/27/21 01:36	108-67-8	
1,3-Dichlorobenzene	**<16.8**	ug/kg	61.2	16.8	1	04/26/21 09:00	04/27/21 01:36	541-73-1	
1,3-Dichloropropane	**<13.3**	ug/kg	61.2	13.3	1	04/26/21 09:00	04/27/21 01:36	142-28-9	
1,4-Dichlorobenzene	**245**	ug/kg	61.2	16.8	1	04/26/21 09:00	04/27/21 01:36	106-46-7	
2,2-Dichloropropane	**<16.5**	ug/kg	61.2	16.5	1	04/26/21 09:00	04/27/21 01:36	594-20-7	
2-Chlorotoluene	**<19.8**	ug/kg	61.2	19.8	1	04/26/21 09:00	04/27/21 01:36	95-49-8	
4-Chlorotoluene	**<23.3**	ug/kg	61.2	23.3	1	04/26/21 09:00	04/27/21 01:36	106-43-4	
Benzene	**<14.6**	ug/kg	24.5	14.6	1	04/26/21 09:00	04/27/21 01:36	71-43-2	
Bromobenzene	**<23.9**	ug/kg	61.2	23.9	1	04/26/21 09:00	04/27/21 01:36	108-86-1	
Bromochloromethane	**<16.8**	ug/kg	61.2	16.8	1	04/26/21 09:00	04/27/21 01:36	74-97-5	
Bromodichloromethane	**<14.6**	ug/kg	61.2	14.6	1	04/26/21 09:00	04/27/21 01:36	75-27-4	
Bromoform	**<269**	ug/kg	306	269	1	04/26/21 09:00	04/27/21 01:36	75-25-2	L1
Bromomethane	**<85.9**	ug/kg	306	85.9	1	04/26/21 09:00	04/27/21 01:36	74-83-9	
Carbon tetrachloride	**<13.5**	ug/kg	61.2	13.5	1	04/26/21 09:00	04/27/21 01:36	56-23-5	
Chlorobenzene	**53.7J**	ug/kg	61.2	7.3	1	04/26/21 09:00	04/27/21 01:36	108-90-7	
Chloroethane	**<25.8**	ug/kg	306	25.8	1	04/26/21 09:00	04/27/21 01:36	75-00-3	
Chloroform	**<43.8**	ug/kg	306	43.8	1	04/26/21 09:00	04/27/21 01:36	67-66-3	
Chloromethane	**<23.3**	ug/kg	61.2	23.3	1	04/26/21 09:00	04/27/21 01:36	74-87-3	
Dibromochloromethane	**<209**	ug/kg	306	209	1	04/26/21 09:00	04/27/21 01:36	124-48-1	
Dibromomethane	**<18.1**	ug/kg	61.2	18.1	1	04/26/21 09:00	04/27/21 01:36	74-95-3	

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: B.34 & B.35
Pace Project No.: 40225623

Sample: SOUTH END B.34 (1) **Lab ID: 40225623001** Collected: 04/20/21 11:15 Received: 04/22/21 11:10 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								
Dichlorodifluoromethane	**<26.3**	ug/kg	61.2	26.3	1	04/26/21 09:00	04/27/21 01:36	75-71-8	
Diisopropyl ether	**<15.2**	ug/kg	61.2	15.2	1	04/26/21 09:00	04/27/21 01:36	108-20-3	
Ethylbenzene	**18.5J**	ug/kg	61.2	14.6	1	04/26/21 09:00	04/27/21 01:36	100-41-4	
Hexachloro-1,3-butadiene	**<122**	ug/kg	306	122	1	04/26/21 09:00	04/27/21 01:36	87-68-3	
Isopropylbenzene (Cumene)	**<16.5**	ug/kg	61.2	16.5	1	04/26/21 09:00	04/27/21 01:36	98-82-8	
Methyl-tert-butyl ether	**<18.0**	ug/kg	61.2	18.0	1	04/26/21 09:00	04/27/21 01:36	1634-04-4	
Methylene Chloride	**<17.0**	ug/kg	61.2	17.0	1	04/26/21 09:00	04/27/21 01:36	75-09-2	
Naphthalene	**100J**	ug/kg	306	19.1	1	04/26/21 09:00	04/27/21 01:36	91-20-3	
Styrene	**<15.7**	ug/kg	61.2	15.7	1	04/26/21 09:00	04/27/21 01:36	100-42-5	
Tetrachloroethene	**<23.8**	ug/kg	61.2	23.8	1	04/26/21 09:00	04/27/21 01:36	127-18-4	
Toluene	**42.0J**	ug/kg	61.2	15.4	1	04/26/21 09:00	04/27/21 01:36	108-88-3	
Trichloroethene	**<22.9**	ug/kg	61.2	22.9	1	04/26/21 09:00	04/27/21 01:36	79-01-6	
Trichlorofluoromethane	**<17.8**	ug/kg	61.2	17.8	1	04/26/21 09:00	04/27/21 01:36	75-69-4	
Vinyl chloride	**<12.4**	ug/kg	61.2	12.4	1	04/26/21 09:00	04/27/21 01:36	75-01-4	
cis-1,2-Dichloroethene	**<13.1**	ug/kg	61.2	13.1	1	04/26/21 09:00	04/27/21 01:36	156-59-2	
cis-1,3-Dichloropropene	**<40.4**	ug/kg	306	40.4	1	04/26/21 09:00	04/27/21 01:36	10061-01-5	
m&p-Xylene	**46.5J**	ug/kg	122	25.8	1	04/26/21 09:00	04/27/21 01:36	179601-23-1	
n-Butylbenzene	**<28.0**	ug/kg	61.2	28.0	1	04/26/21 09:00	04/27/21 01:36	104-51-8	
n-Propylbenzene	**<14.7**	ug/kg	61.2	14.7	1	04/26/21 09:00	04/27/21 01:36	103-65-1	
o-Xylene	**20.0J**	ug/kg	61.2	18.4	1	04/26/21 09:00	04/27/21 01:36	95-47-6	
p-Isopropyltoluene	**77.1**	ug/kg	61.2	18.6	1	04/26/21 09:00	04/27/21 01:36	99-87-6	
sec-Butylbenzene	**<14.9**	ug/kg	61.2	14.9	1	04/26/21 09:00	04/27/21 01:36	135-98-8	
tert-Butylbenzene	**<19.2**	ug/kg	61.2	19.2	1	04/26/21 09:00	04/27/21 01:36	98-06-6	
trans-1,2-Dichloroethene	**<13.2**	ug/kg	61.2	13.2	1	04/26/21 09:00	04/27/21 01:36	156-60-5	
trans-1,3-Dichloropropene	**<175**	ug/kg	306	175	1	04/26/21 09:00	04/27/21 01:36	10061-02-6	
Surrogates									
Toluene-d8 (S)	114	%	67-159		1	04/26/21 09:00	04/27/21 01:36	2037-26-5	
4-Bromofluorobenzene (S)	95	%	66-153		1	04/26/21 09:00	04/27/21 01:36	460-00-4	
1,2-Dichlorobenzene-d4 (S)	114	%	82-158		1	04/26/21 09:00	04/27/21 01:36	2199-69-1	
Percent Moisture	Analytical Method: ASTM D2974-87 Pace Analytical Services - Green Bay								
Percent Moisture	**10.1**	%	0.10	0.10	1		04/22/21 17:16		

Sample: SOUTH END B.34 (2) **Lab ID: 40225623002** Collected: 04/20/21 11:15 Received: 04/22/21 11:10 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
8082 GCS PCB	Analytical Method: EPA 8082 Preparation Method: EPA 3541 Pace Analytical Services - Green Bay								
PCB-1016 (Aroclor 1016)	**<25.0**	ug/kg	82.0	25.0	1	04/26/21 06:02	04/26/21 22:07	12674-11-2	
PCB-1221 (Aroclor 1221)	**<25.0**	ug/kg	82.0	25.0	1	04/26/21 06:02	04/26/21 22:07	11104-28-2	

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: B.34 & B.35
Pace Project No.: 40225623

Sample: SOUTH END B.34 (2) **Lab ID: 40225623002** Collected: 04/20/21 11:15 Received: 04/22/21 11:10 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
8082 GCS PCB	Analytical Method: EPA 8082 Preparation Method: EPA 3541 Pace Analytical Services - Green Bay								
PCB-1232 (Aroclor 1232)	**<25.0**	ug/kg	82.0	25.0	1	04/26/21 06:02	04/26/21 22:07	11141-16-5	
PCB-1242 (Aroclor 1242)	**314**	ug/kg	82.0	25.0	1	04/26/21 06:02	04/26/21 22:07	53469-21-9	
PCB-1248 (Aroclor 1248)	**<25.0**	ug/kg	82.0	25.0	1	04/26/21 06:02	04/26/21 22:07	12672-29-6	
PCB-1254 (Aroclor 1254)	**140**	ug/kg	82.0	25.0	1	04/26/21 06:02	04/26/21 22:07	11097-69-1	
PCB-1260 (Aroclor 1260)	**47.5J**	ug/kg	82.0	25.0	1	04/26/21 06:02	04/26/21 22:07	11096-82-5	
PCB, Total	**502**	ug/kg	82.0	25.0	1	04/26/21 06:02	04/26/21 22:07	1336-36-3	
Surrogates									
Tetrachloro-m-xylene (S)	62	%	67-102		1	04/26/21 06:02	04/26/21 22:07	877-09-8	S0
Decachlorobiphenyl (S)	50	%	47-114		1	04/26/21 06:02	04/26/21 22:07	2051-24-3	
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3050 Pace Analytical Services - Green Bay								
Arsenic	**62.7**	mg/kg	4.0	2.4	1	04/27/21 06:55	04/27/21 14:18	7440-38-2	
Barium	**328**	mg/kg	0.80	0.24	1	04/27/21 06:55	04/27/21 14:18	7440-39-3	
Cadmium	**2.4**	mg/kg	0.80	0.21	1	04/27/21 06:55	04/27/21 14:18	7440-43-9	
Chromium	**36.8**	mg/kg	1.6	0.45	1	04/27/21 06:55	04/27/21 14:18	7440-47-3	
Lead	**232**	mg/kg	3.2	0.96	1	04/27/21 06:55	04/27/21 14:18	7439-92-1	
Selenium	**<2.1**	mg/kg	6.4	2.1	1	04/27/21 06:55	04/27/21 14:18	7782-49-2	
Silver	**1.9**	mg/kg	1.6	0.49	1	04/27/21 06:55	04/27/21 14:18	7440-22-4	
7471 Mercury	Analytical Method: EPA 7471 Preparation Method: EPA 7471 Pace Analytical Services - Green Bay								
Mercury	**1.7**	mg/kg	0.057	0.016	1	04/30/21 08:44	05/03/21 10:07	7439-97-6	
8270E MSSV PAH by SIM	Analytical Method: EPA 8270E by SIM Preparation Method: EPA 3546 Pace Analytical Services - Green Bay								
Acenaphthene	**156**	ug/kg	54.7	7.1	2	04/27/21 07:39	04/28/21 19:50	83-32-9	
Acenaphthylene	**19.9J**	ug/kg	54.7	6.9	2	04/27/21 07:39	04/28/21 19:50	208-96-8	
Anthracene	**66.6**	ug/kg	54.7	6.8	2	04/27/21 07:39	04/28/21 19:50	120-12-7	
Benzo(a)anthracene	**213**	ug/kg	54.7	7.1	2	04/27/21 07:39	04/28/21 19:50	56-55-3	
Benzo(a)pyrene	**160**	ug/kg	54.7	6.2	2	04/27/21 07:39	04/28/21 19:50	50-32-8	
Benzo(b)fluoranthene	**207**	ug/kg	54.7	7.6	2	04/27/21 07:39	04/28/21 19:50	205-99-2	
Benzo(g,h,i)perylene	**123**	ug/kg	54.7	9.6	2	04/27/21 07:39	04/28/21 19:50	191-24-2	
Benzo(k)fluoranthene	**126**	ug/kg	54.7	7.0	2	04/27/21 07:39	04/28/21 19:50	207-08-9	
Chrysene	**166**	ug/kg	54.7	10.3	2	04/27/21 07:39	04/28/21 19:50	218-01-9	
Dibenz(a,h)anthracene	**19.0J**	ug/kg	54.7	7.6	2	04/27/21 07:39	04/28/21 19:50	53-70-3	
Fluoranthene	**345**	ug/kg	54.7	6.5	2	04/27/21 07:39	04/28/21 19:50	206-44-0	
Fluorene	**140**	ug/kg	54.7	6.6	2	04/27/21 07:39	04/28/21 19:50	86-73-7	
Indeno(1,2,3-cd)pyrene	**79.2**	ug/kg	54.7	11.4	2	04/27/21 07:39	04/28/21 19:50	193-39-5	
1-Methylnaphthalene	**488**	ug/kg	54.7	8.0	2	04/27/21 07:39	04/28/21 19:50	90-12-0	
2-Methylnaphthalene	**545**	ug/kg	54.7	8.0	2	04/27/21 07:39	04/28/21 19:50	91-57-6	
Naphthalene	**1260**	ug/kg	54.7	5.3	2	04/27/21 07:39	04/28/21 19:50	91-20-3	
Phenanthrene	**490**	ug/kg	54.7	6.3	2	04/27/21 07:39	04/28/21 19:50	85-01-8	
Pyrene	**304**	ug/kg	54.7	8.0	2	04/27/21 07:39	04/28/21 19:50	129-00-0	

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: B.34 & B.35
Pace Project No.: 40225623

Sample: SOUTH END B.34 (2) **Lab ID: 40225623002** Collected: 04/20/21 11:15 Received: 04/22/21 11:10 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 PAH by SIM	Analytical Method: EPA 8270E by SIM Preparation Method: EPA 3546 Pace Analytical Services - Green Bay								
Surrogates									
2-Fluorobiphenyl (S)	55	%	36-86		2	04/27/21 07:39	04/28/21 19:50	321-60-8	
Terphenyl-d14 (S)	50	%	41-97		2	04/27/21 07:39	04/28/21 19:50	1718-51-0	
8260 MSV Med Level Normal List	Analytical Method: EPA 8260 Preparation Method: EPA 5035/5030B Pace Analytical Services - Green Bay								
1,1,1,2-Tetrachloroethane	**<30.0**	ug/kg	125	30.0	1	04/26/21 09:00	04/27/21 01:16	630-20-6	
1,1,1-Trichloroethane	**<32.0**	ug/kg	125	32.0	1	04/26/21 09:00	04/27/21 01:16	71-55-6	
1,1,2,2-Tetrachloroethane	**<45.3**	ug/kg	125	45.3	1	04/26/21 09:00	04/27/21 01:16	79-34-5	
1,1,2-Trichloroethane	**<45.5**	ug/kg	125	45.5	1	04/26/21 09:00	04/27/21 01:16	79-00-5	
1,1-Dichloroethane	**<32.0**	ug/kg	125	32.0	1	04/26/21 09:00	04/27/21 01:16	75-34-3	
1,1-Dichloroethene	**<41.5**	ug/kg	125	41.5	1	04/26/21 09:00	04/27/21 01:16	75-35-4	
1,1-Dichloropropene	**<40.5**	ug/kg	125	40.5	1	04/26/21 09:00	04/27/21 01:16	563-58-6	
1,2,3-Trichlorobenzene	**<139**	ug/kg	625	139	1	04/26/21 09:00	04/27/21 01:16	87-61-6	
1,2,3-Trichloropropane	**<60.8**	ug/kg	125	60.8	1	04/26/21 09:00	04/27/21 01:16	96-18-4	
1,2,4-Trichlorobenzene	**<103**	ug/kg	625	103	1	04/26/21 09:00	04/27/21 01:16	120-82-1	
1,2,4-Trimethylbenzene	**295**	ug/kg	125	37.3	1	04/26/21 09:00	04/27/21 01:16	95-63-6	
1,2-Dibromo-3-chloropropane	**<97.0**	ug/kg	625	97.0	1	04/26/21 09:00	04/27/21 01:16	96-12-8	
1,2-Dibromoethane (EDB)	**<34.3**	ug/kg	125	34.3	1	04/26/21 09:00	04/27/21 01:16	106-93-4	
1,2-Dichlorobenzene	**<38.8**	ug/kg	125	38.8	1	04/26/21 09:00	04/27/21 01:16	95-50-1	
1,2-Dichloroethane	**<28.8**	ug/kg	125	28.8	1	04/26/21 09:00	04/27/21 01:16	107-06-2	
1,2-Dichloropropane	**<29.8**	ug/kg	125	29.8	1	04/26/21 09:00	04/27/21 01:16	78-87-5	
1,3,5-Trimethylbenzene	**47.1J**	ug/kg	125	40.3	1	04/26/21 09:00	04/27/21 01:16	108-67-8	
1,3-Dichlorobenzene	**<34.3**	ug/kg	125	34.3	1	04/26/21 09:00	04/27/21 01:16	541-73-1	
1,3-Dichloropropane	**<27.3**	ug/kg	125	27.3	1	04/26/21 09:00	04/27/21 01:16	142-28-9	
1,4-Dichlorobenzene	**363**	ug/kg	125	34.3	1	04/26/21 09:00	04/27/21 01:16	106-46-7	
2,2-Dichloropropane	**<33.8**	ug/kg	125	33.8	1	04/26/21 09:00	04/27/21 01:16	594-20-7	
2-Chlorotoluene	**<40.5**	ug/kg	125	40.5	1	04/26/21 09:00	04/27/21 01:16	95-49-8	
4-Chlorotoluene	**<47.5**	ug/kg	125	47.5	1	04/26/21 09:00	04/27/21 01:16	106-43-4	
Benzene	**<29.8**	ug/kg	50.0	29.8	1	04/26/21 09:00	04/27/21 01:16	71-43-2	
Bromobenzene	**<48.8**	ug/kg	125	48.8	1	04/26/21 09:00	04/27/21 01:16	108-86-1	
Bromochloromethane	**<34.3**	ug/kg	125	34.3	1	04/26/21 09:00	04/27/21 01:16	74-97-5	
Bromodichloromethane	**<29.8**	ug/kg	125	29.8	1	04/26/21 09:00	04/27/21 01:16	75-27-4	
Bromoform	**<550**	ug/kg	625	550	1	04/26/21 09:00	04/27/21 01:16	75-25-2	L1
Bromomethane	**<175**	ug/kg	625	175	1	04/26/21 09:00	04/27/21 01:16	74-83-9	
Carbon tetrachloride	**<27.5**	ug/kg	125	27.5	1	04/26/21 09:00	04/27/21 01:16	56-23-5	
Chlorobenzene	**117J**	ug/kg	125	15.0	1	04/26/21 09:00	04/27/21 01:16	108-90-7	
Chloroethane	**<52.8**	ug/kg	625	52.8	1	04/26/21 09:00	04/27/21 01:16	75-00-3	
Chloroform	**<89.5**	ug/kg	625	89.5	1	04/26/21 09:00	04/27/21 01:16	67-66-3	
Chloromethane	**<47.5**	ug/kg	125	47.5	1	04/26/21 09:00	04/27/21 01:16	74-87-3	
Dibromochloromethane	**<427**	ug/kg	625	427	1	04/26/21 09:00	04/27/21 01:16	124-48-1	
Dibromomethane	**<37.0**	ug/kg	125	37.0	1	04/26/21 09:00	04/27/21 01:16	74-95-3	
Dichlorodifluoromethane	**<53.8**	ug/kg	125	53.8	1	04/26/21 09:00	04/27/21 01:16	75-71-8	
Diisopropyl ether	**<31.0**	ug/kg	125	31.0	1	04/26/21 09:00	04/27/21 01:16	108-20-3	

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

ANALYTICAL RESULTS

Project: B.34 & B.35
Pace Project No.: 40225623

Sample: SOUTH END B.34 (2) **Lab ID: 40225623002** Collected: 04/20/21 11:15 Received: 04/22/21 11:10 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								
Ethylbenzene	**59.6J**	ug/kg	125	29.8	1	04/26/21 09:00	04/27/21 01:16	100-41-4	
Hexachloro-1,3-butadiene	**<249**	ug/kg	625	249	1	04/26/21 09:00	04/27/21 01:16	87-68-3	
Isopropylbenzene (Cumene)	**<33.8**	ug/kg	125	33.8	1	04/26/21 09:00	04/27/21 01:16	98-82-8	
Methyl-tert-butyl ether	**<36.8**	ug/kg	125	36.8	1	04/26/21 09:00	04/27/21 01:16	1634-04-4	
Methylene Chloride	**<34.8**	ug/kg	125	34.8	1	04/26/21 09:00	04/27/21 01:16	75-09-2	
Naphthalene	**423J**	ug/kg	625	39.0	1	04/26/21 09:00	04/27/21 01:16	91-20-3	
Styrene	**<32.0**	ug/kg	125	32.0	1	04/26/21 09:00	04/27/21 01:16	100-42-5	
Tetrachloroethene	**<48.5**	ug/kg	125	48.5	1	04/26/21 09:00	04/27/21 01:16	127-18-4	
Toluene	**105J**	ug/kg	125	31.5	1	04/26/21 09:00	04/27/21 01:16	108-88-3	
Trichloroethene	**<46.8**	ug/kg	125	46.8	1	04/26/21 09:00	04/27/21 01:16	79-01-6	
Trichlorofluoromethane	**<36.3**	ug/kg	125	36.3	1	04/26/21 09:00	04/27/21 01:16	75-69-4	
Vinyl chloride	**<25.3**	ug/kg	125	25.3	1	04/26/21 09:00	04/27/21 01:16	75-01-4	
cis-1,2-Dichloroethene	**<26.8**	ug/kg	125	26.8	1	04/26/21 09:00	04/27/21 01:16	156-59-2	
cis-1,3-Dichloropropene	**<82.5**	ug/kg	625	82.5	1	04/26/21 09:00	04/27/21 01:16	10061-01-5	
m&p-Xylene	**192J**	ug/kg	250	52.8	1	04/26/21 09:00	04/27/21 01:16	179601-23-1	
n-Butylbenzene	**<57.3**	ug/kg	125	57.3	1	04/26/21 09:00	04/27/21 01:16	104-51-8	
n-Propylbenzene	**<30.0**	ug/kg	125	30.0	1	04/26/21 09:00	04/27/21 01:16	103-65-1	
o-Xylene	**40.9J**	ug/kg	125	37.5	1	04/26/21 09:00	04/27/21 01:16	95-47-6	
p-Isopropyltoluene	**192**	ug/kg	125	38.0	1	04/26/21 09:00	04/27/21 01:16	99-87-6	
sec-Butylbenzene	**<30.5**	ug/kg	125	30.5	1	04/26/21 09:00	04/27/21 01:16	135-98-8	
tert-Butylbenzene	**<39.3**	ug/kg	125	39.3	1	04/26/21 09:00	04/27/21 01:16	98-06-6	
trans-1,2-Dichloroethene	**<27.0**	ug/kg	125	27.0	1	04/26/21 09:00	04/27/21 01:16	156-60-5	
trans-1,3-Dichloropropene	**<358**	ug/kg	625	358	1	04/26/21 09:00	04/27/21 01:16	10061-02-6	
Surrogates									
Toluene-d8 (S)	149	%	67-159		1	04/26/21 09:00	04/27/21 01:16	2037-26-5	
4-Bromofluorobenzene (S)	120	%	66-153		1	04/26/21 09:00	04/27/21 01:16	460-00-4	
1,2-Dichlorobenzene-d4 (S)	145	%	82-158		1	04/26/21 09:00	04/27/21 01:16	2199-69-1	
Percent Moisture	Analytical Method: ASTM D2974-87 Pace Analytical Services - Green Bay								
Percent Moisture	**39.0**	%	0.10	0.10	1		04/22/21 17:16		

Sample: SOUTH END B.34 (3) **Lab ID: 40225623003** Collected: 04/20/21 11:15 Received: 04/22/21 11:10 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
8082 GCS PCB	Analytical Method: EPA 8082 Preparation Method: EPA 3541 Pace Analytical Services - Green Bay								
PCB-1016 (Aroclor 1016)	**<18.0**	ug/kg	59.0	18.0	1	04/26/21 06:02	04/26/21 22:56	12674-11-2	
PCB-1221 (Aroclor 1221)	**<18.0**	ug/kg	59.0	18.0	1	04/26/21 06:02	04/26/21 22:56	11104-28-2	
PCB-1232 (Aroclor 1232)	**<18.0**	ug/kg	59.0	18.0	1	04/26/21 06:02	04/26/21 22:56	11141-16-5	
PCB-1242 (Aroclor 1242)	**269**	ug/kg	59.0	18.0	1	04/26/21 06:02	04/26/21 22:56	53469-21-9	

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: B.34 & B.35
Pace Project No.: 40225623

Sample: SOUTH END B.34 (3) **Lab ID: 40225623003** Collected: 04/20/21 11:15 Received: 04/22/21 11:10 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
8082 GCS PCB	Analytical Method: EPA 8082 Preparation Method: EPA 3541 Pace Analytical Services - Green Bay								
PCB-1248 (Aroclor 1248)	**<18.0**	ug/kg	59.0	18.0	1	04/26/21 06:02	04/26/21 22:56	12672-29-6	
PCB-1254 (Aroclor 1254)	**91.2**	ug/kg	59.0	18.0	1	04/26/21 06:02	04/26/21 22:56	11097-69-1	
PCB-1260 (Aroclor 1260)	**34.4J**	ug/kg	59.0	18.0	1	04/26/21 06:02	04/26/21 22:56	11096-82-5	
PCB, Total	**395**	ug/kg	59.0	18.0	1	04/26/21 06:02	04/26/21 22:56	1336-36-3	
Surrogates									
Tetrachloro-m-xylene (S)	72	%	67-102		1	04/26/21 06:02	04/26/21 22:56	877-09-8	
Decachlorobiphenyl (S)	49	%	47-114		1	04/26/21 06:02	04/26/21 22:56	2051-24-3	
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3050 Pace Analytical Services - Green Bay								
Arsenic	**9.8**	mg/kg	2.8	1.7	1	04/27/21 06:55	04/27/21 14:21	7440-38-2	
Barium	**113**	mg/kg	0.56	0.17	1	04/27/21 06:55	04/27/21 14:21	7440-39-3	
Cadmium	**0.64**	mg/kg	0.56	0.15	1	04/27/21 06:55	04/27/21 14:21	7440-43-9	
Chromium	**18.0**	mg/kg	1.1	0.31	1	04/27/21 06:55	04/27/21 14:21	7440-47-3	
Lead	**106**	mg/kg	2.3	0.68	1	04/27/21 06:55	04/27/21 14:21	7439-92-1	
Selenium	**<1.5**	mg/kg	4.5	1.5	1	04/27/21 06:55	04/27/21 14:21	7782-49-2	
Silver	**0.60J**	mg/kg	1.1	0.35	1	04/27/21 06:55	04/27/21 14:21	7440-22-4	
7471 Mercury	Analytical Method: EPA 7471 Preparation Method: EPA 7471 Pace Analytical Services - Green Bay								
Mercury	**0.34**	mg/kg	0.039	0.011	1	04/30/21 08:44	05/03/21 10:09	7439-97-6	
8270E MSSV PAH by SIM	Analytical Method: EPA 8270E by SIM Preparation Method: EPA 3546 Pace Analytical Services - Green Bay								
Acenaphthene	**144J**	ug/kg	197	25.6	10	04/29/21 07:48	04/30/21 13:25	83-32-9	
Acenaphthylene	**52.8J**	ug/kg	197	24.9	10	04/29/21 07:48	04/30/21 13:25	208-96-8	
Anthracene	**367**	ug/kg	197	24.5	10	04/29/21 07:48	04/30/21 13:25	120-12-7	
Benzo(a)anthracene	**659**	ug/kg	197	25.5	10	04/29/21 07:48	04/30/21 13:25	56-55-3	
Benzo(a)pyrene	**594**	ug/kg	197	22.4	10	04/29/21 07:48	04/30/21 13:25	50-32-8	
Benzo(b)fluoranthene	**843**	ug/kg	197	27.4	10	04/29/21 07:48	04/30/21 13:25	205-99-2	
Benzo(g,h,i)perylene	**425**	ug/kg	197	34.6	10	04/29/21 07:48	04/30/21 13:25	191-24-2	
Benzo(k)fluoranthene	**356**	ug/kg	197	25.2	10	04/29/21 07:48	04/30/21 13:25	207-08-9	
Chrysene	**819**	ug/kg	197	37.2	10	04/29/21 07:48	04/30/21 13:25	218-01-9	
Dibenz(a,h)anthracene	**89.8J**	ug/kg	197	27.3	10	04/29/21 07:48	04/30/21 13:25	53-70-3	
Fluoranthene	**1680**	ug/kg	197	23.4	10	04/29/21 07:48	04/30/21 13:25	206-44-0	
Fluorene	**159J**	ug/kg	197	23.7	10	04/29/21 07:48	04/30/21 13:25	86-73-7	
Indeno(1,2,3-cd)pyrene	**344**	ug/kg	197	41.1	10	04/29/21 07:48	04/30/21 13:25	193-39-5	
1-Methylnaphthalene	**96.1J**	ug/kg	197	28.8	10	04/29/21 07:48	04/30/21 13:25	90-12-0	
2-Methylnaphthalene	**122J**	ug/kg	197	28.9	10	04/29/21 07:48	04/30/21 13:25	91-57-6	
Naphthalene	**208**	ug/kg	197	19.2	10	04/29/21 07:48	04/30/21 13:25	91-20-3	
Phenanthrene	**1160**	ug/kg	197	22.6	10	04/29/21 07:48	04/30/21 13:25	85-01-8	
Pyrene	**1430**	ug/kg	197	29.0	10	04/29/21 07:48	04/30/21 13:25	129-00-0	
Surrogates									
2-Fluorobiphenyl (S)	55	%	36-86		10	04/29/21 07:48	04/30/21 13:25	321-60-8	

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: B.34 & B.35
Pace Project No.: 40225623

Sample: SOUTH END B.34 (3) **Lab ID: 40225623003** Collected: 04/20/21 11:15 Received: 04/22/21 11:10 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 PAH by SIM	Analytical Method: EPA 8270E by SIM Preparation Method: EPA 3546 Pace Analytical Services - Green Bay								
Surrogates									
Terphenyl-d14 (S)	56	%	41-97		10	04/29/21 07:48	04/30/21 13:25	1718-51-0	
8260 MSV Med Level Normal List	Analytical Method: EPA 8260 Preparation Method: EPA 5035/5030B Pace Analytical Services - Green Bay								
1,1,1,2-Tetrachloroethane	**<17.6**	ug/kg	73.4	17.6	1	04/26/21 09:00	04/27/21 01:56	630-20-6	
1,1,1-Trichloroethane	**<18.8**	ug/kg	73.4	18.8	1	04/26/21 09:00	04/27/21 01:56	71-55-6	
1,1,2,2-Tetrachloroethane	**<26.6**	ug/kg	73.4	26.6	1	04/26/21 09:00	04/27/21 01:56	79-34-5	
1,1,2-Trichloroethane	**<26.7**	ug/kg	73.4	26.7	1	04/26/21 09:00	04/27/21 01:56	79-00-5	
1,1-Dichloroethane	**<18.8**	ug/kg	73.4	18.8	1	04/26/21 09:00	04/27/21 01:56	75-34-3	
1,1-Dichloroethene	**<24.4**	ug/kg	73.4	24.4	1	04/26/21 09:00	04/27/21 01:56	75-35-4	
1,1-Dichloropropene	**<23.8**	ug/kg	73.4	23.8	1	04/26/21 09:00	04/27/21 01:56	563-58-6	
1,2,3-Trichlorobenzene	**<81.8**	ug/kg	367	81.8	1	04/26/21 09:00	04/27/21 01:56	87-61-6	
1,2,3-Trichloropropane	**<35.7**	ug/kg	73.4	35.7	1	04/26/21 09:00	04/27/21 01:56	96-18-4	
1,2,4-Trichlorobenzene	**<60.5**	ug/kg	367	60.5	1	04/26/21 09:00	04/27/21 01:56	120-82-1	
1,2,4-Trimethylbenzene	**38.9J**	ug/kg	73.4	21.9	1	04/26/21 09:00	04/27/21 01:56	95-63-6	
1,2-Dibromo-3-chloropropane	**<57.0**	ug/kg	367	57.0	1	04/26/21 09:00	04/27/21 01:56	96-12-8	
1,2-Dibromoethane (EDB)	**<20.1**	ug/kg	73.4	20.1	1	04/26/21 09:00	04/27/21 01:56	106-93-4	
1,2-Dichlorobenzene	**<22.8**	ug/kg	73.4	22.8	1	04/26/21 09:00	04/27/21 01:56	95-50-1	
1,2-Dichloroethane	**<16.9**	ug/kg	73.4	16.9	1	04/26/21 09:00	04/27/21 01:56	107-06-2	
1,2-Dichloropropane	**<17.5**	ug/kg	73.4	17.5	1	04/26/21 09:00	04/27/21 01:56	78-87-5	
1,3,5-Trimethylbenzene	**<23.6**	ug/kg	73.4	23.6	1	04/26/21 09:00	04/27/21 01:56	108-67-8	
1,3-Dichlorobenzene	**<20.1**	ug/kg	73.4	20.1	1	04/26/21 09:00	04/27/21 01:56	541-73-1	
1,3-Dichloropropane	**<16.0**	ug/kg	73.4	16.0	1	04/26/21 09:00	04/27/21 01:56	142-28-9	
1,4-Dichlorobenzene	**113**	ug/kg	73.4	20.1	1	04/26/21 09:00	04/27/21 01:56	106-46-7	
2,2-Dichloropropane	**<19.8**	ug/kg	73.4	19.8	1	04/26/21 09:00	04/27/21 01:56	594-20-7	
2-Chlorotoluene	**<23.8**	ug/kg	73.4	23.8	1	04/26/21 09:00	04/27/21 01:56	95-49-8	
4-Chlorotoluene	**<27.9**	ug/kg	73.4	27.9	1	04/26/21 09:00	04/27/21 01:56	106-43-4	
Benzene	**<17.5**	ug/kg	29.4	17.5	1	04/26/21 09:00	04/27/21 01:56	71-43-2	
Bromobenzene	**<28.6**	ug/kg	73.4	28.6	1	04/26/21 09:00	04/27/21 01:56	108-86-1	
Bromochloromethane	**<20.1**	ug/kg	73.4	20.1	1	04/26/21 09:00	04/27/21 01:56	74-97-5	
Bromodichloromethane	**<17.5**	ug/kg	73.4	17.5	1	04/26/21 09:00	04/27/21 01:56	75-27-4	
Bromoform	**<323**	ug/kg	367	323	1	04/26/21 09:00	04/27/21 01:56	75-25-2	L1
Bromomethane	**<103**	ug/kg	367	103	1	04/26/21 09:00	04/27/21 01:56	74-83-9	
Carbon tetrachloride	**<16.1**	ug/kg	73.4	16.1	1	04/26/21 09:00	04/27/21 01:56	56-23-5	
Chlorobenzene	**30.8J**	ug/kg	73.4	8.8	1	04/26/21 09:00	04/27/21 01:56	108-90-7	
Chloroethane	**<31.0**	ug/kg	367	31.0	1	04/26/21 09:00	04/27/21 01:56	75-00-3	
Chloroform	**<52.6**	ug/kg	367	52.6	1	04/26/21 09:00	04/27/21 01:56	67-66-3	
Chloromethane	**<27.9**	ug/kg	73.4	27.9	1	04/26/21 09:00	04/27/21 01:56	74-87-3	
Dibromochloromethane	**<251**	ug/kg	367	251	1	04/26/21 09:00	04/27/21 01:56	124-48-1	
Dibromomethane	**<21.7**	ug/kg	73.4	21.7	1	04/26/21 09:00	04/27/21 01:56	74-95-3	
Dichlorodifluoromethane	**<31.6**	ug/kg	73.4	31.6	1	04/26/21 09:00	04/27/21 01:56	75-71-8	
Diisopropyl ether	**<18.2**	ug/kg	73.4	18.2	1	04/26/21 09:00	04/27/21 01:56	108-20-3	
Ethylbenzene	**<17.5**	ug/kg	73.4	17.5	1	04/26/21 09:00	04/27/21 01:56	100-41-4	

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

ANALYTICAL RESULTS

Project: B.34 & B.35
Pace Project No.: 40225623

Sample: SOUTH END B.34 (3) **Lab ID: 40225623003** Collected: 04/20/21 11:15 Received: 04/22/21 11:10 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								
Hexachloro-1,3-butadiene	**<146**	ug/kg	367	146	1	04/26/21 09:00	04/27/21 01:56	87-68-3	
Isopropylbenzene (Cumene)	**<19.8**	ug/kg	73.4	19.8	1	04/26/21 09:00	04/27/21 01:56	98-82-8	
Methyl-tert-butyl ether	**<21.6**	ug/kg	73.4	21.6	1	04/26/21 09:00	04/27/21 01:56	1634-04-4	
Methylene Chloride	**<20.4**	ug/kg	73.4	20.4	1	04/26/21 09:00	04/27/21 01:56	75-09-2	
Naphthalene	**<22.9**	ug/kg	367	22.9	1	04/26/21 09:00	04/27/21 01:56	91-20-3	
Styrene	**<18.8**	ug/kg	73.4	18.8	1	04/26/21 09:00	04/27/21 01:56	100-42-5	
Tetrachloroethene	**<28.5**	ug/kg	73.4	28.5	1	04/26/21 09:00	04/27/21 01:56	127-18-4	
Toluene	**40.0J**	ug/kg	73.4	18.5	1	04/26/21 09:00	04/27/21 01:56	108-88-3	
Trichloroethene	**<27.5**	ug/kg	73.4	27.5	1	04/26/21 09:00	04/27/21 01:56	79-01-6	
Trichlorofluoromethane	**<21.3**	ug/kg	73.4	21.3	1	04/26/21 09:00	04/27/21 01:56	75-69-4	
Vinyl chloride	**<14.8**	ug/kg	73.4	14.8	1	04/26/21 09:00	04/27/21 01:56	75-01-4	
cis-1,2-Dichloroethene	**<15.7**	ug/kg	73.4	15.7	1	04/26/21 09:00	04/27/21 01:56	156-59-2	
cis-1,3-Dichloropropene	**<48.4**	ug/kg	367	48.4	1	04/26/21 09:00	04/27/21 01:56	10061-01-5	
m&p-Xylene	**40.0J**	ug/kg	147	31.0	1	04/26/21 09:00	04/27/21 01:56	179601-23-1	
n-Butylbenzene	**<33.6**	ug/kg	73.4	33.6	1	04/26/21 09:00	04/27/21 01:56	104-51-8	
n-Propylbenzene	**<17.6**	ug/kg	73.4	17.6	1	04/26/21 09:00	04/27/21 01:56	103-65-1	
o-Xylene	**<22.0**	ug/kg	73.4	22.0	1	04/26/21 09:00	04/27/21 01:56	95-47-6	
p-Isopropyltoluene	**45.2J**	ug/kg	73.4	22.3	1	04/26/21 09:00	04/27/21 01:56	99-87-6	
sec-Butylbenzene	**<17.9**	ug/kg	73.4	17.9	1	04/26/21 09:00	04/27/21 01:56	135-98-8	
tert-Butylbenzene	**<23.0**	ug/kg	73.4	23.0	1	04/26/21 09:00	04/27/21 01:56	98-06-6	
trans-1,2-Dichloroethene	**<15.9**	ug/kg	73.4	15.9	1	04/26/21 09:00	04/27/21 01:56	156-60-5	
trans-1,3-Dichloropropene	**<210**	ug/kg	367	210	1	04/26/21 09:00	04/27/21 01:56	10061-02-6	
Surrogates									
Toluene-d8 (S)	120	%	67-159		1	04/26/21 09:00	04/27/21 01:56	2037-26-5	
4-Bromofluorobenzene (S)	99	%	66-153		1	04/26/21 09:00	04/27/21 01:56	460-00-4	
1,2-Dichlorobenzene-d4 (S)	118	%	82-158		1	04/26/21 09:00	04/27/21 01:56	2199-69-1	
Percent Moisture	Analytical Method: ASTM D2974-87 Pace Analytical Services - Green Bay								
Percent Moisture	**15.4**	%	0.10	0.10	1		04/22/21 17:16		

Sample: TRIP BLANK **Lab ID: 40225623004** Collected: 04/20/21 11:15 Received: 04/22/21 11:10 Matrix: Solid

Results reported on a "wet-weight" basis

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								
1,1,1,2-Tetrachloroethane	**<12.0**	ug/kg	50.0	12.0	1	04/26/21 09:00	04/27/21 00:15	630-20-6	
1,1,1-Trichloroethane	**<12.8**	ug/kg	50.0	12.8	1	04/26/21 09:00	04/27/21 00:15	71-55-6	
1,1,2,2-Tetrachloroethane	**<18.1**	ug/kg	50.0	18.1	1	04/26/21 09:00	04/27/21 00:15	79-34-5	
1,1,2-Trichloroethane	**<18.2**	ug/kg	50.0	18.2	1	04/26/21 09:00	04/27/21 00:15	79-00-5	
1,1-Dichloroethane	**<12.8**	ug/kg	50.0	12.8	1	04/26/21 09:00	04/27/21 00:15	75-34-3	

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: B.34 & B.35
Pace Project No.: 40225623

Sample: TRIP BLANK **Lab ID: 40225623004** Collected: 04/20/21 11:15 Received: 04/22/21 11:10 Matrix: Solid

Results reported on a "wet-weight" basis

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								
1,1-Dichloroethene	**<16.6**	ug/kg	50.0	16.6	1	04/26/21 09:00	04/27/21 00:15	75-35-4	
1,1-Dichloropropene	**<16.2**	ug/kg	50.0	16.2	1	04/26/21 09:00	04/27/21 00:15	563-58-6	
1,2,3-Trichlorobenzene	**<55.7**	ug/kg	250	55.7	1	04/26/21 09:00	04/27/21 00:15	87-61-6	
1,2,3-Trichloropropane	**<24.3**	ug/kg	50.0	24.3	1	04/26/21 09:00	04/27/21 00:15	96-18-4	
1,2,4-Trichlorobenzene	**<41.2**	ug/kg	250	41.2	1	04/26/21 09:00	04/27/21 00:15	120-82-1	
1,2,4-Trimethylbenzene	**<14.9**	ug/kg	50.0	14.9	1	04/26/21 09:00	04/27/21 00:15	95-63-6	
1,2-Dibromo-3-chloropropane	**<38.8**	ug/kg	250	38.8	1	04/26/21 09:00	04/27/21 00:15	96-12-8	
1,2-Dibromoethane (EDB)	**<13.7**	ug/kg	50.0	13.7	1	04/26/21 09:00	04/27/21 00:15	106-93-4	
1,2-Dichlorobenzene	**<15.5**	ug/kg	50.0	15.5	1	04/26/21 09:00	04/27/21 00:15	95-50-1	
1,2-Dichloroethane	**<11.5**	ug/kg	50.0	11.5	1	04/26/21 09:00	04/27/21 00:15	107-06-2	
1,2-Dichloropropane	**<11.9**	ug/kg	50.0	11.9	1	04/26/21 09:00	04/27/21 00:15	78-87-5	
1,3,5-Trimethylbenzene	**<16.1**	ug/kg	50.0	16.1	1	04/26/21 09:00	04/27/21 00:15	108-67-8	
1,3-Dichlorobenzene	**<13.7**	ug/kg	50.0	13.7	1	04/26/21 09:00	04/27/21 00:15	541-73-1	
1,3-Dichloropropane	**<10.9**	ug/kg	50.0	10.9	1	04/26/21 09:00	04/27/21 00:15	142-28-9	
1,4-Dichlorobenzene	**<13.7**	ug/kg	50.0	13.7	1	04/26/21 09:00	04/27/21 00:15	106-46-7	
2,2-Dichloropropane	**<13.5**	ug/kg	50.0	13.5	1	04/26/21 09:00	04/27/21 00:15	594-20-7	
2-Chlorotoluene	**<16.2**	ug/kg	50.0	16.2	1	04/26/21 09:00	04/27/21 00:15	95-49-8	
4-Chlorotoluene	**<19.0**	ug/kg	50.0	19.0	1	04/26/21 09:00	04/27/21 00:15	106-43-4	
Benzene	**<11.9**	ug/kg	20.0	11.9	1	04/26/21 09:00	04/27/21 00:15	71-43-2	
Bromobenzene	**<19.5**	ug/kg	50.0	19.5	1	04/26/21 09:00	04/27/21 00:15	108-86-1	
Bromochloromethane	**<13.7**	ug/kg	50.0	13.7	1	04/26/21 09:00	04/27/21 00:15	74-97-5	
Bromodichloromethane	**<11.9**	ug/kg	50.0	11.9	1	04/26/21 09:00	04/27/21 00:15	75-27-4	
Bromoform	**<220**	ug/kg	250	220	1	04/26/21 09:00	04/27/21 00:15	75-25-2	L1
Bromomethane	**<70.1**	ug/kg	250	70.1	1	04/26/21 09:00	04/27/21 00:15	74-83-9	
Carbon tetrachloride	**<11.0**	ug/kg	50.0	11.0	1	04/26/21 09:00	04/27/21 00:15	56-23-5	
Chlorobenzene	**<6.0**	ug/kg	50.0	6.0	1	04/26/21 09:00	04/27/21 00:15	108-90-7	
Chloroethane	**<21.1**	ug/kg	250	21.1	1	04/26/21 09:00	04/27/21 00:15	75-00-3	
Chloroform	**<35.8**	ug/kg	250	35.8	1	04/26/21 09:00	04/27/21 00:15	67-66-3	
Chloromethane	**<19.0**	ug/kg	50.0	19.0	1	04/26/21 09:00	04/27/21 00:15	74-87-3	
Dibromochloromethane	**<171**	ug/kg	250	171	1	04/26/21 09:00	04/27/21 00:15	124-48-1	
Dibromomethane	**<14.8**	ug/kg	50.0	14.8	1	04/26/21 09:00	04/27/21 00:15	74-95-3	
Dichlorodifluoromethane	**<21.5**	ug/kg	50.0	21.5	1	04/26/21 09:00	04/27/21 00:15	75-71-8	
Diisopropyl ether	**<12.4**	ug/kg	50.0	12.4	1	04/26/21 09:00	04/27/21 00:15	108-20-3	
Ethylbenzene	**<11.9**	ug/kg	50.0	11.9	1	04/26/21 09:00	04/27/21 00:15	100-41-4	
Hexachloro-1,3-butadiene	**<99.4**	ug/kg	250	99.4	1	04/26/21 09:00	04/27/21 00:15	87-68-3	
Isopropylbenzene (Cumene)	**<13.5**	ug/kg	50.0	13.5	1	04/26/21 09:00	04/27/21 00:15	98-82-8	
Methyl-tert-butyl ether	**<14.7**	ug/kg	50.0	14.7	1	04/26/21 09:00	04/27/21 00:15	1634-04-4	
Methylene Chloride	**<13.9**	ug/kg	50.0	13.9	1	04/26/21 09:00	04/27/21 00:15	75-09-2	
Naphthalene	**<15.6**	ug/kg	250	15.6	1	04/26/21 09:00	04/27/21 00:15	91-20-3	
Styrene	**<12.8**	ug/kg	50.0	12.8	1	04/26/21 09:00	04/27/21 00:15	100-42-5	
Tetrachloroethene	**<19.4**	ug/kg	50.0	19.4	1	04/26/21 09:00	04/27/21 00:15	127-18-4	
Toluene	**<12.6**	ug/kg	50.0	12.6	1	04/26/21 09:00	04/27/21 00:15	108-88-3	
Trichloroethene	**<18.7**	ug/kg	50.0	18.7	1	04/26/21 09:00	04/27/21 00:15	79-01-6	
Trichlorofluoromethane	**<14.5**	ug/kg	50.0	14.5	1	04/26/21 09:00	04/27/21 00:15	75-69-4	

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: B.34 & B.35
Pace Project No.: 40225623

Sample: TRIP BLANK **Lab ID: 40225623004** Collected: 04/20/21 11:15 Received: 04/22/21 11:10 Matrix: Solid

Results reported on a "wet-weight" basis

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								
Vinyl chloride	**<10.1**	ug/kg	50.0	10.1	1	04/26/21 09:00	04/27/21 00:15	75-01-4	
cis-1,2-Dichloroethene	**<10.7**	ug/kg	50.0	10.7	1	04/26/21 09:00	04/27/21 00:15	156-59-2	
cis-1,3-Dichloropropene	**<33.0**	ug/kg	250	33.0	1	04/26/21 09:00	04/27/21 00:15	10061-01-5	
m&p-Xylene	**<21.1**	ug/kg	100	21.1	1	04/26/21 09:00	04/27/21 00:15	179601-23-1	
n-Butylbenzene	**<22.9**	ug/kg	50.0	22.9	1	04/26/21 09:00	04/27/21 00:15	104-51-8	
n-Propylbenzene	**<12.0**	ug/kg	50.0	12.0	1	04/26/21 09:00	04/27/21 00:15	103-65-1	
o-Xylene	**<15.0**	ug/kg	50.0	15.0	1	04/26/21 09:00	04/27/21 00:15	95-47-6	
p-Isopropyltoluene	**<15.2**	ug/kg	50.0	15.2	1	04/26/21 09:00	04/27/21 00:15	99-87-6	
sec-Butylbenzene	**<12.2**	ug/kg	50.0	12.2	1	04/26/21 09:00	04/27/21 00:15	135-98-8	
tert-Butylbenzene	**<15.7**	ug/kg	50.0	15.7	1	04/26/21 09:00	04/27/21 00:15	98-06-6	
trans-1,2-Dichloroethene	**<10.8**	ug/kg	50.0	10.8	1	04/26/21 09:00	04/27/21 00:15	156-60-5	
trans-1,3-Dichloropropene	**<143**	ug/kg	250	143	1	04/26/21 09:00	04/27/21 00:15	10061-02-6	
Surrogates									
Toluene-d8 (S)	94	%	67-159		1	04/26/21 09:00	04/27/21 00:15	2037-26-5	
4-Bromofluorobenzene (S)	82	%	66-153		1	04/26/21 09:00	04/27/21 00:15	460-00-4	
1,2-Dichlorobenzene-d4 (S)	102	%	82-158		1	04/26/21 09:00	04/27/21 00:15	2199-69-1	

REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL DATA

Project: B.34 & B.35
Pace Project No.: 40225623

QC Batch: 383810
QC Batch Method: EPA 7471
Analysis Method: EPA 7471
Analysis Description: 7471 Mercury
Laboratory: Pace Analytical Services - Green Bay
Associated Lab Samples: 40225623001, 40225623002, 40225623003

METHOD BLANK: 2213896 Matrix: Solid
Associated Lab Samples: 40225623001, 40225623002, 40225623003

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Mercury	mg/kg	<0.010	0.035	05/03/21 09:11	

LABORATORY CONTROL SAMPLE: 2213897

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Mercury	mg/kg	0.83	0.81	98	85-115	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2213898 2213899

Parameter	Units	40225797001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Mercury	mg/kg	0.013J	0.87	0.86	0.85	0.85	96	97	85-115	1	20	

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: B.34 & B.35
Pace Project No.: 40225623

QC Batch: 383516
QC Batch Method: EPA 3050
Analysis Method: EPA 6010
Analysis Description: 6010 MET
Laboratory: Pace Analytical Services - Green Bay
Associated Lab Samples: 40225623001, 40225623002, 40225623003

METHOD BLANK: 2212512 Matrix: Solid
Associated Lab Samples: 40225623001, 40225623002, 40225623003

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Arsenic	mg/kg	<1.5	2.5	04/27/21 13:57	
Barium	mg/kg	<0.15	0.50	04/27/21 13:57	
Cadmium	mg/kg	<0.13	0.50	04/27/21 13:57	
Chromium	mg/kg	<0.28	1.0	04/27/21 13:57	
Lead	mg/kg	<0.60	2.0	04/27/21 13:57	
Selenium	mg/kg	<1.3	4.0	04/27/21 13:57	
Silver	mg/kg	<0.31	1.0	04/27/21 13:57	

LABORATORY CONTROL SAMPLE: 2212513

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Arsenic	mg/kg	50	48.7	97	80-120	
Barium	mg/kg	50	48.5	97	80-120	
Cadmium	mg/kg	50	48.6	97	80-120	
Chromium	mg/kg	50	49.9	100	80-120	
Lead	mg/kg	50	49.4	99	80-120	
Selenium	mg/kg	50	49.2	98	80-120	
Silver	mg/kg	25	24.7	99	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2212514 2212515

Parameter	Units	40225610001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Arsenic	mg/kg	<14.8	50.6	50.4	52.6	54.3	98	102	75-125	3	20	
Barium	mg/kg	1890	50.6	50.4	1910	1990	44	206	75-125	4	20	P6
Cadmium	mg/kg	17.6	50.6	50.4	66.7	67.7	97	99	75-125	2	20	
Chromium	mg/kg	53.8	50.6	50.4	105	106	101	103	75-125	1	20	
Lead	mg/kg	23.5	50.6	50.4	69.8	72.7	92	97	75-125	4	20	
Selenium	mg/kg	<13.2	50.6	50.4	50.2	45.1	96	86	75-125	11	20	
Silver	mg/kg	<3.1	25.3	25.2	27.1	27.4	107	109	75-125	1	20	

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: B.34 & B.35
Pace Project No.: 40225623

QC Batch: 383452
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: 40225623001, 40225623002, 40225623003, 40225623004

METHOD BLANK: 2212170 Matrix: Solid
Associated Lab Samples: 40225623001, 40225623002, 40225623003, 40225623004

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1,1,2-Tetrachloroethane	ug/kg	<12.0	50.0	04/26/21 18:12	
1,1,1-Trichloroethane	ug/kg	<12.8	50.0	04/26/21 18:12	
1,1,2,2-Tetrachloroethane	ug/kg	<18.1	50.0	04/26/21 18:12	
1,1,2-Trichloroethane	ug/kg	<18.2	50.0	04/26/21 18:12	
1,1-Dichloroethane	ug/kg	<12.8	50.0	04/26/21 18:12	
1,1-Dichloroethene	ug/kg	<16.6	50.0	04/26/21 18:12	
1,1-Dichloropropene	ug/kg	<16.2	50.0	04/26/21 18:12	
1,2,3-Trichlorobenzene	ug/kg	<55.7	250	04/26/21 18:12	
1,2,3-Trichloropropane	ug/kg	<24.3	50.0	04/26/21 18:12	
1,2,4-Trichlorobenzene	ug/kg	<41.2	250	04/26/21 18:12	
1,2,4-Trimethylbenzene	ug/kg	<14.9	50.0	04/26/21 18:12	
1,2-Dibromo-3-chloropropane	ug/kg	<38.8	250	04/26/21 18:12	
1,2-Dibromoethane (EDB)	ug/kg	<13.7	50.0	04/26/21 18:12	
1,2-Dichlorobenzene	ug/kg	<15.5	50.0	04/26/21 18:12	
1,2-Dichloroethane	ug/kg	<11.5	50.0	04/26/21 18:12	
1,2-Dichloropropane	ug/kg	<11.9	50.0	04/26/21 18:12	
1,3,5-Trimethylbenzene	ug/kg	<16.1	50.0	04/26/21 18:12	
1,3-Dichlorobenzene	ug/kg	<13.7	50.0	04/26/21 18:12	
1,3-Dichloropropane	ug/kg	<10.9	50.0	04/26/21 18:12	
1,4-Dichlorobenzene	ug/kg	<13.7	50.0	04/26/21 18:12	
2,2-Dichloropropane	ug/kg	<13.5	50.0	04/26/21 18:12	
2-Chlorotoluene	ug/kg	<16.2	50.0	04/26/21 18:12	
4-Chlorotoluene	ug/kg	<19.0	50.0	04/26/21 18:12	
Benzene	ug/kg	<11.9	20.0	04/26/21 18:12	
Bromobenzene	ug/kg	<19.5	50.0	04/26/21 18:12	
Bromochloromethane	ug/kg	<13.7	50.0	04/26/21 18:12	
Bromodichloromethane	ug/kg	<11.9	50.0	04/26/21 18:12	
Bromoform	ug/kg	<220	250	04/26/21 18:12	
Bromomethane	ug/kg	<70.1	250	04/26/21 18:12	
Carbon tetrachloride	ug/kg	<11.0	50.0	04/26/21 18:12	
Chlorobenzene	ug/kg	<6.0	50.0	04/26/21 18:12	
Chloroethane	ug/kg	<21.1	250	04/26/21 18:12	
Chloroform	ug/kg	<35.8	250	04/26/21 18:12	
Chloromethane	ug/kg	<19.0	50.0	04/26/21 18:12	
cis-1,2-Dichloroethene	ug/kg	<10.7	50.0	04/26/21 18:12	
cis-1,3-Dichloropropene	ug/kg	<33.0	250	04/26/21 18:12	
Dibromochloromethane	ug/kg	<171	250	04/26/21 18:12	
Dibromomethane	ug/kg	<14.8	50.0	04/26/21 18:12	
Dichlorodifluoromethane	ug/kg	<21.5	50.0	04/26/21 18:12	
Diisopropyl ether	ug/kg	<12.4	50.0	04/26/21 18:12	

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: B.34 & B.35
Pace Project No.: 40225623

METHOD BLANK: 2212170 Matrix: Solid
Associated Lab Samples: 40225623001, 40225623002, 40225623003, 40225623004

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Ethylbenzene	ug/kg	<11.9	50.0	04/26/21 18:12	
Hexachloro-1,3-butadiene	ug/kg	<99.4	250	04/26/21 18:12	
Isopropylbenzene (Cumene)	ug/kg	<13.5	50.0	04/26/21 18:12	
m&p-Xylene	ug/kg	<21.1	100	04/26/21 18:12	
Methyl-tert-butyl ether	ug/kg	<14.7	50.0	04/26/21 18:12	
Methylene Chloride	ug/kg	<13.9	50.0	04/26/21 18:12	
n-Butylbenzene	ug/kg	<22.9	50.0	04/26/21 18:12	
n-Propylbenzene	ug/kg	<12.0	50.0	04/26/21 18:12	
Naphthalene	ug/kg	<15.6	250	04/26/21 18:12	
o-Xylene	ug/kg	<15.0	50.0	04/26/21 18:12	
p-Isopropyltoluene	ug/kg	<15.2	50.0	04/26/21 18:12	
sec-Butylbenzene	ug/kg	<12.2	50.0	04/26/21 18:12	
Styrene	ug/kg	<12.8	50.0	04/26/21 18:12	
tert-Butylbenzene	ug/kg	<15.7	50.0	04/26/21 18:12	
Tetrachloroethene	ug/kg	<19.4	50.0	04/26/21 18:12	
Toluene	ug/kg	<12.6	50.0	04/26/21 18:12	
trans-1,2-Dichloroethene	ug/kg	<10.8	50.0	04/26/21 18:12	
trans-1,3-Dichloropropene	ug/kg	<143	250	04/26/21 18:12	
Trichloroethene	ug/kg	<18.7	50.0	04/26/21 18:12	
Trichlorofluoromethane	ug/kg	<14.5	50.0	04/26/21 18:12	
Vinyl chloride	ug/kg	<10.1	50.0	04/26/21 18:12	
1,2-Dichlorobenzene-d4 (S)	%	99	82-158	04/26/21 18:12	
4-Bromofluorobenzene (S)	%	83	66-153	04/26/21 18:12	
Toluene-d8 (S)	%	97	67-159	04/26/21 18:12	

LABORATORY CONTROL SAMPLE: 2212171

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1-Trichloroethane	ug/kg	2500	2690	108	70-130	
1,1,2,2-Tetrachloroethane	ug/kg	2500	2220	89	65-129	
1,1,2-Trichloroethane	ug/kg	2500	2620	105	70-130	
1,1-Dichloroethane	ug/kg	2500	2750	110	70-130	
1,1-Dichloroethene	ug/kg	2500	2460	98	67-120	
1,2,4-Trichlorobenzene	ug/kg	2500	2760	110	64-130	
1,2-Dibromo-3-chloropropane	ug/kg	2500	2310	93	57-119	
1,2-Dibromoethane (EDB)	ug/kg	2500	2510	101	70-130	
1,2-Dichlorobenzene	ug/kg	2500	2570	103	70-130	
1,2-Dichloroethane	ug/kg	2500	2780	111	70-130	
1,2-Dichloropropane	ug/kg	2500	2530	101	72-118	
1,3-Dichlorobenzene	ug/kg	2500	2380	95	70-130	
1,4-Dichlorobenzene	ug/kg	2500	2410	96	70-130	
Benzene	ug/kg	2500	2440	98	70-130	
Bromodichloromethane	ug/kg	2500	2530	101	70-130	
Bromoform	ug/kg	2500	3470	139	66-130	L1

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: B.34 & B.35
Pace Project No.: 40225623

LABORATORY CONTROL SAMPLE: 2212171

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Bromomethane	ug/kg	2500	1430	57	13-153	
Carbon tetrachloride	ug/kg	2500	2620	105	73-134	
Chlorobenzene	ug/kg	2500	2560	103	70-130	
Chloroethane	ug/kg	2500	1720	69	19-170	
Chloroform	ug/kg	2500	2630	105	79-120	
Chloromethane	ug/kg	2500	2060	82	45-117	
cis-1,2-Dichloroethene	ug/kg	2500	2440	98	70-130	
cis-1,3-Dichloropropene	ug/kg	2500	2340	94	68-130	
Dibromochloromethane	ug/kg	2500	2400	96	70-130	
Dichlorodifluoromethane	ug/kg	2500	1860	75	15-135	
Ethylbenzene	ug/kg	2500	2600	104	78-120	
Isopropylbenzene (Cumene)	ug/kg	2500	2450	98	70-130	
m&p-Xylene	ug/kg	5000	4610	92	70-130	
Methyl-tert-butyl ether	ug/kg	2500	2380	95	65-130	
Methylene Chloride	ug/kg	2500	2390	96	70-130	
o-Xylene	ug/kg	2500	2320	93	70-130	
Styrene	ug/kg	2500	2490	100	70-130	
Tetrachloroethene	ug/kg	2500	2710	108	70-130	
Toluene	ug/kg	2500	2550	102	76-120	
trans-1,2-Dichloroethene	ug/kg	2500	2690	108	70-130	
trans-1,3-Dichloropropene	ug/kg	2500	2620	105	70-130	
Trichloroethene	ug/kg	2500	2500	100	70-130	
Trichlorofluoromethane	ug/kg	2500	1840	74	49-153	
Vinyl chloride	ug/kg	2500	2000	80	58-121	
1,2-Dichlorobenzene-d4 (S)	%			99	82-158	
4-Bromofluorobenzene (S)	%			88	66-153	
Toluene-d8 (S)	%			105	67-159	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2212317 2212318

Parameter	Units	40225637004 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	1220	1360	94	105	70-130	11	20	
1,1,2,2-Tetrachloroethane	ug/kg	<23.5	1300	1300	1110	1210	85	93	65-129	9	20	
1,1,2-Trichloroethane	ug/kg	<23.7	1300	1300	1350	1300	104	100	70-130	3	20	
1,1-Dichloroethane	ug/kg	<16.7	1300	1300	1410	1470	108	113	70-130	4	20	
1,1-Dichloroethene	ug/kg	<21.6	1300	1300	1080	1170	83	90	64-120	8	20	
1,2,4-Trichlorobenzene	ug/kg	<53.6	1300	1300	1580	1620	122	124	64-130	2	20	
1,2-Dibromo-3-chloropropane	ug/kg	<50.5	1300	1300	1160	1260	89	97	57-130	8	21	
1,2-Dibromoethane (EDB)	ug/kg	<17.8	1300	1300	1270	1300	98	100	70-130	2	20	
1,2-Dichlorobenzene	ug/kg	<20.2	1300	1300	1470	1420	113	109	70-130	3	20	
1,2-Dichloroethane	ug/kg	<15.0	1300	1300	1370	1440	106	111	70-130	5	20	
1,2-Dichloropropane	ug/kg	<15.5	1300	1300	1280	1320	99	101	72-122	3	20	
1,3-Dichlorobenzene	ug/kg	<17.8	1300	1300	1320	1380	101	106	70-130	5	20	

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: B.34 & B.35
Pace Project No.: 40225623

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2212317 2212318

Parameter	Units	40225637004 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
1,4-Dichlorobenzene	ug/kg	<17.8	1300	1300	1310	1300	100	100	70-130	1	20	
Benzene	ug/kg	<15.5	1300	1300	1230	1280	94	98	70-130	4	20	
Bromodichloromethane	ug/kg	<15.5	1300	1300	1260	1270	97	98	70-130	1	20	
Bromoform	ug/kg	<286	1300	1300	1650	1600	127	123	66-130	3	20	
Bromomethane	ug/kg	<91.2	1300	1300	851	869	65	67	13-153	2	20	
Carbon tetrachloride	ug/kg	<14.3	1300	1300	1150	1400	89	108	67-134	19	20	
Chlorobenzene	ug/kg	<7.8	1300	1300	1360	1320	105	101	70-130	3	20	
Chloroethane	ug/kg	<27.4	1300	1300	1100	1270	84	98	11-195	15	20	
Chloroform	ug/kg	<46.6	1300	1300	1350	1330	104	103	79-120	1	20	
Chloromethane	ug/kg	<24.7	1300	1300	1100	1060	85	81	30-136	4	20	
cis-1,2-Dichloroethene	ug/kg	<13.9	1300	1300	1260	1380	97	106	70-130	9	20	
cis-1,3-Dichloropropene	ug/kg	<42.9	1300	1300	1230	1170	94	90	68-130	5	20	
Dibromochloromethane	ug/kg	<222	1300	1300	1080	1170	83	90	70-130	8	20	
Dichlorodifluoromethane	ug/kg	<28.0	1300	1300	881	956	68	73	10-158	8	25	
Ethylbenzene	ug/kg	<15.5	1300	1300	1290	1310	99	101	78-120	2	20	
Isopropylbenzene (Cumene)	ug/kg	<17.6	1300	1300	1250	1290	96	99	70-130	3	20	
m&p-Xylene	ug/kg	<27.4	2600	2600	2350	2440	90	94	70-130	4	20	
Methyl-tert-butyl ether	ug/kg	<19.1	1300	1300	1220	1250	94	96	65-130	2	20	
Methylene Chloride	ug/kg	<18.1	1300	1300	1370	1320	106	102	70-130	4	20	
o-Xylene	ug/kg	<19.5	1300	1300	1230	1190	94	92	70-130	3	20	
Styrene	ug/kg	<16.7	1300	1300	1240	1270	95	98	70-130	3	20	
Tetrachloroethene	ug/kg	<25.2	1300	1300	1370	1280	106	98	70-130	7	20	
Toluene	ug/kg	<16.4	1300	1300	1300	1320	100	102	76-120	1	20	
trans-1,2-Dichloroethene	ug/kg	<14.0	1300	1300	1260	1370	96	105	70-130	9	20	
trans-1,3-Dichloropropene	ug/kg	<186	1300	1300	1210	1280	93	98	70-130	5	20	
Trichloroethene	ug/kg	<24.3	1300	1300	1220	1300	93	100	70-130	7	20	
Trichlorofluoromethane	ug/kg	<18.9	1300	1300	977	1050	75	81	42-159	7	21	
Vinyl chloride	ug/kg	<13.1	1300	1300	904	987	69	76	43-137	9	20	
1,2-Dichlorobenzene-d4 (S)	%						113	115	82-158			
4-Bromofluorobenzene (S)	%						104	100	66-153			
Toluene-d8 (S)	%						119	117	67-159			

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: B.34 & B.35
Pace Project No.: 40225623

QC Batch: 383379
QC Batch Method: EPA 3541
Analysis Method: EPA 8082
Analysis Description: 8082 GCS PCB
Laboratory: Pace Analytical Services - Green Bay
Associated Lab Samples: 40225623001, 40225623002, 40225623003

METHOD BLANK: 2211888 Matrix: Solid
Associated Lab Samples: 40225623001, 40225623002, 40225623003

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
PCB-1016 (Aroclor 1016)	ug/kg	<15.2	50.0	04/26/21 18:06	
PCB-1221 (Aroclor 1221)	ug/kg	<15.2	50.0	04/26/21 18:06	
PCB-1232 (Aroclor 1232)	ug/kg	<15.2	50.0	04/26/21 18:06	
PCB-1242 (Aroclor 1242)	ug/kg	<15.2	50.0	04/26/21 18:06	
PCB-1248 (Aroclor 1248)	ug/kg	<15.2	50.0	04/26/21 18:06	
PCB-1254 (Aroclor 1254)	ug/kg	<15.2	50.0	04/26/21 18:06	
PCB-1260 (Aroclor 1260)	ug/kg	<15.2	50.0	04/26/21 18:06	
Decachlorobiphenyl (S)	%	81	47-114	04/26/21 18:06	
Tetrachloro-m-xylene (S)	%	85	67-102	04/26/21 18:06	

LABORATORY CONTROL SAMPLE: 2211889

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
PCB-1016 (Aroclor 1016)	ug/kg		<15.2			
PCB-1221 (Aroclor 1221)	ug/kg		<15.2			
PCB-1232 (Aroclor 1232)	ug/kg		<15.2			
PCB-1242 (Aroclor 1242)	ug/kg		<15.2			
PCB-1248 (Aroclor 1248)	ug/kg		<15.2			
PCB-1254 (Aroclor 1254)	ug/kg		<15.2			
PCB-1260 (Aroclor 1260)	ug/kg	500	463	93	69-115	
Decachlorobiphenyl (S)	%			96	47-114	
Tetrachloro-m-xylene (S)	%			86	67-102	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2211890 2211891

Parameter	Units	40225670008 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
PCB-1016 (Aroclor 1016)	ug/kg	<17.1			<17.1	<17.1					20	
PCB-1221 (Aroclor 1221)	ug/kg	<17.1			<17.1	<17.1					20	
PCB-1232 (Aroclor 1232)	ug/kg	<17.1			<17.1	<17.1					20	
PCB-1242 (Aroclor 1242)	ug/kg	<17.1			<17.1	<17.1					20	
PCB-1248 (Aroclor 1248)	ug/kg	<17.1			<17.1	<17.1					20	
PCB-1254 (Aroclor 1254)	ug/kg	<17.1			<17.1	<17.1					20	
PCB-1260 (Aroclor 1260)	ug/kg	32.4J	562	563	502	494	84	82	45-120	2	20	
Decachlorobiphenyl (S)	%						89	79	47-114			
Tetrachloro-m-xylene (S)	%						84	82	67-102			

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: B.34 & B.35
Pace Project No.: 40225623

QC Batch: 383513
QC Batch Method: EPA 3546
Analysis Method: EPA 8270E by SIM
Analysis Description: 8270E/3546 MSSV PAH by SIM
Laboratory: Pace Analytical Services - Green Bay
Associated Lab Samples: 40225623001, 40225623002

METHOD BLANK: 2212501 Matrix: Solid
Associated Lab Samples: 40225623001, 40225623002

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1-Methylnaphthalene	ug/kg	<2.4	16.7	04/27/21 11:18	
2-Methylnaphthalene	ug/kg	<2.4	16.7	04/27/21 11:18	
Acenaphthene	ug/kg	<2.2	16.7	04/27/21 11:18	
Acenaphthylene	ug/kg	<2.1	16.7	04/27/21 11:18	
Anthracene	ug/kg	<2.1	16.7	04/27/21 11:18	
Benzo(a)anthracene	ug/kg	<2.2	16.7	04/27/21 11:18	
Benzo(a)pyrene	ug/kg	<1.9	16.7	04/27/21 11:18	
Benzo(b)fluoranthene	ug/kg	<2.3	16.7	04/27/21 11:18	
Benzo(g,h,i)perylene	ug/kg	<2.9	16.7	04/27/21 11:18	
Benzo(k)fluoranthene	ug/kg	<2.1	16.7	04/27/21 11:18	
Chrysene	ug/kg	<3.1	16.7	04/27/21 11:18	
Dibenz(a,h)anthracene	ug/kg	<2.3	16.7	04/27/21 11:18	
Fluoranthene	ug/kg	<2.0	16.7	04/27/21 11:18	
Fluorene	ug/kg	<2.0	16.7	04/27/21 11:18	
Indeno(1,2,3-cd)pyrene	ug/kg	<3.5	16.7	04/27/21 11:18	
Naphthalene	ug/kg	<1.6	16.7	04/27/21 11:18	
Phenanthrene	ug/kg	<1.9	16.7	04/27/21 11:18	
Pyrene	ug/kg	<2.5	16.7	04/27/21 11:18	
2-Fluorobiphenyl (S)	%	67	36-86	04/27/21 11:18	
Terphenyl-d14 (S)	%	88	41-97	04/27/21 11:18	

LABORATORY CONTROL SAMPLE: 2212502

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1-Methylnaphthalene	ug/kg	333	258	77	53-100	
2-Methylnaphthalene	ug/kg	333	255	77	51-97	
Acenaphthene	ug/kg	333	265	79	62-120	
Acenaphthylene	ug/kg	333	267	80	61-120	
Anthracene	ug/kg	333	321	96	62-111	
Benzo(a)anthracene	ug/kg	333	265	80	61-120	
Benzo(a)pyrene	ug/kg	333	270	81	65-120	
Benzo(b)fluoranthene	ug/kg	333	281	84	64-108	
Benzo(g,h,i)perylene	ug/kg	333	258	77	71-120	
Benzo(k)fluoranthene	ug/kg	333	281	84	76-120	
Chrysene	ug/kg	333	282	85	74-120	
Dibenz(a,h)anthracene	ug/kg	333	273	82	71-120	
Fluoranthene	ug/kg	333	317	95	67-112	
Fluorene	ug/kg	333	270	81	65-120	
Indeno(1,2,3-cd)pyrene	ug/kg	333	293	88	74-120	

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: B.34 & B.35
Pace Project No.: 40225623

LABORATORY CONTROL SAMPLE: 2212502

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Naphthalene	ug/kg	333	249	75	53-120	
Phenanthrene	ug/kg	333	285	85	67-120	
Pyrene	ug/kg	333	280	84	60-103	
2-Fluorobiphenyl (S)	%			77	36-86	
Terphenyl-d14 (S)	%			81	41-97	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2212503 2212504

Parameter	Units	40225616008 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
1-Methylnaphthalene	ug/kg	<2.6	351	351	260	278	74	79	41-100	7	29	
2-Methylnaphthalene	ug/kg	<2.6	351	351	258	277	73	78	42-97	7	21	
Acenaphthene	ug/kg	<2.3	351	351	259	276	73	78	43-120	7	27	
Acenaphthylene	ug/kg	8.4J	351	351	265	278	73	77	51-120	5	26	
Anthracene	ug/kg	7.0J	351	351	303	315	84	88	46-111	4	29	
Benzo(a)anthracene	ug/kg	18.4	351	351	260	281	69	75	48-120	8	23	
Benzo(a)pyrene	ug/kg	23.9	351	351	286	286	75	75	46-108	0	30	
Benzo(b)fluoranthene	ug/kg	32.5	351	351	255	268	63	67	45-108	5	30	
Benzo(g,h,i)perylene	ug/kg	19.6	351	351	250	252	66	66	39-120	1	37	
Benzo(k)fluoranthene	ug/kg	13.6J	351	351	298	283	81	77	47-120	5	31	
Chrysene	ug/kg	28.3	351	351	258	281	65	72	54-120	9	21	
Dibenz(a,h)anthracene	ug/kg	5.5J	351	351	259	269	72	75	46-120	4	34	
Fluoranthene	ug/kg	47.8	351	351	300	310	72	75	53-112	3	27	
Fluorene	ug/kg	2.6J	351	351	261	275	74	78	48-120	5	29	
Indeno(1,2,3-cd)pyrene	ug/kg	17.0J	351	351	283	288	76	77	40-120	2	34	
Naphthalene	ug/kg	3.5J	351	351	251	270	70	76	47-120	7	25	
Phenanthrene	ug/kg	32.7	351	351	277	281	70	71	49-120	1	28	
Pyrene	ug/kg	44.0	351	351	279	312	67	76	43-103	11	31	
2-Fluorobiphenyl (S)	%						72	78	36-86			
Terphenyl-d14 (S)	%						75	80	41-97			

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: B.34 & B.35
Pace Project No.: 40225623

QC Batch: 383787
QC Batch Method: EPA 3546
Analysis Method: EPA 8270E by SIM
Analysis Description: 8270E/3546 MSSV PAH by SIM
Laboratory: Pace Analytical Services - Green Bay

Associated Lab Samples: 40225623003

METHOD BLANK: 2213797 Matrix: Solid
Associated Lab Samples: 40225623003

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1-Methylnaphthalene	ug/kg	<2.4	16.7	04/29/21 10:28	
2-Methylnaphthalene	ug/kg	<2.4	16.7	04/29/21 10:28	
Acenaphthene	ug/kg	<2.2	16.7	04/29/21 10:28	
Acenaphthylene	ug/kg	<2.1	16.7	04/29/21 10:28	
Anthracene	ug/kg	<2.1	16.7	04/29/21 10:28	
Benzo(a)anthracene	ug/kg	<2.2	16.7	04/29/21 10:28	
Benzo(a)pyrene	ug/kg	<1.9	16.7	04/29/21 10:28	
Benzo(b)fluoranthene	ug/kg	<2.3	16.7	04/29/21 10:28	
Benzo(g,h,i)perylene	ug/kg	<2.9	16.7	04/29/21 10:28	
Benzo(k)fluoranthene	ug/kg	<2.1	16.7	04/29/21 10:28	
Chrysene	ug/kg	<3.1	16.7	04/29/21 10:28	
Dibenz(a,h)anthracene	ug/kg	<2.3	16.7	04/29/21 10:28	
Fluoranthene	ug/kg	<2.0	16.7	04/29/21 10:28	
Fluorene	ug/kg	<2.0	16.7	04/29/21 10:28	
Indeno(1,2,3-cd)pyrene	ug/kg	<3.5	16.7	04/29/21 10:28	
Naphthalene	ug/kg	<1.6	16.7	04/29/21 10:28	
Phenanthrene	ug/kg	<1.9	16.7	04/29/21 10:28	
Pyrene	ug/kg	<2.5	16.7	04/29/21 10:28	
2-Fluorobiphenyl (S)	%	78	36-86	04/29/21 10:28	
Terphenyl-d14 (S)	%	81	41-97	04/29/21 10:28	

LABORATORY CONTROL SAMPLE: 2213798

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1-Methylnaphthalene	ug/kg	334	296	89	53-100	
2-Methylnaphthalene	ug/kg	334	289	87	51-97	
Acenaphthene	ug/kg	334	301	90	62-120	
Acenaphthylene	ug/kg	334	301	90	61-120	
Anthracene	ug/kg	334	365	109	62-111	
Benzo(a)anthracene	ug/kg	334	297	89	61-120	
Benzo(a)pyrene	ug/kg	334	340	102	65-120	
Benzo(b)fluoranthene	ug/kg	334	299	90	64-108	
Benzo(g,h,i)perylene	ug/kg	334	294	88	71-120	
Benzo(k)fluoranthene	ug/kg	334	327	98	76-120	
Chrysene	ug/kg	334	321	96	74-120	
Dibenz(a,h)anthracene	ug/kg	334	308	92	71-120	
Fluoranthene	ug/kg	334	358	107	67-112	
Fluorene	ug/kg	334	299	90	65-120	
Indeno(1,2,3-cd)pyrene	ug/kg	334	332	100	74-120	

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: B.34 & B.35
Pace Project No.: 40225623

LABORATORY CONTROL SAMPLE: 2213798

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Naphthalene	ug/kg	334	286	86	53-120	
Phenanthrene	ug/kg	334	317	95	67-120	
Pyrene	ug/kg	334	342	103	60-103	
2-Fluorobiphenyl (S)	%			88	36-86	S0
Terphenyl-d14 (S)	%			89	41-97	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2213799 2213800

Parameter	Units	40225755001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
1-Methylnaphthalene	ug/kg	<2.7	370	370	326	370	87	99	41-100	13	29	
2-Methylnaphthalene	ug/kg	3.6J	370	370	316	362	84	97	42-97	14	21	
Acenaphthene	ug/kg	<2.4	370	370	291	302	78	81	43-120	4	27	
Acenaphthylene	ug/kg	16.3J	370	370	343	335	88	86	51-120	2	26	
Anthracene	ug/kg	16.1J	370	370	392	356	101	92	46-111	9	29	
Benzo(a)anthracene	ug/kg	44.5	370	370	498	477	122	117	48-120	4	23	M1
Benzo(a)pyrene	ug/kg	64.7	370	370	571	542	137	129	46-108	5	30	M1
Benzo(b)fluoranthene	ug/kg	81.2	370	370	820	794	199	193	45-108	3	30	M1
Benzo(g,h,i)perylene	ug/kg	50.5	370	370	251	232	54	49	39-120	8	37	
Benzo(k)fluoranthene	ug/kg	43.9	370	370	357	465	84	114	47-120	26	31	
Chrysene	ug/kg	62.2	370	370	528	504	126	119	54-120	5	21	M1
Dibenz(a,h)anthracene	ug/kg	13.3J	370	370	230	190	58	48	46-120	19	34	
Fluoranthene	ug/kg	67.8	370	370	789	630	195	152	53-112	22	27	M1
Fluorene	ug/kg	2.5J	370	370	302	309	81	83	48-120	2	29	
Indeno(1,2,3-cd)pyrene	ug/kg	44.2	370	370	285	241	65	53	40-120	17	34	
Naphthalene	ug/kg	5.1J	370	370	288	282	76	75	47-120	2	25	
Phenanthrene	ug/kg	21.0	370	370	424	371	109	94	49-120	13	28	
Pyrene	ug/kg	66.6	370	370	593	597	142	143	43-103	1	31	M1
2-Fluorobiphenyl (S)	%						74	81	36-86			
Terphenyl-d14 (S)	%						72	73	41-97			

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: B.34 & B.35
Pace Project No.: 40225623

QC Batch: 383250
QC Batch Method: ASTM D2974-87
Analysis Method: ASTM D2974-87
Analysis Description: Dry Weight/Percent Moisture
Laboratory: Pace Analytical Services - Green Bay
Associated Lab Samples: 40225623001, 40225623002, 40225623003

SAMPLE DUPLICATE: 2210762

Parameter	Units	40225616010 Result	Dup Result	RPD	Max RPD	Qualifiers
Percent Moisture	%	7.3	7.8	6	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.

REPORT OF LABORATORY ANALYSIS

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

QUALIFIERS

Project: B.34 & B.35
Pace Project No.: 40225623

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

D3	Sample was diluted due to the presence of high levels of non-target analytes or other matrix interference.
L1	Analyte recovery in the laboratory control sample (LCS) was above QC limits. Results may be biased high.
M1	Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.
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.

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

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: B.34 & B.35
Pace Project No.: 40225623

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
40225623001	**SOUTH END B.34 (1)**	EPA 3541	383379	EPA 8082	383386
40225623002	**SOUTH END B.34 (2)**	EPA 3541	383379	EPA 8082	383386
40225623003	**SOUTH END B.34 (3)**	EPA 3541	383379	EPA 8082	383386
40225623001	**SOUTH END B.34 (1)**	EPA 3050	383516	EPA 6010	383599
40225623002	**SOUTH END B.34 (2)**	EPA 3050	383516	EPA 6010	383599
40225623003	**SOUTH END B.34 (3)**	EPA 3050	383516	EPA 6010	383599
40225623001	**SOUTH END B.34 (1)**	EPA 7471	383810	EPA 7471	383969
40225623002	**SOUTH END B.34 (2)**	EPA 7471	383810	EPA 7471	383969
40225623003	**SOUTH END B.34 (3)**	EPA 7471	383810	EPA 7471	383969
40225623001	**SOUTH END B.34 (1)**	EPA 3546	383513	EPA 8270E by SIM	383565
40225623002	**SOUTH END B.34 (2)**	EPA 3546	383513	EPA 8270E by SIM	383565
40225623003	**SOUTH END B.34 (3)**	EPA 3546	383787	EPA 8270E by SIM	383822
40225623001	**SOUTH END B.34 (1)**	EPA 5035/5030B	383452	EPA 8260	383489
40225623002	**SOUTH END B.34 (2)**	EPA 5035/5030B	383452	EPA 8260	383489
40225623003	**SOUTH END B.34 (3)**	EPA 5035/5030B	383452	EPA 8260	383489
40225623004	**TRIP BLANK**	EPA 5035/5030B	383452	EPA 8260	383489
40225623001	**SOUTH END B.34 (1)**	ASTM D2974-87	383250		
40225623002	**SOUTH END B.34 (2)**	ASTM D2974-87	383250		
40225623003	**SOUTH END B.34 (3)**	ASTM D2974-87	383250		

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

40225623

Pace Analytical®
www.pacelabs.com

CHAIN OF CUSTODY

(Please Print Clearly)	
Company Name:	Marinette Marine
Branch/Location:	
Project Contact:	Makayla Jacobs
Phone:	715-245-1931
Project Number:	
Project Name:	B.34 & B.35
Project State:	WI
Sampled By (Print):	Warren Netzow
Sampled By (Sign):	
PO #:	Regulatory Program:

*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:	
Mail To Company:	
Mail To Address:	
Invoice To Contact:	
Invoice To Company:	
Invoice To Address:	
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, W = Water, B = Biota, DW = Drinking Water, C = Charcoal, GW = Ground Water, O = Oil, SW = Surface Water, S = Soil, WW = Waste Water, SI = Sludge, WP = Wipe

PACE LAB #	CLIENT FIELD ID	COLLECTION DATE	COLLECTION TIME	MATRIX	FILTERED? (YES/NO) Y/N	PRESERVATION (CODE)* Pick Letter	Analyses Requested: PAH/VOC	RCRA Metals	PAHs	PCBs	CLIENT COMMENTS	LAB COMMENTS (Lab Use Only)	Profile #
001	South End B.34(1)	4-20	11:15	S			X	X	X	X			
002	South End B.34(2)	4-20	11:15	S			X	X	X	X			
003	South End B.34(3)	4-20	11:15	S			X	X	X	X			
004	Trip Blank												
												Lab added to COC per PM - included in shipment MLL 4-22-21	

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

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

Email #1:	
Email #2:	
Telephone:	
Fax:	

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

Relinquished By:	Date/Time:	Received By:	Date/Time:
Makayla Jacobs	4/21/21 2:00pm		
UPS	4-22-21 1110	Marlin Z Probst Jr	4-22-21 1110

PACE Project No.: 40225623

Receipt Temp = 1.0 °C

Sample Receipt pH OK / Adjusted

Cooler Custody Seal
Present / Not Present
Intact / Not Intact

Version 6.0 06/14/06

C019a(27Jun2006)

ORIGINAL

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

Sample Preservation Receipt Form

Client Name: Marinette Marine Project # 40225623

All containers needing preservation have been checked and noted below: □Yes □No ~~N/A~~ Initial when completed: Date/ Time:

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

Pace Lab #	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)
	AG1U	BG1U	AG1H	AG4S	AG4U	AG5U	AG2S	BG3U	BP1U	BP3U	BP3B	BP3N	BP3S	VG9A	DG9T	VG9U	VG9H	VG9M	VG9D	JGFU	JG9U	WGFU	WPFU	SP5T	ZPLC	GN						
001																		1		2			1									2.5 / 5 / 10
002																		1		2			1									2.5 / 5 / 10
003																		1		2			1									2.5 / 5 / 10
004																		2														2.5 / 5 / 10
005																																2.5 / 5 / 10
006																																2.5 / 5 / 10
007																																2.5 / 5 / 10
008																																2.5 / 5 / 10
009																																2.5 / 5 / 10
010																																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

MH 4-22-21

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# : 40225623

40225623

Client Name: Marinette Marine

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

Tracking #: 1Z 578 899 03 6585 1336

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

Cooler Temperature Uncorr: 1.0 /Corr: 1.0

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

Person examining contents: Date: 4-22-21 /Initials: MLK

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. TCC MLK 4-22-21
Chain of Custody Filled Out:	☐ Yes ☒ No ☐ N/A	2. pg #, mail, invoice, pres., proj # MLK 4-22-21
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. Lab received the following bottles empty + w/o labels and disposed upon receipt:
Correct Containers Used:	☒ Yes ☐ No	9. (2) JGFU, (1) WPFU, (4) BP3U, 1 syringe/poly MLK 4-22-21
-Pace Containers Used:	☒ Yes ☐ No ☐ N/A	
-Pace IR Containers Used:	☐ Yes ☐ No ☒ N/A	Minimal MLK 4-22-21
Containers Intact:	☐ Yes ☒ No	10. 2 VOA: cap loose + liquid escaped MLK 4-22-21
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. Lab added to COC per PM - included in shipment MLK 4-22-21
Trip Blank Custody Seals Present	☐ Yes ☒ No ☐ N/A	
Pace Trip Blank Lot # (if purchased): B104602VB		

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

Person Contacted: Date/Time:

Comments/ Resolution: Cooler received w/o tape/strap MLK 4-22-21

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

Page 2 of 2