From: Paul Lindquist <PLINDQUIST@ramboll.com>
Sent: Friday, January 7, 2022 5:13 PM
To: Beggs, Tauren R - DNR
Cc: Kristin Jones (Kristin.Jones@newellco.com); Adam Tegen; Witte, Edward
Subject: BRRTS #: 02-36-545108 (MIRRO PLT 9 [Former] - LGU)
Attachments: 02-36-545108_NR 716.14 Data Transmittal-GW Dec 2021.pdf

Good evening Tauren,

Attached for your records is a copy of the data transmittal letter for the December 2021 off-site groundwater sampling activities completed as part of the site investigation of the former Mirro Plant No. 9 facility (BRRTS #02-36-545108) located at 1512 Washington Street in Manitowoc, WI. Please note, a copy of the letter and attachments has been uploaded to the WDNR RR Program Submission Portal.

Thank you and have a great weekend.

Paul Lindquist

Managing Consultant
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plindquist@ramboll.com

RAMBOLL

ENVIRONMENT
& HEALTH

Sent via E-Mail

Mr. Tauren Beggs
Wisconsin Department of Natural Resources
2984 Shawano Avenue
Green Bay, WI 54313-6727

NR 716.14 DATA TRANSMITTAL
DECEMBER 2021 GROUNDWATER ANALYTICAL RESULTS
FORMER MIRRO PLANT NO. 9 FACILITY
1512 WASHINGTON STREET, MANITOWOC, WISCONSIN
WDNR BRRTS NO. 02-36-545108

Dear Mr. Beggs:

Ramboll US Consulting, Inc. (Ramboll), on behalf of Newell Operating Company (NOC), is providing the Wisconsin Department of Natural Resources (WDNR) with the attached analytical results for the December 2021 groundwater sampling event (MW-200, MW-217, MW-218, and MW-228) completed as part of the site investigation of the former Mirro Plant No. 9 site in Manitowoc, Wisconsin. The groundwater samples were collected on December 9, 2021, in accordance with the approved Site Investigation Work Plan submitted to the WDNR on October 14, 2020, and approved on November 17, 2020. A draft figure showing the monitoring well locations is attached along with draft tabulated results (Attachment A) and the laboratory analytical report (Attachment B).

If you have any questions or require additional information, please feel contact us at the numbers listed below.

Yours sincerely,

Paul D. Lindquist
Managing Consultant

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plindquist@ramboll.com

Jeanne M. Tarvin, PG, CPG
E&H Americas Country Market Director

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cc: Kristin Jones, NOC
Edward Witte, Godfrey & Kahn, S.C.
Adam Tegen, City of Manitowoc

January 7, 2022

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ATTACHMENT A

TABLES AND FIGURE

Table 1A – December 2021 VOC Groundwater Analytical Results

Table 1B – December 2021 PAH, PCB, and Metals Groundwater Analytical Results

Table 1C – December 2021 PFAS Groundwater Analytical Results

Figure 1 – Site Layout and Sampling Locations

Table 1a. December 2021 VOC Groundwater Analytical Results Compared to WDNR PAL and ES

Former Mirro Plant No. 9
1512 Washington Street, Manitowoc, WI 54220
FID No.: 436033730 BRRTS No.: 02-36-545108

DRAFT

Sample Location	Sample ID	Sample Date	BTEX Benzene	BTEX Ethylbenzene	BTEX Toluene	BTEX Xylenes, Total	VOC 1,1,1,2-Tetrachloroethane	VOC 1,1,1-Trichloroethane	VOC 1,1,2,2-Tetrachloroethane	VOC 1,1,2-Trichloroethane	VOC 1,1-Dichloroethane	VOC 1,1-Dichloroethene	VOC 1,1-Dichloropropene	VOC 1,2,3-Trichlorobenzene	VOC 1,2,3-Trichloropropane	VOC 1,2,4-Trichlorobenzene	VOC Trimethylbenzenes, Total[1]	VOC 1,2,4-Trimethylbenzene	VOC 1,3,5-Trimethylbenzene	VOC 1,2-Dibromo-3-chloropropane	VOC 1,2-Dibromoethane	VOC 1,2-Dichlorobenzene	VOC 1,2-Dichloroethane	VOC 1,2-Dichloropropane	VOC 1,3-Dichlorobenzene	VOC 1,3-Dichloropropane	VOC 1,3-Dichloropropene[2]	VOC cis-1,3-Dichloropropene	VOC trans-1,3-Dichloropropene	VOC 1,4-Dichlorobenzene	VOC 2,2-Dichloropropane	VOC 2-Chlorotoluene	VOC 4-Chlorotoluene	VOC 4-Isopropyltoluene
		Reporting Units:	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
		WI Groundwater ES:	**5**	**700**	**800**	**2,000**	**70**	**200**	**0.2**	**5**	**850**	**7**	**NS**	**NS**	**60**	**70**	**480**	**NS**	**NS**	**0.2**	**0.05**	**600**	**5**	**5**	**600**	**NS**	**0.4**	**NS**	**NS**	**75**	**NS**	**NS**	**NS**	**NS**
		WI Groundwater PAL:	0.5	140	160	400	7	40	0.02	0.5	85	0.7	NS	NS	12	14	96	NS	NS	0.02	0.005	60	0.5	0.5	120	NS	0.04	NS	NS	15	NS	NS	NS	NS
MW-217	MW-217	12/9/92021	<0.5	<0.5	<0.5	<1	<1	<1	<1	<1	<1	<1	<1	<1	<2	<1	<2	<1	<1	<5	<1	<1	<1	<1	<1	<1	<2	<1	<1	<1	<1	<1	<1	<1
MW-218	MW-218	12/9/92021	<0.5	<0.5	<0.5	<1	<1	<1	<1	<1	<1	<1	<1	<1	<2	<1	<2	<1	<1	<5	<1	<1	<1	<1	<1	<1	<2	<1	<1	<1	<1	<1	<1	<1
MW-228	MW-228	12/9/92021	<0.5	<0.5	<0.5	<1	<1	<1	<1	<1	<1	<1	<1	<1	<2	<1	<2	<1	<1	<5	<1	<1	<1	<1	<1	<1	<2	<1	<1	<1	<1	<1	<1	<1

Notes:

Bold	**attains or exceeds WI Groundwater ES**
Underlined	attains or exceeds WI Groundwater PAL
Gray Text	analyte not detected

Results & Flags:
< = Concentration is less than the Limit of Detection (LOD)
NA = Not Applicable

Screening Levels:
PAL and ES are from WI Administrative Code NR 140 groundwater quality standards.
Lab comments and definitions can be found in associated laboratory reports.

Acronyms:
µg/L = micrograms per liter
BRRTS = Bureau for Remediation and Redevelopment Tracking System
BTEX = Benzene, Toluene, Ethylbenzene and Xylene
ES = Enforcement Standard
FID = facility identification number
NS = No Screening Level
PAL = Preventive Action Limit
USEPA = U.S. Environmental Protection Agency
VOC = Volatile Organic Compound
WDNR = Wisconsin Department of Natural Resources
WI = Wisconsin

Superscripts:
1. Total trimethylbenzenes were calculated by Ramboll as follows:
   a. Where no detections were observed, the sum of the reporting limits is presented.
   b. Where detections were observed, only the detected results were added together for the total summation.
   c. Analytes used for the calculation are 1,2,4-Trimethylbenzene and 1,3,5-Trimethylbenzene.
2. 1,3-Dichloropropene was calculated by Ramboll as follows:
   a. Where no detections were observed, the sum of the reporting limits is presented.
   b. Where detections were observed, the detected results were added together for the total summation.
   c. cis-1,3-Dichloropropene and trans-1,3-Dichloropropene were used for the calculation.

Table 1a. December 2021 VOC Groundwater Analytical Results Compared to WDNR PAL and ES

Former Mirro Plant No. 9
1512 Washington Street, Manitowoc, WI 54220
FID No.: 436033730 BRRTS No.: 02-36-545108

DRAFT

Sample Location	Sample ID	Sample Date	VOC Bromobenzene	VOC Bromochloromethane	VOC Bromodichloromethane	VOC Bromoform	VOC Bromomethane	VOC Carbon Tetrachloride	VOC Chlorobenzene	VOC Chloroethane	VOC Chloroform	VOC Chloromethane	VOC cis-1,2-Dichloroethene	VOC Dibromochloromethane	VOC Dibromomethane	VOC Freon 12	VOC Hexachlorobutadiene	VOC Isopropyl ether	VOC Isopropylbenzene	VOC Methylene chloride (Dichloromethane, DCM)	VOC Methyl-tert-butyl-ether	VOC n-Butylbenzene	VOC n-Propylbenzene	VOC Naphthalene	VOC sec-Butylbenzene	VOC Styrene	VOC tert-Butylbenzene	VOC Tetrachloroethene	VOC trans-1,2-Dichloroethene	VOC Trichloroethene	VOC Trichlorofluoromethane	VOC Vinyl Chloride
		Reporting Units:	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
		WI Groundwater ES:	**NS**	**NS**	**0.6**	**4.4**	**10**	**5**	**NS**	**400**	**6**	**30**	**70**	**60**	**NS**	**1,000**	**NS**	**NS**	**NS**	**5**	**60**	**NS**	**NS**	**100**	**NS**	**100**	**NS**	**5**	**100**	**5**	**NS**	**0.2**
		WI Groundwater PAL:	NS	NS	0.06	0.44	1	0.5	NS	80	0.6	3	7	6	NS	200	NS	NS	NS	0.5	12	NS	NS	10	NS	10	NS	0.5	20	0.5	NS	0.02
MW-217	MW-217	12/9/92021	<1	<1	<1	<1	<3	<1	<1	<1	<2	<1	<1	<1	<1	<3	<1	<1	<1	<5	<1	<1	<1	<1	<1	<1	<1	<1	<1	<0.5	<1	<1
MW-218	MW-218	12/9/92021	<1	<1	<1	<1	<3	<1	<1	<1	<2	<1	<1	<1	<1	<3	<1	<1	<1	<5	<1	<1	<1	<1	<1	<1	<1	<1	<1	<0.5	<1	<1
MW-228	MW-228	12/9/92021	<1	<1	<1	<1	<3	<1	<1	<1	<2	<1	<1	<1	<1	<3	<1	<1	<1	<5	<1	<1	<1	<1	<1	<1	<1	<1	<1	<0.5	<1	<1

Notes:

Bold	**attains or exceeds WI Groundwater ES**
Underlined	attains or exceeds WI Groundwater PAL
Gray Text	analyte not detected

Results & Flags:
< = Concentration is less than the Limit of Detection (LOD)
NA = Not Applicable

Screening Levels:
PAL and ES are from WI Administrative Code NR 140 groundwater quality standard.
Lab comments and definitions can be found in associated laboratory reports.

Acronyms:
µg/L = micrograms per liter
BRRTS = Bureau for Remediation and Redevelopment Tracking System
BTEX = Benzene, Toluene, Ethylbenzene and Xylene
ES = Enforcement Standard
FID = facility identification number
NS = No Screening Level
PAL = Preventive Action Limit
USEPA = U.S. Environmental Protection Agency
VOC = Volatile Organic Compound
WDNR = Wisconsin Department of Natural Resources
WI = Wisconsin

Superscripts:
1. Total trimethylbenzenes were calculated by Ramboll as follows:
   a. Where no detections were observed, the sum of the reporting limits is presented.
   b. Where detections were observed, only the detected results were added together for the total summation.
   c. Analytes used for the calculation are 1,2,4-Trimethylbenzene and 1,3,5-Trimethylbenzene.
2. 1,3-Dichloropropene was calculated by Ramboll as follows:
   a. Where no detections were observed, the sum of the reporting limits is presented.
   b. Where detections were observed, the detected results were added together for the total summation.
   c. cis-1,3-Dichloropropene and trans-1,3-Dichloropropene were used for the calculation.

Table 1b. December 2021 PAH, PCB, Metals Groundwater Analytical Results Compared to WDNR PAL and ES

Former Mirro Plant No. 9
1512 Washington Street, Manitowoc, WI 54220
FID No.: 436033730 BRRTS No.: 02-36-545108

DRAFT

Sample Location	Sample ID	Sample Date	PAH 1-Methylnaphthalene	PAH 2-Methylnaphthalene	PAH Acenaphthene	PAH Acenaphthylene	PAH Anthracene	PAH Benzo(a)anthracene	PAH Benzo(a)pyrene	PAH Benzo(b)fluoranthene	PAH Benzo(g,h,i)perylene	PAH Benzo(k)fluoranthene	PAH Chrysene	PAH Dibenz(a,h)anthracene	PAH Fluoranthene	PAH Fluorene	PAH Indeno(1,2,3-cd)pyrene	PAH Naphthalene	PAH Phenanthrene	PAH Pyrene	PCB PCB, Total	PCB PCB-1016	PCB PCB-1221	PCB PCB-1232	PCB PCB-1242	PCB PCB-1248	PCB PCB-1254	PCB PCB-1260
		Reporting Units:	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
		WI Groundwater ES:	**NS**	**NS**	**NS**	**NS**	**3,000**	**NS**	**0.2**	**0.2**	**NS**	**NS**	**0.2**	**NS**	**400**	**400**	**NS**	**100**	**NS**	**250**	**0.03**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**
		WI Groundwater PAL:	NS	NS	NS	NS	600	NS	0.02	0.02	NS	NS	0.02	NS	80	80	NS	10	NS	50	0.003	NS	NS	NS	NS	NS	NS	NS
MW-217	MW-217	12/9/92021	<1.6	<1.6	<0.8	<0.8	<0.8	<0.16	<0.16	<0.16	<0.8	<0.16	<0.16	<0.24	<0.8	<0.8	<0.16	<0.8	<0.8	<0.8	<0.41	<0.41	<0.41	<0.41	<0.41	<0.41	<0.41	<0.41
MW-218	MW-218	12/9/92021	<1.6	<1.6	<0.78	<0.78	<0.78	<0.16	<0.16	<0.16	<0.78	<0.16	<0.16	<0.23	<0.78	<0.78	<0.16	<0.78	<0.78	<0.78	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4

Notes:

Bold	**attains or exceeds WI Groundwater ES**
Underlined	attains or exceeds WI Groundwater PAL
Gray Text	analyte not detected

Results & Flags:
< = Concentration is less than the Limit of Detection (LOD)
J = Estimated concentration
NA = Not Applicable

Screening Levels:
PAL and ES are from WI Administrative Code NR 140 groundwater quality standards.
Lab comments and definitions can be found in associated laboratory reports.

Acronyms:
µg/L = micrograms per liter
BRRTS = Bureau for Remediation and Redevelopment Tracking System
ES = Enforcement Standard
FID = facility identification number
NS = No Screening Level
PAH = Polycyclic Aromatic Hydrocarbon
PAL = Preventive Action Limit
PCB = Polychlorinated Biphenyl
USEPA = U.S. Environmental Protection Agency
WDNR = Wisconsin Department of Natural Resources
WI = Wisconsin

Table 1b. December 2021 PAH, PCB, Metals Groundwater Analytical Results Compared to WDNR PAL and ES

Former Mirro Plant No. 9
1512 Washington Street, Manitowoc, WI 54220
FID No.: 436033730 BRRTS No.: 02-36-545108

DRAFT

Sample Location	Sample ID	Sample Date	Metal Aluminum, Dissolved	Metal Antimony, Dissolved	Metal Arsenic, Dissolved	Metal Barium, Dissolved	Metal Cadmium, Dissolved	Metal Chromium, Dissolved	Metal Copper, Dissolved	Metal Iron, Dissolved	Metal Lead, Dissolved	Metal Manganese, Dissolved	Metal Mercury, Dissolved	Metal Nickel, Dissolved	Metal Selenium, Dissolved	Metal Silver, Dissolved	Metal Thallium, Dissolved
		Reporting Units:	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
		WI Groundwater ES:	**200**	**6**	**10**	**2,000**	**5**	**100**	**1,300**	**300**	**15**	**300**	**2**	**100**	**50**	**50**	**2**
		WI Groundwater PAL:	40	1.2	1	400	0.5	10	130	150	1.5	60	0.2	20	10	10	0.4
MW-217	MW-217	12/9/92021	<100	<3	0.82 J	130	<0.5	<5	4.5	<100	<0.5	220	<0.2	2.3	<2.5	<0.5	<2
MW-218	MW-218	12/9/92021	<100	<3	2	97	<0.5	2.1 J	0.87 J	**3,300**	<0.5	**340**	<0.2	3.3	<2.5	<0.5	<2

Notes:

Bold	**attains or exceeds WI Groundwater ES**
Underlined	attains or exceeds WI Groundwater PAL
Gray Text	analyte not detected

Results & Flags:
< = Concentration is less than the Limit of Detection (LOD)
J = Estimated concentration
NA = Not Applicable

Screening Levels:
PAL and ES are from WI Administrative Code NR 140 groundwater quality standards.
Lab comments and definitions can be found in associated laboratory reports.

Acronyms:
µg/L = micrograms per liter
BRRTS = Bureau for Remediation and Redevelopment Tracking System
ES = Enforcement Standard
FID = facility identification number
NS = No Screening Level
PAH = Polycyclic Aromatic Hydrocarbon
PAL = Preventive Action Limit
PCB = Polychlorinated Biphenyl
USEPA = U.S. Environmental Protection Agency
WDNR = Wisconsin Department of Natural Resources
WI = Wisconsin

Table 1c. December 2021 PFAS Groundwater Analytical Results Compared to USEPA HAL and Proposed WDNR PAL and ES

Former Mirro Plant No. 9
1512 Washington Street, Manitowoc, WI 54220
FID No.: 436033730 BRRTS No.: 02-36-545108

DRAFT

Sample Location	Sample ID	Sample Date	PFAS (6)[1]	PFOS & PFOA[2]	Perfluorooctanesulfonic acid (PFOS)	Perfluorooctanoic acid (PFOA)	Perfluorooctanesulfonamide (FOSA)	NEtFOSA	NEtFOSAA	NEtFOSE	11Cl-PF3OUdS (F-53B Minor)	4,8-Dioxa-3H-perfluorononanoic acid	4:2 Fluorotelomer sulfonic acid	6:2 Fluorotelomer sulfonic acid	8:2 Fluorotelomer sulfonic acid	9Cl-PF3ONS (F-53B Major)	HFPO-DA (GenX)	NMeFOSA	NMeFOSAA	NMeFOSE	Perfluorobutanesulfonic acid (PFBS)	Perfluorobutanoic acid (PFBA)	Perfluorodecanesulfonic acid (PFDS)	Perfluorodecanoic acid (PFDA)	Perfluorododecanesulfonic acid (PFDoS)	Perfluorododecanoic acid (PFDoA)	Perfluoroheptanesulfonic Acid (PFHpS)	Perfluoroheptanoic acid (PFHpA)	Perfluorohexanesulfonic acid (PFHxS)	Perfluorohexanoic acid (PFHxA)	Perfluorononanesulfonic acid (PFNS)	Perfluorononanoic acid (PFNA)	Perfluoropentanesulfonic acid (PFPeS)	Perfluoropentanoic acid (PFPeA)	Perfluorotetradecanoic acid (PFTeA)	Perfluorotridecanoic acid (PFTriA)	Perfluoroundecanoic acid (PFUnA)
Reporting Units:			ng/L	ng/L	ng/L	ng/L	ng/L	ng/L	ng/L	ng/L	ng/L	ng/L	ng/L	ng/L	ng/L	ng/L	ng/L	ng/L	ng/L	ng/L	ng/L	ng/L	ng/L	ng/L	ng/L	ng/L	ng/L	ng/L	ng/L	ng/L	ng/L	ng/L	ng/L	ng/L	ng/L	ng/L	ng/L	ng/L
USEPA Groundwater HAL:			*NS*	*70*	*70*	*70*	*NS*	*NS*	*NS*	*NS*	*NS*	*NS*	*NS*	*NS*	*NS*	*NS*	*NS*	*NS*	*NS*	*NS*	*NS*	*NS*	*NS*	*NS*	*NS*	*NS*	*NS*	*NS*	*NS*	*NS*	*NS*	*NS*	*NS*	*NS*	*NS*	*NS*	*NS*	*NS*
Proposed WI Groundwater ES:			**20**	**NS**	**20**	**20**	**20**	**20**	**20**	**20**	**NS**	**3,000**	**NS**	**NS**	**NS**	**NS**	**300**	**NS**	**NS**	**NS**	**450,000**	**10,000**	**NS**	**300**	**NS**	**500**	**NS**	**NS**	**40**	**150,000**	**NS**	**30**	**NS**	**NS**	**10,000**	**NS**	**3,000**
Proposed WI Groundwater PAL:			2	NS	2	2	2	2	2	2	NS	600	NS	NS	NS	NS	30	NS	NS	NS	90,000	2,000	NS	60	NS	100	NS	NS	4	30,000	NS	3	NS	NS	2,000	NS	600
MW-200	MW-200	12/9/92021	**92.9**	*92.9*	2.9	***90***	<1.9	<1.9	<4.8	<1.9	<1.9	<1.9	<1.9	<4.8	<1.9	<1.9	<3.8	<1.9	<4.8	<3.8	9	6	<1.9	<1.9	<1.9	<1.9	<1.9	6.9	3.5	8	<1.9	0.35 J	0.52 J	6.4	<1.9	<1.9	<1.9
MW-217	MW-217	12/9/92021	2.3	2.3	<1.9	2.3	<1.9	<1.9	<4.9	<1.9	<1.9	<1.9	<1.9	<4.9	<1.9	<1.9	<3.9	<1.9	<4.9	<3.9	<1.9	<4.9	<1.9	<1.9	<1.9	<1.9	<1.9	1 J	<1.9	1.4 J	<1.9	<1.9	<1.9	0.71 J	<1.9	<1.9	<1.9
MW-218	MW-218	12/9/92021	**110**	*110*	<2	<2	<2	<4.9	<2	<2	<2	<2	<2	<4.9	<2	<2	<3.9	<2	<4.9	<3.9	1.2 J	4.9	<2	<2	<2	<2	<2	2.3	0.82 J	2.9	<2	<2	<2	2.1	<2	<2	<2
MW-228	MW-228	12/9/92021	**51**	51	<1.9	**51**	<1.9	<1.9	<4.8	<1.9	<1.9	<1.9	<1.9	<4.8	<1.9	<1.9	<3.8	<1.9	<4.8	<3.8	2	5.5	<1.9	<1.9	<1.9	<1.9	<1.9	4.2	0.77 J	3.3	<1.9	<1.9	<1.9	2.6	<1.9	<1.9	<1.9

Notes:

Italics	*exceeds USEPA Groundwater HAL*
Bold	**attains or exceeds Proposed WI Groundwater ES**
Underlined	attains or exceeds Proposed WI Groundwater PAL
Gray Text	analyte not detected

Results & Flags:
< = Concentration is less than the Limit of Detection (LOD)
J = Estimated concentration
NA = Not Applicable

Screening Levels:
PAL and ES from WI Administrative Code NR 140 groundwater quality standard are proposed for PFAS.
USEPA Health Advisory Limits are non-enforceable and non-regulatory, established in 2016.

Lab comments and definitions can be found in associated laboratory reports.

Acronyms:
BRRTS = Bureau for Remediation and Redevelopment Tracking System
ES = Enforcement Standard
FID = facility identification number
HAL = Health Advisory Level
ng/L = nanograms per liter
NS = No Screening Level
PAL = Preventive Action Limit
PFAS = per- and polyfluoroalkyl substances
USEPA = U.S. Environmental Protection Agency
WDNR = Wisconsin Department of Natural Resources
WI = Wisconsin

Superscripts:
1. PFAS (6) were calculated by Ramboll as follows:
   a. Where detections were observed, only the detected results were added together for the total summation.
   b. Analytes used for the calculation are NEtFOSA, NEtFOSAA, NEtFOSE, FOSA, PFOS, and PFOA.
2. PFOS & PFOA was calculated by Ramboll as follows:
   a. Where detections were observed, only the detected results were added together for the total summation.
   b. Analytes used for the calculation are PFOS, and PFOA.

RAMBOLL SAMPLING LOCATIONS

- MONITORING WELL
- PIEZOMETER
- SOIL BORING
- TEMPORARY MONITORING POINT
- LNAPL INVESTIGATION AREA
- PROPERTY BOUNDARY
- PARCEL BOUNDARY

HISTORICAL SAMPLING LOCATION (BY CONSULTANT)

- AECOM
- NORTHERN ENVIRONMENTAL
- STANTEC
- SYMBIONT
- TETRA TECH

0 60 120 Feet

SITE LAYOUT AND SAMPLING LOCATIONS

FIGURE 1

FORMER MIRRO PLANT NO. 9
MANITOWOC, WISCONSIN

RAMBOLL US CONSULTING, INC.

RAMBOLL

ATTACHMENT B

LABORATORY ANALYTICAL REPORTS

eurofins | Environment Testing America

ANALYTICAL REPORT

Eurofins TestAmerica, Chicago
2417 Bond Street
University Park, IL 60484
Tel: (708)534-5200

Laboratory Job ID: 500-209562-1
Client Project/Site: Former Mirro Plant No 9 - 1690019647

For:
Ramboll US Corporation
234 W. Florida Street
Fifth Floor
Milwaukee, Wisconsin 53204

Attn: Paul Lindquist

Sandra Fredrick

Authorized for release by:
12/23/2021 4:35:14 PM

Sandie Fredrick, Project Manager II
(920)261-1660
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Job ID: 500-209562-1

Laboratory: Eurofins TestAmerica, Chicago

Narrative

Job Narrative
500-209562-1

Comments
No additional comments.

Receipt
The sample was received on 12/10/2021 10:30 AM. Unless otherwise noted below, the sample arrived in good condition, and where required, properly preserved and on ice. The temperature of the cooler at receipt was -0.4º C.

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

LCMS
Method 537 (modified): The transition mass ratio was above/below of the established ratio limit for Perfluorohexanoic acid (PFHxA) in (CCVL 320-552298/2) associated to this data set. This is indicated by the "R" flag in the raw data. As the flagged data is in control in the CCVL, there is no adverse impact to the data. (CCVL 320-552298/2)

Method 537 (modified): The method blank for preparation batch 320-551272 contained NEtFOSE and NMeFOSE above one half the reporting limit (RL). None of the samples associated with this method blank contained the target compounds; therefore, re-extraction and/or re-analysis of samples were not performed.

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

Organic Prep
Method 3535: Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate (MS/MSD) associated with preparation batch 320-551272. 320-551272 Method: 3535 PFC-W

Method 3535: The following samples contained floating particulates in the sample bottle prior to extraction: MW-228 (500-209562-1). 320-551272 Method: 3535 PFC-W

Method 3535: The following samples were yellow prior to extraction: MW-228 (500-209562-1). 320-551272 Method: 3535 PFC-W

Method 3535: The following samples were light yellow after adjusting to the final volume: MW-228 (500-209562-1). 320-551272 Method: 3535 PFC-W

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

Narrative

Job Narrative
500-209564-1

Comments
No additional comments.

Receipt
The samples were received on 12/10/2021 10:30 AM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperature of the cooler at receipt was -0.4º C.

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

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

Job ID: 500-209562-1 (Continued)

Laboratory: Eurofins TestAmerica, Chicago (Continued)

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

Metals
Method 6020A: The low level continuing calibration verification (CCVL) associated with batch 500-634985 recovered above the upper control limit for Arsenic. The samples associated with this CCV were non-detects for the affected analyte; therefore, the data have been reported.

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

LCMS
Method 537 (modified): The transition mass ratio was above/below of the established ratio limit for Perfluorohexanoic acid (PFHxA) in (CCVL 320-552298/2) associated to this data set. This is indicated by the "R" flag in the raw data. As the flagged data is in control in the CCVL, there is no adverse impact to the data.

(CCVL 320-552298/2)

Method 537 (modified): The method blank for preparation batch 320-551272 contained NEtFOSE and NMeFOSE above one half the reporting limit (RL). None of the samples associated with this method blank contained the target compounds; therefore, re-extraction and/or re-analysis of samples were not performed.

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

Field Service / Mobile Lab
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Organic Prep
Method 3535: Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate (MS/MSD) associated with preparation batch 320-551272.

320-551272
Method: 3535 PFC-W

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

Detection Summary

Client: Ramboll US Corporation
Job ID: 500-209562-1
Project/Site: Former Mirro Plant No 9 - 1690019647

Client Sample ID: MW-228
Lab Sample ID: 500-209562-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Perfluorobutanoic acid (PFBA)	5.5		4.8	2.3	ng/L	1		537 (modified)	Total/NA
Perfluoropentanoic acid (PFPeA)	2.6		1.9	0.47	ng/L	1		537 (modified)	Total/NA
Perfluorohexanoic acid (PFHxA)	3.3		1.9	0.56	ng/L	1		537 (modified)	Total/NA
Perfluoroheptanoic acid (PFHpA)	4.2		1.9	0.24	ng/L	1		537 (modified)	Total/NA
Perfluorooctanoic acid (PFOA)	51		1.9	0.81	ng/L	1		537 (modified)	Total/NA
Perfluorobutanesulfonic acid (PFBS)	2.0		1.9	0.19	ng/L	1		537 (modified)	Total/NA
Perfluorohexanesulfonic acid (PFHxS)	0.77	J	1.9	0.55	ng/L	1		537 (modified)	Total/NA

Client Sample ID: FB-01
Lab Sample ID: 500-209564-1

No Detections.

Client Sample ID: EB-01
Lab Sample ID: 500-209564-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	0.50	J ^+ B	1.0	0.23	ug/L	1		6020A	Dissolved

Client Sample ID: Trip Blank
Lab Sample ID: 500-209564-3

No Detections.

This Detection Summary does not include radiochemical test results.

Method Summary

Client: Ramboll US Corporation
Job ID: 500-209562-1
Project/Site: Former Mirro Plant No 9 - 1690019647

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL CHI
537 (modified)	Fluorinated Alkyl Substances	EPA	TAL SAC
3535	Solid-Phase Extraction (SPE)	SW846	TAL SAC
5030B	Purge and Trap	SW846	TAL CHI

Protocol References:

EPA = US Environmental Protection Agency

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

Laboratory References:

TAL CHI = Eurofins TestAmerica, Chicago, 2417 Bond Street, University Park, IL 60484, TEL (708)534-5200

TAL SAC = Eurofins TestAmerica, Sacramento, 880 Riverside Parkway, West Sacramento, CA 95605, TEL (916)373-5600

Sample Summary

Client: Ramboll US Corporation
Job ID: 500-209562-1
Project/Site: Former Mirro Plant No 9 - 1690019647

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
500-209562-1	MW-228	Water	12/09/21 09:07	12/10/21 10:30
500-209564-1	FB-01	Water	12/09/21 12:30	12/10/21 10:30
500-209564-2	EB-01	Water	12/09/21 12:45	12/10/21 10:30
500-209564-3	Trip Blank	Water	12/09/21 00:00	12/10/21 10:30

Client: Ramboll US Corporation
Job ID: 500-209562-1
Project/Site: Former Mirro Plant No 9 - 1690019647

Client Sample ID: MW-228
Lab Sample ID: 500-209562-1
Date Collected: 12/09/21 09:07
Matrix: Water
Date Received: 12/10/21 10:30

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.15		0.50	0.15	ug/L			12/22/21 15:10	1
Bromobenzene	<0.36		1.0	0.36	ug/L			12/22/21 15:10	1
Bromochloromethane	<0.43		1.0	0.43	ug/L			12/22/21 15:10	1
Bromodichloromethane	<0.37		1.0	0.37	ug/L			12/22/21 15:10	1
Bromoform	<0.48		1.0	0.48	ug/L			12/22/21 15:10	1
Bromomethane	<0.80		3.0	0.80	ug/L			12/22/21 15:10	1
Carbon tetrachloride	<0.38		1.0	0.38	ug/L			12/22/21 15:10	1
Chlorobenzene	<0.39		1.0	0.39	ug/L			12/22/21 15:10	1
Chloroethane	<0.51		1.0	0.51	ug/L			12/22/21 15:10	1
Chloroform	<0.37		2.0	0.37	ug/L			12/22/21 15:10	1
Chloromethane	<0.32		1.0	0.32	ug/L			12/22/21 15:10	1
2-Chlorotoluene	<0.31		1.0	0.31	ug/L			12/22/21 15:10	1
4-Chlorotoluene	<0.35		1.0	0.35	ug/L			12/22/21 15:10	1
cis-1,2-Dichloroethene	<0.41		1.0	0.41	ug/L			12/22/21 15:10	1
cis-1,3-Dichloropropene	<0.42		1.0	0.42	ug/L			12/22/21 15:10	1
Dibromochloromethane	<0.49		1.0	0.49	ug/L			12/22/21 15:10	1
1,2-Dibromo-3-Chloropropane	<2.0		5.0	2.0	ug/L			12/22/21 15:10	1
1,2-Dibromoethane	<0.39		1.0	0.39	ug/L			12/22/21 15:10	1
Dibromomethane	<0.27		1.0	0.27	ug/L			12/22/21 15:10	1
1,2-Dichlorobenzene	<0.33		1.0	0.33	ug/L			12/22/21 15:10	1
1,3-Dichlorobenzene	<0.40		1.0	0.40	ug/L			12/22/21 15:10	1
1,4-Dichlorobenzene	<0.36		1.0	0.36	ug/L			12/22/21 15:10	1
Dichlorodifluoromethane	<0.67		3.0	0.67	ug/L			12/22/21 15:10	1
1,1-Dichloroethane	<0.41		1.0	0.41	ug/L			12/22/21 15:10	1
1,2-Dichloroethane	<0.39		1.0	0.39	ug/L			12/22/21 15:10	1
1,1-Dichloroethene	<0.39		1.0	0.39	ug/L			12/22/21 15:10	1
1,2-Dichloropropane	<0.43		1.0	0.43	ug/L			12/22/21 15:10	1
1,3-Dichloropropane	<0.36		1.0	0.36	ug/L			12/22/21 15:10	1
2,2-Dichloropropane	<0.44		1.0	0.44	ug/L			12/22/21 15:10	1
1,1-Dichloropropene	<0.30		1.0	0.30	ug/L			12/22/21 15:10	1
Ethylbenzene	<0.18		0.50	0.18	ug/L			12/22/21 15:10	1
Hexachlorobutadiene	<0.45		1.0	0.45	ug/L			12/22/21 15:10	1
Isopropylbenzene	<0.39		1.0	0.39	ug/L			12/22/21 15:10	1
Isopropyl ether	<0.28		1.0	0.28	ug/L			12/22/21 15:10	1
Methylene Chloride	<1.6		5.0	1.6	ug/L			12/22/21 15:10	1
Methyl tert-butyl ether	<0.39		1.0	0.39	ug/L			12/22/21 15:10	1
Naphthalene	<0.34		1.0	0.34	ug/L			12/22/21 15:10	1
n-Butylbenzene	<0.39		1.0	0.39	ug/L			12/22/21 15:10	1
N-Propylbenzene	<0.41		1.0	0.41	ug/L			12/22/21 15:10	1
p-Isopropyltoluene	<0.36		1.0	0.36	ug/L			12/22/21 15:10	1
sec-Butylbenzene	<0.40		1.0	0.40	ug/L			12/22/21 15:10	1
Styrene	<0.39		1.0	0.39	ug/L			12/22/21 15:10	1
tert-Butylbenzene	<0.40		1.0	0.40	ug/L			12/22/21 15:10	1
1,1,1,2-Tetrachloroethane	<0.46		1.0	0.46	ug/L			12/22/21 15:10	1
1,1,2,2-Tetrachloroethane	<0.40		1.0	0.40	ug/L			12/22/21 15:10	1
Tetrachloroethene	<0.37		1.0	0.37	ug/L			12/22/21 15:10	1
Toluene	<0.15		0.50	0.15	ug/L			12/22/21 15:10	1
trans-1,2-Dichloroethene	<0.35		1.0	0.35	ug/L			12/22/21 15:10	1
trans-1,3-Dichloropropene	<0.36		1.0	0.36	ug/L			12/22/21 15:10	1

Client: Ramboll US Corporation
Job ID: 500-209562-1
Project/Site: Former Mirro Plant No 9 - 1690019647

Client Sample ID: MW-228
Lab Sample ID: 500-209562-1
Date Collected: 12/09/21 09:07
Matrix: Water
Date Received: 12/10/21 10:30

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,3-Trichlorobenzene	<0.46		1.0	0.46	ug/L			12/22/21 15:10	1
1,2,4-Trichlorobenzene	<0.34		1.0	0.34	ug/L			12/22/21 15:10	1
1,1,1-Trichloroethane	<0.38		1.0	0.38	ug/L			12/22/21 15:10	1
1,1,2-Trichloroethane	<0.35		1.0	0.35	ug/L			12/22/21 15:10	1
Trichloroethene	<0.16		0.50	0.16	ug/L			12/22/21 15:10	1
Trichlorofluoromethane	<0.43		1.0	0.43	ug/L			12/22/21 15:10	1
1,2,3-Trichloropropane	<0.41		2.0	0.41	ug/L			12/22/21 15:10	1
1,2,4-Trimethylbenzene	<0.36		1.0	0.36	ug/L			12/22/21 15:10	1
1,3,5-Trimethylbenzene	<0.25		1.0	0.25	ug/L			12/22/21 15:10	1
Vinyl chloride	<0.20		1.0	0.20	ug/L			12/22/21 15:10	1
Xylenes, Total	<0.22		1.0	0.22	ug/L			12/22/21 15:10	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*83*		*72 - 124*		*12/22/21 15:10*	*1*
Dibromofluoromethane (Surr)	*90*		*75 - 120*		*12/22/21 15:10*	*1*
1,2-Dichloroethane-d4 (Surr)	*87*		*75 - 126*		*12/22/21 15:10*	*1*
Toluene-d8 (Surr)	*95*		*75 - 120*		*12/22/21 15:10*	*1*

Method: 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	**5.5**		4.8	2.3	ng/L		12/16/21 04:53	12/20/21 06:22	1
Perfluoropentanoic acid (PFPeA)	**2.6**		1.9	0.47	ng/L		12/16/21 04:53	12/20/21 06:22	1
Perfluorohexanoic acid (PFHxA)	**3.3**		1.9	0.56	ng/L		12/16/21 04:53	12/20/21 06:22	1
Perfluoroheptanoic acid (PFHpA)	**4.2**		1.9	0.24	ng/L		12/16/21 04:53	12/20/21 06:22	1
Perfluorooctanoic acid (PFOA)	**51**		1.9	0.81	ng/L		12/16/21 04:53	12/20/21 06:22	1
Perfluorononanoic acid (PFNA)	<0.26		1.9	0.26	ng/L		12/16/21 04:53	12/20/21 06:22	1
Perfluorodecanoic acid (PFDA)	<0.30		1.9	0.30	ng/L		12/16/21 04:53	12/20/21 06:22	1
Perfluoroundecanoic acid (PFUnA)	<1.1		1.9	1.1	ng/L		12/16/21 04:53	12/20/21 06:22	1
Perfluorododecanoic acid (PFDoA)	<0.53		1.9	0.53	ng/L		12/16/21 04:53	12/20/21 06:22	1
Perfluorotridecanoic acid (PFTriA)	<1.2		1.9	1.2	ng/L		12/16/21 04:53	12/20/21 06:22	1
Perfluorotetradecanoic acid (PFTeA)	<0.70		1.9	0.70	ng/L		12/16/21 04:53	12/20/21 06:22	1
Perfluorobutanesulfonic acid (PFBS)	**2.0**		1.9	0.19	ng/L		12/16/21 04:53	12/20/21 06:22	1
Perfluoropentanesulfonic acid (PFPeS)	<0.29		1.9	0.29	ng/L		12/16/21 04:53	12/20/21 06:22	1
Perfluorohexanesulfonic acid (PFHxS)	**0.77**	**J**	1.9	0.55	ng/L		12/16/21 04:53	12/20/21 06:22	1
Perfluoroheptanesulfonic Acid (PFHpS)	<0.18		1.9	0.18	ng/L		12/16/21 04:53	12/20/21 06:22	1
Perfluorooctanesulfonic acid (PFOS)	<0.52		1.9	0.52	ng/L		12/16/21 04:53	12/20/21 06:22	1
Perfluorononanesulfonic acid (PFNS)	<0.35		1.9	0.35	ng/L		12/16/21 04:53	12/20/21 06:22	1
Perfluorodecanesulfonic acid (PFDS)	<0.31		1.9	0.31	ng/L		12/16/21 04:53	12/20/21 06:22	1
Perfluorododecanesulfonic acid (PFDoS)	<0.93		1.9	0.93	ng/L		12/16/21 04:53	12/20/21 06:22	1
Perfluorooctanesulfonamide (FOSA)	<0.94		1.9	0.94	ng/L		12/16/21 04:53	12/20/21 06:22	1
NEtFOSA	<0.83		1.9	0.83	ng/L		12/16/21 04:53	12/20/21 06:22	1
NMeFOSA	<0.41		1.9	0.41	ng/L		12/16/21 04:53	12/20/21 06:22	1
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	<1.1		4.8	1.1	ng/L		12/16/21 04:53	12/20/21 06:22	1
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	<1.2		4.8	1.2	ng/L		12/16/21 04:53	12/20/21 06:22	1
NMeFOSE	<1.3		3.8	1.3	ng/L		12/16/21 04:53	12/20/21 06:22	1

Client: Ramboll US Corporation
Job ID: 500-209562-1
Project/Site: Former Mirro Plant No 9 - 1690019647

Client Sample ID: MW-228
Lab Sample ID: 500-209562-1
Date Collected: 12/09/21 09:07
Matrix: Water
Date Received: 12/10/21 10:30

Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
NEtFOSE	<0.81		1.9	0.81	ng/L		12/16/21 04:53	12/20/21 06:22	1
4:2 FTS	<0.23		1.9	0.23	ng/L		12/16/21 04:53	12/20/21 06:22	1
6:2 FTS	<2.4		4.8	2.4	ng/L		12/16/21 04:53	12/20/21 06:22	1
8:2 FTS	<0.44		1.9	0.44	ng/L		12/16/21 04:53	12/20/21 06:22	1
DONA	<0.38		1.9	0.38	ng/L		12/16/21 04:53	12/20/21 06:22	1
HFPO-DA (GenX)	<1.4		3.8	1.4	ng/L		12/16/21 04:53	12/20/21 06:22	1
F-53B Major	<0.23		1.9	0.23	ng/L		12/16/21 04:53	12/20/21 06:22	1
F-53B Minor	<0.31		1.9	0.31	ng/L		12/16/21 04:53	12/20/21 06:22	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C4 PFBA	*73*		*25 - 150*	*12/16/21 04:53*	*12/20/21 06:22*	*1*
13C5 PFPeA	*83*		*25 - 150*	*12/16/21 04:53*	*12/20/21 06:22*	*1*
13C2 PFHxA	*71*		*25 - 150*	*12/16/21 04:53*	*12/20/21 06:22*	*1*
13C4 PFHpA	*76*		*25 - 150*	*12/16/21 04:53*	*12/20/21 06:22*	*1*
13C4 PFOA	*92*		*25 - 150*	*12/16/21 04:53*	*12/20/21 06:22*	*1*
13C5 PFNA	*114*		*25 - 150*	*12/16/21 04:53*	*12/20/21 06:22*	*1*
13C2 PFDA	*96*		*25 - 150*	*12/16/21 04:53*	*12/20/21 06:22*	*1*
13C2 PFUnA	*97*		*25 - 150*	*12/16/21 04:53*	*12/20/21 06:22*	*1*
13C2 PFDoA	*103*		*25 - 150*	*12/16/21 04:53*	*12/20/21 06:22*	*1*
13C2 PFTeDA	*104*		*25 - 150*	*12/16/21 04:53*	*12/20/21 06:22*	*1*
13C3 PFBS	*77*		*25 - 150*	*12/16/21 04:53*	*12/20/21 06:22*	*1*
18O2 PFHxS	*79*		*25 - 150*	*12/16/21 04:53*	*12/20/21 06:22*	*1*
13C4 PFOS	*91*		*25 - 150*	*12/16/21 04:53*	*12/20/21 06:22*	*1*
13C8 FOSA	*85*		*10 - 150*	*12/16/21 04:53*	*12/20/21 06:22*	*1*
d3-NMeFOSAA	*78*		*25 - 150*	*12/16/21 04:53*	*12/20/21 06:22*	*1*
d5-NEtFOSAA	*91*		*25 - 150*	*12/16/21 04:53*	*12/20/21 06:22*	*1*
d-N-MeFOSA-M	*78*		*10 - 150*	*12/16/21 04:53*	*12/20/21 06:22*	*1*
d-N-EtFOSA-M	*74*		*10 - 150*	*12/16/21 04:53*	*12/20/21 06:22*	*1*
d7-N-MeFOSE-M	*85*		*10 - 150*	*12/16/21 04:53*	*12/20/21 06:22*	*1*
d9-N-EtFOSE-M	*81*		*10 - 150*	*12/16/21 04:53*	*12/20/21 06:22*	*1*
M2-4:2 FTS	*76*		*25 - 150*	*12/16/21 04:53*	*12/20/21 06:22*	*1*
M2-6:2 FTS	*84*		*25 - 150*	*12/16/21 04:53*	*12/20/21 06:22*	*1*
M2-8:2 FTS	*87*		*25 - 150*	*12/16/21 04:53*	*12/20/21 06:22*	*1*
13C3 HFPO-DA	*88*		*25 - 150*	*12/16/21 04:53*	*12/20/21 06:22*	*1*
13C2 10:2 FTS	*87*		*25 - 150*	*12/16/21 04:53*	*12/20/21 06:22*	*1*

Client: Ramboll US Corporation
Job ID: 500-209562-1
Project/Site: Former Mirro Plant No 9 - 1690019647

Client Sample ID: FB-01
Lab Sample ID: 500-209564-1
Date Collected: 12/09/21 12:30
Matrix: Water
Date Received: 12/10/21 10:30

Method: 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	<2.2		4.6	2.2	ng/L		12/16/21 04:53	12/20/21 06:32	1
Perfluoropentanoic acid (PFPeA)	<0.45		1.9	0.45	ng/L		12/16/21 04:53	12/20/21 06:32	1
Perfluorohexanoic acid (PFHxA)	<0.54		1.9	0.54	ng/L		12/16/21 04:53	12/20/21 06:32	1
Perfluoroheptanoic acid (PFHpA)	<0.23		1.9	0.23	ng/L		12/16/21 04:53	12/20/21 06:32	1
Perfluorooctanoic acid (PFOA)	<0.79		1.9	0.79	ng/L		12/16/21 04:53	12/20/21 06:32	1
Perfluorononanoic acid (PFNA)	<0.25		1.9	0.25	ng/L		12/16/21 04:53	12/20/21 06:32	1
Perfluorodecanoic acid (PFDA)	<0.29		1.9	0.29	ng/L		12/16/21 04:53	12/20/21 06:32	1
Perfluoroundecanoic acid (PFUnA)	<1.0		1.9	1.0	ng/L		12/16/21 04:53	12/20/21 06:32	1
Perfluorododecanoic acid (PFDoA)	<0.51		1.9	0.51	ng/L		12/16/21 04:53	12/20/21 06:32	1
Perfluorotridecanoic acid (PFTriA)	<1.2		1.9	1.2	ng/L		12/16/21 04:53	12/20/21 06:32	1
Perfluorotetradecanoic acid (PFTeA)	<0.68		1.9	0.68	ng/L		12/16/21 04:53	12/20/21 06:32	1
Perfluorobutanesulfonic acid (PFBS)	<0.19		1.9	0.19	ng/L		12/16/21 04:53	12/20/21 06:32	1
Perfluoropentanesulfonic acid (PFPeS)	<0.28		1.9	0.28	ng/L		12/16/21 04:53	12/20/21 06:32	1
Perfluorohexanesulfonic acid (PFHxS)	<0.53		1.9	0.53	ng/L		12/16/21 04:53	12/20/21 06:32	1
Perfluoroheptanesulfonic Acid (PFHpS)	<0.18		1.9	0.18	ng/L		12/16/21 04:53	12/20/21 06:32	1
Perfluorooctanesulfonic acid (PFOS)	<0.50		1.9	0.50	ng/L		12/16/21 04:53	12/20/21 06:32	1
Perfluorononanesulfonic acid (PFNS)	<0.34		1.9	0.34	ng/L		12/16/21 04:53	12/20/21 06:32	1
Perfluorodecanesulfonic acid (PFDS)	<0.30		1.9	0.30	ng/L		12/16/21 04:53	12/20/21 06:32	1
Perfluorododecanesulfonic acid (PFDoS)	<0.90		1.9	0.90	ng/L		12/16/21 04:53	12/20/21 06:32	1
Perfluorooctanesulfonamide (FOSA)	<0.91		1.9	0.91	ng/L		12/16/21 04:53	12/20/21 06:32	1
NEtFOSA	<0.81		1.9	0.81	ng/L		12/16/21 04:53	12/20/21 06:32	1
NMeFOSA	<0.40		1.9	0.40	ng/L		12/16/21 04:53	12/20/21 06:32	1
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	<1.1		4.6	1.1	ng/L		12/16/21 04:53	12/20/21 06:32	1
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	<1.2		4.6	1.2	ng/L		12/16/21 04:53	12/20/21 06:32	1
NMeFOSE	<1.3		3.7	1.3	ng/L		12/16/21 04:53	12/20/21 06:32	1
NEtFOSE	<0.79		1.9	0.79	ng/L		12/16/21 04:53	12/20/21 06:32	1
4:2 FTS	<0.22		1.9	0.22	ng/L		12/16/21 04:53	12/20/21 06:32	1
6:2 FTS	<2.3		4.6	2.3	ng/L		12/16/21 04:53	12/20/21 06:32	1
8:2 FTS	<0.43		1.9	0.43	ng/L		12/16/21 04:53	12/20/21 06:32	1
DONA	<0.37		1.9	0.37	ng/L		12/16/21 04:53	12/20/21 06:32	1
HFPO-DA (GenX)	<1.4		3.7	1.4	ng/L		12/16/21 04:53	12/20/21 06:32	1
F-53B Major	<0.22		1.9	0.22	ng/L		12/16/21 04:53	12/20/21 06:32	1
F-53B Minor	<0.30		1.9	0.30	ng/L		12/16/21 04:53	12/20/21 06:32	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C4 PFBA	*77*		*25 - 150*	*12/16/21 04:53*	*12/20/21 06:32*	*1*
13C5 PFPeA	*76*		*25 - 150*	*12/16/21 04:53*	*12/20/21 06:32*	*1*
13C2 PFHxA	*64*		*25 - 150*	*12/16/21 04:53*	*12/20/21 06:32*	*1*
13C4 PFHpA	*62*		*25 - 150*	*12/16/21 04:53*	*12/20/21 06:32*	*1*
13C4 PFOA	*87*		*25 - 150*	*12/16/21 04:53*	*12/20/21 06:32*	*1*
13C5 PFNA	*94*		*25 - 150*	*12/16/21 04:53*	*12/20/21 06:32*	*1*
13C2 PFDA	*80*		*25 - 150*	*12/16/21 04:53*	*12/20/21 06:32*	*1*
13C2 PFUnA	*80*		*25 - 150*	*12/16/21 04:53*	*12/20/21 06:32*	*1*
13C2 PFDoA	*86*		*25 - 150*	*12/16/21 04:53*	*12/20/21 06:32*	*1*
13C2 PFTeDA	*93*		*25 - 150*	*12/16/21 04:53*	*12/20/21 06:32*	*1*
13C3 PFBS	*75*		*25 - 150*	*12/16/21 04:53*	*12/20/21 06:32*	*1*

Client: Ramboll US Corporation
Job ID: 500-209562-1
Project/Site: Former Mirro Plant No 9 - 1690019647

Client Sample ID: FB-01
Lab Sample ID: 500-209564-1
Date Collected: 12/09/21 12:30
Matrix: Water
Date Received: 12/10/21 10:30

Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
18O2 PFHxS	67		25 - 150	12/16/21 04:53	12/20/21 06:32	1
13C4 PFOS	81		25 - 150	12/16/21 04:53	12/20/21 06:32	1
13C8 FOSA	71		10 - 150	12/16/21 04:53	12/20/21 06:32	1
d3-NMeFOSAA	69		25 - 150	12/16/21 04:53	12/20/21 06:32	1
d5-NEtFOSAA	79		25 - 150	12/16/21 04:53	12/20/21 06:32	1
d-N-MeFOSA-M	65		10 - 150	12/16/21 04:53	12/20/21 06:32	1
d-N-EtFOSA-M	64		10 - 150	12/16/21 04:53	12/20/21 06:32	1
d7-N-MeFOSE-M	71		10 - 150	12/16/21 04:53	12/20/21 06:32	1
d9-N-EtFOSE-M	75		10 - 150	12/16/21 04:53	12/20/21 06:32	1
M2-4:2 FTS	54		25 - 150	12/16/21 04:53	12/20/21 06:32	1
M2-6:2 FTS	67		25 - 150	12/16/21 04:53	12/20/21 06:32	1
M2-8:2 FTS	63		25 - 150	12/16/21 04:53	12/20/21 06:32	1
13C3 HFPO-DA	64		25 - 150	12/16/21 04:53	12/20/21 06:32	1
13C2 10:2 FTS	74		25 - 150	12/16/21 04:53	12/20/21 06:32	1

Client: Ramboll US Corporation
Job ID: 500-209562-1
Project/Site: Former Mirro Plant No 9 - 1690019647

Client Sample ID: EB-01
Lab Sample ID: 500-209564-2
Date Collected: 12/09/21 12:45
Matrix: Water
Date Received: 12/10/21 10:30

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.15		0.50	0.15	ug/L			12/22/21 16:33	1
Bromobenzene	<0.36		1.0	0.36	ug/L			12/22/21 16:33	1
Bromochloromethane	<0.43		1.0	0.43	ug/L			12/22/21 16:33	1
Bromodichloromethane	<0.37		1.0	0.37	ug/L			12/22/21 16:33	1
Bromoform	<0.48		1.0	0.48	ug/L			12/22/21 16:33	1
Bromomethane	<0.80		3.0	0.80	ug/L			12/22/21 16:33	1
Carbon tetrachloride	<0.38		1.0	0.38	ug/L			12/22/21 16:33	1
Chlorobenzene	<0.39		1.0	0.39	ug/L			12/22/21 16:33	1
Chloroethane	<0.51		1.0	0.51	ug/L			12/22/21 16:33	1
Chloroform	<0.37		2.0	0.37	ug/L			12/22/21 16:33	1
Chloromethane	<0.32		1.0	0.32	ug/L			12/22/21 16:33	1
2-Chlorotoluene	<0.31		1.0	0.31	ug/L			12/22/21 16:33	1
4-Chlorotoluene	<0.35		1.0	0.35	ug/L			12/22/21 16:33	1
cis-1,2-Dichloroethene	<0.41		1.0	0.41	ug/L			12/22/21 16:33	1
cis-1,3-Dichloropropene	<0.42		1.0	0.42	ug/L			12/22/21 16:33	1
Dibromochloromethane	<0.49		1.0	0.49	ug/L			12/22/21 16:33	1
1,2-Dibromo-3-Chloropropane	<2.0		5.0	2.0	ug/L			12/22/21 16:33	1
1,2-Dibromoethane	<0.39		1.0	0.39	ug/L			12/22/21 16:33	1
Dibromomethane	<0.27		1.0	0.27	ug/L			12/22/21 16:33	1
1,2-Dichlorobenzene	<0.33		1.0	0.33	ug/L			12/22/21 16:33	1
1,3-Dichlorobenzene	<0.40		1.0	0.40	ug/L			12/22/21 16:33	1
1,4-Dichlorobenzene	<0.36		1.0	0.36	ug/L			12/22/21 16:33	1
Dichlorodifluoromethane	<0.67		3.0	0.67	ug/L			12/22/21 16:33	1
1,1-Dichloroethane	<0.41		1.0	0.41	ug/L			12/22/21 16:33	1
1,2-Dichloroethane	<0.39		1.0	0.39	ug/L			12/22/21 16:33	1
1,1-Dichloroethene	<0.39		1.0	0.39	ug/L			12/22/21 16:33	1
1,2-Dichloropropane	<0.43		1.0	0.43	ug/L			12/22/21 16:33	1
1,3-Dichloropropane	<0.36		1.0	0.36	ug/L			12/22/21 16:33	1
2,2-Dichloropropane	<0.44		1.0	0.44	ug/L			12/22/21 16:33	1
1,1-Dichloropropene	<0.30		1.0	0.30	ug/L			12/22/21 16:33	1
Ethylbenzene	<0.18		0.50	0.18	ug/L			12/22/21 16:33	1
Hexachlorobutadiene	<0.45		1.0	0.45	ug/L			12/22/21 16:33	1
Isopropylbenzene	<0.39		1.0	0.39	ug/L			12/22/21 16:33	1
Isopropyl ether	<0.28		1.0	0.28	ug/L			12/22/21 16:33	1
Methylene Chloride	<1.6		5.0	1.6	ug/L			12/22/21 16:33	1
Methyl tert-butyl ether	<0.39		1.0	0.39	ug/L			12/22/21 16:33	1
Naphthalene	<0.34		1.0	0.34	ug/L			12/22/21 16:33	1
n-Butylbenzene	<0.39		1.0	0.39	ug/L			12/22/21 16:33	1
N-Propylbenzene	<0.41		1.0	0.41	ug/L			12/22/21 16:33	1
p-Isopropyltoluene	<0.36		1.0	0.36	ug/L			12/22/21 16:33	1
sec-Butylbenzene	<0.40		1.0	0.40	ug/L			12/22/21 16:33	1
Styrene	<0.39		1.0	0.39	ug/L			12/22/21 16:33	1
tert-Butylbenzene	<0.40		1.0	0.40	ug/L			12/22/21 16:33	1
1,1,1,2-Tetrachloroethane	<0.46		1.0	0.46	ug/L			12/22/21 16:33	1
1,1,2,2-Tetrachloroethane	<0.40		1.0	0.40	ug/L			12/22/21 16:33	1
Tetrachloroethene	<0.37		1.0	0.37	ug/L			12/22/21 16:33	1
Toluene	<0.15		0.50	0.15	ug/L			12/22/21 16:33	1
trans-1,2-Dichloroethene	<0.35		1.0	0.35	ug/L			12/22/21 16:33	1
trans-1,3-Dichloropropene	<0.36		1.0	0.36	ug/L			12/22/21 16:33	1

Client Sample ID: EB-01
Lab Sample ID: 500-209564-2
Date Collected: 12/09/21 12:45
Matrix: Water
Date Received: 12/10/21 10:30

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,3-Trichlorobenzene	<0.46		1.0	0.46	ug/L			12/22/21 16:33	1
1,2,4-Trichlorobenzene	<0.34		1.0	0.34	ug/L			12/22/21 16:33	1
1,1,1-Trichloroethane	<0.38		1.0	0.38	ug/L			12/22/21 16:33	1
1,1,2-Trichloroethane	<0.35		1.0	0.35	ug/L			12/22/21 16:33	1
Trichloroethene	<0.16		0.50	0.16	ug/L			12/22/21 16:33	1
Trichlorofluoromethane	<0.43		1.0	0.43	ug/L			12/22/21 16:33	1
1,2,3-Trichloropropane	<0.41		2.0	0.41	ug/L			12/22/21 16:33	1
1,2,4-Trimethylbenzene	<0.36		1.0	0.36	ug/L			12/22/21 16:33	1
1,3,5-Trimethylbenzene	<0.25		1.0	0.25	ug/L			12/22/21 16:33	1
Vinyl chloride	<0.20		1.0	0.20	ug/L			12/22/21 16:33	1
Xylenes, Total	<0.22		1.0	0.22	ug/L			12/22/21 16:33	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*83*		*72 - 124*		*12/22/21 16:33*	*1*
Dibromofluoromethane (Surr)	*90*		*75 - 120*		*12/22/21 16:33*	*1*
1,2-Dichloroethane-d4 (Surr)	*86*		*75 - 126*		*12/22/21 16:33*	*1*
Toluene-d8 (Surr)	*95*		*75 - 120*		*12/22/21 16:33*	*1*

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	<0.26		0.85	0.26	ug/L		12/15/21 07:23	12/16/21 16:54	1
Acenaphthylene	<0.23		0.85	0.23	ug/L		12/15/21 07:23	12/16/21 16:54	1
Anthracene	<0.28		0.85	0.28	ug/L		12/15/21 07:23	12/16/21 16:54	1
Benzo[a]anthracene	<0.048		0.17	0.048	ug/L		12/15/21 07:23	12/16/21 16:54	1
Benzo[a]pyrene	<0.084		0.17	0.084	ug/L		12/15/21 07:23	12/16/21 16:54	1
Benzo[b]fluoranthene	<0.069		0.17	0.069	ug/L		12/15/21 07:23	12/16/21 16:54	1
Benzo[g,h,i]perylene	<0.32		0.85	0.32	ug/L		12/15/21 07:23	12/16/21 16:54	1
Benzo[k]fluoranthene	<0.055		0.17	0.055	ug/L		12/15/21 07:23	12/16/21 16:54	1
Chrysene	<0.058		0.17	0.058	ug/L		12/15/21 07:23	12/16/21 16:54	1
Dibenz(a,h)anthracene	<0.043		0.26	0.043	ug/L		12/15/21 07:23	12/16/21 16:54	1
Fluoranthene	<0.39		0.85	0.39	ug/L		12/15/21 07:23	12/16/21 16:54	1
Fluorene	<0.21		0.85	0.21	ug/L		12/15/21 07:23	12/16/21 16:54	1
Indeno[1,2,3-cd]pyrene	<0.064		0.17	0.064	ug/L		12/15/21 07:23	12/16/21 16:54	1
1-Methylnaphthalene	<0.26		1.7	0.26	ug/L		12/15/21 07:23	12/16/21 16:54	1
2-Methylnaphthalene	<0.056		1.7	0.056	ug/L		12/15/21 07:23	12/16/21 16:54	1
Naphthalene	<0.26		0.85	0.26	ug/L		12/15/21 07:23	12/16/21 16:54	1
Phenanthrene	<0.26		0.85	0.26	ug/L		12/15/21 07:23	12/16/21 16:54	1
Pyrene	<0.36		0.85	0.36	ug/L		12/15/21 07:23	12/16/21 16:54	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*67*		*34 - 110*	*12/15/21 07:23*	*12/16/21 16:54*	*1*
Nitrobenzene-d5 (Surr)	*62*		*36 - 120*	*12/15/21 07:23*	*12/16/21 16:54*	*1*
Terphenyl-d14 (Surr)	*86*		*40 - 145*	*12/15/21 07:23*	*12/16/21 16:54*	*1*

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<0.075		0.45	0.075	ug/L		12/13/21 09:44	12/14/21 10:53	1
PCB-1221	<0.22		0.45	0.22	ug/L		12/13/21 09:44	12/14/21 10:53	1
PCB-1232	<0.22		0.45	0.22	ug/L		12/13/21 09:44	12/14/21 10:53	1
PCB-1242	<0.22		0.45	0.22	ug/L		12/13/21 09:44	12/14/21 10:53	1

Client Sample ID: EB-01
Lab Sample ID: 500-209564-2
Date Collected: 12/09/21 12:45
Matrix: Water
Date Received: 12/10/21 10:30

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1248	<0.22		0.45	0.22	ug/L		12/13/21 09:44	12/14/21 10:53	1
PCB-1254	<0.22		0.45	0.22	ug/L		12/13/21 09:44	12/14/21 10:53	1
PCB-1260	<0.079		0.45	0.079	ug/L		12/13/21 09:44	12/14/21 10:53	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*85*		*30 - 120*	*12/13/21 09:44*	*12/14/21 10:53*	*1*
DCB Decachlorobiphenyl	*75*		*30 - 140*	*12/13/21 09:44*	*12/14/21 10:53*	*1*

Method: 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	<2.4		4.9	2.4	ng/L		12/16/21 04:53	12/20/21 06:43	1
Perfluoropentanoic acid (PFPeA)	<0.48		2.0	0.48	ng/L		12/16/21 04:53	12/20/21 06:43	1
Perfluorohexanoic acid (PFHxA)	<0.57		2.0	0.57	ng/L		12/16/21 04:53	12/20/21 06:43	1
Perfluoroheptanoic acid (PFHpA)	<0.25		2.0	0.25	ng/L		12/16/21 04:53	12/20/21 06:43	1
Perfluorooctanoic acid (PFOA)	<0.84		2.0	0.84	ng/L		12/16/21 04:53	12/20/21 06:43	1
Perfluorononanoic acid (PFNA)	<0.27		2.0	0.27	ng/L		12/16/21 04:53	12/20/21 06:43	1
Perfluorodecanoic acid (PFDA)	<0.31		2.0	0.31	ng/L		12/16/21 04:53	12/20/21 06:43	1
Perfluoroundecanoic acid (PFUnA)	<1.1		2.0	1.1	ng/L		12/16/21 04:53	12/20/21 06:43	1
Perfluorododecanoic acid (PFDoA)	<0.54		2.0	0.54	ng/L		12/16/21 04:53	12/20/21 06:43	1
Perfluorotridecanoic acid (PFTriA)	<1.3		2.0	1.3	ng/L		12/16/21 04:53	12/20/21 06:43	1
Perfluorotetradecanoic acid (PFTeA)	<0.72		2.0	0.72	ng/L		12/16/21 04:53	12/20/21 06:43	1
Perfluorobutanesulfonic acid (PFBS)	<0.20		2.0	0.20	ng/L		12/16/21 04:53	12/20/21 06:43	1
Perfluoropentanesulfonic acid (PFPeS)	<0.30		2.0	0.30	ng/L		12/16/21 04:53	12/20/21 06:43	1
Perfluorohexanesulfonic acid (PFHxS)	<0.56		2.0	0.56	ng/L		12/16/21 04:53	12/20/21 06:43	1
Perfluoroheptanesulfonic Acid (PFHpS)	<0.19		2.0	0.19	ng/L		12/16/21 04:53	12/20/21 06:43	1
Perfluorooctanesulfonic acid (PFOS)	<0.53		2.0	0.53	ng/L		12/16/21 04:53	12/20/21 06:43	1
Perfluorononanesulfonic acid (PFNS)	<0.37		2.0	0.37	ng/L		12/16/21 04:53	12/20/21 06:43	1
Perfluorodecanesulfonic acid (PFDS)	<0.32		2.0	0.32	ng/L		12/16/21 04:53	12/20/21 06:43	1
Perfluorododecanesulfonic acid (PFDoS)	<0.96		2.0	0.96	ng/L		12/16/21 04:53	12/20/21 06:43	1
Perfluorooctanesulfonamide (FOSA)	<0.97		2.0	0.97	ng/L		12/16/21 04:53	12/20/21 06:43	1
NEtFOSA	<0.86		2.0	0.86	ng/L		12/16/21 04:53	12/20/21 06:43	1
NMeFOSA	<0.42		2.0	0.42	ng/L		12/16/21 04:53	12/20/21 06:43	1
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	<1.2		4.9	1.2	ng/L		12/16/21 04:53	12/20/21 06:43	1
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	<1.3		4.9	1.3	ng/L		12/16/21 04:53	12/20/21 06:43	1
NMeFOSE	<1.4		4.0	1.4	ng/L		12/16/21 04:53	12/20/21 06:43	1
NEtFOSE	<0.84		2.0	0.84	ng/L		12/16/21 04:53	12/20/21 06:43	1
4:2 FTS	<0.24		2.0	0.24	ng/L		12/16/21 04:53	12/20/21 06:43	1
6:2 FTS	<2.5		4.9	2.5	ng/L		12/16/21 04:53	12/20/21 06:43	1
8:2 FTS	<0.45		2.0	0.45	ng/L		12/16/21 04:53	12/20/21 06:43	1
DONA	<0.40		2.0	0.40	ng/L		12/16/21 04:53	12/20/21 06:43	1
HFPO-DA (GenX)	<1.5		4.0	1.5	ng/L		12/16/21 04:53	12/20/21 06:43	1
F-53B Major	<0.24		2.0	0.24	ng/L		12/16/21 04:53	12/20/21 06:43	1
F-53B Minor	<0.32		2.0	0.32	ng/L		12/16/21 04:53	12/20/21 06:43	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C4 PFBA	*90*		*25 - 150*	*12/16/21 04:53*	*12/20/21 06:43*	*1*
13C5 PFPeA	*86*		*25 - 150*	*12/16/21 04:53*	*12/20/21 06:43*	*1*

Client: Ramboll US Corporation
Job ID: 500-209562-1
Project/Site: Former Mirro Plant No 9 - 1690019647

Client Sample ID: EB-01
Lab Sample ID: 500-209564-2
Date Collected: 12/09/21 12:45
Matrix: Water
Date Received: 12/10/21 10:30

Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C2 PFHxA	71		25 - 150	12/16/21 04:53	12/20/21 06:43	1
13C4 PFHpA	75		25 - 150	12/16/21 04:53	12/20/21 06:43	1
13C4 PFOA	99		25 - 150	12/16/21 04:53	12/20/21 06:43	1
13C5 PFNA	103		25 - 150	12/16/21 04:53	12/20/21 06:43	1
13C2 PFDA	93		25 - 150	12/16/21 04:53	12/20/21 06:43	1
13C2 PFUnA	92		25 - 150	12/16/21 04:53	12/20/21 06:43	1
13C2 PFDoA	108		25 - 150	12/16/21 04:53	12/20/21 06:43	1
13C2 PFTeDA	114		25 - 150	12/16/21 04:53	12/20/21 06:43	1
13C3 PFBS	86		25 - 150	12/16/21 04:53	12/20/21 06:43	1
18O2 PFHxS	77		25 - 150	12/16/21 04:53	12/20/21 06:43	1
13C4 PFOS	93		25 - 150	12/16/21 04:53	12/20/21 06:43	1
13C8 FOSA	82		10 - 150	12/16/21 04:53	12/20/21 06:43	1
d3-NMeFOSAA	81		25 - 150	12/16/21 04:53	12/20/21 06:43	1
d5-NEtFOSAA	85		25 - 150	12/16/21 04:53	12/20/21 06:43	1
d-N-MeFOSA-M	79		10 - 150	12/16/21 04:53	12/20/21 06:43	1
d-N-EtFOSA-M	78		10 - 150	12/16/21 04:53	12/20/21 06:43	1
d7-N-MeFOSE-M	85		10 - 150	12/16/21 04:53	12/20/21 06:43	1
d9-N-EtFOSE-M	86		10 - 150	12/16/21 04:53	12/20/21 06:43	1
M2-4:2 FTS	67		25 - 150	12/16/21 04:53	12/20/21 06:43	1
M2-6:2 FTS	76		25 - 150	12/16/21 04:53	12/20/21 06:43	1
M2-8:2 FTS	76		25 - 150	12/16/21 04:53	12/20/21 06:43	1
13C3 HFPO-DA	79		25 - 150	12/16/21 04:53	12/20/21 06:43	1
13C2 10:2 FTS	103		25 - 150	12/16/21 04:53	12/20/21 06:43	1

Method: 6020A - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	<25		100	25	ug/L		12/21/21 09:30	12/21/21 22:54	1
Antimony	<1.3		3.0	1.3	ug/L		12/21/21 09:30	12/21/21 22:54	1
Arsenic	**0.50**	**J ^+ B**	1.0	0.23	ug/L		12/21/21 09:30	12/21/21 22:54	1
Barium	<0.73		2.5	0.73	ug/L		12/21/21 09:30	12/21/21 22:54	1
Cadmium	<0.17		0.50	0.17	ug/L		12/21/21 09:30	12/21/21 22:54	1
Chromium	<1.1		5.0	1.1	ug/L		12/21/21 09:30	12/21/21 22:54	1
Copper	<0.50		2.0	0.50	ug/L		12/21/21 09:30	12/21/21 22:54	1
Iron	<47		100	47	ug/L		12/21/21 09:30	12/21/21 22:54	1
Lead	<0.19		0.50	0.19	ug/L		12/21/21 09:30	12/21/21 22:54	1
Manganese	<0.79		2.5	0.79	ug/L		12/21/21 09:30	12/21/21 22:54	1
Nickel	<0.63		2.0	0.63	ug/L		12/21/21 09:30	12/21/21 22:54	1
Selenium	<0.98		2.5	0.98	ug/L		12/21/21 09:30	12/21/21 22:54	1
Silver	<0.12		0.50	0.12	ug/L		12/21/21 09:30	12/21/21 22:54	1
Thallium	<0.57		2.0	0.57	ug/L		12/21/21 09:30	12/21/21 22:54	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.098		0.20	0.098	ug/L		12/16/21 10:45	12/17/21 08:55	1

Client: Ramboll US Corporation
Job ID: 500-209562-1
Project/Site: Former Mirro Plant No 9 - 1690019647

Client Sample ID: Trip Blank
Lab Sample ID: 500-209564-3
Date Collected: 12/09/21 00:00
Matrix: Water
Date Received: 12/10/21 10:30

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.15		0.50	0.15	ug/L			12/22/21 14:16	1
Bromobenzene	<0.36		1.0	0.36	ug/L			12/22/21 14:16	1
Bromochloromethane	<0.43		1.0	0.43	ug/L			12/22/21 14:16	1
Bromodichloromethane	<0.37		1.0	0.37	ug/L			12/22/21 14:16	1
Bromoform	<0.48		1.0	0.48	ug/L			12/22/21 14:16	1
Bromomethane	<0.80		3.0	0.80	ug/L			12/22/21 14:16	1
Carbon tetrachloride	<0.38		1.0	0.38	ug/L			12/22/21 14:16	1
Chlorobenzene	<0.39		1.0	0.39	ug/L			12/22/21 14:16	1
Chloroethane	<0.51		1.0	0.51	ug/L			12/22/21 14:16	1
Chloroform	<0.37		2.0	0.37	ug/L			12/22/21 14:16	1
Chloromethane	<0.32		1.0	0.32	ug/L			12/22/21 14:16	1
2-Chlorotoluene	<0.31		1.0	0.31	ug/L			12/22/21 14:16	1
4-Chlorotoluene	<0.35		1.0	0.35	ug/L			12/22/21 14:16	1
cis-1,2-Dichloroethene	<0.41		1.0	0.41	ug/L			12/22/21 14:16	1
cis-1,3-Dichloropropene	<0.42		1.0	0.42	ug/L			12/22/21 14:16	1
Dibromochloromethane	<0.49		1.0	0.49	ug/L			12/22/21 14:16	1
1,2-Dibromo-3-Chloropropane	<2.0		5.0	2.0	ug/L			12/22/21 14:16	1
1,2-Dibromoethane	<0.39		1.0	0.39	ug/L			12/22/21 14:16	1
Dibromomethane	<0.27		1.0	0.27	ug/L			12/22/21 14:16	1
1,2-Dichlorobenzene	<0.33		1.0	0.33	ug/L			12/22/21 14:16	1
1,3-Dichlorobenzene	<0.40		1.0	0.40	ug/L			12/22/21 14:16	1
1,4-Dichlorobenzene	<0.36		1.0	0.36	ug/L			12/22/21 14:16	1
Dichlorodifluoromethane	<0.67		3.0	0.67	ug/L			12/22/21 14:16	1
1,1-Dichloroethane	<0.41		1.0	0.41	ug/L			12/22/21 14:16	1
1,2-Dichloroethane	<0.39		1.0	0.39	ug/L			12/22/21 14:16	1
1,1-Dichloroethene	<0.39		1.0	0.39	ug/L			12/22/21 14:16	1
1,2-Dichloropropane	<0.43		1.0	0.43	ug/L			12/22/21 14:16	1
1,3-Dichloropropane	<0.36		1.0	0.36	ug/L			12/22/21 14:16	1
2,2-Dichloropropane	<0.44		1.0	0.44	ug/L			12/22/21 14:16	1
1,1-Dichloropropene	<0.30		1.0	0.30	ug/L			12/22/21 14:16	1
Ethylbenzene	<0.18		0.50	0.18	ug/L			12/22/21 14:16	1
Hexachlorobutadiene	<0.45		1.0	0.45	ug/L			12/22/21 14:16	1
Isopropylbenzene	<0.39		1.0	0.39	ug/L			12/22/21 14:16	1
Isopropyl ether	<0.28		1.0	0.28	ug/L			12/22/21 14:16	1
Methylene Chloride	<1.6		5.0	1.6	ug/L			12/22/21 14:16	1
Methyl tert-butyl ether	<0.39		1.0	0.39	ug/L			12/22/21 14:16	1
Naphthalene	<0.34		1.0	0.34	ug/L			12/22/21 14:16	1
n-Butylbenzene	<0.39		1.0	0.39	ug/L			12/22/21 14:16	1
N-Propylbenzene	<0.41		1.0	0.41	ug/L			12/22/21 14:16	1
p-Isopropyltoluene	<0.36		1.0	0.36	ug/L			12/22/21 14:16	1
sec-Butylbenzene	<0.40		1.0	0.40	ug/L			12/22/21 14:16	1
Styrene	<0.39		1.0	0.39	ug/L			12/22/21 14:16	1
tert-Butylbenzene	<0.40		1.0	0.40	ug/L			12/22/21 14:16	1
1,1,1,2-Tetrachloroethane	<0.46		1.0	0.46	ug/L			12/22/21 14:16	1
1,1,2,2-Tetrachloroethane	<0.40		1.0	0.40	ug/L			12/22/21 14:16	1
Tetrachloroethene	<0.37		1.0	0.37	ug/L			12/22/21 14:16	1
Toluene	<0.15		0.50	0.15	ug/L			12/22/21 14:16	1
trans-1,2-Dichloroethene	<0.35		1.0	0.35	ug/L			12/22/21 14:16	1
trans-1,3-Dichloropropene	<0.36		1.0	0.36	ug/L			12/22/21 14:16	1

Client: Ramboll US Corporation
Job ID: 500-209562-1
Project/Site: Former Mirro Plant No 9 - 1690019647

Client Sample ID: Trip Blank
Lab Sample ID: 500-209564-3
Date Collected: 12/09/21 00:00
Matrix: Water
Date Received: 12/10/21 10:30

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,3-Trichlorobenzene	<0.46		1.0	0.46	ug/L			12/22/21 14:16	1
1,2,4-Trichlorobenzene	<0.34		1.0	0.34	ug/L			12/22/21 14:16	1
1,1,1-Trichloroethane	<0.38		1.0	0.38	ug/L			12/22/21 14:16	1
1,1,2-Trichloroethane	<0.35		1.0	0.35	ug/L			12/22/21 14:16	1
Trichloroethene	<0.16		0.50	0.16	ug/L			12/22/21 14:16	1
Trichlorofluoromethane	<0.43		1.0	0.43	ug/L			12/22/21 14:16	1
1,2,3-Trichloropropane	<0.41		2.0	0.41	ug/L			12/22/21 14:16	1
1,2,4-Trimethylbenzene	<0.36		1.0	0.36	ug/L			12/22/21 14:16	1
1,3,5-Trimethylbenzene	<0.25		1.0	0.25	ug/L			12/22/21 14:16	1
Vinyl chloride	<0.20		1.0	0.20	ug/L			12/22/21 14:16	1
Xylenes, Total	<0.22		1.0	0.22	ug/L			12/22/21 14:16	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*82*		*72 - 124*		*12/22/21 14:16*	*1*
Dibromofluoromethane (Surr)	*89*		*75 - 120*		*12/22/21 14:16*	*1*
1,2-Dichloroethane-d4 (Surr)	*84*		*75 - 126*		*12/22/21 14:16*	*1*
Toluene-d8 (Surr)	*94*		*75 - 120*		*12/22/21 14:16*	*1*

Definitions/Glossary

Client: Ramboll US Corporation
Job ID: 500-209562-1
Project/Site: Former Mirro Plant No 9 - 1690019647

Qualifiers

LCMS

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Metals

Qualifier	Qualifier Description
^+	Continuing Calibration Verification (CCV) is outside acceptance limits, high biased.
B	Compound was found in the blank and sample.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

QC Association Summary

Client: Ramboll US Corporation
Project/Site: Former Mirro Plant No 9 - 1690019647

Job ID: 500-209562-1

GC/MS VOA

Analysis Batch: 634922

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-209562-1	MW-228	Total/NA	Water	8260B	
500-209564-2	EB-01	Total/NA	Water	8260B	
500-209564-3	Trip Blank	Total/NA	Water	8260B	
MB 500-634922/6	Method Blank	Total/NA	Water	8260B	
LCS 500-634922/4	Lab Control Sample	Total/NA	Water	8260B	

GC/MS Semi VOA

Prep Batch: 633730

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-209564-2	EB-01	Total/NA	Water	3510C	
MB 500-633730/1-A	Method Blank	Total/NA	Water	3510C	
LCS 500-633730/2-A	Lab Control Sample	Total/NA	Water	3510C	

Analysis Batch: 633806

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 500-633730/1-A	Method Blank	Total/NA	Water	8270D	633730
LCS 500-633730/2-A	Lab Control Sample	Total/NA	Water	8270D	633730

Analysis Batch: 634033

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-209564-2	EB-01	Total/NA	Water	8270D	633730

GC Semi VOA

Prep Batch: 633372

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-209564-2	EB-01	Total/NA	Water	3510C	
MB 500-633372/1-A	Method Blank	Total/NA	Water	3510C	
LCS 500-633372/4-A	Lab Control Sample	Total/NA	Water	3510C	
LCSD 500-633372/5-A	Lab Control Sample Dup	Total/NA	Water	3510C	

Analysis Batch: 633459

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-209564-2	EB-01	Total/NA	Water	8082A	633372
MB 500-633372/1-A	Method Blank	Total/NA	Water	8082A	633372
LCS 500-633372/4-A	Lab Control Sample	Total/NA	Water	8082A	633372
LCSD 500-633372/5-A	Lab Control Sample Dup	Total/NA	Water	8082A	633372

LCMS

Prep Batch: 551272

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-209562-1	MW-228	Total/NA	Water	3535	
500-209564-1	FB-01	Total/NA	Water	3535	
500-209564-2	EB-01	Total/NA	Water	3535	
MB 320-551272/1-A	Method Blank	Total/NA	Water	3535	
LCS 320-551272/2-A	Lab Control Sample	Total/NA	Water	3535	
LCSD 320-551272/3-A	Lab Control Sample Dup	Total/NA	Water	3535	

QC Association Summary

Client: Ramboll US Corporation
Job ID: 500-209562-1
Project/Site: Former Mirro Plant No 9 - 1690019647

LCMS

Analysis Batch: 552303

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-209562-1	MW-228	Total/NA	Water	537 (modified)	551272
500-209564-1	FB-01	Total/NA	Water	537 (modified)	551272
500-209564-2	EB-01	Total/NA	Water	537 (modified)	551272
MB 320-551272/1-A	Method Blank	Total/NA	Water	537 (modified)	551272
LCS 320-551272/2-A	Lab Control Sample	Total/NA	Water	537 (modified)	551272
LCSD 320-551272/3-A	Lab Control Sample Dup	Total/NA	Water	537 (modified)	551272

Metals

Prep Batch: 634059

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-209564-2	EB-01	Dissolved	Water	7470A	
MB 500-634059/12-A	Method Blank	Total/NA	Water	7470A	
LCS 500-634059/13-A	Lab Control Sample	Total/NA	Water	7470A	

Analysis Batch: 634283

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-209564-2	EB-01	Dissolved	Water	7470A	634059
MB 500-634059/12-A	Method Blank	Total/NA	Water	7470A	634059
LCS 500-634059/13-A	Lab Control Sample	Total/NA	Water	7470A	634059

Prep Batch: 634757

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-209564-2	EB-01	Dissolved	Water	3005A	
MB 500-634757/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 500-634757/2-A	Lab Control Sample	Total Recoverable	Water	3005A	

Analysis Batch: 634985

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-209564-2	EB-01	Dissolved	Water	6020A	634757
MB 500-634757/1-A	Method Blank	Total Recoverable	Water	6020A	634757
LCS 500-634757/2-A	Lab Control Sample	Total Recoverable	Water	6020A	634757

Surrogate Summary

Client: Ramboll US Corporation
Job ID: 500-209562-1
Project/Site: Former Mirro Plant No 9 - 1690019647

Method: 8260B - Volatile Organic Compounds (GC/MS)

Matrix: Water — **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)			
		BFB	DBFM	DCA	TOL
Lab Sample ID	Client Sample ID	(72-124)	(75-120)	(75-126)	(75-120)
500-209562-1	MW-228	83	90	87	95
500-209564-2	EB-01	83	90	86	95
500-209564-3	Trip Blank	82	89	84	94
LCS 500-634922/4	Lab Control Sample	83	93	85	96
MB 500-634922/6	Method Blank	84	91	86	93

Surrogate Legend

BFB = 4-Bromofluorobenzene (Surr)
DBFM = Dibromofluoromethane (Surr)
DCA = 1,2-Dichloroethane-d4 (Surr)
TOL = Toluene-d8 (Surr)

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Matrix: Water — **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)		
		FBP	NBZ	TPHL
Lab Sample ID	Client Sample ID	(34-110)	(36-120)	(40-145)
500-209564-2	EB-01	67	62	86
LCS 500-633730/2-A	Lab Control Sample	72	74	101
MB 500-633730/1-A	Method Blank	72	70	121

Surrogate Legend

FBP = 2-Fluorobiphenyl (Surr)
NBZ = Nitrobenzene-d5 (Surr)
TPHL = Terphenyl-d14 (Surr)

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Matrix: Water — **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)	
		TCX1	DCBP1
Lab Sample ID	Client Sample ID	(30-120)	(30-140)
500-209564-2	EB-01	85	75
LCS 500-633372/4-A	Lab Control Sample	75	78
LCSD 500-633372/5-A	Lab Control Sample Dup	78	78
MB 500-633372/1-A	Method Blank	83	78

Surrogate Legend

TCX = Tetrachloro-m-xylene
DCBP = DCB Decachlorobiphenyl

Method: 8260B - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 500-634922/6
Matrix: Water
Analysis Batch: 634922

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.15		0.50	0.15	ug/L			12/22/21 13:49	1
Bromobenzene	<0.36		1.0	0.36	ug/L			12/22/21 13:49	1
Bromochloromethane	<0.43		1.0	0.43	ug/L			12/22/21 13:49	1
Bromodichloromethane	<0.37		1.0	0.37	ug/L			12/22/21 13:49	1
Bromoform	<0.48		1.0	0.48	ug/L			12/22/21 13:49	1
Bromomethane	<0.80		3.0	0.80	ug/L			12/22/21 13:49	1
Carbon tetrachloride	<0.38		1.0	0.38	ug/L			12/22/21 13:49	1
Chlorobenzene	<0.39		1.0	0.39	ug/L			12/22/21 13:49	1
Chloroethane	<0.51		1.0	0.51	ug/L			12/22/21 13:49	1
Chloroform	<0.37		2.0	0.37	ug/L			12/22/21 13:49	1
Chloromethane	<0.32		1.0	0.32	ug/L			12/22/21 13:49	1
2-Chlorotoluene	<0.31		1.0	0.31	ug/L			12/22/21 13:49	1
4-Chlorotoluene	<0.35		1.0	0.35	ug/L			12/22/21 13:49	1
cis-1,2-Dichloroethene	<0.41		1.0	0.41	ug/L			12/22/21 13:49	1
cis-1,3-Dichloropropene	<0.42		1.0	0.42	ug/L			12/22/21 13:49	1
Dibromochloromethane	<0.49		1.0	0.49	ug/L			12/22/21 13:49	1
1,2-Dibromo-3-Chloropropane	<2.0		5.0	2.0	ug/L			12/22/21 13:49	1
1,2-Dibromoethane	<0.39		1.0	0.39	ug/L			12/22/21 13:49	1
Dibromomethane	<0.27		1.0	0.27	ug/L			12/22/21 13:49	1
1,2-Dichlorobenzene	<0.33		1.0	0.33	ug/L			12/22/21 13:49	1
1,3-Dichlorobenzene	<0.40		1.0	0.40	ug/L			12/22/21 13:49	1
1,4-Dichlorobenzene	<0.36		1.0	0.36	ug/L			12/22/21 13:49	1
Dichlorodifluoromethane	<0.67		3.0	0.67	ug/L			12/22/21 13:49	1
1,1-Dichloroethane	<0.41		1.0	0.41	ug/L			12/22/21 13:49	1
1,2-Dichloroethane	<0.39		1.0	0.39	ug/L			12/22/21 13:49	1
1,1-Dichloroethene	<0.39		1.0	0.39	ug/L			12/22/21 13:49	1
1,2-Dichloropropane	<0.43		1.0	0.43	ug/L			12/22/21 13:49	1
1,3-Dichloropropane	<0.36		1.0	0.36	ug/L			12/22/21 13:49	1
2,2-Dichloropropane	<0.44		1.0	0.44	ug/L			12/22/21 13:49	1
1,1-Dichloropropene	<0.30		1.0	0.30	ug/L			12/22/21 13:49	1
Ethylbenzene	<0.18		0.50	0.18	ug/L			12/22/21 13:49	1
Hexachlorobutadiene	<0.45		1.0	0.45	ug/L			12/22/21 13:49	1
Isopropylbenzene	<0.39		1.0	0.39	ug/L			12/22/21 13:49	1
Isopropyl ether	<0.28		1.0	0.28	ug/L			12/22/21 13:49	1
Methylene Chloride	<1.6		5.0	1.6	ug/L			12/22/21 13:49	1
Methyl tert-butyl ether	<0.39		1.0	0.39	ug/L			12/22/21 13:49	1
Naphthalene	<0.34		1.0	0.34	ug/L			12/22/21 13:49	1
n-Butylbenzene	<0.39		1.0	0.39	ug/L			12/22/21 13:49	1
N-Propylbenzene	<0.41		1.0	0.41	ug/L			12/22/21 13:49	1
p-Isopropyltoluene	<0.36		1.0	0.36	ug/L			12/22/21 13:49	1
sec-Butylbenzene	<0.40		1.0	0.40	ug/L			12/22/21 13:49	1
Styrene	<0.39		1.0	0.39	ug/L			12/22/21 13:49	1
tert-Butylbenzene	<0.40		1.0	0.40	ug/L			12/22/21 13:49	1
1,1,1,2-Tetrachloroethane	<0.46		1.0	0.46	ug/L			12/22/21 13:49	1
1,1,2,2-Tetrachloroethane	<0.40		1.0	0.40	ug/L			12/22/21 13:49	1
Tetrachloroethene	<0.37		1.0	0.37	ug/L			12/22/21 13:49	1
Toluene	<0.15		0.50	0.15	ug/L			12/22/21 13:49	1
trans-1,2-Dichloroethene	<0.35		1.0	0.35	ug/L			12/22/21 13:49	1

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

Lab Sample ID: MB 500-634922/6
Matrix: Water
Analysis Batch: 634922

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
trans-1,3-Dichloropropene	<0.36		1.0	0.36	ug/L			12/22/21 13:49	1
1,2,3-Trichlorobenzene	<0.46		1.0	0.46	ug/L			12/22/21 13:49	1
1,2,4-Trichlorobenzene	<0.34		1.0	0.34	ug/L			12/22/21 13:49	1
1,1,1-Trichloroethane	<0.38		1.0	0.38	ug/L			12/22/21 13:49	1
1,1,2-Trichloroethane	<0.35		1.0	0.35	ug/L			12/22/21 13:49	1
Trichloroethene	<0.16		0.50	0.16	ug/L			12/22/21 13:49	1
Trichlorofluoromethane	<0.43		1.0	0.43	ug/L			12/22/21 13:49	1
1,2,3-Trichloropropane	<0.41		2.0	0.41	ug/L			12/22/21 13:49	1
1,2,4-Trimethylbenzene	<0.36		1.0	0.36	ug/L			12/22/21 13:49	1
1,3,5-Trimethylbenzene	<0.25		1.0	0.25	ug/L			12/22/21 13:49	1
Vinyl chloride	<0.20		1.0	0.20	ug/L			12/22/21 13:49	1
Xylenes, Total	<0.22		1.0	0.22	ug/L			12/22/21 13:49	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*84*		*72 - 124*		*12/22/21 13:49*	*1*
Dibromofluoromethane (Surr)	*91*		*75 - 120*		*12/22/21 13:49*	*1*
1,2-Dichloroethane-d4 (Surr)	*86*		*75 - 126*		*12/22/21 13:49*	*1*
Toluene-d8 (Surr)	*93*		*75 - 120*		*12/22/21 13:49*	*1*

Lab Sample ID: LCS 500-634922/4
Matrix: Water
Analysis Batch: 634922

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	50.0	47.3		ug/L		95	70 - 120
Bromobenzene	50.0	39.8		ug/L		80	70 - 122
Bromochloromethane	50.0	50.8		ug/L		102	65 - 122
Bromodichloromethane	50.0	38.7		ug/L		77	69 - 120
Bromoform	50.0	32.8		ug/L		66	56 - 132
Bromomethane	50.0	64.4		ug/L		129	40 - 152
Carbon tetrachloride	50.0	44.2		ug/L		88	59 - 133
Chlorobenzene	50.0	46.9		ug/L		94	70 - 120
Chloroethane	50.0	63.4		ug/L		127	48 - 136
Chloroform	50.0	44.0		ug/L		88	70 - 120
Chloromethane	50.0	50.2		ug/L		100	56 - 152
2-Chlorotoluene	50.0	44.0		ug/L		88	70 - 125
4-Chlorotoluene	50.0	42.5		ug/L		85	68 - 124
cis-1,2-Dichloroethene	50.0	48.4		ug/L		97	70 - 125
cis-1,3-Dichloropropene	50.0	36.7		ug/L		73	64 - 127
Dibromochloromethane	50.0	37.0		ug/L		74	68 - 125
1,2-Dibromo-3-Chloropropane	50.0	30.5		ug/L		61	56 - 123
1,2-Dibromoethane	50.0	40.9		ug/L		82	70 - 125
Dibromomethane	50.0	44.1		ug/L		88	70 - 120
1,2-Dichlorobenzene	50.0	45.4		ug/L		91	70 - 125
1,3-Dichlorobenzene	50.0	45.2		ug/L		90	70 - 125
1,4-Dichlorobenzene	50.0	44.8		ug/L		90	70 - 120
Dichlorodifluoromethane	50.0	56.0		ug/L		112	40 - 159
1,1-Dichloroethane	50.0	44.3		ug/L		89	70 - 125

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

Lab Sample ID: LCS 500-634922/4
Matrix: Water
Analysis Batch: 634922

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2-Dichloroethane	50.0	42.0		ug/L		84	68 - 127
1,1-Dichloroethene	50.0	52.4		ug/L		105	67 - 122
1,2-Dichloropropane	50.0	44.1		ug/L		88	67 - 130
1,3-Dichloropropane	50.0	40.0		ug/L		80	62 - 136
2,2-Dichloropropane	50.0	36.3		ug/L		73	58 - 139
1,1-Dichloropropene	50.0	44.4		ug/L		89	70 - 121
Ethylbenzene	50.0	50.1		ug/L		100	70 - 123
Hexachlorobutadiene	50.0	55.1		ug/L		110	51 - 150
Isopropylbenzene	50.0	47.0		ug/L		94	70 - 126
Methylene Chloride	50.0	49.4		ug/L		99	69 - 125
Methyl tert-butyl ether	50.0	29.0		ug/L		58	55 - 123
Naphthalene	50.0	53.4		ug/L		107	53 - 144
n-Butylbenzene	50.0	50.7		ug/L		101	68 - 125
N-Propylbenzene	50.0	44.7		ug/L		89	69 - 127
p-Isopropyltoluene	50.0	53.5		ug/L		107	70 - 125
sec-Butylbenzene	50.0	50.9		ug/L		102	70 - 123
Styrene	50.0	47.2		ug/L		94	70 - 120
tert-Butylbenzene	50.0	52.1		ug/L		104	70 - 121
1,1,1,2-Tetrachloroethane	50.0	46.8		ug/L		94	70 - 125
1,1,2,2-Tetrachloroethane	50.0	37.0		ug/L		74	62 - 140
Tetrachloroethene	50.0	48.4		ug/L		97	70 - 128
Toluene	50.0	47.2		ug/L		94	70 - 125
trans-1,2-Dichloroethene	50.0	48.3		ug/L		97	70 - 125
trans-1,3-Dichloropropene	50.0	32.6		ug/L		65	62 - 128
1,2,3-Trichlorobenzene	50.0	53.5		ug/L		107	51 - 145
1,2,4-Trichlorobenzene	50.0	50.3		ug/L		101	57 - 137
1,1,1-Trichloroethane	50.0	45.7		ug/L		91	70 - 125
1,1,2-Trichloroethane	50.0	42.8		ug/L		86	71 - 130
Trichloroethene	50.0	50.0		ug/L		100	70 - 125
Trichlorofluoromethane	50.0	44.9		ug/L		90	55 - 128
1,2,3-Trichloropropane	50.0	38.5		ug/L		77	50 - 133
1,2,4-Trimethylbenzene	50.0	47.6		ug/L		95	70 - 123
1,3,5-Trimethylbenzene	50.0	48.4		ug/L		97	70 - 123
Vinyl chloride	50.0	55.5		ug/L		111	64 - 126
Xylenes, Total	100	101		ug/L		101	70 - 125

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*83*		*72 - 124*
Dibromofluoromethane (Surr)	*93*		*75 - 120*
1,2-Dichloroethane-d4 (Surr)	*85*		*75 - 126*
Toluene-d8 (Surr)	*96*		*75 - 120*

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Lab Sample ID: MB 500-633730/1-A
Matrix: Water
Analysis Batch: 633806

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 633730

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	<0.25		0.80	0.25	ug/L		12/15/21 07:23	12/15/21 15:11	1
Acenaphthylene	<0.21		0.80	0.21	ug/L		12/15/21 07:23	12/15/21 15:11	1
Anthracene	<0.27		0.80	0.27	ug/L		12/15/21 07:23	12/15/21 15:11	1
Benzo[a]anthracene	<0.045		0.16	0.045	ug/L		12/15/21 07:23	12/15/21 15:11	1
Benzo[a]pyrene	<0.079		0.16	0.079	ug/L		12/15/21 07:23	12/15/21 15:11	1
Benzo[b]fluoranthene	<0.065		0.16	0.065	ug/L		12/15/21 07:23	12/15/21 15:11	1
Benzo[g,h,i]perylene	<0.30		0.80	0.30	ug/L		12/15/21 07:23	12/15/21 15:11	1
Benzo[k]fluoranthene	<0.051		0.16	0.051	ug/L		12/15/21 07:23	12/15/21 15:11	1
Chrysene	<0.055		0.16	0.055	ug/L		12/15/21 07:23	12/15/21 15:11	1
Dibenz(a,h)anthracene	<0.041		0.24	0.041	ug/L		12/15/21 07:23	12/15/21 15:11	1
Fluoranthene	<0.36		0.80	0.36	ug/L		12/15/21 07:23	12/15/21 15:11	1
Fluorene	<0.20		0.80	0.20	ug/L		12/15/21 07:23	12/15/21 15:11	1
Indeno[1,2,3-cd]pyrene	<0.060		0.16	0.060	ug/L		12/15/21 07:23	12/15/21 15:11	1
1-Methylnaphthalene	<0.24		1.6	0.24	ug/L		12/15/21 07:23	12/15/21 15:11	1
2-Methylnaphthalene	<0.052		1.6	0.052	ug/L		12/15/21 07:23	12/15/21 15:11	1
Naphthalene	<0.25		0.80	0.25	ug/L		12/15/21 07:23	12/15/21 15:11	1
Phenanthrene	<0.24		0.80	0.24	ug/L		12/15/21 07:23	12/15/21 15:11	1
Pyrene	<0.34		0.80	0.34	ug/L		12/15/21 07:23	12/15/21 15:11	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*72*		*34 - 110*	*12/15/21 07:23*	*12/15/21 15:11*	*1*
Nitrobenzene-d5 (Surr)	*70*		*36 - 120*	*12/15/21 07:23*	*12/15/21 15:11*	*1*
Terphenyl-d14 (Surr)	*121*		*40 - 145*	*12/15/21 07:23*	*12/15/21 15:11*	*1*

Lab Sample ID: LCS 500-633730/2-A
Matrix: Water
Analysis Batch: 633806

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 633730

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acenaphthene	32.0	22.9		ug/L		71	46 - 110
Acenaphthylene	32.0	25.5		ug/L		80	47 - 113
Anthracene	32.0	27.5		ug/L		86	67 - 118
Benzo[a]anthracene	32.0	28.5		ug/L		89	70 - 126
Benzo[a]pyrene	32.0	35.5		ug/L		111	70 - 135
Benzo[b]fluoranthene	32.0	31.5		ug/L		99	69 - 136
Benzo[g,h,i]perylene	32.0	23.7		ug/L		74	70 - 135
Benzo[k]fluoranthene	32.0	30.5		ug/L		95	70 - 133
Chrysene	32.0	29.6		ug/L		93	68 - 129
Dibenz(a,h)anthracene	32.0	25.4		ug/L		79	70 - 134
Fluoranthene	32.0	28.1		ug/L		88	68 - 126
Fluorene	32.0	24.2		ug/L		76	53 - 120
Indeno[1,2,3-cd]pyrene	32.0	26.8		ug/L		84	65 - 133
1-Methylnaphthalene	32.0	20.6		ug/L		64	38 - 110
2-Methylnaphthalene	32.0	21.6		ug/L		67	34 - 110
Naphthalene	32.0	20.8		ug/L		65	36 - 110
Phenanthrene	32.0	26.5		ug/L		83	65 - 120
Pyrene	32.0	29.4		ug/L		92	70 - 126

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 500-633730/2-A
Matrix: Water
Analysis Batch: 633806

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 633730

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2-Fluorobiphenyl (Surr)	*72*		*34 - 110*
Nitrobenzene-d5 (Surr)	*74*		*36 - 120*
Terphenyl-d14 (Surr)	*101*		*40 - 145*

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Lab Sample ID: MB 500-633372/1-A
Matrix: Water
Analysis Batch: 633459

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 633372

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<0.067		0.40	0.067	ug/L		12/13/21 09:44	12/14/21 08:44	1
PCB-1221	<0.20		0.40	0.20	ug/L		12/13/21 09:44	12/14/21 08:44	1
PCB-1232	<0.20		0.40	0.20	ug/L		12/13/21 09:44	12/14/21 08:44	1
PCB-1242	<0.20		0.40	0.20	ug/L		12/13/21 09:44	12/14/21 08:44	1
PCB-1248	<0.20		0.40	0.20	ug/L		12/13/21 09:44	12/14/21 08:44	1
PCB-1254	<0.20		0.40	0.20	ug/L		12/13/21 09:44	12/14/21 08:44	1
PCB-1260	<0.070		0.40	0.070	ug/L		12/13/21 09:44	12/14/21 08:44	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*83*		*30 - 120*	*12/13/21 09:44*	*12/14/21 08:44*	*1*
DCB Decachlorobiphenyl	*78*		*30 - 140*	*12/13/21 09:44*	*12/14/21 08:44*	*1*

Lab Sample ID: LCS 500-633372/4-A
Matrix: Water
Analysis Batch: 633459

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 633372

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
PCB-1016			4.00	4.07		ug/L		102	56 - 120		
PCB-1260			4.00	3.97		ug/L		99	53 - 137		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Tetrachloro-m-xylene	*75*		*30 - 120*
DCB Decachlorobiphenyl	*78*		*30 - 140*

Lab Sample ID: LCSD 500-633372/5-A
Matrix: Water
Analysis Batch: 633459

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 633372

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
PCB-1016			4.00	3.95		ug/L		99	56 - 120	3	20
PCB-1260			4.00	3.76		ug/L		94	53 - 137	5	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
Tetrachloro-m-xylene	*78*		*30 - 120*
DCB Decachlorobiphenyl	*78*		*30 - 140*

Method: 537 (modified) - Fluorinated Alkyl Substances

Lab Sample ID: MB 320-551272/1-A
Matrix: Water
Analysis Batch: 552303

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 551272

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	<2.4		5.0	2.4	ng/L		12/16/21 04:53	12/20/21 04:06	1
Perfluoropentanoic acid (PFPeA)	<0.49		2.0	0.49	ng/L		12/16/21 04:53	12/20/21 04:06	1
Perfluorohexanoic acid (PFHxA)	<0.58		2.0	0.58	ng/L		12/16/21 04:53	12/20/21 04:06	1
Perfluoroheptanoic acid (PFHpA)	<0.25		2.0	0.25	ng/L		12/16/21 04:53	12/20/21 04:06	1
Perfluorooctanoic acid (PFOA)	<0.85		2.0	0.85	ng/L		12/16/21 04:53	12/20/21 04:06	1
Perfluorononanoic acid (PFNA)	<0.27		2.0	0.27	ng/L		12/16/21 04:53	12/20/21 04:06	1
Perfluorodecanoic acid (PFDA)	<0.31		2.0	0.31	ng/L		12/16/21 04:53	12/20/21 04:06	1
Perfluoroundecanoic acid (PFUnA)	<1.1		2.0	1.1	ng/L		12/16/21 04:53	12/20/21 04:06	1
Perfluorododecanoic acid (PFDoA)	<0.55		2.0	0.55	ng/L		12/16/21 04:53	12/20/21 04:06	1
Perfluorotridecanoic acid (PFTriA)	<1.3		2.0	1.3	ng/L		12/16/21 04:53	12/20/21 04:06	1
Perfluorotetradecanoic acid (PFTeA)	<0.73		2.0	0.73	ng/L		12/16/21 04:53	12/20/21 04:06	1
Perfluorobutanesulfonic acid (PFBS)	<0.20		2.0	0.20	ng/L		12/16/21 04:53	12/20/21 04:06	1
Perfluoropentanesulfonic acid (PFPeS)	<0.30		2.0	0.30	ng/L		12/16/21 04:53	12/20/21 04:06	1
Perfluorohexanesulfonic acid (PFHxS)	<0.57		2.0	0.57	ng/L		12/16/21 04:53	12/20/21 04:06	1
Perfluoroheptanesulfonic Acid (PFHpS)	<0.19		2.0	0.19	ng/L		12/16/21 04:53	12/20/21 04:06	1
Perfluorooctanesulfonic acid (PFOS)	<0.54		2.0	0.54	ng/L		12/16/21 04:53	12/20/21 04:06	1
Perfluorononanesulfonic acid (PFNS)	<0.37		2.0	0.37	ng/L		12/16/21 04:53	12/20/21 04:06	1
Perfluorodecanesulfonic acid (PFDS)	<0.32		2.0	0.32	ng/L		12/16/21 04:53	12/20/21 04:06	1
Perfluorododecanesulfonic acid (PFDoS)	<0.97		2.0	0.97	ng/L		12/16/21 04:53	12/20/21 04:06	1
Perfluorooctanesulfonamide (FOSA)	<0.98		2.0	0.98	ng/L		12/16/21 04:53	12/20/21 04:06	1
NEtFOSA	<0.87		2.0	0.87	ng/L		12/16/21 04:53	12/20/21 04:06	1
NMeFOSA	<0.43		2.0	0.43	ng/L		12/16/21 04:53	12/20/21 04:06	1
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	<1.2		5.0	1.2	ng/L		12/16/21 04:53	12/20/21 04:06	1
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	<1.3		5.0	1.3	ng/L		12/16/21 04:53	12/20/21 04:06	1
NMeFOSE	2.89	J	4.0	1.4	ng/L		12/16/21 04:53	12/20/21 04:06	1
NEtFOSE	1.62	J	2.0	0.85	ng/L		12/16/21 04:53	12/20/21 04:06	1
4:2 FTS	<0.24		2.0	0.24	ng/L		12/16/21 04:53	12/20/21 04:06	1
6:2 FTS	<2.5		5.0	2.5	ng/L		12/16/21 04:53	12/20/21 04:06	1
8:2 FTS	<0.46		2.0	0.46	ng/L		12/16/21 04:53	12/20/21 04:06	1
DONA	<0.40		2.0	0.40	ng/L		12/16/21 04:53	12/20/21 04:06	1
HFPO-DA (GenX)	<1.5		4.0	1.5	ng/L		12/16/21 04:53	12/20/21 04:06	1
F-53B Major	<0.24		2.0	0.24	ng/L		12/16/21 04:53	12/20/21 04:06	1
F-53B Minor	<0.32		2.0	0.32	ng/L		12/16/21 04:53	12/20/21 04:06	1

Isotope Dilution	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C4 PFBA	*93*		*25 - 150*	*12/16/21 04:53*	*12/20/21 04:06*	*1*
13C5 PFPeA	*90*		*25 - 150*	*12/16/21 04:53*	*12/20/21 04:06*	*1*
13C2 PFHxA	*77*		*25 - 150*	*12/16/21 04:53*	*12/20/21 04:06*	*1*
13C4 PFHpA	*71*		*25 - 150*	*12/16/21 04:53*	*12/20/21 04:06*	*1*
13C4 PFOA	*94*		*25 - 150*	*12/16/21 04:53*	*12/20/21 04:06*	*1*
13C5 PFNA	*101*		*25 - 150*	*12/16/21 04:53*	*12/20/21 04:06*	*1*
13C2 PFDA	*91*		*25 - 150*	*12/16/21 04:53*	*12/20/21 04:06*	*1*
13C2 PFUnA	*94*		*25 - 150*	*12/16/21 04:53*	*12/20/21 04:06*	*1*
13C2 PFDoA	*98*		*25 - 150*	*12/16/21 04:53*	*12/20/21 04:06*	*1*
13C2 PFTeDA	*105*		*25 - 150*	*12/16/21 04:53*	*12/20/21 04:06*	*1*

Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

Lab Sample ID: MB 320-551272/1-A
Matrix: Water
Analysis Batch: 552303

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 551272

Isotope Dilution	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C3 PFBS	89		25 - 150	12/16/21 04:53	12/20/21 04:06	1
18O2 PFHxS	81		25 - 150	12/16/21 04:53	12/20/21 04:06	1
13C4 PFOS	86		25 - 150	12/16/21 04:53	12/20/21 04:06	1
13C8 FOSA	79		10 - 150	12/16/21 04:53	12/20/21 04:06	1
d3-NMeFOSAA	77		25 - 150	12/16/21 04:53	12/20/21 04:06	1
d5-NEtFOSAA	83		25 - 150	12/16/21 04:53	12/20/21 04:06	1
d-N-MeFOSA-M	74		10 - 150	12/16/21 04:53	12/20/21 04:06	1
d-N-EtFOSA-M	74		10 - 150	12/16/21 04:53	12/20/21 04:06	1
d7-N-MeFOSE-M	75		10 - 150	12/16/21 04:53	12/20/21 04:06	1
d9-N-EtFOSE-M	73		10 - 150	12/16/21 04:53	12/20/21 04:06	1
M2-4:2 FTS	60		25 - 150	12/16/21 04:53	12/20/21 04:06	1
M2-6:2 FTS	81		25 - 150	12/16/21 04:53	12/20/21 04:06	1
M2-8:2 FTS	75		25 - 150	12/16/21 04:53	12/20/21 04:06	1
13C3 HFPO-DA	97		25 - 150	12/16/21 04:53	12/20/21 04:06	1
13C2 10:2 FTS	76		25 - 150	12/16/21 04:53	12/20/21 04:06	1

Lab Sample ID: LCS 320-551272/2-A
Matrix: Water
Analysis Batch: 552303

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 551272

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Perfluorobutanoic acid (PFBA)	40.0	33.7		ng/L		84	60 - 135
Perfluoropentanoic acid (PFPeA)	40.0	39.4		ng/L		99	60 - 135
Perfluorohexanoic acid (PFHxA)	40.0	40.3		ng/L		101	60 - 135
Perfluoroheptanoic acid (PFHpA)	40.0	38.2		ng/L		96	60 - 135
Perfluorooctanoic acid (PFOA)	40.0	39.3		ng/L		98	60 - 135
Perfluorononanoic acid (PFNA)	40.0	35.5		ng/L		89	60 - 135
Perfluorodecanoic acid (PFDA)	40.0	36.3		ng/L		91	60 - 135
Perfluoroundecanoic acid (PFUnA)	40.0	36.6		ng/L		92	60 - 135
Perfluorododecanoic acid (PFDoA)	40.0	35.6		ng/L		89	60 - 135
Perfluorotridecanoic acid (PFTriA)	40.0	38.5		ng/L		96	60 - 135
Perfluorotetradecanoic acid (PFTeA)	40.0	31.7		ng/L		79	60 - 135
Perfluorobutanesulfonic acid (PFBS)	35.4	29.3		ng/L		83	60 - 135
Perfluoropentanesulfonic acid (PFPeS)	37.5	27.7		ng/L		74	60 - 135
Perfluorohexanesulfonic acid (PFHxS)	36.4	34.0		ng/L		93	60 - 135
Perfluoroheptanesulfonic Acid (PFHpS)	38.1	34.7		ng/L		91	60 - 135
Perfluorooctanesulfonic acid (PFOS)	37.1	31.0		ng/L		84	60 - 135
Perfluorononanesulfonic acid (PFNS)	38.4	32.9		ng/L		86	60 - 135
Perfluorodecanesulfonic acid (PFDS)	38.6	32.5		ng/L		84	60 - 135
Perfluorododecanesulfonic acid (PFDoS)	38.7	36.1		ng/L		93	60 - 135

Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

Lab Sample ID: LCS 320-551272/2-A
Matrix: Water
Analysis Batch: 552303

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 551272

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Perfluorooctanesulfonamide (FOSA)	40.0	39.9		ng/L		100	60 - 135
NEtFOSA	40.0	41.0		ng/L		102	60 - 135
NMeFOSA	40.0	37.7		ng/L		94	60 - 135
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	40.0	39.3		ng/L		98	60 - 135
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	40.0	34.4		ng/L		86	60 - 135
NMeFOSE	40.0	41.7		ng/L		104	60 - 135
NEtFOSE	40.0	38.6		ng/L		97	60 - 135
4:2 FTS	37.4	37.1		ng/L		99	60 - 135
6:2 FTS	37.9	38.0		ng/L		100	60 - 135
8:2 FTS	38.3	41.7		ng/L		109	60 - 135
DONA	37.7	33.3		ng/L		88	60 - 135
HFPO-DA (GenX)	40.0	35.9		ng/L		90	60 - 135
F-53B Major	37.3	34.2		ng/L		92	60 - 135
F-53B Minor	37.7	35.0		ng/L		93	60 - 135

Isotope Dilution	*LCS %Recovery*	*LCS Qualifier*	*Limits*
13C4 PFBA	*95*		*25 - 150*
13C5 PFPeA	*84*		*25 - 150*
13C2 PFHxA	*73*		*25 - 150*
13C4 PFHpA	*74*		*25 - 150*
13C4 PFOA	*93*		*25 - 150*
13C5 PFNA	*93*		*25 - 150*
13C2 PFDA	*89*		*25 - 150*
13C2 PFUnA	*88*		*25 - 150*
13C2 PFDoA	*99*		*25 - 150*
13C2 PFTeDA	*111*		*25 - 150*
13C3 PFBS	*86*		*25 - 150*
18O2 PFHxS	*77*		*25 - 150*
13C4 PFOS	*89*		*25 - 150*
13C8 FOSA	*82*		*10 - 150*
d3-NMeFOSAA	*74*		*25 - 150*
d5-NEtFOSAA	*87*		*25 - 150*
d-N-MeFOSA-M	*75*		*10 - 150*
d-N-EtFOSA-M	*70*		*10 - 150*
d7-N-MeFOSE-M	*75*		*10 - 150*
d9-N-EtFOSE-M	*77*		*10 - 150*
M2-4:2 FTS	*62*		*25 - 150*
M2-6:2 FTS	*74*		*25 - 150*
M2-8:2 FTS	*70*		*25 - 150*
13C3 HFPO-DA	*89*		*25 - 150*
13C2 10:2 FTS	*82*		*25 - 150*

Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

Lab Sample ID: LCSD 320-551272/3-A
Matrix: Water
Analysis Batch: 552303

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 551272

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Perfluorobutanoic acid (PFBA)	40.0	34.6		ng/L		86	60 - 135	3	30
Perfluoropentanoic acid (PFPeA)	40.0	40.2		ng/L		100	60 - 135	2	30
Perfluorohexanoic acid (PFHxA)	40.0	39.3		ng/L		98	60 - 135	2	30
Perfluoroheptanoic acid (PFHpA)	40.0	39.9		ng/L		100	60 - 135	4	30
Perfluorooctanoic acid (PFOA)	40.0	36.8		ng/L		92	60 - 135	7	30
Perfluorononanoic acid (PFNA)	40.0	35.5		ng/L		89	60 - 135	0	30
Perfluorodecanoic acid (PFDA)	40.0	38.2		ng/L		96	60 - 135	5	30
Perfluoroundecanoic acid (PFUnA)	40.0	36.1		ng/L		90	60 - 135	2	30
Perfluorododecanoic acid (PFDoA)	40.0	38.3		ng/L		96	60 - 135	7	30
Perfluorotridecanoic acid (PFTriA)	40.0	40.6		ng/L		102	60 - 135	5	30
Perfluorotetradecanoic acid (PFTeA)	40.0	29.8		ng/L		75	60 - 135	6	30
Perfluorobutanesulfonic acid (PFBS)	35.4	27.2		ng/L		77	60 - 135	8	30
Perfluoropentanesulfonic acid (PFPeS)	37.5	29.1		ng/L		77	60 - 135	5	30
Perfluorohexanesulfonic acid (PFHxS)	36.4	32.3		ng/L		89	60 - 135	5	30
Perfluoroheptanesulfonic Acid (PFHpS)	38.1	37.4		ng/L		98	60 - 135	8	30
Perfluorooctanesulfonic acid (PFOS)	37.1	32.6		ng/L		88	60 - 135	5	30
Perfluorononanesulfonic acid (PFNS)	38.4	33.9		ng/L		88	60 - 135	3	30
Perfluorodecanesulfonic acid (PFDS)	38.6	32.1		ng/L		83	60 - 135	1	30
Perfluorododecanesulfonic acid (PFDoS)	38.7	37.0		ng/L		96	60 - 135	3	30
Perfluorooctanesulfonamide (FOSA)	40.0	39.3		ng/L		98	60 - 135	1	30
NEtFOSA	40.0	38.7		ng/L		97	60 - 135	6	30
NMeFOSA	40.0	36.4		ng/L		91	60 - 135	4	30
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	40.0	38.5		ng/L		96	60 - 135	2	30
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	40.0	35.4		ng/L		88	60 - 135	3	30
NMeFOSE	40.0	40.3		ng/L		101	60 - 135	3	30
NEtFOSE	40.0	38.0		ng/L		95	60 - 135	2	30
4:2 FTS	37.4	41.3		ng/L		110	60 - 135	11	30
6:2 FTS	37.9	43.3		ng/L		114	60 - 135	13	30
8:2 FTS	38.3	35.8		ng/L		93	60 - 135	15	30
DONA	37.7	34.6		ng/L		92	60 - 135	4	30
HFPO-DA (GenX)	40.0	41.1		ng/L		103	60 - 135	13	30
F-53B Major	37.3	37.0		ng/L		99	60 - 135	8	30
F-53B Minor	37.7	36.2		ng/L		96	60 - 135	3	30

Isotope Dilution	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
13C4 PFBA	*104*		*25 - 150*
13C5 PFPeA	*94*		*25 - 150*

Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

Lab Sample ID: LCSD 320-551272/3-A
Matrix: Water
Analysis Batch: 552303

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 551272

Isotope Dilution	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
13C2 PFHxA	*79*		*25 - 150*
13C4 PFHpA	*79*		*25 - 150*
13C4 PFOA	*103*		*25 - 150*
13C5 PFNA	*115*		*25 - 150*
13C2 PFDA	*97*		*25 - 150*
13C2 PFUnA	*93*		*25 - 150*
13C2 PFDoA	*100*		*25 - 150*
13C2 PFTeDA	*116*		*25 - 150*
13C3 PFBS	*98*		*25 - 150*
18O2 PFHxS	*91*		*25 - 150*
13C4 PFOS	*94*		*25 - 150*
13C8 FOSA	*92*		*10 - 150*
d3-NMeFOSAA	*80*		*25 - 150*
d5-NEtFOSAA	*87*		*25 - 150*
d-N-MeFOSA-M	*86*		*10 - 150*
d-N-EtFOSA-M	*81*		*10 - 150*
d7-N-MeFOSE-M	*78*		*10 - 150*
d9-N-EtFOSE-M	*85*		*10 - 150*
M2-4:2 FTS	*64*		*25 - 150*
M2-6:2 FTS	*78*		*25 - 150*
M2-8:2 FTS	*84*		*25 - 150*
13C3 HFPO-DA	*91*		*25 - 150*
13C2 10:2 FTS	*79*		*25 - 150*

Method: 6020A - Metals (ICP/MS)

Lab Sample ID: MB 500-634757/1-A
Matrix: Water
Analysis Batch: 634985

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 634757

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	<25		100	25	ug/L		12/21/21 09:30	12/21/21 21:28	1
Antimony	<1.3		3.0	1.3	ug/L		12/21/21 09:30	12/21/21 21:28	1
Arsenic	0.379	J ^+	1.0	0.23	ug/L		12/21/21 09:30	12/21/21 21:28	1
Barium	<0.73		2.5	0.73	ug/L		12/21/21 09:30	12/21/21 21:28	1
Cadmium	<0.17		0.50	0.17	ug/L		12/21/21 09:30	12/21/21 21:28	1
Chromium	<1.1		5.0	1.1	ug/L		12/21/21 09:30	12/21/21 21:28	1
Copper	<0.50		2.0	0.50	ug/L		12/21/21 09:30	12/21/21 21:28	1
Iron	<47		100	47	ug/L		12/21/21 09:30	12/21/21 21:28	1
Lead	<0.19		0.50	0.19	ug/L		12/21/21 09:30	12/21/21 21:28	1
Manganese	<0.79		2.5	0.79	ug/L		12/21/21 09:30	12/21/21 21:28	1
Nickel	<0.63		2.0	0.63	ug/L		12/21/21 09:30	12/21/21 21:28	1
Selenium	<0.98		2.5	0.98	ug/L		12/21/21 09:30	12/21/21 21:28	1
Silver	<0.12		0.50	0.12	ug/L		12/21/21 09:30	12/21/21 21:28	1
Thallium	<0.57		2.0	0.57	ug/L		12/21/21 09:30	12/21/21 21:28	1

Method: 6020A - Metals (ICP/MS) (Continued)

Lab Sample ID: LCS 500-634757/2-A
Matrix: Water
Analysis Batch: 634985

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 634757

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Aluminum	2000	2320		ug/L		116	80 - 120
Antimony	500	516		ug/L		103	80 - 120
Arsenic	100	105	^+	ug/L		105	80 - 120
Barium	500	524		ug/L		105	80 - 120
Cadmium	50.0	50.5		ug/L		101	80 - 120
Chromium	200	210		ug/L		105	80 - 120
Copper	250	262		ug/L		105	80 - 120
Iron	1000	1040		ug/L		104	80 - 120
Lead	100	105		ug/L		105	80 - 120
Manganese	500	515		ug/L		103	80 - 120
Nickel	500	518		ug/L		104	80 - 120
Selenium	100	105		ug/L		105	80 - 120
Silver	50.0	50.3		ug/L		101	80 - 120
Thallium	100	107		ug/L		107	80 - 120

Method: 7470A - Mercury (CVAA)

Lab Sample ID: MB 500-634059/12-A
Matrix: Water
Analysis Batch: 634283

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 634059

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.098		0.20	0.098	ug/L		12/16/21 10:45	12/17/21 08:38	1

Lab Sample ID: LCS 500-634059/13-A
Matrix: Water
Analysis Batch: 634283

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 634059

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	2.00	2.01		ug/L		101	80 - 120

Lab Chronicle

Client: Ramboll US Corporation
Project/Site: Former Mirro Plant No 9 - 1690019647

Job ID: 500-209562-1

Client Sample ID: MW-228
Date Collected: 12/09/21 09:07
Date Received: 12/10/21 10:30

Lab Sample ID: 500-209562-1
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	634922	12/22/21 15:10	STW	TAL CHI
Total/NA	Prep	3535			551272	12/16/21 04:53	EG	TAL SAC
Total/NA	Analysis	537 (modified)		1	552303	12/20/21 06:22	K1S	TAL SAC

Client Sample ID: FB-01
Date Collected: 12/09/21 12:30
Date Received: 12/10/21 10:30

Lab Sample ID: 500-209564-1
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3535			551272	12/16/21 04:53	EG	TAL SAC
Total/NA	Analysis	537 (modified)		1	552303	12/20/21 06:32	K1S	TAL SAC

Client Sample ID: EB-01
Date Collected: 12/09/21 12:45
Date Received: 12/10/21 10:30

Lab Sample ID: 500-209564-2
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	634922	12/22/21 16:33	STW	TAL CHI
Total/NA	Prep	3510C			633730	12/15/21 07:23	ALW	TAL CHI
Total/NA	Analysis	8270D		1	634033	12/16/21 16:54	EMA	TAL CHI
Total/NA	Prep	3510C			633372	12/13/21 09:44	DAK	TAL CHI
Total/NA	Analysis	8082A		1	633459	12/14/21 10:53	JBJ	TAL CHI
Total/NA	Prep	3535			551272	12/16/21 04:53	EG	TAL SAC
Total/NA	Analysis	537 (modified)		1	552303	12/20/21 06:43	K1S	TAL SAC
Dissolved	Prep	3005A			634757	12/21/21 09:30	DAJ	TAL CHI
Dissolved	Analysis	6020A		1	634985	12/21/21 22:54	FXG	TAL CHI
Dissolved	Prep	7470A			634059	12/16/21 10:45	MJG	TAL CHI
Dissolved	Analysis	7470A		1	634283	12/17/21 08:55	MJG	TAL CHI

Client Sample ID: Trip Blank
Date Collected: 12/09/21 00:00
Date Received: 12/10/21 10:30

Lab Sample ID: 500-209564-3
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	634922	12/22/21 14:16	STW	TAL CHI

Laboratory References:

TAL CHI = Eurofins TestAmerica, Chicago, 2417 Bond Street, University Park, IL 60484, TEL (708)534-5200

TAL SAC = Eurofins TestAmerica, Sacramento, 880 Riverside Parkway, West Sacramento, CA 95605, TEL (916)373-5600

Accreditation/Certification Summary

Client: Ramboll US Corporation
Job ID: 500-209562-1
Project/Site: Former Mirro Plant No 9 - 1690019647

Laboratory: Eurofins TestAmerica, Chicago

The accreditations/certifications listed below are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Wisconsin	State	999580010	08-31-22

Laboratory: Eurofins TestAmerica, Sacramento

The accreditations/certifications listed below are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Wisconsin	State	998204680	08-31-22

Eurofins TestAmerica, Chicago
2417 Bond Street
University Park IL 60484
Phone 708-534-5200 Fax 708-534-5211

Chain of Custody Record

eurofins

Client Information	Sampler: DUNCAN GLASFORD	Lab PM: Fredrick Sandie	Carrier Tracking No(s):	COC No: 500-96812-42719.3
Client Contact: Paul Lindquist	Phone: 262 573 6315	E-Mail: sandra.fredrick@eurofinset.com	State of Origin: WI	Page: Page 1 of 1
Company: Ramboll US Corporation	PWSID:			Job #: 500-209562
Address: 234 W Florida Street Fifth Floor	Due Date Requested:			
City: Milwaukee	TAT Requested (days):			
State, Zip: WI 53204	Compliance Project: Δ Yes Δ No			
Phone: 262 901-3510(Tel)	PO #: Purchase Order not required			
Email: plindquist@ramboll.com	WO #:			
Project Name: Former Mirro Plant No 9 169001964.1	Project #: 50018382			
Site:	SSOW#:			

500-209562 COC

Analysis Requested

Preservation Codes:
A HCL, B NaOH, C Zn Acetate, D Nitric Acid, E NaHSO4, F MeOH, G Amchlor, H Ascorbic Acid, I Ice, J DI Water, K EDTA, L EDA, M Hexane, N None, O AsNaO2, P Na2O4S, Q Na2SO3, R Na2S2O3, S H2SO4, T TSP Dodecahydrate, U Acetone, V MCAA, W pH 4-5, Z other (specify)
Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	PFC_IDA_WI PFAS, Standard List (33 analytes)	6020A 7470A	8082A 8270D	8260B VOC	Total Number of containers	Special Instructions/Note
			Preservation Code:				N	D	N	A		
1 MW-228	12-9-21	907	G	Water			X			X		

Possible Hazard Identification
☐ Non Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I II III IV Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by	Date	Time	Method of Shipment

Relinquished by	Date/Time	Company	Received by	Date/Time	Company
[signature]	12-9-21 1530	RAMBOLL	[signature]	12.9.21 1530	TA
[signature]	12.9.21 1700	TA	[signature]	12/10/21 1030	ESA
Relinquished by	Date/Time	Company	Received by	Date/Time	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No:	Cooler Temperature(s) °C and Other Remarks: -0.4

Eurofins TestAmerica, Chicago
2417 Bond Street
University Park IL 60484
Phone 708-534-5200 Fax 708-534-5211

Chain of Custody Record

eurofins

Client Information	Sampler: DUNCAN GLASFORD	Lab PM: Fredrick Sandie	Carrier Tracking No(s):	COC No: 500-96812-42719.1
Client Contact: Paul Lindquist	Phone: 262 573 6315	E Mail: sandra.fredrick@eurofinset.com	State of Origin: WI	Page: Page 1 of 1
Company: Rambol US Corporation	PWSID:	Analysis Requested		Job #: 500-209564

Address: 234 W Florida Street Fifth Floor	Due Date Requested:		Preservation Codes: A HCl, B NaOH, C Zn Acetate, D Nitric Acid, E NaHSO4, F MeOH, G Amchlor, H Ascorbic Acid, I Ice, J DI Water, K EDTA, L EDA, M Hexane, N None, O AsNaO, P Na2O4S, Q Na2SO3, R Na2S2O3, S H2SO4, T TSP Dodecahydrate, U Acetone, V MCAA, W pH 4-5, Z other (specify), Other
City: Milwaukee	TAT Requested (days):		
State, Zip: WI 53204	Compliance Project: Δ Yes Δ No		
Phone: 262 901 3510(Tel)	PO #: Purchase Order not required		
Email: plindquist@rambol.com	WO #:		
Project Name: Former Mirro Plant No 9 1690019647	Project #: 50018382		
Site:	SSOW#:		

500-209564 COC

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	PFC_IDA_WI PFAS, Standard List (33 analytes)	6020A, 7470A	8082A, 8270D	8260B VOC	Total Number of containers	Special Instructions/Note
			Preservation Code:				N	D	N	A		
1 FB-01	12-9-21	1230	G	Water			X					
2 EB-01	12-9-21	1245	G	Water	X		X	X	X	X		
3 TRIP BLANK	—	—	—	Water						X		
				Water								
				Water								
				Water								
				Water								
				Water								
				Water								
				Water								
				Water								

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I II III IV Other (specify)

Special Instructions/QC Requirements

Empty Kit Relinquished by:	Date	Time	Method of Shipment:

	Date/Time	Company		Date/Time	Company
Relinquished by:	12-9-21 1530	RAMBOLL	Received by:	12.9.21 1530	TA
Relinquished by:	12.9.21 1700	TA	Received by:	12/10/21 1030	EAL
Relinquished by:	Date/Time	Company	Received by:	Date/Time	Company

Custody Seals Intact: Δ Yes Δ No | Custody Seal No.:

Cooler Temperature(s) and Other Remarks: -0.4

500-209562 Wayb

Eurofins TestAmerica, Chicago
2417 Bond Street
University Park, IL 60484
Phone: 708-534-5200 Fax: 708-534-5211

Chain of Custody Record

eurofins | Environment Testing America

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Fredrick, Sandie	Carrier Tracking No(s):	COC No: 500-155297.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: sandra.fredrick@eurofinset.com	State of Origin: Wisconsin	Page: Page 1 of 1
Company: TestAmerica Laboratories, Inc.		Accreditations Required (See note): State - Wisconsin		Job #: 500-209562-1
Address: 880 Riverside Parkway, ,	Due Date Requested: 12/26/2021			
City: West Sacramento	TAT Requested (days):			
State, Zip: CA, 95605				
Phone: 916-373-5600(Tel) 916-372-1059(Fax)	PO #:			
Email:	WO #:			
Project Name: Former Mirro Plant No 9 - 1690019647	Project #: 50018382			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:

A - HCL	M - Hexane
B - NaOH	N - None
C - Zn Acetate	O - AsNaO2
D - Nitric Acid	P - Na2O4S
E - NaHSO4	Q - Na2SO3
F - MeOH	R - Na2S2O3
G - Amchlor	S - H2SO4
H - Ascorbic Acid	T - TSP Dodecahydrate
I - Ice	U - Acetone
J - DI Water	V - MCAA
K - EDTA	W - pH 4-5
L - EDA	Z - other (specify)

Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	PFC_IDA_WI/3535_PFC_28D PFAS, Standard List (33 analytes)	Total Number of containers	Special Instructions/Note:
			Preservation Code:						
MW-228 (500-209562-1)	12/9/21	09:07 Central		Water			X	2	

Note: Since laboratory accreditations are subject to change, Eurofins TestAmerica places the ownership of method, analyte & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins TestAmerica laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins TestAmerica attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said complicance to Eurofins TestAmerica.

Possible Hazard Identification	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
Unconfirmed	☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
1	Paula Buckley	12/10/21 1600	EDA Ctl		12-11-21 1005	EESca
2	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
3	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: ∆ Yes ∆ No	Custody Seal No.: 1672533	Cooler Temperature(s) °C and Other Remarks: 2-1

Ver: 06/08/2021

12/23/2021

Login Sample Receipt Checklist

Client: Ramboll US Corporation

Job Number: 500-209562-1

Login Number: 209562
List Number: 1
Creator: Scott, Sherri L

List Source: Eurofins TestAmerica, Chicago

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	-0.4 samples not frozen
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: Ramboll US Corporation

Job Number: 500-209562-1

Login Number: 209562
List Number: 2
Creator: Simmons, Jason C

List Source: Eurofins TestAmerica, Sacramento
List Creation: 12/11/21 02:05 PM

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	1672533
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	2.4c
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	False	Received project as a subcontract.
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

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Sacramento Sample Receiving Notes

500-209562 Field Sheet

Job: _____

Tracking # : 1893 4454 3918

SO / PO / FO (SAT) / 2-Day / Ground / UPS / CDO / Courier

GSO / OnTrac / Goldstreak / USPS / Other _____

Use this form to record Sample Custody Seal, Cooler Custody Seal, Temperature & corrected Temperature & other observations. File in the job folder with the COC.

Therm. ID: CO6 Corr. Factor: (+ / -) N/A °C

Ice ~ Wet ✓ Gel _____ Other _____

Cooler Custody Seal: 1672533

Cooler ID: ~

Temp Observed: 2.4 °C Corrected: 2.4 °C

From: Temp Blank ☐ Sample ☑

Opening/Processing The Shipment	Yes	No	NA
Cooler compromised/tampered with?	☐	☑	☐
Cooler Temperature is acceptable?	☑	☐	☐
Frozen samples show signs of thaw?	☐	☐	☑

Initials: SO Date: 12-11-20

Unpacking/Labeling The Samples	Yes	No	NA
CoC is complete w/o discrepancies?	☑	☐	☐
Samples compromised/tampered with?	☐	☑	☐
Sample containers have legible labels?	☑	☐	☐
Sample custody seal?	☐	☐	☑
Containers are not broken or leaking?	☑	☐	☐
Sample date/times are provided?	☑	☐	☐
Appropriate containers are used?	☑	☐	☐
Sample bottles are completely filled?	☑	☐	☐
Sample preservatives verified?	☐	☐	☑
Samples w/o discrepancies?	☑	☐	☐
Zero headspace?*	☐	☐	☑
Alkalinity has no headspace?	☐	☐	☑
Perchlorate has headspace? (Methods 314, 331, 6850)	☐	☐	☑
Multiphasic samples are not present?	☑	☐	☐

*Containers requiring zero headspace have no headspace, or bubble < 6 mm (1/4")

Initials: SO Date: 12/11/20

Notes: _____

Trizma Lot #(s): _____

Login Completion	Yes	No	NA
Receipt Temperature on COC?	☑	☐	☐
Samples received within hold time?	☑	☐	☐
NCM Filed?	☐	☐	☑
Log Release checked in TALS?	☐	☐	☑

Initials: SO Date: 12/11/20

Isotope Dilution Summary

Client: Ramboll US Corporation
Project/Site: Former Mirro Plant No 9 - 1690019647

Job ID: 500-209562-1

Method: 537 (modified) - Fluorinated Alkyl Substances

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

		Percent Isotope Dilution Recovery (Acceptance Limits)							
Lab Sample ID	Client Sample ID	PFBA (25-150)	PFPeA (25-150)	PFHxA (25-150)	C4PFHA (25-150)	PFOA (25-150)	PFNA (25-150)	PFDA (25-150)	PFUnA (25-150)
500-209562-1	MW-228	73	83	71	76	92	114	96	97
500-209564-1	FB-01	77	76	64	62	87	94	80	80
500-209564-2	EB-01	90	86	71	75	99	103	93	92
LCS 320-551272/2-A	Lab Control Sample	95	84	73	74	93	93	89	88
LCSD 320-551272/3-A	Lab Control Sample Dup	104	94	79	79	103	115	97	93
MB 320-551272/1-A	Method Blank	93	90	77	71	94	101	91	94

		Percent Isotope Dilution Recovery (Acceptance Limits)							
Lab Sample ID	Client Sample ID	PFDoA (25-150)	PFTDA (25-150)	C3PFBS (25-150)	PFHxS (25-150)	PFOS (25-150)	PFOSA (10-150)	d3NMFOS (25-150)	d5NEFOS (25-150)
500-209562-1	MW-228	103	104	77	79	91	85	78	91
500-209564-1	FB-01	86	93	75	67	81	71	69	79
500-209564-2	EB-01	108	114	86	77	93	82	81	85
LCS 320-551272/2-A	Lab Control Sample	99	111	86	77	89	82	74	87
LCSD 320-551272/3-A	Lab Control Sample Dup	100	116	98	91	94	92	80	87
MB 320-551272/1-A	Method Blank	98	105	89	81	86	79	77	83

		Percent Isotope Dilution Recovery (Acceptance Limits)							
Lab Sample ID	Client Sample ID	dMeFOSA (10-150)	dEtFOSA (10-150)	NMFM (10-150)	NEFM (10-150)	M242FTS (25-150)	M262FTS (25-150)	M282FTS (25-150)	HFPODA (25-150)
500-209562-1	MW-228	78	74	85	81	76	84	87	88
500-209564-1	FB-01	65	64	71	75	54	67	63	64
500-209564-2	EB-01	79	78	85	86	67	76	76	79
LCS 320-551272/2-A	Lab Control Sample	75	70	75	77	62	74	70	89
LCSD 320-551272/3-A	Lab Control Sample Dup	86	81	78	85	64	78	84	91
MB 320-551272/1-A	Method Blank	74	74	75	73	60	81	75	97

		Percent Isotope Dilution Recovery (Acceptance Limits)
Lab Sample ID	Client Sample ID	M102FTS (25-150)
500-209562-1	MW-228	87
500-209564-1	FB-01	74
500-209564-2	EB-01	103
LCS 320-551272/2-A	Lab Control Sample	82
LCSD 320-551272/3-A	Lab Control Sample Dup	79
MB 320-551272/1-A	Method Blank	76

Surrogate Legend

PFBA = 13C4 PFBA
PFPeA = 13C5 PFPeA
PFHxA = 13C2 PFHxA
C4PFHA = 13C4 PFHpA
PFOA = 13C4 PFOA
PFNA = 13C5 PFNA
PFDA = 13C2 PFDA
PFUnA = 13C2 PFUnA
PFDoA = 13C2 PFDoA
PFTDA = 13C2 PFTeDA
C3PFBS = 13C3 PFBS
PFHxS = 18O2 PFHxS
PFOS = 13C4 PFOS
PFOSA = 13C8 FOSA

Isotope Dilution Summary

Client: Ramboll US Corporation
Job ID: 500-209562-1
Project/Site: Former Mirro Plant No 9 - 1690019647

d3NMFOS = d3-NMeFOSAA
d5NEFOS = d5-NEtFOSAA
dMeFOSA = d-N-MeFOSA-M
dEtFOSA = d-N-EtFOSA-M
NMFM = d7-N-MeFOSE-M
NEFM = d9-N-EtFOSE-M
M242FTS = M2-4:2 FTS
M262FTS = M2-6:2 FTS
M282FTS = M2-8:2 FTS
HFPODA = 13C3 HFPO-DA
M102FTS = 13C2 10:2 FTS

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ANALYTICAL REPORT

Eurofins TestAmerica, Chicago
2417 Bond Street
University Park, IL 60484
Tel: (708)534-5200

Laboratory Job ID: 500-209563-1
Client Project/Site: Former Mirro Plant No 9 - 1690019647

For:
Ramboll US Corporation
234 W. Florida Street
Fifth Floor
Milwaukee, Wisconsin 53204

Attn: Paul Lindquist

Sandie Fredrick

Authorized for release by:
12/23/2021 4:39:53 PM

Sandie Fredrick, Project Manager II
(920)261-1660
sandra.fredrick@eurofinset.com

Table of Contents

Job ID: 500-209563-1

Laboratory: Eurofins TestAmerica, Chicago

Narrative

Job Narrative
500-209563-1

Comments
No additional comments.

Receipt
The sample was received on 12/10/2021 10:30 AM. Unless otherwise noted below, the sample arrived in good condition, and where required, properly preserved and on ice. The temperature of the cooler at receipt was -0.4º C.

LCMS
Method 537 (modified): The transition mass ratio was above/below of the established ratio limit for Perfluorohexanoic acid (PFHxA) in (CCVL 320-552298/2) associated to this data set. This is indicated by the "R" flag in the raw data. As the flagged data is in control in the CCVL, there is no adverse impact to the data.

(CCVL 320-552298/2)

Method 537 (modified): The method blank for preparation batch 320-551272 contained NEtFOSE and NMeFOSE above one half the reporting limit (RL). None of the samples associated with this method blank contained the target compounds; therefore, re-extraction and/or re-analysis of samples were not performed.

Method 537 (modified): The "I" qualifier means the transition mass ratio for the indicated analyte was above the established ratio limits. The qualitative identification of the analyte has some degree of uncertainty, and the reported value may have some high bias. However, analyst judgment was used to positively identify the analyte. MW-200 (500-209563-1)

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

Organic Prep
Method 3535: Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate (MS/MSD) associated with preparation batch 320-551272.

320-551272
Method: 3535 PFC-W

Method 3535: The following samples contained floating particulates in the sample bottle prior to extraction: MW-200 (500-209563-1).

320-551272
Method: 3535 PFC-W

Method 3535: The following samples were yellow prior to extraction: MW-200 (500-209563-1).

320-551272
Method: 3535 PFC-W

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

Narrative

Job Narrative
500-209564-1

Comments
No additional comments.

Receipt
The samples were received on 12/10/2021 10:30 AM. Unless otherwise noted below, the samples arrived in good condition, and where

Job ID: 500-209563-1 (Continued)

Laboratory: Eurofins TestAmerica, Chicago (Continued)

required, properly preserved and on ice. The temperature of the cooler at receipt was -0.4º C.

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

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

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

Metals
Method 6020A: The low level continuing calibration verification (CCVL) associated with batch 500-634985 recovered above the upper control limit for Arsenic. The samples associated with this CCV were non-detects for the affected analyte; therefore, the data have been reported.

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

LCMS
Method 537 (modified): The transition mass ratio was above/below of the established ratio limit for Perfluorohexanoic acid (PFHxA) in (CCVL 320-552298/2) associated to this data set. This is indicated by the "R" flag in the raw data. As the flagged data is in control in the CCVL, there is no adverse impact to the data.

(CCVL 320-552298/2)

Method 537 (modified): The method blank for preparation batch 320-551272 contained NEtFOSE and NMeFOSE above one half the reporting limit (RL). None of the samples associated with this method blank contained the target compounds; therefore, re-extraction and/or re-analysis of samples were not performed.

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

Field Service / Mobile Lab
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Organic Prep
Method 3535: Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate (MS/MSD) associated with preparation batch 320-551272.

320-551272
Method: 3535 PFC-W

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

Detection Summary

Client: Ramboll US Corporation
Job ID: 500-209563-1
Project/Site: Former Mirro Plant No 9 - 1690019647

Client Sample ID: MW-200 — Lab Sample ID: 500-209563-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Perfluorobutanoic acid (PFBA)	6.0		4.8	2.3	ng/L	1		537 (modified)	Total/NA
Perfluoropentanoic acid (PFPeA)	6.4		1.9	0.47	ng/L	1		537 (modified)	Total/NA
Perfluorohexanoic acid (PFHxA)	8.0		1.9	0.56	ng/L	1		537 (modified)	Total/NA
Perfluoroheptanoic acid (PFHpA)	6.9		1.9	0.24	ng/L	1		537 (modified)	Total/NA
Perfluorooctanoic acid (PFOA)	90		1.9	0.81	ng/L	1		537 (modified)	Total/NA
Perfluorononanoic acid (PFNA)	0.35	J	1.9	0.26	ng/L	1		537 (modified)	Total/NA
Perfluorobutanesulfonic acid (PFBS)	9.0		1.9	0.19	ng/L	1		537 (modified)	Total/NA
Perfluoropentanesulfonic acid (PFPeS)	0.52	J	1.9	0.29	ng/L	1		537 (modified)	Total/NA
Perfluorohexanesulfonic acid (PFHxS)	3.5		1.9	0.55	ng/L	1		537 (modified)	Total/NA
Perfluorooctanesulfonic acid (PFOS)	2.9	I	1.9	0.52	ng/L	1		537 (modified)	Total/NA

Client Sample ID: FB-01 — Lab Sample ID: 500-209564-1

No Detections.

Client Sample ID: EB-01 — Lab Sample ID: 500-209564-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	0.50	J ^+ B	1.0	0.23	ug/L	1		6020A	Dissolved

Client Sample ID: Trip Blank — Lab Sample ID: 500-209564-3

No Detections.

This Detection Summary does not include radiochemical test results.

Method Summary

Client: Ramboll US Corporation
Job ID: 500-209563-1
Project/Site: Former Mirro Plant No 9 - 1690019647

Method	Method Description	Protocol	Laboratory
537 (modified)	Fluorinated Alkyl Substances	EPA	TAL SAC
3535	Solid-Phase Extraction (SPE)	SW846	TAL SAC

Protocol References:

EPA = US Environmental Protection Agency

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

Laboratory References:

TAL SAC = Eurofins TestAmerica, Sacramento, 880 Riverside Parkway, West Sacramento, CA 95605, TEL (916)373-5600

Sample Summary

Client: Ramboll US Corporation
Job ID: 500-209563-1
Project/Site: Former Mirro Plant No 9 - 1690019647

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
500-209563-1	MW-200	Water	12/09/21 12:10	12/10/21 10:30
500-209564-1	FB-01	Water	12/09/21 12:30	12/10/21 10:30
500-209564-2	EB-01	Water	12/09/21 12:45	12/10/21 10:30
500-209564-3	Trip Blank	Water	12/09/21 00:00	12/10/21 10:30

Client: Ramboll US Corporation
Project/Site: Former Mirro Plant No 9 - 1690019647

Job ID: 500-209563-1

Client Sample ID: MW-200
Date Collected: 12/09/21 12:10
Date Received: 12/10/21 10:30

Lab Sample ID: 500-209563-1
Matrix: Water

Method: 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	**6.0**		4.8	2.3	ng/L		12/16/21 04:53	12/20/21 05:30	1
Perfluoropentanoic acid (PFPeA)	**6.4**		1.9	0.47	ng/L		12/16/21 04:53	12/20/21 05:30	1
Perfluorohexanoic acid (PFHxA)	**8.0**		1.9	0.56	ng/L		12/16/21 04:53	12/20/21 05:30	1
Perfluoroheptanoic acid (PFHpA)	**6.9**		1.9	0.24	ng/L		12/16/21 04:53	12/20/21 05:30	1
Perfluorooctanoic acid (PFOA)	**90**		1.9	0.81	ng/L		12/16/21 04:53	12/20/21 05:30	1
Perfluorononanoic acid (PFNA)	**0.35**	**J**	1.9	0.26	ng/L		12/16/21 04:53	12/20/21 05:30	1
Perfluorodecanoic acid (PFDA)	<0.30		1.9	0.30	ng/L		12/16/21 04:53	12/20/21 05:30	1
Perfluoroundecanoic acid (PFUnA)	<1.1		1.9	1.1	ng/L		12/16/21 04:53	12/20/21 05:30	1
Perfluorododecanoic acid (PFDoA)	<0.53		1.9	0.53	ng/L		12/16/21 04:53	12/20/21 05:30	1
Perfluorotridecanoic acid (PFTriA)	<1.2		1.9	1.2	ng/L		12/16/21 04:53	12/20/21 05:30	1
Perfluorotetradecanoic acid (PFTeA)	<0.70		1.9	0.70	ng/L		12/16/21 04:53	12/20/21 05:30	1
Perfluorobutanesulfonic acid (PFBS)	**9.0**		1.9	0.19	ng/L		12/16/21 04:53	12/20/21 05:30	1
Perfluoropentanesulfonic acid (PFPeS)	**0.52**	**J**	1.9	0.29	ng/L		12/16/21 04:53	12/20/21 05:30	1
Perfluorohexanesulfonic acid (PFHxS)	**3.5**		1.9	0.55	ng/L		12/16/21 04:53	12/20/21 05:30	1
Perfluoroheptanesulfonic Acid (PFHpS)	<0.18		1.9	0.18	ng/L		12/16/21 04:53	12/20/21 05:30	1
Perfluorooctanesulfonic acid (PFOS)	**2.9**	**I**	1.9	0.52	ng/L		12/16/21 04:53	12/20/21 05:30	1
Perfluorononanesulfonic acid (PFNS)	<0.35		1.9	0.35	ng/L		12/16/21 04:53	12/20/21 05:30	1
Perfluorodecanesulfonic acid (PFDS)	<0.31		1.9	0.31	ng/L		12/16/21 04:53	12/20/21 05:30	1
Perfluorododecanesulfonic acid (PFDoS)	<0.93		1.9	0.93	ng/L		12/16/21 04:53	12/20/21 05:30	1
Perfluorooctanesulfonamide (FOSA)	<0.94		1.9	0.94	ng/L		12/16/21 04:53	12/20/21 05:30	1
NEtFOSA	<0.83		1.9	0.83	ng/L		12/16/21 04:53	12/20/21 05:30	1
NMeFOSA	<0.41		1.9	0.41	ng/L		12/16/21 04:53	12/20/21 05:30	1
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	<1.1		4.8	1.1	ng/L		12/16/21 04:53	12/20/21 05:30	1
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	<1.2		4.8	1.2	ng/L		12/16/21 04:53	12/20/21 05:30	1
NMeFOSE	<1.3		3.8	1.3	ng/L		12/16/21 04:53	12/20/21 05:30	1
NEtFOSE	<0.81		1.9	0.81	ng/L		12/16/21 04:53	12/20/21 05:30	1
4:2 FTS	<0.23		1.9	0.23	ng/L		12/16/21 04:53	12/20/21 05:30	1
6:2 FTS	<2.4		4.8	2.4	ng/L		12/16/21 04:53	12/20/21 05:30	1
8:2 FTS	<0.44		1.9	0.44	ng/L		12/16/21 04:53	12/20/21 05:30	1
DONA	<0.38		1.9	0.38	ng/L		12/16/21 04:53	12/20/21 05:30	1
HFPO-DA (GenX)	<1.4		3.8	1.4	ng/L		12/16/21 04:53	12/20/21 05:30	1
F-53B Major	<0.23		1.9	0.23	ng/L		12/16/21 04:53	12/20/21 05:30	1
F-53B Minor	<0.31		1.9	0.31	ng/L		12/16/21 04:53	12/20/21 05:30	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C4 PFBA	*74*		*25 - 150*	*12/16/21 04:53*	*12/20/21 05:30*	*1*
13C5 PFPeA	*83*		*25 - 150*	*12/16/21 04:53*	*12/20/21 05:30*	*1*
13C2 PFHxA	*66*		*25 - 150*	*12/16/21 04:53*	*12/20/21 05:30*	*1*
13C4 PFHpA	*66*		*25 - 150*	*12/16/21 04:53*	*12/20/21 05:30*	*1*
13C4 PFOA	*90*		*25 - 150*	*12/16/21 04:53*	*12/20/21 05:30*	*1*
13C5 PFNA	*93*		*25 - 150*	*12/16/21 04:53*	*12/20/21 05:30*	*1*
13C2 PFDA	*81*		*25 - 150*	*12/16/21 04:53*	*12/20/21 05:30*	*1*
13C2 PFUnA	*78*		*25 - 150*	*12/16/21 04:53*	*12/20/21 05:30*	*1*
13C2 PFDoA	*85*		*25 - 150*	*12/16/21 04:53*	*12/20/21 05:30*	*1*

Client: Ramboll US Corporation
Job ID: 500-209563-1
Project/Site: Former Mirro Plant No 9 - 1690019647

Client Sample ID: MW-200
Lab Sample ID: 500-209563-1
Date Collected: 12/09/21 12:10
Matrix: Water
Date Received: 12/10/21 10:30

Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C2 PFTeDA	90		25 - 150	12/16/21 04:53	12/20/21 05:30	1
13C3 PFBS	80		25 - 150	12/16/21 04:53	12/20/21 05:30	1
18O2 PFHxS	66		25 - 150	12/16/21 04:53	12/20/21 05:30	1
13C4 PFOS	82		25 - 150	12/16/21 04:53	12/20/21 05:30	1
13C8 FOSA	74		10 - 150	12/16/21 04:53	12/20/21 05:30	1
d3-NMeFOSAA	61		25 - 150	12/16/21 04:53	12/20/21 05:30	1
d5-NEtFOSAA	69		25 - 150	12/16/21 04:53	12/20/21 05:30	1
d-N-MeFOSA-M	61		10 - 150	12/16/21 04:53	12/20/21 05:30	1
d-N-EtFOSA-M	59		10 - 150	12/16/21 04:53	12/20/21 05:30	1
d7-N-MeFOSE-M	55		10 - 150	12/16/21 04:53	12/20/21 05:30	1
d9-N-EtFOSE-M	66		10 - 150	12/16/21 04:53	12/20/21 05:30	1
M2-4:2 FTS	61		25 - 150	12/16/21 04:53	12/20/21 05:30	1
M2-6:2 FTS	70		25 - 150	12/16/21 04:53	12/20/21 05:30	1
M2-8:2 FTS	69		25 - 150	12/16/21 04:53	12/20/21 05:30	1
13C3 HFPO-DA	77		25 - 150	12/16/21 04:53	12/20/21 05:30	1
13C2 10:2 FTS	69		25 - 150	12/16/21 04:53	12/20/21 05:30	1

Client: Ramboll US Corporation
Job ID: 500-209563-1
Project/Site: Former Mirro Plant No 9 - 1690019647

Client Sample ID: FB-01
Lab Sample ID: 500-209564-1
Date Collected: 12/09/21 12:30
Matrix: Water
Date Received: 12/10/21 10:30

Method: 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	<2.2		4.6	2.2	ng/L		12/16/21 04:53	12/20/21 06:32	1
Perfluoropentanoic acid (PFPeA)	<0.45		1.9	0.45	ng/L		12/16/21 04:53	12/20/21 06:32	1
Perfluorohexanoic acid (PFHxA)	<0.54		1.9	0.54	ng/L		12/16/21 04:53	12/20/21 06:32	1
Perfluoroheptanoic acid (PFHpA)	<0.23		1.9	0.23	ng/L		12/16/21 04:53	12/20/21 06:32	1
Perfluorooctanoic acid (PFOA)	<0.79		1.9	0.79	ng/L		12/16/21 04:53	12/20/21 06:32	1
Perfluorononanoic acid (PFNA)	<0.25		1.9	0.25	ng/L		12/16/21 04:53	12/20/21 06:32	1
Perfluorodecanoic acid (PFDA)	<0.29		1.9	0.29	ng/L		12/16/21 04:53	12/20/21 06:32	1
Perfluoroundecanoic acid (PFUnA)	<1.0		1.9	1.0	ng/L		12/16/21 04:53	12/20/21 06:32	1
Perfluorododecanoic acid (PFDoA)	<0.51		1.9	0.51	ng/L		12/16/21 04:53	12/20/21 06:32	1
Perfluorotridecanoic acid (PFTriA)	<1.2		1.9	1.2	ng/L		12/16/21 04:53	12/20/21 06:32	1
Perfluorotetradecanoic acid (PFTeA)	<0.68		1.9	0.68	ng/L		12/16/21 04:53	12/20/21 06:32	1
Perfluorobutanesulfonic acid (PFBS)	<0.19		1.9	0.19	ng/L		12/16/21 04:53	12/20/21 06:32	1
Perfluoropentanesulfonic acid (PFPeS)	<0.28		1.9	0.28	ng/L		12/16/21 04:53	12/20/21 06:32	1
Perfluorohexanesulfonic acid (PFHxS)	<0.53		1.9	0.53	ng/L		12/16/21 04:53	12/20/21 06:32	1
Perfluoroheptanesulfonic Acid (PFHpS)	<0.18		1.9	0.18	ng/L		12/16/21 04:53	12/20/21 06:32	1
Perfluorooctanesulfonic acid (PFOS)	<0.50		1.9	0.50	ng/L		12/16/21 04:53	12/20/21 06:32	1
Perfluorononanesulfonic acid (PFNS)	<0.34		1.9	0.34	ng/L		12/16/21 04:53	12/20/21 06:32	1
Perfluorodecanesulfonic acid (PFDS)	<0.30		1.9	0.30	ng/L		12/16/21 04:53	12/20/21 06:32	1
Perfluorododecanesulfonic acid (PFDoS)	<0.90		1.9	0.90	ng/L		12/16/21 04:53	12/20/21 06:32	1
Perfluorooctanesulfonamide (FOSA)	<0.91		1.9	0.91	ng/L		12/16/21 04:53	12/20/21 06:32	1
NEtFOSA	<0.81		1.9	0.81	ng/L		12/16/21 04:53	12/20/21 06:32	1
NMeFOSA	<0.40		1.9	0.40	ng/L		12/16/21 04:53	12/20/21 06:32	1
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	<1.1		4.6	1.1	ng/L		12/16/21 04:53	12/20/21 06:32	1
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	<1.2		4.6	1.2	ng/L		12/16/21 04:53	12/20/21 06:32	1
NMeFOSE	<1.3		3.7	1.3	ng/L		12/16/21 04:53	12/20/21 06:32	1
NEtFOSE	<0.79		1.9	0.79	ng/L		12/16/21 04:53	12/20/21 06:32	1
4:2 FTS	<0.22		1.9	0.22	ng/L		12/16/21 04:53	12/20/21 06:32	1
6:2 FTS	<2.3		4.6	2.3	ng/L		12/16/21 04:53	12/20/21 06:32	1
8:2 FTS	<0.43		1.9	0.43	ng/L		12/16/21 04:53	12/20/21 06:32	1
DONA	<0.37		1.9	0.37	ng/L		12/16/21 04:53	12/20/21 06:32	1
HFPO-DA (GenX)	<1.4		3.7	1.4	ng/L		12/16/21 04:53	12/20/21 06:32	1
F-53B Major	<0.22		1.9	0.22	ng/L		12/16/21 04:53	12/20/21 06:32	1
F-53B Minor	<0.30		1.9	0.30	ng/L		12/16/21 04:53	12/20/21 06:32	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C4 PFBA	*77*		*25 - 150*	*12/16/21 04:53*	*12/20/21 06:32*	*1*
13C5 PFPeA	*76*		*25 - 150*	*12/16/21 04:53*	*12/20/21 06:32*	*1*
13C2 PFHxA	*64*		*25 - 150*	*12/16/21 04:53*	*12/20/21 06:32*	*1*
13C4 PFHpA	*62*		*25 - 150*	*12/16/21 04:53*	*12/20/21 06:32*	*1*
13C4 PFOA	*87*		*25 - 150*	*12/16/21 04:53*	*12/20/21 06:32*	*1*
13C5 PFNA	*94*		*25 - 150*	*12/16/21 04:53*	*12/20/21 06:32*	*1*
13C2 PFDA	*80*		*25 - 150*	*12/16/21 04:53*	*12/20/21 06:32*	*1*
13C2 PFUnA	*80*		*25 - 150*	*12/16/21 04:53*	*12/20/21 06:32*	*1*
13C2 PFDoA	*86*		*25 - 150*	*12/16/21 04:53*	*12/20/21 06:32*	*1*
13C2 PFTeDA	*93*		*25 - 150*	*12/16/21 04:53*	*12/20/21 06:32*	*1*
13C3 PFBS	*75*		*25 - 150*	*12/16/21 04:53*	*12/20/21 06:32*	*1*

Client: Ramboll US Corporation
Job ID: 500-209563-1
Project/Site: Former Mirro Plant No 9 - 1690019647

Client Sample ID: FB-01
Lab Sample ID: 500-209564-1
Date Collected: 12/09/21 12:30
Matrix: Water
Date Received: 12/10/21 10:30

Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
18O2 PFHxS	67		25 - 150	12/16/21 04:53	12/20/21 06:32	1
13C4 PFOS	81		25 - 150	12/16/21 04:53	12/20/21 06:32	1
13C8 FOSA	71		10 - 150	12/16/21 04:53	12/20/21 06:32	1
d3-NMeFOSAA	69		25 - 150	12/16/21 04:53	12/20/21 06:32	1
d5-NEtFOSAA	79		25 - 150	12/16/21 04:53	12/20/21 06:32	1
d-N-MeFOSA-M	65		10 - 150	12/16/21 04:53	12/20/21 06:32	1
d-N-EtFOSA-M	64		10 - 150	12/16/21 04:53	12/20/21 06:32	1
d7-N-MeFOSE-M	71		10 - 150	12/16/21 04:53	12/20/21 06:32	1
d9-N-EtFOSE-M	75		10 - 150	12/16/21 04:53	12/20/21 06:32	1
M2-4:2 FTS	54		25 - 150	12/16/21 04:53	12/20/21 06:32	1
M2-6:2 FTS	67		25 - 150	12/16/21 04:53	12/20/21 06:32	1
M2-8:2 FTS	63		25 - 150	12/16/21 04:53	12/20/21 06:32	1
13C3 HFPO-DA	64		25 - 150	12/16/21 04:53	12/20/21 06:32	1
13C2 10:2 FTS	74		25 - 150	12/16/21 04:53	12/20/21 06:32	1

Client: Ramboll US Corporation
Job ID: 500-209563-1
Project/Site: Former Mirro Plant No 9 - 1690019647

Client Sample ID: EB-01
Lab Sample ID: 500-209564-2
Date Collected: 12/09/21 12:45
Matrix: Water
Date Received: 12/10/21 10:30

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.15		0.50	0.15	ug/L			12/22/21 16:33	1
Bromobenzene	<0.36		1.0	0.36	ug/L			12/22/21 16:33	1
Bromochloromethane	<0.43		1.0	0.43	ug/L			12/22/21 16:33	1
Bromodichloromethane	<0.37		1.0	0.37	ug/L			12/22/21 16:33	1
Bromoform	<0.48		1.0	0.48	ug/L			12/22/21 16:33	1
Bromomethane	<0.80		3.0	0.80	ug/L			12/22/21 16:33	1
Carbon tetrachloride	<0.38		1.0	0.38	ug/L			12/22/21 16:33	1
Chlorobenzene	<0.39		1.0	0.39	ug/L			12/22/21 16:33	1
Chloroethane	<0.51		1.0	0.51	ug/L			12/22/21 16:33	1
Chloroform	<0.37		2.0	0.37	ug/L			12/22/21 16:33	1
Chloromethane	<0.32		1.0	0.32	ug/L			12/22/21 16:33	1
2-Chlorotoluene	<0.31		1.0	0.31	ug/L			12/22/21 16:33	1
4-Chlorotoluene	<0.35		1.0	0.35	ug/L			12/22/21 16:33	1
cis-1,2-Dichloroethene	<0.41		1.0	0.41	ug/L			12/22/21 16:33	1
cis-1,3-Dichloropropene	<0.42		1.0	0.42	ug/L			12/22/21 16:33	1
Dibromochloromethane	<0.49		1.0	0.49	ug/L			12/22/21 16:33	1
1,2-Dibromo-3-Chloropropane	<2.0		5.0	2.0	ug/L			12/22/21 16:33	1
1,2-Dibromoethane	<0.39		1.0	0.39	ug/L			12/22/21 16:33	1
Dibromomethane	<0.27		1.0	0.27	ug/L			12/22/21 16:33	1
1,2-Dichlorobenzene	<0.33		1.0	0.33	ug/L			12/22/21 16:33	1
1,3-Dichlorobenzene	<0.40		1.0	0.40	ug/L			12/22/21 16:33	1
1,4-Dichlorobenzene	<0.36		1.0	0.36	ug/L			12/22/21 16:33	1
Dichlorodifluoromethane	<0.67		3.0	0.67	ug/L			12/22/21 16:33	1
1,1-Dichloroethane	<0.41		1.0	0.41	ug/L			12/22/21 16:33	1
1,2-Dichloroethane	<0.39		1.0	0.39	ug/L			12/22/21 16:33	1
1,1-Dichloroethene	<0.39		1.0	0.39	ug/L			12/22/21 16:33	1
1,2-Dichloropropane	<0.43		1.0	0.43	ug/L			12/22/21 16:33	1
1,3-Dichloropropane	<0.36		1.0	0.36	ug/L			12/22/21 16:33	1
2,2-Dichloropropane	<0.44		1.0	0.44	ug/L			12/22/21 16:33	1
1,1-Dichloropropene	<0.30		1.0	0.30	ug/L			12/22/21 16:33	1
Ethylbenzene	<0.18		0.50	0.18	ug/L			12/22/21 16:33	1
Hexachlorobutadiene	<0.45		1.0	0.45	ug/L			12/22/21 16:33	1
Isopropylbenzene	<0.39		1.0	0.39	ug/L			12/22/21 16:33	1
Isopropyl ether	<0.28		1.0	0.28	ug/L			12/22/21 16:33	1
Methylene Chloride	<1.6		5.0	1.6	ug/L			12/22/21 16:33	1
Methyl tert-butyl ether	<0.39		1.0	0.39	ug/L			12/22/21 16:33	1
Naphthalene	<0.34		1.0	0.34	ug/L			12/22/21 16:33	1
n-Butylbenzene	<0.39		1.0	0.39	ug/L			12/22/21 16:33	1
N-Propylbenzene	<0.41		1.0	0.41	ug/L			12/22/21 16:33	1
p-Isopropyltoluene	<0.36		1.0	0.36	ug/L			12/22/21 16:33	1
sec-Butylbenzene	<0.40		1.0	0.40	ug/L			12/22/21 16:33	1
Styrene	<0.39		1.0	0.39	ug/L			12/22/21 16:33	1
tert-Butylbenzene	<0.40		1.0	0.40	ug/L			12/22/21 16:33	1
1,1,1,2-Tetrachloroethane	<0.46		1.0	0.46	ug/L			12/22/21 16:33	1
1,1,2,2-Tetrachloroethane	<0.40		1.0	0.40	ug/L			12/22/21 16:33	1
Tetrachloroethene	<0.37		1.0	0.37	ug/L			12/22/21 16:33	1
Toluene	<0.15		0.50	0.15	ug/L			12/22/21 16:33	1
trans-1,2-Dichloroethene	<0.35		1.0	0.35	ug/L			12/22/21 16:33	1
trans-1,3-Dichloropropene	<0.36		1.0	0.36	ug/L			12/22/21 16:33	1

Client: Ramboll US Corporation
Job ID: 500-209563-1
Project/Site: Former Mirro Plant No 9 - 1690019647

Client Sample ID: EB-01
Lab Sample ID: 500-209564-2
Date Collected: 12/09/21 12:45
Matrix: Water
Date Received: 12/10/21 10:30

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,3-Trichlorobenzene	<0.46		1.0	0.46	ug/L			12/22/21 16:33	1
1,2,4-Trichlorobenzene	<0.34		1.0	0.34	ug/L			12/22/21 16:33	1
1,1,1-Trichloroethane	<0.38		1.0	0.38	ug/L			12/22/21 16:33	1
1,1,2-Trichloroethane	<0.35		1.0	0.35	ug/L			12/22/21 16:33	1
Trichloroethene	<0.16		0.50	0.16	ug/L			12/22/21 16:33	1
Trichlorofluoromethane	<0.43		1.0	0.43	ug/L			12/22/21 16:33	1
1,2,3-Trichloropropane	<0.41		2.0	0.41	ug/L			12/22/21 16:33	1
1,2,4-Trimethylbenzene	<0.36		1.0	0.36	ug/L			12/22/21 16:33	1
1,3,5-Trimethylbenzene	<0.25		1.0	0.25	ug/L			12/22/21 16:33	1
Vinyl chloride	<0.20		1.0	0.20	ug/L			12/22/21 16:33	1
Xylenes, Total	<0.22		1.0	0.22	ug/L			12/22/21 16:33	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*83*		*72 - 124*		*12/22/21 16:33*	*1*
Dibromofluoromethane (Surr)	*90*		*75 - 120*		*12/22/21 16:33*	*1*
1,2-Dichloroethane-d4 (Surr)	*86*		*75 - 126*		*12/22/21 16:33*	*1*
Toluene-d8 (Surr)	*95*		*75 - 120*		*12/22/21 16:33*	*1*

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	<0.26		0.85	0.26	ug/L		12/15/21 07:23	12/16/21 16:54	1
Acenaphthylene	<0.23		0.85	0.23	ug/L		12/15/21 07:23	12/16/21 16:54	1
Anthracene	<0.28		0.85	0.28	ug/L		12/15/21 07:23	12/16/21 16:54	1
Benzo[a]anthracene	<0.048		0.17	0.048	ug/L		12/15/21 07:23	12/16/21 16:54	1
Benzo[a]pyrene	<0.084		0.17	0.084	ug/L		12/15/21 07:23	12/16/21 16:54	1
Benzo[b]fluoranthene	<0.069		0.17	0.069	ug/L		12/15/21 07:23	12/16/21 16:54	1
Benzo[g,h,i]perylene	<0.32		0.85	0.32	ug/L		12/15/21 07:23	12/16/21 16:54	1
Benzo[k]fluoranthene	<0.055		0.17	0.055	ug/L		12/15/21 07:23	12/16/21 16:54	1
Chrysene	<0.058		0.17	0.058	ug/L		12/15/21 07:23	12/16/21 16:54	1
Dibenz(a,h)anthracene	<0.043		0.26	0.043	ug/L		12/15/21 07:23	12/16/21 16:54	1
Fluoranthene	<0.39		0.85	0.39	ug/L		12/15/21 07:23	12/16/21 16:54	1
Fluorene	<0.21		0.85	0.21	ug/L		12/15/21 07:23	12/16/21 16:54	1
Indeno[1,2,3-cd]pyrene	<0.064		0.17	0.064	ug/L		12/15/21 07:23	12/16/21 16:54	1
1-Methylnaphthalene	<0.26		1.7	0.26	ug/L		12/15/21 07:23	12/16/21 16:54	1
2-Methylnaphthalene	<0.056		1.7	0.056	ug/L		12/15/21 07:23	12/16/21 16:54	1
Naphthalene	<0.26		0.85	0.26	ug/L		12/15/21 07:23	12/16/21 16:54	1
Phenanthrene	<0.26		0.85	0.26	ug/L		12/15/21 07:23	12/16/21 16:54	1
Pyrene	<0.36		0.85	0.36	ug/L		12/15/21 07:23	12/16/21 16:54	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*67*		*34 - 110*	*12/15/21 07:23*	*12/16/21 16:54*	*1*
Nitrobenzene-d5 (Surr)	*62*		*36 - 120*	*12/15/21 07:23*	*12/16/21 16:54*	*1*
Terphenyl-d14 (Surr)	*86*		*40 - 145*	*12/15/21 07:23*	*12/16/21 16:54*	*1*

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<0.075		0.45	0.075	ug/L		12/13/21 09:44	12/14/21 10:53	1
PCB-1221	<0.22		0.45	0.22	ug/L		12/13/21 09:44	12/14/21 10:53	1
PCB-1232	<0.22		0.45	0.22	ug/L		12/13/21 09:44	12/14/21 10:53	1
PCB-1242	<0.22		0.45	0.22	ug/L		12/13/21 09:44	12/14/21 10:53	1

Client Sample ID: EB-01
Lab Sample ID: 500-209564-2
Date Collected: 12/09/21 12:45
Matrix: Water
Date Received: 12/10/21 10:30

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1248	<0.22		0.45	0.22	ug/L		12/13/21 09:44	12/14/21 10:53	1
PCB-1254	<0.22		0.45	0.22	ug/L		12/13/21 09:44	12/14/21 10:53	1
PCB-1260	<0.079		0.45	0.079	ug/L		12/13/21 09:44	12/14/21 10:53	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*85*		*30 - 120*	*12/13/21 09:44*	*12/14/21 10:53*	*1*
DCB Decachlorobiphenyl	*75*		*30 - 140*	*12/13/21 09:44*	*12/14/21 10:53*	*1*

Method: 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	<2.4		4.9	2.4	ng/L		12/16/21 04:53	12/20/21 06:43	1
Perfluoropentanoic acid (PFPeA)	<0.48		2.0	0.48	ng/L		12/16/21 04:53	12/20/21 06:43	1
Perfluorohexanoic acid (PFHxA)	<0.57		2.0	0.57	ng/L		12/16/21 04:53	12/20/21 06:43	1
Perfluoroheptanoic acid (PFHpA)	<0.25		2.0	0.25	ng/L		12/16/21 04:53	12/20/21 06:43	1
Perfluorooctanoic acid (PFOA)	<0.84		2.0	0.84	ng/L		12/16/21 04:53	12/20/21 06:43	1
Perfluorononanoic acid (PFNA)	<0.27		2.0	0.27	ng/L		12/16/21 04:53	12/20/21 06:43	1
Perfluorodecanoic acid (PFDA)	<0.31		2.0	0.31	ng/L		12/16/21 04:53	12/20/21 06:43	1
Perfluoroundecanoic acid (PFUnA)	<1.1		2.0	1.1	ng/L		12/16/21 04:53	12/20/21 06:43	1
Perfluorododecanoic acid (PFDoA)	<0.54		2.0	0.54	ng/L		12/16/21 04:53	12/20/21 06:43	1
Perfluorotridecanoic acid (PFTriA)	<1.3		2.0	1.3	ng/L		12/16/21 04:53	12/20/21 06:43	1
Perfluorotetradecanoic acid (PFTeA)	<0.72		2.0	0.72	ng/L		12/16/21 04:53	12/20/21 06:43	1
Perfluorobutanesulfonic acid (PFBS)	<0.20		2.0	0.20	ng/L		12/16/21 04:53	12/20/21 06:43	1
Perfluoropentanesulfonic acid (PFPeS)	<0.30		2.0	0.30	ng/L		12/16/21 04:53	12/20/21 06:43	1
Perfluorohexanesulfonic acid (PFHxS)	<0.56		2.0	0.56	ng/L		12/16/21 04:53	12/20/21 06:43	1
Perfluoroheptanesulfonic Acid (PFHpS)	<0.19		2.0	0.19	ng/L		12/16/21 04:53	12/20/21 06:43	1
Perfluorooctanesulfonic acid (PFOS)	<0.53		2.0	0.53	ng/L		12/16/21 04:53	12/20/21 06:43	1
Perfluorononanesulfonic acid (PFNS)	<0.37		2.0	0.37	ng/L		12/16/21 04:53	12/20/21 06:43	1
Perfluorodecanesulfonic acid (PFDS)	<0.32		2.0	0.32	ng/L		12/16/21 04:53	12/20/21 06:43	1
Perfluorododecanesulfonic acid (PFDoS)	<0.96		2.0	0.96	ng/L		12/16/21 04:53	12/20/21 06:43	1
Perfluorooctanesulfonamide (FOSA)	<0.97		2.0	0.97	ng/L		12/16/21 04:53	12/20/21 06:43	1
NEtFOSA	<0.86		2.0	0.86	ng/L		12/16/21 04:53	12/20/21 06:43	1
NMeFOSA	<0.42		2.0	0.42	ng/L		12/16/21 04:53	12/20/21 06:43	1
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	<1.2		4.9	1.2	ng/L		12/16/21 04:53	12/20/21 06:43	1
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	<1.3		4.9	1.3	ng/L		12/16/21 04:53	12/20/21 06:43	1
NMeFOSE	<1.4		4.0	1.4	ng/L		12/16/21 04:53	12/20/21 06:43	1
NEtFOSE	<0.84		2.0	0.84	ng/L		12/16/21 04:53	12/20/21 06:43	1
4:2 FTS	<0.24		2.0	0.24	ng/L		12/16/21 04:53	12/20/21 06:43	1
6:2 FTS	<2.5		4.9	2.5	ng/L		12/16/21 04:53	12/20/21 06:43	1
8:2 FTS	<0.45		2.0	0.45	ng/L		12/16/21 04:53	12/20/21 06:43	1
DONA	<0.40		2.0	0.40	ng/L		12/16/21 04:53	12/20/21 06:43	1
HFPO-DA (GenX)	<1.5		4.0	1.5	ng/L		12/16/21 04:53	12/20/21 06:43	1
F-53B Major	<0.24		2.0	0.24	ng/L		12/16/21 04:53	12/20/21 06:43	1
F-53B Minor	<0.32		2.0	0.32	ng/L		12/16/21 04:53	12/20/21 06:43	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C4 PFBA	*90*		*25 - 150*	*12/16/21 04:53*	*12/20/21 06:43*	*1*
13C5 PFPeA	*86*		*25 - 150*	*12/16/21 04:53*	*12/20/21 06:43*	*1*

Client Sample ID: EB-01
Date Collected: 12/09/21 12:45
Date Received: 12/10/21 10:30

Lab Sample ID: 500-209564-2
Matrix: Water

Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C2 PFHxA	71		25 - 150	12/16/21 04:53	12/20/21 06:43	1
13C4 PFHpA	75		25 - 150	12/16/21 04:53	12/20/21 06:43	1
13C4 PFOA	99		25 - 150	12/16/21 04:53	12/20/21 06:43	1
13C5 PFNA	103		25 - 150	12/16/21 04:53	12/20/21 06:43	1
13C2 PFDA	93		25 - 150	12/16/21 04:53	12/20/21 06:43	1
13C2 PFUnA	92		25 - 150	12/16/21 04:53	12/20/21 06:43	1
13C2 PFDoA	108		25 - 150	12/16/21 04:53	12/20/21 06:43	1
13C2 PFTeDA	114		25 - 150	12/16/21 04:53	12/20/21 06:43	1
13C3 PFBS	86		25 - 150	12/16/21 04:53	12/20/21 06:43	1
18O2 PFHxS	77		25 - 150	12/16/21 04:53	12/20/21 06:43	1
13C4 PFOS	93		25 - 150	12/16/21 04:53	12/20/21 06:43	1
13C8 FOSA	82		10 - 150	12/16/21 04:53	12/20/21 06:43	1
d3-NMeFOSAA	81		25 - 150	12/16/21 04:53	12/20/21 06:43	1
d5-NEtFOSAA	85		25 - 150	12/16/21 04:53	12/20/21 06:43	1
d-N-MeFOSA-M	79		10 - 150	12/16/21 04:53	12/20/21 06:43	1
d-N-EtFOSA-M	78		10 - 150	12/16/21 04:53	12/20/21 06:43	1
d7-N-MeFOSE-M	85		10 - 150	12/16/21 04:53	12/20/21 06:43	1
d9-N-EtFOSE-M	86		10 - 150	12/16/21 04:53	12/20/21 06:43	1
M2-4:2 FTS	67		25 - 150	12/16/21 04:53	12/20/21 06:43	1
M2-6:2 FTS	76		25 - 150	12/16/21 04:53	12/20/21 06:43	1
M2-8:2 FTS	76		25 - 150	12/16/21 04:53	12/20/21 06:43	1
13C3 HFPO-DA	79		25 - 150	12/16/21 04:53	12/20/21 06:43	1
13C2 10:2 FTS	103		25 - 150	12/16/21 04:53	12/20/21 06:43	1

Method: 6020A - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	<25		100	25	ug/L		12/21/21 09:30	12/21/21 22:54	1
Antimony	<1.3		3.0	1.3	ug/L		12/21/21 09:30	12/21/21 22:54	1
Arsenic	**0.50**	**J ^+ B**	1.0	0.23	ug/L		12/21/21 09:30	12/21/21 22:54	1
Barium	<0.73		2.5	0.73	ug/L		12/21/21 09:30	12/21/21 22:54	1
Cadmium	<0.17		0.50	0.17	ug/L		12/21/21 09:30	12/21/21 22:54	1
Chromium	<1.1		5.0	1.1	ug/L		12/21/21 09:30	12/21/21 22:54	1
Copper	<0.50		2.0	0.50	ug/L		12/21/21 09:30	12/21/21 22:54	1
Iron	<47		100	47	ug/L		12/21/21 09:30	12/21/21 22:54	1
Lead	<0.19		0.50	0.19	ug/L		12/21/21 09:30	12/21/21 22:54	1
Manganese	<0.79		2.5	0.79	ug/L		12/21/21 09:30	12/21/21 22:54	1
Nickel	<0.63		2.0	0.63	ug/L		12/21/21 09:30	12/21/21 22:54	1
Selenium	<0.98		2.5	0.98	ug/L		12/21/21 09:30	12/21/21 22:54	1
Silver	<0.12		0.50	0.12	ug/L		12/21/21 09:30	12/21/21 22:54	1
Thallium	<0.57		2.0	0.57	ug/L		12/21/21 09:30	12/21/21 22:54	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.098		0.20	0.098	ug/L		12/16/21 10:45	12/17/21 08:55	1

Client: Ramboll US Corporation
Job ID: 500-209563-1
Project/Site: Former Mirro Plant No 9 - 1690019647

Client Sample ID: Trip Blank
Lab Sample ID: 500-209564-3
Date Collected: 12/09/21 00:00
Matrix: Water
Date Received: 12/10/21 10:30

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.15		0.50	0.15	ug/L			12/22/21 14:16	1
Bromobenzene	<0.36		1.0	0.36	ug/L			12/22/21 14:16	1
Bromochloromethane	<0.43		1.0	0.43	ug/L			12/22/21 14:16	1
Bromodichloromethane	<0.37		1.0	0.37	ug/L			12/22/21 14:16	1
Bromoform	<0.48		1.0	0.48	ug/L			12/22/21 14:16	1
Bromomethane	<0.80		3.0	0.80	ug/L			12/22/21 14:16	1
Carbon tetrachloride	<0.38		1.0	0.38	ug/L			12/22/21 14:16	1
Chlorobenzene	<0.39		1.0	0.39	ug/L			12/22/21 14:16	1
Chloroethane	<0.51		1.0	0.51	ug/L			12/22/21 14:16	1
Chloroform	<0.37		2.0	0.37	ug/L			12/22/21 14:16	1
Chloromethane	<0.32		1.0	0.32	ug/L			12/22/21 14:16	1
2-Chlorotoluene	<0.31		1.0	0.31	ug/L			12/22/21 14:16	1
4-Chlorotoluene	<0.35		1.0	0.35	ug/L			12/22/21 14:16	1
cis-1,2-Dichloroethene	<0.41		1.0	0.41	ug/L			12/22/21 14:16	1
cis-1,3-Dichloropropene	<0.42		1.0	0.42	ug/L			12/22/21 14:16	1
Dibromochloromethane	<0.49		1.0	0.49	ug/L			12/22/21 14:16	1
1,2-Dibromo-3-Chloropropane	<2.0		5.0	2.0	ug/L			12/22/21 14:16	1
1,2-Dibromoethane	<0.39		1.0	0.39	ug/L			12/22/21 14:16	1
Dibromomethane	<0.27		1.0	0.27	ug/L			12/22/21 14:16	1
1,2-Dichlorobenzene	<0.33		1.0	0.33	ug/L			12/22/21 14:16	1
1,3-Dichlorobenzene	<0.40		1.0	0.40	ug/L			12/22/21 14:16	1
1,4-Dichlorobenzene	<0.36		1.0	0.36	ug/L			12/22/21 14:16	1
Dichlorodifluoromethane	<0.67		3.0	0.67	ug/L			12/22/21 14:16	1
1,1-Dichloroethane	<0.41		1.0	0.41	ug/L			12/22/21 14:16	1
1,2-Dichloroethane	<0.39		1.0	0.39	ug/L			12/22/21 14:16	1
1,1-Dichloroethene	<0.39		1.0	0.39	ug/L			12/22/21 14:16	1
1,2-Dichloropropane	<0.43		1.0	0.43	ug/L			12/22/21 14:16	1
1,3-Dichloropropane	<0.36		1.0	0.36	ug/L			12/22/21 14:16	1
2,2-Dichloropropane	<0.44		1.0	0.44	ug/L			12/22/21 14:16	1
1,1-Dichloropropene	<0.30		1.0	0.30	ug/L			12/22/21 14:16	1
Ethylbenzene	<0.18		0.50	0.18	ug/L			12/22/21 14:16	1
Hexachlorobutadiene	<0.45		1.0	0.45	ug/L			12/22/21 14:16	1
Isopropylbenzene	<0.39		1.0	0.39	ug/L			12/22/21 14:16	1
Isopropyl ether	<0.28		1.0	0.28	ug/L			12/22/21 14:16	1
Methylene Chloride	<1.6		5.0	1.6	ug/L			12/22/21 14:16	1
Methyl tert-butyl ether	<0.39		1.0	0.39	ug/L			12/22/21 14:16	1
Naphthalene	<0.34		1.0	0.34	ug/L			12/22/21 14:16	1
n-Butylbenzene	<0.39		1.0	0.39	ug/L			12/22/21 14:16	1
N-Propylbenzene	<0.41		1.0	0.41	ug/L			12/22/21 14:16	1
p-Isopropyltoluene	<0.36		1.0	0.36	ug/L			12/22/21 14:16	1
sec-Butylbenzene	<0.40		1.0	0.40	ug/L			12/22/21 14:16	1
Styrene	<0.39		1.0	0.39	ug/L			12/22/21 14:16	1
tert-Butylbenzene	<0.40		1.0	0.40	ug/L			12/22/21 14:16	1
1,1,1,2-Tetrachloroethane	<0.46		1.0	0.46	ug/L			12/22/21 14:16	1
1,1,2,2-Tetrachloroethane	<0.40		1.0	0.40	ug/L			12/22/21 14:16	1
Tetrachloroethene	<0.37		1.0	0.37	ug/L			12/22/21 14:16	1
Toluene	<0.15		0.50	0.15	ug/L			12/22/21 14:16	1
trans-1,2-Dichloroethene	<0.35		1.0	0.35	ug/L			12/22/21 14:16	1
trans-1,3-Dichloropropene	<0.36		1.0	0.36	ug/L			12/22/21 14:16	1

Client: Ramboll US Corporation
Job ID: 500-209563-1
Project/Site: Former Mirro Plant No 9 - 1690019647

Client Sample ID: Trip Blank
Lab Sample ID: 500-209564-3
Date Collected: 12/09/21 00:00
Matrix: Water
Date Received: 12/10/21 10:30

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,3-Trichlorobenzene	<0.46		1.0	0.46	ug/L			12/22/21 14:16	1
1,2,4-Trichlorobenzene	<0.34		1.0	0.34	ug/L			12/22/21 14:16	1
1,1,1-Trichloroethane	<0.38		1.0	0.38	ug/L			12/22/21 14:16	1
1,1,2-Trichloroethane	<0.35		1.0	0.35	ug/L			12/22/21 14:16	1
Trichloroethene	<0.16		0.50	0.16	ug/L			12/22/21 14:16	1
Trichlorofluoromethane	<0.43		1.0	0.43	ug/L			12/22/21 14:16	1
1,2,3-Trichloropropane	<0.41		2.0	0.41	ug/L			12/22/21 14:16	1
1,2,4-Trimethylbenzene	<0.36		1.0	0.36	ug/L			12/22/21 14:16	1
1,3,5-Trimethylbenzene	<0.25		1.0	0.25	ug/L			12/22/21 14:16	1
Vinyl chloride	<0.20		1.0	0.20	ug/L			12/22/21 14:16	1
Xylenes, Total	<0.22		1.0	0.22	ug/L			12/22/21 14:16	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*82*		*72 - 124*		*12/22/21 14:16*	*1*
Dibromofluoromethane (Surr)	*89*		*75 - 120*		*12/22/21 14:16*	*1*
1,2-Dichloroethane-d4 (Surr)	*84*		*75 - 126*		*12/22/21 14:16*	*1*
Toluene-d8 (Surr)	*94*		*75 - 120*		*12/22/21 14:16*	*1*

Definitions/Glossary

Client: Ramboll US Corporation
Job ID: 500-209563-1
Project/Site: Former Mirro Plant No 9 - 1690019647

Qualifiers

LCMS

Qualifier	Qualifier Description
I	Value is EMPC (estimated maximum possible concentration).
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Metals

Qualifier	Qualifier Description
^+	Continuing Calibration Verification (CCV) is outside acceptance limits, high biased.
B	Compound was found in the blank and sample.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

GC/MS VOA

Analysis Batch: 634922

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-209564-2	EB-01	Total/NA	Water	8260B	
500-209564-3	Trip Blank	Total/NA	Water	8260B	
MB 500-634922/6	Method Blank	Total/NA	Water	8260B	
LCS 500-634922/4	Lab Control Sample	Total/NA	Water	8260B	

GC/MS Semi VOA

Prep Batch: 633730

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-209564-2	EB-01	Total/NA	Water	3510C	
MB 500-633730/1-A	Method Blank	Total/NA	Water	3510C	
LCS 500-633730/2-A	Lab Control Sample	Total/NA	Water	3510C	

Analysis Batch: 633806

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 500-633730/1-A	Method Blank	Total/NA	Water	8270D	633730
LCS 500-633730/2-A	Lab Control Sample	Total/NA	Water	8270D	633730

Analysis Batch: 634033

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-209564-2	EB-01	Total/NA	Water	8270D	633730

GC Semi VOA

Prep Batch: 633372

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-209564-2	EB-01	Total/NA	Water	3510C	
MB 500-633372/1-A	Method Blank	Total/NA	Water	3510C	
LCS 500-633372/4-A	Lab Control Sample	Total/NA	Water	3510C	
LCSD 500-633372/5-A	Lab Control Sample Dup	Total/NA	Water	3510C	

Analysis Batch: 633459

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-209564-2	EB-01	Total/NA	Water	8082A	633372
MB 500-633372/1-A	Method Blank	Total/NA	Water	8082A	633372
LCS 500-633372/4-A	Lab Control Sample	Total/NA	Water	8082A	633372
LCSD 500-633372/5-A	Lab Control Sample Dup	Total/NA	Water	8082A	633372

LCMS

Prep Batch: 551272

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-209563-1	MW-200	Total/NA	Water	3535	
500-209564-1	FB-01	Total/NA	Water	3535	
500-209564-2	EB-01	Total/NA	Water	3535	
MB 320-551272/1-A	Method Blank	Total/NA	Water	3535	
LCS 320-551272/2-A	Lab Control Sample	Total/NA	Water	3535	
LCSD 320-551272/3-A	Lab Control Sample Dup	Total/NA	Water	3535	

Analysis Batch: 552303

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-209563-1	MW-200	Total/NA	Water	537 (modified)	551272

LCMS (Continued)

Analysis Batch: 552303 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-209564-1	FB-01	Total/NA	Water	537 (modified)	551272
500-209564-2	EB-01	Total/NA	Water	537 (modified)	551272
MB 320-551272/1-A	Method Blank	Total/NA	Water	537 (modified)	551272
LCS 320-551272/2-A	Lab Control Sample	Total/NA	Water	537 (modified)	551272
LCSD 320-551272/3-A	Lab Control Sample Dup	Total/NA	Water	537 (modified)	551272

Metals

Prep Batch: 634059

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-209564-2	EB-01	Dissolved	Water	7470A	
MB 500-634059/12-A	Method Blank	Total/NA	Water	7470A	
LCS 500-634059/13-A	Lab Control Sample	Total/NA	Water	7470A	

Analysis Batch: 634283

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-209564-2	EB-01	Dissolved	Water	7470A	634059
MB 500-634059/12-A	Method Blank	Total/NA	Water	7470A	634059
LCS 500-634059/13-A	Lab Control Sample	Total/NA	Water	7470A	634059

Prep Batch: 634757

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-209564-2	EB-01	Dissolved	Water	3005A	
MB 500-634757/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 500-634757/2-A	Lab Control Sample	Total Recoverable	Water	3005A	

Analysis Batch: 634985

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-209564-2	EB-01	Dissolved	Water	6020A	634757
MB 500-634757/1-A	Method Blank	Total Recoverable	Water	6020A	634757
LCS 500-634757/2-A	Lab Control Sample	Total Recoverable	Water	6020A	634757

Surrogate Summary

Client: Ramboll US Corporation
Project/Site: Former Mirro Plant No 9 - 1690019647

Job ID: 500-209563-1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Matrix: Water — **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)			
		BFB	DBFM	DCA	TOL
Lab Sample ID	Client Sample ID	(72-124)	(75-120)	(75-126)	(75-120)
500-209564-2	EB-01	83	90	86	95
500-209564-3	Trip Blank	82	89	84	94
LCS 500-634922/4	Lab Control Sample	83	93	85	96
MB 500-634922/6	Method Blank	84	91	86	93

Surrogate Legend

BFB = 4-Bromofluorobenzene (Surr)
DBFM = Dibromofluoromethane (Surr)
DCA = 1,2-Dichloroethane-d4 (Surr)
TOL = Toluene-d8 (Surr)

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Matrix: Water — **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)		
		FBP	NBZ	TPHL
Lab Sample ID	Client Sample ID	(34-110)	(36-120)	(40-145)
500-209564-2	EB-01	67	62	86
LCS 500-633730/2-A	Lab Control Sample	72	74	101
MB 500-633730/1-A	Method Blank	72	70	121

Surrogate Legend

FBP = 2-Fluorobiphenyl (Surr)
NBZ = Nitrobenzene-d5 (Surr)
TPHL = Terphenyl-d14 (Surr)

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Matrix: Water — **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)	
		TCX1	DCBP1
Lab Sample ID	Client Sample ID	(30-120)	(30-140)
500-209564-2	EB-01	85	75
LCS 500-633372/4-A	Lab Control Sample	75	78
LCSD 500-633372/5-A	Lab Control Sample Dup	78	78
MB 500-633372/1-A	Method Blank	83	78

Surrogate Legend

TCX = Tetrachloro-m-xylene
DCBP = DCB Decachlorobiphenyl

Method: 8260B - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 500-634922/6
Matrix: Water
Analysis Batch: 634922

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.15		0.50	0.15	ug/L			12/22/21 13:49	1
Bromobenzene	<0.36		1.0	0.36	ug/L			12/22/21 13:49	1
Bromochloromethane	<0.43		1.0	0.43	ug/L			12/22/21 13:49	1
Bromodichloromethane	<0.37		1.0	0.37	ug/L			12/22/21 13:49	1
Bromoform	<0.48		1.0	0.48	ug/L			12/22/21 13:49	1
Bromomethane	<0.80		3.0	0.80	ug/L			12/22/21 13:49	1
Carbon tetrachloride	<0.38		1.0	0.38	ug/L			12/22/21 13:49	1
Chlorobenzene	<0.39		1.0	0.39	ug/L			12/22/21 13:49	1
Chloroethane	<0.51		1.0	0.51	ug/L			12/22/21 13:49	1
Chloroform	<0.37		2.0	0.37	ug/L			12/22/21 13:49	1
Chloromethane	<0.32		1.0	0.32	ug/L			12/22/21 13:49	1
2-Chlorotoluene	<0.31		1.0	0.31	ug/L			12/22/21 13:49	1
4-Chlorotoluene	<0.35		1.0	0.35	ug/L			12/22/21 13:49	1
cis-1,2-Dichloroethene	<0.41		1.0	0.41	ug/L			12/22/21 13:49	1
cis-1,3-Dichloropropene	<0.42		1.0	0.42	ug/L			12/22/21 13:49	1
Dibromochloromethane	<0.49		1.0	0.49	ug/L			12/22/21 13:49	1
1,2-Dibromo-3-Chloropropane	<2.0		5.0	2.0	ug/L			12/22/21 13:49	1
1,2-Dibromoethane	<0.39		1.0	0.39	ug/L			12/22/21 13:49	1
Dibromomethane	<0.27		1.0	0.27	ug/L			12/22/21 13:49	1
1,2-Dichlorobenzene	<0.33		1.0	0.33	ug/L			12/22/21 13:49	1
1,3-Dichlorobenzene	<0.40		1.0	0.40	ug/L			12/22/21 13:49	1
1,4-Dichlorobenzene	<0.36		1.0	0.36	ug/L			12/22/21 13:49	1
Dichlorodifluoromethane	<0.67		3.0	0.67	ug/L			12/22/21 13:49	1
1,1-Dichloroethane	<0.41		1.0	0.41	ug/L			12/22/21 13:49	1
1,2-Dichloroethane	<0.39		1.0	0.39	ug/L			12/22/21 13:49	1
1,1-Dichloroethene	<0.39		1.0	0.39	ug/L			12/22/21 13:49	1
1,2-Dichloropropane	<0.43		1.0	0.43	ug/L			12/22/21 13:49	1
1,3-Dichloropropane	<0.36		1.0	0.36	ug/L			12/22/21 13:49	1
2,2-Dichloropropane	<0.44		1.0	0.44	ug/L			12/22/21 13:49	1
1,1-Dichloropropene	<0.30		1.0	0.30	ug/L			12/22/21 13:49	1
Ethylbenzene	<0.18		0.50	0.18	ug/L			12/22/21 13:49	1
Hexachlorobutadiene	<0.45		1.0	0.45	ug/L			12/22/21 13:49	1
Isopropylbenzene	<0.39		1.0	0.39	ug/L			12/22/21 13:49	1
Isopropyl ether	<0.28		1.0	0.28	ug/L			12/22/21 13:49	1
Methylene Chloride	<1.6		5.0	1.6	ug/L			12/22/21 13:49	1
Methyl tert-butyl ether	<0.39		1.0	0.39	ug/L			12/22/21 13:49	1
Naphthalene	<0.34		1.0	0.34	ug/L			12/22/21 13:49	1
n-Butylbenzene	<0.39		1.0	0.39	ug/L			12/22/21 13:49	1
N-Propylbenzene	<0.41		1.0	0.41	ug/L			12/22/21 13:49	1
p-Isopropyltoluene	<0.36		1.0	0.36	ug/L			12/22/21 13:49	1
sec-Butylbenzene	<0.40		1.0	0.40	ug/L			12/22/21 13:49	1
Styrene	<0.39		1.0	0.39	ug/L			12/22/21 13:49	1
tert-Butylbenzene	<0.40		1.0	0.40	ug/L			12/22/21 13:49	1
1,1,1,2-Tetrachloroethane	<0.46		1.0	0.46	ug/L			12/22/21 13:49	1
1,1,2,2-Tetrachloroethane	<0.40		1.0	0.40	ug/L			12/22/21 13:49	1
Tetrachloroethene	<0.37		1.0	0.37	ug/L			12/22/21 13:49	1
Toluene	<0.15		0.50	0.15	ug/L			12/22/21 13:49	1
trans-1,2-Dichloroethene	<0.35		1.0	0.35	ug/L			12/22/21 13:49	1

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

Lab Sample ID: MB 500-634922/6
Matrix: Water
Analysis Batch: 634922

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
trans-1,3-Dichloropropene	<0.36		1.0	0.36	ug/L			12/22/21 13:49	1
1,2,3-Trichlorobenzene	<0.46		1.0	0.46	ug/L			12/22/21 13:49	1
1,2,4-Trichlorobenzene	<0.34		1.0	0.34	ug/L			12/22/21 13:49	1
1,1,1-Trichloroethane	<0.38		1.0	0.38	ug/L			12/22/21 13:49	1
1,1,2-Trichloroethane	<0.35		1.0	0.35	ug/L			12/22/21 13:49	1
Trichloroethene	<0.16		0.50	0.16	ug/L			12/22/21 13:49	1
Trichlorofluoromethane	<0.43		1.0	0.43	ug/L			12/22/21 13:49	1
1,2,3-Trichloropropane	<0.41		2.0	0.41	ug/L			12/22/21 13:49	1
1,2,4-Trimethylbenzene	<0.36		1.0	0.36	ug/L			12/22/21 13:49	1
1,3,5-Trimethylbenzene	<0.25		1.0	0.25	ug/L			12/22/21 13:49	1
Vinyl chloride	<0.20		1.0	0.20	ug/L			12/22/21 13:49	1
Xylenes, Total	<0.22		1.0	0.22	ug/L			12/22/21 13:49	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*84*		*72 - 124*		*12/22/21 13:49*	*1*
Dibromofluoromethane (Surr)	*91*		*75 - 120*		*12/22/21 13:49*	*1*
1,2-Dichloroethane-d4 (Surr)	*86*		*75 - 126*		*12/22/21 13:49*	*1*
Toluene-d8 (Surr)	*93*		*75 - 120*		*12/22/21 13:49*	*1*

Lab Sample ID: LCS 500-634922/4
Matrix: Water
Analysis Batch: 634922

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	50.0	47.3		ug/L		95	70 - 120
Bromobenzene	50.0	39.8		ug/L		80	70 - 122
Bromochloromethane	50.0	50.8		ug/L		102	65 - 122
Bromodichloromethane	50.0	38.7		ug/L		77	69 - 120
Bromoform	50.0	32.8		ug/L		66	56 - 132
Bromomethane	50.0	64.4		ug/L		129	40 - 152
Carbon tetrachloride	50.0	44.2		ug/L		88	59 - 133
Chlorobenzene	50.0	46.9		ug/L		94	70 - 120
Chloroethane	50.0	63.4		ug/L		127	48 - 136
Chloroform	50.0	44.0		ug/L		88	70 - 120
Chloromethane	50.0	50.2		ug/L		100	56 - 152
2-Chlorotoluene	50.0	44.0		ug/L		88	70 - 125
4-Chlorotoluene	50.0	42.5		ug/L		85	68 - 124
cis-1,2-Dichloroethene	50.0	48.4		ug/L		97	70 - 125
cis-1,3-Dichloropropene	50.0	36.7		ug/L		73	64 - 127
Dibromochloromethane	50.0	37.0		ug/L		74	68 - 125
1,2-Dibromo-3-Chloropropane	50.0	30.5		ug/L		61	56 - 123
1,2-Dibromoethane	50.0	40.9		ug/L		82	70 - 125
Dibromomethane	50.0	44.1		ug/L		88	70 - 120
1,2-Dichlorobenzene	50.0	45.4		ug/L		91	70 - 125
1,3-Dichlorobenzene	50.0	45.2		ug/L		90	70 - 125
1,4-Dichlorobenzene	50.0	44.8		ug/L		90	70 - 120
Dichlorodifluoromethane	50.0	56.0		ug/L		112	40 - 159
1,1-Dichloroethane	50.0	44.3		ug/L		89	70 - 125

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

Lab Sample ID: LCS 500-634922/4
Matrix: Water
Analysis Batch: 634922

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2-Dichloroethane	50.0	42.0		ug/L		84	68 - 127
1,1-Dichloroethene	50.0	52.4		ug/L		105	67 - 122
1,2-Dichloropropane	50.0	44.1		ug/L		88	67 - 130
1,3-Dichloropropane	50.0	40.0		ug/L		80	62 - 136
2,2-Dichloropropane	50.0	36.3		ug/L		73	58 - 139
1,1-Dichloropropene	50.0	44.4		ug/L		89	70 - 121
Ethylbenzene	50.0	50.1		ug/L		100	70 - 123
Hexachlorobutadiene	50.0	55.1		ug/L		110	51 - 150
Isopropylbenzene	50.0	47.0		ug/L		94	70 - 126
Methylene Chloride	50.0	49.4		ug/L		99	69 - 125
Methyl tert-butyl ether	50.0	29.0		ug/L		58	55 - 123
Naphthalene	50.0	53.4		ug/L		107	53 - 144
n-Butylbenzene	50.0	50.7		ug/L		101	68 - 125
N-Propylbenzene	50.0	44.7		ug/L		89	69 - 127
p-Isopropyltoluene	50.0	53.5		ug/L		107	70 - 125
sec-Butylbenzene	50.0	50.9		ug/L		102	70 - 123
Styrene	50.0	47.2		ug/L		94	70 - 120
tert-Butylbenzene	50.0	52.1		ug/L		104	70 - 121
1,1,1,2-Tetrachloroethane	50.0	46.8		ug/L		94	70 - 125
1,1,2,2-Tetrachloroethane	50.0	37.0		ug/L		74	62 - 140
Tetrachloroethene	50.0	48.4		ug/L		97	70 - 128
Toluene	50.0	47.2		ug/L		94	70 - 125
trans-1,2-Dichloroethene	50.0	48.3		ug/L		97	70 - 125
trans-1,3-Dichloropropene	50.0	32.6		ug/L		65	62 - 128
1,2,3-Trichlorobenzene	50.0	53.5		ug/L		107	51 - 145
1,2,4-Trichlorobenzene	50.0	50.3		ug/L		101	57 - 137
1,1,1-Trichloroethane	50.0	45.7		ug/L		91	70 - 125
1,1,2-Trichloroethane	50.0	42.8		ug/L		86	71 - 130
Trichloroethene	50.0	50.0		ug/L		100	70 - 125
Trichlorofluoromethane	50.0	44.9		ug/L		90	55 - 128
1,2,3-Trichloropropane	50.0	38.5		ug/L		77	50 - 133
1,2,4-Trimethylbenzene	50.0	47.6		ug/L		95	70 - 123
1,3,5-Trimethylbenzene	50.0	48.4		ug/L		97	70 - 123
Vinyl chloride	50.0	55.5		ug/L		111	64 - 126
Xylenes, Total	100	101		ug/L		101	70 - 125

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*83*		*72 - 124*
Dibromofluoromethane (Surr)	*93*		*75 - 120*
1,2-Dichloroethane-d4 (Surr)	*85*		*75 - 126*
Toluene-d8 (Surr)	*96*		*75 - 120*

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Lab Sample ID: MB 500-633730/1-A
Matrix: Water
Analysis Batch: 633806

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 633730

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	<0.25		0.80	0.25	ug/L		12/15/21 07:23	12/15/21 15:11	1
Acenaphthylene	<0.21		0.80	0.21	ug/L		12/15/21 07:23	12/15/21 15:11	1
Anthracene	<0.27		0.80	0.27	ug/L		12/15/21 07:23	12/15/21 15:11	1
Benzo[a]anthracene	<0.045		0.16	0.045	ug/L		12/15/21 07:23	12/15/21 15:11	1
Benzo[a]pyrene	<0.079		0.16	0.079	ug/L		12/15/21 07:23	12/15/21 15:11	1
Benzo[b]fluoranthene	<0.065		0.16	0.065	ug/L		12/15/21 07:23	12/15/21 15:11	1
Benzo[g,h,i]perylene	<0.30		0.80	0.30	ug/L		12/15/21 07:23	12/15/21 15:11	1
Benzo[k]fluoranthene	<0.051		0.16	0.051	ug/L		12/15/21 07:23	12/15/21 15:11	1
Chrysene	<0.055		0.16	0.055	ug/L		12/15/21 07:23	12/15/21 15:11	1
Dibenz(a,h)anthracene	<0.041		0.24	0.041	ug/L		12/15/21 07:23	12/15/21 15:11	1
Fluoranthene	<0.36		0.80	0.36	ug/L		12/15/21 07:23	12/15/21 15:11	1
Fluorene	<0.20		0.80	0.20	ug/L		12/15/21 07:23	12/15/21 15:11	1
Indeno[1,2,3-cd]pyrene	<0.060		0.16	0.060	ug/L		12/15/21 07:23	12/15/21 15:11	1
1-Methylnaphthalene	<0.24		1.6	0.24	ug/L		12/15/21 07:23	12/15/21 15:11	1
2-Methylnaphthalene	<0.052		1.6	0.052	ug/L		12/15/21 07:23	12/15/21 15:11	1
Naphthalene	<0.25		0.80	0.25	ug/L		12/15/21 07:23	12/15/21 15:11	1
Phenanthrene	<0.24		0.80	0.24	ug/L		12/15/21 07:23	12/15/21 15:11	1
Pyrene	<0.34		0.80	0.34	ug/L		12/15/21 07:23	12/15/21 15:11	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*72*		*34 - 110*	*12/15/21 07:23*	*12/15/21 15:11*	*1*
Nitrobenzene-d5 (Surr)	*70*		*36 - 120*	*12/15/21 07:23*	*12/15/21 15:11*	*1*
Terphenyl-d14 (Surr)	*121*		*40 - 145*	*12/15/21 07:23*	*12/15/21 15:11*	*1*

Lab Sample ID: LCS 500-633730/2-A
Matrix: Water
Analysis Batch: 633806

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 633730

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acenaphthene	32.0	22.9		ug/L		71	46 - 110
Acenaphthylene	32.0	25.5		ug/L		80	47 - 113
Anthracene	32.0	27.5		ug/L		86	67 - 118
Benzo[a]anthracene	32.0	28.5		ug/L		89	70 - 126
Benzo[a]pyrene	32.0	35.5		ug/L		111	70 - 135
Benzo[b]fluoranthene	32.0	31.5		ug/L		99	69 - 136
Benzo[g,h,i]perylene	32.0	23.7		ug/L		74	70 - 135
Benzo[k]fluoranthene	32.0	30.5		ug/L		95	70 - 133
Chrysene	32.0	29.6		ug/L		93	68 - 129
Dibenz(a,h)anthracene	32.0	25.4		ug/L		79	70 - 134
Fluoranthene	32.0	28.1		ug/L		88	68 - 126
Fluorene	32.0	24.2		ug/L		76	53 - 120
Indeno[1,2,3-cd]pyrene	32.0	26.8		ug/L		84	65 - 133
1-Methylnaphthalene	32.0	20.6		ug/L		64	38 - 110
2-Methylnaphthalene	32.0	21.6		ug/L		67	34 - 110
Naphthalene	32.0	20.8		ug/L		65	36 - 110
Phenanthrene	32.0	26.5		ug/L		83	65 - 120
Pyrene	32.0	29.4		ug/L		92	70 - 126

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 500-633730/2-A
Matrix: Water
Analysis Batch: 633806

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 633730

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2-Fluorobiphenyl (Surr)	*72*		*34 - 110*
Nitrobenzene-d5 (Surr)	*74*		*36 - 120*
Terphenyl-d14 (Surr)	*101*		*40 - 145*

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Lab Sample ID: MB 500-633372/1-A
Matrix: Water
Analysis Batch: 633459

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 633372

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<0.067		0.40	0.067	ug/L		12/13/21 09:44	12/14/21 08:44	1
PCB-1221	<0.20		0.40	0.20	ug/L		12/13/21 09:44	12/14/21 08:44	1
PCB-1232	<0.20		0.40	0.20	ug/L		12/13/21 09:44	12/14/21 08:44	1
PCB-1242	<0.20		0.40	0.20	ug/L		12/13/21 09:44	12/14/21 08:44	1
PCB-1248	<0.20		0.40	0.20	ug/L		12/13/21 09:44	12/14/21 08:44	1
PCB-1254	<0.20		0.40	0.20	ug/L		12/13/21 09:44	12/14/21 08:44	1
PCB-1260	<0.070		0.40	0.070	ug/L		12/13/21 09:44	12/14/21 08:44	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*83*		*30 - 120*	*12/13/21 09:44*	*12/14/21 08:44*	*1*
DCB Decachlorobiphenyl	*78*		*30 - 140*	*12/13/21 09:44*	*12/14/21 08:44*	*1*

Lab Sample ID: LCS 500-633372/4-A
Matrix: Water
Analysis Batch: 633459

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 633372

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
PCB-1016			4.00	4.07		ug/L		102	56 - 120		
PCB-1260			4.00	3.97		ug/L		99	53 - 137		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Tetrachloro-m-xylene	*75*		*30 - 120*
DCB Decachlorobiphenyl	*78*		*30 - 140*

Lab Sample ID: LCSD 500-633372/5-A
Matrix: Water
Analysis Batch: 633459

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 633372

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
PCB-1016			4.00	3.95		ug/L		99	56 - 120	3	20
PCB-1260			4.00	3.76		ug/L		94	53 - 137	5	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
Tetrachloro-m-xylene	*78*		*30 - 120*
DCB Decachlorobiphenyl	*78*		*30 - 140*

Method: 537 (modified) - Fluorinated Alkyl Substances

Lab Sample ID: MB 320-551272/1-A
Matrix: Water
Analysis Batch: 552303

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 551272

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	<2.4		5.0	2.4	ng/L		12/16/21 04:53	12/20/21 04:06	1
Perfluoropentanoic acid (PFPeA)	<0.49		2.0	0.49	ng/L		12/16/21 04:53	12/20/21 04:06	1
Perfluorohexanoic acid (PFHxA)	<0.58		2.0	0.58	ng/L		12/16/21 04:53	12/20/21 04:06	1
Perfluoroheptanoic acid (PFHpA)	<0.25		2.0	0.25	ng/L		12/16/21 04:53	12/20/21 04:06	1
Perfluorooctanoic acid (PFOA)	<0.85		2.0	0.85	ng/L		12/16/21 04:53	12/20/21 04:06	1
Perfluorononanoic acid (PFNA)	<0.27		2.0	0.27	ng/L		12/16/21 04:53	12/20/21 04:06	1
Perfluorodecanoic acid (PFDA)	<0.31		2.0	0.31	ng/L		12/16/21 04:53	12/20/21 04:06	1
Perfluoroundecanoic acid (PFUnA)	<1.1		2.0	1.1	ng/L		12/16/21 04:53	12/20/21 04:06	1
Perfluorododecanoic acid (PFDoA)	<0.55		2.0	0.55	ng/L		12/16/21 04:53	12/20/21 04:06	1
Perfluorotridecanoic acid (PFTriA)	<1.3		2.0	1.3	ng/L		12/16/21 04:53	12/20/21 04:06	1
Perfluorotetradecanoic acid (PFTeA)	<0.73		2.0	0.73	ng/L		12/16/21 04:53	12/20/21 04:06	1
Perfluorobutanesulfonic acid (PFBS)	<0.20		2.0	0.20	ng/L		12/16/21 04:53	12/20/21 04:06	1
Perfluoropentanesulfonic acid (PFPeS)	<0.30		2.0	0.30	ng/L		12/16/21 04:53	12/20/21 04:06	1
Perfluorohexanesulfonic acid (PFHxS)	<0.57		2.0	0.57	ng/L		12/16/21 04:53	12/20/21 04:06	1
Perfluoroheptanesulfonic Acid (PFHpS)	<0.19		2.0	0.19	ng/L		12/16/21 04:53	12/20/21 04:06	1
Perfluorooctanesulfonic acid (PFOS)	<0.54		2.0	0.54	ng/L		12/16/21 04:53	12/20/21 04:06	1
Perfluorononanesulfonic acid (PFNS)	<0.37		2.0	0.37	ng/L		12/16/21 04:53	12/20/21 04:06	1
Perfluorodecanesulfonic acid (PFDS)	<0.32		2.0	0.32	ng/L		12/16/21 04:53	12/20/21 04:06	1
Perfluorododecanesulfonic acid (PFDoS)	<0.97		2.0	0.97	ng/L		12/16/21 04:53	12/20/21 04:06	1
Perfluorooctanesulfonamide (FOSA)	<0.98		2.0	0.98	ng/L		12/16/21 04:53	12/20/21 04:06	1
NEtFOSA	<0.87		2.0	0.87	ng/L		12/16/21 04:53	12/20/21 04:06	1
NMeFOSA	<0.43		2.0	0.43	ng/L		12/16/21 04:53	12/20/21 04:06	1
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	<1.2		5.0	1.2	ng/L		12/16/21 04:53	12/20/21 04:06	1
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	<1.3		5.0	1.3	ng/L		12/16/21 04:53	12/20/21 04:06	1
NMeFOSE	2.89	J	4.0	1.4	ng/L		12/16/21 04:53	12/20/21 04:06	1
NEtFOSE	1.62	J	2.0	0.85	ng/L		12/16/21 04:53	12/20/21 04:06	1
4:2 FTS	<0.24		2.0	0.24	ng/L		12/16/21 04:53	12/20/21 04:06	1
6:2 FTS	<2.5		5.0	2.5	ng/L		12/16/21 04:53	12/20/21 04:06	1
8:2 FTS	<0.46		2.0	0.46	ng/L		12/16/21 04:53	12/20/21 04:06	1
DONA	<0.40		2.0	0.40	ng/L		12/16/21 04:53	12/20/21 04:06	1
HFPO-DA (GenX)	<1.5		4.0	1.5	ng/L		12/16/21 04:53	12/20/21 04:06	1
F-53B Major	<0.24		2.0	0.24	ng/L		12/16/21 04:53	12/20/21 04:06	1
F-53B Minor	<0.32		2.0	0.32	ng/L		12/16/21 04:53	12/20/21 04:06	1

Isotope Dilution	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C4 PFBA	*93*		*25 - 150*	*12/16/21 04:53*	*12/20/21 04:06*	*1*
13C5 PFPeA	*90*		*25 - 150*	*12/16/21 04:53*	*12/20/21 04:06*	*1*
13C2 PFHxA	*77*		*25 - 150*	*12/16/21 04:53*	*12/20/21 04:06*	*1*
13C4 PFHpA	*71*		*25 - 150*	*12/16/21 04:53*	*12/20/21 04:06*	*1*
13C4 PFOA	*94*		*25 - 150*	*12/16/21 04:53*	*12/20/21 04:06*	*1*
13C5 PFNA	*101*		*25 - 150*	*12/16/21 04:53*	*12/20/21 04:06*	*1*
13C2 PFDA	*91*		*25 - 150*	*12/16/21 04:53*	*12/20/21 04:06*	*1*
13C2 PFUnA	*94*		*25 - 150*	*12/16/21 04:53*	*12/20/21 04:06*	*1*
13C2 PFDoA	*98*		*25 - 150*	*12/16/21 04:53*	*12/20/21 04:06*	*1*
13C2 PFTeDA	*105*		*25 - 150*	*12/16/21 04:53*	*12/20/21 04:06*	*1*

Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

Lab Sample ID: MB 320-551272/1-A
Matrix: Water
Analysis Batch: 552303

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 551272

Isotope Dilution	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C3 PFBS	89		25 - 150	12/16/21 04:53	12/20/21 04:06	1
18O2 PFHxS	81		25 - 150	12/16/21 04:53	12/20/21 04:06	1
13C4 PFOS	86		25 - 150	12/16/21 04:53	12/20/21 04:06	1
13C8 FOSA	79		10 - 150	12/16/21 04:53	12/20/21 04:06	1
d3-NMeFOSAA	77		25 - 150	12/16/21 04:53	12/20/21 04:06	1
d5-NEtFOSAA	83		25 - 150	12/16/21 04:53	12/20/21 04:06	1
d-N-MeFOSA-M	74		10 - 150	12/16/21 04:53	12/20/21 04:06	1
d-N-EtFOSA-M	74		10 - 150	12/16/21 04:53	12/20/21 04:06	1
d7-N-MeFOSE-M	75		10 - 150	12/16/21 04:53	12/20/21 04:06	1
d9-N-EtFOSE-M	73		10 - 150	12/16/21 04:53	12/20/21 04:06	1
M2-4:2 FTS	60		25 - 150	12/16/21 04:53	12/20/21 04:06	1
M2-6:2 FTS	81		25 - 150	12/16/21 04:53	12/20/21 04:06	1
M2-8:2 FTS	75		25 - 150	12/16/21 04:53	12/20/21 04:06	1
13C3 HFPO-DA	97		25 - 150	12/16/21 04:53	12/20/21 04:06	1
13C2 10:2 FTS	76		25 - 150	12/16/21 04:53	12/20/21 04:06	1

Lab Sample ID: LCS 320-551272/2-A
Matrix: Water
Analysis Batch: 552303

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 551272

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Perfluorobutanoic acid (PFBA)	40.0	33.7		ng/L		84	60 - 135
Perfluoropentanoic acid (PFPeA)	40.0	39.4		ng/L		99	60 - 135
Perfluorohexanoic acid (PFHxA)	40.0	40.3		ng/L		101	60 - 135
Perfluoroheptanoic acid (PFHpA)	40.0	38.2		ng/L		96	60 - 135
Perfluorooctanoic acid (PFOA)	40.0	39.3		ng/L		98	60 - 135
Perfluorononanoic acid (PFNA)	40.0	35.5		ng/L		89	60 - 135
Perfluorodecanoic acid (PFDA)	40.0	36.3		ng/L		91	60 - 135
Perfluoroundecanoic acid (PFUnA)	40.0	36.6		ng/L		92	60 - 135
Perfluorododecanoic acid (PFDoA)	40.0	35.6		ng/L		89	60 - 135
Perfluorotridecanoic acid (PFTriA)	40.0	38.5		ng/L		96	60 - 135
Perfluorotetradecanoic acid (PFTeA)	40.0	31.7		ng/L		79	60 - 135
Perfluorobutanesulfonic acid (PFBS)	35.4	29.3		ng/L		83	60 - 135
Perfluoropentanesulfonic acid (PFPeS)	37.5	27.7		ng/L		74	60 - 135
Perfluorohexanesulfonic acid (PFHxS)	36.4	34.0		ng/L		93	60 - 135
Perfluoroheptanesulfonic Acid (PFHpS)	38.1	34.7		ng/L		91	60 - 135
Perfluorooctanesulfonic acid (PFOS)	37.1	31.0		ng/L		84	60 - 135
Perfluorononanesulfonic acid (PFNS)	38.4	32.9		ng/L		86	60 - 135
Perfluorodecanesulfonic acid (PFDS)	38.6	32.5		ng/L		84	60 - 135
Perfluorododecanesulfonic acid (PFDoS)	38.7	36.1		ng/L		93	60 - 135

Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

Lab Sample ID: LCS 320-551272/2-A
Matrix: Water
Analysis Batch: 552303

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 551272

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Perfluorooctanesulfonamide (FOSA)	40.0	39.9		ng/L		100	60 - 135
NEtFOSA	40.0	41.0		ng/L		102	60 - 135
NMeFOSA	40.0	37.7		ng/L		94	60 - 135
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	40.0	39.3		ng/L		98	60 - 135
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	40.0	34.4		ng/L		86	60 - 135
NMeFOSE	40.0	41.7		ng/L		104	60 - 135
NEtFOSE	40.0	38.6		ng/L		97	60 - 135
4:2 FTS	37.4	37.1		ng/L		99	60 - 135
6:2 FTS	37.9	38.0		ng/L		100	60 - 135
8:2 FTS	38.3	41.7		ng/L		109	60 - 135
DONA	37.7	33.3		ng/L		88	60 - 135
HFPO-DA (GenX)	40.0	35.9		ng/L		90	60 - 135
F-53B Major	37.3	34.2		ng/L		92	60 - 135
F-53B Minor	37.7	35.0		ng/L		93	60 - 135

Isotope Dilution	*LCS %Recovery*	*LCS Qualifier*	*Limits*
13C4 PFBA	*95*		*25 - 150*
13C5 PFPeA	*84*		*25 - 150*
13C2 PFHxA	*73*		*25 - 150*
13C4 PFHpA	*74*		*25 - 150*
13C4 PFOA	*93*		*25 - 150*
13C5 PFNA	*93*		*25 - 150*
13C2 PFDA	*89*		*25 - 150*
13C2 PFUnA	*88*		*25 - 150*
13C2 PFDoA	*99*		*25 - 150*
13C2 PFTeDA	*111*		*25 - 150*
13C3 PFBS	*86*		*25 - 150*
18O2 PFHxS	*77*		*25 - 150*
13C4 PFOS	*89*		*25 - 150*
13C8 FOSA	*82*		*10 - 150*
d3-NMeFOSAA	*74*		*25 - 150*
d5-NEtFOSAA	*87*		*25 - 150*
d-N-MeFOSA-M	*75*		*10 - 150*
d-N-EtFOSA-M	*70*		*10 - 150*
d7-N-MeFOSE-M	*75*		*10 - 150*
d9-N-EtFOSE-M	*77*		*10 - 150*
M2-4:2 FTS	*62*		*25 - 150*
M2-6:2 FTS	*74*		*25 - 150*
M2-8:2 FTS	*70*		*25 - 150*
13C3 HFPO-DA	*89*		*25 - 150*
13C2 10:2 FTS	*82*		*25 - 150*

Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

Lab Sample ID: LCSD 320-551272/3-A
Matrix: Water
Analysis Batch: 552303

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 551272

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Perfluorobutanoic acid (PFBA)			40.0	34.6		ng/L		86	60 - 135	3	30
Perfluoropentanoic acid (PFPeA)			40.0	40.2		ng/L		100	60 - 135	2	30
Perfluorohexanoic acid (PFHxA)			40.0	39.3		ng/L		98	60 - 135	2	30
Perfluoroheptanoic acid (PFHpA)			40.0	39.9		ng/L		100	60 - 135	4	30
Perfluorooctanoic acid (PFOA)			40.0	36.8		ng/L		92	60 - 135	7	30
Perfluorononanoic acid (PFNA)			40.0	35.5		ng/L		89	60 - 135	0	30
Perfluorodecanoic acid (PFDA)			40.0	38.2		ng/L		96	60 - 135	5	30
Perfluoroundecanoic acid (PFUnA)			40.0	36.1		ng/L		90	60 - 135	2	30
Perfluorododecanoic acid (PFDoA)			40.0	38.3		ng/L		96	60 - 135	7	30
Perfluorotridecanoic acid (PFTriA)			40.0	40.6		ng/L		102	60 - 135	5	30
Perfluorotetradecanoic acid (PFTeA)			40.0	29.8		ng/L		75	60 - 135	6	30
Perfluorobutanesulfonic acid (PFBS)			35.4	27.2		ng/L		77	60 - 135	8	30
Perfluoropentanesulfonic acid (PFPeS)			37.5	29.1		ng/L		77	60 - 135	5	30
Perfluorohexanesulfonic acid (PFHxS)			36.4	32.3		ng/L		89	60 - 135	5	30
Perfluoroheptanesulfonic Acid (PFHpS)			38.1	37.4		ng/L		98	60 - 135	8	30
Perfluorooctanesulfonic acid (PFOS)			37.1	32.6		ng/L		88	60 - 135	5	30
Perfluorononanesulfonic acid (PFNS)			38.4	33.9		ng/L		88	60 - 135	3	30
Perfluorodecanesulfonic acid (PFDS)			38.6	32.1		ng/L		83	60 - 135	1	30
Perfluorododecanesulfonic acid (PFDoS)			38.7	37.0		ng/L		96	60 - 135	3	30
Perfluorooctanesulfonamide (FOSA)			40.0	39.3		ng/L		98	60 - 135	1	30
NEtFOSA			40.0	38.7		ng/L		97	60 - 135	6	30
NMeFOSA			40.0	36.4		ng/L		91	60 - 135	4	30
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)			40.0	38.5		ng/L		96	60 - 135	2	30
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)			40.0	35.4		ng/L		88	60 - 135	3	30
NMeFOSE			40.0	40.3		ng/L		101	60 - 135	3	30
NEtFOSE			40.0	38.0		ng/L		95	60 - 135	2	30
4:2 FTS			37.4	41.3		ng/L		110	60 - 135	11	30
6:2 FTS			37.9	43.3		ng/L		114	60 - 135	13	30
8:2 FTS			38.3	35.8		ng/L		93	60 - 135	15	30
DONA			37.7	34.6		ng/L		92	60 - 135	4	30
HFPO-DA (GenX)			40.0	41.1		ng/L		103	60 - 135	13	30
F-53B Major			37.3	37.0		ng/L		99	60 - 135	8	30
F-53B Minor			37.7	36.2		ng/L		96	60 - 135	3	30

Isotope Dilution	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
13C4 PFBA	*104*		*25 - 150*
13C5 PFPeA	*94*		*25 - 150*

Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

Lab Sample ID: LCSD 320-551272/3-A
Matrix: Water
Analysis Batch: 552303

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 551272

Isotope Dilution	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
13C2 PFHxA	*79*		*25 - 150*
13C4 PFHpA	*79*		*25 - 150*
13C4 PFOA	*103*		*25 - 150*
13C5 PFNA	*115*		*25 - 150*
13C2 PFDA	*97*		*25 - 150*
13C2 PFUnA	*93*		*25 - 150*
13C2 PFDoA	*100*		*25 - 150*
13C2 PFTeDA	*116*		*25 - 150*
13C3 PFBS	*98*		*25 - 150*
18O2 PFHxS	*91*		*25 - 150*
13C4 PFOS	*94*		*25 - 150*
13C8 FOSA	*92*		*10 - 150*
d3-NMeFOSAA	*80*		*25 - 150*
d5-NEtFOSAA	*87*		*25 - 150*
d-N-MeFOSA-M	*86*		*10 - 150*
d-N-EtFOSA-M	*81*		*10 - 150*
d7-N-MeFOSE-M	*78*		*10 - 150*
d9-N-EtFOSE-M	*85*		*10 - 150*
M2-4:2 FTS	*64*		*25 - 150*
M2-6:2 FTS	*78*		*25 - 150*
M2-8:2 FTS	*84*		*25 - 150*
13C3 HFPO-DA	*91*		*25 - 150*
13C2 10:2 FTS	*79*		*25 - 150*

Method: 6020A - Metals (ICP/MS)

Lab Sample ID: MB 500-634757/1-A
Matrix: Water
Analysis Batch: 634985

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 634757

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	<25		100	25	ug/L		12/21/21 09:30	12/21/21 21:28	1
Antimony	<1.3		3.0	1.3	ug/L		12/21/21 09:30	12/21/21 21:28	1
Arsenic	0.379	J ^+	1.0	0.23	ug/L		12/21/21 09:30	12/21/21 21:28	1
Barium	<0.73		2.5	0.73	ug/L		12/21/21 09:30	12/21/21 21:28	1
Cadmium	<0.17		0.50	0.17	ug/L		12/21/21 09:30	12/21/21 21:28	1
Chromium	<1.1		5.0	1.1	ug/L		12/21/21 09:30	12/21/21 21:28	1
Copper	<0.50		2.0	0.50	ug/L		12/21/21 09:30	12/21/21 21:28	1
Iron	<47		100	47	ug/L		12/21/21 09:30	12/21/21 21:28	1
Lead	<0.19		0.50	0.19	ug/L		12/21/21 09:30	12/21/21 21:28	1
Manganese	<0.79		2.5	0.79	ug/L		12/21/21 09:30	12/21/21 21:28	1
Nickel	<0.63		2.0	0.63	ug/L		12/21/21 09:30	12/21/21 21:28	1
Selenium	<0.98		2.5	0.98	ug/L		12/21/21 09:30	12/21/21 21:28	1
Silver	<0.12		0.50	0.12	ug/L		12/21/21 09:30	12/21/21 21:28	1
Thallium	<0.57		2.0	0.57	ug/L		12/21/21 09:30	12/21/21 21:28	1

Method: 6020A - Metals (ICP/MS) (Continued)

Lab Sample ID: LCS 500-634757/2-A
Matrix: Water
Analysis Batch: 634985

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 634757

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Aluminum	2000	2320		ug/L		116	80 - 120
Antimony	500	516		ug/L		103	80 - 120
Arsenic	100	105	^+	ug/L		105	80 - 120
Barium	500	524		ug/L		105	80 - 120
Cadmium	50.0	50.5		ug/L		101	80 - 120
Chromium	200	210		ug/L		105	80 - 120
Copper	250	262		ug/L		105	80 - 120
Iron	1000	1040		ug/L		104	80 - 120
Lead	100	105		ug/L		105	80 - 120
Manganese	500	515		ug/L		103	80 - 120
Nickel	500	518		ug/L		104	80 - 120
Selenium	100	105		ug/L		105	80 - 120
Silver	50.0	50.3		ug/L		101	80 - 120
Thallium	100	107		ug/L		107	80 - 120

Method: 7470A - Mercury (CVAA)

Lab Sample ID: MB 500-634059/12-A
Matrix: Water
Analysis Batch: 634283

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 634059

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.098		0.20	0.098	ug/L		12/16/21 10:45	12/17/21 08:38	1

Lab Sample ID: LCS 500-634059/13-A
Matrix: Water
Analysis Batch: 634283

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 634059

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	2.00	2.01		ug/L		101	80 - 120

Lab Chronicle

Client: Ramboll US Corporation
Job ID: 500-209563-1
Project/Site: Former Mirro Plant No 9 - 1690019647

Client Sample ID: MW-200
Lab Sample ID: 500-209563-1
Date Collected: 12/09/21 12:10
Matrix: Water
Date Received: 12/10/21 10:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3535			551272	12/16/21 04:53	EG	TAL SAC
Total/NA	Analysis	537 (modified)		1	552303	12/20/21 05:30	K1S	TAL SAC

Client Sample ID: FB-01
Lab Sample ID: 500-209564-1
Date Collected: 12/09/21 12:30
Matrix: Water
Date Received: 12/10/21 10:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3535			551272	12/16/21 04:53	EG	TAL SAC
Total/NA	Analysis	537 (modified)		1	552303	12/20/21 06:32	K1S	TAL SAC

Client Sample ID: EB-01
Lab Sample ID: 500-209564-2
Date Collected: 12/09/21 12:45
Matrix: Water
Date Received: 12/10/21 10:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	634922	12/22/21 16:33	STW	TAL CHI
Total/NA	Prep	3510C			633730	12/15/21 07:23	ALW	TAL CHI
Total/NA	Analysis	8270D		1	634033	12/16/21 16:54	EMA	TAL CHI
Total/NA	Prep	3510C			633372	12/13/21 09:44	DAK	TAL CHI
Total/NA	Analysis	8082A		1	633459	12/14/21 10:53	JBJ	TAL CHI
Total/NA	Prep	3535			551272	12/16/21 04:53	EG	TAL SAC
Total/NA	Analysis	537 (modified)		1	552303	12/20/21 06:43	K1S	TAL SAC
Dissolved	Prep	3005A			634757	12/21/21 09:30	DAJ	TAL CHI
Dissolved	Analysis	6020A		1	634985	12/21/21 22:54	FXG	TAL CHI
Dissolved	Prep	7470A			634059	12/16/21 10:45	MJG	TAL CHI
Dissolved	Analysis	7470A		1	634283	12/17/21 08:55	MJG	TAL CHI

Client Sample ID: Trip Blank
Lab Sample ID: 500-209564-3
Date Collected: 12/09/21 00:00
Matrix: Water
Date Received: 12/10/21 10:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	634922	12/22/21 14:16	STW	TAL CHI

Laboratory References:

TAL SAC = Eurofins TestAmerica, Sacramento, 880 Riverside Parkway, West Sacramento, CA 95605, TEL (916)373-5600

Accreditation/Certification Summary

Client: Ramboll US Corporation
Job ID: 500-209563-1
Project/Site: Former Mirro Plant No 9 - 1690019647

Laboratory: Eurofins TestAmerica, Chicago

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
California	State	2903	04-29-22
Georgia	State	N/A	04-29-22
Georgia (DW)	State	939	04-30-21 *
Hawaii	State	NA	04-29-22
Illinois	NELAP	IL00035	04-29-22
Indiana	State	C-IL-02	04-29-22
Iowa	State	082	05-01-22
Kansas	NELAP	E-10161	10-31-22
Kentucky (UST)	State	AI # 108083	04-29-22
Kentucky (WW)	State	KY90023	12-31-21
Louisiana	NELAP	02046	06-30-22
Mississippi	State	NA	04-30-22
North Carolina (WW/SW)	State	291	12-31-21
North Dakota	State	R-194	04-29-22
Oklahoma	State	8908	08-31-22
South Carolina	State	77001003	04-29-22
USDA	US Federal Programs	P330-18-00018	02-11-24
Wisconsin	State	999580010	08-31-22
Wyoming	State	8TMS-Q	04-30-22

Laboratory: Eurofins TestAmerica, Sacramento

The accreditations/certifications listed below are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Wisconsin	State	998204680	08-31-22

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

Eurofins TestAmerica, Chicago (Univ Park)
2417 Bond Street
University Park IL 60484
Phone (708) 534-5200 Phone (708) 534-5211

Chain of Custody Record

eurofins Environment Testing America

Client Information	Sampler: DUNCAN GLASFORD	Lab PM: Fredrick Sandie	Carrier Tracking No(s):	COC No: 500-91813-40925 17
Client Contact: Paul Lindquist	Phone: 2625736315	E-Mail: sandra fredrick@eurofinset.com	State of Origin: WI	Page: ~~Page 1~~ 1 of 1
Company: Ramboll US Corporation	PWSID:			Job #: 500-209563

Address: 234 W Florida Street Fifth Floor	Due Date Requested:	Analysis Requested	Preservation Codes:
City: Milwaukee	TAT Requested (days):		A HCL M Hexane B NaOH N None C Zn Acetate O AsNaO2 D Nitric Acid P Na2O4S E NaHSO4 Q Na2SO3 F MeOH R Na2S2O3 G Amchlor S H2SO4 H Ascorbic Acid T TSP Dodecahydrate I Ice U Acetone J DI Water V MCAA K EDTA W pH 4-5 L EDA Z other (specify)
State, Zip: WI 53204	Compliance Project: Δ Yes Δ No		
Phone: 262-901-3507(Tel)	PO #: ~~1690019647~~ DO NOT REQ		
Email: plindquist@ramboll com	WO #:		Other:
Project Name: Former Mirro Plant No 9 - 1690019647	Project #: 50018382		
Site:	SSOW#:		

500-209563 COC

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water S=solid O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	PFC_IDA_WI - PFAS, Standard List (33 analytes)	8260B - VOC	6020A, 7470A	8082A, 8270D	Total Number of containers	Special Instructions/Note
			Preservation Code:		X	X	N	A	D	N	X	
1 MW-200	12-9-21	1210	G	Water			X					
				Water								
				Water								
				Water								
				Water								
				Water								
				Water								
				Water								
				Water								
				Water								
				Water								

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested I II III IV Other (specify)

Special Instructions/QC Requirements

Empty Kit Relinquished by:	Date	Time	Method of Shipment.

	Relinquished by	Date/Time	Company	Received by	Date/Time	Company
1		12-9-21 1530	RAMBOLL		12.9.21 1530	TA
2		12/10/21 1700	TA		12/10/21 1030	EXA
3		Date/Time	Company	Received by	Date/Time.	Company

Custody Seals Intact. Δ Yes Δ No	Custody Seal No	Cooler Temperature(s) °C and Other Remarks.
		-0.4

Eurofins TestAmerica, Chicago
2417 Bond Street
University Park IL 60484
Phone 708-534-5200 Fax 708-534-5211

Chain of Custody Record

eurofins

Client Information	Sampler: DUNCAN GLASFORD	Lab PM: Fredrick Sandie	Carrier Tracking No(s):	COC No: 500-96812-42719.1
Client Contact: Paul Lindquist	Phone: 262 573 6315	E Mail: sandra.fredrick@eurofinset.com	State of Origin: WI	Page: Page 1 of 1
Company: Rambol US Corporation	FWSID:	Analysis Requested		Job #: 500-209564

Address: 234 W Florida Street Fifth Floor	Due Date Requested:		Preservation Codes: A HCl; B NaOH; C Zn Acetate; D Nitric Acid; E NaHSO4; F MeOH; G Amchlor; H Ascorbic Acid; I Ice; J DI Water; K EDTA; L EDA; M Hexane; N None; O AsNaO2; P Na2O4S; Q Na2SO3; R Na2S2O3; S H2SO4; T TSP Dodecahydrate; U Acetone; V MCAA; W pH 4-5; Z other (specify); Other
City: Milwaukee	TAT Requested (days):		
State, Zip: WI 53204	Compliance Project: Δ Yes Δ No		
Phone: 262 901 3510(Tel)	PO #: Purchase Order not required		
Email: plindquist@rambol.com	WO #:		
Project Name: Former Mirro Plant No 9 1690019647	Project #: 50018382		
Site:	SSOW#:		

500-209564 COC

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	PFC_IDA_WI PFAS, Standard List (33 analytes)	6020A; 7470A	8082A; 8270D	8260B VOC	Total Number of containers	Special Instructions/Note
			Preservation Code:				N	D	N	A		
1 FB-01	12-9-21	1230	G	Water			X					
2 EB-01	12-9-21	1245	G	Water	X		X	X	X	X		
3 TRIP BLANK	—	—	—	Water						X		
				Water								
				Water								
				Water								
				Water								
				Water								
				Water								
				Water								
				Water								

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months

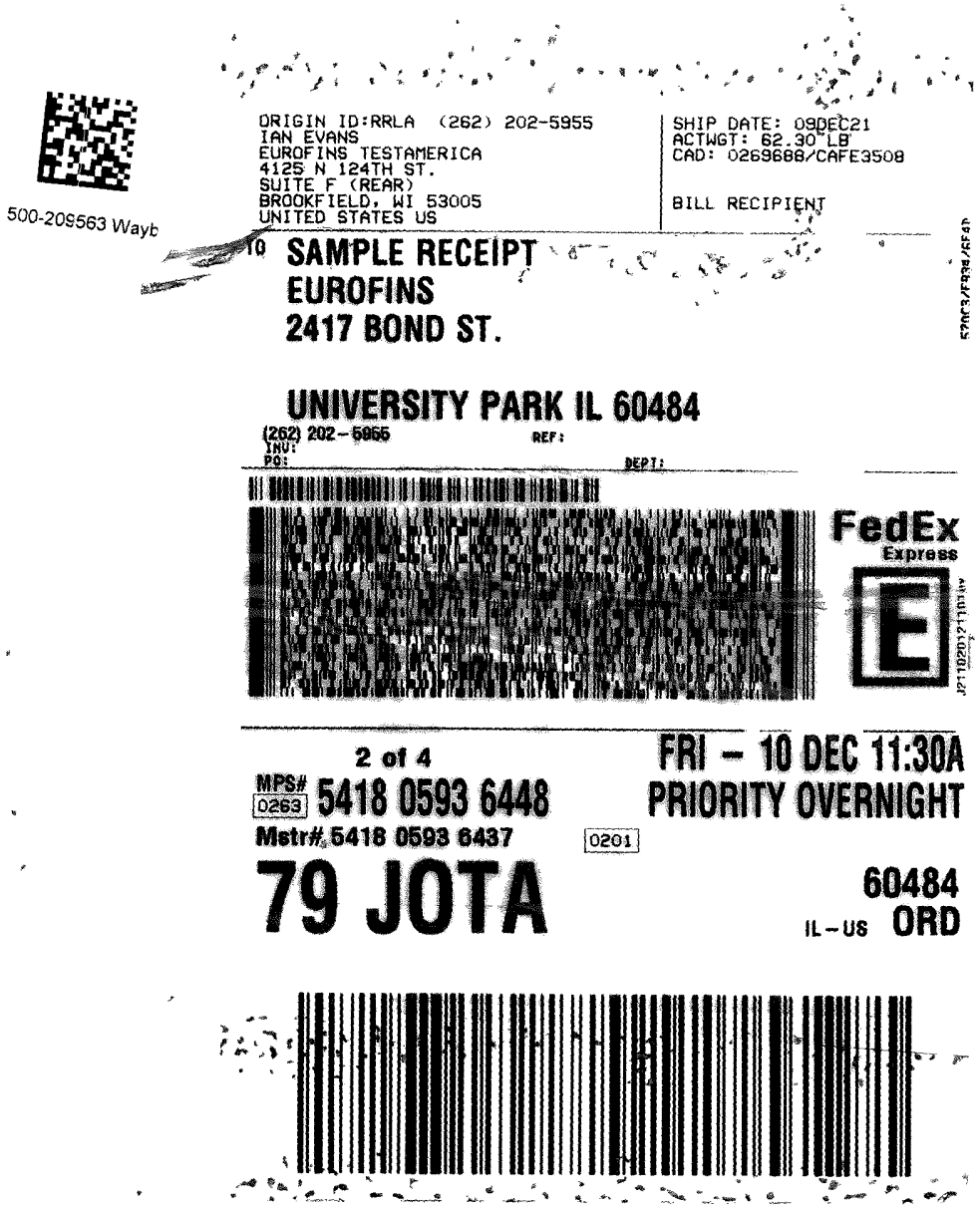
Deliverable Requested: I II III IV Other (specify)

Special Instructions/QC Requirements

Empty Kit Relinquished by:	Date	Time	Method of Shipment:

Relinquished by	Date/Time	Company	Received by	Date/Time	Company
	12-9-21 1530	RAMBOLL		12.9.21 1530	TA
	12.9.21 1700	TA		12/10/21 1030	BTL

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.	Cooler Temperature(s) and Other Remarks: -0.4


500-209563 Wayb
ORIGIN ID:RRLA (262) 202-5955
IAN EVANS
EUROFINS TESTAMERICA
4125 N 124TH ST.
SUITE F (REAR)
BROOKFIELD, WI 53005
UNITED STATES US
SHIP DATE: 09DEC21
ACTWGT: 62.30 LB
CAD: 0269688/CAFE3508
BILL RECIPIENT
TO SAMPLE RECEIPT
EUROFINS
2417 BOND ST.
UNIVERSITY PARK IL 60484
(262) 202-5955
INV:
PO:
REF:
DEPT:
FedEx
Express
2 of 4
MPS# 0263 5418 0593 6448
Mstr# 5418 0593 6437
0201
FRI - 10 DEC 11:30A
PRIORITY OVERNIGHT
79 JOTA
60484
IL-US ORD

Eurofins TestAmerica, Chicago
2417 Bond Street
University Park, IL 60484
Phone: 708-534-5200 Fax: 708-534-5211

Chain of Custody Record

eurofins Environment Testing America

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Fredrick, Sandie	Carrier Tracking No(s):	COC No: 500-155298.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: sandra.fredrick@eurofinset.com	State of Origin: Wisconsin	Page: Page 1 of 1
Company: TestAmerica Laboratories, Inc.		Accreditations Required (See note): State - Wisconsin		Job #: 500-209563-1
Address: 880 Riverside Parkway, ,	Due Date Requested: 12/26/2021			
City: West Sacramento	TAT Requested (days):			
State, Zip: CA, 95605				
Phone: 916-373-5600(Tel) 916-372-1059(Fax)	PO #:			
Email:	WO #:			
Project Name: Former Mirro Plant No 9 - 1690019647	Project #: 50018382			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:

A - HCL	M - Hexane
B - NaOH	N - None
C - Zn Acetate	O - AsNaO2
D - Nitric Acid	P - Na2O4S
E - NaHSO4	Q - Na2SO3
F - MeOH	R - Na2S2O3
G - Amchlor	S - H2SO4
H - Ascorbic Acid	T - TSP Dodecahydrate
I - Ice	U - Acetone
J - DI Water	V - MCAA
K - EDTA	W - pH 4-5
L - EDA	Z - other (specify)

Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	PFC_IDA_WI3535_PFC_28D PFAS, Standard List (33 analytes)	Total Number of containers	Special Instructions/Note:
			Preservation Code:						
MW-200 (500-209563-1)	12/9/21	12:10 Central		Water			X	2	

Note: Since laboratory accreditations are subject to change, Eurofins TestAmerica places the ownership of method, analyte & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins TestAmerica laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins TestAmerica attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said complicance to Eurofins TestAmerica.

Possible Hazard Identification	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
Unconfirmed	☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
1	Paula Buckley	12/10/21 1600	EDA CHI		12/11-21 1005	Eurofins
2	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
3	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact:	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks:
Δ Yes Δ No	1072533	2.4

Ver: 06/08/2021

Login Sample Receipt Checklist

Client: Ramboll US Corporation

Job Number: 500-209563-1

Login Number: 209563
List Number: 1
Creator: Scott, Sherri L

List Source: Eurofins TestAmerica, Chicago

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	-0.4 samples not frozen
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: Ramboll US Corporation

Job Number: 500-209563-1

Login Number: 209563
List Number: 2
Creator: Simmons, Jason C

List Source: Eurofins TestAmerica, Sacramento
List Creation: 12/11/21 02:05 PM

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	1672533
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	2.4c
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	False	Received project as a subcontract.
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

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Sacramento
Sample Receiving Notes

500-209563 Field Sheet

Job: _____

Tracking # : 1893 4454 3918

SO / PO / FO / (SAT) / 2-Day / Ground / UPS / CDO / Courier

GSO / OnTrac / Goldstreak / USPS / Other _____

Use this form to record Sample Custody Seal, Cooler Custody Seal, Temperature & corrected Temperature & other observations. File in the job folder with the COC.

Therm. ID: C06 Corr. Factor: (+ / -) N/A °C

Ice ~ Wet ~ Gel _____ Other _____

Cooler Custody Seal: 1672533

Cooler ID: ~

Temp Observed: 2.4 °C Corrected: 2.4 °C

From: Temp Blank ☐ Sample ☑

Opening/Processing The Shipment	Yes	No	NA
Cooler compromised/tampered with?	☐	☑	☐
Cooler Temperature is acceptable?	☑	☐	☐
Frozen samples show signs of thaw?	☐	☐	☑

Initials: SO Date: 12-11-21

Unpacking/Labeling The Samples	Yes	No	NA
CoC is complete w/o discrepancies?	☑	☐	☐
Samples compromised/tampered with?	☐	☑	☐
Sample containers have legible labels?	☑	☐	☐
Sample custody seal?	☐	☐	☑
Containers are not broken or leaking?	☑	☐	☐
Sample date/times are provided?	☑	☐	☐
Appropriate containers are used?	☑	☐	☐
Sample bottles are completely filled?	☑	☐	☐
Sample preservatives verified?	☐	☐	☑
Samples w/o discrepancies?	☑	☐	☐
Zero headspace?*	☐	☐	☑
Alkalinity has no headspace?	☐	☐	☑
Perchlorate has headspace? (Methods 314, 331, 6850)	☐	☐	☑
Multiphasic samples are not present?	☑	☐	☐

*Containers requiring zero headspace have no headspace, or bubble < 6 mm (1/4")

Initials: [illegible] Date: 12/11/21

Notes: _____

Trizma Lot #(s): _____

Login Completion	Yes	No	NA
Receipt Temperature on COC?	☑	☐	☐
Samples received within hold time?	☑	☐	☐
NCM Filed?	☐	☐	☑
Log Release checked in TALS?	☐	☐	☑

Initials: [illegible] Date: 12/11/21

Isotope Dilution Summary

Client: Ramboll US Corporation
Project/Site: Former Mirro Plant No 9 - 1690019647

Job ID: 500-209563-1

Method: 537 (modified) - Fluorinated Alkyl Substances

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

		Percent Isotope Dilution Recovery (Acceptance Limits)							
Lab Sample ID	Client Sample ID	PFBA (25-150)	PFPeA (25-150)	PFHxA (25-150)	C4PFHA (25-150)	PFOA (25-150)	PFNA (25-150)	PFDA (25-150)	PFUnA (25-150)
500-209563-1	MW-200	74	83	66	66	90	93	81	78
500-209564-1	FB-01	77	76	64	62	87	94	80	80
500-209564-2	EB-01	90	86	71	75	99	103	93	92
LCS 320-551272/2-A	Lab Control Sample	95	84	73	74	93	93	89	88
LCSD 320-551272/3-A	Lab Control Sample Dup	104	94	79	79	103	115	97	93
MB 320-551272/1-A	Method Blank	93	90	77	71	94	101	91	94

		Percent Isotope Dilution Recovery (Acceptance Limits)							
Lab Sample ID	Client Sample ID	PFDoA (25-150)	PFTDA (25-150)	C3PFBS (25-150)	PFHxS (25-150)	PFOS (25-150)	PFOSA (10-150)	d3NMFOS (25-150)	d5NEFOS (25-150)
500-209563-1	MW-200	85	90	80	66	82	74	61	69
500-209564-1	FB-01	86	93	75	67	81	71	69	79
500-209564-2	EB-01	108	114	86	77	93	82	81	85
LCS 320-551272/2-A	Lab Control Sample	99	111	86	77	89	82	74	87
LCSD 320-551272/3-A	Lab Control Sample Dup	100	116	98	91	94	92	80	87
MB 320-551272/1-A	Method Blank	98	105	89	81	86	79	77	83

		Percent Isotope Dilution Recovery (Acceptance Limits)							
Lab Sample ID	Client Sample ID	dMeFOSA (10-150)	dEtFOSA (10-150)	NMFM (10-150)	NEFM (10-150)	M242FTS (25-150)	M262FTS (25-150)	M282FTS (25-150)	HFPODA (25-150)
500-209563-1	MW-200	61	59	55	66	61	70	69	77
500-209564-1	FB-01	65	64	71	75	54	67	63	64
500-209564-2	EB-01	79	78	85	86	67	76	76	79
LCS 320-551272/2-A	Lab Control Sample	75	70	75	77	62	74	70	89
LCSD 320-551272/3-A	Lab Control Sample Dup	86	81	78	85	64	78	84	91
MB 320-551272/1-A	Method Blank	74	74	75	73	60	81	75	97

		Percent Isotope Dilution Recovery (Acceptance Limits)
Lab Sample ID	Client Sample ID	M102FTS (25-150)
500-209563-1	MW-200	69
500-209564-1	FB-01	74
500-209564-2	EB-01	103
LCS 320-551272/2-A	Lab Control Sample	82
LCSD 320-551272/3-A	Lab Control Sample Dup	79
MB 320-551272/1-A	Method Blank	76

Surrogate Legend

PFBA = 13C4 PFBA
PFPeA = 13C5 PFPeA
PFHxA = 13C2 PFHxA
C4PFHA = 13C4 PFHpA
PFOA = 13C4 PFOA
PFNA = 13C5 PFNA
PFDA = 13C2 PFDA
PFUnA = 13C2 PFUnA
PFDoA = 13C2 PFDoA
PFTDA = 13C2 PFTeDA
C3PFBS = 13C3 PFBS
PFHxS = 18O2 PFHxS
PFOS = 13C4 PFOS
PFOSA = 13C8 FOSA

Isotope Dilution Summary

Client: Ramboll US Corporation
Job ID: 500-209563-1
Project/Site: Former Mirro Plant No 9 - 1690019647

d3NMFOS = d3-NMeFOSAA
d5NEFOS = d5-NEtFOSAA
dMeFOSA = d-N-MeFOSA-M
dEtFOSA = d-N-EtFOSA-M
NMFM = d7-N-MeFOSE-M
NEFM = d9-N-EtFOSE-M
M242FTS = M2-4:2 FTS
M262FTS = M2-6:2 FTS
M282FTS = M2-8:2 FTS
HFPODA = 13C3 HFPO-DA
M102FTS = 13C2 10:2 FTS

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ANALYTICAL REPORT

Eurofins TestAmerica, Chicago
2417 Bond Street
University Park, IL 60484
Tel: (708)534-5200

Laboratory Job ID: 500-209564-1
Client Project/Site: Former Mirro Plant No 9 - 1690019647

For:
Ramboll US Corporation
234 W. Florida Street
Fifth Floor
Milwaukee, Wisconsin 53204

Attn: Paul Lindquist

Sandra Fredrick

Authorized for release by:
12/23/2021 5:04:04 PM

Sandie Fredrick, Project Manager II
(920)261-1660
sandra.fredrick@eurofinset.com

Table of Contents

Case Narrative

Client: Ramboll US Corporation
Job ID: 500-209564-1
Project/Site: Former Mirro Plant No 9 - 1690019647

Job ID: 500-209564-1

Laboratory: Eurofins TestAmerica, Chicago

Narrative

Job Narrative
500-209564-1

Comments
No additional comments.

Receipt
The samples were received on 12/10/2021 10:30 AM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperature of the cooler at receipt was -0.4º C.

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

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

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

Metals
Method 6020A: The low level continuing calibration verification (CCVL) associated with batch 500-634985 recovered above the upper control limit for Arsenic. The samples associated with this CCV were non-detects for the affected analyte; therefore, the data have been reported.

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

LCMS
Method 537 (modified): The transition mass ratio was above/below of the established ratio limit for Perfluorohexanoic acid (PFHxA) in (CCVL 320-552298/2) associated to this data set. This is indicated by the "R" flag in the raw data. As the flagged data is in control in the CCVL, there is no adverse impact to the data. (CCVL 320-552298/2)

Method 537 (modified): The method blank for preparation batch 320-551272 contained NEtFOSE and NMeFOSE above one half the reporting limit (RL). None of the samples associated with this method blank contained the target compounds; therefore, re-extraction and/or re-analysis of samples were not performed.

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

Field Service / Mobile Lab
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Organic Prep
Method 3535: Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate (MS/MSD) associated with preparation batch 320-551272. 320-551272 Method: 3535 PFC-W

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

Detection Summary

Client: Ramboll US Corporation
Job ID: 500-209564-1
Project/Site: Former Mirro Plant No 9 - 1690019647

Client Sample ID: FB-01
Lab Sample ID: 500-209564-1

No Detections.

Client Sample ID: EB-01
Lab Sample ID: 500-209564-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	0.50	J ^+ B	1.0	0.23	ug/L	1		6020A	Dissolved

Client Sample ID: Trip Blank
Lab Sample ID: 500-209564-3

No Detections.

This Detection Summary does not include radiochemical test results.

Method Summary

Client: Ramboll US Corporation
Job ID: 500-209564-1
Project/Site: Former Mirro Plant No 9 - 1690019647

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL CHI
8270D	Semivolatile Organic Compounds (GC/MS)	SW846	TAL CHI
8082A	Polychlorinated Biphenyls (PCBs) by Gas Chromatography	SW846	TAL CHI
537 (modified)	Fluorinated Alkyl Substances	EPA	TAL SAC
6020A	Metals (ICP/MS)	SW846	TAL CHI
7470A	Mercury (CVAA)	SW846	TAL CHI
3005A	Preparation, Total Recoverable or Dissolved Metals	SW846	TAL CHI
3510C	Liquid-Liquid Extraction (Separatory Funnel)	SW846	TAL CHI
3535	Solid-Phase Extraction (SPE)	SW846	TAL SAC
5030B	Purge and Trap	SW846	TAL CHI
7470A	Preparation, Mercury	SW846	TAL CHI

Protocol References:

EPA = US Environmental Protection Agency

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

Laboratory References:

TAL CHI = Eurofins TestAmerica, Chicago, 2417 Bond Street, University Park, IL 60484, TEL (708)534-5200

TAL SAC = Eurofins TestAmerica, Sacramento, 880 Riverside Parkway, West Sacramento, CA 95605, TEL (916)373-5600

Sample Summary

Client: Ramboll US Corporation
Job ID: 500-209564-1
Project/Site: Former Mirro Plant No 9 - 1690019647

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
500-209564-1	FB-01	Water	12/09/21 12:30	12/10/21 10:30
500-209564-2	EB-01	Water	12/09/21 12:45	12/10/21 10:30
500-209564-3	Trip Blank	Water	12/09/21 00:00	12/10/21 10:30

Client: Ramboll US Corporation
Job ID: 500-209564-1
Project/Site: Former Mirro Plant No 9 - 1690019647

Client Sample ID: FB-01
Lab Sample ID: 500-209564-1
Date Collected: 12/09/21 12:30
Matrix: Water
Date Received: 12/10/21 10:30

Method: 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	<2.2		4.6	2.2	ng/L		12/16/21 04:53	12/20/21 06:32	1
Perfluoropentanoic acid (PFPeA)	<0.45		1.9	0.45	ng/L		12/16/21 04:53	12/20/21 06:32	1
Perfluorohexanoic acid (PFHxA)	<0.54		1.9	0.54	ng/L		12/16/21 04:53	12/20/21 06:32	1
Perfluoroheptanoic acid (PFHpA)	<0.23		1.9	0.23	ng/L		12/16/21 04:53	12/20/21 06:32	1
Perfluorooctanoic acid (PFOA)	<0.79		1.9	0.79	ng/L		12/16/21 04:53	12/20/21 06:32	1
Perfluorononanoic acid (PFNA)	<0.25		1.9	0.25	ng/L		12/16/21 04:53	12/20/21 06:32	1
Perfluorodecanoic acid (PFDA)	<0.29		1.9	0.29	ng/L		12/16/21 04:53	12/20/21 06:32	1
Perfluoroundecanoic acid (PFUnA)	<1.0		1.9	1.0	ng/L		12/16/21 04:53	12/20/21 06:32	1
Perfluorododecanoic acid (PFDoA)	<0.51		1.9	0.51	ng/L		12/16/21 04:53	12/20/21 06:32	1
Perfluorotridecanoic acid (PFTriA)	<1.2		1.9	1.2	ng/L		12/16/21 04:53	12/20/21 06:32	1
Perfluorotetradecanoic acid (PFTeA)	<0.68		1.9	0.68	ng/L		12/16/21 04:53	12/20/21 06:32	1
Perfluorobutanesulfonic acid (PFBS)	<0.19		1.9	0.19	ng/L		12/16/21 04:53	12/20/21 06:32	1
Perfluoropentanesulfonic acid (PFPeS)	<0.28		1.9	0.28	ng/L		12/16/21 04:53	12/20/21 06:32	1
Perfluorohexanesulfonic acid (PFHxS)	<0.53		1.9	0.53	ng/L		12/16/21 04:53	12/20/21 06:32	1
Perfluoroheptanesulfonic Acid (PFHpS)	<0.18		1.9	0.18	ng/L		12/16/21 04:53	12/20/21 06:32	1
Perfluorooctanesulfonic acid (PFOS)	<0.50		1.9	0.50	ng/L		12/16/21 04:53	12/20/21 06:32	1
Perfluorononanesulfonic acid (PFNS)	<0.34		1.9	0.34	ng/L		12/16/21 04:53	12/20/21 06:32	1
Perfluorodecanesulfonic acid (PFDS)	<0.30		1.9	0.30	ng/L		12/16/21 04:53	12/20/21 06:32	1
Perfluorododecanesulfonic acid (PFDoS)	<0.90		1.9	0.90	ng/L		12/16/21 04:53	12/20/21 06:32	1
Perfluorooctanesulfonamide (FOSA)	<0.91		1.9	0.91	ng/L		12/16/21 04:53	12/20/21 06:32	1
NEtFOSA	<0.81		1.9	0.81	ng/L		12/16/21 04:53	12/20/21 06:32	1
NMeFOSA	<0.40		1.9	0.40	ng/L		12/16/21 04:53	12/20/21 06:32	1
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	<1.1		4.6	1.1	ng/L		12/16/21 04:53	12/20/21 06:32	1
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	<1.2		4.6	1.2	ng/L		12/16/21 04:53	12/20/21 06:32	1
NMeFOSE	<1.3		3.7	1.3	ng/L		12/16/21 04:53	12/20/21 06:32	1
NEtFOSE	<0.79		1.9	0.79	ng/L		12/16/21 04:53	12/20/21 06:32	1
4:2 FTS	<0.22		1.9	0.22	ng/L		12/16/21 04:53	12/20/21 06:32	1
6:2 FTS	<2.3		4.6	2.3	ng/L		12/16/21 04:53	12/20/21 06:32	1
8:2 FTS	<0.43		1.9	0.43	ng/L		12/16/21 04:53	12/20/21 06:32	1
DONA	<0.37		1.9	0.37	ng/L		12/16/21 04:53	12/20/21 06:32	1
HFPO-DA (GenX)	<1.4		3.7	1.4	ng/L		12/16/21 04:53	12/20/21 06:32	1
F-53B Major	<0.22		1.9	0.22	ng/L		12/16/21 04:53	12/20/21 06:32	1
F-53B Minor	<0.30		1.9	0.30	ng/L		12/16/21 04:53	12/20/21 06:32	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C4 PFBA	*77*		*25 - 150*	*12/16/21 04:53*	*12/20/21 06:32*	*1*
13C5 PFPeA	*76*		*25 - 150*	*12/16/21 04:53*	*12/20/21 06:32*	*1*
13C2 PFHxA	*64*		*25 - 150*	*12/16/21 04:53*	*12/20/21 06:32*	*1*
13C4 PFHpA	*62*		*25 - 150*	*12/16/21 04:53*	*12/20/21 06:32*	*1*
13C4 PFOA	*87*		*25 - 150*	*12/16/21 04:53*	*12/20/21 06:32*	*1*
13C5 PFNA	*94*		*25 - 150*	*12/16/21 04:53*	*12/20/21 06:32*	*1*
13C2 PFDA	*80*		*25 - 150*	*12/16/21 04:53*	*12/20/21 06:32*	*1*
13C2 PFUnA	*80*		*25 - 150*	*12/16/21 04:53*	*12/20/21 06:32*	*1*
13C2 PFDoA	*86*		*25 - 150*	*12/16/21 04:53*	*12/20/21 06:32*	*1*
13C2 PFTeDA	*93*		*25 - 150*	*12/16/21 04:53*	*12/20/21 06:32*	*1*
13C3 PFBS	*75*		*25 - 150*	*12/16/21 04:53*	*12/20/21 06:32*	*1*

Client: Ramboll US Corporation
Job ID: 500-209564-1
Project/Site: Former Mirro Plant No 9 - 1690019647

Client Sample ID: FB-01
Lab Sample ID: 500-209564-1
Date Collected: 12/09/21 12:30
Matrix: Water
Date Received: 12/10/21 10:30

Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
18O2 PFHxS	67		25 - 150	12/16/21 04:53	12/20/21 06:32	1
13C4 PFOS	81		25 - 150	12/16/21 04:53	12/20/21 06:32	1
13C8 FOSA	71		10 - 150	12/16/21 04:53	12/20/21 06:32	1
d3-NMeFOSAA	69		25 - 150	12/16/21 04:53	12/20/21 06:32	1
d5-NEtFOSAA	79		25 - 150	12/16/21 04:53	12/20/21 06:32	1
d-N-MeFOSA-M	65		10 - 150	12/16/21 04:53	12/20/21 06:32	1
d-N-EtFOSA-M	64		10 - 150	12/16/21 04:53	12/20/21 06:32	1
d7-N-MeFOSE-M	71		10 - 150	12/16/21 04:53	12/20/21 06:32	1
d9-N-EtFOSE-M	75		10 - 150	12/16/21 04:53	12/20/21 06:32	1
M2-4:2 FTS	54		25 - 150	12/16/21 04:53	12/20/21 06:32	1
M2-6:2 FTS	67		25 - 150	12/16/21 04:53	12/20/21 06:32	1
M2-8:2 FTS	63		25 - 150	12/16/21 04:53	12/20/21 06:32	1
13C3 HFPO-DA	64		25 - 150	12/16/21 04:53	12/20/21 06:32	1
13C2 10:2 FTS	74		25 - 150	12/16/21 04:53	12/20/21 06:32	1

Client: Ramboll US Corporation
Job ID: 500-209564-1
Project/Site: Former Mirro Plant No 9 - 1690019647

Client Sample ID: EB-01
Lab Sample ID: 500-209564-2
Date Collected: 12/09/21 12:45
Matrix: Water
Date Received: 12/10/21 10:30

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.15		0.50	0.15	ug/L			12/22/21 16:33	1
Bromobenzene	<0.36		1.0	0.36	ug/L			12/22/21 16:33	1
Bromochloromethane	<0.43		1.0	0.43	ug/L			12/22/21 16:33	1
Bromodichloromethane	<0.37		1.0	0.37	ug/L			12/22/21 16:33	1
Bromoform	<0.48		1.0	0.48	ug/L			12/22/21 16:33	1
Bromomethane	<0.80		3.0	0.80	ug/L			12/22/21 16:33	1
Carbon tetrachloride	<0.38		1.0	0.38	ug/L			12/22/21 16:33	1
Chlorobenzene	<0.39		1.0	0.39	ug/L			12/22/21 16:33	1
Chloroethane	<0.51		1.0	0.51	ug/L			12/22/21 16:33	1
Chloroform	<0.37		2.0	0.37	ug/L			12/22/21 16:33	1
Chloromethane	<0.32		1.0	0.32	ug/L			12/22/21 16:33	1
2-Chlorotoluene	<0.31		1.0	0.31	ug/L			12/22/21 16:33	1
4-Chlorotoluene	<0.35		1.0	0.35	ug/L			12/22/21 16:33	1
cis-1,2-Dichloroethene	<0.41		1.0	0.41	ug/L			12/22/21 16:33	1
cis-1,3-Dichloropropene	<0.42		1.0	0.42	ug/L			12/22/21 16:33	1
Dibromochloromethane	<0.49		1.0	0.49	ug/L			12/22/21 16:33	1
1,2-Dibromo-3-Chloropropane	<2.0		5.0	2.0	ug/L			12/22/21 16:33	1
1,2-Dibromoethane	<0.39		1.0	0.39	ug/L			12/22/21 16:33	1
Dibromomethane	<0.27		1.0	0.27	ug/L			12/22/21 16:33	1
1,2-Dichlorobenzene	<0.33		1.0	0.33	ug/L			12/22/21 16:33	1
1,3-Dichlorobenzene	<0.40		1.0	0.40	ug/L			12/22/21 16:33	1
1,4-Dichlorobenzene	<0.36		1.0	0.36	ug/L			12/22/21 16:33	1
Dichlorodifluoromethane	<0.67		3.0	0.67	ug/L			12/22/21 16:33	1
1,1-Dichloroethane	<0.41		1.0	0.41	ug/L			12/22/21 16:33	1
1,2-Dichloroethane	<0.39		1.0	0.39	ug/L			12/22/21 16:33	1
1,1-Dichloroethene	<0.39		1.0	0.39	ug/L			12/22/21 16:33	1
1,2-Dichloropropane	<0.43		1.0	0.43	ug/L			12/22/21 16:33	1
1,3-Dichloropropane	<0.36		1.0	0.36	ug/L			12/22/21 16:33	1
2,2-Dichloropropane	<0.44		1.0	0.44	ug/L			12/22/21 16:33	1
1,1-Dichloropropene	<0.30		1.0	0.30	ug/L			12/22/21 16:33	1
Ethylbenzene	<0.18		0.50	0.18	ug/L			12/22/21 16:33	1
Hexachlorobutadiene	<0.45		1.0	0.45	ug/L			12/22/21 16:33	1
Isopropylbenzene	<0.39		1.0	0.39	ug/L			12/22/21 16:33	1
Isopropyl ether	<0.28		1.0	0.28	ug/L			12/22/21 16:33	1
Methylene Chloride	<1.6		5.0	1.6	ug/L			12/22/21 16:33	1
Methyl tert-butyl ether	<0.39		1.0	0.39	ug/L			12/22/21 16:33	1
Naphthalene	<0.34		1.0	0.34	ug/L			12/22/21 16:33	1
n-Butylbenzene	<0.39		1.0	0.39	ug/L			12/22/21 16:33	1
N-Propylbenzene	<0.41		1.0	0.41	ug/L			12/22/21 16:33	1
p-Isopropyltoluene	<0.36		1.0	0.36	ug/L			12/22/21 16:33	1
sec-Butylbenzene	<0.40		1.0	0.40	ug/L			12/22/21 16:33	1
Styrene	<0.39		1.0	0.39	ug/L			12/22/21 16:33	1
tert-Butylbenzene	<0.40		1.0	0.40	ug/L			12/22/21 16:33	1
1,1,1,2-Tetrachloroethane	<0.46		1.0	0.46	ug/L			12/22/21 16:33	1
1,1,2,2-Tetrachloroethane	<0.40		1.0	0.40	ug/L			12/22/21 16:33	1
Tetrachloroethene	<0.37		1.0	0.37	ug/L			12/22/21 16:33	1
Toluene	<0.15		0.50	0.15	ug/L			12/22/21 16:33	1
trans-1,2-Dichloroethene	<0.35		1.0	0.35	ug/L			12/22/21 16:33	1
trans-1,3-Dichloropropene	<0.36		1.0	0.36	ug/L			12/22/21 16:33	1

Client: Ramboll US Corporation
Job ID: 500-209564-1
Project/Site: Former Mirro Plant No 9 - 1690019647

Client Sample ID: EB-01
Lab Sample ID: 500-209564-2
Date Collected: 12/09/21 12:45
Matrix: Water
Date Received: 12/10/21 10:30

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,3-Trichlorobenzene	<0.46		1.0	0.46	ug/L			12/22/21 16:33	1
1,2,4-Trichlorobenzene	<0.34		1.0	0.34	ug/L			12/22/21 16:33	1
1,1,1-Trichloroethane	<0.38		1.0	0.38	ug/L			12/22/21 16:33	1
1,1,2-Trichloroethane	<0.35		1.0	0.35	ug/L			12/22/21 16:33	1
Trichloroethene	<0.16		0.50	0.16	ug/L			12/22/21 16:33	1
Trichlorofluoromethane	<0.43		1.0	0.43	ug/L			12/22/21 16:33	1
1,2,3-Trichloropropane	<0.41		2.0	0.41	ug/L			12/22/21 16:33	1
1,2,4-Trimethylbenzene	<0.36		1.0	0.36	ug/L			12/22/21 16:33	1
1,3,5-Trimethylbenzene	<0.25		1.0	0.25	ug/L			12/22/21 16:33	1
Vinyl chloride	<0.20		1.0	0.20	ug/L			12/22/21 16:33	1
Xylenes, Total	<0.22		1.0	0.22	ug/L			12/22/21 16:33	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*83*		*72 - 124*		*12/22/21 16:33*	*1*
Dibromofluoromethane (Surr)	*90*		*75 - 120*		*12/22/21 16:33*	*1*
1,2-Dichloroethane-d4 (Surr)	*86*		*75 - 126*		*12/22/21 16:33*	*1*
Toluene-d8 (Surr)	*95*		*75 - 120*		*12/22/21 16:33*	*1*

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	<0.26		0.85	0.26	ug/L		12/15/21 07:23	12/16/21 16:54	1
Acenaphthylene	<0.23		0.85	0.23	ug/L		12/15/21 07:23	12/16/21 16:54	1
Anthracene	<0.28		0.85	0.28	ug/L		12/15/21 07:23	12/16/21 16:54	1
Benzo[a]anthracene	<0.048		0.17	0.048	ug/L		12/15/21 07:23	12/16/21 16:54	1
Benzo[a]pyrene	<0.084		0.17	0.084	ug/L		12/15/21 07:23	12/16/21 16:54	1
Benzo[b]fluoranthene	<0.069		0.17	0.069	ug/L		12/15/21 07:23	12/16/21 16:54	1
Benzo[g,h,i]perylene	<0.32		0.85	0.32	ug/L		12/15/21 07:23	12/16/21 16:54	1
Benzo[k]fluoranthene	<0.055		0.17	0.055	ug/L		12/15/21 07:23	12/16/21 16:54	1
Chrysene	<0.058		0.17	0.058	ug/L		12/15/21 07:23	12/16/21 16:54	1
Dibenz(a,h)anthracene	<0.043		0.26	0.043	ug/L		12/15/21 07:23	12/16/21 16:54	1
Fluoranthene	<0.39		0.85	0.39	ug/L		12/15/21 07:23	12/16/21 16:54	1
Fluorene	<0.21		0.85	0.21	ug/L		12/15/21 07:23	12/16/21 16:54	1
Indeno[1,2,3-cd]pyrene	<0.064		0.17	0.064	ug/L		12/15/21 07:23	12/16/21 16:54	1
1-Methylnaphthalene	<0.26		1.7	0.26	ug/L		12/15/21 07:23	12/16/21 16:54	1
2-Methylnaphthalene	<0.056		1.7	0.056	ug/L		12/15/21 07:23	12/16/21 16:54	1
Naphthalene	<0.26		0.85	0.26	ug/L		12/15/21 07:23	12/16/21 16:54	1
Phenanthrene	<0.26		0.85	0.26	ug/L		12/15/21 07:23	12/16/21 16:54	1
Pyrene	<0.36		0.85	0.36	ug/L		12/15/21 07:23	12/16/21 16:54	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*67*		*34 - 110*	*12/15/21 07:23*	*12/16/21 16:54*	*1*
Nitrobenzene-d5 (Surr)	*62*		*36 - 120*	*12/15/21 07:23*	*12/16/21 16:54*	*1*
Terphenyl-d14 (Surr)	*86*		*40 - 145*	*12/15/21 07:23*	*12/16/21 16:54*	*1*

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<0.075		0.45	0.075	ug/L		12/13/21 09:44	12/14/21 10:53	1
PCB-1221	<0.22		0.45	0.22	ug/L		12/13/21 09:44	12/14/21 10:53	1
PCB-1232	<0.22		0.45	0.22	ug/L		12/13/21 09:44	12/14/21 10:53	1
PCB-1242	<0.22		0.45	0.22	ug/L		12/13/21 09:44	12/14/21 10:53	1

Client Sample ID: EB-01
Lab Sample ID: 500-209564-2
Date Collected: 12/09/21 12:45
Matrix: Water
Date Received: 12/10/21 10:30

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1248	<0.22		0.45	0.22	ug/L		12/13/21 09:44	12/14/21 10:53	1
PCB-1254	<0.22		0.45	0.22	ug/L		12/13/21 09:44	12/14/21 10:53	1
PCB-1260	<0.079		0.45	0.079	ug/L		12/13/21 09:44	12/14/21 10:53	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*85*		*30 - 120*	*12/13/21 09:44*	*12/14/21 10:53*	*1*
DCB Decachlorobiphenyl	*75*		*30 - 140*	*12/13/21 09:44*	*12/14/21 10:53*	*1*

Method: 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	<2.4		4.9	2.4	ng/L		12/16/21 04:53	12/20/21 06:43	1
Perfluoropentanoic acid (PFPeA)	<0.48		2.0	0.48	ng/L		12/16/21 04:53	12/20/21 06:43	1
Perfluorohexanoic acid (PFHxA)	<0.57		2.0	0.57	ng/L		12/16/21 04:53	12/20/21 06:43	1
Perfluoroheptanoic acid (PFHpA)	<0.25		2.0	0.25	ng/L		12/16/21 04:53	12/20/21 06:43	1
Perfluorooctanoic acid (PFOA)	<0.84		2.0	0.84	ng/L		12/16/21 04:53	12/20/21 06:43	1
Perfluorononanoic acid (PFNA)	<0.27		2.0	0.27	ng/L		12/16/21 04:53	12/20/21 06:43	1
Perfluorodecanoic acid (PFDA)	<0.31		2.0	0.31	ng/L		12/16/21 04:53	12/20/21 06:43	1
Perfluoroundecanoic acid (PFUnA)	<1.1		2.0	1.1	ng/L		12/16/21 04:53	12/20/21 06:43	1
Perfluorododecanoic acid (PFDoA)	<0.54		2.0	0.54	ng/L		12/16/21 04:53	12/20/21 06:43	1
Perfluorotridecanoic acid (PFTriA)	<1.3		2.0	1.3	ng/L		12/16/21 04:53	12/20/21 06:43	1
Perfluorotetradecanoic acid (PFTeA)	<0.72		2.0	0.72	ng/L		12/16/21 04:53	12/20/21 06:43	1
Perfluorobutanesulfonic acid (PFBS)	<0.20		2.0	0.20	ng/L		12/16/21 04:53	12/20/21 06:43	1
Perfluoropentanesulfonic acid (PFPeS)	<0.30		2.0	0.30	ng/L		12/16/21 04:53	12/20/21 06:43	1
Perfluorohexanesulfonic acid (PFHxS)	<0.56		2.0	0.56	ng/L		12/16/21 04:53	12/20/21 06:43	1
Perfluoroheptanesulfonic Acid (PFHpS)	<0.19		2.0	0.19	ng/L		12/16/21 04:53	12/20/21 06:43	1
Perfluorooctanesulfonic acid (PFOS)	<0.53		2.0	0.53	ng/L		12/16/21 04:53	12/20/21 06:43	1
Perfluorononanesulfonic acid (PFNS)	<0.37		2.0	0.37	ng/L		12/16/21 04:53	12/20/21 06:43	1
Perfluorodecanesulfonic acid (PFDS)	<0.32		2.0	0.32	ng/L		12/16/21 04:53	12/20/21 06:43	1
Perfluorododecanesulfonic acid (PFDoS)	<0.96		2.0	0.96	ng/L		12/16/21 04:53	12/20/21 06:43	1
Perfluorooctanesulfonamide (FOSA)	<0.97		2.0	0.97	ng/L		12/16/21 04:53	12/20/21 06:43	1
NEtFOSA	<0.86		2.0	0.86	ng/L		12/16/21 04:53	12/20/21 06:43	1
NMeFOSA	<0.42		2.0	0.42	ng/L		12/16/21 04:53	12/20/21 06:43	1
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	<1.2		4.9	1.2	ng/L		12/16/21 04:53	12/20/21 06:43	1
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	<1.3		4.9	1.3	ng/L		12/16/21 04:53	12/20/21 06:43	1
NMeFOSE	<1.4		4.0	1.4	ng/L		12/16/21 04:53	12/20/21 06:43	1
NEtFOSE	<0.84		2.0	0.84	ng/L		12/16/21 04:53	12/20/21 06:43	1
4:2 FTS	<0.24		2.0	0.24	ng/L		12/16/21 04:53	12/20/21 06:43	1
6:2 FTS	<2.5		4.9	2.5	ng/L		12/16/21 04:53	12/20/21 06:43	1
8:2 FTS	<0.45		2.0	0.45	ng/L		12/16/21 04:53	12/20/21 06:43	1
DONA	<0.40		2.0	0.40	ng/L		12/16/21 04:53	12/20/21 06:43	1
HFPO-DA (GenX)	<1.5		4.0	1.5	ng/L		12/16/21 04:53	12/20/21 06:43	1
F-53B Major	<0.24		2.0	0.24	ng/L		12/16/21 04:53	12/20/21 06:43	1
F-53B Minor	<0.32		2.0	0.32	ng/L		12/16/21 04:53	12/20/21 06:43	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C4 PFBA	*90*		*25 - 150*	*12/16/21 04:53*	*12/20/21 06:43*	*1*
13C5 PFPeA	*86*		*25 - 150*	*12/16/21 04:53*	*12/20/21 06:43*	*1*

Client Sample ID: EB-01
Date Collected: 12/09/21 12:45
Date Received: 12/10/21 10:30

Lab Sample ID: 500-209564-2
Matrix: Water

Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C2 PFHxA	71		25 - 150	12/16/21 04:53	12/20/21 06:43	1
13C4 PFHpA	75		25 - 150	12/16/21 04:53	12/20/21 06:43	1
13C4 PFOA	99		25 - 150	12/16/21 04:53	12/20/21 06:43	1
13C5 PFNA	103		25 - 150	12/16/21 04:53	12/20/21 06:43	1
13C2 PFDA	93		25 - 150	12/16/21 04:53	12/20/21 06:43	1
13C2 PFUnA	92		25 - 150	12/16/21 04:53	12/20/21 06:43	1
13C2 PFDoA	108		25 - 150	12/16/21 04:53	12/20/21 06:43	1
13C2 PFTeDA	114		25 - 150	12/16/21 04:53	12/20/21 06:43	1
13C3 PFBS	86		25 - 150	12/16/21 04:53	12/20/21 06:43	1
18O2 PFHxS	77		25 - 150	12/16/21 04:53	12/20/21 06:43	1
13C4 PFOS	93		25 - 150	12/16/21 04:53	12/20/21 06:43	1
13C8 FOSA	82		10 - 150	12/16/21 04:53	12/20/21 06:43	1
d3-NMeFOSAA	81		25 - 150	12/16/21 04:53	12/20/21 06:43	1
d5-NEtFOSAA	85		25 - 150	12/16/21 04:53	12/20/21 06:43	1
d-N-MeFOSA-M	79		10 - 150	12/16/21 04:53	12/20/21 06:43	1
d-N-EtFOSA-M	78		10 - 150	12/16/21 04:53	12/20/21 06:43	1
d7-N-MeFOSE-M	85		10 - 150	12/16/21 04:53	12/20/21 06:43	1
d9-N-EtFOSE-M	86		10 - 150	12/16/21 04:53	12/20/21 06:43	1
M2-4:2 FTS	67		25 - 150	12/16/21 04:53	12/20/21 06:43	1
M2-6:2 FTS	76		25 - 150	12/16/21 04:53	12/20/21 06:43	1
M2-8:2 FTS	76		25 - 150	12/16/21 04:53	12/20/21 06:43	1
13C3 HFPO-DA	79		25 - 150	12/16/21 04:53	12/20/21 06:43	1
13C2 10:2 FTS	103		25 - 150	12/16/21 04:53	12/20/21 06:43	1

Method: 6020A - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	<25		100	25	ug/L		12/21/21 09:30	12/21/21 22:54	1
Antimony	<1.3		3.0	1.3	ug/L		12/21/21 09:30	12/21/21 22:54	1
Arsenic	**0.50**	**J ^+ B**	1.0	0.23	ug/L		12/21/21 09:30	12/21/21 22:54	1
Barium	<0.73		2.5	0.73	ug/L		12/21/21 09:30	12/21/21 22:54	1
Cadmium	<0.17		0.50	0.17	ug/L		12/21/21 09:30	12/21/21 22:54	1
Chromium	<1.1		5.0	1.1	ug/L		12/21/21 09:30	12/21/21 22:54	1
Copper	<0.50		2.0	0.50	ug/L		12/21/21 09:30	12/21/21 22:54	1
Iron	<47		100	47	ug/L		12/21/21 09:30	12/21/21 22:54	1
Lead	<0.19		0.50	0.19	ug/L		12/21/21 09:30	12/21/21 22:54	1
Manganese	<0.79		2.5	0.79	ug/L		12/21/21 09:30	12/21/21 22:54	1
Nickel	<0.63		2.0	0.63	ug/L		12/21/21 09:30	12/21/21 22:54	1
Selenium	<0.98		2.5	0.98	ug/L		12/21/21 09:30	12/21/21 22:54	1
Silver	<0.12		0.50	0.12	ug/L		12/21/21 09:30	12/21/21 22:54	1
Thallium	<0.57		2.0	0.57	ug/L		12/21/21 09:30	12/21/21 22:54	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.098		0.20	0.098	ug/L		12/16/21 10:45	12/17/21 08:55	1

Client: Ramboll US Corporation
Project/Site: Former Mirro Plant No 9 - 1690019647

Job ID: 500-209564-1

Client Sample ID: Trip Blank

Date Collected: 12/09/21 00:00
Date Received: 12/10/21 10:30

Lab Sample ID: 500-209564-3

Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.15		0.50	0.15	ug/L			12/22/21 14:16	1
Bromobenzene	<0.36		1.0	0.36	ug/L			12/22/21 14:16	1
Bromochloromethane	<0.43		1.0	0.43	ug/L			12/22/21 14:16	1
Bromodichloromethane	<0.37		1.0	0.37	ug/L			12/22/21 14:16	1
Bromoform	<0.48		1.0	0.48	ug/L			12/22/21 14:16	1
Bromomethane	<0.80		3.0	0.80	ug/L			12/22/21 14:16	1
Carbon tetrachloride	<0.38		1.0	0.38	ug/L			12/22/21 14:16	1
Chlorobenzene	<0.39		1.0	0.39	ug/L			12/22/21 14:16	1
Chloroethane	<0.51		1.0	0.51	ug/L			12/22/21 14:16	1
Chloroform	<0.37		2.0	0.37	ug/L			12/22/21 14:16	1
Chloromethane	<0.32		1.0	0.32	ug/L			12/22/21 14:16	1
2-Chlorotoluene	<0.31		1.0	0.31	ug/L			12/22/21 14:16	1
4-Chlorotoluene	<0.35		1.0	0.35	ug/L			12/22/21 14:16	1
cis-1,2-Dichloroethene	<0.41		1.0	0.41	ug/L			12/22/21 14:16	1
cis-1,3-Dichloropropene	<0.42		1.0	0.42	ug/L			12/22/21 14:16	1
Dibromochloromethane	<0.49		1.0	0.49	ug/L			12/22/21 14:16	1
1,2-Dibromo-3-Chloropropane	<2.0		5.0	2.0	ug/L			12/22/21 14:16	1
1,2-Dibromoethane	<0.39		1.0	0.39	ug/L			12/22/21 14:16	1
Dibromomethane	<0.27		1.0	0.27	ug/L			12/22/21 14:16	1
1,2-Dichlorobenzene	<0.33		1.0	0.33	ug/L			12/22/21 14:16	1
1,3-Dichlorobenzene	<0.40		1.0	0.40	ug/L			12/22/21 14:16	1
1,4-Dichlorobenzene	<0.36		1.0	0.36	ug/L			12/22/21 14:16	1
Dichlorodifluoromethane	<0.67		3.0	0.67	ug/L			12/22/21 14:16	1
1,1-Dichloroethane	<0.41		1.0	0.41	ug/L			12/22/21 14:16	1
1,2-Dichloroethane	<0.39		1.0	0.39	ug/L			12/22/21 14:16	1
1,1-Dichloroethene	<0.39		1.0	0.39	ug/L			12/22/21 14:16	1
1,2-Dichloropropane	<0.43		1.0	0.43	ug/L			12/22/21 14:16	1
1,3-Dichloropropane	<0.36		1.0	0.36	ug/L			12/22/21 14:16	1
2,2-Dichloropropane	<0.44		1.0	0.44	ug/L			12/22/21 14:16	1
1,1-Dichloropropene	<0.30		1.0	0.30	ug/L			12/22/21 14:16	1
Ethylbenzene	<0.18		0.50	0.18	ug/L			12/22/21 14:16	1
Hexachlorobutadiene	<0.45		1.0	0.45	ug/L			12/22/21 14:16	1
Isopropylbenzene	<0.39		1.0	0.39	ug/L			12/22/21 14:16	1
Isopropyl ether	<0.28		1.0	0.28	ug/L			12/22/21 14:16	1
Methylene Chloride	<1.6		5.0	1.6	ug/L			12/22/21 14:16	1
Methyl tert-butyl ether	<0.39		1.0	0.39	ug/L			12/22/21 14:16	1
Naphthalene	<0.34		1.0	0.34	ug/L			12/22/21 14:16	1
n-Butylbenzene	<0.39		1.0	0.39	ug/L			12/22/21 14:16	1
N-Propylbenzene	<0.41		1.0	0.41	ug/L			12/22/21 14:16	1
p-Isopropyltoluene	<0.36		1.0	0.36	ug/L			12/22/21 14:16	1
sec-Butylbenzene	<0.40		1.0	0.40	ug/L			12/22/21 14:16	1
Styrene	<0.39		1.0	0.39	ug/L			12/22/21 14:16	1
tert-Butylbenzene	<0.40		1.0	0.40	ug/L			12/22/21 14:16	1
1,1,1,2-Tetrachloroethane	<0.46		1.0	0.46	ug/L			12/22/21 14:16	1
1,1,2,2-Tetrachloroethane	<0.40		1.0	0.40	ug/L			12/22/21 14:16	1
Tetrachloroethene	<0.37		1.0	0.37	ug/L			12/22/21 14:16	1
Toluene	<0.15		0.50	0.15	ug/L			12/22/21 14:16	1
trans-1,2-Dichloroethene	<0.35		1.0	0.35	ug/L			12/22/21 14:16	1
trans-1,3-Dichloropropene	<0.36		1.0	0.36	ug/L			12/22/21 14:16	1

Client: Ramboll US Corporation
Job ID: 500-209564-1
Project/Site: Former Mirro Plant No 9 - 1690019647

Client Sample ID: Trip Blank
Lab Sample ID: 500-209564-3
Date Collected: 12/09/21 00:00
Matrix: Water
Date Received: 12/10/21 10:30

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,3-Trichlorobenzene	<0.46		1.0	0.46	ug/L			12/22/21 14:16	1
1,2,4-Trichlorobenzene	<0.34		1.0	0.34	ug/L			12/22/21 14:16	1
1,1,1-Trichloroethane	<0.38		1.0	0.38	ug/L			12/22/21 14:16	1
1,1,2-Trichloroethane	<0.35		1.0	0.35	ug/L			12/22/21 14:16	1
Trichloroethene	<0.16		0.50	0.16	ug/L			12/22/21 14:16	1
Trichlorofluoromethane	<0.43		1.0	0.43	ug/L			12/22/21 14:16	1
1,2,3-Trichloropropane	<0.41		2.0	0.41	ug/L			12/22/21 14:16	1
1,2,4-Trimethylbenzene	<0.36		1.0	0.36	ug/L			12/22/21 14:16	1
1,3,5-Trimethylbenzene	<0.25		1.0	0.25	ug/L			12/22/21 14:16	1
Vinyl chloride	<0.20		1.0	0.20	ug/L			12/22/21 14:16	1
Xylenes, Total	<0.22		1.0	0.22	ug/L			12/22/21 14:16	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*82*		*72 - 124*		*12/22/21 14:16*	*1*
Dibromofluoromethane (Surr)	*89*		*75 - 120*		*12/22/21 14:16*	*1*
1,2-Dichloroethane-d4 (Surr)	*84*		*75 - 126*		*12/22/21 14:16*	*1*
Toluene-d8 (Surr)	*94*		*75 - 120*		*12/22/21 14:16*	*1*

Definitions/Glossary

Client: Ramboll US Corporation
Job ID: 500-209564-1
Project/Site: Former Mirro Plant No 9 - 1690019647

Qualifiers

LCMS

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Metals

Qualifier	Qualifier Description
^+	Continuing Calibration Verification (CCV) is outside acceptance limits, high biased.
B	Compound was found in the blank and sample.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

QC Association Summary

Client: Ramboll US Corporation
Job ID: 500-209564-1
Project/Site: Former Mirro Plant No 9 - 1690019647

GC/MS VOA

Analysis Batch: 634922

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-209564-2	EB-01	Total/NA	Water	8260B	
500-209564-3	Trip Blank	Total/NA	Water	8260B	
MB 500-634922/6	Method Blank	Total/NA	Water	8260B	
LCS 500-634922/4	Lab Control Sample	Total/NA	Water	8260B	

GC/MS Semi VOA

Prep Batch: 633730

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-209564-2	EB-01	Total/NA	Water	3510C	
MB 500-633730/1-A	Method Blank	Total/NA	Water	3510C	
LCS 500-633730/2-A	Lab Control Sample	Total/NA	Water	3510C	

Analysis Batch: 633806

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 500-633730/1-A	Method Blank	Total/NA	Water	8270D	633730
LCS 500-633730/2-A	Lab Control Sample	Total/NA	Water	8270D	633730

Analysis Batch: 634033

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-209564-2	EB-01	Total/NA	Water	8270D	633730

GC Semi VOA

Prep Batch: 633372

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-209564-2	EB-01	Total/NA	Water	3510C	
MB 500-633372/1-A	Method Blank	Total/NA	Water	3510C	
LCS 500-633372/4-A	Lab Control Sample	Total/NA	Water	3510C	
LCSD 500-633372/5-A	Lab Control Sample Dup	Total/NA	Water	3510C	

Analysis Batch: 633459

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-209564-2	EB-01	Total/NA	Water	8082A	633372
MB 500-633372/1-A	Method Blank	Total/NA	Water	8082A	633372
LCS 500-633372/4-A	Lab Control Sample	Total/NA	Water	8082A	633372
LCSD 500-633372/5-A	Lab Control Sample Dup	Total/NA	Water	8082A	633372

LCMS

Prep Batch: 551272

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-209564-1	FB-01	Total/NA	Water	3535	
500-209564-2	EB-01	Total/NA	Water	3535	
MB 320-551272/1-A	Method Blank	Total/NA	Water	3535	
LCS 320-551272/2-A	Lab Control Sample	Total/NA	Water	3535	
LCSD 320-551272/3-A	Lab Control Sample Dup	Total/NA	Water	3535	

Analysis Batch: 552303

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-209564-1	FB-01	Total/NA	Water	537 (modified)	551272
500-209564-2	EB-01	Total/NA	Water	537 (modified)	551272

LCMS (Continued)

Analysis Batch: 552303 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 320-551272/1-A	Method Blank	Total/NA	Water	537 (modified)	551272
LCS 320-551272/2-A	Lab Control Sample	Total/NA	Water	537 (modified)	551272
LCSD 320-551272/3-A	Lab Control Sample Dup	Total/NA	Water	537 (modified)	551272

Metals

Prep Batch: 634059

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-209564-2	EB-01	Dissolved	Water	7470A	
MB 500-634059/12-A	Method Blank	Total/NA	Water	7470A	
LCS 500-634059/13-A	Lab Control Sample	Total/NA	Water	7470A	

Analysis Batch: 634283

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-209564-2	EB-01	Dissolved	Water	7470A	634059
MB 500-634059/12-A	Method Blank	Total/NA	Water	7470A	634059
LCS 500-634059/13-A	Lab Control Sample	Total/NA	Water	7470A	634059

Prep Batch: 634757

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-209564-2	EB-01	Dissolved	Water	3005A	
MB 500-634757/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 500-634757/2-A	Lab Control Sample	Total Recoverable	Water	3005A	

Analysis Batch: 634985

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-209564-2	EB-01	Dissolved	Water	6020A	634757
MB 500-634757/1-A	Method Blank	Total Recoverable	Water	6020A	634757
LCS 500-634757/2-A	Lab Control Sample	Total Recoverable	Water	6020A	634757

Surrogate Summary

Client: Ramboll US Corporation
Project/Site: Former Mirro Plant No 9 - 1690019647

Job ID: 500-209564-1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Matrix: Water — **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)			
		BFB	DBFM	DCA	TOL
Lab Sample ID	Client Sample ID	(72-124)	(75-120)	(75-126)	(75-120)
500-209564-2	EB-01	83	90	86	95
500-209564-3	Trip Blank	82	89	84	94
LCS 500-634922/4	Lab Control Sample	83	93	85	96
MB 500-634922/6	Method Blank	84	91	86	93

Surrogate Legend

BFB = 4-Bromofluorobenzene (Surr)
DBFM = Dibromofluoromethane (Surr)
DCA = 1,2-Dichloroethane-d4 (Surr)
TOL = Toluene-d8 (Surr)

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Matrix: Water — **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)		
		FBP	NBZ	TPHL
Lab Sample ID	Client Sample ID	(34-110)	(36-120)	(40-145)
500-209564-2	EB-01	67	62	86
LCS 500-633730/2-A	Lab Control Sample	72	74	101
MB 500-633730/1-A	Method Blank	72	70	121

Surrogate Legend

FBP = 2-Fluorobiphenyl (Surr)
NBZ = Nitrobenzene-d5 (Surr)
TPHL = Terphenyl-d14 (Surr)

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Matrix: Water — **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)	
		TCX1	DCBP1
Lab Sample ID	Client Sample ID	(30-120)	(30-140)
500-209564-2	EB-01	85	75
LCS 500-633372/4-A	Lab Control Sample	75	78
LCSD 500-633372/5-A	Lab Control Sample Dup	78	78
MB 500-633372/1-A	Method Blank	83	78

Surrogate Legend

TCX = Tetrachloro-m-xylene
DCBP = DCB Decachlorobiphenyl

Method: 8260B - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 500-634922/6
Matrix: Water
Analysis Batch: 634922

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.15		0.50	0.15	ug/L			12/22/21 13:49	1
Bromobenzene	<0.36		1.0	0.36	ug/L			12/22/21 13:49	1
Bromochloromethane	<0.43		1.0	0.43	ug/L			12/22/21 13:49	1
Bromodichloromethane	<0.37		1.0	0.37	ug/L			12/22/21 13:49	1
Bromoform	<0.48		1.0	0.48	ug/L			12/22/21 13:49	1
Bromomethane	<0.80		3.0	0.80	ug/L			12/22/21 13:49	1
Carbon tetrachloride	<0.38		1.0	0.38	ug/L			12/22/21 13:49	1
Chlorobenzene	<0.39		1.0	0.39	ug/L			12/22/21 13:49	1
Chloroethane	<0.51		1.0	0.51	ug/L			12/22/21 13:49	1
Chloroform	<0.37		2.0	0.37	ug/L			12/22/21 13:49	1
Chloromethane	<0.32		1.0	0.32	ug/L			12/22/21 13:49	1
2-Chlorotoluene	<0.31		1.0	0.31	ug/L			12/22/21 13:49	1
4-Chlorotoluene	<0.35		1.0	0.35	ug/L			12/22/21 13:49	1
cis-1,2-Dichloroethene	<0.41		1.0	0.41	ug/L			12/22/21 13:49	1
cis-1,3-Dichloropropene	<0.42		1.0	0.42	ug/L			12/22/21 13:49	1
Dibromochloromethane	<0.49		1.0	0.49	ug/L			12/22/21 13:49	1
1,2-Dibromo-3-Chloropropane	<2.0		5.0	2.0	ug/L			12/22/21 13:49	1
1,2-Dibromoethane	<0.39		1.0	0.39	ug/L			12/22/21 13:49	1
Dibromomethane	<0.27		1.0	0.27	ug/L			12/22/21 13:49	1
1,2-Dichlorobenzene	<0.33		1.0	0.33	ug/L			12/22/21 13:49	1
1,3-Dichlorobenzene	<0.40		1.0	0.40	ug/L			12/22/21 13:49	1
1,4-Dichlorobenzene	<0.36		1.0	0.36	ug/L			12/22/21 13:49	1
Dichlorodifluoromethane	<0.67		3.0	0.67	ug/L			12/22/21 13:49	1
1,1-Dichloroethane	<0.41		1.0	0.41	ug/L			12/22/21 13:49	1
1,2-Dichloroethane	<0.39		1.0	0.39	ug/L			12/22/21 13:49	1
1,1-Dichloroethene	<0.39		1.0	0.39	ug/L			12/22/21 13:49	1
1,2-Dichloropropane	<0.43		1.0	0.43	ug/L			12/22/21 13:49	1
1,3-Dichloropropane	<0.36		1.0	0.36	ug/L			12/22/21 13:49	1
2,2-Dichloropropane	<0.44		1.0	0.44	ug/L			12/22/21 13:49	1
1,1-Dichloropropene	<0.30		1.0	0.30	ug/L			12/22/21 13:49	1
Ethylbenzene	<0.18		0.50	0.18	ug/L			12/22/21 13:49	1
Hexachlorobutadiene	<0.45		1.0	0.45	ug/L			12/22/21 13:49	1
Isopropylbenzene	<0.39		1.0	0.39	ug/L			12/22/21 13:49	1
Isopropyl ether	<0.28		1.0	0.28	ug/L			12/22/21 13:49	1
Methylene Chloride	<1.6		5.0	1.6	ug/L			12/22/21 13:49	1
Methyl tert-butyl ether	<0.39		1.0	0.39	ug/L			12/22/21 13:49	1
Naphthalene	<0.34		1.0	0.34	ug/L			12/22/21 13:49	1
n-Butylbenzene	<0.39		1.0	0.39	ug/L			12/22/21 13:49	1
N-Propylbenzene	<0.41		1.0	0.41	ug/L			12/22/21 13:49	1
p-Isopropyltoluene	<0.36		1.0	0.36	ug/L			12/22/21 13:49	1
sec-Butylbenzene	<0.40		1.0	0.40	ug/L			12/22/21 13:49	1
Styrene	<0.39		1.0	0.39	ug/L			12/22/21 13:49	1
tert-Butylbenzene	<0.40		1.0	0.40	ug/L			12/22/21 13:49	1
1,1,1,2-Tetrachloroethane	<0.46		1.0	0.46	ug/L			12/22/21 13:49	1
1,1,2,2-Tetrachloroethane	<0.40		1.0	0.40	ug/L			12/22/21 13:49	1
Tetrachloroethene	<0.37		1.0	0.37	ug/L			12/22/21 13:49	1
Toluene	<0.15		0.50	0.15	ug/L			12/22/21 13:49	1
trans-1,2-Dichloroethene	<0.35		1.0	0.35	ug/L			12/22/21 13:49	1

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

Lab Sample ID: MB 500-634922/6
Matrix: Water
Analysis Batch: 634922

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
trans-1,3-Dichloropropene	<0.36		1.0	0.36	ug/L			12/22/21 13:49	1
1,2,3-Trichlorobenzene	<0.46		1.0	0.46	ug/L			12/22/21 13:49	1
1,2,4-Trichlorobenzene	<0.34		1.0	0.34	ug/L			12/22/21 13:49	1
1,1,1-Trichloroethane	<0.38		1.0	0.38	ug/L			12/22/21 13:49	1
1,1,2-Trichloroethane	<0.35		1.0	0.35	ug/L			12/22/21 13:49	1
Trichloroethene	<0.16		0.50	0.16	ug/L			12/22/21 13:49	1
Trichlorofluoromethane	<0.43		1.0	0.43	ug/L			12/22/21 13:49	1
1,2,3-Trichloropropane	<0.41		2.0	0.41	ug/L			12/22/21 13:49	1
1,2,4-Trimethylbenzene	<0.36		1.0	0.36	ug/L			12/22/21 13:49	1
1,3,5-Trimethylbenzene	<0.25		1.0	0.25	ug/L			12/22/21 13:49	1
Vinyl chloride	<0.20		1.0	0.20	ug/L			12/22/21 13:49	1
Xylenes, Total	<0.22		1.0	0.22	ug/L			12/22/21 13:49	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*84*		*72 - 124*		*12/22/21 13:49*	*1*
Dibromofluoromethane (Surr)	*91*		*75 - 120*		*12/22/21 13:49*	*1*
1,2-Dichloroethane-d4 (Surr)	*86*		*75 - 126*		*12/22/21 13:49*	*1*
Toluene-d8 (Surr)	*93*		*75 - 120*		*12/22/21 13:49*	*1*

Lab Sample ID: LCS 500-634922/4
Matrix: Water
Analysis Batch: 634922

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	50.0	47.3		ug/L		95	70 - 120
Bromobenzene	50.0	39.8		ug/L		80	70 - 122
Bromochloromethane	50.0	50.8		ug/L		102	65 - 122
Bromodichloromethane	50.0	38.7		ug/L		77	69 - 120
Bromoform	50.0	32.8		ug/L		66	56 - 132
Bromomethane	50.0	64.4		ug/L		129	40 - 152
Carbon tetrachloride	50.0	44.2		ug/L		88	59 - 133
Chlorobenzene	50.0	46.9		ug/L		94	70 - 120
Chloroethane	50.0	63.4		ug/L		127	48 - 136
Chloroform	50.0	44.0		ug/L		88	70 - 120
Chloromethane	50.0	50.2		ug/L		100	56 - 152
2-Chlorotoluene	50.0	44.0		ug/L		88	70 - 125
4-Chlorotoluene	50.0	42.5		ug/L		85	68 - 124
cis-1,2-Dichloroethene	50.0	48.4		ug/L		97	70 - 125
cis-1,3-Dichloropropene	50.0	36.7		ug/L		73	64 - 127
Dibromochloromethane	50.0	37.0		ug/L		74	68 - 125
1,2-Dibromo-3-Chloropropane	50.0	30.5		ug/L		61	56 - 123
1,2-Dibromoethane	50.0	40.9		ug/L		82	70 - 125
Dibromomethane	50.0	44.1		ug/L		88	70 - 120
1,2-Dichlorobenzene	50.0	45.4		ug/L		91	70 - 125
1,3-Dichlorobenzene	50.0	45.2		ug/L		90	70 - 125
1,4-Dichlorobenzene	50.0	44.8		ug/L		90	70 - 120
Dichlorodifluoromethane	50.0	56.0		ug/L		112	40 - 159
1,1-Dichloroethane	50.0	44.3		ug/L		89	70 - 125

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

Lab Sample ID: LCS 500-634922/4
Matrix: Water
Analysis Batch: 634922

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2-Dichloroethane	50.0	42.0		ug/L		84	68 - 127
1,1-Dichloroethene	50.0	52.4		ug/L		105	67 - 122
1,2-Dichloropropane	50.0	44.1		ug/L		88	67 - 130
1,3-Dichloropropane	50.0	40.0		ug/L		80	62 - 136
2,2-Dichloropropane	50.0	36.3		ug/L		73	58 - 139
1,1-Dichloropropene	50.0	44.4		ug/L		89	70 - 121
Ethylbenzene	50.0	50.1		ug/L		100	70 - 123
Hexachlorobutadiene	50.0	55.1		ug/L		110	51 - 150
Isopropylbenzene	50.0	47.0		ug/L		94	70 - 126
Methylene Chloride	50.0	49.4		ug/L		99	69 - 125
Methyl tert-butyl ether	50.0	29.0		ug/L		58	55 - 123
Naphthalene	50.0	53.4		ug/L		107	53 - 144
n-Butylbenzene	50.0	50.7		ug/L		101	68 - 125
N-Propylbenzene	50.0	44.7		ug/L		89	69 - 127
p-Isopropyltoluene	50.0	53.5		ug/L		107	70 - 125
sec-Butylbenzene	50.0	50.9		ug/L		102	70 - 123
Styrene	50.0	47.2		ug/L		94	70 - 120
tert-Butylbenzene	50.0	52.1		ug/L		104	70 - 121
1,1,1,2-Tetrachloroethane	50.0	46.8		ug/L		94	70 - 125
1,1,2,2-Tetrachloroethane	50.0	37.0		ug/L		74	62 - 140
Tetrachloroethene	50.0	48.4		ug/L		97	70 - 128
Toluene	50.0	47.2		ug/L		94	70 - 125
trans-1,2-Dichloroethene	50.0	48.3		ug/L		97	70 - 125
trans-1,3-Dichloropropene	50.0	32.6		ug/L		65	62 - 128
1,2,3-Trichlorobenzene	50.0	53.5		ug/L		107	51 - 145
1,2,4-Trichlorobenzene	50.0	50.3		ug/L		101	57 - 137
1,1,1-Trichloroethane	50.0	45.7		ug/L		91	70 - 125
1,1,2-Trichloroethane	50.0	42.8		ug/L		86	71 - 130
Trichloroethene	50.0	50.0		ug/L		100	70 - 125
Trichlorofluoromethane	50.0	44.9		ug/L		90	55 - 128
1,2,3-Trichloropropane	50.0	38.5		ug/L		77	50 - 133
1,2,4-Trimethylbenzene	50.0	47.6		ug/L		95	70 - 123
1,3,5-Trimethylbenzene	50.0	48.4		ug/L		97	70 - 123
Vinyl chloride	50.0	55.5		ug/L		111	64 - 126
Xylenes, Total	100	101		ug/L		101	70 - 125

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*83*		*72 - 124*
Dibromofluoromethane (Surr)	*93*		*75 - 120*
1,2-Dichloroethane-d4 (Surr)	*85*		*75 - 126*
Toluene-d8 (Surr)	*96*		*75 - 120*

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Lab Sample ID: MB 500-633730/1-A
Matrix: Water
Analysis Batch: 633806

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 633730

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	<0.25		0.80	0.25	ug/L		12/15/21 07:23	12/15/21 15:11	1
Acenaphthylene	<0.21		0.80	0.21	ug/L		12/15/21 07:23	12/15/21 15:11	1
Anthracene	<0.27		0.80	0.27	ug/L		12/15/21 07:23	12/15/21 15:11	1
Benzo[a]anthracene	<0.045		0.16	0.045	ug/L		12/15/21 07:23	12/15/21 15:11	1
Benzo[a]pyrene	<0.079		0.16	0.079	ug/L		12/15/21 07:23	12/15/21 15:11	1
Benzo[b]fluoranthene	<0.065		0.16	0.065	ug/L		12/15/21 07:23	12/15/21 15:11	1
Benzo[g,h,i]perylene	<0.30		0.80	0.30	ug/L		12/15/21 07:23	12/15/21 15:11	1
Benzo[k]fluoranthene	<0.051		0.16	0.051	ug/L		12/15/21 07:23	12/15/21 15:11	1
Chrysene	<0.055		0.16	0.055	ug/L		12/15/21 07:23	12/15/21 15:11	1
Dibenz(a,h)anthracene	<0.041		0.24	0.041	ug/L		12/15/21 07:23	12/15/21 15:11	1
Fluoranthene	<0.36		0.80	0.36	ug/L		12/15/21 07:23	12/15/21 15:11	1
Fluorene	<0.20		0.80	0.20	ug/L		12/15/21 07:23	12/15/21 15:11	1
Indeno[1,2,3-cd]pyrene	<0.060		0.16	0.060	ug/L		12/15/21 07:23	12/15/21 15:11	1
1-Methylnaphthalene	<0.24		1.6	0.24	ug/L		12/15/21 07:23	12/15/21 15:11	1
2-Methylnaphthalene	<0.052		1.6	0.052	ug/L		12/15/21 07:23	12/15/21 15:11	1
Naphthalene	<0.25		0.80	0.25	ug/L		12/15/21 07:23	12/15/21 15:11	1
Phenanthrene	<0.24		0.80	0.24	ug/L		12/15/21 07:23	12/15/21 15:11	1
Pyrene	<0.34		0.80	0.34	ug/L		12/15/21 07:23	12/15/21 15:11	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*72*		*34 - 110*	*12/15/21 07:23*	*12/15/21 15:11*	*1*
Nitrobenzene-d5 (Surr)	*70*		*36 - 120*	*12/15/21 07:23*	*12/15/21 15:11*	*1*
Terphenyl-d14 (Surr)	*121*		*40 - 145*	*12/15/21 07:23*	*12/15/21 15:11*	*1*

Lab Sample ID: LCS 500-633730/2-A
Matrix: Water
Analysis Batch: 633806

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 633730

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acenaphthene	32.0	22.9		ug/L		71	46 - 110
Acenaphthylene	32.0	25.5		ug/L		80	47 - 113
Anthracene	32.0	27.5		ug/L		86	67 - 118
Benzo[a]anthracene	32.0	28.5		ug/L		89	70 - 126
Benzo[a]pyrene	32.0	35.5		ug/L		111	70 - 135
Benzo[b]fluoranthene	32.0	31.5		ug/L		99	69 - 136
Benzo[g,h,i]perylene	32.0	23.7		ug/L		74	70 - 135
Benzo[k]fluoranthene	32.0	30.5		ug/L		95	70 - 133
Chrysene	32.0	29.6		ug/L		93	68 - 129
Dibenz(a,h)anthracene	32.0	25.4		ug/L		79	70 - 134
Fluoranthene	32.0	28.1		ug/L		88	68 - 126
Fluorene	32.0	24.2		ug/L		76	53 - 120
Indeno[1,2,3-cd]pyrene	32.0	26.8		ug/L		84	65 - 133
1-Methylnaphthalene	32.0	20.6		ug/L		64	38 - 110
2-Methylnaphthalene	32.0	21.6		ug/L		67	34 - 110
Naphthalene	32.0	20.8		ug/L		65	36 - 110
Phenanthrene	32.0	26.5		ug/L		83	65 - 120
Pyrene	32.0	29.4		ug/L		92	70 - 126

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 500-633730/2-A
Matrix: Water
Analysis Batch: 633806

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 633730

Surrogate	LCS %Recovery	LCS Qualifier	Limits
2-Fluorobiphenyl (Surr)	72		34 - 110
Nitrobenzene-d5 (Surr)	74		36 - 120
Terphenyl-d14 (Surr)	101		40 - 145

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Lab Sample ID: MB 500-633372/1-A
Matrix: Water
Analysis Batch: 633459

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 633372

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<0.067		0.40	0.067	ug/L		12/13/21 09:44	12/14/21 08:44	1
PCB-1221	<0.20		0.40	0.20	ug/L		12/13/21 09:44	12/14/21 08:44	1
PCB-1232	<0.20		0.40	0.20	ug/L		12/13/21 09:44	12/14/21 08:44	1
PCB-1242	<0.20		0.40	0.20	ug/L		12/13/21 09:44	12/14/21 08:44	1
PCB-1248	<0.20		0.40	0.20	ug/L		12/13/21 09:44	12/14/21 08:44	1
PCB-1254	<0.20		0.40	0.20	ug/L		12/13/21 09:44	12/14/21 08:44	1
PCB-1260	<0.070		0.40	0.070	ug/L		12/13/21 09:44	12/14/21 08:44	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	83		30 - 120	12/13/21 09:44	12/14/21 08:44	1
DCB Decachlorobiphenyl	78		30 - 140	12/13/21 09:44	12/14/21 08:44	1

Lab Sample ID: LCS 500-633372/4-A
Matrix: Water
Analysis Batch: 633459

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 633372

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
PCB-1016			4.00	4.07		ug/L		102	56 - 120		
PCB-1260			4.00	3.97		ug/L		99	53 - 137		

Surrogate	LCS %Recovery	LCS Qualifier	Limits
Tetrachloro-m-xylene	75		30 - 120
DCB Decachlorobiphenyl	78		30 - 140

Lab Sample ID: LCSD 500-633372/5-A
Matrix: Water
Analysis Batch: 633459

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 633372

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
PCB-1016			4.00	3.95		ug/L		99	56 - 120	3	20
PCB-1260			4.00	3.76		ug/L		94	53 - 137	5	20

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
Tetrachloro-m-xylene	78		30 - 120
DCB Decachlorobiphenyl	78		30 - 140

Method: 537 (modified) - Fluorinated Alkyl Substances

Lab Sample ID: MB 320-551272/1-A
Matrix: Water
Analysis Batch: 552303

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 551272

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	<2.4		5.0	2.4	ng/L		12/16/21 04:53	12/20/21 04:06	1
Perfluoropentanoic acid (PFPeA)	<0.49		2.0	0.49	ng/L		12/16/21 04:53	12/20/21 04:06	1
Perfluorohexanoic acid (PFHxA)	<0.58		2.0	0.58	ng/L		12/16/21 04:53	12/20/21 04:06	1
Perfluoroheptanoic acid (PFHpA)	<0.25		2.0	0.25	ng/L		12/16/21 04:53	12/20/21 04:06	1
Perfluorooctanoic acid (PFOA)	<0.85		2.0	0.85	ng/L		12/16/21 04:53	12/20/21 04:06	1
Perfluorononanoic acid (PFNA)	<0.27		2.0	0.27	ng/L		12/16/21 04:53	12/20/21 04:06	1
Perfluorodecanoic acid (PFDA)	<0.31		2.0	0.31	ng/L		12/16/21 04:53	12/20/21 04:06	1
Perfluoroundecanoic acid (PFUnA)	<1.1		2.0	1.1	ng/L		12/16/21 04:53	12/20/21 04:06	1
Perfluorododecanoic acid (PFDoA)	<0.55		2.0	0.55	ng/L		12/16/21 04:53	12/20/21 04:06	1
Perfluorotridecanoic acid (PFTriA)	<1.3		2.0	1.3	ng/L		12/16/21 04:53	12/20/21 04:06	1
Perfluorotetradecanoic acid (PFTeA)	<0.73		2.0	0.73	ng/L		12/16/21 04:53	12/20/21 04:06	1
Perfluorobutanesulfonic acid (PFBS)	<0.20		2.0	0.20	ng/L		12/16/21 04:53	12/20/21 04:06	1
Perfluoropentanesulfonic acid (PFPeS)	<0.30		2.0	0.30	ng/L		12/16/21 04:53	12/20/21 04:06	1
Perfluorohexanesulfonic acid (PFHxS)	<0.57		2.0	0.57	ng/L		12/16/21 04:53	12/20/21 04:06	1
Perfluoroheptanesulfonic Acid (PFHpS)	<0.19		2.0	0.19	ng/L		12/16/21 04:53	12/20/21 04:06	1
Perfluorooctanesulfonic acid (PFOS)	<0.54		2.0	0.54	ng/L		12/16/21 04:53	12/20/21 04:06	1
Perfluorononanesulfonic acid (PFNS)	<0.37		2.0	0.37	ng/L		12/16/21 04:53	12/20/21 04:06	1
Perfluorodecanesulfonic acid (PFDS)	<0.32		2.0	0.32	ng/L		12/16/21 04:53	12/20/21 04:06	1
Perfluorododecanesulfonic acid (PFDoS)	<0.97		2.0	0.97	ng/L		12/16/21 04:53	12/20/21 04:06	1
Perfluorooctanesulfonamide (FOSA)	<0.98		2.0	0.98	ng/L		12/16/21 04:53	12/20/21 04:06	1
NEtFOSA	<0.87		2.0	0.87	ng/L		12/16/21 04:53	12/20/21 04:06	1
NMeFOSA	<0.43		2.0	0.43	ng/L		12/16/21 04:53	12/20/21 04:06	1
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	<1.2		5.0	1.2	ng/L		12/16/21 04:53	12/20/21 04:06	1
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	<1.3		5.0	1.3	ng/L		12/16/21 04:53	12/20/21 04:06	1
NMeFOSE	2.89	J	4.0	1.4	ng/L		12/16/21 04:53	12/20/21 04:06	1
NEtFOSE	1.62	J	2.0	0.85	ng/L		12/16/21 04:53	12/20/21 04:06	1
4:2 FTS	<0.24		2.0	0.24	ng/L		12/16/21 04:53	12/20/21 04:06	1
6:2 FTS	<2.5		5.0	2.5	ng/L		12/16/21 04:53	12/20/21 04:06	1
8:2 FTS	<0.46		2.0	0.46	ng/L		12/16/21 04:53	12/20/21 04:06	1
DONA	<0.40		2.0	0.40	ng/L		12/16/21 04:53	12/20/21 04:06	1
HFPO-DA (GenX)	<1.5		4.0	1.5	ng/L		12/16/21 04:53	12/20/21 04:06	1
F-53B Major	<0.24		2.0	0.24	ng/L		12/16/21 04:53	12/20/21 04:06	1
F-53B Minor	<0.32		2.0	0.32	ng/L		12/16/21 04:53	12/20/21 04:06	1

Isotope Dilution	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C4 PFBA	*93*		*25 - 150*	*12/16/21 04:53*	*12/20/21 04:06*	*1*
13C5 PFPeA	*90*		*25 - 150*	*12/16/21 04:53*	*12/20/21 04:06*	*1*
13C2 PFHxA	*77*		*25 - 150*	*12/16/21 04:53*	*12/20/21 04:06*	*1*
13C4 PFHpA	*71*		*25 - 150*	*12/16/21 04:53*	*12/20/21 04:06*	*1*
13C4 PFOA	*94*		*25 - 150*	*12/16/21 04:53*	*12/20/21 04:06*	*1*
13C5 PFNA	*101*		*25 - 150*	*12/16/21 04:53*	*12/20/21 04:06*	*1*
13C2 PFDA	*91*		*25 - 150*	*12/16/21 04:53*	*12/20/21 04:06*	*1*
13C2 PFUnA	*94*		*25 - 150*	*12/16/21 04:53*	*12/20/21 04:06*	*1*
13C2 PFDoA	*98*		*25 - 150*	*12/16/21 04:53*	*12/20/21 04:06*	*1*
13C2 PFTeDA	*105*		*25 - 150*	*12/16/21 04:53*	*12/20/21 04:06*	*1*

Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

Lab Sample ID: MB 320-551272/1-A
Matrix: Water
Analysis Batch: 552303

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 551272

Isotope Dilution	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C3 PFBS	89		25 - 150	12/16/21 04:53	12/20/21 04:06	1
18O2 PFHxS	81		25 - 150	12/16/21 04:53	12/20/21 04:06	1
13C4 PFOS	86		25 - 150	12/16/21 04:53	12/20/21 04:06	1
13C8 FOSA	79		10 - 150	12/16/21 04:53	12/20/21 04:06	1
d3-NMeFOSAA	77		25 - 150	12/16/21 04:53	12/20/21 04:06	1
d5-NEtFOSAA	83		25 - 150	12/16/21 04:53	12/20/21 04:06	1
d-N-MeFOSA-M	74		10 - 150	12/16/21 04:53	12/20/21 04:06	1
d-N-EtFOSA-M	74		10 - 150	12/16/21 04:53	12/20/21 04:06	1
d7-N-MeFOSE-M	75		10 - 150	12/16/21 04:53	12/20/21 04:06	1
d9-N-EtFOSE-M	73		10 - 150	12/16/21 04:53	12/20/21 04:06	1
M2-4:2 FTS	60		25 - 150	12/16/21 04:53	12/20/21 04:06	1
M2-6:2 FTS	81		25 - 150	12/16/21 04:53	12/20/21 04:06	1
M2-8:2 FTS	75		25 - 150	12/16/21 04:53	12/20/21 04:06	1
13C3 HFPO-DA	97		25 - 150	12/16/21 04:53	12/20/21 04:06	1
13C2 10:2 FTS	76		25 - 150	12/16/21 04:53	12/20/21 04:06	1

Lab Sample ID: LCS 320-551272/2-A
Matrix: Water
Analysis Batch: 552303

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 551272

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Perfluorobutanoic acid (PFBA)	40.0	33.7		ng/L		84	60 - 135
Perfluoropentanoic acid (PFPeA)	40.0	39.4		ng/L		99	60 - 135
Perfluorohexanoic acid (PFHxA)	40.0	40.3		ng/L		101	60 - 135
Perfluoroheptanoic acid (PFHpA)	40.0	38.2		ng/L		96	60 - 135
Perfluorooctanoic acid (PFOA)	40.0	39.3		ng/L		98	60 - 135
Perfluorononanoic acid (PFNA)	40.0	35.5		ng/L		89	60 - 135
Perfluorodecanoic acid (PFDA)	40.0	36.3		ng/L		91	60 - 135
Perfluoroundecanoic acid (PFUnA)	40.0	36.6		ng/L		92	60 - 135
Perfluorododecanoic acid (PFDoA)	40.0	35.6		ng/L		89	60 - 135
Perfluorotridecanoic acid (PFTriA)	40.0	38.5		ng/L		96	60 - 135
Perfluorotetradecanoic acid (PFTeA)	40.0	31.7		ng/L		79	60 - 135
Perfluorobutanesulfonic acid (PFBS)	35.4	29.3		ng/L		83	60 - 135
Perfluoropentanesulfonic acid (PFPeS)	37.5	27.7		ng/L		74	60 - 135
Perfluorohexanesulfonic acid (PFHxS)	36.4	34.0		ng/L		93	60 - 135
Perfluoroheptanesulfonic Acid (PFHpS)	38.1	34.7		ng/L		91	60 - 135
Perfluorooctanesulfonic acid (PFOS)	37.1	31.0		ng/L		84	60 - 135
Perfluorononanesulfonic acid (PFNS)	38.4	32.9		ng/L		86	60 - 135
Perfluorodecanesulfonic acid (PFDS)	38.6	32.5		ng/L		84	60 - 135
Perfluorododecanesulfonic acid (PFDoS)	38.7	36.1		ng/L		93	60 - 135

Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

Lab Sample ID: LCS 320-551272/2-A
Matrix: Water
Analysis Batch: 552303

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 551272

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Perfluorooctanesulfonamide (FOSA)	40.0	39.9		ng/L		100	60 - 135
NEtFOSA	40.0	41.0		ng/L		102	60 - 135
NMeFOSA	40.0	37.7		ng/L		94	60 - 135
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	40.0	39.3		ng/L		98	60 - 135
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	40.0	34.4		ng/L		86	60 - 135
NMeFOSE	40.0	41.7		ng/L		104	60 - 135
NEtFOSE	40.0	38.6		ng/L		97	60 - 135
4:2 FTS	37.4	37.1		ng/L		99	60 - 135
6:2 FTS	37.9	38.0		ng/L		100	60 - 135
8:2 FTS	38.3	41.7		ng/L		109	60 - 135
DONA	37.7	33.3		ng/L		88	60 - 135
HFPO-DA (GenX)	40.0	35.9		ng/L		90	60 - 135
F-53B Major	37.3	34.2		ng/L		92	60 - 135
F-53B Minor	37.7	35.0		ng/L		93	60 - 135

Isotope Dilution	*LCS %Recovery*	*LCS Qualifier*	*Limits*
13C4 PFBA	*95*		*25 - 150*
13C5 PFPeA	*84*		*25 - 150*
13C2 PFHxA	*73*		*25 - 150*
13C4 PFHpA	*74*		*25 - 150*
13C4 PFOA	*93*		*25 - 150*
13C5 PFNA	*93*		*25 - 150*
13C2 PFDA	*89*		*25 - 150*
13C2 PFUnA	*88*		*25 - 150*
13C2 PFDoA	*99*		*25 - 150*
13C2 PFTeDA	*111*		*25 - 150*
13C3 PFBS	*86*		*25 - 150*
18O2 PFHxS	*77*		*25 - 150*
13C4 PFOS	*89*		*25 - 150*
13C8 FOSA	*82*		*10 - 150*
d3-NMeFOSAA	*74*		*25 - 150*
d5-NEtFOSAA	*87*		*25 - 150*
d-N-MeFOSA-M	*75*		*10 - 150*
d-N-EtFOSA-M	*70*		*10 - 150*
d7-N-MeFOSE-M	*75*		*10 - 150*
d9-N-EtFOSE-M	*77*		*10 - 150*
M2-4:2 FTS	*62*		*25 - 150*
M2-6:2 FTS	*74*		*25 - 150*
M2-8:2 FTS	*70*		*25 - 150*
13C3 HFPO-DA	*89*		*25 - 150*
13C2 10:2 FTS	*82*		*25 - 150*

Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

Lab Sample ID: LCSD 320-551272/3-A
Matrix: Water
Analysis Batch: 552303

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 551272

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Perfluorobutanoic acid (PFBA)			40.0	34.6		ng/L		86	60 - 135	3	30
Perfluoropentanoic acid (PFPeA)			40.0	40.2		ng/L		100	60 - 135	2	30
Perfluorohexanoic acid (PFHxA)			40.0	39.3		ng/L		98	60 - 135	2	30
Perfluoroheptanoic acid (PFHpA)			40.0	39.9		ng/L		100	60 - 135	4	30
Perfluorooctanoic acid (PFOA)			40.0	36.8		ng/L		92	60 - 135	7	30
Perfluorononanoic acid (PFNA)			40.0	35.5		ng/L		89	60 - 135	0	30
Perfluorodecanoic acid (PFDA)			40.0	38.2		ng/L		96	60 - 135	5	30
Perfluoroundecanoic acid (PFUnA)			40.0	36.1		ng/L		90	60 - 135	2	30
Perfluorododecanoic acid (PFDoA)			40.0	38.3		ng/L		96	60 - 135	7	30
Perfluorotridecanoic acid (PFTriA)			40.0	40.6		ng/L		102	60 - 135	5	30
Perfluorotetradecanoic acid (PFTeA)			40.0	29.8		ng/L		75	60 - 135	6	30
Perfluorobutanesulfonic acid (PFBS)			35.4	27.2		ng/L		77	60 - 135	8	30
Perfluoropentanesulfonic acid (PFPeS)			37.5	29.1		ng/L		77	60 - 135	5	30
Perfluorohexanesulfonic acid (PFHxS)			36.4	32.3		ng/L		89	60 - 135	5	30
Perfluoroheptanesulfonic Acid (PFHpS)			38.1	37.4		ng/L		98	60 - 135	8	30
Perfluorooctanesulfonic acid (PFOS)			37.1	32.6		ng/L		88	60 - 135	5	30
Perfluorononanesulfonic acid (PFNS)			38.4	33.9		ng/L		88	60 - 135	3	30
Perfluorodecanesulfonic acid (PFDS)			38.6	32.1		ng/L		83	60 - 135	1	30
Perfluorododecanesulfonic acid (PFDoS)			38.7	37.0		ng/L		96	60 - 135	3	30
Perfluorooctanesulfonamide (FOSA)			40.0	39.3		ng/L		98	60 - 135	1	30
NEtFOSA			40.0	38.7		ng/L		97	60 - 135	6	30
NMeFOSA			40.0	36.4		ng/L		91	60 - 135	4	30
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)			40.0	38.5		ng/L		96	60 - 135	2	30
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)			40.0	35.4		ng/L		88	60 - 135	3	30
NMeFOSE			40.0	40.3		ng/L		101	60 - 135	3	30
NEtFOSE			40.0	38.0		ng/L		95	60 - 135	2	30
4:2 FTS			37.4	41.3		ng/L		110	60 - 135	11	30
6:2 FTS			37.9	43.3		ng/L		114	60 - 135	13	30
8:2 FTS			38.3	35.8		ng/L		93	60 - 135	15	30
DONA			37.7	34.6		ng/L		92	60 - 135	4	30
HFPO-DA (GenX)			40.0	41.1		ng/L		103	60 - 135	13	30
F-53B Major			37.3	37.0		ng/L		99	60 - 135	8	30
F-53B Minor			37.7	36.2		ng/L		96	60 - 135	3	30

Isotope Dilution	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
13C4 PFBA	*104*		*25 - 150*
13C5 PFPeA	*94*		*25 - 150*

Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

Lab Sample ID: LCSD 320-551272/3-A
Matrix: Water
Analysis Batch: 552303

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 551272

Isotope Dilution	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
13C2 PFHxA	*79*		*25 - 150*
13C4 PFHpA	*79*		*25 - 150*
13C4 PFOA	*103*		*25 - 150*
13C5 PFNA	*115*		*25 - 150*
13C2 PFDA	*97*		*25 - 150*
13C2 PFUnA	*93*		*25 - 150*
13C2 PFDoA	*100*		*25 - 150*
13C2 PFTeDA	*116*		*25 - 150*
13C3 PFBS	*98*		*25 - 150*
18O2 PFHxS	*91*		*25 - 150*
13C4 PFOS	*94*		*25 - 150*
13C8 FOSA	*92*		*10 - 150*
d3-NMeFOSAA	*80*		*25 - 150*
d5-NEtFOSAA	*87*		*25 - 150*
d-N-MeFOSA-M	*86*		*10 - 150*
d-N-EtFOSA-M	*81*		*10 - 150*
d7-N-MeFOSE-M	*78*		*10 - 150*
d9-N-EtFOSE-M	*85*		*10 - 150*
M2-4:2 FTS	*64*		*25 - 150*
M2-6:2 FTS	*78*		*25 - 150*
M2-8:2 FTS	*84*		*25 - 150*
13C3 HFPO-DA	*91*		*25 - 150*
13C2 10:2 FTS	*79*		*25 - 150*

Method: 6020A - Metals (ICP/MS)

Lab Sample ID: MB 500-634757/1-A
Matrix: Water
Analysis Batch: 634985

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 634757

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	<25		100	25	ug/L		12/21/21 09:30	12/21/21 21:28	1
Antimony	<1.3		3.0	1.3	ug/L		12/21/21 09:30	12/21/21 21:28	1
Arsenic	0.379	J ^+	1.0	0.23	ug/L		12/21/21 09:30	12/21/21 21:28	1
Barium	<0.73		2.5	0.73	ug/L		12/21/21 09:30	12/21/21 21:28	1
Cadmium	<0.17		0.50	0.17	ug/L		12/21/21 09:30	12/21/21 21:28	1
Chromium	<1.1		5.0	1.1	ug/L		12/21/21 09:30	12/21/21 21:28	1
Copper	<0.50		2.0	0.50	ug/L		12/21/21 09:30	12/21/21 21:28	1
Iron	<47		100	47	ug/L		12/21/21 09:30	12/21/21 21:28	1
Lead	<0.19		0.50	0.19	ug/L		12/21/21 09:30	12/21/21 21:28	1
Manganese	<0.79		2.5	0.79	ug/L		12/21/21 09:30	12/21/21 21:28	1
Nickel	<0.63		2.0	0.63	ug/L		12/21/21 09:30	12/21/21 21:28	1
Selenium	<0.98		2.5	0.98	ug/L		12/21/21 09:30	12/21/21 21:28	1
Silver	<0.12		0.50	0.12	ug/L		12/21/21 09:30	12/21/21 21:28	1
Thallium	<0.57		2.0	0.57	ug/L		12/21/21 09:30	12/21/21 21:28	1

Method: 6020A - Metals (ICP/MS) (Continued)

Lab Sample ID: LCS 500-634757/2-A
Matrix: Water
Analysis Batch: 634985

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 634757

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Aluminum	2000	2320		ug/L		116	80 - 120
Antimony	500	516		ug/L		103	80 - 120
Arsenic	100	105	^+	ug/L		105	80 - 120
Barium	500	524		ug/L		105	80 - 120
Cadmium	50.0	50.5		ug/L		101	80 - 120
Chromium	200	210		ug/L		105	80 - 120
Copper	250	262		ug/L		105	80 - 120
Iron	1000	1040		ug/L		104	80 - 120
Lead	100	105		ug/L		105	80 - 120
Manganese	500	515		ug/L		103	80 - 120
Nickel	500	518		ug/L		104	80 - 120
Selenium	100	105		ug/L		105	80 - 120
Silver	50.0	50.3		ug/L		101	80 - 120
Thallium	100	107		ug/L		107	80 - 120

Method: 7470A - Mercury (CVAA)

Lab Sample ID: MB 500-634059/12-A
Matrix: Water
Analysis Batch: 634283

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 634059

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.098		0.20	0.098	ug/L		12/16/21 10:45	12/17/21 08:38	1

Lab Sample ID: LCS 500-634059/13-A
Matrix: Water
Analysis Batch: 634283

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 634059

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	2.00	2.01		ug/L		101	80 - 120

Lab Chronicle

Client: Ramboll US Corporation
Project/Site: Former Mirro Plant No 9 - 1690019647

Job ID: 500-209564-1

Client Sample ID: FB-01
Date Collected: 12/09/21 12:30
Date Received: 12/10/21 10:30

Lab Sample ID: 500-209564-1
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3535			551272	12/16/21 04:53	EG	TAL SAC
Total/NA	Analysis	537 (modified)		1	552303	12/20/21 06:32	K1S	TAL SAC

Client Sample ID: EB-01
Date Collected: 12/09/21 12:45
Date Received: 12/10/21 10:30

Lab Sample ID: 500-209564-2
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	634922	12/22/21 16:33	STW	TAL CHI
Total/NA	Prep	3510C			633730	12/15/21 07:23	ALW	TAL CHI
Total/NA	Analysis	8270D		1	634033	12/16/21 16:54	EMA	TAL CHI
Total/NA	Prep	3510C			633372	12/13/21 09:44	DAK	TAL CHI
Total/NA	Analysis	8082A		1	633459	12/14/21 10:53	JBJ	TAL CHI
Total/NA	Prep	3535			551272	12/16/21 04:53	EG	TAL SAC
Total/NA	Analysis	537 (modified)		1	552303	12/20/21 06:43	K1S	TAL SAC
Dissolved	Prep	3005A			634757	12/21/21 09:30	DAJ	TAL CHI
Dissolved	Analysis	6020A		1	634985	12/21/21 22:54	FXG	TAL CHI
Dissolved	Prep	7470A			634059	12/16/21 10:45	MJG	TAL CHI
Dissolved	Analysis	7470A		1	634283	12/17/21 08:55	MJG	TAL CHI

Client Sample ID: Trip Blank
Date Collected: 12/09/21 00:00
Date Received: 12/10/21 10:30

Lab Sample ID: 500-209564-3
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	634922	12/22/21 14:16	STW	TAL CHI

Laboratory References:

TAL CHI = Eurofins TestAmerica, Chicago, 2417 Bond Street, University Park, IL 60484, TEL (708)534-5200

TAL SAC = Eurofins TestAmerica, Sacramento, 880 Riverside Parkway, West Sacramento, CA 95605, TEL (916)373-5600

Accreditation/Certification Summary

Client: Ramboll US Corporation
Job ID: 500-209564-1
Project/Site: Former Mirro Plant No 9 - 1690019647

Laboratory: Eurofins TestAmerica, Chicago

The accreditations/certifications listed below are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Wisconsin	State	999580010	08-31-22

Laboratory: Eurofins TestAmerica, Sacramento

The accreditations/certifications listed below are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Wisconsin	State	998204680	08-31-22

Eurofins TestAmerica, Chicago
2417 Bond Street
University Park IL 60484
Phone 708-534-5200 Fax 708-534-5211

Chain of Custody Record

eurofins

Client Information	Sampler: DUNCAN GLASFORD	Lab PM: Fredrick Sandie	Carrier Tracking No(s):	COC No: 500-96812-42719.1
Client Contact: Paul Lindquist	Phone: 262 573 6315	E Mail: sandra.fredrick@eurofinset.com	State of Origin: WI	Page: Page 1 of 1
Company: Ramboll US Corporation	PWSID:	Analysis Requested		Job #: 500-209564

Address: 234 W Florida Street Fifth Floor	Due Date Requested:		Preservation Codes: A HCl, B NaOH, C Zn Acetate, D Nitric Acid, E NaHSO4, F MeOH, G Amchlor, H Ascorbic Acid, I Ice, J DI Water, K EDTA, L EDA, M Hexane, N None, O AsNaO2, P Na2O4S, Q Na2SO3, R Na2S2O3, S H2SO4, T TSP Dodecahydrate, U Acetone, V MCAA, W pH 4-5, Z other (specify), Other
City: Milwaukee	TAT Requested (days):		
State, Zip: WI 53204	Compliance Project: Δ Yes Δ No		
Phone: 262 901 3510(Tel)	PO #: Purchase Order not required		
Email: plindquist@ramboll.com	WO #:		
Project Name: Former Mirro Plant No 9 1690019647	Project #: 50018382		
Site:	SSOW#:		

500-209564 COC

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	PFC_IDA_WI PFAS, Standard List (33 analytes)	6020A; 7470A	8082A; 8270D	8260B VOC	Total Number of containers	Special Instructions/Note
			Preservation Code:				N	D	N	A		
1 FB-01	12-9-21	1230	G	Water			X					
2 EB-01	12-9-21	1245	G	Water	X		X	X	X	X		
3 TRIP BLANK	—	—	—	Water						X		
				Water								
				Water								
				Water								
				Water								
				Water								
				Water								
				Water								
				Water								

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months

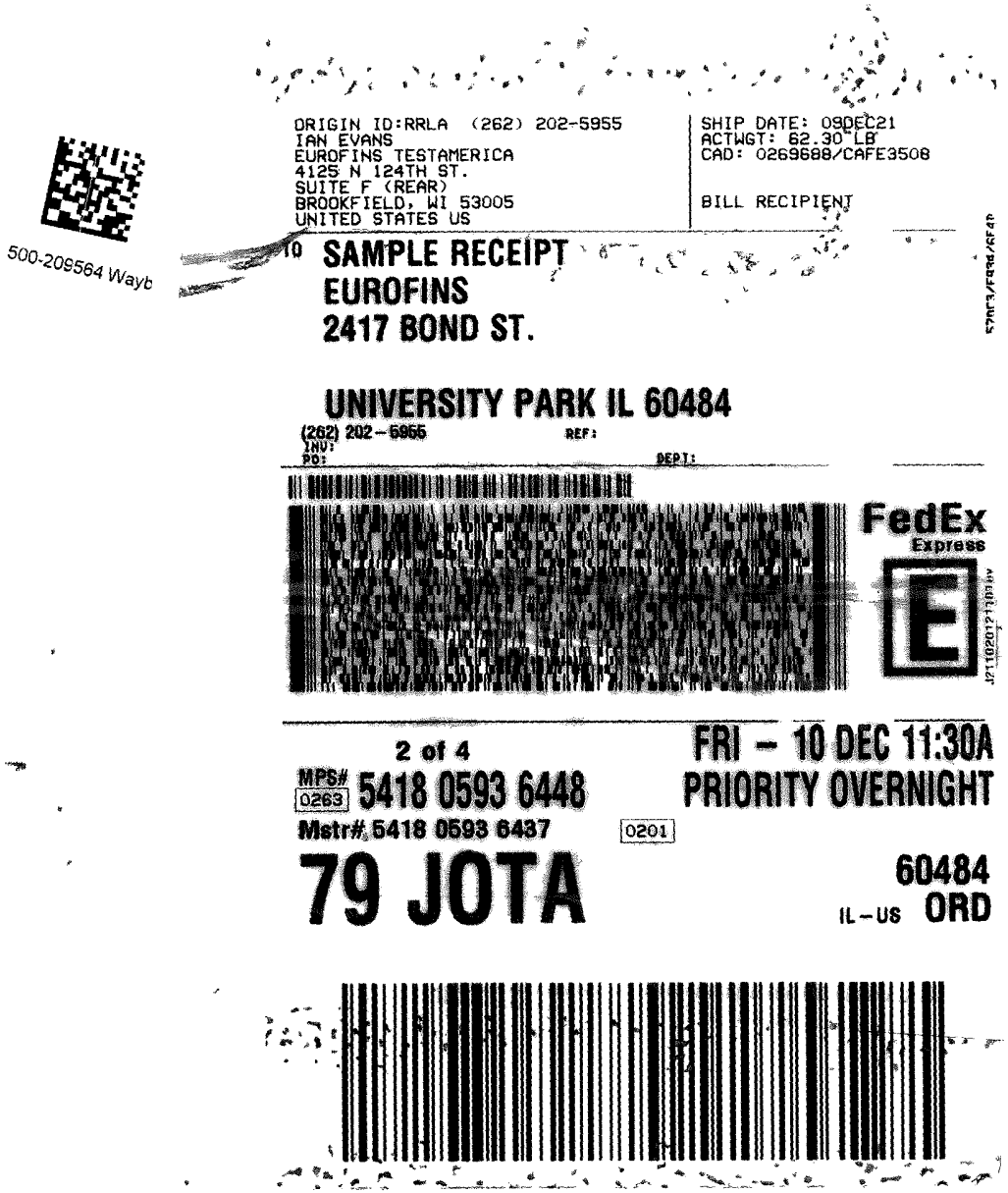
Deliverable Requested: I II III IV Other (specify)

Special Instructions/QC Requirements

Empty Kit Relinquished by:	Date	Time	Method of Shipment:

	Date/Time	Company	Received by	Date/Time	Company
Relinquished by:	12-9-21 1530	RAMBOLL		12.9.21 1530	TA
Relinquished by:	12.9.21 1700	TA		12/10/21 1030	EAL
Relinquished by:	Date/Time	Company	Received by	Date/Time	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.	Cooler Temperature(s) and Other Remarks: -0.4


500-209564 Wayb
ORIGIN ID:RRLA (262) 202-5955
IAN EVANS
EUROFINS TESTAMERICA
4125 N 124TH ST.
SUITE F (REAR)
BROOKFIELD, WI 53005
UNITED STATES US
SHIP DATE: 09DEC21
ACTWGT: 62.30 LB
CAD: 0269688/CAFE3508
BILL RECIPIENT
TO SAMPLE RECEIPT
EUROFINS
2417 BOND ST.
UNIVERSITY PARK IL 60484
(262) 202-5955
REF:
INV:
PO:
DEPT:
FedEx
Express
2 of 4
MPS# 5418 0593 6448
Mstr# 5418 0593 6437
0263
0201
FRI - 10 DEC 11:30A
PRIORITY OVERNIGHT
79 JOTA
60484
IL-US ORD

Eurofins TestAmerica, Chicago
2417 Bond Street
University Park, IL 60484
Phone: 708-534-5200 Fax: 708-534-5211

Chain of Custody Record

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Client Information (Sub Contract Lab)	Sampler:	Lab PM: Fredrick, Sandie	Carrier Tracking No(s):	COC No: 500-155299.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: sandra.fredrick@eurofinset.com	State of Origin: Wisconsin	Page: Page 1 of 1
Company: TestAmerica Laboratories, Inc.		Accreditations Required (See note): State - Wisconsin		Job #: 500-209564-1
Address: 880 Riverside Parkway, ,	Due Date Requested: 12/26/2021			
City: West Sacramento	TAT Requested (days):			
State, Zip: CA, 95605				
Phone: 916-373-5600(Tel) 916-372-1059(Fax)	PO #:			
Email:	WO #:			
Project Name: Former Mirro Plant No 9 - 1690019647	Project #: 50018382			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:

A - HCL	M - Hexane
B - NaOH	N - None
C - Zn Acetate	O - AsNaO2
D - Nitric Acid	P - Na2O4S
E - NaHSO4	Q - Na2SO3
F - MeOH	R - Na2S2O3
G - Amchlor	S - H2SO4
H - Ascorbic Acid	T - TSP Dodecahydrate
I - Ice	U - Acetone
J - DI Water	V - MCAA
K - EDTA	W - pH 4-5
L - EDA	Z - other (specify)

Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	PFC_IDA_WI3535_PFC_28D PFAS, Standard List (33 analytes)	Total Number of containers	Special Instructions/Note:
			Preservation Code:						
FB-01 (500-209564-1)	12/9/21	12:30 Central		Water			X	2	
EB-01 (500-209564-2)	12/9/21	12:45 Central		Water			X	2	

Note: Since laboratory accreditations are subject to change, Eurofins TestAmerica places the ownership of method, analyte & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins TestAmerica laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins TestAmerica attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said complicance to Eurofins TestAmerica.

Possible Hazard Identification	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
Unconfirmed	☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
1	Paula Buckley	12/10/21 1600	GTA CH		12-11-21 1005	EETSac
2	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
3	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact:	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks:
Δ Yes Δ No	1672333	2.4

Ver: 06/08/2021

Login Sample Receipt Checklist

Client: Ramboll US Corporation

Job Number: 500-209564-1

Login Number: 209564
List Number: 1
Creator: Scott, Sherri L

List Source: Eurofins TestAmerica, Chicago

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	-0.4 samples not frozen
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: Ramboll US Corporation

Job Number: 500-209564-1

Login Number: 209564
List Number: 2
Creator: Simmons, Jason C

List Source: Eurofins TestAmerica, Sacramento
List Creation: 12/11/21 02:05 PM

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	1672533
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	2.4c
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	False	Received project as a subcontract.
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

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Sacramento Sample Receiving Notes

500-209564 Field Sheet

Tracking # : 1893 4454 3918

Job: _____

SO / PO / FO / (SAT) / 2-Day / Ground / UPS / CDO / Courier

GSO / OnTrac / Goldstreak / USPS / Other _____

Use this form to record Sample Custody Seal, Cooler Custody Seal, Temperature & corrected Temperature & other observations. File in the job folder with the COC.

Therm. ID: C06 Corr. Factor: (+ / -) N/A °C

Ice ___ Wet ✓ Gel ___ Other ___

Cooler Custody Seal: 1672533

Cooler ID: —

Temp Observed: 2.4 °C Corrected: 2.4 °C

From: Temp Blank ☐ Sample ☑

Opening/Processing The Shipment	Yes	No	NA
Cooler compromised/tampered with?	☐	☑	☐
Cooler Temperature is acceptable?	☑	☐	☐
Frozen samples show signs of thaw?	☐	☐	☑

Initials: SO Date: 12-11-20

Unpacking/Labeling The Samples	Yes	No	NA
CoC is complete w/o discrepancies?	☑	☐	☐
Samples compromised/tampered with?	☐	☑	☐
Sample containers have legible labels?	☑	☐	☐
Sample custody seal?	☐	☐	☑
Containers are not broken or leaking?	☑	☐	☐
Sample date/times are provided?	☑	☐	☐
Appropriate containers are used?	☑	☐	☐
Sample bottles are completely filled?	☑	☐	☐
Sample preservatives verified?	☐	☐	☑
Samples w/o discrepancies?	☑	☐	☐
Zero headspace?*	☐	☐	☑
Alkalinity has no headspace?	☐	☐	☑
Perchlorate has headspace? (Methods 314, 331, 6850)	☐	☐	☑
Multiphasic samples are not present?	☑	☐	☐

*Containers requiring zero headspace have no headspace, or bubble < 6 mm (1/4")

Initials: LB Date: 12/11/20

Notes: _____

Trizma Lot #(s): _____

Login Completion	Yes	No	NA
Receipt Temperature on COC?	☑	☐	☐
Samples received within hold time?	☑	☐	☐
NCM Filed?	☐	☐	☑
Log Release checked in TALS?	☐	☐	☑

Initials: LB Date: 12/11/20

Isotope Dilution Summary

Client: Ramboll US Corporation
Project/Site: Former Mirro Plant No 9 - 1690019647

Job ID: 500-209564-1

Method: 537 (modified) - Fluorinated Alkyl Substances

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

		Percent Isotope Dilution Recovery (Acceptance Limits)							
		PFBA	PFPeA	PFHxA	C4PFHA	PFOA	PFNA	PFDA	PFUnA
Lab Sample ID	Client Sample ID	(25-150)	(25-150)	(25-150)	(25-150)	(25-150)	(25-150)	(25-150)	(25-150)
500-209564-1	FB-01	77	76	64	62	87	94	80	80
500-209564-2	EB-01	90	86	71	75	99	103	93	92
LCS 320-551272/2-A	Lab Control Sample	95	84	73	74	93	93	89	88
LCSD 320-551272/3-A	Lab Control Sample Dup	104	94	79	79	103	115	97	93
MB 320-551272/1-A	Method Blank	93	90	77	71	94	101	91	94

		Percent Isotope Dilution Recovery (Acceptance Limits)							
		PFDoA	PFTDA	C3PFBS	PFHxS	PFOS	PFOSA	d3NMFOS	d5NEFOS
Lab Sample ID	Client Sample ID	(25-150)	(25-150)	(25-150)	(25-150)	(25-150)	(10-150)	(25-150)	(25-150)
500-209564-1	FB-01	86	93	75	67	81	71	69	79
500-209564-2	EB-01	108	114	86	77	93	82	81	85
LCS 320-551272/2-A	Lab Control Sample	99	111	86	77	89	82	74	87
LCSD 320-551272/3-A	Lab Control Sample Dup	100	116	98	91	94	92	80	87
MB 320-551272/1-A	Method Blank	98	105	89	81	86	79	77	83

		Percent Isotope Dilution Recovery (Acceptance Limits)							
		dMeFOSA	dEtFOSA	NMFM	NEFM	M242FTS	M262FTS	M282FTS	HFPODA
Lab Sample ID	Client Sample ID	(10-150)	(10-150)	(10-150)	(10-150)	(25-150)	(25-150)	(25-150)	(25-150)
500-209564-1	FB-01	65	64	71	75	54	67	63	64
500-209564-2	EB-01	79	78	85	86	67	76	76	79
LCS 320-551272/2-A	Lab Control Sample	75	70	75	77	62	74	70	89
LCSD 320-551272/3-A	Lab Control Sample Dup	86	81	78	85	64	78	84	91
MB 320-551272/1-A	Method Blank	74	74	75	73	60	81	75	97

		Percent Isotope Dilution Recovery (Acceptance Limits)
		M102FTS
Lab Sample ID	Client Sample ID	(25-150)
500-209564-1	FB-01	74
500-209564-2	EB-01	103
LCS 320-551272/2-A	Lab Control Sample	82
LCSD 320-551272/3-A	Lab Control Sample Dup	79
MB 320-551272/1-A	Method Blank	76

Surrogate Legend

PFBA = 13C4 PFBA
PFPeA = 13C5 PFPeA
PFHxA = 13C2 PFHxA
C4PFHA = 13C4 PFHpA
PFOA = 13C4 PFOA
PFNA = 13C5 PFNA
PFDA = 13C2 PFDA
PFUnA = 13C2 PFUnA
PFDoA = 13C2 PFDoA
PFTDA = 13C2 PFTeDA
C3PFBS = 13C3 PFBS
PFHxS = 18O2 PFHxS
PFOS = 13C4 PFOS
PFOSA = 13C8 FOSA
d3NMFOS = d3-NMeFOSAA
d5NEFOS = d5-NEtFOSAA
dMeFOSA = d-N-MeFOSA-M
dEtFOSA = d-N-EtFOSA-M

Isotope Dilution Summary

Client: Ramboll US Corporation
Job ID: 500-209564-1
Project/Site: Former Mirro Plant No 9 - 1690019647

NMFM = d7-N-MeFOSE-M
NEFM = d9-N-EtFOSE-M
M242FTS = M2-4:2 FTS
M262FTS = M2-6:2 FTS
M282FTS = M2-8:2 FTS
HFPODA = 13C3 HFPO-DA
M102FTS = 13C2 10:2 FTS

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ANALYTICAL REPORT

Eurofins TestAmerica, Chicago
2417 Bond Street
University Park, IL 60484
Tel: (708)534-5200

Laboratory Job ID: 500-209565-1
Client Project/Site: Former Mirro Plant No 9 - 1690019647

For:
Ramboll US Corporation
234 W. Florida Street
Fifth Floor
Milwaukee, Wisconsin 53204

Attn: Paul Lindquist

Sandra Fredrick

Authorized for release by:
12/23/2021 5:05:27 PM

Sandie Fredrick, Project Manager II
(920)261-1660
sandra.fredrick@eurofinset.com

Table of Contents

Job ID: 500-209565-1

Laboratory: Eurofins TestAmerica, Chicago

Narrative

Job Narrative
500-209564-1

Comments
No additional comments.

Receipt
The samples were received on 12/10/2021 10:30 AM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperature of the cooler at receipt was -0.4º C.

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

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

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

Metals
Method 6020A: The low level continuing calibration verification (CCVL) associated with batch 500-634985 recovered above the upper control limit for Arsenic. The samples associated with this CCV were non-detects for the affected analyte; therefore, the data have been reported.

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

LCMS
Method 537 (modified): The transition mass ratio was above/below of the established ratio limit for Perfluorohexanoic acid (PFHxA) in (CCVL 320-552298/2) associated to this data set. This is indicated by the "R" flag in the raw data. As the flagged data is in control in the CCVL, there is no adverse impact to the data.

(CCVL 320-552298/2)

Method 537 (modified): The method blank for preparation batch 320-551272 contained NEtFOSE and NMeFOSE above one half the reporting limit (RL). None of the samples associated with this method blank contained the target compounds; therefore, re-extraction and/or re-analysis of samples were not performed.

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

Field Service / Mobile Lab
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Organic Prep
Method 3535: Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate (MS/MSD) associated with preparation batch 320-551272.

320-551272
Method: 3535 PFC-W

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

Narrative

Job Narrative
500-209565-1

Job ID: 500-209565-1 (Continued)

Laboratory: Eurofins TestAmerica, Chicago (Continued)

Comments
No additional comments.

Receipt
The samples were received on 12/10/2021 10:30 AM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperature of the cooler at receipt was -0.4º C.

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

GC/MS Semi VOA
Method 8270D: The continuing calibration verification (CCV) analyzed in batch 500-634188 was outside the method criteria for the following analyte(s): Benzo[g,h,i]perylene, Dibenz(a,h)anthracene and Indeno[1,2,3-cd]pyrene. A CCV standard at or below the reporting limit (RL) was analyzed with the affected samples and found to be acceptable. As indicated in the reference method, sample analysis may proceed; however, any detection for the affected analyte(s) is considered estimated.

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

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

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

LCMS
Method 537 (modified): The transition mass ratio was above/below of the established ratio limit for Perfluorohexanoic acid (PFHxA) in (CCVL 320-552298/2) associated to this data set. This is indicated by the "R" flag in the raw data. As the flagged data is in control in the CCVL, there is no adverse impact to the data. (CCVL 320-552298/2)

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

Field Service / Mobile Lab
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Organic Prep
Method 3535: Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate (MS/MSD) associated with preparation batch 320-551271. 320-551271 Method: 3535 PFC-W

Method 3535: The following samples were yellow and contained floating particulates in the sample bottle prior to extraction: MW-217 (500-209565-1) and MW-218 (500-209565-2). 320-551271 Method: 3535 PFC-W

Method 3535: The following samples were light yellow after adjusting to the final volume: MW-217 (500-209565-1) and MW-218 (500-209565-2). 320-551271 Method: 3535 PFC-W

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

Detection Summary

Client: Ramboll US Corporation
Job ID: 500-209565-1
Project/Site: Former Mirro Plant No 9 - 1690019647

Client Sample ID: FB-01 — Lab Sample ID: 500-209564-1

No Detections.

Client Sample ID: EB-01 — Lab Sample ID: 500-209564-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	0.50	J ^+ B	1.0	0.23	ug/L	1		6020A	Dissolved

Client Sample ID: Trip Blank — Lab Sample ID: 500-209564-3

No Detections.

Client Sample ID: MW-217 — Lab Sample ID: 500-209565-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Perfluoropentanoic acid (PFPeA)	0.71	J	1.9	0.48	ng/L	1		537 (modified)	Total/NA
Perfluorohexanoic acid (PFHxA)	1.4	J	1.9	0.56	ng/L	1		537 (modified)	Total/NA
Perfluoroheptanoic acid (PFHpA)	1.0	J	1.9	0.24	ng/L	1		537 (modified)	Total/NA
Perfluorooctanoic acid (PFOA)	2.3		1.9	0.82	ng/L	1		537 (modified)	Total/NA
Arsenic	0.82	J	1.0	0.23	ug/L	1		6020A	Dissolved
Barium	130		2.5	0.73	ug/L	1		6020A	Dissolved
Copper	4.5		2.0	0.50	ug/L	1		6020A	Dissolved
Manganese	220		2.5	0.79	ug/L	1		6020A	Dissolved
Nickel	2.3		2.0	0.63	ug/L	1		6020A	Dissolved

Client Sample ID: MW-218 — Lab Sample ID: 500-209565-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Perfluorobutanoic acid (PFBA)	4.9		4.9	2.4	ng/L	1		537 (modified)	Total/NA
Perfluoropentanoic acid (PFPeA)	2.1		2.0	0.48	ng/L	1		537 (modified)	Total/NA
Perfluorohexanoic acid (PFHxA)	2.9		2.0	0.57	ng/L	1		537 (modified)	Total/NA
Perfluoroheptanoic acid (PFHpA)	2.3		2.0	0.25	ng/L	1		537 (modified)	Total/NA
Perfluorooctanoic acid (PFOA)	110		2.0	0.84	ng/L	1		537 (modified)	Total/NA
Perfluorobutanesulfonic acid (PFBS)	1.2	J	2.0	0.20	ng/L	1		537 (modified)	Total/NA
Perfluorohexanesulfonic acid (PFHxS)	0.82	J	2.0	0.56	ng/L	1		537 (modified)	Total/NA
Arsenic	2.0		1.0	0.23	ug/L	1		6020A	Dissolved
Barium	97		2.5	0.73	ug/L	1		6020A	Dissolved
Chromium	2.1	J	5.0	1.1	ug/L	1		6020A	Dissolved
Copper	0.87	J	2.0	0.50	ug/L	1		6020A	Dissolved
Iron	3300		100	47	ug/L	1		6020A	Dissolved
Manganese	340		2.5	0.79	ug/L	1		6020A	Dissolved
Nickel	3.3		2.0	0.63	ug/L	1		6020A	Dissolved

This Detection Summary does not include radiochemical test results.

Method Summary

Client: Ramboll US Corporation
Job ID: 500-209565-1
Project/Site: Former Mirro Plant No 9 - 1690019647

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL CHI
8270D	Semivolatile Organic Compounds (GC/MS)	SW846	TAL CHI
8082A	Polychlorinated Biphenyls (PCBs) by Gas Chromatography	SW846	TAL CHI
537 (modified)	Fluorinated Alkyl Substances	EPA	TAL SAC
6020A	Metals (ICP/MS)	SW846	TAL CHI
7470A	Mercury (CVAA)	SW846	TAL CHI
3005A	Preparation, Total Recoverable or Dissolved Metals	SW846	TAL CHI
3510C	Liquid-Liquid Extraction (Separatory Funnel)	SW846	TAL CHI
3535	Solid-Phase Extraction (SPE)	SW846	TAL SAC
5030B	Purge and Trap	SW846	TAL CHI
7470A	Preparation, Mercury	SW846	TAL CHI

Protocol References:

EPA = US Environmental Protection Agency

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

Laboratory References:

TAL CHI = Eurofins TestAmerica, Chicago, 2417 Bond Street, University Park, IL 60484, TEL (708)534-5200

TAL SAC = Eurofins TestAmerica, Sacramento, 880 Riverside Parkway, West Sacramento, CA 95605, TEL (916)373-5600

Sample Summary

Client: Ramboll US Corporation
Job ID: 500-209565-1
Project/Site: Former Mirro Plant No 9 - 1690019647

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
500-209564-1	FB-01	Water	12/09/21 12:30	12/10/21 10:30
500-209564-2	EB-01	Water	12/09/21 12:45	12/10/21 10:30
500-209564-3	Trip Blank	Water	12/09/21 00:00	12/10/21 10:30
500-209565-1	MW-217	Water	12/09/21 09:55	12/10/21 10:30
500-209565-2	MW-218	Water	12/09/21 11:00	12/10/21 10:30

Client: Ramboll US Corporation
Job ID: 500-209565-1
Project/Site: Former Mirro Plant No 9 - 1690019647

Client Sample ID: FB-01
Lab Sample ID: 500-209564-1
Date Collected: 12/09/21 12:30
Matrix: Water
Date Received: 12/10/21 10:30

Method: 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	<2.2		4.6	2.2	ng/L		12/16/21 04:53	12/20/21 06:32	1
Perfluoropentanoic acid (PFPeA)	<0.45		1.9	0.45	ng/L		12/16/21 04:53	12/20/21 06:32	1
Perfluorohexanoic acid (PFHxA)	<0.54		1.9	0.54	ng/L		12/16/21 04:53	12/20/21 06:32	1
Perfluoroheptanoic acid (PFHpA)	<0.23		1.9	0.23	ng/L		12/16/21 04:53	12/20/21 06:32	1
Perfluorooctanoic acid (PFOA)	<0.79		1.9	0.79	ng/L		12/16/21 04:53	12/20/21 06:32	1
Perfluorononanoic acid (PFNA)	<0.25		1.9	0.25	ng/L		12/16/21 04:53	12/20/21 06:32	1
Perfluorodecanoic acid (PFDA)	<0.29		1.9	0.29	ng/L		12/16/21 04:53	12/20/21 06:32	1
Perfluoroundecanoic acid (PFUnA)	<1.0		1.9	1.0	ng/L		12/16/21 04:53	12/20/21 06:32	1
Perfluorododecanoic acid (PFDoA)	<0.51		1.9	0.51	ng/L		12/16/21 04:53	12/20/21 06:32	1
Perfluorotridecanoic acid (PFTriA)	<1.2		1.9	1.2	ng/L		12/16/21 04:53	12/20/21 06:32	1
Perfluorotetradecanoic acid (PFTeA)	<0.68		1.9	0.68	ng/L		12/16/21 04:53	12/20/21 06:32	1
Perfluorobutanesulfonic acid (PFBS)	<0.19		1.9	0.19	ng/L		12/16/21 04:53	12/20/21 06:32	1
Perfluoropentanesulfonic acid (PFPeS)	<0.28		1.9	0.28	ng/L		12/16/21 04:53	12/20/21 06:32	1
Perfluorohexanesulfonic acid (PFHxS)	<0.53		1.9	0.53	ng/L		12/16/21 04:53	12/20/21 06:32	1
Perfluoroheptanesulfonic Acid (PFHpS)	<0.18		1.9	0.18	ng/L		12/16/21 04:53	12/20/21 06:32	1
Perfluorooctanesulfonic acid (PFOS)	<0.50		1.9	0.50	ng/L		12/16/21 04:53	12/20/21 06:32	1
Perfluorononanesulfonic acid (PFNS)	<0.34		1.9	0.34	ng/L		12/16/21 04:53	12/20/21 06:32	1
Perfluorodecanesulfonic acid (PFDS)	<0.30		1.9	0.30	ng/L		12/16/21 04:53	12/20/21 06:32	1
Perfluorododecanesulfonic acid (PFDoS)	<0.90		1.9	0.90	ng/L		12/16/21 04:53	12/20/21 06:32	1
Perfluorooctanesulfonamide (FOSA)	<0.91		1.9	0.91	ng/L		12/16/21 04:53	12/20/21 06:32	1
NEtFOSA	<0.81		1.9	0.81	ng/L		12/16/21 04:53	12/20/21 06:32	1
NMeFOSA	<0.40		1.9	0.40	ng/L		12/16/21 04:53	12/20/21 06:32	1
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	<1.1		4.6	1.1	ng/L		12/16/21 04:53	12/20/21 06:32	1
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	<1.2		4.6	1.2	ng/L		12/16/21 04:53	12/20/21 06:32	1
NMeFOSE	<1.3		3.7	1.3	ng/L		12/16/21 04:53	12/20/21 06:32	1
NEtFOSE	<0.79		1.9	0.79	ng/L		12/16/21 04:53	12/20/21 06:32	1
4:2 FTS	<0.22		1.9	0.22	ng/L		12/16/21 04:53	12/20/21 06:32	1
6:2 FTS	<2.3		4.6	2.3	ng/L		12/16/21 04:53	12/20/21 06:32	1
8:2 FTS	<0.43		1.9	0.43	ng/L		12/16/21 04:53	12/20/21 06:32	1
DONA	<0.37		1.9	0.37	ng/L		12/16/21 04:53	12/20/21 06:32	1
HFPO-DA (GenX)	<1.4		3.7	1.4	ng/L		12/16/21 04:53	12/20/21 06:32	1
F-53B Major	<0.22		1.9	0.22	ng/L		12/16/21 04:53	12/20/21 06:32	1
F-53B Minor	<0.30		1.9	0.30	ng/L		12/16/21 04:53	12/20/21 06:32	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C4 PFBA	*77*		*25 - 150*	*12/16/21 04:53*	*12/20/21 06:32*	*1*
13C5 PFPeA	*76*		*25 - 150*	*12/16/21 04:53*	*12/20/21 06:32*	*1*
13C2 PFHxA	*64*		*25 - 150*	*12/16/21 04:53*	*12/20/21 06:32*	*1*
13C4 PFHpA	*62*		*25 - 150*	*12/16/21 04:53*	*12/20/21 06:32*	*1*
13C4 PFOA	*87*		*25 - 150*	*12/16/21 04:53*	*12/20/21 06:32*	*1*
13C5 PFNA	*94*		*25 - 150*	*12/16/21 04:53*	*12/20/21 06:32*	*1*
13C2 PFDA	*80*		*25 - 150*	*12/16/21 04:53*	*12/20/21 06:32*	*1*
13C2 PFUnA	*80*		*25 - 150*	*12/16/21 04:53*	*12/20/21 06:32*	*1*
13C2 PFDoA	*86*		*25 - 150*	*12/16/21 04:53*	*12/20/21 06:32*	*1*
13C2 PFTeDA	*93*		*25 - 150*	*12/16/21 04:53*	*12/20/21 06:32*	*1*
13C3 PFBS	*75*		*25 - 150*	*12/16/21 04:53*	*12/20/21 06:32*	*1*

Client: Ramboll US Corporation
Job ID: 500-209565-1
Project/Site: Former Mirro Plant No 9 - 1690019647

Client Sample ID: FB-01
Lab Sample ID: 500-209564-1
Date Collected: 12/09/21 12:30
Matrix: Water
Date Received: 12/10/21 10:30

Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
18O2 PFHxS	67		25 - 150	12/16/21 04:53	12/20/21 06:32	1
13C4 PFOS	81		25 - 150	12/16/21 04:53	12/20/21 06:32	1
13C8 FOSA	71		10 - 150	12/16/21 04:53	12/20/21 06:32	1
d3-NMeFOSAA	69		25 - 150	12/16/21 04:53	12/20/21 06:32	1
d5-NEtFOSAA	79		25 - 150	12/16/21 04:53	12/20/21 06:32	1
d-N-MeFOSA-M	65		10 - 150	12/16/21 04:53	12/20/21 06:32	1
d-N-EtFOSA-M	64		10 - 150	12/16/21 04:53	12/20/21 06:32	1
d7-N-MeFOSE-M	71		10 - 150	12/16/21 04:53	12/20/21 06:32	1
d9-N-EtFOSE-M	75		10 - 150	12/16/21 04:53	12/20/21 06:32	1
M2-4:2 FTS	54		25 - 150	12/16/21 04:53	12/20/21 06:32	1
M2-6:2 FTS	67		25 - 150	12/16/21 04:53	12/20/21 06:32	1
M2-8:2 FTS	63		25 - 150	12/16/21 04:53	12/20/21 06:32	1
13C3 HFPO-DA	64		25 - 150	12/16/21 04:53	12/20/21 06:32	1
13C2 10:2 FTS	74		25 - 150	12/16/21 04:53	12/20/21 06:32	1

Client: Ramboll US Corporation
Job ID: 500-209565-1
Project/Site: Former Mirro Plant No 9 - 1690019647

Client Sample ID: EB-01
Lab Sample ID: 500-209564-2
Date Collected: 12/09/21 12:45
Matrix: Water
Date Received: 12/10/21 10:30

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.15		0.50	0.15	ug/L			12/22/21 16:33	1
Bromobenzene	<0.36		1.0	0.36	ug/L			12/22/21 16:33	1
Bromochloromethane	<0.43		1.0	0.43	ug/L			12/22/21 16:33	1
Bromodichloromethane	<0.37		1.0	0.37	ug/L			12/22/21 16:33	1
Bromoform	<0.48		1.0	0.48	ug/L			12/22/21 16:33	1
Bromomethane	<0.80		3.0	0.80	ug/L			12/22/21 16:33	1
Carbon tetrachloride	<0.38		1.0	0.38	ug/L			12/22/21 16:33	1
Chlorobenzene	<0.39		1.0	0.39	ug/L			12/22/21 16:33	1
Chloroethane	<0.51		1.0	0.51	ug/L			12/22/21 16:33	1
Chloroform	<0.37		2.0	0.37	ug/L			12/22/21 16:33	1
Chloromethane	<0.32		1.0	0.32	ug/L			12/22/21 16:33	1
2-Chlorotoluene	<0.31		1.0	0.31	ug/L			12/22/21 16:33	1
4-Chlorotoluene	<0.35		1.0	0.35	ug/L			12/22/21 16:33	1
cis-1,2-Dichloroethene	<0.41		1.0	0.41	ug/L			12/22/21 16:33	1
cis-1,3-Dichloropropene	<0.42		1.0	0.42	ug/L			12/22/21 16:33	1
Dibromochloromethane	<0.49		1.0	0.49	ug/L			12/22/21 16:33	1
1,2-Dibromo-3-Chloropropane	<2.0		5.0	2.0	ug/L			12/22/21 16:33	1
1,2-Dibromoethane	<0.39		1.0	0.39	ug/L			12/22/21 16:33	1
Dibromomethane	<0.27		1.0	0.27	ug/L			12/22/21 16:33	1
1,2-Dichlorobenzene	<0.33		1.0	0.33	ug/L			12/22/21 16:33	1
1,3-Dichlorobenzene	<0.40		1.0	0.40	ug/L			12/22/21 16:33	1
1,4-Dichlorobenzene	<0.36		1.0	0.36	ug/L			12/22/21 16:33	1
Dichlorodifluoromethane	<0.67		3.0	0.67	ug/L			12/22/21 16:33	1
1,1-Dichloroethane	<0.41		1.0	0.41	ug/L			12/22/21 16:33	1
1,2-Dichloroethane	<0.39		1.0	0.39	ug/L			12/22/21 16:33	1
1,1-Dichloroethene	<0.39		1.0	0.39	ug/L			12/22/21 16:33	1
1,2-Dichloropropane	<0.43		1.0	0.43	ug/L			12/22/21 16:33	1
1,3-Dichloropropane	<0.36		1.0	0.36	ug/L			12/22/21 16:33	1
2,2-Dichloropropane	<0.44		1.0	0.44	ug/L			12/22/21 16:33	1
1,1-Dichloropropene	<0.30		1.0	0.30	ug/L			12/22/21 16:33	1
Ethylbenzene	<0.18		0.50	0.18	ug/L			12/22/21 16:33	1
Hexachlorobutadiene	<0.45		1.0	0.45	ug/L			12/22/21 16:33	1
Isopropylbenzene	<0.39		1.0	0.39	ug/L			12/22/21 16:33	1
Isopropyl ether	<0.28		1.0	0.28	ug/L			12/22/21 16:33	1
Methylene Chloride	<1.6		5.0	1.6	ug/L			12/22/21 16:33	1
Methyl tert-butyl ether	<0.39		1.0	0.39	ug/L			12/22/21 16:33	1
Naphthalene	<0.34		1.0	0.34	ug/L			12/22/21 16:33	1
n-Butylbenzene	<0.39		1.0	0.39	ug/L			12/22/21 16:33	1
N-Propylbenzene	<0.41		1.0	0.41	ug/L			12/22/21 16:33	1
p-Isopropyltoluene	<0.36		1.0	0.36	ug/L			12/22/21 16:33	1
sec-Butylbenzene	<0.40		1.0	0.40	ug/L			12/22/21 16:33	1
Styrene	<0.39		1.0	0.39	ug/L			12/22/21 16:33	1
tert-Butylbenzene	<0.40		1.0	0.40	ug/L			12/22/21 16:33	1
1,1,1,2-Tetrachloroethane	<0.46		1.0	0.46	ug/L			12/22/21 16:33	1
1,1,2,2-Tetrachloroethane	<0.40		1.0	0.40	ug/L			12/22/21 16:33	1
Tetrachloroethene	<0.37		1.0	0.37	ug/L			12/22/21 16:33	1
Toluene	<0.15		0.50	0.15	ug/L			12/22/21 16:33	1
trans-1,2-Dichloroethene	<0.35		1.0	0.35	ug/L			12/22/21 16:33	1
trans-1,3-Dichloropropene	<0.36		1.0	0.36	ug/L			12/22/21 16:33	1

Client: Ramboll US Corporation
Job ID: 500-209565-1
Project/Site: Former Mirro Plant No 9 - 1690019647

Client Sample ID: EB-01
Lab Sample ID: 500-209564-2
Date Collected: 12/09/21 12:45
Matrix: Water
Date Received: 12/10/21 10:30

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,3-Trichlorobenzene	<0.46		1.0	0.46	ug/L			12/22/21 16:33	1
1,2,4-Trichlorobenzene	<0.34		1.0	0.34	ug/L			12/22/21 16:33	1
1,1,1-Trichloroethane	<0.38		1.0	0.38	ug/L			12/22/21 16:33	1
1,1,2-Trichloroethane	<0.35		1.0	0.35	ug/L			12/22/21 16:33	1
Trichloroethene	<0.16		0.50	0.16	ug/L			12/22/21 16:33	1
Trichlorofluoromethane	<0.43		1.0	0.43	ug/L			12/22/21 16:33	1
1,2,3-Trichloropropane	<0.41		2.0	0.41	ug/L			12/22/21 16:33	1
1,2,4-Trimethylbenzene	<0.36		1.0	0.36	ug/L			12/22/21 16:33	1
1,3,5-Trimethylbenzene	<0.25		1.0	0.25	ug/L			12/22/21 16:33	1
Vinyl chloride	<0.20		1.0	0.20	ug/L			12/22/21 16:33	1
Xylenes, Total	<0.22		1.0	0.22	ug/L			12/22/21 16:33	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*83*		*72 - 124*		*12/22/21 16:33*	*1*
Dibromofluoromethane (Surr)	*90*		*75 - 120*		*12/22/21 16:33*	*1*
1,2-Dichloroethane-d4 (Surr)	*86*		*75 - 126*		*12/22/21 16:33*	*1*
Toluene-d8 (Surr)	*95*		*75 - 120*		*12/22/21 16:33*	*1*

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	<0.26		0.85	0.26	ug/L		12/15/21 07:23	12/16/21 16:54	1
Acenaphthylene	<0.23		0.85	0.23	ug/L		12/15/21 07:23	12/16/21 16:54	1
Anthracene	<0.28		0.85	0.28	ug/L		12/15/21 07:23	12/16/21 16:54	1
Benzo[a]anthracene	<0.048		0.17	0.048	ug/L		12/15/21 07:23	12/16/21 16:54	1
Benzo[a]pyrene	<0.084		0.17	0.084	ug/L		12/15/21 07:23	12/16/21 16:54	1
Benzo[b]fluoranthene	<0.069		0.17	0.069	ug/L		12/15/21 07:23	12/16/21 16:54	1
Benzo[g,h,i]perylene	<0.32		0.85	0.32	ug/L		12/15/21 07:23	12/16/21 16:54	1
Benzo[k]fluoranthene	<0.055		0.17	0.055	ug/L		12/15/21 07:23	12/16/21 16:54	1
Chrysene	<0.058		0.17	0.058	ug/L		12/15/21 07:23	12/16/21 16:54	1
Dibenz(a,h)anthracene	<0.043		0.26	0.043	ug/L		12/15/21 07:23	12/16/21 16:54	1
Fluoranthene	<0.39		0.85	0.39	ug/L		12/15/21 07:23	12/16/21 16:54	1
Fluorene	<0.21		0.85	0.21	ug/L		12/15/21 07:23	12/16/21 16:54	1
Indeno[1,2,3-cd]pyrene	<0.064		0.17	0.064	ug/L		12/15/21 07:23	12/16/21 16:54	1
1-Methylnaphthalene	<0.26		1.7	0.26	ug/L		12/15/21 07:23	12/16/21 16:54	1
2-Methylnaphthalene	<0.056		1.7	0.056	ug/L		12/15/21 07:23	12/16/21 16:54	1
Naphthalene	<0.26		0.85	0.26	ug/L		12/15/21 07:23	12/16/21 16:54	1
Phenanthrene	<0.26		0.85	0.26	ug/L		12/15/21 07:23	12/16/21 16:54	1
Pyrene	<0.36		0.85	0.36	ug/L		12/15/21 07:23	12/16/21 16:54	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*67*		*34 - 110*	*12/15/21 07:23*	*12/16/21 16:54*	*1*
Nitrobenzene-d5 (Surr)	*62*		*36 - 120*	*12/15/21 07:23*	*12/16/21 16:54*	*1*
Terphenyl-d14 (Surr)	*86*		*40 - 145*	*12/15/21 07:23*	*12/16/21 16:54*	*1*

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<0.075		0.45	0.075	ug/L		12/13/21 09:44	12/14/21 10:53	1
PCB-1221	<0.22		0.45	0.22	ug/L		12/13/21 09:44	12/14/21 10:53	1
PCB-1232	<0.22		0.45	0.22	ug/L		12/13/21 09:44	12/14/21 10:53	1
PCB-1242	<0.22		0.45	0.22	ug/L		12/13/21 09:44	12/14/21 10:53	1

Client Sample ID: EB-01
Lab Sample ID: 500-209564-2
Date Collected: 12/09/21 12:45
Matrix: Water
Date Received: 12/10/21 10:30

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1248	<0.22		0.45	0.22	ug/L		12/13/21 09:44	12/14/21 10:53	1
PCB-1254	<0.22		0.45	0.22	ug/L		12/13/21 09:44	12/14/21 10:53	1
PCB-1260	<0.079		0.45	0.079	ug/L		12/13/21 09:44	12/14/21 10:53	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*85*		*30 - 120*	*12/13/21 09:44*	*12/14/21 10:53*	*1*
DCB Decachlorobiphenyl	*75*		*30 - 140*	*12/13/21 09:44*	*12/14/21 10:53*	*1*

Method: 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	<2.4		4.9	2.4	ng/L		12/16/21 04:53	12/20/21 06:43	1
Perfluoropentanoic acid (PFPeA)	<0.48		2.0	0.48	ng/L		12/16/21 04:53	12/20/21 06:43	1
Perfluorohexanoic acid (PFHxA)	<0.57		2.0	0.57	ng/L		12/16/21 04:53	12/20/21 06:43	1
Perfluoroheptanoic acid (PFHpA)	<0.25		2.0	0.25	ng/L		12/16/21 04:53	12/20/21 06:43	1
Perfluorooctanoic acid (PFOA)	<0.84		2.0	0.84	ng/L		12/16/21 04:53	12/20/21 06:43	1
Perfluorononanoic acid (PFNA)	<0.27		2.0	0.27	ng/L		12/16/21 04:53	12/20/21 06:43	1
Perfluorodecanoic acid (PFDA)	<0.31		2.0	0.31	ng/L		12/16/21 04:53	12/20/21 06:43	1
Perfluoroundecanoic acid (PFUnA)	<1.1		2.0	1.1	ng/L		12/16/21 04:53	12/20/21 06:43	1
Perfluorododecanoic acid (PFDoA)	<0.54		2.0	0.54	ng/L		12/16/21 04:53	12/20/21 06:43	1
Perfluorotridecanoic acid (PFTriA)	<1.3		2.0	1.3	ng/L		12/16/21 04:53	12/20/21 06:43	1
Perfluorotetradecanoic acid (PFTeA)	<0.72		2.0	0.72	ng/L		12/16/21 04:53	12/20/21 06:43	1
Perfluorobutanesulfonic acid (PFBS)	<0.20		2.0	0.20	ng/L		12/16/21 04:53	12/20/21 06:43	1
Perfluoropentanesulfonic acid (PFPeS)	<0.30		2.0	0.30	ng/L		12/16/21 04:53	12/20/21 06:43	1
Perfluorohexanesulfonic acid (PFHxS)	<0.56		2.0	0.56	ng/L		12/16/21 04:53	12/20/21 06:43	1
Perfluoroheptanesulfonic Acid (PFHpS)	<0.19		2.0	0.19	ng/L		12/16/21 04:53	12/20/21 06:43	1
Perfluorooctanesulfonic acid (PFOS)	<0.53		2.0	0.53	ng/L		12/16/21 04:53	12/20/21 06:43	1
Perfluorononanesulfonic acid (PFNS)	<0.37		2.0	0.37	ng/L		12/16/21 04:53	12/20/21 06:43	1
Perfluorodecanesulfonic acid (PFDS)	<0.32		2.0	0.32	ng/L		12/16/21 04:53	12/20/21 06:43	1
Perfluorododecanesulfonic acid (PFDoS)	<0.96		2.0	0.96	ng/L		12/16/21 04:53	12/20/21 06:43	1
Perfluorooctanesulfonamide (FOSA)	<0.97		2.0	0.97	ng/L		12/16/21 04:53	12/20/21 06:43	1
NEtFOSA	<0.86		2.0	0.86	ng/L		12/16/21 04:53	12/20/21 06:43	1
NMeFOSA	<0.42		2.0	0.42	ng/L		12/16/21 04:53	12/20/21 06:43	1
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	<1.2		4.9	1.2	ng/L		12/16/21 04:53	12/20/21 06:43	1
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	<1.3		4.9	1.3	ng/L		12/16/21 04:53	12/20/21 06:43	1
NMeFOSE	<1.4		4.0	1.4	ng/L		12/16/21 04:53	12/20/21 06:43	1
NEtFOSE	<0.84		2.0	0.84	ng/L		12/16/21 04:53	12/20/21 06:43	1
4:2 FTS	<0.24		2.0	0.24	ng/L		12/16/21 04:53	12/20/21 06:43	1
6:2 FTS	<2.5		4.9	2.5	ng/L		12/16/21 04:53	12/20/21 06:43	1
8:2 FTS	<0.45		2.0	0.45	ng/L		12/16/21 04:53	12/20/21 06:43	1
DONA	<0.40		2.0	0.40	ng/L		12/16/21 04:53	12/20/21 06:43	1
HFPO-DA (GenX)	<1.5		4.0	1.5	ng/L		12/16/21 04:53	12/20/21 06:43	1
F-53B Major	<0.24		2.0	0.24	ng/L		12/16/21 04:53	12/20/21 06:43	1
F-53B Minor	<0.32		2.0	0.32	ng/L		12/16/21 04:53	12/20/21 06:43	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C4 PFBA	*90*		*25 - 150*	*12/16/21 04:53*	*12/20/21 06:43*	*1*
13C5 PFPeA	*86*		*25 - 150*	*12/16/21 04:53*	*12/20/21 06:43*	*1*

Client Sample ID: EB-01
Date Collected: 12/09/21 12:45
Date Received: 12/10/21 10:30

Lab Sample ID: 500-209564-2
Matrix: Water

Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C2 PFHxA	71		25 - 150	12/16/21 04:53	12/20/21 06:43	1
13C4 PFHpA	75		25 - 150	12/16/21 04:53	12/20/21 06:43	1
13C4 PFOA	99		25 - 150	12/16/21 04:53	12/20/21 06:43	1
13C5 PFNA	103		25 - 150	12/16/21 04:53	12/20/21 06:43	1
13C2 PFDA	93		25 - 150	12/16/21 04:53	12/20/21 06:43	1
13C2 PFUnA	92		25 - 150	12/16/21 04:53	12/20/21 06:43	1
13C2 PFDoA	108		25 - 150	12/16/21 04:53	12/20/21 06:43	1
13C2 PFTeDA	114		25 - 150	12/16/21 04:53	12/20/21 06:43	1
13C3 PFBS	86		25 - 150	12/16/21 04:53	12/20/21 06:43	1
18O2 PFHxS	77		25 - 150	12/16/21 04:53	12/20/21 06:43	1
13C4 PFOS	93		25 - 150	12/16/21 04:53	12/20/21 06:43	1
13C8 FOSA	82		10 - 150	12/16/21 04:53	12/20/21 06:43	1
d3-NMeFOSAA	81		25 - 150	12/16/21 04:53	12/20/21 06:43	1
d5-NEtFOSAA	85		25 - 150	12/16/21 04:53	12/20/21 06:43	1
d-N-MeFOSA-M	79		10 - 150	12/16/21 04:53	12/20/21 06:43	1
d-N-EtFOSA-M	78		10 - 150	12/16/21 04:53	12/20/21 06:43	1
d7-N-MeFOSE-M	85		10 - 150	12/16/21 04:53	12/20/21 06:43	1
d9-N-EtFOSE-M	86		10 - 150	12/16/21 04:53	12/20/21 06:43	1
M2-4:2 FTS	67		25 - 150	12/16/21 04:53	12/20/21 06:43	1
M2-6:2 FTS	76		25 - 150	12/16/21 04:53	12/20/21 06:43	1
M2-8:2 FTS	76		25 - 150	12/16/21 04:53	12/20/21 06:43	1
13C3 HFPO-DA	79		25 - 150	12/16/21 04:53	12/20/21 06:43	1
13C2 10:2 FTS	103		25 - 150	12/16/21 04:53	12/20/21 06:43	1

Method: 6020A - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	<25		100	25	ug/L		12/21/21 09:30	12/21/21 22:54	1
Antimony	<1.3		3.0	1.3	ug/L		12/21/21 09:30	12/21/21 22:54	1
Arsenic	**0.50**	**J ^+ B**	1.0	0.23	ug/L		12/21/21 09:30	12/21/21 22:54	1
Barium	<0.73		2.5	0.73	ug/L		12/21/21 09:30	12/21/21 22:54	1
Cadmium	<0.17		0.50	0.17	ug/L		12/21/21 09:30	12/21/21 22:54	1
Chromium	<1.1		5.0	1.1	ug/L		12/21/21 09:30	12/21/21 22:54	1
Copper	<0.50		2.0	0.50	ug/L		12/21/21 09:30	12/21/21 22:54	1
Iron	<47		100	47	ug/L		12/21/21 09:30	12/21/21 22:54	1
Lead	<0.19		0.50	0.19	ug/L		12/21/21 09:30	12/21/21 22:54	1
Manganese	<0.79		2.5	0.79	ug/L		12/21/21 09:30	12/21/21 22:54	1
Nickel	<0.63		2.0	0.63	ug/L		12/21/21 09:30	12/21/21 22:54	1
Selenium	<0.98		2.5	0.98	ug/L		12/21/21 09:30	12/21/21 22:54	1
Silver	<0.12		0.50	0.12	ug/L		12/21/21 09:30	12/21/21 22:54	1
Thallium	<0.57		2.0	0.57	ug/L		12/21/21 09:30	12/21/21 22:54	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.098		0.20	0.098	ug/L		12/16/21 10:45	12/17/21 08:55	1

Client: Ramboll US Corporation
Job ID: 500-209565-1
Project/Site: Former Mirro Plant No 9 - 1690019647

Client Sample ID: Trip Blank
Lab Sample ID: 500-209564-3
Date Collected: 12/09/21 00:00
Matrix: Water
Date Received: 12/10/21 10:30

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.15		0.50	0.15	ug/L			12/22/21 14:16	1
Bromobenzene	<0.36		1.0	0.36	ug/L			12/22/21 14:16	1
Bromochloromethane	<0.43		1.0	0.43	ug/L			12/22/21 14:16	1
Bromodichloromethane	<0.37		1.0	0.37	ug/L			12/22/21 14:16	1
Bromoform	<0.48		1.0	0.48	ug/L			12/22/21 14:16	1
Bromomethane	<0.80		3.0	0.80	ug/L			12/22/21 14:16	1
Carbon tetrachloride	<0.38		1.0	0.38	ug/L			12/22/21 14:16	1
Chlorobenzene	<0.39		1.0	0.39	ug/L			12/22/21 14:16	1
Chloroethane	<0.51		1.0	0.51	ug/L			12/22/21 14:16	1
Chloroform	<0.37		2.0	0.37	ug/L			12/22/21 14:16	1
Chloromethane	<0.32		1.0	0.32	ug/L			12/22/21 14:16	1
2-Chlorotoluene	<0.31		1.0	0.31	ug/L			12/22/21 14:16	1
4-Chlorotoluene	<0.35		1.0	0.35	ug/L			12/22/21 14:16	1
cis-1,2-Dichloroethene	<0.41		1.0	0.41	ug/L			12/22/21 14:16	1
cis-1,3-Dichloropropene	<0.42		1.0	0.42	ug/L			12/22/21 14:16	1
Dibromochloromethane	<0.49		1.0	0.49	ug/L			12/22/21 14:16	1
1,2-Dibromo-3-Chloropropane	<2.0		5.0	2.0	ug/L			12/22/21 14:16	1
1,2-Dibromoethane	<0.39		1.0	0.39	ug/L			12/22/21 14:16	1
Dibromomethane	<0.27		1.0	0.27	ug/L			12/22/21 14:16	1
1,2-Dichlorobenzene	<0.33		1.0	0.33	ug/L			12/22/21 14:16	1
1,3-Dichlorobenzene	<0.40		1.0	0.40	ug/L			12/22/21 14:16	1
1,4-Dichlorobenzene	<0.36		1.0	0.36	ug/L			12/22/21 14:16	1
Dichlorodifluoromethane	<0.67		3.0	0.67	ug/L			12/22/21 14:16	1
1,1-Dichloroethane	<0.41		1.0	0.41	ug/L			12/22/21 14:16	1
1,2-Dichloroethane	<0.39		1.0	0.39	ug/L			12/22/21 14:16	1
1,1-Dichloroethene	<0.39		1.0	0.39	ug/L			12/22/21 14:16	1
1,2-Dichloropropane	<0.43		1.0	0.43	ug/L			12/22/21 14:16	1
1,3-Dichloropropane	<0.36		1.0	0.36	ug/L			12/22/21 14:16	1
2,2-Dichloropropane	<0.44		1.0	0.44	ug/L			12/22/21 14:16	1
1,1-Dichloropropene	<0.30		1.0	0.30	ug/L			12/22/21 14:16	1
Ethylbenzene	<0.18		0.50	0.18	ug/L			12/22/21 14:16	1
Hexachlorobutadiene	<0.45		1.0	0.45	ug/L			12/22/21 14:16	1
Isopropylbenzene	<0.39		1.0	0.39	ug/L			12/22/21 14:16	1
Isopropyl ether	<0.28		1.0	0.28	ug/L			12/22/21 14:16	1
Methylene Chloride	<1.6		5.0	1.6	ug/L			12/22/21 14:16	1
Methyl tert-butyl ether	<0.39		1.0	0.39	ug/L			12/22/21 14:16	1
Naphthalene	<0.34		1.0	0.34	ug/L			12/22/21 14:16	1
n-Butylbenzene	<0.39		1.0	0.39	ug/L			12/22/21 14:16	1
N-Propylbenzene	<0.41		1.0	0.41	ug/L			12/22/21 14:16	1
p-Isopropyltoluene	<0.36		1.0	0.36	ug/L			12/22/21 14:16	1
sec-Butylbenzene	<0.40		1.0	0.40	ug/L			12/22/21 14:16	1
Styrene	<0.39		1.0	0.39	ug/L			12/22/21 14:16	1
tert-Butylbenzene	<0.40		1.0	0.40	ug/L			12/22/21 14:16	1
1,1,1,2-Tetrachloroethane	<0.46		1.0	0.46	ug/L			12/22/21 14:16	1
1,1,2,2-Tetrachloroethane	<0.40		1.0	0.40	ug/L			12/22/21 14:16	1
Tetrachloroethene	<0.37		1.0	0.37	ug/L			12/22/21 14:16	1
Toluene	<0.15		0.50	0.15	ug/L			12/22/21 14:16	1
trans-1,2-Dichloroethene	<0.35		1.0	0.35	ug/L			12/22/21 14:16	1
trans-1,3-Dichloropropene	<0.36		1.0	0.36	ug/L			12/22/21 14:16	1

Client: Ramboll US Corporation
Job ID: 500-209565-1
Project/Site: Former Mirro Plant No 9 - 1690019647

Client Sample ID: Trip Blank
Lab Sample ID: 500-209564-3
Date Collected: 12/09/21 00:00
Matrix: Water
Date Received: 12/10/21 10:30

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,3-Trichlorobenzene	<0.46		1.0	0.46	ug/L			12/22/21 14:16	1
1,2,4-Trichlorobenzene	<0.34		1.0	0.34	ug/L			12/22/21 14:16	1
1,1,1-Trichloroethane	<0.38		1.0	0.38	ug/L			12/22/21 14:16	1
1,1,2-Trichloroethane	<0.35		1.0	0.35	ug/L			12/22/21 14:16	1
Trichloroethene	<0.16		0.50	0.16	ug/L			12/22/21 14:16	1
Trichlorofluoromethane	<0.43		1.0	0.43	ug/L			12/22/21 14:16	1
1,2,3-Trichloropropane	<0.41		2.0	0.41	ug/L			12/22/21 14:16	1
1,2,4-Trimethylbenzene	<0.36		1.0	0.36	ug/L			12/22/21 14:16	1
1,3,5-Trimethylbenzene	<0.25		1.0	0.25	ug/L			12/22/21 14:16	1
Vinyl chloride	<0.20		1.0	0.20	ug/L			12/22/21 14:16	1
Xylenes, Total	<0.22		1.0	0.22	ug/L			12/22/21 14:16	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*82*		*72 - 124*		*12/22/21 14:16*	*1*
Dibromofluoromethane (Surr)	*89*		*75 - 120*		*12/22/21 14:16*	*1*
1,2-Dichloroethane-d4 (Surr)	*84*		*75 - 126*		*12/22/21 14:16*	*1*
Toluene-d8 (Surr)	*94*		*75 - 120*		*12/22/21 14:16*	*1*

Client: Ramboll US Corporation
Project/Site: Former Mirro Plant No 9 - 1690019647

Job ID: 500-209565-1

Client Sample ID: MW-217
Date Collected: 12/09/21 09:55
Date Received: 12/10/21 10:30

Lab Sample ID: 500-209565-1
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.15		0.50	0.15	ug/L			12/22/21 15:38	1
Bromobenzene	<0.36		1.0	0.36	ug/L			12/22/21 15:38	1
Bromochloromethane	<0.43		1.0	0.43	ug/L			12/22/21 15:38	1
Bromodichloromethane	<0.37		1.0	0.37	ug/L			12/22/21 15:38	1
Bromoform	<0.48		1.0	0.48	ug/L			12/22/21 15:38	1
Bromomethane	<0.80		3.0	0.80	ug/L			12/22/21 15:38	1
Carbon tetrachloride	<0.38		1.0	0.38	ug/L			12/22/21 15:38	1
Chlorobenzene	<0.39		1.0	0.39	ug/L			12/22/21 15:38	1
Chloroethane	<0.51		1.0	0.51	ug/L			12/22/21 15:38	1
Chloroform	<0.37		2.0	0.37	ug/L			12/22/21 15:38	1
Chloromethane	<0.32		1.0	0.32	ug/L			12/22/21 15:38	1
2-Chlorotoluene	<0.31		1.0	0.31	ug/L			12/22/21 15:38	1
4-Chlorotoluene	<0.35		1.0	0.35	ug/L			12/22/21 15:38	1
cis-1,2-Dichloroethene	<0.41		1.0	0.41	ug/L			12/22/21 15:38	1
cis-1,3-Dichloropropene	<0.42		1.0	0.42	ug/L			12/22/21 15:38	1
Dibromochloromethane	<0.49		1.0	0.49	ug/L			12/22/21 15:38	1
1,2-Dibromo-3-Chloropropane	<2.0		5.0	2.0	ug/L			12/22/21 15:38	1
1,2-Dibromoethane	<0.39		1.0	0.39	ug/L			12/22/21 15:38	1
Dibromomethane	<0.27		1.0	0.27	ug/L			12/22/21 15:38	1
1,2-Dichlorobenzene	<0.33		1.0	0.33	ug/L			12/22/21 15:38	1
1,3-Dichlorobenzene	<0.40		1.0	0.40	ug/L			12/22/21 15:38	1
1,4-Dichlorobenzene	<0.36		1.0	0.36	ug/L			12/22/21 15:38	1
Dichlorodifluoromethane	<0.67		3.0	0.67	ug/L			12/22/21 15:38	1
1,1-Dichloroethane	<0.41		1.0	0.41	ug/L			12/22/21 15:38	1
1,2-Dichloroethane	<0.39		1.0	0.39	ug/L			12/22/21 15:38	1
1,1-Dichloroethene	<0.39		1.0	0.39	ug/L			12/22/21 15:38	1
1,2-Dichloropropane	<0.43		1.0	0.43	ug/L			12/22/21 15:38	1
1,3-Dichloropropane	<0.36		1.0	0.36	ug/L			12/22/21 15:38	1
2,2-Dichloropropane	<0.44		1.0	0.44	ug/L			12/22/21 15:38	1
1,1-Dichloropropene	<0.30		1.0	0.30	ug/L			12/22/21 15:38	1
Ethylbenzene	<0.18		0.50	0.18	ug/L			12/22/21 15:38	1
Hexachlorobutadiene	<0.45		1.0	0.45	ug/L			12/22/21 15:38	1
Isopropylbenzene	<0.39		1.0	0.39	ug/L			12/22/21 15:38	1
Isopropyl ether	<0.28		1.0	0.28	ug/L			12/22/21 15:38	1
Methylene Chloride	<1.6		5.0	1.6	ug/L			12/22/21 15:38	1
Methyl tert-butyl ether	<0.39		1.0	0.39	ug/L			12/22/21 15:38	1
Naphthalene	<0.34		1.0	0.34	ug/L			12/22/21 15:38	1
n-Butylbenzene	<0.39		1.0	0.39	ug/L			12/22/21 15:38	1
N-Propylbenzene	<0.41		1.0	0.41	ug/L			12/22/21 15:38	1
p-Isopropyltoluene	<0.36		1.0	0.36	ug/L			12/22/21 15:38	1
sec-Butylbenzene	<0.40		1.0	0.40	ug/L			12/22/21 15:38	1
Styrene	<0.39		1.0	0.39	ug/L			12/22/21 15:38	1
tert-Butylbenzene	<0.40		1.0	0.40	ug/L			12/22/21 15:38	1
1,1,1,2-Tetrachloroethane	<0.46		1.0	0.46	ug/L			12/22/21 15:38	1
1,1,2,2-Tetrachloroethane	<0.40		1.0	0.40	ug/L			12/22/21 15:38	1
Tetrachloroethene	<0.37		1.0	0.37	ug/L			12/22/21 15:38	1
Toluene	<0.15		0.50	0.15	ug/L			12/22/21 15:38	1
trans-1,2-Dichloroethene	<0.35		1.0	0.35	ug/L			12/22/21 15:38	1
trans-1,3-Dichloropropene	<0.36		1.0	0.36	ug/L			12/22/21 15:38	1

Client: Ramboll US Corporation
Job ID: 500-209565-1
Project/Site: Former Mirro Plant No 9 - 1690019647

Client Sample ID: MW-217
Date Collected: 12/09/21 09:55
Date Received: 12/10/21 10:30

Lab Sample ID: 500-209565-1
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,3-Trichlorobenzene	<0.46		1.0	0.46	ug/L			12/22/21 15:38	1
1,2,4-Trichlorobenzene	<0.34		1.0	0.34	ug/L			12/22/21 15:38	1
1,1,1-Trichloroethane	<0.38		1.0	0.38	ug/L			12/22/21 15:38	1
1,1,2-Trichloroethane	<0.35		1.0	0.35	ug/L			12/22/21 15:38	1
Trichloroethene	<0.16		0.50	0.16	ug/L			12/22/21 15:38	1
Trichlorofluoromethane	<0.43		1.0	0.43	ug/L			12/22/21 15:38	1
1,2,3-Trichloropropane	<0.41		2.0	0.41	ug/L			12/22/21 15:38	1
1,2,4-Trimethylbenzene	<0.36		1.0	0.36	ug/L			12/22/21 15:38	1
1,3,5-Trimethylbenzene	<0.25		1.0	0.25	ug/L			12/22/21 15:38	1
Vinyl chloride	<0.20		1.0	0.20	ug/L			12/22/21 15:38	1
Xylenes, Total	<0.22		1.0	0.22	ug/L			12/22/21 15:38	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*83*		*72 - 124*		*12/22/21 15:38*	*1*
Dibromofluoromethane (Surr)	*91*		*75 - 120*		*12/22/21 15:38*	*1*
1,2-Dichloroethane-d4 (Surr)	*85*		*75 - 126*		*12/22/21 15:38*	*1*
Toluene-d8 (Surr)	*94*		*75 - 120*		*12/22/21 15:38*	*1*

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	<0.25		0.80	0.25	ug/L		12/14/21 11:43	12/17/21 18:07	1
Acenaphthylene	<0.21		0.80	0.21	ug/L		12/14/21 11:43	12/17/21 18:07	1
Anthracene	<0.27		0.80	0.27	ug/L		12/14/21 11:43	12/17/21 18:07	1
Benzo[a]anthracene	<0.045		0.16	0.045	ug/L		12/14/21 11:43	12/17/21 18:07	1
Benzo[a]pyrene	<0.079		0.16	0.079	ug/L		12/14/21 11:43	12/17/21 18:07	1
Benzo[b]fluoranthene	<0.065		0.16	0.065	ug/L		12/14/21 11:43	12/17/21 18:07	1
Benzo[g,h,i]perylene	<0.30		0.80	0.30	ug/L		12/14/21 11:43	12/17/21 18:07	1
Benzo[k]fluoranthene	<0.051		0.16	0.051	ug/L		12/14/21 11:43	12/17/21 18:07	1
Chrysene	<0.055		0.16	0.055	ug/L		12/14/21 11:43	12/17/21 18:07	1
Dibenz(a,h)anthracene	<0.041		0.24	0.041	ug/L		12/14/21 11:43	12/17/21 18:07	1
Fluoranthene	<0.36		0.80	0.36	ug/L		12/14/21 11:43	12/17/21 18:07	1
Fluorene	<0.20		0.80	0.20	ug/L		12/14/21 11:43	12/17/21 18:07	1
Indeno[1,2,3-cd]pyrene	<0.060		0.16	0.060	ug/L		12/14/21 11:43	12/17/21 18:07	1
1-Methylnaphthalene	<0.24		1.6	0.24	ug/L		12/14/21 11:43	12/17/21 18:07	1
2-Methylnaphthalene	<0.052		1.6	0.052	ug/L		12/14/21 11:43	12/17/21 18:07	1
Naphthalene	<0.25		0.80	0.25	ug/L		12/14/21 11:43	12/17/21 18:07	1
Phenanthrene	<0.24		0.80	0.24	ug/L		12/14/21 11:43	12/17/21 18:07	1
Pyrene	<0.34		0.80	0.34	ug/L		12/14/21 11:43	12/17/21 18:07	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*74*		*34 - 110*	*12/14/21 11:43*	*12/17/21 18:07*	*1*
Nitrobenzene-d5 (Surr)	*64*		*36 - 120*	*12/14/21 11:43*	*12/17/21 18:07*	*1*
Terphenyl-d14 (Surr)	*102*		*40 - 145*	*12/14/21 11:43*	*12/17/21 18:07*	*1*

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<0.069		0.41	0.069	ug/L		12/13/21 09:44	12/14/21 11:09	1
PCB-1221	<0.21		0.41	0.21	ug/L		12/13/21 09:44	12/14/21 11:09	1
PCB-1232	<0.21		0.41	0.21	ug/L		12/13/21 09:44	12/14/21 11:09	1
PCB-1242	<0.21		0.41	0.21	ug/L		12/13/21 09:44	12/14/21 11:09	1

Client Sample ID: MW-217
Lab Sample ID: 500-209565-1
Date Collected: 12/09/21 09:55
Matrix: Water
Date Received: 12/10/21 10:30

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1248	<0.21		0.41	0.21	ug/L		12/13/21 09:44	12/14/21 11:09	1
PCB-1254	<0.21		0.41	0.21	ug/L		12/13/21 09:44	12/14/21 11:09	1
PCB-1260	<0.072		0.41	0.072	ug/L		12/13/21 09:44	12/14/21 11:09	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*79*		*30 - 120*	*12/13/21 09:44*	*12/14/21 11:09*	*1*
DCB Decachlorobiphenyl	*84*		*30 - 140*	*12/13/21 09:44*	*12/14/21 11:09*	*1*

Method: 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	<2.3		4.9	2.3	ng/L		12/16/21 04:40	12/20/21 02:53	1
Perfluoropentanoic acid (PFPeA)	**0.71**	**J**	1.9	0.48	ng/L		12/16/21 04:40	12/20/21 02:53	1
Perfluorohexanoic acid (PFHxA)	**1.4**	**J**	1.9	0.56	ng/L		12/16/21 04:40	12/20/21 02:53	1
Perfluoroheptanoic acid (PFHpA)	**1.0**	**J**	1.9	0.24	ng/L		12/16/21 04:40	12/20/21 02:53	1
Perfluorooctanoic acid (PFOA)	**2.3**		1.9	0.82	ng/L		12/16/21 04:40	12/20/21 02:53	1
Perfluorononanoic acid (PFNA)	<0.26		1.9	0.26	ng/L		12/16/21 04:40	12/20/21 02:53	1
Perfluorodecanoic acid (PFDA)	<0.30		1.9	0.30	ng/L		12/16/21 04:40	12/20/21 02:53	1
Perfluoroundecanoic acid (PFUnA)	<1.1		1.9	1.1	ng/L		12/16/21 04:40	12/20/21 02:53	1
Perfluorododecanoic acid (PFDoA)	<0.53		1.9	0.53	ng/L		12/16/21 04:40	12/20/21 02:53	1
Perfluorotridecanoic acid (PFTriA)	<1.3		1.9	1.3	ng/L		12/16/21 04:40	12/20/21 02:53	1
Perfluorotetradecanoic acid (PFTeA)	<0.71		1.9	0.71	ng/L		12/16/21 04:40	12/20/21 02:53	1
Perfluorobutanesulfonic acid (PFBS)	<0.19		1.9	0.19	ng/L		12/16/21 04:40	12/20/21 02:53	1
Perfluoropentanesulfonic acid (PFPeS)	<0.29		1.9	0.29	ng/L		12/16/21 04:40	12/20/21 02:53	1
Perfluorohexanesulfonic acid (PFHxS)	<0.55		1.9	0.55	ng/L		12/16/21 04:40	12/20/21 02:53	1
Perfluoroheptanesulfonic Acid (PFHpS)	<0.18		1.9	0.18	ng/L		12/16/21 04:40	12/20/21 02:53	1
Perfluorooctanesulfonic acid (PFOS)	<0.52		1.9	0.52	ng/L		12/16/21 04:40	12/20/21 02:53	1
Perfluorononanesulfonic acid (PFNS)	<0.36		1.9	0.36	ng/L		12/16/21 04:40	12/20/21 02:53	1
Perfluorodecanesulfonic acid (PFDS)	<0.31		1.9	0.31	ng/L		12/16/21 04:40	12/20/21 02:53	1
Perfluorododecanesulfonic acid (PFDoS)	<0.94		1.9	0.94	ng/L		12/16/21 04:40	12/20/21 02:53	1
Perfluorooctanesulfonamide (FOSA)	<0.95		1.9	0.95	ng/L		12/16/21 04:40	12/20/21 02:53	1
NEtFOSA	<0.84		1.9	0.84	ng/L		12/16/21 04:40	12/20/21 02:53	1
NMeFOSA	<0.42		1.9	0.42	ng/L		12/16/21 04:40	12/20/21 02:53	1
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	<1.2		4.9	1.2	ng/L		12/16/21 04:40	12/20/21 02:53	1
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	<1.3		4.9	1.3	ng/L		12/16/21 04:40	12/20/21 02:53	1
NMeFOSE	<1.4		3.9	1.4	ng/L		12/16/21 04:40	12/20/21 02:53	1
NEtFOSE	<0.82		1.9	0.82	ng/L		12/16/21 04:40	12/20/21 02:53	1
4:2 FTS	<0.23		1.9	0.23	ng/L		12/16/21 04:40	12/20/21 02:53	1
6:2 FTS	<2.4		4.9	2.4	ng/L		12/16/21 04:40	12/20/21 02:53	1
8:2 FTS	<0.45		1.9	0.45	ng/L		12/16/21 04:40	12/20/21 02:53	1
DONA	<0.39		1.9	0.39	ng/L		12/16/21 04:40	12/20/21 02:53	1
HFPO-DA (GenX)	<1.5		3.9	1.5	ng/L		12/16/21 04:40	12/20/21 02:53	1
F-53B Major	<0.23		1.9	0.23	ng/L		12/16/21 04:40	12/20/21 02:53	1
F-53B Minor	<0.31		1.9	0.31	ng/L		12/16/21 04:40	12/20/21 02:53	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C4 PFBA	*65*		*25 - 150*	*12/16/21 04:40*	*12/20/21 02:53*	*1*
13C5 PFPeA	*83*		*25 - 150*	*12/16/21 04:40*	*12/20/21 02:53*	*1*

Client Sample ID: MW-217
Date Collected: 12/09/21 09:55
Date Received: 12/10/21 10:30

Lab Sample ID: 500-209565-1
Matrix: Water

Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C2 PFHxA	66		25 - 150	12/16/21 04:40	12/20/21 02:53	1
13C4 PFHpA	70		25 - 150	12/16/21 04:40	12/20/21 02:53	1
13C4 PFOA	99		25 - 150	12/16/21 04:40	12/20/21 02:53	1
13C5 PFNA	111		25 - 150	12/16/21 04:40	12/20/21 02:53	1
13C2 PFDA	92		25 - 150	12/16/21 04:40	12/20/21 02:53	1
13C2 PFUnA	86		25 - 150	12/16/21 04:40	12/20/21 02:53	1
13C2 PFDoA	85		25 - 150	12/16/21 04:40	12/20/21 02:53	1
13C2 PFTeDA	103		25 - 150	12/16/21 04:40	12/20/21 02:53	1
13C3 PFBS	86		25 - 150	12/16/21 04:40	12/20/21 02:53	1
18O2 PFHxS	80		25 - 150	12/16/21 04:40	12/20/21 02:53	1
13C4 PFOS	91		25 - 150	12/16/21 04:40	12/20/21 02:53	1
13C8 FOSA	83		10 - 150	12/16/21 04:40	12/20/21 02:53	1
d3-NMeFOSAA	68		25 - 150	12/16/21 04:40	12/20/21 02:53	1
d5-NEtFOSAA	76		25 - 150	12/16/21 04:40	12/20/21 02:53	1
d-N-MeFOSA-M	68		10 - 150	12/16/21 04:40	12/20/21 02:53	1
d-N-EtFOSA-M	65		10 - 150	12/16/21 04:40	12/20/21 02:53	1
d7-N-MeFOSE-M	70		10 - 150	12/16/21 04:40	12/20/21 02:53	1
d9-N-EtFOSE-M	70		10 - 150	12/16/21 04:40	12/20/21 02:53	1
M2-4:2 FTS	70		25 - 150	12/16/21 04:40	12/20/21 02:53	1
M2-6:2 FTS	79		25 - 150	12/16/21 04:40	12/20/21 02:53	1
M2-8:2 FTS	69		25 - 150	12/16/21 04:40	12/20/21 02:53	1
13C3 HFPO-DA	86		25 - 150	12/16/21 04:40	12/20/21 02:53	1
13C2 10:2 FTS	73		25 - 150	12/16/21 04:40	12/20/21 02:53	1

Method: 6020A - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	<25		100	25	ug/L		12/21/21 09:30	12/21/21 22:57	1
Antimony	<1.3		3.0	1.3	ug/L		12/21/21 09:30	12/21/21 22:57	1
Arsenic	**0.82**	**J**	1.0	0.23	ug/L		12/21/21 09:30	12/22/21 14:21	1
Barium	**130**		2.5	0.73	ug/L		12/21/21 09:30	12/21/21 22:57	1
Cadmium	<0.17		0.50	0.17	ug/L		12/21/21 09:30	12/21/21 22:57	1
Chromium	<1.1		5.0	1.1	ug/L		12/21/21 09:30	12/21/21 22:57	1
Copper	**4.5**		2.0	0.50	ug/L		12/21/21 09:30	12/21/21 22:57	1
Iron	<47		100	47	ug/L		12/21/21 09:30	12/21/21 22:57	1
Lead	<0.19		0.50	0.19	ug/L		12/21/21 09:30	12/21/21 22:57	1
Manganese	**220**		2.5	0.79	ug/L		12/21/21 09:30	12/21/21 22:57	1
Nickel	**2.3**		2.0	0.63	ug/L		12/21/21 09:30	12/21/21 22:57	1
Selenium	<0.98		2.5	0.98	ug/L		12/21/21 09:30	12/21/21 22:57	1
Silver	<0.12		0.50	0.12	ug/L		12/21/21 09:30	12/21/21 22:57	1
Thallium	<0.57		2.0	0.57	ug/L		12/21/21 09:30	12/21/21 22:57	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.098		0.20	0.098	ug/L		12/16/21 10:45	12/17/21 10:54	1

Client: Ramboll US Corporation
Project/Site: Former Mirro Plant No 9 - 1690019647

Job ID: 500-209565-1

Client Sample ID: MW-218
Date Collected: 12/09/21 11:00
Date Received: 12/10/21 10:30

Lab Sample ID: 500-209565-2
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.15		0.50	0.15	ug/L			12/22/21 16:05	1
Bromobenzene	<0.36		1.0	0.36	ug/L			12/22/21 16:05	1
Bromochloromethane	<0.43		1.0	0.43	ug/L			12/22/21 16:05	1
Bromodichloromethane	<0.37		1.0	0.37	ug/L			12/22/21 16:05	1
Bromoform	<0.48		1.0	0.48	ug/L			12/22/21 16:05	1
Bromomethane	<0.80		3.0	0.80	ug/L			12/22/21 16:05	1
Carbon tetrachloride	<0.38		1.0	0.38	ug/L			12/22/21 16:05	1
Chlorobenzene	<0.39		1.0	0.39	ug/L			12/22/21 16:05	1
Chloroethane	<0.51		1.0	0.51	ug/L			12/22/21 16:05	1
Chloroform	<0.37		2.0	0.37	ug/L			12/22/21 16:05	1
Chloromethane	<0.32		1.0	0.32	ug/L			12/22/21 16:05	1
2-Chlorotoluene	<0.31		1.0	0.31	ug/L			12/22/21 16:05	1
4-Chlorotoluene	<0.35		1.0	0.35	ug/L			12/22/21 16:05	1
cis-1,2-Dichloroethene	<0.41		1.0	0.41	ug/L			12/22/21 16:05	1
cis-1,3-Dichloropropene	<0.42		1.0	0.42	ug/L			12/22/21 16:05	1
Dibromochloromethane	<0.49		1.0	0.49	ug/L			12/22/21 16:05	1
1,2-Dibromo-3-Chloropropane	<2.0		5.0	2.0	ug/L			12/22/21 16:05	1
1,2-Dibromoethane	<0.39		1.0	0.39	ug/L			12/22/21 16:05	1
Dibromomethane	<0.27		1.0	0.27	ug/L			12/22/21 16:05	1
1,2-Dichlorobenzene	<0.33		1.0	0.33	ug/L			12/22/21 16:05	1
1,3-Dichlorobenzene	<0.40		1.0	0.40	ug/L			12/22/21 16:05	1
1,4-Dichlorobenzene	<0.36		1.0	0.36	ug/L			12/22/21 16:05	1
Dichlorodifluoromethane	<0.67		3.0	0.67	ug/L			12/22/21 16:05	1
1,1-Dichloroethane	<0.41		1.0	0.41	ug/L			12/22/21 16:05	1
1,2-Dichloroethane	<0.39		1.0	0.39	ug/L			12/22/21 16:05	1
1,1-Dichloroethene	<0.39		1.0	0.39	ug/L			12/22/21 16:05	1
1,2-Dichloropropane	<0.43		1.0	0.43	ug/L			12/22/21 16:05	1
1,3-Dichloropropane	<0.36		1.0	0.36	ug/L			12/22/21 16:05	1
2,2-Dichloropropane	<0.44		1.0	0.44	ug/L			12/22/21 16:05	1
1,1-Dichloropropene	<0.30		1.0	0.30	ug/L			12/22/21 16:05	1
Ethylbenzene	<0.18		0.50	0.18	ug/L			12/22/21 16:05	1
Hexachlorobutadiene	<0.45		1.0	0.45	ug/L			12/22/21 16:05	1
Isopropylbenzene	<0.39		1.0	0.39	ug/L			12/22/21 16:05	1
Isopropyl ether	<0.28		1.0	0.28	ug/L			12/22/21 16:05	1
Methylene Chloride	<1.6		5.0	1.6	ug/L			12/22/21 16:05	1
Methyl tert-butyl ether	<0.39		1.0	0.39	ug/L			12/22/21 16:05	1
Naphthalene	<0.34		1.0	0.34	ug/L			12/22/21 16:05	1
n-Butylbenzene	<0.39		1.0	0.39	ug/L			12/22/21 16:05	1
N-Propylbenzene	<0.41		1.0	0.41	ug/L			12/22/21 16:05	1
p-Isopropyltoluene	<0.36		1.0	0.36	ug/L			12/22/21 16:05	1
sec-Butylbenzene	<0.40		1.0	0.40	ug/L			12/22/21 16:05	1
Styrene	<0.39		1.0	0.39	ug/L			12/22/21 16:05	1
tert-Butylbenzene	<0.40		1.0	0.40	ug/L			12/22/21 16:05	1
1,1,1,2-Tetrachloroethane	<0.46		1.0	0.46	ug/L			12/22/21 16:05	1
1,1,2,2-Tetrachloroethane	<0.40		1.0	0.40	ug/L			12/22/21 16:05	1
Tetrachloroethene	<0.37		1.0	0.37	ug/L			12/22/21 16:05	1
Toluene	<0.15		0.50	0.15	ug/L			12/22/21 16:05	1
trans-1,2-Dichloroethene	<0.35		1.0	0.35	ug/L			12/22/21 16:05	1
trans-1,3-Dichloropropene	<0.36		1.0	0.36	ug/L			12/22/21 16:05	1

Client: Ramboll US Corporation
Job ID: 500-209565-1
Project/Site: Former Mirro Plant No 9 - 1690019647

Client Sample ID: MW-218
Date Collected: 12/09/21 11:00
Date Received: 12/10/21 10:30

Lab Sample ID: 500-209565-2
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,3-Trichlorobenzene	<0.46		1.0	0.46	ug/L			12/22/21 16:05	1
1,2,4-Trichlorobenzene	<0.34		1.0	0.34	ug/L			12/22/21 16:05	1
1,1,1-Trichloroethane	<0.38		1.0	0.38	ug/L			12/22/21 16:05	1
1,1,2-Trichloroethane	<0.35		1.0	0.35	ug/L			12/22/21 16:05	1
Trichloroethene	<0.16		0.50	0.16	ug/L			12/22/21 16:05	1
Trichlorofluoromethane	<0.43		1.0	0.43	ug/L			12/22/21 16:05	1
1,2,3-Trichloropropane	<0.41		2.0	0.41	ug/L			12/22/21 16:05	1
1,2,4-Trimethylbenzene	<0.36		1.0	0.36	ug/L			12/22/21 16:05	1
1,3,5-Trimethylbenzene	<0.25		1.0	0.25	ug/L			12/22/21 16:05	1
Vinyl chloride	<0.20		1.0	0.20	ug/L			12/22/21 16:05	1
Xylenes, Total	<0.22		1.0	0.22	ug/L			12/22/21 16:05	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*81*		*72 - 124*		*12/22/21 16:05*	*1*
Dibromofluoromethane (Surr)	*92*		*75 - 120*		*12/22/21 16:05*	*1*
1,2-Dichloroethane-d4 (Surr)	*87*		*75 - 126*		*12/22/21 16:05*	*1*
Toluene-d8 (Surr)	*95*		*75 - 120*		*12/22/21 16:05*	*1*

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	<0.24		0.78	0.24	ug/L		12/14/21 11:43	12/17/21 18:31	1
Acenaphthylene	<0.21		0.78	0.21	ug/L		12/14/21 11:43	12/17/21 18:31	1
Anthracene	<0.26		0.78	0.26	ug/L		12/14/21 11:43	12/17/21 18:31	1
Benzo[a]anthracene	<0.044		0.16	0.044	ug/L		12/14/21 11:43	12/17/21 18:31	1
Benzo[a]pyrene	<0.077		0.16	0.077	ug/L		12/14/21 11:43	12/17/21 18:31	1
Benzo[b]fluoranthene	<0.063		0.16	0.063	ug/L		12/14/21 11:43	12/17/21 18:31	1
Benzo[g,h,i]perylene	<0.29		0.78	0.29	ug/L		12/14/21 11:43	12/17/21 18:31	1
Benzo[k]fluoranthene	<0.050		0.16	0.050	ug/L		12/14/21 11:43	12/17/21 18:31	1
Chrysene	<0.053		0.16	0.053	ug/L		12/14/21 11:43	12/17/21 18:31	1
Dibenz(a,h)anthracene	<0.040		0.23	0.040	ug/L		12/14/21 11:43	12/17/21 18:31	1
Fluoranthene	<0.35		0.78	0.35	ug/L		12/14/21 11:43	12/17/21 18:31	1
Fluorene	<0.19		0.78	0.19	ug/L		12/14/21 11:43	12/17/21 18:31	1
Indeno[1,2,3-cd]pyrene	<0.058		0.16	0.058	ug/L		12/14/21 11:43	12/17/21 18:31	1
1-Methylnaphthalene	<0.24		1.6	0.24	ug/L		12/14/21 11:43	12/17/21 18:31	1
2-Methylnaphthalene	<0.051		1.6	0.051	ug/L		12/14/21 11:43	12/17/21 18:31	1
Naphthalene	<0.24		0.78	0.24	ug/L		12/14/21 11:43	12/17/21 18:31	1
Phenanthrene	<0.24		0.78	0.24	ug/L		12/14/21 11:43	12/17/21 18:31	1
Pyrene	<0.33		0.78	0.33	ug/L		12/14/21 11:43	12/17/21 18:31	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*72*		*34 - 110*	*12/14/21 11:43*	*12/17/21 18:31*	*1*
Nitrobenzene-d5 (Surr)	*69*		*36 - 120*	*12/14/21 11:43*	*12/17/21 18:31*	*1*
Terphenyl-d14 (Surr)	*104*		*40 - 145*	*12/14/21 11:43*	*12/17/21 18:31*	*1*

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<0.067		0.40	0.067	ug/L		12/13/21 09:44	12/14/21 11:25	1
PCB-1221	<0.20		0.40	0.20	ug/L		12/13/21 09:44	12/14/21 11:25	1
PCB-1232	<0.20		0.40	0.20	ug/L		12/13/21 09:44	12/14/21 11:25	1
PCB-1242	<0.20		0.40	0.20	ug/L		12/13/21 09:44	12/14/21 11:25	1

Client Sample ID: MW-218
Lab Sample ID: 500-209565-2
Date Collected: 12/09/21 11:00
Matrix: Water
Date Received: 12/10/21 10:30

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1248	<0.20		0.40	0.20	ug/L		12/13/21 09:44	12/14/21 11:25	1
PCB-1254	<0.20		0.40	0.20	ug/L		12/13/21 09:44	12/14/21 11:25	1
PCB-1260	<0.070		0.40	0.070	ug/L		12/13/21 09:44	12/14/21 11:25	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*87*		*30 - 120*	*12/13/21 09:44*	*12/14/21 11:25*	*1*
DCB Decachlorobiphenyl	*84*		*30 - 140*	*12/13/21 09:44*	*12/14/21 11:25*	*1*

Method: 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	**4.9**		4.9	2.4	ng/L		12/16/21 04:40	12/20/21 03:04	1
Perfluoropentanoic acid (PFPeA)	**2.1**		2.0	0.48	ng/L		12/16/21 04:40	12/20/21 03:04	1
Perfluorohexanoic acid (PFHxA)	**2.9**		2.0	0.57	ng/L		12/16/21 04:40	12/20/21 03:04	1
Perfluoroheptanoic acid (PFHpA)	**2.3**		2.0	0.25	ng/L		12/16/21 04:40	12/20/21 03:04	1
Perfluorooctanoic acid (PFOA)	**110**		2.0	0.84	ng/L		12/16/21 04:40	12/20/21 03:04	1
Perfluorononanoic acid (PFNA)	<0.27		2.0	0.27	ng/L		12/16/21 04:40	12/20/21 03:04	1
Perfluorodecanoic acid (PFDA)	<0.31		2.0	0.31	ng/L		12/16/21 04:40	12/20/21 03:04	1
Perfluoroundecanoic acid (PFUnA)	<1.1		2.0	1.1	ng/L		12/16/21 04:40	12/20/21 03:04	1
Perfluorododecanoic acid (PFDoA)	<0.54		2.0	0.54	ng/L		12/16/21 04:40	12/20/21 03:04	1
Perfluorotridecanoic acid (PFTriA)	<1.3		2.0	1.3	ng/L		12/16/21 04:40	12/20/21 03:04	1
Perfluorotetradecanoic acid (PFTeA)	<0.72		2.0	0.72	ng/L		12/16/21 04:40	12/20/21 03:04	1
Perfluorobutanesulfonic acid (PFBS)	**1.2**	**J**	2.0	0.20	ng/L		12/16/21 04:40	12/20/21 03:04	1
Perfluoropentanesulfonic acid (PFPeS)	<0.30		2.0	0.30	ng/L		12/16/21 04:40	12/20/21 03:04	1
Perfluorohexanesulfonic acid (PFHxS)	**0.82**	**J**	2.0	0.56	ng/L		12/16/21 04:40	12/20/21 03:04	1
Perfluoroheptanesulfonic Acid (PFHpS)	<0.19		2.0	0.19	ng/L		12/16/21 04:40	12/20/21 03:04	1
Perfluorooctanesulfonic acid (PFOS)	<0.53		2.0	0.53	ng/L		12/16/21 04:40	12/20/21 03:04	1
Perfluorononanesulfonic acid (PFNS)	<0.37		2.0	0.37	ng/L		12/16/21 04:40	12/20/21 03:04	1
Perfluorodecanesulfonic acid (PFDS)	<0.32		2.0	0.32	ng/L		12/16/21 04:40	12/20/21 03:04	1
Perfluorododecanesulfonic acid (PFDoS)	<0.96		2.0	0.96	ng/L		12/16/21 04:40	12/20/21 03:04	1
Perfluorooctanesulfonamide (FOSA)	<0.97		2.0	0.97	ng/L		12/16/21 04:40	12/20/21 03:04	1
NEtFOSA	<0.86		2.0	0.86	ng/L		12/16/21 04:40	12/20/21 03:04	1
NMeFOSA	<0.42		2.0	0.42	ng/L		12/16/21 04:40	12/20/21 03:04	1
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	<1.2		4.9	1.2	ng/L		12/16/21 04:40	12/20/21 03:04	1
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	<1.3		4.9	1.3	ng/L		12/16/21 04:40	12/20/21 03:04	1
NMeFOSE	<1.4		3.9	1.4	ng/L		12/16/21 04:40	12/20/21 03:04	1
NEtFOSE	<0.84		2.0	0.84	ng/L		12/16/21 04:40	12/20/21 03:04	1
4:2 FTS	<0.24		2.0	0.24	ng/L		12/16/21 04:40	12/20/21 03:04	1
6:2 FTS	<2.5		4.9	2.5	ng/L		12/16/21 04:40	12/20/21 03:04	1
8:2 FTS	<0.45		2.0	0.45	ng/L		12/16/21 04:40	12/20/21 03:04	1
DONA	<0.39		2.0	0.39	ng/L		12/16/21 04:40	12/20/21 03:04	1
HFPO-DA (GenX)	<1.5		3.9	1.5	ng/L		12/16/21 04:40	12/20/21 03:04	1
F-53B Major	<0.24		2.0	0.24	ng/L		12/16/21 04:40	12/20/21 03:04	1
F-53B Minor	<0.32		2.0	0.32	ng/L		12/16/21 04:40	12/20/21 03:04	1

Client Sample ID: MW-218
Date Collected: 12/09/21 11:00
Date Received: 12/10/21 10:30

Lab Sample ID: 500-209565-2
Matrix: Water

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C4 PFBA	77		25 - 150	12/16/21 04:40	12/20/21 03:04	1
13C5 PFPeA	82		25 - 150	12/16/21 04:40	12/20/21 03:04	1
13C2 PFHxA	62		25 - 150	12/16/21 04:40	12/20/21 03:04	1
13C4 PFHpA	71		25 - 150	12/16/21 04:40	12/20/21 03:04	1
13C4 PFOA	85		25 - 150	12/16/21 04:40	12/20/21 03:04	1
13C5 PFNA	92		25 - 150	12/16/21 04:40	12/20/21 03:04	1
13C2 PFDA	86		25 - 150	12/16/21 04:40	12/20/21 03:04	1
13C2 PFUnA	84		25 - 150	12/16/21 04:40	12/20/21 03:04	1
13C2 PFDoA	89		25 - 150	12/16/21 04:40	12/20/21 03:04	1
13C2 PFTeDA	100		25 - 150	12/16/21 04:40	12/20/21 03:04	1
13C3 PFBS	78		25 - 150	12/16/21 04:40	12/20/21 03:04	1
18O2 PFHxS	68		25 - 150	12/16/21 04:40	12/20/21 03:04	1
13C4 PFOS	86		25 - 150	12/16/21 04:40	12/20/21 03:04	1
13C8 FOSA	70		10 - 150	12/16/21 04:40	12/20/21 03:04	1
d3-NMeFOSAA	67		25 - 150	12/16/21 04:40	12/20/21 03:04	1
d5-NEtFOSAA	70		25 - 150	12/16/21 04:40	12/20/21 03:04	1
d-N-MeFOSA-M	63		10 - 150	12/16/21 04:40	12/20/21 03:04	1
d-N-EtFOSA-M	63		10 - 150	12/16/21 04:40	12/20/21 03:04	1
d7-N-MeFOSE-M	70		10 - 150	12/16/21 04:40	12/20/21 03:04	1
d9-N-EtFOSE-M	75		10 - 150	12/16/21 04:40	12/20/21 03:04	1
M2-4:2 FTS	54		25 - 150	12/16/21 04:40	12/20/21 03:04	1
M2-6:2 FTS	73		25 - 150	12/16/21 04:40	12/20/21 03:04	1
M2-8:2 FTS	69		25 - 150	12/16/21 04:40	12/20/21 03:04	1
13C3 HFPO-DA	78		25 - 150	12/16/21 04:40	12/20/21 03:04	1
13C2 10:2 FTS	78		25 - 150	12/16/21 04:40	12/20/21 03:04	1

Method: 6020A - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	<25		100	25	ug/L		12/21/21 09:30	12/21/21 23:01	1
Antimony	<1.3		3.0	1.3	ug/L		12/21/21 09:30	12/21/21 23:01	1
Arsenic	**2.0**		1.0	0.23	ug/L		12/21/21 09:30	12/22/21 14:24	1
Barium	**97**		2.5	0.73	ug/L		12/21/21 09:30	12/21/21 23:01	1
Cadmium	<0.17		0.50	0.17	ug/L		12/21/21 09:30	12/21/21 23:01	1
Chromium	**2.1**	**J**	5.0	1.1	ug/L		12/21/21 09:30	12/21/21 23:01	1
Copper	**0.87**	**J**	2.0	0.50	ug/L		12/21/21 09:30	12/21/21 23:01	1
Iron	**3300**		100	47	ug/L		12/21/21 09:30	12/21/21 23:01	1
Lead	<0.19		0.50	0.19	ug/L		12/21/21 09:30	12/21/21 23:01	1
Manganese	**340**		2.5	0.79	ug/L		12/21/21 09:30	12/21/21 23:01	1
Nickel	**3.3**		2.0	0.63	ug/L		12/21/21 09:30	12/21/21 23:01	1
Selenium	<0.98		2.5	0.98	ug/L		12/21/21 09:30	12/21/21 23:01	1
Silver	<0.12		0.50	0.12	ug/L		12/21/21 09:30	12/21/21 23:01	1
Thallium	<0.57		2.0	0.57	ug/L		12/21/21 09:30	12/21/21 23:01	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.098		0.20	0.098	ug/L		12/16/21 10:45	12/17/21 10:56	1

Definitions/Glossary

Client: Ramboll US Corporation
Job ID: 500-209565-1
Project/Site: Former Mirro Plant No 9 - 1690019647

Qualifiers

LCMS

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Metals

Qualifier	Qualifier Description
^+	Continuing Calibration Verification (CCV) is outside acceptance limits, high biased.
B	Compound was found in the blank and sample.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

QC Association Summary

Client: Ramboll US Corporation
Job ID: 500-209565-1
Project/Site: Former Mirro Plant No 9 - 1690019647

GC/MS VOA

Analysis Batch: 634922

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-209564-2	EB-01	Total/NA	Water	8260B	
500-209564-3	Trip Blank	Total/NA	Water	8260B	
500-209565-1	MW-217	Total/NA	Water	8260B	
500-209565-2	MW-218	Total/NA	Water	8260B	
MB 500-634922/6	Method Blank	Total/NA	Water	8260B	
LCS 500-634922/4	Lab Control Sample	Total/NA	Water	8260B	

GC/MS Semi VOA

Prep Batch: 633643

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-209565-1	MW-217	Total/NA	Water	3510C	
500-209565-2	MW-218	Total/NA	Water	3510C	
MB 500-633643/1-A	Method Blank	Total/NA	Water	3510C	
LCS 500-633643/2-A	Lab Control Sample	Total/NA	Water	3510C	
LCSD 500-633643/3-A	Lab Control Sample Dup	Total/NA	Water	3510C	

Prep Batch: 633730

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-209564-2	EB-01	Total/NA	Water	3510C	
MB 500-633730/1-A	Method Blank	Total/NA	Water	3510C	
LCS 500-633730/2-A	Lab Control Sample	Total/NA	Water	3510C	

Analysis Batch: 633806

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 500-633730/1-A	Method Blank	Total/NA	Water	8270D	633730
LCS 500-633730/2-A	Lab Control Sample	Total/NA	Water	8270D	633730

Analysis Batch: 634033

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-209564-2	EB-01	Total/NA	Water	8270D	633730

Analysis Batch: 634188

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-209565-1	MW-217	Total/NA	Water	8270D	633643
500-209565-2	MW-218	Total/NA	Water	8270D	633643
MB 500-633643/1-A	Method Blank	Total/NA	Water	8270D	633643
LCS 500-633643/2-A	Lab Control Sample	Total/NA	Water	8270D	633643
LCSD 500-633643/3-A	Lab Control Sample Dup	Total/NA	Water	8270D	633643

GC Semi VOA

Prep Batch: 633372

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-209564-2	EB-01	Total/NA	Water	3510C	
500-209565-1	MW-217	Total/NA	Water	3510C	
500-209565-2	MW-218	Total/NA	Water	3510C	
MB 500-633372/1-A	Method Blank	Total/NA	Water	3510C	
LCS 500-633372/4-A	Lab Control Sample	Total/NA	Water	3510C	
LCSD 500-633372/5-A	Lab Control Sample Dup	Total/NA	Water	3510C	

GC Semi VOA

Analysis Batch: 633459

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-209564-2	EB-01	Total/NA	Water	8082A	633372
500-209565-1	MW-217	Total/NA	Water	8082A	633372
500-209565-2	MW-218	Total/NA	Water	8082A	633372
MB 500-633372/1-A	Method Blank	Total/NA	Water	8082A	633372
LCS 500-633372/4-A	Lab Control Sample	Total/NA	Water	8082A	633372
LCSD 500-633372/5-A	Lab Control Sample Dup	Total/NA	Water	8082A	633372

LCMS

Prep Batch: 551271

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-209565-1	MW-217	Total/NA	Water	3535	
500-209565-2	MW-218	Total/NA	Water	3535	
MB 320-551271/1-A	Method Blank	Total/NA	Water	3535	
LCS 320-551271/2-A	Lab Control Sample	Total/NA	Water	3535	
LCSD 320-551271/3-A	Lab Control Sample Dup	Total/NA	Water	3535	

Prep Batch: 551272

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-209564-1	FB-01	Total/NA	Water	3535	
500-209564-2	EB-01	Total/NA	Water	3535	
MB 320-551272/1-A	Method Blank	Total/NA	Water	3535	
LCS 320-551272/2-A	Lab Control Sample	Total/NA	Water	3535	
LCSD 320-551272/3-A	Lab Control Sample Dup	Total/NA	Water	3535	

Analysis Batch: 552298

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-209565-1	MW-217	Total/NA	Water	537 (modified)	551271
500-209565-2	MW-218	Total/NA	Water	537 (modified)	551271
MB 320-551271/1-A	Method Blank	Total/NA	Water	537 (modified)	551271
LCS 320-551271/2-A	Lab Control Sample	Total/NA	Water	537 (modified)	551271
LCSD 320-551271/3-A	Lab Control Sample Dup	Total/NA	Water	537 (modified)	551271

Analysis Batch: 552303

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-209564-1	FB-01	Total/NA	Water	537 (modified)	551272
500-209564-2	EB-01	Total/NA	Water	537 (modified)	551272
MB 320-551272/1-A	Method Blank	Total/NA	Water	537 (modified)	551272
LCS 320-551272/2-A	Lab Control Sample	Total/NA	Water	537 (modified)	551272
LCSD 320-551272/3-A	Lab Control Sample Dup	Total/NA	Water	537 (modified)	551272

Metals

Prep Batch: 634059

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-209564-2	EB-01	Dissolved	Water	7470A	
MB 500-634059/12-A	Method Blank	Total/NA	Water	7470A	
LCS 500-634059/13-A	Lab Control Sample	Total/NA	Water	7470A	

Prep Batch: 634060

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-209565-1	MW-217	Dissolved	Water	7470A	

Metals (Continued)

Prep Batch: 634060 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-209565-2	MW-218	Dissolved	Water	7470A	
MB 500-634060/12-A	Method Blank	Total/NA	Water	7470A	
LCS 500-634060/13-A	Lab Control Sample	Total/NA	Water	7470A	

Analysis Batch: 634283

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-209564-2	EB-01	Dissolved	Water	7470A	634059
500-209565-1	MW-217	Dissolved	Water	7470A	634060
500-209565-2	MW-218	Dissolved	Water	7470A	634060
MB 500-634059/12-A	Method Blank	Total/NA	Water	7470A	634059
MB 500-634060/12-A	Method Blank	Total/NA	Water	7470A	634060
LCS 500-634059/13-A	Lab Control Sample	Total/NA	Water	7470A	634059
LCS 500-634060/13-A	Lab Control Sample	Total/NA	Water	7470A	634060

Prep Batch: 634757

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-209564-2	EB-01	Dissolved	Water	3005A	
500-209565-1	MW-217	Dissolved	Water	3005A	
500-209565-2	MW-218	Dissolved	Water	3005A	
MB 500-634757/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 500-634757/2-A	Lab Control Sample	Total Recoverable	Water	3005A	

Analysis Batch: 634985

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-209564-2	EB-01	Dissolved	Water	6020A	634757
500-209565-1	MW-217	Dissolved	Water	6020A	634757
500-209565-2	MW-218	Dissolved	Water	6020A	634757
MB 500-634757/1-A	Method Blank	Total Recoverable	Water	6020A	634757
LCS 500-634757/2-A	Lab Control Sample	Total Recoverable	Water	6020A	634757

Analysis Batch: 635122

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-209565-1	MW-217	Dissolved	Water	6020A	634757
500-209565-2	MW-218	Dissolved	Water	6020A	634757
MB 500-634757/1-A	Method Blank	Total Recoverable	Water	6020A	634757
LCS 500-634757/2-A	Lab Control Sample	Total Recoverable	Water	6020A	634757

Surrogate Summary

Client: Ramboll US Corporation
Job ID: 500-209565-1
Project/Site: Former Mirro Plant No 9 - 1690019647

Method: 8260B - Volatile Organic Compounds (GC/MS)

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

		Percent Surrogate Recovery (Acceptance Limits)			
		BFB	DBFM	DCA	TOL
Lab Sample ID	Client Sample ID	(72-124)	(75-120)	(75-126)	(75-120)
500-209564-2	EB-01	83	90	86	95
500-209564-3	Trip Blank	82	89	84	94
500-209565-1	MW-217	83	91	85	94
500-209565-2	MW-218	81	92	87	95
LCS 500-634922/4	Lab Control Sample	83	93	85	96
MB 500-634922/6	Method Blank	84	91	86	93

Surrogate Legend

BFB = 4-Bromofluorobenzene (Surr)
DBFM = Dibromofluoromethane (Surr)
DCA = 1,2-Dichloroethane-d4 (Surr)
TOL = Toluene-d8 (Surr)

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

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

		Percent Surrogate Recovery (Acceptance Limits)		
		FBP	NBZ	TPHL
Lab Sample ID	Client Sample ID	(34-110)	(36-120)	(40-145)
500-209564-2	EB-01	67	62	86
500-209565-1	MW-217	74	64	102
500-209565-2	MW-218	72	69	104
LCS 500-633643/2-A	Lab Control Sample	78	76	95
LCS 500-633730/2-A	Lab Control Sample	72	74	101
LCSD 500-633643/3-A	Lab Control Sample Dup	73	71	100
MB 500-633643/1-A	Method Blank	75	70	95
MB 500-633730/1-A	Method Blank	72	70	121

Surrogate Legend

FBP = 2-Fluorobiphenyl (Surr)
NBZ = Nitrobenzene-d5 (Surr)
TPHL = Terphenyl-d14 (Surr)

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

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

		Percent Surrogate Recovery (Acceptance Limits)	
		TCX1	DCBP1
Lab Sample ID	Client Sample ID	(30-120)	(30-140)
500-209564-2	EB-01	85	75
500-209565-1	MW-217	79	84
500-209565-2	MW-218	87	84
LCS 500-633372/4-A	Lab Control Sample	75	78
LCSD 500-633372/5-A	Lab Control Sample Dup	78	78
MB 500-633372/1-A	Method Blank	83	78

Surrogate Legend

TCX = Tetrachloro-m-xylene
DCBP = DCB Decachlorobiphenyl

Method: 8260B - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 500-634922/6
Matrix: Water
Analysis Batch: 634922

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.15		0.50	0.15	ug/L			12/22/21 13:49	1
Bromobenzene	<0.36		1.0	0.36	ug/L			12/22/21 13:49	1
Bromochloromethane	<0.43		1.0	0.43	ug/L			12/22/21 13:49	1
Bromodichloromethane	<0.37		1.0	0.37	ug/L			12/22/21 13:49	1
Bromoform	<0.48		1.0	0.48	ug/L			12/22/21 13:49	1
Bromomethane	<0.80		3.0	0.80	ug/L			12/22/21 13:49	1
Carbon tetrachloride	<0.38		1.0	0.38	ug/L			12/22/21 13:49	1
Chlorobenzene	<0.39		1.0	0.39	ug/L			12/22/21 13:49	1
Chloroethane	<0.51		1.0	0.51	ug/L			12/22/21 13:49	1
Chloroform	<0.37		2.0	0.37	ug/L			12/22/21 13:49	1
Chloromethane	<0.32		1.0	0.32	ug/L			12/22/21 13:49	1
2-Chlorotoluene	<0.31		1.0	0.31	ug/L			12/22/21 13:49	1
4-Chlorotoluene	<0.35		1.0	0.35	ug/L			12/22/21 13:49	1
cis-1,2-Dichloroethene	<0.41		1.0	0.41	ug/L			12/22/21 13:49	1
cis-1,3-Dichloropropene	<0.42		1.0	0.42	ug/L			12/22/21 13:49	1
Dibromochloromethane	<0.49		1.0	0.49	ug/L			12/22/21 13:49	1
1,2-Dibromo-3-Chloropropane	<2.0		5.0	2.0	ug/L			12/22/21 13:49	1
1,2-Dibromoethane	<0.39		1.0	0.39	ug/L			12/22/21 13:49	1
Dibromomethane	<0.27		1.0	0.27	ug/L			12/22/21 13:49	1
1,2-Dichlorobenzene	<0.33		1.0	0.33	ug/L			12/22/21 13:49	1
1,3-Dichlorobenzene	<0.40		1.0	0.40	ug/L			12/22/21 13:49	1
1,4-Dichlorobenzene	<0.36		1.0	0.36	ug/L			12/22/21 13:49	1
Dichlorodifluoromethane	<0.67		3.0	0.67	ug/L			12/22/21 13:49	1
1,1-Dichloroethane	<0.41		1.0	0.41	ug/L			12/22/21 13:49	1
1,2-Dichloroethane	<0.39		1.0	0.39	ug/L			12/22/21 13:49	1
1,1-Dichloroethene	<0.39		1.0	0.39	ug/L			12/22/21 13:49	1
1,2-Dichloropropane	<0.43		1.0	0.43	ug/L			12/22/21 13:49	1
1,3-Dichloropropane	<0.36		1.0	0.36	ug/L			12/22/21 13:49	1
2,2-Dichloropropane	<0.44		1.0	0.44	ug/L			12/22/21 13:49	1
1,1-Dichloropropene	<0.30		1.0	0.30	ug/L			12/22/21 13:49	1
Ethylbenzene	<0.18		0.50	0.18	ug/L			12/22/21 13:49	1
Hexachlorobutadiene	<0.45		1.0	0.45	ug/L			12/22/21 13:49	1
Isopropylbenzene	<0.39		1.0	0.39	ug/L			12/22/21 13:49	1
Isopropyl ether	<0.28		1.0	0.28	ug/L			12/22/21 13:49	1
Methylene Chloride	<1.6		5.0	1.6	ug/L			12/22/21 13:49	1
Methyl tert-butyl ether	<0.39		1.0	0.39	ug/L			12/22/21 13:49	1
Naphthalene	<0.34		1.0	0.34	ug/L			12/22/21 13:49	1
n-Butylbenzene	<0.39		1.0	0.39	ug/L			12/22/21 13:49	1
N-Propylbenzene	<0.41		1.0	0.41	ug/L			12/22/21 13:49	1
p-Isopropyltoluene	<0.36		1.0	0.36	ug/L			12/22/21 13:49	1
sec-Butylbenzene	<0.40		1.0	0.40	ug/L			12/22/21 13:49	1
Styrene	<0.39		1.0	0.39	ug/L			12/22/21 13:49	1
tert-Butylbenzene	<0.40		1.0	0.40	ug/L			12/22/21 13:49	1
1,1,1,2-Tetrachloroethane	<0.46		1.0	0.46	ug/L			12/22/21 13:49	1
1,1,2,2-Tetrachloroethane	<0.40		1.0	0.40	ug/L			12/22/21 13:49	1
Tetrachloroethene	<0.37		1.0	0.37	ug/L			12/22/21 13:49	1
Toluene	<0.15		0.50	0.15	ug/L			12/22/21 13:49	1
trans-1,2-Dichloroethene	<0.35		1.0	0.35	ug/L			12/22/21 13:49	1

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

Lab Sample ID: MB 500-634922/6
Matrix: Water
Analysis Batch: 634922

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
trans-1,3-Dichloropropene	<0.36		1.0	0.36	ug/L			12/22/21 13:49	1
1,2,3-Trichlorobenzene	<0.46		1.0	0.46	ug/L			12/22/21 13:49	1
1,2,4-Trichlorobenzene	<0.34		1.0	0.34	ug/L			12/22/21 13:49	1
1,1,1-Trichloroethane	<0.38		1.0	0.38	ug/L			12/22/21 13:49	1
1,1,2-Trichloroethane	<0.35		1.0	0.35	ug/L			12/22/21 13:49	1
Trichloroethene	<0.16		0.50	0.16	ug/L			12/22/21 13:49	1
Trichlorofluoromethane	<0.43		1.0	0.43	ug/L			12/22/21 13:49	1
1,2,3-Trichloropropane	<0.41		2.0	0.41	ug/L			12/22/21 13:49	1
1,2,4-Trimethylbenzene	<0.36		1.0	0.36	ug/L			12/22/21 13:49	1
1,3,5-Trimethylbenzene	<0.25		1.0	0.25	ug/L			12/22/21 13:49	1
Vinyl chloride	<0.20		1.0	0.20	ug/L			12/22/21 13:49	1
Xylenes, Total	<0.22		1.0	0.22	ug/L			12/22/21 13:49	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*84*		*72 - 124*		*12/22/21 13:49*	*1*
Dibromofluoromethane (Surr)	*91*		*75 - 120*		*12/22/21 13:49*	*1*
1,2-Dichloroethane-d4 (Surr)	*86*		*75 - 126*		*12/22/21 13:49*	*1*
Toluene-d8 (Surr)	*93*		*75 - 120*		*12/22/21 13:49*	*1*

Lab Sample ID: LCS 500-634922/4
Matrix: Water
Analysis Batch: 634922

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	50.0	47.3		ug/L		95	70 - 120
Bromobenzene	50.0	39.8		ug/L		80	70 - 122
Bromochloromethane	50.0	50.8		ug/L		102	65 - 122
Bromodichloromethane	50.0	38.7		ug/L		77	69 - 120
Bromoform	50.0	32.8		ug/L		66	56 - 132
Bromomethane	50.0	64.4		ug/L		129	40 - 152
Carbon tetrachloride	50.0	44.2		ug/L		88	59 - 133
Chlorobenzene	50.0	46.9		ug/L		94	70 - 120
Chloroethane	50.0	63.4		ug/L		127	48 - 136
Chloroform	50.0	44.0		ug/L		88	70 - 120
Chloromethane	50.0	50.2		ug/L		100	56 - 152
2-Chlorotoluene	50.0	44.0		ug/L		88	70 - 125
4-Chlorotoluene	50.0	42.5		ug/L		85	68 - 124
cis-1,2-Dichloroethene	50.0	48.4		ug/L		97	70 - 125
cis-1,3-Dichloropropene	50.0	36.7		ug/L		73	64 - 127
Dibromochloromethane	50.0	37.0		ug/L		74	68 - 125
1,2-Dibromo-3-Chloropropane	50.0	30.5		ug/L		61	56 - 123
1,2-Dibromoethane	50.0	40.9		ug/L		82	70 - 125
Dibromomethane	50.0	44.1		ug/L		88	70 - 120
1,2-Dichlorobenzene	50.0	45.4		ug/L		91	70 - 125
1,3-Dichlorobenzene	50.0	45.2		ug/L		90	70 - 125
1,4-Dichlorobenzene	50.0	44.8		ug/L		90	70 - 120
Dichlorodifluoromethane	50.0	56.0		ug/L		112	40 - 159
1,1-Dichloroethane	50.0	44.3		ug/L		89	70 - 125

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

Lab Sample ID: LCS 500-634922/4
Matrix: Water
Analysis Batch: 634922

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2-Dichloroethane	50.0	42.0		ug/L		84	68 - 127
1,1-Dichloroethene	50.0	52.4		ug/L		105	67 - 122
1,2-Dichloropropane	50.0	44.1		ug/L		88	67 - 130
1,3-Dichloropropane	50.0	40.0		ug/L		80	62 - 136
2,2-Dichloropropane	50.0	36.3		ug/L		73	58 - 139
1,1-Dichloropropene	50.0	44.4		ug/L		89	70 - 121
Ethylbenzene	50.0	50.1		ug/L		100	70 - 123
Hexachlorobutadiene	50.0	55.1		ug/L		110	51 - 150
Isopropylbenzene	50.0	47.0		ug/L		94	70 - 126
Methylene Chloride	50.0	49.4		ug/L		99	69 - 125
Methyl tert-butyl ether	50.0	29.0		ug/L		58	55 - 123
Naphthalene	50.0	53.4		ug/L		107	53 - 144
n-Butylbenzene	50.0	50.7		ug/L		101	68 - 125
N-Propylbenzene	50.0	44.7		ug/L		89	69 - 127
p-Isopropyltoluene	50.0	53.5		ug/L		107	70 - 125
sec-Butylbenzene	50.0	50.9		ug/L		102	70 - 123
Styrene	50.0	47.2		ug/L		94	70 - 120
tert-Butylbenzene	50.0	52.1		ug/L		104	70 - 121
1,1,1,2-Tetrachloroethane	50.0	46.8		ug/L		94	70 - 125
1,1,2,2-Tetrachloroethane	50.0	37.0		ug/L		74	62 - 140
Tetrachloroethene	50.0	48.4		ug/L		97	70 - 128
Toluene	50.0	47.2		ug/L		94	70 - 125
trans-1,2-Dichloroethene	50.0	48.3		ug/L		97	70 - 125
trans-1,3-Dichloropropene	50.0	32.6		ug/L		65	62 - 128
1,2,3-Trichlorobenzene	50.0	53.5		ug/L		107	51 - 145
1,2,4-Trichlorobenzene	50.0	50.3		ug/L		101	57 - 137
1,1,1-Trichloroethane	50.0	45.7		ug/L		91	70 - 125
1,1,2-Trichloroethane	50.0	42.8		ug/L		86	71 - 130
Trichloroethene	50.0	50.0		ug/L		100	70 - 125
Trichlorofluoromethane	50.0	44.9		ug/L		90	55 - 128
1,2,3-Trichloropropane	50.0	38.5		ug/L		77	50 - 133
1,2,4-Trimethylbenzene	50.0	47.6		ug/L		95	70 - 123
1,3,5-Trimethylbenzene	50.0	48.4		ug/L		97	70 - 123
Vinyl chloride	50.0	55.5		ug/L		111	64 - 126
Xylenes, Total	100	101		ug/L		101	70 - 125

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*83*		*72 - 124*
Dibromofluoromethane (Surr)	*93*		*75 - 120*
1,2-Dichloroethane-d4 (Surr)	*85*		*75 - 126*
Toluene-d8 (Surr)	*96*		*75 - 120*

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Lab Sample ID: MB 500-633643/1-A
Matrix: Water
Analysis Batch: 634188

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 633643

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	<0.25		0.80	0.25	ug/L		12/14/21 11:43	12/17/21 09:52	1
Acenaphthylene	<0.21		0.80	0.21	ug/L		12/14/21 11:43	12/17/21 09:52	1
Anthracene	<0.27		0.80	0.27	ug/L		12/14/21 11:43	12/17/21 09:52	1
Benzo[a]anthracene	<0.045		0.16	0.045	ug/L		12/14/21 11:43	12/17/21 09:52	1
Benzo[a]pyrene	<0.079		0.16	0.079	ug/L		12/14/21 11:43	12/17/21 09:52	1
Benzo[b]fluoranthene	<0.065		0.16	0.065	ug/L		12/14/21 11:43	12/17/21 09:52	1
Benzo[g,h,i]perylene	<0.30		0.80	0.30	ug/L		12/14/21 11:43	12/17/21 09:52	1
Benzo[k]fluoranthene	<0.051		0.16	0.051	ug/L		12/14/21 11:43	12/17/21 09:52	1
Chrysene	<0.055		0.16	0.055	ug/L		12/14/21 11:43	12/17/21 09:52	1
Dibenz(a,h)anthracene	<0.041		0.24	0.041	ug/L		12/14/21 11:43	12/17/21 09:52	1
Fluoranthene	<0.36		0.80	0.36	ug/L		12/14/21 11:43	12/17/21 09:52	1
Fluorene	<0.20		0.80	0.20	ug/L		12/14/21 11:43	12/17/21 09:52	1
Indeno[1,2,3-cd]pyrene	<0.060		0.16	0.060	ug/L		12/14/21 11:43	12/17/21 09:52	1
1-Methylnaphthalene	<0.24		1.6	0.24	ug/L		12/14/21 11:43	12/17/21 09:52	1
2-Methylnaphthalene	<0.052		1.6	0.052	ug/L		12/14/21 11:43	12/17/21 09:52	1
Naphthalene	<0.25		0.80	0.25	ug/L		12/14/21 11:43	12/17/21 09:52	1
Phenanthrene	<0.24		0.80	0.24	ug/L		12/14/21 11:43	12/17/21 09:52	1
Pyrene	<0.34		0.80	0.34	ug/L		12/14/21 11:43	12/17/21 09:52	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*75*		*34 - 110*	*12/14/21 11:43*	*12/17/21 09:52*	*1*
Nitrobenzene-d5 (Surr)	*70*		*36 - 120*	*12/14/21 11:43*	*12/17/21 09:52*	*1*
Terphenyl-d14 (Surr)	*95*		*40 - 145*	*12/14/21 11:43*	*12/17/21 09:52*	*1*

Lab Sample ID: LCS 500-633643/2-A
Matrix: Water
Analysis Batch: 634188

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 633643

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acenaphthene	32.0	23.8		ug/L		74	46 - 110
Acenaphthylene	32.0	25.4		ug/L		79	47 - 113
Anthracene	32.0	27.0		ug/L		84	67 - 118
Benzo[a]anthracene	32.0	27.7		ug/L		87	70 - 126
Benzo[a]pyrene	32.0	35.9		ug/L		112	70 - 135
Benzo[b]fluoranthene	32.0	30.6		ug/L		96	69 - 136
Benzo[g,h,i]perylene	32.0	37.8		ug/L		118	70 - 135
Benzo[k]fluoranthene	32.0	29.5		ug/L		92	70 - 133
Chrysene	32.0	28.8		ug/L		90	68 - 129
Dibenz(a,h)anthracene	32.0	36.7		ug/L		115	70 - 134
Fluoranthene	32.0	29.6		ug/L		93	68 - 126
Fluorene	32.0	25.4		ug/L		80	53 - 120
Indeno[1,2,3-cd]pyrene	32.0	36.8		ug/L		115	65 - 133
1-Methylnaphthalene	32.0	22.5		ug/L		70	38 - 110
2-Methylnaphthalene	32.0	23.4		ug/L		73	34 - 110
Naphthalene	32.0	21.2		ug/L		66	36 - 110
Phenanthrene	32.0	26.0		ug/L		81	65 - 120
Pyrene	32.0	27.3		ug/L		85	70 - 126

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 500-633643/2-A
Matrix: Water
Analysis Batch: 634188

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 633643

Surrogate	LCS %Recovery	LCS Qualifier	Limits
2-Fluorobiphenyl (Surr)	78		34 - 110
Nitrobenzene-d5 (Surr)	76		36 - 120
Terphenyl-d14 (Surr)	95		40 - 145

Lab Sample ID: LCSD 500-633643/3-A
Matrix: Water
Analysis Batch: 634188

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 633643

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Acenaphthene			32.0	21.7		ug/L		68	46 - 110	9	20
Acenaphthylene			32.0	23.9		ug/L		75	47 - 113	6	20
Anthracene			32.0	25.1		ug/L		79	67 - 118	7	20
Benzo[a]anthracene			32.0	27.4		ug/L		86	70 - 126	1	20
Benzo[a]pyrene			32.0	33.6		ug/L		105	70 - 135	6	20
Benzo[b]fluoranthene			32.0	27.4		ug/L		85	69 - 136	11	20
Benzo[g,h,i]perylene			32.0	35.0		ug/L		109	70 - 135	8	20
Benzo[k]fluoranthene			32.0	26.5		ug/L		83	70 - 133	11	20
Chrysene			32.0	27.9		ug/L		87	68 - 129	3	20
Dibenz(a,h)anthracene			32.0	33.9		ug/L		106	70 - 134	8	20
Fluoranthene			32.0	27.0		ug/L		84	68 - 126	9	20
Fluorene			32.0	23.4		ug/L		73	53 - 120	8	20
Indeno[1,2,3-cd]pyrene			32.0	33.2		ug/L		104	65 - 133	10	20
1-Methylnaphthalene			32.0	20.3		ug/L		63	38 - 110	10	20
2-Methylnaphthalene			32.0	20.9		ug/L		65	34 - 110	11	20
Naphthalene			32.0	19.8		ug/L		62	36 - 110	6	20
Phenanthrene			32.0	24.3		ug/L		76	65 - 120	7	20
Pyrene			32.0	28.1		ug/L		88	70 - 126	3	20

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
2-Fluorobiphenyl (Surr)	73		34 - 110
Nitrobenzene-d5 (Surr)	71		36 - 120
Terphenyl-d14 (Surr)	100		40 - 145

Lab Sample ID: MB 500-633730/1-A
Matrix: Water
Analysis Batch: 633806

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 633730

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	<0.25		0.80	0.25	ug/L		12/15/21 07:23	12/15/21 15:11	1
Acenaphthylene	<0.21		0.80	0.21	ug/L		12/15/21 07:23	12/15/21 15:11	1
Anthracene	<0.27		0.80	0.27	ug/L		12/15/21 07:23	12/15/21 15:11	1
Benzo[a]anthracene	<0.045		0.16	0.045	ug/L		12/15/21 07:23	12/15/21 15:11	1
Benzo[a]pyrene	<0.079		0.16	0.079	ug/L		12/15/21 07:23	12/15/21 15:11	1
Benzo[b]fluoranthene	<0.065		0.16	0.065	ug/L		12/15/21 07:23	12/15/21 15:11	1
Benzo[g,h,i]perylene	<0.30		0.80	0.30	ug/L		12/15/21 07:23	12/15/21 15:11	1
Benzo[k]fluoranthene	<0.051		0.16	0.051	ug/L		12/15/21 07:23	12/15/21 15:11	1
Chrysene	<0.055		0.16	0.055	ug/L		12/15/21 07:23	12/15/21 15:11	1
Dibenz(a,h)anthracene	<0.041		0.24	0.041	ug/L		12/15/21 07:23	12/15/21 15:11	1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 500-633730/1-A
Matrix: Water
Analysis Batch: 633806

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 633730

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoranthene	<0.36		0.80	0.36	ug/L		12/15/21 07:23	12/15/21 15:11	1
Fluorene	<0.20		0.80	0.20	ug/L		12/15/21 07:23	12/15/21 15:11	1
Indeno[1,2,3-cd]pyrene	<0.060		0.16	0.060	ug/L		12/15/21 07:23	12/15/21 15:11	1
1-Methylnaphthalene	<0.24		1.6	0.24	ug/L		12/15/21 07:23	12/15/21 15:11	1
2-Methylnaphthalene	<0.052		1.6	0.052	ug/L		12/15/21 07:23	12/15/21 15:11	1
Naphthalene	<0.25		0.80	0.25	ug/L		12/15/21 07:23	12/15/21 15:11	1
Phenanthrene	<0.24		0.80	0.24	ug/L		12/15/21 07:23	12/15/21 15:11	1
Pyrene	<0.34		0.80	0.34	ug/L		12/15/21 07:23	12/15/21 15:11	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*72*		*34 - 110*	*12/15/21 07:23*	*12/15/21 15:11*	*1*
Nitrobenzene-d5 (Surr)	*70*		*36 - 120*	*12/15/21 07:23*	*12/15/21 15:11*	*1*
Terphenyl-d14 (Surr)	*121*		*40 - 145*	*12/15/21 07:23*	*12/15/21 15:11*	*1*

Lab Sample ID: LCS 500-633730/2-A
Matrix: Water
Analysis Batch: 633806

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 633730

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acenaphthene	32.0	22.9		ug/L		71	46 - 110
Acenaphthylene	32.0	25.5		ug/L		80	47 - 113
Anthracene	32.0	27.5		ug/L		86	67 - 118
Benzo[a]anthracene	32.0	28.5		ug/L		89	70 - 126
Benzo[a]pyrene	32.0	35.5		ug/L		111	70 - 135
Benzo[b]fluoranthene	32.0	31.5		ug/L		99	69 - 136
Benzo[g,h,i]perylene	32.0	23.7		ug/L		74	70 - 135
Benzo[k]fluoranthene	32.0	30.5		ug/L		95	70 - 133
Chrysene	32.0	29.6		ug/L		93	68 - 129
Dibenz(a,h)anthracene	32.0	25.4		ug/L		79	70 - 134
Fluoranthene	32.0	28.1		ug/L		88	68 - 126
Fluorene	32.0	24.2		ug/L		76	53 - 120
Indeno[1,2,3-cd]pyrene	32.0	26.8		ug/L		84	65 - 133
1-Methylnaphthalene	32.0	20.6		ug/L		64	38 - 110
2-Methylnaphthalene	32.0	21.6		ug/L		67	34 - 110
Naphthalene	32.0	20.8		ug/L		65	36 - 110
Phenanthrene	32.0	26.5		ug/L		83	65 - 120
Pyrene	32.0	29.4		ug/L		92	70 - 126

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2-Fluorobiphenyl (Surr)	*72*		*34 - 110*
Nitrobenzene-d5 (Surr)	*74*		*36 - 120*
Terphenyl-d14 (Surr)	*101*		*40 - 145*

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Lab Sample ID: MB 500-633372/1-A
Matrix: Water
Analysis Batch: 633459

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 633372

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<0.067		0.40	0.067	ug/L		12/13/21 09:44	12/14/21 08:44	1
PCB-1221	<0.20		0.40	0.20	ug/L		12/13/21 09:44	12/14/21 08:44	1
PCB-1232	<0.20		0.40	0.20	ug/L		12/13/21 09:44	12/14/21 08:44	1
PCB-1242	<0.20		0.40	0.20	ug/L		12/13/21 09:44	12/14/21 08:44	1
PCB-1248	<0.20		0.40	0.20	ug/L		12/13/21 09:44	12/14/21 08:44	1
PCB-1254	<0.20		0.40	0.20	ug/L		12/13/21 09:44	12/14/21 08:44	1
PCB-1260	<0.070		0.40	0.070	ug/L		12/13/21 09:44	12/14/21 08:44	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*83*		*30 - 120*	*12/13/21 09:44*	*12/14/21 08:44*	*1*
DCB Decachlorobiphenyl	*78*		*30 - 140*	*12/13/21 09:44*	*12/14/21 08:44*	*1*

Lab Sample ID: LCS 500-633372/4-A
Matrix: Water
Analysis Batch: 633459

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 633372

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
PCB-1016			4.00	4.07		ug/L		102	56 - 120		
PCB-1260			4.00	3.97		ug/L		99	53 - 137		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Tetrachloro-m-xylene	*75*		*30 - 120*
DCB Decachlorobiphenyl	*78*		*30 - 140*

Lab Sample ID: LCSD 500-633372/5-A
Matrix: Water
Analysis Batch: 633459

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 633372

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
PCB-1016			4.00	3.95		ug/L		99	56 - 120	3	20
PCB-1260			4.00	3.76		ug/L		94	53 - 137	5	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
Tetrachloro-m-xylene	*78*		*30 - 120*
DCB Decachlorobiphenyl	*78*		*30 - 140*

Method: 537 (modified) - Fluorinated Alkyl Substances

Lab Sample ID: MB 320-551271/1-A
Matrix: Water
Analysis Batch: 552298

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 551271

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	<2.4		5.0	2.4	ng/L		12/16/21 04:40	12/19/21 23:25	1
Perfluoropentanoic acid (PFPeA)	<0.49		2.0	0.49	ng/L		12/16/21 04:40	12/19/21 23:25	1
Perfluorohexanoic acid (PFHxA)	<0.58		2.0	0.58	ng/L		12/16/21 04:40	12/19/21 23:25	1
Perfluoroheptanoic acid (PFHpA)	<0.25		2.0	0.25	ng/L		12/16/21 04:40	12/19/21 23:25	1
Perfluorooctanoic acid (PFOA)	<0.85		2.0	0.85	ng/L		12/16/21 04:40	12/19/21 23:25	1

Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

Lab Sample ID: MB 320-551271/1-A
Matrix: Water
Analysis Batch: 552298

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 551271

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorononanoic acid (PFNA)	<0.27		2.0	0.27	ng/L		12/16/21 04:40	12/19/21 23:25	1
Perfluorodecanoic acid (PFDA)	<0.31		2.0	0.31	ng/L		12/16/21 04:40	12/19/21 23:25	1
Perfluoroundecanoic acid (PFUnA)	<1.1		2.0	1.1	ng/L		12/16/21 04:40	12/19/21 23:25	1
Perfluorododecanoic acid (PFDoA)	<0.55		2.0	0.55	ng/L		12/16/21 04:40	12/19/21 23:25	1
Perfluorotridecanoic acid (PFTriA)	<1.3		2.0	1.3	ng/L		12/16/21 04:40	12/19/21 23:25	1
Perfluorotetradecanoic acid (PFTeA)	<0.73		2.0	0.73	ng/L		12/16/21 04:40	12/19/21 23:25	1
Perfluorobutanesulfonic acid (PFBS)	<0.20		2.0	0.20	ng/L		12/16/21 04:40	12/19/21 23:25	1
Perfluoropentanesulfonic acid (PFPeS)	<0.30		2.0	0.30	ng/L		12/16/21 04:40	12/19/21 23:25	1
Perfluorohexanesulfonic acid (PFHxS)	<0.57		2.0	0.57	ng/L		12/16/21 04:40	12/19/21 23:25	1
Perfluoroheptanesulfonic Acid (PFHpS)	<0.19		2.0	0.19	ng/L		12/16/21 04:40	12/19/21 23:25	1
Perfluorooctanesulfonic acid (PFOS)	<0.54		2.0	0.54	ng/L		12/16/21 04:40	12/19/21 23:25	1
Perfluorononanesulfonic acid (PFNS)	<0.37		2.0	0.37	ng/L		12/16/21 04:40	12/19/21 23:25	1
Perfluorodecanesulfonic acid (PFDS)	<0.32		2.0	0.32	ng/L		12/16/21 04:40	12/19/21 23:25	1
Perfluorododecanesulfonic acid (PFDoS)	<0.97		2.0	0.97	ng/L		12/16/21 04:40	12/19/21 23:25	1
Perfluorooctanesulfonamide (FOSA)	<0.98		2.0	0.98	ng/L		12/16/21 04:40	12/19/21 23:25	1
NEtFOSA	<0.87		2.0	0.87	ng/L		12/16/21 04:40	12/19/21 23:25	1
NMeFOSA	<0.43		2.0	0.43	ng/L		12/16/21 04:40	12/19/21 23:25	1
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	<1.2		5.0	1.2	ng/L		12/16/21 04:40	12/19/21 23:25	1
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	<1.3		5.0	1.3	ng/L		12/16/21 04:40	12/19/21 23:25	1
NMeFOSE	<1.4		4.0	1.4	ng/L		12/16/21 04:40	12/19/21 23:25	1
NEtFOSE	<0.85		2.0	0.85	ng/L		12/16/21 04:40	12/19/21 23:25	1
4:2 FTS	<0.24		2.0	0.24	ng/L		12/16/21 04:40	12/19/21 23:25	1
6:2 FTS	<2.5		5.0	2.5	ng/L		12/16/21 04:40	12/19/21 23:25	1
8:2 FTS	<0.46		2.0	0.46	ng/L		12/16/21 04:40	12/19/21 23:25	1
DONA	<0.40		2.0	0.40	ng/L		12/16/21 04:40	12/19/21 23:25	1
HFPO-DA (GenX)	<1.5		4.0	1.5	ng/L		12/16/21 04:40	12/19/21 23:25	1
F-53B Major	<0.24		2.0	0.24	ng/L		12/16/21 04:40	12/19/21 23:25	1
F-53B Minor	<0.32		2.0	0.32	ng/L		12/16/21 04:40	12/19/21 23:25	1

Isotope Dilution	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C4 PFBA	*104*		*25 - 150*	*12/16/21 04:40*	*12/19/21 23:25*	*1*
13C5 PFPeA	*93*		*25 - 150*	*12/16/21 04:40*	*12/19/21 23:25*	*1*
13C2 PFHxA	*76*		*25 - 150*	*12/16/21 04:40*	*12/19/21 23:25*	*1*
13C4 PFHpA	*77*		*25 - 150*	*12/16/21 04:40*	*12/19/21 23:25*	*1*
13C4 PFOA	*94*		*25 - 150*	*12/16/21 04:40*	*12/19/21 23:25*	*1*
13C5 PFNA	*101*		*25 - 150*	*12/16/21 04:40*	*12/19/21 23:25*	*1*
13C2 PFDA	*88*		*25 - 150*	*12/16/21 04:40*	*12/19/21 23:25*	*1*
13C2 PFUnA	*97*		*25 - 150*	*12/16/21 04:40*	*12/19/21 23:25*	*1*
13C2 PFDoA	*105*		*25 - 150*	*12/16/21 04:40*	*12/19/21 23:25*	*1*
13C2 PFTeDA	*120*		*25 - 150*	*12/16/21 04:40*	*12/19/21 23:25*	*1*
13C3 PFBS	*85*		*25 - 150*	*12/16/21 04:40*	*12/19/21 23:25*	*1*
18O2 PFHxS	*82*		*25 - 150*	*12/16/21 04:40*	*12/19/21 23:25*	*1*
13C4 PFOS	*90*		*25 - 150*	*12/16/21 04:40*	*12/19/21 23:25*	*1*
13C8 FOSA	*84*		*10 - 150*	*12/16/21 04:40*	*12/19/21 23:25*	*1*
d3-NMeFOSAA	*78*		*25 - 150*	*12/16/21 04:40*	*12/19/21 23:25*	*1*

Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

Lab Sample ID: MB 320-551271/1-A
Matrix: Water
Analysis Batch: 552298

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 551271

Isotope Dilution	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
d5-NEtFOSAA	82		25 - 150	12/16/21 04:40	12/19/21 23:25	1
d-N-MeFOSA-M	75		10 - 150	12/16/21 04:40	12/19/21 23:25	1
d-N-EtFOSA-M	74		10 - 150	12/16/21 04:40	12/19/21 23:25	1
d7-N-MeFOSE-M	82		10 - 150	12/16/21 04:40	12/19/21 23:25	1
d9-N-EtFOSE-M	85		10 - 150	12/16/21 04:40	12/19/21 23:25	1
M2-4:2 FTS	61		25 - 150	12/16/21 04:40	12/19/21 23:25	1
M2-6:2 FTS	76		25 - 150	12/16/21 04:40	12/19/21 23:25	1
M2-8:2 FTS	78		25 - 150	12/16/21 04:40	12/19/21 23:25	1
13C3 HFPO-DA	91		25 - 150	12/16/21 04:40	12/19/21 23:25	1
13C2 10:2 FTS	92		25 - 150	12/16/21 04:40	12/19/21 23:25	1

Lab Sample ID: LCS 320-551271/2-A
Matrix: Water
Analysis Batch: 552298

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 551271

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Perfluorobutanoic acid (PFBA)	40.0	34.3		ng/L		86	60 - 135
Perfluoropentanoic acid (PFPeA)	40.0	38.4		ng/L		96	60 - 135
Perfluorohexanoic acid (PFHxA)	40.0	38.9		ng/L		97	60 - 135
Perfluoroheptanoic acid (PFHpA)	40.0	39.4		ng/L		98	60 - 135
Perfluorooctanoic acid (PFOA)	40.0	33.3		ng/L		83	60 - 135
Perfluorononanoic acid (PFNA)	40.0	35.2		ng/L		88	60 - 135
Perfluorodecanoic acid (PFDA)	40.0	36.1		ng/L		90	60 - 135
Perfluoroundecanoic acid (PFUnA)	40.0	34.7		ng/L		87	60 - 135
Perfluorododecanoic acid (PFDoA)	40.0	38.1		ng/L		95	60 - 135
Perfluorotridecanoic acid (PFTriA)	40.0	39.7		ng/L		99	60 - 135
Perfluorotetradecanoic acid (PFTeA)	40.0	32.3		ng/L		81	60 - 135
Perfluorobutanesulfonic acid (PFBS)	35.4	29.0		ng/L		82	60 - 135
Perfluoropentanesulfonic acid (PFPeS)	37.5	29.7		ng/L		79	60 - 135
Perfluorohexanesulfonic acid (PFHxS)	36.4	33.0		ng/L		91	60 - 135
Perfluoroheptanesulfonic Acid (PFHpS)	38.1	35.3		ng/L		93	60 - 135
Perfluorooctanesulfonic acid (PFOS)	37.1	31.3		ng/L		84	60 - 135
Perfluorononanesulfonic acid (PFNS)	38.4	31.0		ng/L		81	60 - 135
Perfluorodecanesulfonic acid (PFDS)	38.6	31.0		ng/L		80	60 - 135
Perfluorododecanesulfonic acid (PFDoS)	38.7	37.1		ng/L		96	60 - 135
Perfluorooctanesulfonamide (FOSA)	40.0	39.7		ng/L		99	60 - 135
NEtFOSA	40.0	39.6		ng/L		99	60 - 135
NMeFOSA	40.0	36.7		ng/L		92	60 - 135

Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

Lab Sample ID: LCS 320-551271/2-A
Matrix: Water
Analysis Batch: 552298

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 551271

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	40.0	39.0		ng/L		98	60 - 135
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	40.0	36.2		ng/L		90	60 - 135
NMeFOSE	40.0	39.0		ng/L		98	60 - 135
NEtFOSE	40.0	33.9		ng/L		85	60 - 135
4:2 FTS	37.4	37.7		ng/L		101	60 - 135
6:2 FTS	37.9	38.8		ng/L		102	60 - 135
8:2 FTS	38.3	39.4		ng/L		103	60 - 135
DONA	37.7	32.8		ng/L		87	60 - 135
HFPO-DA (GenX)	40.0	43.9		ng/L		110	60 - 135
F-53B Major	37.3	34.6		ng/L		93	60 - 135
F-53B Minor	37.7	35.0		ng/L		93	60 - 135

Isotope Dilution	*LCS %Recovery*	*LCS Qualifier*	*Limits*
13C4 PFBA	*110*		*25 - 150*
13C5 PFPeA	*97*		*25 - 150*
13C2 PFHxA	*82*		*25 - 150*
13C4 PFHpA	*82*		*25 - 150*
13C4 PFOA	*111*		*25 - 150*
13C5 PFNA	*114*		*25 - 150*
13C2 PFDA	*97*		*25 - 150*
13C2 PFUnA	*106*		*25 - 150*
13C2 PFDoA	*107*		*25 - 150*
13C2 PFTeDA	*121*		*25 - 150*
13C3 PFBS	*93*		*25 - 150*
18O2 PFHxS	*87*		*25 - 150*
13C4 PFOS	*102*		*25 - 150*
13C8 FOSA	*90*		*10 - 150*
d3-NMeFOSAA	*86*		*25 - 150*
d5-NEtFOSAA	*91*		*25 - 150*
d-N-MeFOSA-M	*83*		*10 - 150*
d-N-EtFOSA-M	*83*		*10 - 150*
d7-N-MeFOSE-M	*89*		*10 - 150*
d9-N-EtFOSE-M	*92*		*10 - 150*
M2-4:2 FTS	*62*		*25 - 150*
M2-6:2 FTS	*85*		*25 - 150*
M2-8:2 FTS	*78*		*25 - 150*
13C3 HFPO-DA	*97*		*25 - 150*
13C2 10:2 FTS	*92*		*25 - 150*

Lab Sample ID: LCSD 320-551271/3-A
Matrix: Water
Analysis Batch: 552298

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 551271

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Perfluorobutanoic acid (PFBA)	40.0	35.4		ng/L		89	60 - 135	3	30
Perfluoropentanoic acid (PFPeA)	40.0	39.1		ng/L		98	60 - 135	2	30
Perfluorohexanoic acid (PFHxA)	40.0	38.6		ng/L		97	60 - 135	1	30

Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

Lab Sample ID: LCSD 320-551271/3-A
Matrix: Water
Analysis Batch: 552298

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 551271

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Perfluoroheptanoic acid (PFHpA)	40.0	40.4		ng/L		101	60 - 135	3	30
Perfluorooctanoic acid (PFOA)	40.0	36.7		ng/L		92	60 - 135	10	30
Perfluorononanoic acid (PFNA)	40.0	37.9		ng/L		95	60 - 135	7	30
Perfluorodecanoic acid (PFDA)	40.0	36.3		ng/L		91	60 - 135	1	30
Perfluoroundecanoic acid (PFUnA)	40.0	33.8		ng/L		84	60 - 135	3	30
Perfluorododecanoic acid (PFDoA)	40.0	38.4		ng/L		96	60 - 135	1	30
Perfluorotridecanoic acid (PFTriA)	40.0	43.1		ng/L		108	60 - 135	8	30
Perfluorotetradecanoic acid (PFTeA)	40.0	31.7		ng/L		79	60 - 135	2	30
Perfluorobutanesulfonic acid (PFBS)	35.4	30.9		ng/L		87	60 - 135	6	30
Perfluoropentanesulfonic acid (PFPeS)	37.5	27.3		ng/L		73	60 - 135	9	30
Perfluorohexanesulfonic acid (PFHxS)	36.4	33.1		ng/L		91	60 - 135	0	30
Perfluoroheptanesulfonic Acid (PFHpS)	38.1	36.4		ng/L		96	60 - 135	3	30
Perfluorooctanesulfonic acid (PFOS)	37.1	29.9		ng/L		80	60 - 135	5	30
Perfluorononanesulfonic acid (PFNS)	38.4	29.9		ng/L		78	60 - 135	4	30
Perfluorodecanesulfonic acid (PFDS)	38.6	30.6		ng/L		79	60 - 135	1	30
Perfluorododecanesulfonic acid (PFDoS)	38.7	32.8		ng/L		85	60 - 135	13	30
Perfluorooctanesulfonamide (FOSA)	40.0	42.3		ng/L		106	60 - 135	6	30
NEtFOSA	40.0	40.3		ng/L		101	60 - 135	2	30
NMeFOSA	40.0	38.2		ng/L		95	60 - 135	4	30
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	40.0	40.5		ng/L		101	60 - 135	4	30
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	40.0	37.2		ng/L		93	60 - 135	3	30
NMeFOSE	40.0	39.8		ng/L		100	60 - 135	2	30
NEtFOSE	40.0	34.5		ng/L		86	60 - 135	2	30
4:2 FTS	37.4	37.3		ng/L		100	60 - 135	1	30
6:2 FTS	37.9	42.9		ng/L		113	60 - 135	10	30
8:2 FTS	38.3	37.7		ng/L		98	60 - 135	4	30
DONA	37.7	32.5		ng/L		86	60 - 135	1	30
HFPO-DA (GenX)	40.0	37.0		ng/L		92	60 - 135	17	30
F-53B Major	37.3	35.8		ng/L		96	60 - 135	4	30
F-53B Minor	37.7	34.8		ng/L		92	60 - 135	1	30

Isotope Dilution	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
13C4 PFBA	*97*		*25 - 150*
13C5 PFPeA	*96*		*25 - 150*
13C2 PFHxA	*76*		*25 - 150*
13C4 PFHpA	*72*		*25 - 150*
13C4 PFOA	*99*		*25 - 150*

Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

Lab Sample ID: LCSD 320-551271/3-A
Matrix: Water
Analysis Batch: 552298

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 551271

Isotope Dilution	LCSD %Recovery	LCSD Qualifier	Limits
13C5 PFNA	103		25 - 150
13C2 PFDA	95		25 - 150
13C2 PFUnA	96		25 - 150
13C2 PFDoA	95		25 - 150
13C2 PFTeDA	113		25 - 150
13C3 PFBS	90		25 - 150
18O2 PFHxS	76		25 - 150
13C4 PFOS	95		25 - 150
13C8 FOSA	80		10 - 150
d3-NMeFOSAA	75		25 - 150
d5-NEtFOSAA	81		25 - 150
d-N-MeFOSA-M	77		10 - 150
d-N-EtFOSA-M	74		10 - 150
d7-N-MeFOSE-M	81		10 - 150
d9-N-EtFOSE-M	88		10 - 150
M2-4:2 FTS	63		25 - 150
M2-6:2 FTS	71		25 - 150
M2-8:2 FTS	75		25 - 150
13C3 HFPO-DA	96		25 - 150
13C2 10:2 FTS	76		25 - 150

Lab Sample ID: MB 320-551272/1-A
Matrix: Water
Analysis Batch: 552303

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 551272

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	<2.4		5.0	2.4	ng/L		12/16/21 04:53	12/20/21 04:06	1
Perfluoropentanoic acid (PFPeA)	<0.49		2.0	0.49	ng/L		12/16/21 04:53	12/20/21 04:06	1
Perfluorohexanoic acid (PFHxA)	<0.58		2.0	0.58	ng/L		12/16/21 04:53	12/20/21 04:06	1
Perfluoroheptanoic acid (PFHpA)	<0.25		2.0	0.25	ng/L		12/16/21 04:53	12/20/21 04:06	1
Perfluorooctanoic acid (PFOA)	<0.85		2.0	0.85	ng/L		12/16/21 04:53	12/20/21 04:06	1
Perfluorononanoic acid (PFNA)	<0.27		2.0	0.27	ng/L		12/16/21 04:53	12/20/21 04:06	1
Perfluorodecanoic acid (PFDA)	<0.31		2.0	0.31	ng/L		12/16/21 04:53	12/20/21 04:06	1
Perfluoroundecanoic acid (PFUnA)	<1.1		2.0	1.1	ng/L		12/16/21 04:53	12/20/21 04:06	1
Perfluorododecanoic acid (PFDoA)	<0.55		2.0	0.55	ng/L		12/16/21 04:53	12/20/21 04:06	1
Perfluorotridecanoic acid (PFTriA)	<1.3		2.0	1.3	ng/L		12/16/21 04:53	12/20/21 04:06	1
Perfluorotetradecanoic acid (PFTeA)	<0.73		2.0	0.73	ng/L		12/16/21 04:53	12/20/21 04:06	1
Perfluorobutanesulfonic acid (PFBS)	<0.20		2.0	0.20	ng/L		12/16/21 04:53	12/20/21 04:06	1
Perfluoropentanesulfonic acid (PFPeS)	<0.30		2.0	0.30	ng/L		12/16/21 04:53	12/20/21 04:06	1
Perfluorohexanesulfonic acid (PFHxS)	<0.57		2.0	0.57	ng/L		12/16/21 04:53	12/20/21 04:06	1
Perfluoroheptanesulfonic Acid (PFHpS)	<0.19		2.0	0.19	ng/L		12/16/21 04:53	12/20/21 04:06	1
Perfluorooctanesulfonic acid (PFOS)	<0.54		2.0	0.54	ng/L		12/16/21 04:53	12/20/21 04:06	1
Perfluorononanesulfonic acid (PFNS)	<0.37		2.0	0.37	ng/L		12/16/21 04:53	12/20/21 04:06	1
Perfluorodecanesulfonic acid (PFDS)	<0.32		2.0	0.32	ng/L		12/16/21 04:53	12/20/21 04:06	1
Perfluorododecanesulfonic acid (PFDoS)	<0.97		2.0	0.97	ng/L		12/16/21 04:53	12/20/21 04:06	1
Perfluorooctanesulfonamide (FOSA)	<0.98		2.0	0.98	ng/L		12/16/21 04:53	12/20/21 04:06	1
NEtFOSA	<0.87		2.0	0.87	ng/L		12/16/21 04:53	12/20/21 04:06	1

Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

Lab Sample ID: MB 320-551272/1-A
Matrix: Water
Analysis Batch: 552303

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 551272

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
NMeFOSA	<0.43		2.0	0.43	ng/L		12/16/21 04:53	12/20/21 04:06	1
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	<1.2		5.0	1.2	ng/L		12/16/21 04:53	12/20/21 04:06	1
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	<1.3		5.0	1.3	ng/L		12/16/21 04:53	12/20/21 04:06	1
NMeFOSE	2.89	J	4.0	1.4	ng/L		12/16/21 04:53	12/20/21 04:06	1
NEtFOSE	1.62	J	2.0	0.85	ng/L		12/16/21 04:53	12/20/21 04:06	1
4:2 FTS	<0.24		2.0	0.24	ng/L		12/16/21 04:53	12/20/21 04:06	1
6:2 FTS	<2.5		5.0	2.5	ng/L		12/16/21 04:53	12/20/21 04:06	1
8:2 FTS	<0.46		2.0	0.46	ng/L		12/16/21 04:53	12/20/21 04:06	1
DONA	<0.40		2.0	0.40	ng/L		12/16/21 04:53	12/20/21 04:06	1
HFPO-DA (GenX)	<1.5		4.0	1.5	ng/L		12/16/21 04:53	12/20/21 04:06	1
F-53B Major	<0.24		2.0	0.24	ng/L		12/16/21 04:53	12/20/21 04:06	1
F-53B Minor	<0.32		2.0	0.32	ng/L		12/16/21 04:53	12/20/21 04:06	1

Isotope Dilution	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C4 PFBA	*93*		*25 - 150*	*12/16/21 04:53*	*12/20/21 04:06*	*1*
13C5 PFPeA	*90*		*25 - 150*	*12/16/21 04:53*	*12/20/21 04:06*	*1*
13C2 PFHxA	*77*		*25 - 150*	*12/16/21 04:53*	*12/20/21 04:06*	*1*
13C4 PFHpA	*71*		*25 - 150*	*12/16/21 04:53*	*12/20/21 04:06*	*1*
13C4 PFOA	*94*		*25 - 150*	*12/16/21 04:53*	*12/20/21 04:06*	*1*
13C5 PFNA	*101*		*25 - 150*	*12/16/21 04:53*	*12/20/21 04:06*	*1*
13C2 PFDA	*91*		*25 - 150*	*12/16/21 04:53*	*12/20/21 04:06*	*1*
13C2 PFUnA	*94*		*25 - 150*	*12/16/21 04:53*	*12/20/21 04:06*	*1*
13C2 PFDoA	*98*		*25 - 150*	*12/16/21 04:53*	*12/20/21 04:06*	*1*
13C2 PFTeDA	*105*		*25 - 150*	*12/16/21 04:53*	*12/20/21 04:06*	*1*
13C3 PFBS	*89*		*25 - 150*	*12/16/21 04:53*	*12/20/21 04:06*	*1*
18O2 PFHxS	*81*		*25 - 150*	*12/16/21 04:53*	*12/20/21 04:06*	*1*
13C4 PFOS	*86*		*25 - 150*	*12/16/21 04:53*	*12/20/21 04:06*	*1*
13C8 FOSA	*79*		*10 - 150*	*12/16/21 04:53*	*12/20/21 04:06*	*1*
d3-NMeFOSAA	*77*		*25 - 150*	*12/16/21 04:53*	*12/20/21 04:06*	*1*
d5-NEtFOSAA	*83*		*25 - 150*	*12/16/21 04:53*	*12/20/21 04:06*	*1*
d-N-MeFOSA-M	*74*		*10 - 150*	*12/16/21 04:53*	*12/20/21 04:06*	*1*
d-N-EtFOSA-M	*74*		*10 - 150*	*12/16/21 04:53*	*12/20/21 04:06*	*1*
d7-N-MeFOSE-M	*75*		*10 - 150*	*12/16/21 04:53*	*12/20/21 04:06*	*1*
d9-N-EtFOSE-M	*73*		*10 - 150*	*12/16/21 04:53*	*12/20/21 04:06*	*1*
M2-4:2 FTS	*60*		*25 - 150*	*12/16/21 04:53*	*12/20/21 04:06*	*1*
M2-6:2 FTS	*81*		*25 - 150*	*12/16/21 04:53*	*12/20/21 04:06*	*1*
M2-8:2 FTS	*75*		*25 - 150*	*12/16/21 04:53*	*12/20/21 04:06*	*1*
13C3 HFPO-DA	*97*		*25 - 150*	*12/16/21 04:53*	*12/20/21 04:06*	*1*
13C2 10:2 FTS	*76*		*25 - 150*	*12/16/21 04:53*	*12/20/21 04:06*	*1*

Lab Sample ID: LCS 320-551272/2-A
Matrix: Water
Analysis Batch: 552303

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 551272

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Perfluorobutanoic acid (PFBA)	40.0	33.7		ng/L		84	60 - 135
Perfluoropentanoic acid (PFPeA)	40.0	39.4		ng/L		99	60 - 135

Client: Ramboll US Corporation
Job ID: 500-209565-1
Project/Site: Former Mirro Plant No 9 - 1690019647

Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

Lab Sample ID: LCS 320-551272/2-A
Matrix: Water
Analysis Batch: 552303

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 551272

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Perfluorohexanoic acid (PFHxA)	40.0	40.3		ng/L		101	60 - 135
Perfluoroheptanoic acid (PFHpA)	40.0	38.2		ng/L		96	60 - 135
Perfluorooctanoic acid (PFOA)	40.0	39.3		ng/L		98	60 - 135
Perfluorononanoic acid (PFNA)	40.0	35.5		ng/L		89	60 - 135
Perfluorodecanoic acid (PFDA)	40.0	36.3		ng/L		91	60 - 135
Perfluoroundecanoic acid (PFUnA)	40.0	36.6		ng/L		92	60 - 135
Perfluorododecanoic acid (PFDoA)	40.0	35.6		ng/L		89	60 - 135
Perfluorotridecanoic acid (PFTriA)	40.0	38.5		ng/L		96	60 - 135
Perfluorotetradecanoic acid (PFTeA)	40.0	31.7		ng/L		79	60 - 135
Perfluorobutanesulfonic acid (PFBS)	35.4	29.3		ng/L		83	60 - 135
Perfluoropentanesulfonic acid (PFPeS)	37.5	27.7		ng/L		74	60 - 135
Perfluorohexanesulfonic acid (PFHxS)	36.4	34.0		ng/L		93	60 - 135
Perfluoroheptanesulfonic Acid (PFHpS)	38.1	34.7		ng/L		91	60 - 135
Perfluorooctanesulfonic acid (PFOS)	37.1	31.0		ng/L		84	60 - 135
Perfluorononanesulfonic acid (PFNS)	38.4	32.9		ng/L		86	60 - 135
Perfluorodecanesulfonic acid (PFDS)	38.6	32.5		ng/L		84	60 - 135
Perfluorododecanesulfonic acid (PFDoS)	38.7	36.1		ng/L		93	60 - 135
Perfluorooctanesulfonamide (FOSA)	40.0	39.9		ng/L		100	60 - 135
NEtFOSA	40.0	41.0		ng/L		102	60 - 135
NMeFOSA	40.0	37.7		ng/L		94	60 - 135
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	40.0	39.3		ng/L		98	60 - 135
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	40.0	34.4		ng/L		86	60 - 135
NMeFOSE	40.0	41.7		ng/L		104	60 - 135
NEtFOSE	40.0	38.6		ng/L		97	60 - 135
4:2 FTS	37.4	37.1		ng/L		99	60 - 135
6:2 FTS	37.9	38.0		ng/L		100	60 - 135
8:2 FTS	38.3	41.7		ng/L		109	60 - 135
DONA	37.7	33.3		ng/L		88	60 - 135
HFPO-DA (GenX)	40.0	35.9		ng/L		90	60 - 135
F-53B Major	37.3	34.2		ng/L		92	60 - 135
F-53B Minor	37.7	35.0		ng/L		93	60 - 135

Isotope Dilution	*LCS %Recovery*	*LCS Qualifier*	*Limits*
13C4 PFBA	*95*		*25 - 150*
13C5 PFPeA	*84*		*25 - 150*
13C2 PFHxA	*73*		*25 - 150*
13C4 PFHpA	*74*		*25 - 150*

Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

Lab Sample ID: LCS 320-551272/2-A
Matrix: Water
Analysis Batch: 552303

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 551272

Isotope Dilution	*LCS %Recovery*	*LCS Qualifier*	*Limits*
13C4 PFOA	*93*		*25 - 150*
13C5 PFNA	*93*		*25 - 150*
13C2 PFDA	*89*		*25 - 150*
13C2 PFUnA	*88*		*25 - 150*
13C2 PFDoA	*99*		*25 - 150*
13C2 PFTeDA	*111*		*25 - 150*
13C3 PFBS	*86*		*25 - 150*
18O2 PFHxS	*77*		*25 - 150*
13C4 PFOS	*89*		*25 - 150*
13C8 FOSA	*82*		*10 - 150*
d3-NMeFOSAA	*74*		*25 - 150*
d5-NEtFOSAA	*87*		*25 - 150*
d-N-MeFOSA-M	*75*		*10 - 150*
d-N-EtFOSA-M	*70*		*10 - 150*
d7-N-MeFOSE-M	*75*		*10 - 150*
d9-N-EtFOSE-M	*77*		*10 - 150*
M2-4:2 FTS	*62*		*25 - 150*
M2-6:2 FTS	*74*		*25 - 150*
M2-8:2 FTS	*70*		*25 - 150*
13C3 HFPO-DA	*89*		*25 - 150*
13C2 10:2 FTS	*82*		*25 - 150*

Lab Sample ID: LCSD 320-551272/3-A
Matrix: Water
Analysis Batch: 552303

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 551272

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Perfluorobutanoic acid (PFBA)			40.0	34.6		ng/L		86	60 - 135	3	30
Perfluoropentanoic acid (PFPeA)			40.0	40.2		ng/L		100	60 - 135	2	30
Perfluorohexanoic acid (PFHxA)			40.0	39.3		ng/L		98	60 - 135	2	30
Perfluoroheptanoic acid (PFHpA)			40.0	39.9		ng/L		100	60 - 135	4	30
Perfluorooctanoic acid (PFOA)			40.0	36.8		ng/L		92	60 - 135	7	30
Perfluorononanoic acid (PFNA)			40.0	35.5		ng/L		89	60 - 135	0	30
Perfluorodecanoic acid (PFDA)			40.0	38.2		ng/L		96	60 - 135	5	30
Perfluoroundecanoic acid (PFUnA)			40.0	36.1		ng/L		90	60 - 135	2	30
Perfluorododecanoic acid (PFDoA)			40.0	38.3		ng/L		96	60 - 135	7	30
Perfluorotridecanoic acid (PFTriA)			40.0	40.6		ng/L		102	60 - 135	5	30
Perfluorotetradecanoic acid (PFTeA)			40.0	29.8		ng/L		75	60 - 135	6	30
Perfluorobutanesulfonic acid (PFBS)			35.4	27.2		ng/L		77	60 - 135	8	30
Perfluoropentanesulfonic acid (PFPeS)			37.5	29.1		ng/L		77	60 - 135	5	30
Perfluorohexanesulfonic acid (PFHxS)			36.4	32.3		ng/L		89	60 - 135	5	30
Perfluoroheptanesulfonic Acid (PFHpS)			38.1	37.4		ng/L		98	60 - 135	8	30

Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

Lab Sample ID: LCSD 320-551272/3-A
Matrix: Water
Analysis Batch: 552303

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 551272

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Perfluorooctanesulfonic acid (PFOS)			37.1	32.6		ng/L		88	60 - 135	5	30
Perfluorononanesulfonic acid (PFNS)			38.4	33.9		ng/L		88	60 - 135	3	30
Perfluorodecanesulfonic acid (PFDS)			38.6	32.1		ng/L		83	60 - 135	1	30
Perfluorododecanesulfonic acid (PFDoS)			38.7	37.0		ng/L		96	60 - 135	3	30
Perfluorooctanesulfonamide (FOSA)			40.0	39.3		ng/L		98	60 - 135	1	30
NEtFOSA			40.0	38.7		ng/L		97	60 - 135	6	30
NMeFOSA			40.0	36.4		ng/L		91	60 - 135	4	30
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)			40.0	38.5		ng/L		96	60 - 135	2	30
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)			40.0	35.4		ng/L		88	60 - 135	3	30
NMeFOSE			40.0	40.3		ng/L		101	60 - 135	3	30
NEtFOSE			40.0	38.0		ng/L		95	60 - 135	2	30
4:2 FTS			37.4	41.3		ng/L		110	60 - 135	11	30
6:2 FTS			37.9	43.3		ng/L		114	60 - 135	13	30
8:2 FTS			38.3	35.8		ng/L		93	60 - 135	15	30
DONA			37.7	34.6		ng/L		92	60 - 135	4	30
HFPO-DA (GenX)			40.0	41.1		ng/L		103	60 - 135	13	30
F-53B Major			37.3	37.0		ng/L		99	60 - 135	8	30
F-53B Minor			37.7	36.2		ng/L		96	60 - 135	3	30

Isotope Dilution	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
13C4 PFBA	*104*		*25 - 150*
13C5 PFPeA	*94*		*25 - 150*
13C2 PFHxA	*79*		*25 - 150*
13C4 PFHpA	*79*		*25 - 150*
13C4 PFOA	*103*		*25 - 150*
13C5 PFNA	*115*		*25 - 150*
13C2 PFDA	*97*		*25 - 150*
13C2 PFUnA	*93*		*25 - 150*
13C2 PFDoA	*100*		*25 - 150*
13C2 PFTeDA	*116*		*25 - 150*
13C3 PFBS	*98*		*25 - 150*
18O2 PFHxS	*91*		*25 - 150*
13C4 PFOS	*94*		*25 - 150*
13C8 FOSA	*92*		*10 - 150*
d3-NMeFOSAA	*80*		*25 - 150*
d5-NEtFOSAA	*87*		*25 - 150*
d-N-MeFOSA-M	*86*		*10 - 150*
d-N-EtFOSA-M	*81*		*10 - 150*
d7-N-MeFOSE-M	*78*		*10 - 150*
d9-N-EtFOSE-M	*85*		*10 - 150*
M2-4:2 FTS	*64*		*25 - 150*
M2-6:2 FTS	*78*		*25 - 150*
M2-8:2 FTS	*84*		*25 - 150*

Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

Lab Sample ID: LCSD 320-551272/3-A
Matrix: Water
Analysis Batch: 552303

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 551272

Isotope Dilution	LCSD %Recovery	LCSD Qualifier	Limits
13C3 HFPO-DA	91		25 - 150
13C2 10:2 FTS	79		25 - 150

Method: 6020A - Metals (ICP/MS)

Lab Sample ID: MB 500-634757/1-A
Matrix: Water
Analysis Batch: 634985

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 634757

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	<25		100	25	ug/L		12/21/21 09:30	12/21/21 21:28	1
Antimony	<1.3		3.0	1.3	ug/L		12/21/21 09:30	12/21/21 21:28	1
Barium	<0.73		2.5	0.73	ug/L		12/21/21 09:30	12/21/21 21:28	1
Cadmium	<0.17		0.50	0.17	ug/L		12/21/21 09:30	12/21/21 21:28	1
Chromium	<1.1		5.0	1.1	ug/L		12/21/21 09:30	12/21/21 21:28	1
Copper	<0.50		2.0	0.50	ug/L		12/21/21 09:30	12/21/21 21:28	1
Iron	<47		100	47	ug/L		12/21/21 09:30	12/21/21 21:28	1
Lead	<0.19		0.50	0.19	ug/L		12/21/21 09:30	12/21/21 21:28	1
Manganese	<0.79		2.5	0.79	ug/L		12/21/21 09:30	12/21/21 21:28	1
Nickel	<0.63		2.0	0.63	ug/L		12/21/21 09:30	12/21/21 21:28	1
Selenium	<0.98		2.5	0.98	ug/L		12/21/21 09:30	12/21/21 21:28	1
Silver	<0.12		0.50	0.12	ug/L		12/21/21 09:30	12/21/21 21:28	1
Thallium	<0.57		2.0	0.57	ug/L		12/21/21 09:30	12/21/21 21:28	1

Lab Sample ID: MB 500-634757/1-A
Matrix: Water
Analysis Batch: 635122

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 634757

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.23		1.0	0.23	ug/L		12/21/21 09:30	12/22/21 13:26	1

Lab Sample ID: LCS 500-634757/2-A
Matrix: Water
Analysis Batch: 634985

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 634757

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Aluminum	2000	2320		ug/L		116	80 - 120
Antimony	500	516		ug/L		103	80 - 120
Barium	500	524		ug/L		105	80 - 120
Cadmium	50.0	50.5		ug/L		101	80 - 120
Chromium	200	210		ug/L		105	80 - 120
Copper	250	262		ug/L		105	80 - 120
Iron	1000	1040		ug/L		104	80 - 120
Lead	100	105		ug/L		105	80 - 120
Manganese	500	515		ug/L		103	80 - 120
Nickel	500	518		ug/L		104	80 - 120
Selenium	100	105		ug/L		105	80 - 120
Silver	50.0	50.3		ug/L		101	80 - 120
Thallium	100	107		ug/L		107	80 - 120

Method: 6020A - Metals (ICP/MS) (Continued)

Lab Sample ID: LCS 500-634757/2-A
Matrix: Water
Analysis Batch: 635122

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 634757

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	100	94.8		ug/L		95	80 - 120

Method: 7470A - Mercury (CVAA)

Lab Sample ID: MB 500-634059/12-A
Matrix: Water
Analysis Batch: 634283

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 634059

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.098		0.20	0.098	ug/L		12/16/21 10:45	12/17/21 08:38	1

Lab Sample ID: LCS 500-634059/13-A
Matrix: Water
Analysis Batch: 634283

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 634059

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	2.00	2.01		ug/L		101	80 - 120

Lab Sample ID: MB 500-634060/12-A
Matrix: Water
Analysis Batch: 634283

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 634060

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.098		0.20	0.098	ug/L		12/16/21 10:45	12/17/21 08:42	1

Lab Sample ID: LCS 500-634060/13-A
Matrix: Water
Analysis Batch: 634283

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 634060

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	2.00	1.96		ug/L		98	80 - 120

Lab Chronicle

Client: Ramboll US Corporation
Project/Site: Former Mirro Plant No 9 - 1690019647

Job ID: 500-209565-1

Client Sample ID: FB-01
Date Collected: 12/09/21 12:30
Date Received: 12/10/21 10:30

Lab Sample ID: 500-209564-1
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3535			551272	12/16/21 04:53	EG	TAL SAC
Total/NA	Analysis	537 (modified)		1	552303	12/20/21 06:32	K1S	TAL SAC

Client Sample ID: EB-01
Date Collected: 12/09/21 12:45
Date Received: 12/10/21 10:30

Lab Sample ID: 500-209564-2
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	634922	12/22/21 16:33	STW	TAL CHI
Total/NA	Prep	3510C			633730	12/15/21 07:23	ALW	TAL CHI
Total/NA	Analysis	8270D		1	634033	12/16/21 16:54	EMA	TAL CHI
Total/NA	Prep	3510C			633372	12/13/21 09:44	DAK	TAL CHI
Total/NA	Analysis	8082A		1	633459	12/14/21 10:53	JBJ	TAL CHI
Total/NA	Prep	3535			551272	12/16/21 04:53	EG	TAL SAC
Total/NA	Analysis	537 (modified)		1	552303	12/20/21 06:43	K1S	TAL SAC
Dissolved	Prep	3005A			634757	12/21/21 09:30	DAJ	TAL CHI
Dissolved	Analysis	6020A		1	634985	12/21/21 22:54	FXG	TAL CHI
Dissolved	Prep	7470A			634059	12/16/21 10:45	MJG	TAL CHI
Dissolved	Analysis	7470A		1	634283	12/17/21 08:55	MJG	TAL CHI

Client Sample ID: Trip Blank
Date Collected: 12/09/21 00:00
Date Received: 12/10/21 10:30

Lab Sample ID: 500-209564-3
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	634922	12/22/21 14:16	STW	TAL CHI

Client Sample ID: MW-217
Date Collected: 12/09/21 09:55
Date Received: 12/10/21 10:30

Lab Sample ID: 500-209565-1
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	634922	12/22/21 15:38	STW	TAL CHI
Total/NA	Prep	3510C			633643	12/14/21 11:43	ALW	TAL CHI
Total/NA	Analysis	8270D		1	634188	12/17/21 18:07	NB	TAL CHI
Total/NA	Prep	3510C			633372	12/13/21 09:44	DAK	TAL CHI
Total/NA	Analysis	8082A		1	633459	12/14/21 11:09	JBJ	TAL CHI
Total/NA	Prep	3535			551271	12/16/21 04:40	EG	TAL SAC
Total/NA	Analysis	537 (modified)		1	552298	12/20/21 02:53	K1S	TAL SAC
Dissolved	Prep	3005A			634757	12/21/21 09:30	DAJ	TAL CHI
Dissolved	Analysis	6020A		1	634985	12/21/21 22:57	FXG	TAL CHI
Dissolved	Prep	3005A			634757	12/21/21 09:30	DAJ	TAL CHI
Dissolved	Analysis	6020A		1	635122	12/22/21 14:21	FXG	TAL CHI
Dissolved	Prep	7470A			634060	12/16/21 10:45	MJG	TAL CHI
Dissolved	Analysis	7470A		1	634283	12/17/21 10:54	MJG	TAL CHI

Lab Chronicle

Client: Ramboll US Corporation
Job ID: 500-209565-1
Project/Site: Former Mirro Plant No 9 - 1690019647

Client Sample ID: MW-218
Date Collected: 12/09/21 11:00
Date Received: 12/10/21 10:30

Lab Sample ID: 500-209565-2
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	634922	12/22/21 16:05	STW	TAL CHI
Total/NA	Prep	3510C			633643	12/14/21 11:43	ALW	TAL CHI
Total/NA	Analysis	8270D		1	634188	12/17/21 18:31	NB	TAL CHI
Total/NA	Prep	3510C			633372	12/13/21 09:44	DAK	TAL CHI
Total/NA	Analysis	8082A		1	633459	12/14/21 11:25	JBJ	TAL CHI
Total/NA	Prep	3535			551271	12/16/21 04:40	EG	TAL SAC
Total/NA	Analysis	537 (modified)		1	552298	12/20/21 03:04	K1S	TAL SAC
Dissolved	Prep	3005A			634757	12/21/21 09:30	DAJ	TAL CHI
Dissolved	Analysis	6020A		1	634985	12/21/21 23:01	FXG	TAL CHI
Dissolved	Prep	3005A			634757	12/21/21 09:30	DAJ	TAL CHI
Dissolved	Analysis	6020A		1	635122	12/22/21 14:24	FXG	TAL CHI
Dissolved	Prep	7470A			634060	12/16/21 10:45	MJG	TAL CHI
Dissolved	Analysis	7470A		1	634283	12/17/21 10:56	MJG	TAL CHI

Laboratory References:

TAL CHI = Eurofins TestAmerica, Chicago, 2417 Bond Street, University Park, IL 60484, TEL (708)534-5200

TAL SAC = Eurofins TestAmerica, Sacramento, 880 Riverside Parkway, West Sacramento, CA 95605, TEL (916)373-5600

Accreditation/Certification Summary

Client: Ramboll US Corporation
Job ID: 500-209565-1
Project/Site: Former Mirro Plant No 9 - 1690019647

Laboratory: Eurofins TestAmerica, Chicago

The accreditations/certifications listed below are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Wisconsin	State	999580010	08-31-22

Laboratory: Eurofins TestAmerica, Sacramento

The accreditations/certifications listed below are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Wisconsin	State	998204680	08-31-22

Eurofins TestAmerica, Chicago
2417 Bond Street
University Park IL 60484
Phone 708-534-5200 Fax 708-534-5211

Chain of Custody Record

eurofins

Client Information	Sampler: DUNCAN GLASFORD	Lab PM: Fredrick Sandie	Carrier Tracking No(s):	COC No: 500-96812-42719.1
Client Contact: Paul Lindquist	Phone: 262 573 6315	E Mail: sandra.fredrick@eurofinset.com	State of Origin: WI	Page: Page 1 of 1
Company: Rambol US Corporation	FWSID:	Analysis Requested		Job #: 500-209564

Address: 234 W Florida Street Fifth Floor	Due Date Requested:		Preservation Codes: A HCl; B NaOH; C Zn Acetate; D Nitric Acid; E NaHSO4; F MeOH; G Amchlor; H Ascorbic Acid; I Ice; J DI Water; K EDTA; L EDA; M Hexane; N None; O AsNaO2; P Na2O4S; Q Na2SO3; R Na2S2O3; S H2SO4; T TSP Dodecahydrate; U Acetone; V MCAA; W pH 4-5; Z other (specify); Other
City: Milwaukee	TAT Requested (days):		
State, Zip: WI 53204	Compliance Project: Δ Yes Δ No		
Phone: 262 901 3510(Tel)	PO #: Purchase Order not required		
Email: plindquist@rambol.com	WO #:		
Project Name: Former Mirro Plant No 9 1690019647	Project #: 50018382		
Site:	SSOW#:		

500-209564 COC

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	PFC_IDA_WI PFAS, Standard List (33 analytes)	6020A; 7470A	8082A; 8270D	VOC 8260B	Total Number of containers	Special Instructions/Note
			Preservation Code:				N	D	N	A		
1 FB-01	12-9-21	1230	G	Water			X					
2 EB-01	12-9-21	1245	G	Water	X		X	X	X	X		
3 TRIP BLANK	—	—	—	Water						X		
				Water								
				Water								
				Water								
				Water								
				Water								
				Water								
				Water								
				Water								
				Water								

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I II III IV Other (specify)

Special Instructions/QC Requirements

Empty Kit Relinquished by:	Date	Time	Method of Shipment:

	Date/Time	Company		Date/Time	Company
Relinquished by:	12-9-21 1530	RAMBOLL	Received by:	12.9.21 1530	TA
Relinquished by:	12.9.21 1700	TA	Received by:	12/10/21 1030	EAL
Relinquished by:			Received by:		

Custody Seals Intact: Δ Yes Δ No | Custody Seal No.:

Cooler Temperature(s) and Other Remarks: -0.4

Eurofins TestAmerica, Chicago (Univ Park)
2417 Bond Street
University Park IL 60484
Phone (708) 534-5200 Phone (708) 534-5211

Chain of Custody Record

eurofins Environment Testing America

Client Information	Sampler: DUNCAN GLASFORD	Lab PM: Fredrick Sandie	Carrier Tracking No(s)	COC No: 500-91813-40925 5
Client Contact: Paul Lindquist	Phone: 262 573 6315	E Mail: sandra fredrick@eurofinset.com	State of Origin: WI	Page: Page 1 of 1
Company: Ramboll US Corporation	PWSID:			Job #: 500-209565
Address: 234 W Florida Street Fifth Floor	Due Date Requested			
City: Milwaukee	TAT Requested (days)			
State Zip: WI 53204	Compliance Project Δ Yes Δ No			
Phone: 262-901-3507(Tel)	PO #: 1690019647			
Email: plindquist@ramboll.com	WO #:			
Project Name: Former Mirro Plant No 9 - 1690019647	Project #: 50018382			
Site:	SSOW#:			

500-209565 COC

Analysis Requested

Preservation Codes

A	HCL	M	Hexane
B	NaOH	N	None
C	Zn Acetate	O	AsNaO2
D	Nitric Acid	P	Na2O4S
E	NaHSO4	Q	Na2SO3
F	MeOH	R	Na2S2O3
G	Amchlor	S	H2SO4
H	Ascorbic Acid	T	TSP Dodecahydrate
I	Ice	U	Acetone
J	DI Water	V	MCAA
K	EDTA	W	pH 4-5
L	EDA	Z	other (specify)

Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	PFC_IDA_WI - PFAS, Standard List (33 analytes)	8260B - VOC	6020A, 7470A	8082A, 8270D	Total Number of containers	Special Instructions/Note
			Preservation Code:				N	A	D	N		
MW-217	12-9-21	955	G	Water	X		X	X	X	X		
MW-218	12-9-21	1100	G	Water	X		X	X	X	X		
				Water								
				Water								
				Water								
				Water								
				Water								
				Water								
				Water								
				Water								
				Water								
				Water								

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested I II III IV Other (specify)

Special Instructions/QC Requirements

Empty Kit Relinquished by	Date	Time	Method of Shipment:

	Relinquished by	Date/Time	Company	Received by	Date/Time	Company
		12-9-21 1530	RAMBOLL		12.9.21 1530	TA
		12.9.21 1700	TA		12/10/21 1030	EDA
		Date/Time	Company		Date/Time	Company

Custody Seals Intact. Δ Yes Δ No	Custody Seal No	Cooler Temperature(s) °C and Other Remarks.
		0.4


500-209565 Wayb
ORIGIN ID:RRLA (262) 202-5955
IAN EVANS
EUROFINS TESTAMERICA
4125 N 124TH ST.
SUITE F (REAR)
BROOKFIELD, WI 53005
UNITED STATES US
SHIP DATE: 09DEC21
ACTWGT: 62.30 LB
CAD: 0269688/CAFE3508
BILL RECIPIENT
TO SAMPLE RECEIPT
EUROFINS
2417 BOND ST.
UNIVERSITY PARK IL 60484
(262) 202-5955
INV:
PO:
REF:
DEPT:
FedEx
Express
2 of 4
MPS# 0263 5418 0593 6448
Mstr# 5418 0593 6437
0201
FRI - 10 DEC 11:30A
PRIORITY OVERNIGHT
79 JOTA
60484
IL-US ORD

Eurofins TestAmerica, Chicago
2417 Bond Street
University Park, IL 60484
Phone: 708-534-5200 Fax: 708-534-5211

Chain of Custody Record

eurofins | Environment Testing America

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Fredrick, Sandie	Carrier Tracking No(s):	COC No: 500-155300.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: sandra.fredrick@eurofinset.com	State of Origin: Wisconsin	Page: Page 1 of 1
Company: TestAmerica Laboratories, Inc.		Accreditations Required (See note): State - Wisconsin		Job #: 500-209565-1
Address: 880 Riverside Parkway, ,	Due Date Requested: 12/26/2021			
City: West Sacramento	TAT Requested (days):			
State, Zip: CA, 95605				
Phone: 916-373-5600(Tel) 916-372-1059(Fax)	PO #:			
Email:	WO #:			
Project Name: Former Mirro Plant No 9 - 1690019647	Project #: 50018382			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:

A - HCL	M - Hexane
B - NaOH	N - None
C - Zn Acetate	O - AsNaO2
D - Nitric Acid	P - Na2O4S
E - NaHSO4	Q - Na2SO3
F - MeOH	R - Na2S2O3
G - Amchlor	S - H2SO4
H - Ascorbic Acid	T - TSP Dodecahydrate
I - Ice	U - Acetone
J - DI Water	V - MCAA
K - EDTA	W - pH 4-5
L - EDA	Z - other (specify)

Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	PFC_IDA_WI/3535_PFC_28D PFAS, Standard List (33 analytes)	Total Number of containers	Special Instructions/Note:
			Preservation Code:						
MW-217 (500-209565-1)	12/9/21	09:55 Central		Water			X	2	
MW-218 (500-209565-2)	12/9/21	11:00 Central		Water			X	2	

Note: Since laboratory accreditations are subject to change, Eurofins TestAmerica places the ownership of method, analyte & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins TestAmerica laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins TestAmerica attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said complicance to Eurofins TestAmerica.

Possible Hazard Identification	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
Unconfirmed	☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Pamela Buckley	12/10/21 1600	EMA Corp		12-11-21 1005	EMSL
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact:	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks:
Δ Yes Δ No	1672533	2.1

Ver: 06/08/2021

Login Sample Receipt Checklist

Client: Ramboll US Corporation

Job Number: 500-209565-1

Login Number: 209565
List Number: 1
Creator: Scott, Sherri L

List Source: Eurofins TestAmerica, Chicago

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	-0.4 samples not frozen
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: Ramboll US Corporation

Job Number: 500-209565-1

Login Number: 209565
List Number: 2
Creator: Simmons, Jason C

List Source: Eurofins TestAmerica, Sacramento
List Creation: 12/11/21 02:05 PM

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	1672533
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	2.4c
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	False	Received project as a subcontract.
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

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Sacramento Sample Receiving Notes

500-209565 Field Sheet

Job: _____

Tracking # : 1893 4454 3918

SO / PO / FO (SAT) / 2-Day / Ground / UPS / CDO / Courier

GSO / OnTrac / Goldstreak / USPS / Other _____

Use this form to record Sample Custody Seal, Cooler Custody Seal, Temperature & corrected Temperature & other observations. File in the job folder with the COC.

Therm. ID: 006 Corr. Factor: (+ / -) N/A °C

Ice ~ Wet ~ Gel _____ Other _____

Cooler Custody Seal: 1672533

Cooler ID: ~

Temp Observed: 2.4 °C Corrected: 2.4 °C

From: Temp Blank ☐ Sample ☒

Opening/Processing The Shipment	Yes	No	NA
Cooler compromised/tampered with?	☐	☒	☐
Cooler Temperature is acceptable?	☒	☐	☐
Frozen samples show signs of thaw?	☐	☐	☒

Initials: SO Date: 12-11-21

Unpacking/Labeling The Samples	Yes	No	NA
CoC is complete w/o discrepancies?	☒	☐	☐
Samples compromised/tampered with?	☐	☒	☐
Sample containers have legible labels?	☒	☐	☐
Sample custody seal?	☐	☐	☒
Containers are not broken or leaking?	☒	☐	☐
Sample date/times are provided?	☒	☐	☐
Appropriate containers are used?	☒	☐	☐
Sample bottles are completely filled?	☒	☐	☐
Sample preservatives verified?	☐	☐	☒
Samples w/o discrepancies?	☒	☐	☐
Zero headspace?*	☐	☐	☒
Alkalinity has no headspace?	☐	☐	☒
Perchlorate has headspace? (Methods 314, 331, 6850)	☐	☐	☒
Multiphasic samples are not present?	☒	☐	☐

*Containers requiring zero headspace have no headspace, or bubble < 6 mm (1/4")

Initials: SO Date: 12/11/21

Notes: _____

Trizma Lot #(s): _____

Login Completion	Yes	No	NA
Receipt Temperature on COC?	☒	☐	☐
Samples received within hold time?	☒	☐	☐
NCM Filed?	☐	☐	☒
Log Release checked in TALS?	☐	☐	☒

Initials: SO Date: 12/11/21

Isotope Dilution Summary

Client: Ramboll US Corporation
Job ID: 500-209565-1
Project/Site: Former Mirro Plant No 9 - 1690019647

Method: 537 (modified) - Fluorinated Alkyl Substances

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

Percent Isotope Dilution Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	PFBA (25-150)	PFPeA (25-150)	PFHxA (25-150)	C4PFHA (25-150)	PFOA (25-150)	PFNA (25-150)	PFDA (25-150)	PFUnA (25-150)
500-209564-1	FB-01	77	76	64	62	87	94	80	80
500-209564-2	EB-01	90	86	71	75	99	103	93	92
500-209565-1	MW-217	65	83	66	70	99	111	92	86
500-209565-2	MW-218	77	82	62	71	85	92	86	84
LCS 320-551271/2-A	Lab Control Sample	110	97	82	82	111	114	97	106
LCS 320-551272/2-A	Lab Control Sample	95	84	73	74	93	93	89	88
LCSD 320-551271/3-A	Lab Control Sample Dup	97	96	76	72	99	103	95	96
LCSD 320-551272/3-A	Lab Control Sample Dup	104	94	79	79	103	115	97	93
MB 320-551271/1-A	Method Blank	104	93	76	77	94	101	88	97
MB 320-551272/1-A	Method Blank	93	90	77	71	94	101	91	94

Percent Isotope Dilution Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	PFDoA (25-150)	PFTDA (25-150)	C3PFBS (25-150)	PFHxS (25-150)	PFOS (25-150)	PFOSA (10-150)	d3NMFOS (25-150)	d5NEFOS (25-150)
500-209564-1	FB-01	86	93	75	67	81	71	69	79
500-209564-2	EB-01	108	114	86	77	93	82	81	85
500-209565-1	MW-217	85	103	86	80	91	83	68	76
500-209565-2	MW-218	89	100	78	68	86	70	67	70
LCS 320-551271/2-A	Lab Control Sample	107	121	93	87	102	90	86	91
LCS 320-551272/2-A	Lab Control Sample	99	111	86	77	89	82	74	87
LCSD 320-551271/3-A	Lab Control Sample Dup	95	113	90	76	95	80	75	81
LCSD 320-551272/3-A	Lab Control Sample Dup	100	116	98	91	94	92	80	87
MB 320-551271/1-A	Method Blank	105	120	85	82	90	84	78	82
MB 320-551272/1-A	Method Blank	98	105	89	81	86	79	77	83

Percent Isotope Dilution Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	dMeFOSA (10-150)	dEtFOSA (10-150)	NMFM (10-150)	NEFM (10-150)	M242FTS (25-150)	M262FTS (25-150)	M282FTS (25-150)	HFPODA (25-150)
500-209564-1	FB-01	65	64	71	75	54	67	63	64
500-209564-2	EB-01	79	78	85	86	67	76	76	79
500-209565-1	MW-217	68	65	70	70	70	79	69	86
500-209565-2	MW-218	63	63	70	75	54	73	69	78
LCS 320-551271/2-A	Lab Control Sample	83	83	89	92	62	85	78	97
LCS 320-551272/2-A	Lab Control Sample	75	70	75	77	62	74	70	89
LCSD 320-551271/3-A	Lab Control Sample Dup	77	74	81	88	63	71	75	96
LCSD 320-551272/3-A	Lab Control Sample Dup	86	81	78	85	64	78	84	91
MB 320-551271/1-A	Method Blank	75	74	82	85	61	76	78	91
MB 320-551272/1-A	Method Blank	74	74	75	73	60	81	75	97

Percent Isotope Dilution Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	M102FTS (25-150)
500-209564-1	FB-01	74
500-209564-2	EB-01	103
500-209565-1	MW-217	73
500-209565-2	MW-218	78
LCS 320-551271/2-A	Lab Control Sample	92
LCS 320-551272/2-A	Lab Control Sample	82
LCSD 320-551271/3-A	Lab Control Sample Dup	76
LCSD 320-551272/3-A	Lab Control Sample Dup	79
MB 320-551271/1-A	Method Blank	92
MB 320-551272/1-A	Method Blank	76

Isotope Dilution Summary

Client: Ramboll US Corporation
Job ID: 500-209565-1
Project/Site: Former Mirro Plant No 9 - 1690019647

Surrogate Legend

PFBA = 13C4 PFBA
PFPeA = 13C5 PFPeA
PFHxA = 13C2 PFHxA
C4PFHA = 13C4 PFHpA
PFOA = 13C4 PFOA
PFNA = 13C5 PFNA
PFDA = 13C2 PFDA
PFUnA = 13C2 PFUnA
PFDoA = 13C2 PFDoA
PFTDA = 13C2 PFTeDA
C3PFBS = 13C3 PFBS
PFHxS = 18O2 PFHxS
PFOS = 13C4 PFOS
PFOSA = 13C8 FOSA
d3NMFOS = d3-NMeFOSAA
d5NEFOS = d5-NEtFOSAA
dMeFOSA = d-N-MeFOSA-M
dEtFOSA = d-N-EtFOSA-M
NMFM = d7-N-MeFOSE-M
NEFM = d9-N-EtFOSE-M
M242FTS = M2-4:2 FTS
M262FTS = M2-6:2 FTS
M282FTS = M2-8:2 FTS
HFPODA = 13C3 HFPO-DA
M102FTS = 13C2 10:2 FTS