



Gabriel Fernandez
Rainbow Landscape, Inc. dba Better Than Real Artificial Grass
771 Andersen Dr
San Rafael, California 94901
Tel: 415-456-2169
Email: info@betterthanrealgrass.com
RE: PFAS-Artificial Turf

Work Order No.: 2407139

Dear Jorge Jimenez Zamora:

Torrent Laboratory, Inc. received 1 sample(s) on July 19, 2024 for the analyses presented in the following Report.

All data for associated QC met EPA or laboratory specification(s) except where noted in the case narrative.

Torrent Laboratory, Inc. is certified by the State of California, ELAP #1991. If you have any questions regarding these test results, please feel free to contact the Project Management Team at (408)263-5258; ext 204.

A handwritten signature in blue ink that reads "Kathie Evans". The signature is written in a cursive style and is positioned above a horizontal line.

Kathie Evans
Project Manager

August 02, 2024

Date



Date: 8/2/2024

Client: Rainbow Landscape, Inc. dba Better Than Real Artificial Grass

Project: PFAS-Artificial Turf

Work Order: 2407139

CASE NARRATIVE

Unless otherwise indicated in the following narrative, no issues encountered with the receiving, preparation, analysis or reporting of the results associated with this work order.

Unless otherwise indicated in the following narrative, no results have been method and/or field blank corrected.

Reported results relate only to the items/samples tested by the laboratory.

This report shall not be reproduced, except in full, without the written approval of Torrent Laboratory, Inc.

Analytical Comments for method E 1633 Draft 3, LCS low range, QC Preparation Batch ID 1162579, Note:

The following compounds were outside of the method specified limits (high bias) but all batch associated samples were ND at the PQL. The mid-range LCS was within control limits. No corrective action is required:

Gen-X, PFOA, PFOSA, PFDS

The following compounds were outside of the method specific limits (low bias) in the mid-range LCS but were within limits in the low level LCS and all batch associated samples were ND at the MDL. No corrective action is required.

PFTeDA



Sample Result Summary

Report prepared for: Jorge Jimenez Zamora
Rainbow Landscape, Inc. dba Better Than Real Artificial Grass

Date Received: 07/19/24

Date Reported: 08/02/24

Artificial Turf

2407139-001

Parameters:

Analysis
Method

DF

MDL

PQL

Results

Unit

All compounds were non-detectable for this sample.



SAMPLE RESULTS

Report prepared for: Jorge Jimenez Zamora **Date/Time Received:** 07/19/24, 10:35 am
 Rainbow Landscape, Inc. dba Better Than Real Artific **Date Reported:** 08/02/24

Client Sample ID:	Artificial Turf	Lab Sample ID:	2407139-001A
Project Name/Location:	PFAS-Artificial Turf	Sample Matrix:	Solid
Project Number:			
Date/Time Sampled:	07/18/24 /		
SDG:			

Prep Method: 1633Draft-S	Prep Batch Date/Time: 7/25/24	1:00:00PM
Prep Batch ID: 1162486	Prep Analyst:	NDUM

Parameters:	Analysis Method	DF	MDL	PQL	Results	Q	Units	Analyzed	Time	By	Analytical Batch
Perfluorobutanoic acid (PFBA)	E1633	1	0.0160	2.00	ND		ug/kg	07/29/24	22:48	TA	485817
PF4OPeA [PFMPA]	E1633	1	0.00828	1.00	ND		ug/kg	07/29/24	22:48	TA	485817
FPrPA [3:3 FTCA]	E1633	1	0.0683	2.00	ND		ug/kg	07/29/24	22:48	TA	485817
Perfluoropentanoic acid (PFPeA)	E1633	1	0.00414	1.00	ND		ug/kg	07/29/24	22:48	TA	485817
PF5OHxA [PFMBA]	E1633	1	0.00290	1.00	ND		ug/kg	07/29/24	22:48	TA	485817
4:2 Fluorotelomer sulfonic acid (4:2 FTS)	E1633	1	0.0320	2.00	ND		ug/kg	07/29/24	22:48	TA	485817
3-Perfluoroheptyl propanoic acid (NFDHA)	E1633	1	0.0113	1.00	ND		ug/kg	07/29/24	22:48	TA	485817
Perfluorohexanoic acid (PFHxA)	E1633	1	0.00798	0.500	ND		ug/kg	07/29/24	22:48	TA	485817
Perfluorobutane sulfonic acid (PFBS)	E1633	1	0.0116	0.500	ND		ug/kg	07/29/24	22:48	TA	485817
HFPO-DA [Gen-X]	E1633	1	0.0195	1.00	ND		ug/kg	07/29/24	22:48	TA	485817
FPePA [5:3 FTCA]	E1633	1	0.0204	10.0	ND		ug/kg	07/29/24	22:48	TA	485817
Perfluoro(2-ethoxyethane)sulphonic acid (PFEESA)	E1633	1	0.00456	1.00	ND		ug/kg	07/29/24	22:48	TA	485817
Perfluoroheptanoic acid (PFHpA)	E1633	1	0.00704	0.500	ND		ug/kg	07/29/24	22:48	TA	485817
ADONA	E1633	1	0.0147	1.00	ND		ug/kg	07/29/24	22:48	TA	485817
Perfluoropentane sulfonic acid (PFPeS)	E1633	1	0.00898	0.500	ND		ug/kg	07/29/24	22:48	TA	485817
6:2 Fluorotelomer sulfonic acid (6:2 FTS)	E1633	1	0.0247	2.00	ND		ug/kg	07/29/24	22:48	TA	485817
Perfluorooctanoic acid (PFOA)	E1633	1	0.00548	0.500	ND		ug/kg	07/29/24	22:48	TA	485817
FHpPA [7:3 FTCA]	E1633	1	0.00492	10.0	ND		ug/kg	07/29/24	22:48	TA	485817
Perfluorohexane sulfonic acid (PFHxS)	E1633	1	0.0127	0.500	ND		ug/kg	07/29/24	22:48	TA	485817
Perfluorononanoic acid (PFNA)	E1633	1	0.0112	0.500	ND		ug/kg	07/29/24	22:48	TA	485817
8:2 Fluorotelomer sulfonic acid (8:2 FTS)	E1633	1	0.0390	2.00	ND		ug/kg	07/29/24	22:48	TA	485817
Perfluoroheptane sulfonic acid (PFHpS)	E1633	1	0.0105	0.500	ND		ug/kg	07/29/24	22:48	TA	485817
N-Methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)	E1633	1	0.0290	0.500	ND		ug/kg	07/29/24	22:48	TA	485817
Perfluorodecanoic acid (PFDA)	E1633	1	0.0153	0.500	ND		ug/kg	07/29/24	22:48	TA	485817
N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)	E1633	1	0.0176	0.500	ND		ug/kg	07/29/24	22:48	TA	485817
Perfluorooctane sulfonic acid (PFOS)	E1633	1	0.0128	0.500	ND		ug/kg	07/29/24	22:48	TA	485817
Perfluoroundecanoic acid (PFUnA)	E1633	1	0.00972	0.500	ND		ug/kg	07/29/24	22:48	TA	485817



SAMPLE RESULTS

Report prepared for: Jorge Jimenez Zamora **Date/Time Received:** 07/19/24, 10:35 am
 Rainbow Landscape, Inc. dba Better Than Real Artific **Date Reported:** 08/02/24

Client Sample ID:	Artificial Turf	Lab Sample ID:	2407139-001A
Project Name/Location:	PFAS-Artificial Turf	Sample Matrix:	Solid
Project Number:			
Date/Time Sampled:	07/18/24 /		
SDG:			

Prep Method: 1633Draft-S	Prep Batch Date/Time: 7/25/24	1:00:00PM
Prep Batch ID: 1162486	Prep Analyst:	NDUM

Parameters:	Analysis Method	DF	MDL	PQL	Results	Q	Units	Analyzed	Time	By	Analytical Batch
9-Cl-PF3ONS	E1633	1	0.0136	1.00	ND		ug/kg	07/29/24	22:48	TA	485817
Perfluorononane sulfonic acid (PFNS)	E1633	1	0.0114	0.500	ND		ug/kg	07/29/24	22:48	TA	485817
Perfluorododecanoic acid (PFDoA)	E1633	1	0.0211	0.500	ND		ug/kg	07/29/24	22:48	TA	485817
Perfluorooctanesulfonamide (PFOSA)	E1633	1	0.00252	0.500	ND		ug/kg	07/29/24	22:48	TA	485817
Perfluorodecane sulfonic acid (PFDS)	E1633	1	0.00190	0.500	ND		ug/kg	07/29/24	22:48	TA	485817
Perfluorotridecanoic acid (PFTrDA)	E1633	1	0.00380	0.500	ND		ug/kg	07/29/24	22:48	TA	485817
11-Cl-PF3OUdS	E1633	1	0.0111	1.00	ND		ug/kg	07/29/24	22:48	TA	485817
Perfluorotetradecanoic acid (PFTeDA)	E1633	1	0.00514	0.500	ND		ug/kg	07/29/24	22:48	TA	485817
Perfluorododecanesulfonic acid (PFDoS)	E1633	1	0.0117	0.500	ND		ug/kg	07/29/24	22:48	TA	485817
N-Methylperfluorooctanesulfonamide (NMeFOSE)	E1633	1	0.0165	5.00	ND		ug/kg	07/29/24	22:48	TA	485817
N-Methyl perfluorooctane sulfonamide (NMeFOSA)	E1633	1	0.00654	0.500	ND		ug/kg	07/29/24	22:48	TA	485817
N-ethyl perfluorooctanesulfonamidoethanol (NEtFOSE)	E1633	1	0.0301	5.00	ND		ug/kg	07/29/24	22:48	TA	485817
N-Ethyl perfluorooctane sulfonamide (NEtFOSA)	E1633	1	0.00614	0.500	ND		ug/kg	07/29/24	22:48	TA	485817



MB Summary Report

Work Order:	2407139	Prep Method:	1633Draft-S	Prep Date:	07/25/24	Prep Batch:	1162486
Matrix:	Soil	Analytical Method:	E1633	Analyzed Date:	7/29/2024	Analytical Batch:	485817
Units:	ug/kg						

Parameters	MDL	PQL	Method Blank Conc.	Lab Qualifier	
Perfluorobutanoic acid (PFBA)	0.0160	2.00	ND		
PF4OPeA [PFMPA]	0.00828	1.00	ND		
FPrPA [3:3 FTCA]	0.0683	2.00	ND		
Perfluoropentanoic acid (PFPeA)	0.00414	1.00	ND		
PF5OHxA [PFMBA]	0.00290	1.00	ND		
4:2 Fluorotelomer sulfonic acid (4:2 FTS)	0.0320	2.00	ND		
3-Perfluoroheptyl propanoic acid (NFDHA)	0.0113	1.00	ND		
Perfluorohexanoic acid (PFHxA)	0.00798	0.500	ND		
Perfluorobutane sulfonic acid (PFBS)	0.0116	0.500	ND		
HFPO-DA [Gen-X]	0.0195	1.00	ND		
FPePA [5:3 FTCA]	0.0204	10.0	ND		
Perfluoro(2-ethoxyethane)sulphonic acid (PFEESA)	0.00456	1.00	ND		
Perfluoroheptanoic acid (PFHpA)	0.00704	0.500	ND		
ADONA	0.0147	1.00	ND		
Perfluoropentane sulfonic acid (PFPeS)	0.00898	0.500	ND		
6:2 Fluorotelomer sulfonic acid (6:2 FTS)	0.0247	2.00	ND		
Perfluorooctanoic acid (PFOA)	0.00548	0.500	ND		
FHpPA [7:3 FTCA]	0.00492	10.0	ND		
Perfluorohexane sulfonic acid (PFHxS)	0.0127	0.500	ND		
Perfluorononanoic acid (PFNA)	0.0112	0.500	ND		
8:2 Fluorotelomer sulfonic acid (8:2 FTS)	0.0390	2.00	ND		
Perfluoroheptane sulfonic acid (PFHpS)	0.0105	0.500	ND		
N-Methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)	0.0290	0.500	ND		
Perfluorodecanoic acid (PFDA)	0.0153	0.500	ND		
N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)	0.0176	0.500	ND		
Perfluorooctane sulfonic acid (PFOS)	0.0128	0.500	ND		
Perfluoroundecanoic acid (PFUnA)	0.00972	0.500	ND		
9-Cl-PF3ONS	0.0136	1.00	ND		
Perfluorononane sulfonic acid (PFNS)	0.0114	0.500	ND		
Perfluorododecanoic acid (PFDoA)	0.0211	0.500	ND		
Perfluorooctanesulfonamide (PFOSA)	0.00252	0.500	ND		
Perfluorodecane sulfonic acid (PFDS)	0.00190	0.500	ND		
Perfluorotridecanoic acid (PFTrDA)	0.00380	0.500	ND		
11-Cl-PF3OUdS	0.0111	1.00	ND		



MB Summary Report

Work Order:	2407139	Prep Method:	1633Draft-S	Prep Date:	07/25/24	Prep Batch:	1162486
Matrix:	Soil	Analytical Method:	E1633	Analyzed Date:	7/29/2024	Analytical Batch:	485817
Units:	ug/kg						

Parameters	MDL	PQL	Method Blank Conc.	Lab Qualifier	
Perfluorotetradecanoic acid (PFTeDA)	0.00514	0.500	ND		
Perfluorododecanesulfonic acid (PFDoS)	0.0117	0.500	ND		
N-Methylperfluorooctanesulfonamido ethanol (NMeFOSE)	0.0165	5.00	ND		
N-Methyl perfluorooctane sulfonamide (NMeFOSA)	0.00654	0.500	ND		
N-ethyl perfluorooctanesulfonamidoethanol (NEtFOSE)	0.0301	5.00	ND		
N-Ethyl perfluorooctane sulfonamide (NEtFOSA)	0.00614	0.500	ND		



LCS/LCSD Summary Report

Raw values are used in quality control assessment.

Work Order:	2407139	Prep Method:	1633Draft-S	Prep Date:	07/25/24	Prep Batch:	1162486
Matrix:	Soil	Analytical Method:	E1633	Analyzed Date:	7/29/2024	Analytical Batch:	485817
Units:	ug/kg						

Parameters	MDL	PQL	Method Blank Conc.	Spike Conc.	LCS % Recovery	LCSD % Recovery	LCS/LCSD % RPD	% Recovery Limits	% RPD Limits	Lab Qualifier
Perfluorobutanoic acid (PFBA)	0.0160	2.00		0.40	89.5			40 - 150		
PF4OPeA [PFMPA]	0.00820	1.00		0.40	114			40 - 150		
FPrPA [3:3 FTCA]	0.0684	2.00		0.40	72.4			40 - 150		
Perfluoropentanoic acid (PFPe)	0.00420	1.00		0.20	83.4			40 - 150		
PF5OHxA [PFMBA]	0.00300	1.00		0.40	88.3			40 - 150		
4:2 Fluorotelomer sulfonic acid	0.0320	2.00		0.40	73.5			40 - 150		
3-Perfluoroheptyl propanoic acid	0.0112	1.00		0.40	150			40 - 150		
Perfluorohexanoic acid (PFHx)	0.00800	0.500		0.10	87.7			40 - 150		
Perfluorobutane sulfonic acid	0.0116	0.500		0.10	84.7			40 - 150		
HFPO-DA [Gen-X]	0.0194	1.00		0.40	164			40 - 150		S
FPePA [5:3 FTCA]	0.0204	10.0		2.0	111			40 - 150		
Perfluoro(2-ethoxyethane)sulphonic acid	0.00460	1.00		0.40	89.2			40 - 150		
Perfluoroheptanoic acid (PFHp)	0.00700	0.500		0.10	145			40 - 150		
ADONA	0.0146	1.00		0.40	92.0			40 - 150		
Perfluoropentane sulfonic acid	0.00900	0.500		0.10	74.0			40 - 150		
6:2 Fluorotelomer sulfonic acid	0.0246	2.00		0.40	78.9			40 - 150		
Perfluorooctanoic acid (PFOA)	0.00540	0.500		0.10	151			40 - 150		S
FHpPA [7:3 FTCA]	0.00500	10.0		2.0	72.3			40 - 150		
Perfluorohexane sulfonic acid	0.0128	0.500		0.10	150			40 - 150		
Perfluorononanoic acid (PFNA)	0.0112	0.500		0.10	68.6			40 - 150		
8:2 Fluorotelomer sulfonic acid	0.0390	2.00		0.40	121			40 - 150		
Perfluoroheptane sulfonic acid	0.0106	0.500		0.10	89.4			40 - 150		
N-Methyl perfluorooctanesulfonic acid	0.0290	0.500		0.10	142			40 - 150		
Perfluorodecanoic acid (PFDA)	0.0152	0.500		0.10	85.7			40 - 150		
N-ethyl perfluorooctanesulfonic acid	0.0176	0.500		0.10	142			40 - 150		
Perfluorooctane sulfonic acid (PFOS)	0.0128	0.500		0.10	106			40 - 150		
Perfluoroundecanoic acid (PFUdA)	0.00980	0.500		0.10	72.9			40 - 150		
9-Cl-PF3ONS	0.0136	1.00		0.40	99.4			40 - 150		
Perfluorononane sulfonic acid	0.0114	0.500		0.10	76.8			40 - 150		
Perfluorododecanoic acid (PFDDA)	0.0212	0.500		0.10	74.7			40 - 150		
Perfluorooctanesulfonamide (PFOSA)	0.00260	0.500		0.10	161			40 - 150		S
Perfluorodecane sulfonic acid (PFDS)	0.00200	0.500		0.10	175			40 - 150		S
Perfluorotridecanoic acid (PFTDA)	0.00380	0.500		0.10	72.9			40 - 150		
11-Cl-PF3OUdS	0.0110	1.00		0.40	96.5			40 - 150		
Perfluorotetradecanoic acid (PFTDA)	0.00520	0.500		0.10	39.6			40 - 150		
Perfluorododecanesulfonic acid (PFDS)	0.0116	0.500		0.10	94.6			40 - 150		
N-Methylperfluorooctanesulfonic acid	0.0166	5.00		2.0	146			40 - 150		
N-Methyl perfluorooctane sulfonic acid	0.00660	0.500		0.20	140			40 - 150		
N-ethyl perfluorooctanesulfonic acid	0.0302	5.00		2.0	142			40 - 150		
N-Ethyl perfluorooctane sulfonic acid	0.00620	0.500		0.20	76.8			40 - 150		



LCS/LCSD Summary Report

Raw values are used in quality control assessment.

Work Order:	2407139	Prep Method:	1633Draft-S	Prep Date:	07/25/24	Prep Batch:	1162486
Matrix:	Soil	Analytical Method:	E1633	Analyzed Date:	7/29/2024	Analytical Batch:	485817
Units:	ug/kg						

Parameters	MDL	PQL	Method Blank Conc.	Spike Conc.	LCS % Recovery	LCSD % Recovery	LCS/LCSD % RPD	% Recovery Limits	% RPD Limits	Lab Qualifier
Perfluorobutanoic acid (PFBA)	0.0160	2.00	ND	10.0	75.7			40 - 150		
PF4OPeA [PFMPA]	0.00820	1.00	ND	10.0	105			40 - 150		
FPrPA [3:3 FTCA]	0.0684	2.00	ND	10.0	64.7			40 - 150		
Perfluoropentanoic acid (PFPe)	0.00420	1.00	ND	5.00	73.2			40 - 150		
PF5OHxA [PFMBA]	0.00300	1.00	ND	10.0	78.2			40 - 150		
4:2 Fluorotelomer sulfonic acid	0.0320	2.00	ND	10.0	75.5			40 - 150		
3-Perfluoroheptyl propanoic ac	0.0112	1.00	ND	10.0	71.2			40 - 150		
Perfluorohexanoic acid (PFHx)	0.00800	0.500	ND	2.50	74.9			40 - 150		
Perfluorobutane sulfonic acid	0.0116	0.500	ND	2.50	73.6			40 - 150		
HFPO-DA [Gen-X]	0.0194	1.00	ND	10.0	79.7			40 - 150		
FPePA [5:3 FTCA]	0.0204	10.0	ND	50.0	66.8			40 - 150		
Perfluoro(2-ethoxyethane)sulp	0.00460	1.00	ND	10.0	76.7			40 - 150		
Perfluoroheptanoic acid (PFH7)	0.00700	0.500	ND	2.50	75.0			40 - 150		
ADONA	0.0146	1.00	ND	10.0	83.4			40 - 150		
Perfluoropentane sulfonic aci	0.00900	0.500	ND	2.50	73.0			40 - 150		
6:2 Fluorotelomer sulfonic acid	0.0246	2.00	ND	10.0	71.4			40 - 150		
Perfluorooctanoic acid (PFOA)	0.00540	0.500	ND	2.50	71.6			40 - 150		
FHpPA [7:3 FTCA]	0.00500	10.0	ND	50.0	62.5			40 - 150		
Perfluorohexane sulfonic acid	0.0128	0.500	ND	2.50	72.2			40 - 150		
Perfluorononanoic acid (PFNA)	0.0112	0.500	ND	2.50	75.5			40 - 150		
8:2 Fluorotelomer sulfonic acid	0.0390	2.00	ND	10.0	78.7			40 - 150		
Perfluoroheptane sulfonic acid	0.0106	0.500	ND	2.50	78.0			40 - 150		
N-Methyl perfluorooctanesulfoi	0.0290	0.500	ND	2.50	78.0			40 - 150		
Perfluorodecanoic acid (PFDA)	0.0152	0.500	ND	2.50	74.6			40 - 150		
N-ethyl perfluorooctanesulfona	0.0176	0.500	ND	2.50	80.7			40 - 150		
Perfluorooctane sulfonic acid (0.0128	0.500	ND	2.50	79.1			40 - 150		
Perfluoroundecanoic acid (PFI	0.00980	0.500	ND	2.50	70.3			40 - 150		
9-Cl-PF3ONS	0.0136	1.00	ND	10.0	91.2			40 - 150		
Perfluorononane sulfonic acid	0.0114	0.500	ND	2.50	76.6			40 - 150		
Perfluorododecanoic acid (PF	0.0212	0.500	ND	2.50	72.5			40 - 150		
Perfluorooctanesulfonamide (F	0.00260	0.500	ND	2.50	73.7			40 - 150		
Perfluorodecane sulfonic acid	0.00200	0.500	ND	2.50	67.8			40 - 150		
Perfluorotridecanoic acid (PFT	0.00380	0.500	ND	2.50	65.0			40 - 150		
11-Cl-PF3OUdS	0.0110	1.00	ND	10.0	79.9			40 - 150		
Perfluorotetradecanoic acid (P	0.00520	0.500	ND	2.50	33.6			40 - 150		
Perfluorododecanesulfonic aci	0.0116	0.500	ND	2.50	69.9			40 - 150		
N-Methylperfluorooctanesulfon	0.0166	5.00	ND	50.0	72.7			40 - 150		
N-Methyl perfluorooctane sulfc	0.00660	0.500	ND	5.00	74.6			40 - 150		
N-ethyl perfluorooctanesulfona	0.0302	5.00	ND	50.0	73.2			40 - 150		
N-Ethyl perfluorooctane sulfon:	0.00620	0.500	ND	5.00	71.8			40 - 150		

S



Duplicate QC Summary Report

Work Order: 2407139	Prep Method: 1633Draft-S	Prep Date: 7/25/2024	Prep Batch: 1162486
Matrix:	Analytical Method: E1633	Analyzed Date: 07/29/24	Analytical Batch: 485817
Units:	Lab Sample ID: 2407139-001A-DUP-1162486		

Parameters	MDL	PQL	Sample Result	Duplicate Result	% RPD
Perfluorobutanoic acid (PFBA)	0.0160	2.00	0.000	ND	0.00
PF4OPeA [PFMPA]	0.00828	1.00	0.000	ND	0.00
FPrPA [3:3 FTCA]	0.0683	2.00	0.000	ND	0.00
Perfluoropentanoic acid (PFPeA)	0.00414	1.00	0.000	ND	0.00
PF5OHxA [PFMBA]	0.00290	1.00	0.000	ND	0.00
4:2 Fluorotelomer sulfonic acid (4:2 FTS)	0.0320	2.00	0.000	ND	0.00
3-Perfluoroheptyl propanoic acid (NFDHA)	0.0113	1.00	0.000	ND	0.00
Perfluorohexanoic acid (PFHxA)	0.00798	0.500	0.000	ND	0.00
Perfluorobutane sulfonic acid (PFBS)	0.0116	0.500	0.000	ND	0.00
HFPO-DA [Gen-X]	0.0195	1.00	0.000	ND	0.00
FPePA [5:3 FTCA]	0.0204	10.0	0.000	ND	0.00
Perfluoro(2-ethoxyethane)sulphonic acid (PFEEESA)	0.00456	1.00	0.000	ND	0.00
Perfluoroheptanoic acid (PFHpA)	0.00704	0.500	0.000	ND	0.00
ADONA	0.0147	1.00	0.000	ND	0.00
Perfluoropentane sulfonic acid (PFPeS)	0.00898	0.500	0.000	ND	0.00
6:2 Fluorotelomer sulfonic acid (6:2 FTS)	0.0247	2.00	0.000	ND	0.00
Perfluorooctanoic acid (PFOA)	0.00548	0.500	0.000	ND	0.00
FHpPA [7:3 FTCA]	0.00492	10.0	0.000	ND	0.00
Perfluorohexane sulfonic acid (PFHxS)	0.0127	0.500	0.000	ND	0.00
Perfluorononanoic acid (PFNA)	0.0112	0.500	0.000	ND	0.00
8:2 Fluorotelomer sulfonic acid (8:2 FTS)	0.0390	2.00	0.000	ND	0.00
Perfluoroheptane sulfonic acid (PFHpS)	0.0105	0.500	0.000	ND	0.00
N-Methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)	0.0290	0.500	0.000	ND	0.00
Perfluorodecanoic acid (PFDA)	0.0153	0.500	0.000	ND	0.00
N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)	0.0176	0.500	0.000	ND	0.00
Perfluorooctane sulfonic acid (PFOS)	0.0128	0.500	0.000	ND	0.00
Perfluoroundecanoic acid (PFUnA)	0.00972	0.500	0.000	ND	0.00
9-CI-PF3ONS	0.0136	1.00	0.000	ND	0.00



Duplicate QC Summary Report

Work Order: 2407139	Prep Method: 1633Draft-S	Prep Date: 7/25/2024	Prep Batch: 1162486
Matrix:	Analytical Method: E1633	Analyzed Date: 07/29/24	Analytical Batch: 485817
Units:	Lab Sample ID: 2407139-001A-DUP-1162486		

Parameters	MDL	PQL	Sample Result	Duplicate Result	% RPD
Perfluorononane sulfonic acid (PFNS)	0.0114	0.500	0.000	ND	0.00
Perfluorododecanoic acid (PFDoA)	0.0211	0.500	0.000	ND	0.00
Perfluorooctanesulfonamide (PFOSA)	0.00252	0.500	0.000	ND	0.00
Perfluorodecane sulfonic acid (PFDS)	0.00190	0.500	0.000	ND	0.00
Perfluorotridecanoic acid (PFTrDA)	0.00380	0.500	0.000	ND	0.00
11-Cl-PF3OUdS	0.0111	1.00	0.000	ND	0.00
Perfluorotetradecanoic acid (PFTeDA)	0.00514	0.500	0.000	ND	0.00
Perfluorododecanesulfonic acid (PFDoS)	0.0117	0.500	0.000	ND	0.00
N-Methylperfluorooctanesulfonamid oethanol (NMeFOSE)	0.0165	5.00	0.000	ND	0.00
N-Methyl perfluorooctane sulfonamide (NMeFOSA)	0.00654	0.500	0.000	ND	0.00
N-ethyl perfluorooctanesulfonamidoethanol (NEtFOSE)	0.0301	5.00	0.000	ND	0.00
N-Ethyl perfluorooctane sulfonamide (NEtFOSA)	0.00614	0.500	0.000	ND	0.00



Laboratory Qualifiers and Definitions

DEFINITIONS:

Accuracy/Bias (% Recovery) - The closeness of agreement between an observed value and an accepted reference value.
Blank (Method/Preparation Blank) -MB/PB - An analyte-free matrix to which all reagents are added in the same volumes/proportions as used in sample processing. The method blank is used to document contamination resulting from the analytical process.
Duplicate - a field sample and/or laboratory QC sample prepared in duplicate following all of the same processes and procedures used on the original sample (sample duplicate, LCSD, MSD)
Laboratory Control Sample (LCS ad LCSD) - A known matrix spiked with compounds representative of the target analyte(s). This is used to document laboratory performance.
Matrix - the component or substrate that contains the analyte of interest (e.g., - groundwater, sediment, soil, waste water, etc)
Matrix Spike (MS/MSD) - Client sample spiked with identical concentrations of target analyte (s). The spiking occurs prior to the sample preparation and analysis. They are used to document the precision and bias of a method in a given sample matrix.
Method Detection Limit (MDL) - the minimum concentration of a substance that can be measured and reported with a 99% confidence that the analyte concentration is greater than zero
Practical Quantitation Limit/Reporting Limit/Limit of Quantitation (PQL/RL/LOQ) - a laboratory determined value at 2 to 5 times above the MDL that can be reproduced in a manner that results in a 99% confidence level that the result is both accurate and precise. PQLs/RLs/LODs reflect all preparation factors and/or dilution factors that have been applied to the sample during the preparation and/or analytical processes.
Precision (%RPD) - The agreement among a set of replicate/duplicate measurements without regard to known value of the replicates
Surrogate (S) or (Surr) - An organic compound which is similar to the target analyte(s) in chemical composition and behavior in the analytical process, but which is not normally found in environmental samples. Surrogates are used in most organic analysis to demonstrate matrix compatibility with the chosen method of analysis
Tentatively Identified Compound (TIC) - A compound not contained within the analytical calibration standards but present in the GCMS library of defined compounds. When the library is searched for an unknown compound, it can frequently give a tentative identification to the compound based on retention time and primary and secondary ion match. TICs are reported as estimates and are candidates for further investigation.
Units: the unit of measure used to express the reported result - mg/L and mg/Kg (equivalent to PPM - parts per million in liquid and solid), ug/L and ug/Kg (equivalent to PPB - parts per billion in liquid and solid), ug/m3 , mg/m3 , ppbv and ppmv (all units of measure for reporting concentrations in air), % (equivalent to 10000 ppm or 1,000,000 ppb), ug/Wipe (concentration found on the surface of a single Wipe usually taken over a 100cm ² surface)

LABORATORY QUALIFIERS

<p>B - Indicates when the analyte is found in the associated method or preparation blank</p> <p>D - Surrogate is not recoverable due to the necessary dilution of the sample</p> <p>E - Indicates the reportable value is outside of the calibration range of the instrument but within the linear range of the instrument (unless otherwise noted) Values reported with an E qualifier should be considered as estimated.</p> <p>H- Indicates that the recommended holding time for the analyte or compound has been exceeded</p> <p>J- Indicates a value between the method MDL and PQL and that the reported concentration should be considered as estimated rather the quantitative</p> <p>NA - Not Analyzed</p> <p>N/A - Not Applicable</p> <p>ND - Not Detected at a concentration greater than the PQL/RL or, if reported to the MDL, at greater than the MDL.</p> <p>NR - Not recoverable - a matrix spike concentration is not recoverable due to a concentration within the original sample that is greater than four times the spike concentration added</p> <p>R- The % RPD between a duplicate set of samples is outside of the absolute values established by laboratory control charts</p> <p>S- Spike recovery is outside of established method and/or laboratory control limits. Further explanation of the use of this qualifier should be included within a case narrative</p> <p>X -Used to indicate that a value based on pattern identification is within the pattern range but not typical of the pattern found in standards. Further explanation may or may not be provided within the sample footnote and/or the case narrative.</p>



Sample Receipt Checklist

Client Name: Rainbow Landscape, Inc. dba Better Than Real Artificial Grass

Date and Time Received: 7/19/2024 10:35:00AM

Project Name: PFAS-Artificial Turf

Received By: Lorna Imbat

Work Order No.: 2407139

Physically Logged By: Lorna Imbat

Checklist Completed By: Lorna Imbat

Carrier Name: UPS

Chain of Custody (COC) Information

Chain of custody present? Yes
Chain of custody signed when relinquished and received? Yes
Chain of custody agrees with sample labels? Yes
Custody seals intact on sample bottles? Not Present

Sample Receipt Information

Custody seals intact on shipping container/cooler? Not Present
Shipping Container/Cooler In Good Condition? Yes
Samples in proper container/bottle? Yes
Samples containers intact? Yes
Sufficient sample volume for indicated test? Yes

Sample Preservation and Hold Time (HT) Information

All samples received within holding time? Yes
Container/Temp Blank temperature in compliance? No Temperature: 24.0 °C
Water-VOA vials have zero headspace? No VOA vials submitted
Water-pH acceptable upon receipt? N/A
pH Checked by: n/a pH Adjusted by: n/a

Comments:



Login Summary Report

Client ID: TL7097 Rainbow Landscape, Inc. dba Better Than Real Artificial Gr **QC Level:** II
Project Name: PFAS-Artificial Turf **TAT Requested:** 10 Day:10
Project # : **Date Received:** 7/19/2024
Report Due Date: 8/2/2024 **Time Received:** 10:35 am
Comments:
Work Order # : **2407139**

<u>WO Sample ID</u>	<u>Client Sample ID</u>	<u>Collection Date/Time</u>	<u>Matrix</u>	<u>Scheduled Disposal</u>	<u>Sample On Hold</u>	<u>Test On Hold</u>	<u>Requested Tests</u>	<u>Subbed</u>
2407139-001A	Artificial Turf	07/18/24	Soil	01/14/25			Prep Fee 1633 DRAFT_S	



483 Sinclair Frontage Road
 Milpitas, CA 95035
 Phone: 408.263.5258
 FAX: 408.263.8293
 www.torrentlab.com

CHAIN OF CUSTODY

LAB WORK ORDER NO 2467139

Reset

• NOTE: SHADED AREAS ARE FOR TORRENT LAB USE ONLY •

Company Name: Rainbow Landscape Inc dba Better Than <input type="checkbox"/> Env. <input type="checkbox"/> Non Env.	Project #: N/A	PO#: N/A
Address: 771 Andersen Dr	Project Name: PFAS - Artificial Turf	
City: San Rafael State: CA Zip Code: 94901	Comments: Quote # 00003953	
Telephone: (415) 456-2169 Cell:	SAMPLER:	
REPORT TO: Jorge Jimenez Zamora BILL TO: Jorge Jimenez Zamora	EMAIL: info@BetterThanRealGrass.com	

TURNAROUND TIME: <input type="checkbox"/> 2-8 Hours <input type="checkbox"/> 2 Work Days <input type="checkbox"/> 5 Work Days <input type="checkbox"/> Noon - Nxt Day <input type="checkbox"/> 3 Work Days <input checked="" type="checkbox"/> 7 Work Days <input type="checkbox"/> 1 Work Day <input type="checkbox"/> 4 Work Days <input type="checkbox"/> 10 Work Days	SAMPLE TYPE: <input type="checkbox"/> Drinking Water <input type="checkbox"/> Air <input type="checkbox"/> Storm Water <input type="checkbox"/> Wipe <input type="checkbox"/> Waste Water <input type="checkbox"/> Other <input type="checkbox"/> Ground Water <input type="checkbox"/> Soil <input checked="" type="checkbox"/> Product / Bulk	REPORT FORMAT: <input type="checkbox"/> Level II - Std. <input type="checkbox"/> DoD/DoE Level III <input type="checkbox"/> DoD/DoE Level III <input type="checkbox"/> Excel - EDD <input type="checkbox"/> EDF <input type="checkbox"/> Client Specific EDD
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ANALYSIS REQUESTED

PFAS

LAB ID	CANISTER I.D.	CLIENT'S SAMPLE I.D.	DATE / TIME SAMPLED	MATRIX	# OF CONT	CONT TYPE	REMARKS
	-1	Artificial Turf	7-18-24	S	1	ziplock	

1 Relinquished By: <i>[Signature]</i> Print: Jorge Jimenez Zamora Date: 07/18/2024 Time: 10:35	Received By: <i>[Signature]</i> Print: L-D Jimenez Date: 7-18-24 Time: 1035
2 Relinquished By: Print: Date: Time:	Received By: Print: Date: Time:

Cooler Temperature 24.3 °C Samples Received on ice? Yes No Method of Shipment UPS

NOTE: Samples are discarded by the laboratory 30 days from date of receipt unless other arrangements are made.
 QA-F-065, Rev 1.0, TLICD-959 Temp 24.3 #3 Page ___ of ___