

Work Orders: 1D29055

Report Date: 6/24/2021

Project: PFAS

Received Date: 4/29/2021

Turnaround Time: Normal

Phones: (417) 864-1708

Fax:

Attn: Todd Cox

P.O. #:

Client: City of Springfield
218 E. Central
Springfield, MO 65802

Billing Code:

DoD-ELAP ANAB #L2457 • DoD-ISO ANAB # • ELAP-CA #1132 • EPA-UCMR #CA00211 • Guam-EPA #17-008R • HW-DOH # • ISO17025 ANAB #L2457.01 • LACSD #10143 • NELAP-OR #4047 • NJ-DEP #CA015 • NV-DEP #NAC 445A • SCAQMD #93LA1006

This is a complete final report. The information in this report applies to the samples analyzed in accordance with the chain-of-custody document. Weck Laboratories certifies that the test results meet all requirements of TNI unless noted by qualifiers or written in the Case Narrative. This analytical report must be reproduced in its entirety.

Dear Todd Cox,

Enclosed are the results of analyses for samples received 4/29/21 with the Chain-of-Custody document. The samples were received in good condition, at 6.8 °C and on ice. All analyses met the method criteria except as noted in the case narrative or in the report with data qualifiers.

Reviewed by:



Chris Samatmanakit
Project Manager



City of Springfield
 218 E. Central
 Springfield, MO 65802

Project Number: PFAS

Reported:

06/24/2021 12:54

Project Manager: Todd Cox

Case Narrative

Samples were received at slightly elevated temperature. -CSS 4/29/21

Sample Summary

Sample Name	Sampled By	Lab ID	Matrix	Sampled	Qualifiers
SW Primary Influent (Raw)	Derek Gillis	1D29055-01	Water	04/27/21 06:40	
NW Primary Influent (Raw)	Derek Gillis	1D29055-02	Water	04/27/21 08:10	
SW Effluent 001	Derek Gillis	1D29055-03	Water	04/27/21 06:30	
NW Effluent 001	Derek Gillis	1D29055-04	Water	04/27/21 08:00	
Springfield Landfill Leachate	Derek Gillis	1D29055-05	Water	04/27/21 07:40	
SW Primary Influent (Raw) Field Blank	Derek Gillis	1D29055-06	Water	04/27/21 06:40	
NW Primary Influent (Raw) Field Blank	Derek Gillis	1D29055-07	Water	04/27/21 08:10	
SW Effluent 001 Field Blank	Derek Gillis	1D29055-08	Water	04/27/21 06:30	
NW Effluent 001 Field Blank	Derek Gillis	1D29055-09	Water	04/27/21 08:00	
Springfield Landfill Leachate Field Blank	Derek Gillis	1D29055-10	Water	04/27/21 07:40	
SW Biosolids Field Sample (BTSF)	Derek Gillis	1D29055-11	Solid	04/27/21 06:15	
SW Biosolids Field Sample (BTSF) Field Blank	Derek Gillis	1D29055-12	Water	04/27/21 06:15	



WECK LABORATORIES, INC.

Certificate of Analysis

FINAL REPORT

City of Springfield
218 E. Central
Springfield, MO 65802

Project Number: PFAS
Project Manager: Todd Cox

Reported:
06/24/2021 12:54

Sample Results

Sample: SW Primary Influent (Raw)
1D29055-01 (Water)

Sampled: 04/27/21 6:40 by Derek Gillis

Analyte	Result	MRL	Units	Dil	Analyzed	Qualifier
---------	--------	-----	-------	-----	----------	-----------

Per- and Polyfluorinated Alkyl Substances (PFAS) by Dir.Inj/LCMSMS

Method: EPA 537M

Instr: LCMS03

Batch ID: W1E0349

Preparation: _NONE (LC)

Prepared: 05/06/21 16:44

Analyst: jna

6:2 FTS	ND	1000	ng/l	1	05/13/21	
8:2 FTS	ND	1000	ng/l	1	05/13/21	
EtFOSA	ND	1000	ng/l	1	05/13/21	
EtFOSE	ND	1000	ng/l	1	05/13/21	
FOSA	ND	1000	ng/l	1	05/13/21	
MeFOSA	ND	1000	ng/l	1	05/13/21	
MeFOSAA	ND	1000	ng/l	1	05/13/21	
MeFOSE	ND	1000	ng/l	1	05/13/21	
PFBA	ND	1000	ng/l	1	05/13/21	
PFTeDA	ND	1000	ng/l	1	05/13/21	

Per- and Polyfluorinated Alkyl Substances (PFAS) by SPE/LCMSMS

Method: EPA 537M

Instr: LCMS06

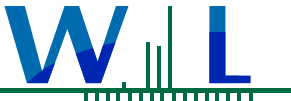
Batch ID: W1E0130

Preparation: EPA 537/SPE

Prepared: 05/04/21 09:53

Analyst: jna

11CI-PF3OUdS	ND	2.0	ng/l	1	05/07/21	
4:2 FTS	ND	1.0	ng/l	1	05/07/21	
9CI-PF3ONS	ND	1.0	ng/l	1	05/07/21	
ADONA	ND	1.0	ng/l	1	05/07/21	
EtFOSAA	ND	2.0	ng/l	1	05/07/21	
HFPO-DA	ND	1.0	ng/l	1	05/07/21	
Perfluorooctanoic acid (PFOA)	3.3	1.0	ng/l	1	05/07/21	
PFBS	7.0	1.0	ng/l	1	05/07/21	
PFDA	ND	1.0	ng/l	1	05/07/21	
PFDoA	ND	1.0	ng/l	1	05/07/21	
PFDS	ND	1.0	ng/l	1	05/07/21	
PFHpA	ND	4.0	ng/l	1	05/07/21	
PFHpS	ND	1.0	ng/l	1	05/07/21	
PFHxA	5.3	2.0	ng/l	1	05/07/21	
PFHxS	7.8	1.0	ng/l	1	05/07/21	
PFNA	ND	1.0	ng/l	1	05/07/21	
PFNS	ND	1.0	ng/l	1	05/07/21	
PFOS	18	2.0	ng/l	1	05/07/21	
PFPeA	4.5	1.0	ng/l	1	05/07/21	
PFPeS	ND	1.0	ng/l	1	05/07/21	
PFTTrDA	ND	1.0	ng/l	1	05/07/21	
PFUnA	ND	1.0	ng/l	1	05/07/21	



WECK LABORATORIES, INC.

Certificate of Analysis

FINAL REPORT

City of Springfield
218 E. Central
Springfield, MO 65802

Project Number: PFAS
Project Manager: Todd Cox

Reported:
06/24/2021 12:54

Sample Results

(Continued)

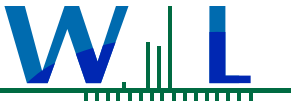
Sample: NW Primary Influent (Raw)
1D29055-02 (Water)

Sampled: 04/27/21 8:10 by Derek Gillis

Analyte	Result	MRL	Units	Dil	Analyzed	Qualifier
Per- and Polyfluorinated Alkyl Substances (PFAS) by Dir.Inj/LCMSMS						
Method: EPA 537M		Instr: LCMS03				
Batch ID: W1E0349	Preparation: _NONE (LC)	Prepared: 05/06/21 16:44	Analyst: jna			
11CI-PF3OUdS	ND	1000	ng/l	1	05/13/21	
6:2 FTS	6000	1000	ng/l	1	05/13/21	
EtFOSA	ND	1000	ng/l	1	05/13/21	
EtFOSAA	ND	1000	ng/l	1	05/13/21	
EtFOSE	ND	1000	ng/l	1	05/13/21	
FOSA	ND	1000	ng/l	1	05/13/21	
MeFOSA	ND	1000	ng/l	1	05/13/21	
MeFOSAA	ND	1000	ng/l	1	05/13/21	
MeFOSE	ND	1000	ng/l	1	05/13/21	
PFBA	ND	1000	ng/l	1	05/13/21	
PFDoA	ND	1000	ng/l	1	05/13/21	
PFDS	ND	1000	ng/l	1	05/13/21	
PFTeDA	ND	1000	ng/l	1	05/13/21	
PFTTrDA	ND	1000	ng/l	1	05/13/21	
PFUnA	ND	1000	ng/l	1	05/13/21	

Per- and Polyfluorinated Alkyl Substances (PFAS) by SPE/LCMSMS

Method: EPA 537M		Instr: LCMS06				
Batch ID: W1E0130	Preparation: EPA 537/SPE	Prepared: 05/04/21 09:53	Analyst: jna			
4:2 FTS	ND	1.0	ng/l	1	05/07/21	
8:2 FTS	ND	1.0	ng/l	1	05/07/21	
9CI-PF3ONS	ND	1.0	ng/l	1	05/07/21	
ADONA	ND	1.0	ng/l	1	05/07/21	
HFPO-DA	ND	1.0	ng/l	1	05/07/21	
Perfluorooctanoic acid (PFOA)	15	1.0	ng/l	1	05/07/21	
PFBS	12	1.0	ng/l	1	05/07/21	
PFDA	ND	1.0	ng/l	1	05/07/21	
PFHpA	5.7	4.0	ng/l	1	05/07/21	
PFHpS	ND	1.0	ng/l	1	05/07/21	
PFHxA	24	2.0	ng/l	1	05/07/21	
PFHxS	12	1.0	ng/l	1	05/07/21	
PFNA	ND	1.0	ng/l	1	05/07/21	
PFNS	ND	1.0	ng/l	1	05/07/21	
PFOS	12	2.0	ng/l	1	05/07/21	
PFPeA	13	1.0	ng/l	1	05/07/21	
PFPeS	ND	1.0	ng/l	1	05/07/21	



WECK LABORATORIES, INC.

City of Springfield
218 E. Central
Springfield, MO 65802

Project Number: PFAS
Project Manager: Todd Cox

Certificate of Analysis

FINAL REPORT

Reported:
06/24/2021 12:54

Sample Results

(Continued)

Sample: SW Effluent 001
1D29055-03 (Water) Sampled: 04/27/21 6:30 by Derek Gillis

Analyte	Result	MRL	Units	Dil	Analyzed	Qualifier
Per- and Polyfluorinated Alkyl Substances (PFAS) by Dir.Inj/LCMSMS						
Method: EPA 537M		Instr: LCMS03				
Batch ID: W1E0349	Preparation: _NONE (LC)	Prepared: 05/06/21 16:44	Analyst: jna			
6:2 FTS	ND	1000	ng/l	1	05/13/21	
PFTeDA	ND	1000	ng/l	1	05/13/21	

Per- and Polyfluorinated Alkyl Substances (PFAS) by SPE/LCMSMS						
Method: EPA 537M		Instr: LCMS06				
Batch ID: W1E0130	Preparation: EPA 537/SPE	Prepared: 05/04/21 09:53	Analyst: jna			
11CI-PF3OUdS	ND	2.0	ng/l	1	05/07/21	
4:2 FTS	ND	1.0	ng/l	1	05/07/21	
8:2 FTS	ND	1.0	ng/l	1	05/07/21	
9CI-PF3ONS	ND	1.0	ng/l	1	05/07/21	
ADONA	ND	1.0	ng/l	1	05/07/21	
EtFOSA	ND	2.0	ng/l	1	05/07/21	
EtFOSAA	ND	2.0	ng/l	1	05/07/21	
EtFOSE	ND	1.0	ng/l	1	05/07/21	
FOSA	ND	1.0	ng/l	1	05/07/21	
HFPO-DA	ND	1.0	ng/l	1	05/07/21	
MeFOSA	ND	2.0	ng/l	1	05/07/21	
MeFOSAA	ND	1.0	ng/l	1	05/07/21	
MeFOSE	ND	2.0	ng/l	1	05/07/21	
Perfluorooctanoic acid (PFOA)	6.1	1.0	ng/l	1	05/07/21	
PFBA	4.9	1.0	ng/l	1	05/07/21	
PFBS	8.9	1.0	ng/l	1	05/07/21	
PFDA	ND	1.0	ng/l	1	05/07/21	
PFDoA	ND	1.0	ng/l	1	05/07/21	
PFDS	ND	1.0	ng/l	1	05/07/21	
PFHpA	ND	4.0	ng/l	1	05/07/21	
PFHpS	ND	1.0	ng/l	1	05/07/21	
PFHxA	17	2.0	ng/l	1	05/07/21	
PFHxS	7.3	1.0	ng/l	1	05/07/21	
PFNA	ND	1.0	ng/l	1	05/07/21	
PFNS	ND	1.0	ng/l	1	05/07/21	
PFOS	13	2.0	ng/l	1	05/07/21	
PFPeA	9.8	1.0	ng/l	1	05/07/21	
PFPeS	ND	1.0	ng/l	1	05/07/21	
PFTTrDA	ND	1.0	ng/l	1	05/07/21	
PFUnA	ND	1.0	ng/l	1	05/07/21	



Certificate of Analysis

FINAL REPORT

City of Springfield
218 E. Central
Springfield, MO 65802

Project Number: PFAS
Project Manager: Todd Cox

Reported:
06/24/2021 12:54

Sample Results

(Continued)

Sample: NW Effluent 001
1D29055-04 (Water) Sampled: 04/27/21 8:00 by Derek Gillis

Analyte	Result	MRL	Units	Dil	Analyzed	Qualifier
Per- and Polyfluorinated Alkyl Substances (PFAS) by Dir.Inj/LCMSMS						
Method: EPA 537M		Instr: LCMS03				
Batch ID: W1E0349	Preparation: _NONE (LC)	Prepared: 05/06/21 16:44		Analyst: jna		
6:2 FTS	ND	1000	ng/l	1	05/13/21	
8:2 FTS	ND	1000	ng/l	1	05/13/21	
EtFOSA	ND	1000	ng/l	1	05/13/21	
MeFOSA	ND	1000	ng/l	1	05/13/21	
PFBA	ND	1000	ng/l	1	05/13/21	
PFTeDA	ND	1000	ng/l	1	05/13/21	

Analyte	Result	MRL	Units	Dil	Analyzed	Qualifier
Per- and Polyfluorinated Alkyl Substances (PFAS) by SPE/LCMSMS						
Method: EPA 537M		Instr: LCMS06				
Batch ID: W1E0130	Preparation: EPA 537/SPE	Prepared: 05/04/21 09:53		Analyst: jna		
11CI-PF3OUdS	ND	2.0	ng/l	1	05/07/21	
4:2 FTS	ND	1.0	ng/l	1	05/07/21	
9CI-PF3ONS	ND	1.0	ng/l	1	05/07/21	
ADONA	ND	1.0	ng/l	1	05/07/21	
EtFOSAA	ND	2.0	ng/l	1	05/07/21	
EtFOSE	ND	1.0	ng/l	1	05/07/21	
FOSA	ND	1.0	ng/l	1	05/07/21	
HFPO-DA	ND	1.0	ng/l	1	05/07/21	
MeFOSAA	ND	1.0	ng/l	1	05/07/21	
MeFOSE	ND	2.0	ng/l	1	05/07/21	
Perfluorooctanoic acid (PFOA)	16	1.0	ng/l	1	05/07/21	
PFBS	11	1.0	ng/l	1	05/07/21	
PFDA	ND	1.0	ng/l	1	05/07/21	
PFDoA	ND	1.0	ng/l	1	05/07/21	
PFDS	ND	1.0	ng/l	1	05/07/21	
PFHpA	5.6	4.0	ng/l	1	05/07/21	
PFHpS	ND	1.0	ng/l	1	05/07/21	
PFHxA	44	2.0	ng/l	1	05/07/21	
PFHxS	9.2	1.0	ng/l	1	05/07/21	
PFNA	ND	1.0	ng/l	1	05/07/21	
PFNS	ND	1.0	ng/l	1	05/07/21	
PFOS	7.7	2.0	ng/l	1	05/07/21	
PFPeA	24	1.0	ng/l	1	05/07/21	
PFPeS	ND	1.0	ng/l	1	05/07/21	
PFTTrDA	ND	1.0	ng/l	1	05/07/21	
PFUnA	ND	1.0	ng/l	1	05/07/21	



Certificate of Analysis

FINAL REPORT

City of Springfield
218 E. Central
Springfield, MO 65802

Project Number: PFAS
Project Manager: Todd Cox

Reported:
06/24/2021 12:54

Sample Results

(Continued)

Sample: Springfield Landfill Leachate
1D29055-05 (Water)

Sampled: 04/27/21 7:40 by Derek Gillis

Analyte	Result	MRL	Units	Dil	Analyzed	Qualifier
Per- and Polyfluorinated Alkyl Substances (PFAS) by Dir.Inj/LCMSMS						
Method: EPA 537M		Instr: LCMS03				
Batch ID: W1E0349	Preparation: _NONE (LC)	Prepared: 05/06/21 16:44		Analyst: jna		
11CI-PF3OUdS	ND	1000	ng/l	1	05/13/21	
4:2 FTS	ND	1000	ng/l	1	05/13/21	
6:2 FTS	ND	1000	ng/l	1	05/13/21	
8:2 FTS	ND	1000	ng/l	1	05/13/21	
9CI-PF3ONS	ND	1000	ng/l	1	05/13/21	
ADONA	ND	1000	ng/l	1	05/13/21	
EtFOSA	ND	1000	ng/l	1	05/13/21	
EtFOSAA	ND	1000	ng/l	1	05/13/21	
EtFOSE	ND	1000	ng/l	1	05/13/21	
FOSA	ND	1000	ng/l	1	05/13/21	
HFPO-DA	ND	1000	ng/l	1	05/13/21	
MeFOSA	ND	1000	ng/l	1	05/13/21	
MeFOSAA	ND	1000	ng/l	1	05/13/21	
MeFOSE	ND	1000	ng/l	1	05/13/21	
Perfluorooctanoic acid (PFOA)	ND	1000	ng/l	1	05/13/21	
PFBA	ND	1000	ng/l	1	05/13/21	
PFBS	ND	1000	ng/l	1	05/13/21	
PFDA	ND	1000	ng/l	1	05/13/21	
PFDoA	ND	1000	ng/l	1	05/13/21	
PFDS	ND	1000	ng/l	1	05/13/21	
PFHpA	ND	1000	ng/l	1	05/13/21	
PFHpS	ND	1000	ng/l	1	05/13/21	
PFHxA	ND	1000	ng/l	1	05/13/21	
PFHxS	ND	1000	ng/l	1	05/13/21	
PFNA	ND	1000	ng/l	1	05/13/21	
PFNS	ND	1000	ng/l	1	05/13/21	
PFOS	ND	1000	ng/l	1	05/13/21	
PFPeA	ND	1000	ng/l	1	05/13/21	
PFPeS	ND	1000	ng/l	1	05/13/21	
PFTeDA	ND	1000	ng/l	1	05/13/21	
PFTTrDA	ND	1000	ng/l	1	05/13/21	
PFUnA	ND	1000	ng/l	1	05/13/21	



WECK LABORATORIES, INC.

Certificate of Analysis

FINAL REPORT

City of Springfield
218 E. Central
Springfield, MO 65802

Project Number: PFAS
Project Manager: Todd Cox

Reported:
06/24/2021 12:54

Sample Results

(Continued)

Sample: SW Primary Influent (Raw) Field Blank
1D29055-06 (Water)

Sampled: 04/27/21 6:40 by Derek Gillis

Analyte	Result	MRL	Units	Dil	Analyzed	Qualifier
Per- and Polyfluorinated Alkyl Substances (PFAS) by SPE/LCMSMS						
Method: EPA 537M			Instr: LCMS06			
Batch ID: W1E0130		Preparation: EPA 537/SPE		Prepared: 05/04/21 09:53		Analyst: jna
11CI-PF3OUdS	ND	2.0	ng/l	1	05/07/21	
4:2 FTS	ND	1.0	ng/l	1	05/07/21	
6:2 FTS	ND	1.0	ng/l	1	05/07/21	
8:2 FTS	ND	1.0	ng/l	1	05/07/21	
9CI-PF3ONS	ND	1.0	ng/l	1	05/07/21	
ADONA	ND	1.0	ng/l	1	05/07/21	
EtFOSA	ND	2.0	ng/l	1	05/07/21	
EtFOSAA	ND	2.0	ng/l	1	05/07/21	
EtFOSE	ND	1.0	ng/l	1	05/07/21	
FOSA	ND	1.0	ng/l	1	05/07/21	
HFPO-DA	ND	1.0	ng/l	1	05/07/21	
MeFOSA	ND	2.0	ng/l	1	05/07/21	
MeFOSAA	ND	1.0	ng/l	1	05/07/21	
MeFOSE	ND	2.0	ng/l	1	05/07/21	
Perfluorooctanoic acid (PFOA)	ND	1.0	ng/l	1	05/07/21	
PFBA	ND	1.0	ng/l	1	05/07/21	
PFBS	ND	1.0	ng/l	1	05/07/21	
PFDA	ND	1.0	ng/l	1	05/07/21	
PFDoA	ND	1.0	ng/l	1	05/07/21	
PFDS	ND	1.0	ng/l	1	05/07/21	
PFHpA	ND	4.0	ng/l	1	05/07/21	
PFHpS	ND	1.0	ng/l	1	05/07/21	
PFHxA	ND	2.0	ng/l	1	05/07/21	
PFHxS	ND	1.0	ng/l	1	05/07/21	
PFNA	ND	1.0	ng/l	1	05/07/21	
PFNS	ND	1.0	ng/l	1	05/07/21	
PFOS	ND	2.0	ng/l	1	05/07/21	
PFPeA	ND	1.0	ng/l	1	05/07/21	
PFPeS	ND	1.0	ng/l	1	05/07/21	
PFTeDA	ND	2.0	ng/l	1	05/07/21	
PFTTrDA	ND	1.0	ng/l	1	05/07/21	
PFUnA	ND	1.0	ng/l	1	05/07/21	



WECK LABORATORIES, INC.

Certificate of Analysis

FINAL REPORT

City of Springfield
218 E. Central
Springfield, MO 65802

Project Number: PFAS
Project Manager: Todd Cox

Reported:
06/24/2021 12:54

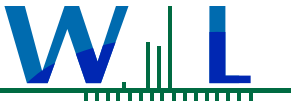
Sample Results

(Continued)

Sample: NW Primary Influent (Raw) Field Blank
1D29055-07 (Water)

Sampled: 04/27/21 8:10 by Derek Gillis

Analyte	Result	MRL	Units	Dil	Analyzed	Qualifier
Per- and Polyfluorinated Alkyl Substances (PFAS) by SPE/LCMSMS						
Method: EPA 537M			Instr: LCMS06			
Batch ID: W1E0130		Preparation: EPA 537/SPE		Prepared: 05/04/21 09:53		Analyst: jna
11CI-PF3OUdS	ND	2.0	ng/l	1	05/07/21	
4:2 FTS	ND	1.0	ng/l	1	05/07/21	
6:2 FTS	ND	1.0	ng/l	1	05/07/21	
8:2 FTS	ND	1.0	ng/l	1	05/07/21	
9CI-PF3ONS	ND	1.0	ng/l	1	05/07/21	
ADONA	ND	1.0	ng/l	1	05/07/21	
EtFOSA	ND	2.0	ng/l	1	05/07/21	I-05
EtFOSAA	ND	2.0	ng/l	1	05/07/21	
EtFOSE	ND	1.0	ng/l	1	05/07/21	I-05
FOSA	ND	1.0	ng/l	1	05/07/21	
HFPO-DA	ND	1.0	ng/l	1	05/07/21	
MeFOSA	ND	2.0	ng/l	1	05/07/21	I-05
MeFOSAA	ND	1.0	ng/l	1	05/07/21	
MeFOSE	ND	2.0	ng/l	1	05/07/21	I-05
Perfluorooctanoic acid (PFOA)	ND	1.0	ng/l	1	05/07/21	
PFBA	ND	1.0	ng/l	1	05/07/21	
PFBS	ND	1.0	ng/l	1	05/07/21	
PFDA	ND	1.0	ng/l	1	05/07/21	
PFDoA	ND	1.0	ng/l	1	05/07/21	
PFDS	ND	1.0	ng/l	1	05/07/21	
PFHpA	ND	4.0	ng/l	1	05/07/21	
PFHpS	ND	1.0	ng/l	1	05/07/21	
PFHxA	ND	2.0	ng/l	1	05/07/21	
PFHxS	ND	1.0	ng/l	1	05/07/21	
PFNA	ND	1.0	ng/l	1	05/07/21	
PFNS	ND	1.0	ng/l	1	05/07/21	
PFOS	ND	2.0	ng/l	1	05/07/21	
PFPeA	ND	1.0	ng/l	1	05/07/21	
PFPeS	ND	1.0	ng/l	1	05/07/21	
PFTeDA	ND	2.0	ng/l	1	05/07/21	I-05
PFTrDA	ND	1.0	ng/l	1	05/07/21	
PFUnA	ND	1.0	ng/l	1	05/07/21	



WECK LABORATORIES, INC.

Certificate of Analysis

FINAL REPORT

City of Springfield
218 E. Central
Springfield, MO 65802

Project Number: PFAS
Project Manager: Todd Cox

Reported:
06/24/2021 12:54

Sample Results

(Continued)

Sample: SW Effluent 001 Field Blank
1D29055-08 (Water)

Sampled: 04/27/21 6:30 by Derek Gillis

Analyte	Result	MRL	Units	Dil	Analyzed	Qualifier
Per- and Polyfluorinated Alkyl Substances (PFAS) by SPE/LCMSMS						
Method: EPA 537M		Instr: LCMS06				
Batch ID: W1E0130	Preparation: EPA 537/SPE	Prepared: 05/04/21 09:53			Analyst: jna	
11CI-PF3OUdS	ND	2.0	ng/l	1	05/07/21	
4:2 FTS	ND	1.0	ng/l	1	05/07/21	
6:2 FTS	ND	1.0	ng/l	1	05/07/21	
8:2 FTS	ND	1.0	ng/l	1	05/07/21	
9CI-PF3ONS	ND	1.0	ng/l	1	05/07/21	
ADONA	ND	1.0	ng/l	1	05/07/21	
EtFOSA	ND	2.0	ng/l	1	05/07/21	
EtFOSAA	ND	2.0	ng/l	1	05/07/21	
EtFOSE	ND	1.0	ng/l	1	05/07/21	
FOSA	ND	1.0	ng/l	1	05/07/21	
HFPO-DA	ND	1.0	ng/l	1	05/07/21	
MeFOSA	ND	2.0	ng/l	1	05/07/21	
MeFOSAA	ND	1.0	ng/l	1	05/07/21	
MeFOSE	ND	2.0	ng/l	1	05/07/21	
Perfluorooctanoic acid (PFOA)	ND	1.0	ng/l	1	05/07/21	
PFBA	ND	1.0	ng/l	1	05/07/21	
PFBS	ND	1.0	ng/l	1	05/07/21	
PFDA	ND	1.0	ng/l	1	05/07/21	
PFDoA	ND	1.0	ng/l	1	05/07/21	
PFDS	ND	1.0	ng/l	1	05/07/21	
PFHpA	ND	4.0	ng/l	1	05/07/21	
PFHpS	ND	1.0	ng/l	1	05/07/21	
PFHxA	ND	2.0	ng/l	1	05/07/21	
PFHxS	ND	1.0	ng/l	1	05/07/21	
PFNA	ND	1.0	ng/l	1	05/07/21	
PFNS	ND	1.0	ng/l	1	05/07/21	
PFOS	ND	2.0	ng/l	1	05/07/21	
PFPeA	ND	1.0	ng/l	1	05/07/21	
PFPeS	ND	1.0	ng/l	1	05/07/21	
PFTeDA	ND	2.0	ng/l	1	05/07/21	
PFTrDA	ND	1.0	ng/l	1	05/07/21	
PFUnA	ND	1.0	ng/l	1	05/07/21	



Certificate of Analysis

FINAL REPORT

City of Springfield
218 E. Central
Springfield, MO 65802

Project Number: PFAS
Project Manager: Todd Cox

Reported:
06/24/2021 12:54

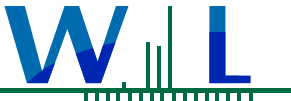
Sample Results

(Continued)

Sample: NW Effluent 001 Field Blank
1D29055-09 (Water)

Sampled: 04/27/21 8:00 by Derek Gillis

Analyte	Result	MRL	Units	Dil	Analyzed	Qualifier
Per- and Polyfluorinated Alkyl Substances (PFAS) by SPE/LCMSMS						
Method: EPA 537M		Instr: LCMS06				
Batch ID: W1E0130	Preparation: EPA 537/SPE	Prepared: 05/04/21 09:53			Analyst: jna	
11CI-PF3OUdS	ND	2.0	ng/l	1	05/07/21	
4:2 FTS	ND	1.0	ng/l	1	05/07/21	
6:2 FTS	ND	1.0	ng/l	1	05/07/21	
8:2 FTS	ND	1.0	ng/l	1	05/07/21	
9CI-PF3ONS	ND	1.0	ng/l	1	05/07/21	
ADONA	ND	1.0	ng/l	1	05/07/21	
EtFOSA	ND	2.0	ng/l	1	05/07/21	
EtFOSAA	ND	2.0	ng/l	1	05/07/21	
EtFOSE	ND	1.0	ng/l	1	05/07/21	
FOSA	ND	1.0	ng/l	1	05/07/21	
HFPO-DA	ND	1.0	ng/l	1	05/07/21	
MeFOSA	ND	2.0	ng/l	1	05/07/21	I-05
MeFOSAA	ND	1.0	ng/l	1	05/07/21	
MeFOSE	ND	2.0	ng/l	1	05/07/21	
Perfluorooctanoic acid (PFOA)	ND	1.0	ng/l	1	05/07/21	
PFBA	ND	1.0	ng/l	1	05/07/21	
PFBS	ND	1.0	ng/l	1	05/07/21	
PFDA	ND	1.0	ng/l	1	05/07/21	
PFDoA	ND	1.0	ng/l	1	05/07/21	
PFDS	ND	1.0	ng/l	1	05/07/21	
PFHpA	ND	4.0	ng/l	1	05/07/21	
PFHpS	ND	1.0	ng/l	1	05/07/21	
PFHxA	ND	2.0	ng/l	1	05/07/21	
PFHxS	ND	1.0	ng/l	1	05/07/21	
PFNA	ND	1.0	ng/l	1	05/07/21	
PFNS	ND	1.0	ng/l	1	05/07/21	
PFOS	ND	2.0	ng/l	1	05/07/21	
PFPeA	ND	1.0	ng/l	1	05/07/21	
PFPeS	ND	1.0	ng/l	1	05/07/21	
PFTeDA	ND	2.0	ng/l	1	05/07/21	
PFTrDA	ND	1.0	ng/l	1	05/07/21	
PFUnA	ND	1.0	ng/l	1	05/07/21	



WECK LABORATORIES, INC.

Certificate of Analysis

FINAL REPORT

City of Springfield
218 E. Central
Springfield, MO 65802

Project Number: PFAS
Project Manager: Todd Cox

Reported:
06/24/2021 12:54

Sample Results

(Continued)

Sample: Springfield Landfill Leachate Field Blank
1D29055-10 (Water)

Sampled: 04/27/21 7:40 by Derek Gillis

Analyte	Result	MRL	Units	Dil	Analyzed	Qualifier
Per- and Polyfluorinated Alkyl Substances (PFAS) by SPE/LCMSMS						
Method: EPA 537M		Instr: LCMS06				
Batch ID: W1E0130	Preparation: EPA 537/SPE	Prepared: 05/04/21 09:53			Analyst: jna	
11CI-PF3OUdS	ND	2.0	ng/l	1	05/07/21	
4:2 FTS	ND	1.0	ng/l	1	05/07/21	
6:2 FTS	ND	1.0	ng/l	1	05/07/21	
8:2 FTS	ND	1.0	ng/l	1	05/07/21	
9CI-PF3ONS	ND	1.0	ng/l	1	05/07/21	
ADONA	ND	1.0	ng/l	1	05/07/21	
EtFOSA	ND	2.0	ng/l	1	05/07/21	
EtFOSAA	ND	2.0	ng/l	1	05/07/21	
EtFOSE	ND	1.0	ng/l	1	05/07/21	
FOSA	ND	1.0	ng/l	1	05/07/21	
HFPO-DA	ND	1.0	ng/l	1	05/07/21	
MeFOSA	ND	2.0	ng/l	1	05/07/21	I-05
MeFOSAA	ND	1.0	ng/l	1	05/07/21	
MeFOSE	ND	2.0	ng/l	1	05/07/21	
Perfluorooctanoic acid (PFOA)	ND	1.0	ng/l	1	05/07/21	
PFBA	ND	1.0	ng/l	1	05/07/21	
PFBS	ND	1.0	ng/l	1	05/07/21	
PFDA	ND	1.0	ng/l	1	05/07/21	
PFDoA	ND	1.0	ng/l	1	05/07/21	
PFDS	ND	1.0	ng/l	1	05/07/21	
PFHpA	ND	4.0	ng/l	1	05/07/21	
PFHpS	ND	1.0	ng/l	1	05/07/21	
PFHxA	ND	2.0	ng/l	1	05/07/21	
PFHxS	ND	1.0	ng/l	1	05/07/21	
PFNA	ND	1.0	ng/l	1	05/07/21	
PFNS	ND	1.0	ng/l	1	05/07/21	
PFOS	ND	2.0	ng/l	1	05/07/21	
PFPeA	ND	1.0	ng/l	1	05/07/21	
PFPeS	ND	1.0	ng/l	1	05/07/21	
PFTeDA	ND	2.0	ng/l	1	05/07/21	
PFTTrDA	ND	1.0	ng/l	1	05/07/21	
PFUnA	ND	1.0	ng/l	1	05/07/21	



Certificate of Analysis

FINAL REPORT

City of Springfield
218 E. Central
Springfield, MO 65802

Project Number: PFAS
Project Manager: Todd Cox

Reported:
06/24/2021 12:54

Sample Results

(Continued)

Sample: SW Biosolids Field Sample (BTSF) Field Blank
1D29055-12 (Water)

Sampled: 04/27/21 6:15 by Derek Gillis

Analyte	Result	MRL	Units	Dil	Analyzed	Qualifier
Per- and Polyfluorinated Alkyl Substances (PFAS) by SPE/LCMSMS						
Method: EPA 537M			Instr: LCMS06			
Batch ID: W1E0130		Preparation: EPA 537/SPE		Prepared: 05/04/21 09:53		Analyst: jna
11CI-PF3OUdS	ND	2.0	ng/l	1	05/07/21	I-05
4:2 FTS	ND	1.0	ng/l	1	05/07/21	
6:2 FTS	ND	1.0	ng/l	1	05/07/21	
8:2 FTS	ND	1.0	ng/l	1	05/07/21	
9CI-PF3ONS	ND	1.0	ng/l	1	05/07/21	
ADONA	ND	1.0	ng/l	1	05/07/21	
EtFOSA	ND	2.0	ng/l	1	05/07/21	I-05
EtFOSAA	ND	2.0	ng/l	1	05/07/21	
EtFOSE	ND	1.0	ng/l	1	05/07/21	I-05
FOSA	ND	1.0	ng/l	1	05/07/21	
HFPO-DA	ND	1.0	ng/l	1	05/07/21	
MeFOSA	ND	2.0	ng/l	1	05/07/21	I-05
MeFOSAA	ND	1.0	ng/l	1	05/07/21	
MeFOSE	ND	2.0	ng/l	1	05/07/21	I-05
Perfluorooctanoic acid (PFOA)	ND	1.0	ng/l	1	05/07/21	
PFBA	ND	1.0	ng/l	1	05/07/21	
PFBS	ND	1.0	ng/l	1	05/07/21	
PFDA	ND	1.0	ng/l	1	05/07/21	
PFDoA	ND	1.0	ng/l	1	05/07/21	I-05
PFDS	ND	1.0	ng/l	1	05/07/21	
PFHpA	ND	4.0	ng/l	1	05/07/21	
PFHpS	ND	1.0	ng/l	1	05/07/21	
PFHxA	ND	2.0	ng/l	1	05/07/21	
PFHxS	ND	1.0	ng/l	1	05/07/21	
PFNA	ND	1.0	ng/l	1	05/07/21	
PFNS	ND	1.0	ng/l	1	05/07/21	
PFOS	ND	2.0	ng/l	1	05/07/21	
PFPeA	ND	1.0	ng/l	1	05/07/21	
PFPeS	ND	1.0	ng/l	1	05/07/21	
PFTeDA	ND	2.0	ng/l	1	05/07/21	I-05
PFTrDA	ND	1.0	ng/l	1	05/07/21	
PFUnA	ND	1.0	ng/l	1	05/07/21	

City of Springfield
218 E. Central
Springfield, MO 65802

Project Number: PFAS
Project Manager: Todd Cox

Reported:
06/24/2021 12:54

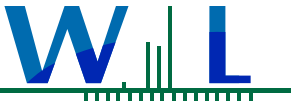
Sample Results APPL, Inc., Clovis, CA SUB_APPL

Sample: SW Biosolids Field Sample (BTSF) 1D29055-11 (Solid) Sampled: 04/27/21 6:15 by Derek Gillis

Analyte	Result	MDL	MRL	Units	Dil	Analyzed	Qualifier
160.3-MOD							
Method: Moisture	Batch ID: 263754		Prepared: 05/11/21 15:25		Analyst: WET		
Moisture	77.8	2.0	2.0	%	1	05/12/21	

B-15BS							
Method: PFAS IN BIO-SOLIDS	Batch ID: 264547		Prepared: 05/11/21 14:40		Analyst: DG		
PFBA	ND	2000.0	10000	ng/kg dry	1	05/17/21	U
PFPEA	ND	3000.0	10000	ng/kg dry	1	05/17/21	U
PFHXA	ND	4000.0	10000	ng/kg dry	1	05/17/21	U
PFHPA	ND	2000.0	10000	ng/kg dry	1	05/17/21	U
PFOA	ND	3000.0	10000	ng/kg dry	1	05/17/21	U
PFNA	ND	2000.0	10000	ng/kg dry	1	05/17/21	U
PFDA	3000	3000.0	10000	ng/kg dry	1	05/17/21	J
PFUDA	ND	2000.0	10000	ng/kg dry	1	05/17/21	U
PFDOA	ND	3000.0	10000	ng/kg dry	1	05/17/21	U
PFTRDA	ND	2000.0	10000	ng/kg dry	1	05/17/21	U
PFTEDA	ND	8000.0	20000	ng/kg dry	1	05/17/21	U
PFBS	ND	2000.0	10000	ng/kg dry	1	05/17/21	U
PFPEs	ND	4000.0	20000	ng/kg dry	1	05/17/21	U
PFHXS	ND	6000.0	20000	ng/kg dry	1	05/17/21	U
PFHPS	ND	6000.0	20000	ng/kg dry	1	05/17/21	U
PFOS	22000	4000.0	20000	ng/kg dry	1	05/17/21	
PFNS	ND	10000.0	50000	ng/kg dry	1	05/17/21	U
PFDS	ND	8000.0	20000	ng/kg dry	1	05/17/21	U
PFOSA	ND	2000.0	10000	ng/kg dry	1	05/17/21	U
N-MEFOSA	ND	8000.0	20000	ng/kg dry	1	05/17/21	U
N-ETFOSA	ND	8000.0	20000	ng/kg dry	1	05/17/21	U
N-MEFOSAA	8700	8000.0	20000	ng/kg dry	1	05/17/21	J
N-ETFOSAA	ND	8000.0	20000	ng/kg dry	1	05/17/21	U
N-MEFOSE	ND	8000.0	20000	ng/kg dry	1	05/17/21	U
N-ETFOSE	ND	8000.0	20000	ng/kg dry	1	05/17/21	U
FTS 4:2	ND	8000.0	20000	ng/kg dry	1	05/17/21	U
FTS 6:2	ND	8000.0	20000	ng/kg dry	1	05/17/21	U
FTS 8:2	ND	6000.0	20000	ng/kg dry	1	05/17/21	U
HFPO-DA	ND	20000.0	50000	ng/kg dry	1	05/17/21	U
ADONA	ND	20000.0	50000	ng/kg dry	1	05/17/21	U
9-CL-PF3ONS	ND	20000.0	50000	ng/kg dry	1	05/17/21	U
11-CL-PF3OUDS	ND	20000.0	50000	ng/kg dry	1	05/17/21	U

Surrogate(s)							
13C4-PFBA	41.4%		50-150			05/17/21	*
13C5-PFPEA	51.4%		50-150			05/17/21	



WECK LABORATORIES, INC.

Certificate of Analysis

FINAL REPORT

City of Springfield
218 E. Central
Springfield, MO 65802

Project Number: PFAS
Project Manager: Todd Cox

Reported:
06/24/2021 12:54

Sample Results APPL, Inc., Clovis, CA SUB_APPL

(Continued)

Sample: SW Biosolids Field Sample (BTSF)
1D29055-11 (Solid)

Sampled: 04/27/21 6:15 by Derek Gillis
(Continued)

Analyte	Result	MDL	MRL	Units	Dil	Analyzed	Qualifier
B-15BS (Continued)							
13C5-PFHXA	67.9%		50-150			05/17/21	
13C4-PFHXA	73.5%		50-150			05/17/21	
13C8-PFOA	73.3%		50-150			05/17/21	
13C9-PFNA	70.1%		50-150			05/17/21	
13C6-PFDA	72.6%		50-150			05/17/21	
13C7-PFUDA	54.0%		50-150			05/17/21	
13C2-PFDOA	31.9%		50-150			05/17/21	*
13C2-PFTEDA	42.9%		50-150			05/17/21	*
13C3-PFBS	64.9%		50-150			05/17/21	
13C3-PFHXS	93.8%		50-150			05/17/21	
13C8-PFOS	83.9%		50-150			05/17/21	
13C3-HFPO-DA	67.5%		50-150			05/17/21	
13C8-PFOSA	45.5%		50-150			05/17/21	*
D3-NMEFOSA	28.2%		50-150			05/17/21	*
D5-NETFOSA	24.2%		50-150			05/17/21	*
13C2-4:2FTS	128%		50-150			05/17/21	
13C2-6:2FTS	90.1%		50-150			05/17/21	
13C2-8:2FTS	109%		50-150			05/17/21	
D3-NMEFOSAA	54.9%		50-150			05/17/21	
D5-NETFOSAA	41.0%		50-150			05/17/21	*
D7-NMEFOSE	38.5%		50-150			05/17/21	*
D9-NETFOSSE	32.6%		50-150			05/17/21	*
13C2D4-6:2FTS	110%		50-150			05/17/21	

City of Springfield
218 E. Central
Springfield, MO 65802

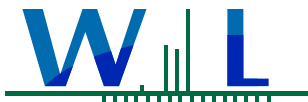
Project Number: PFAS
Project Manager: Todd Cox

Reported:
06/24/2021 12:54

Quality Control Results

B-15BS

Analyte	Result	MDL	MRL	Units	Spike Level	Source Result	%REC	Limits	RPD	RPD Limit	Qualifier
Batch: 264547 - PFAS IN BIO-SOLIDS											
Blank (BA32121-BLK-1)						Prepared: 05/11/21 Analyzed: 05/17/21					
11-CL-PF3OUDS	ND	20000.0	50000	ng/kg							U
9-CL-PF3ONS	ND	20000.0	50000	ng/kg							U
ADONA	ND	20000.0	50000	ng/kg							U
FTS 4:2	ND	8000.0	20000	ng/kg							U
FTS 6:2	ND	8000.0	20000	ng/kg							U
FTS 8:2	ND	6000.0	20000	ng/kg							U
HFPO-DA	ND	20000.0	50000	ng/kg							U
N-ETFOSA	ND	8000.0	20000	ng/kg							U
N-ETFOSAA	ND	8000.0	20000	ng/kg							U
N-ETFOSE	ND	8000.0	20000	ng/kg							U
N-MEFOSA	ND	8000.0	20000	ng/kg							U
N-MEFOSAA	ND	8000.0	20000	ng/kg							U
N-MEFOSE	ND	8000.0	20000	ng/kg							U
PFBA	ND	2000.0	10000	ng/kg							U
PFBS	ND	2000.0	10000	ng/kg							U
PFDA	ND	3000.0	10000	ng/kg							U
PFDOA	ND	3000.0	10000	ng/kg							U
PFDS	ND	8000.0	20000	ng/kg							U
PFHPA	ND	2000.0	10000	ng/kg							U
PFHPS	ND	6000.0	20000	ng/kg							U
PFHXA	ND	4000.0	10000	ng/kg							U
PFHXS	ND	6000.0	20000	ng/kg							U
PFNA	ND	2000.0	10000	ng/kg							U
PFNS	ND	10000.0	50000	ng/kg							U
PFOA	ND	3000.0	10000	ng/kg							U
PFOS	ND	4000.0	20000	ng/kg							U
PFOSA	ND	2000.0	10000	ng/kg							U
PFPEA	ND	3000.0	10000	ng/kg							U
PFPEs	ND	4000.0	20000	ng/kg							U
PFTEDA	ND	8000.0	20000	ng/kg							U
PFTRDA	ND	2000.0	10000	ng/kg							U
PFUDA	ND	2000.0	10000	ng/kg							U
<i>Surrogate(s)</i>											
13C2-4:2FTS	126			ng/kg	100		126	50-150			
13C2-6:2FTS	123			ng/kg	100		123	50-150			
13C2-8:2FTS	112			ng/kg	100		112	50-150			
13C2D4-6:2FTS	128.0			ng/kg	100		128	50-150			
13C2-PFDOA	133			ng/kg	100		133	50-150			
13C2-PFTEDA	133			ng/kg	100		133	50-150			



WECK LABORATORIES, INC.

Certificate of Analysis

FINAL REPORT

City of Springfield
218 E. Central
Springfield, MO 65802

Project Number: PFAS
Project Manager: Todd Cox

Reported:
06/24/2021 12:54

Quality Control Results

(Continued)

B-15BS (Continued)

Analyte	Result	MDL	MRL	Units	Spike Level	Source Result	%REC	Limits	RPD	RPD Limit	Qualifier
Batch: 264547 - PFAS IN BIO-SOLIDS (Continued)											
Blank (BA32121-BLK-1)											
						Prepared: 05/11/21 Analyzed: 05/17/21					
<i>Surrogate(s)</i>											
13C3-HFPO-DA	96.7			ng/kg	100		96.7	50-150			
13C3-PFBS	108			ng/kg	100		108	50-150			
13C3-PFHXS	115			ng/kg	100		115	50-150			
13C4-PFBA	76.7			ng/kg	100		76.7	50-150			
13C4-PFHFA	108			ng/kg	100		108	50-150			
13C5-PFHXA	100			ng/kg	100		100	50-150			
13C5-PFPEA	86.9			ng/kg	100		86.9	50-150			
13C6-PFDA	117			ng/kg	100		117	50-150			
13C7-PFUDA	122			ng/kg	100		122	50-150			
13C8-PFOA	120			ng/kg	100		120	50-150			
13C8-PFOS	117			ng/kg	100		117	50-150			
13C8-PFOSA	80.0			ng/kg	100		80.0	50-150			
13C9-PFNA	121			ng/kg	100		121	50-150			
D3-NMEFOSA	88.6			ng/kg	100		88.6	50-150			
D3-NMEFOSAA	113			ng/kg	100		113	50-150			
D5-NETFOSA	86.6			ng/kg	100		86.6	50-150			
D5-NETFOSAA	117			ng/kg	100		117	50-150			
D7-NMEFOSE	84.0			ng/kg	100		84.0	50-150			
D9-NETFOSE	88.9			ng/kg	100		88.9	50-150			
LCS (BA32121-LCS-2)											
						Prepared: 05/11/21 Analyzed: 05/17/21					
11-CL-PF3OUDS	7030	20000.0	50000	ng/kg	9430	0.0	74.5	73-132		30	
9-CL-PF3ONS	7160	20000.0	50000	ng/kg	9330	0.0	76.7	68-139		30	
ADONA	9350	20000.0	50000	ng/kg	9450	0.0	98.9	59-153		30	
FTS 4:2	8190	8000.0	20000	ng/kg	9350	0.0	87.6	63-143		30	
FTS 6:2	7880	8000.0	20000	ng/kg	9490	0.0	83.0	64-140		30	
FTS 8:2	8780	6000.0	20000	ng/kg	9580	0.0	91.6	67-138		30	
HFPO-DA	8760	20000.0	50000	ng/kg	10000	0.0	87.6	52-151		30	
N-ETFOSA	7850	8000.0	20000	ng/kg	10000	0.0	78.5	59-147		30	
N-ETFOSAA	8150	8000.0	20000	ng/kg	10000	0.0	81.5	61-135		30	
N-ETFOSE	3150	8000.0	20000	ng/kg	10000	0.0	31.5	27-163		30	
N-MEFOSA	7860	8000.0	20000	ng/kg	10000	0.0	78.6	35-157		30	
N-MEFOSAA	8630	8000.0	20000	ng/kg	10000	0.0	86.3	65-136		30	
N-MEFOSE	7840	8000.0	20000	ng/kg	10000	0.0	78.4	56-151		30	
PFBA	8150	2000.0	10000	ng/kg	10000	0.0	81.5	73-129		30	
PFBS	7300	2000.0	10000	ng/kg	8850	0.0	82.5	68-141		30	
PFDA	8980	3000.0	10000	ng/kg	10000	0.0	89.8	71-129		30	
PFDOA	7950	3000.0	10000	ng/kg	10000	0.0	79.5	72-134		30	
PFDS	8130	8000.0	20000	ng/kg	9630	0.0	84.4	53-142		30	



WECK LABORATORIES, INC.

Certificate of Analysis

FINAL REPORT

City of Springfield
218 E. Central
Springfield, MO 65802

Project Number: PFAS
Project Manager: Todd Cox

Reported:
06/24/2021 12:54

Quality Control Results

(Continued)

B-15BS (Continued)

Analyte	Result	MDL	MRL	Units	Spike Level	Source Result	%REC	Limits	RPD	RPD Limit	Qualifier
Batch: 264547 - PFAS IN BIO-SOLIDS (Continued)											
LCS (BA32121-LCS-2)						Prepared: 05/11/21 Analyzed: 05/17/21					
PFHPA	8080	2000.0	10000	ng/kg	10000	0.0	80.8	72-130		30	
PFHPS	7720	6000.0	20000	ng/kg	9510	0.0	81.1	69-134		30	
PFHXA	8340	4000.0	10000	ng/kg	10000	0.0	83.4	72-129		30	
PFHXS	7750	6000.0	20000	ng/kg	9110	0.0	85.1	68-131		30	
PFNA	8340	2000.0	10000	ng/kg	10000	0.0	83.4	69-130		30	
PFNS	7700	10000.0	50000	ng/kg	9600	0.0	80.2	69-127		30	
PFOA	8620	3000.0	10000	ng/kg	10000	0.0	86.2	71-133		30	
PFOS	7160	4000.0	20000	ng/kg	9270	0.0	77.2	65-140		30	
PFOSA	8280	2000.0	10000	ng/kg	10000	0.0	82.8	67-137		30	
PFPEA	8010	3000.0	10000	ng/kg	10000	0.0	80.1	72-129		30	
PFPEB	8220	4000.0	20000	ng/kg	9380	0.0	87.6	71-127		30	
PFTEDA	8100	8000.0	20000	ng/kg	10000	0.0	81.0	71-132		30	
PFTRDA	8300	2000.0	10000	ng/kg	10000	0.0	83.0	65-144		30	
PFUDA	8710	2000.0	10000	ng/kg	10000	0.0	87.1	69-133		30	
<i>Surrogate(s)</i>											
13C2-4:2FTS	116			ng/kg	100	0.0	116	50-150			
13C2-6:2FTS	119			ng/kg	100	0.0	119	50-150			
13C2-8:2FTS	116			ng/kg	100	0.0	116	50-150			
13C2D4-6:2FTS	122			ng/kg	100	0.0	122	50-150			
13C2-PFDOA	137			ng/kg	100	0.0	137	50-150			
13C2-PFTEDA	133			ng/kg	100	0.0	133	50-150			
13C3-HFPO-DA	99.6			ng/kg	100	0.0	99.6	50-150			
13C3-PFBS	105			ng/kg	100	0.0	105	50-150			
13C3-PFHXS	112			ng/kg	100	0.0	112	50-150			
13C4-PFBA	80.8			ng/kg	100	0.0	80.8	50-150			
13C4-PFHPA	109			ng/kg	100	0.0	109	50-150			
13C5-PFHXA	100			ng/kg	100	0.0	100	50-150			
13C5-PFPEA	92.0			ng/kg	100	0.0	92.0	50-150			
13C6-PFDA	115			ng/kg	100	0.0	115	50-150			
13C7-PFUDA	119			ng/kg	100	0.0	119	50-150			
13C8-PFOA	121			ng/kg	100	0.0	121	50-150			
13C8-PFOS	118			ng/kg	100	0.0	118	50-150			
13C8-PFOSA	79.7			ng/kg	100	0.0	79.7	50-150			
13C9-PFNA	121			ng/kg	100	0.0	121	50-150			
D3-NMEFOSA	88.3			ng/kg	100	0.0	88.3	50-150			
D3-NMEFOSAA	114			ng/kg	100	0.0	114	50-150			
D5-NETFOSA	87.0			ng/kg	100	0.0	87.0	50-150			
D5-NETFOSAA	108			ng/kg	100	0.0	108	50-150			
D7-NMEFOSE	84.2			ng/kg	100	0.0	84.2	50-150			

City of Springfield
218 E. Central
Springfield, MO 65802

Project Number: PFAS
Project Manager: Todd Cox

Reported:
06/24/2021 12:54

Quality Control Results

(Continued)

B-15BS (Continued)

Analyte	Result	MDL	MRL	Units	Spike Level	Source Result	%REC	Limits	RPD	RPD Limit	Qualifier
Batch: 264547 - PFAS IN BIO-SOLIDS (Continued)											
LCS (BA32121-LCS-2)						Prepared: 05/11/21 Analyzed: 05/17/21					
<i>Surrogate(s)</i>											
D9-NETFOSE	88.0			ng/kg	100	0.0	88.0	50-150			
LCS Dup (BA32121-LCSD-1)						Prepared: 05/11/21 Analyzed: 05/17/21					
11-CL-PF3OUDS	7490	20000.0	50000	ng/kg	9430	0.0	79.4	73-132	6.3	30	
9-CL-PF3ONS	7950	20000.0	50000	ng/kg	9330	0.0	85.2	68-139	10.5	30	
ADONA	10000	20000.0	50000	ng/kg	9450	0.0	106	59-153	6.7	30	
FTS 4:2	8750	8000.0	20000	ng/kg	9350	0.0	93.6	63-143	6.6	30	
FTS 6:2	8120	8000.0	20000	ng/kg	9490	0.0	85.6	64-140	3.0	30	
FTS 8:2	9230	6000.0	20000	ng/kg	9580	0.0	96.3	67-138	5.0	30	
HFPO-DA	9250	20000.0	50000	ng/kg	10000	0.0	92.5	52-151	5.4	30	
N-ETFOSA	8190	8000.0	20000	ng/kg	10000	0.0	81.9	59-147	4.2	30	
N-ETFOSAA	8380	8000.0	20000	ng/kg	10000	0.0	83.8	61-135	2.8	30	
N-ETFOSE	3590	8000.0	20000	ng/kg	10000	0.0	35.9	27-163	13.1	30	
N-MEFOSA	8110	8000.0	20000	ng/kg	10000	0.0	81.1	35-157	3.1	30	
N-MEFOSAA	8670	8000.0	20000	ng/kg	10000	0.0	86.7	65-136	0.46	30	
N-MEFOSE	8170	8000.0	20000	ng/kg	10000	0.0	81.7	56-151	4.1	30	
PFBA	8440	2000.0	10000	ng/kg	10000	0.0	84.4	73-129	3.5	30	
PFBS	7570	2000.0	10000	ng/kg	8850	0.0	85.6	68-141	3.6	30	
PFDA	9050	3000.0	10000	ng/kg	10000	0.0	90.5	71-129	0.78	30	
PFDOA	8760	3000.0	10000	ng/kg	10000	0.0	87.6	72-134	9.7	30	
PFDS	8640	8000.0	20000	ng/kg	9630	0.0	89.7	53-142	6.1	30	
PFHPA	8650	2000.0	10000	ng/kg	10000	0.0	86.5	72-130	6.8	30	
PFHPS	8040	6000.0	20000	ng/kg	9510	0.0	84.5	69-134	4.1	30	
PFHXA	8480	4000.0	10000	ng/kg	10000	0.0	84.8	72-129	1.7	30	
PFHXS	8020	6000.0	20000	ng/kg	9110	0.0	88.0	68-131	3.4	30	
PFNA	8560	2000.0	10000	ng/kg	10000	0.0	85.6	69-130	2.6	30	
PFNS	8630	10000.0	50000	ng/kg	9600	0.0	89.9	69-127	11.4	30	
PFOA	9020	3000.0	10000	ng/kg	10000	0.0	90.2	71-133	4.5	30	
PFOS	7710	4000.0	20000	ng/kg	9270	0.0	83.1	65-140	7.4	30	
PFOSA	8630	2000.0	10000	ng/kg	10000	0.0	86.3	67-137	4.1	30	
PFPEA	8790	3000.0	10000	ng/kg	10000	0.0	87.9	72-129	9.3	30	
PFPEs	8490	4000.0	20000	ng/kg	9380	0.0	90.5	71-127	3.2	30	
PFTEDA	8710	8000.0	20000	ng/kg	10000	0.0	87.1	71-132	7.3	30	
PFTRDA	9130	2000.0	10000	ng/kg	10000	0.0	91.3	65-144	9.5	30	
PFUDA	8940	2000.0	10000	ng/kg	10000	0.0	89.4	69-133	2.6	30	
<i>Surrogate(s)</i>											
13C2-4:2FTS	108			ng/kg	100	0.0	108	50-150			
13C2-6:2FTS	110			ng/kg	100	0.0	110	50-150			
13C2-8:2FTS	110			ng/kg	100	0.0	110	50-150			



WECK LABORATORIES, INC.

City of Springfield
 218 E. Central
 Springfield, MO 65802

Certificate of Analysis

FINAL REPORT

Project Number: PFAS

Reported:

06/24/2021 12:54

Project Manager: Todd Cox

Quality Control Results

(Continued)

B-15BS (Continued)

Analyte	Result	MDL	MRL	Units	Spike Level	Source Result	%REC	Limits	RPD	RPD Limit	Qualifier
---------	--------	-----	-----	-------	-------------	---------------	------	--------	-----	-----------	-----------

Batch: 264547 - PFAS IN BIO-SOLIDS (Continued)

LCS Dup (BA32121-LCSD-1)

Prepared: 05/11/21 Analyzed: 05/17/21

Surrogate(s)	Result	MDL	MRL	Units	Spike Level	Source Result	%REC	Limits	RPD	RPD Limit	Qualifier
13C2D4-6:2FTS	118			ng/kg	100	0.0	118	50-150			
13C2-PFDOA	131			ng/kg	100	0.0	131	50-150			
13C2-PFTEDA	129			ng/kg	100	0.0	129	50-150			
13C3-HFPO-DA	88.1			ng/kg	100	0.0	88.1	50-150			
13C3-PFBS	103			ng/kg	100	0.0	103	50-150			
13C3-PFHXS	108			ng/kg	100	0.0	108	50-150			
13C4-PFBA	72.5			ng/kg	100	0.0	72.5	50-150			
13C4-PFHFA	98.6			ng/kg	100	0.0	98.6	50-150			
13C5-PFHXA	93.5			ng/kg	100	0.0	93.5	50-150			
13C5-PFPEA	78.4			ng/kg	100	0.0	78.4	50-150			
13C6-PFDA	117			ng/kg	100	0.0	117	50-150			
13C7-PFUDA	119			ng/kg	100	0.0	119	50-150			
13C8-PFOA	110			ng/kg	100	0.0	110	50-150			
13C8-PFOS	111			ng/kg	100	0.0	111	50-150			
13C8-PFOSA	75.7			ng/kg	100	0.0	75.7	50-150			
13C9-PFNA	118			ng/kg	100	0.0	118	50-150			
D3-NMEFOSA	83.2			ng/kg	100	0.0	83.2	50-150			
D3-NMEFOSAA	114			ng/kg	100	0.0	114	50-150			
D5-NETFOSA	81.5			ng/kg	100	0.0	81.5	50-150			
D5-NETFOSAA	51.5			ng/kg	100	0.0	51.5	50-150			
D7-NMEFOSE	80.6			ng/kg	100	0.0	80.6	50-150			
D9-NETFOSSE	84.6			ng/kg	100	0.0	84.6	50-150			



Certificate of Analysis

FINAL REPORT

City of Springfield
218 E. Central
Springfield, MO 65802

Project Number: PFAS
Project Manager: Todd Cox

Reported:
06/24/2021 12:54

Quality Control Results

(Continued)

Per- and Polyfluorinated Alkyl Substances (PFAS) by Dir.Inj/LCMSMS

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	Limits	RPD	RPD Limit	Qualifier
Batch: W1E0349 - EPA 537M										
Blank (W1E0349-BLK1)				Prepared: 05/06/21 Analyzed: 05/12/21						
11CI-PF3OUdS	ND	1000	ng/l							
4:2 FTS	ND	1000	ng/l							
6:2 FTS	ND	1000	ng/l							
8:2 FTS	ND	1000	ng/l							
9CI-PF3ONS	ND	1000	ng/l							
ADONA	ND	1000	ng/l							
EtFOSA	ND	1000	ng/l							
EtFOSAA	ND	1000	ng/l							
EtFOSE	ND	1000	ng/l							
FOSA	ND	1000	ng/l							
HFPO-DA	ND	1000	ng/l							
MeFOSA	ND	1000	ng/l							
MeFOSAA	ND	1000	ng/l							
MeFOSE	ND	1000	ng/l							
Perfluorooctanoic acid (PFOA)	ND	1000	ng/l							
PFBA	ND	1000	ng/l							
PFBS	ND	1000	ng/l							
PFDA	ND	1000	ng/l							
PFDoA	ND	1000	ng/l							
PFDS	ND	1000	ng/l							
PFHpA	ND	1000	ng/l							
PFHpS	ND	1000	ng/l							
PFHxA	ND	1000	ng/l							
PFHxS	ND	1000	ng/l							
PFNA	ND	1000	ng/l							
PFNS	ND	1000	ng/l							
PFOS	ND	1000	ng/l							
PFPeA	ND	1000	ng/l							
PFPeS	ND	1000	ng/l							
PFTeDA	ND	1000	ng/l							
PFTrDA	ND	1000	ng/l							
PFOUnA	ND	1000	ng/l							
LCS (W1E0349-BS1)				Prepared: 05/06/21 Analyzed: 05/12/21						
11CI-PF3OUdS	2600	1000	ng/l	2500		104	70-130			
4:2 FTS	2780	1000	ng/l	2500		111	63-143			
6:2 FTS	2750	1000	ng/l	2500		110	64-140			
8:2 FTS	2230	1000	ng/l	2500		89	67-138			
9CI-PF3ONS	2700	1000	ng/l	2500		108	70-130			
ADONA	2470	1000	ng/l	2500		99	70-130			



WECK LABORATORIES, INC.

Certificate of Analysis

FINAL REPORT

City of Springfield
218 E. Central
Springfield, MO 65802

Project Number: PFAS
Project Manager: Todd Cox

Reported:
06/24/2021 12:54

Quality Control Results

(Continued)

Per- and Polyfluorinated Alkyl Substances (PFAS) by Dir.Inj/LCMSMS (Continued)

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC Limits	RPD	RPD Limit	Qualifier
Batch: W1E0349 - EPA 537M (Continued)									
LCS (W1E0349-BS1)									
				Prepared: 05/06/21 Analyzed: 05/12/21					
EtFOSA	2290	1000	ng/l	2500	92	70-130			
EtFOSAA	2590	1000	ng/l	2500	103	61-135			
EtFOSE	2710	1000	ng/l	2500	108	70-130			
FOSA	2510	1000	ng/l	2500	100	67-137			
HFPO-DA	2540	1000	ng/l	2500	102	70-130			
MeFOSA	2470	1000	ng/l	2500	99	68-141			
MeFOSAA	2390	1000	ng/l	2500	96	65-136			
MeFOSE	2610	1000	ng/l	2500	104	70-130			
Perfluorooctanoic acid (PFOA)	2490	1000	ng/l	2500	99	71-133			
PFBA	2500	1000	ng/l	2500	100	73-129			
PFBS	2720	1000	ng/l	2500	109	72-130			
PFDA	2490	1000	ng/l	2500	99	71-129			
PFDoA	2220	1000	ng/l	2500	89	72-134			
PFDS	2160	1000	ng/l	2500	87	53-142			
PFHpA	2530	1000	ng/l	2500	101	72-130			
PFHpS	2560	1000	ng/l	2500	102	69-134			
PFHxA	2510	1000	ng/l	2500	100	72-129			
PFHxS	2450	1000	ng/l	2500	98	68-131			
PFNA	2410	1000	ng/l	2500	96	69-130			
PFNS	2440	1000	ng/l	2500	98	69-127			
PFOS	2570	1000	ng/l	2500	103	65-140			
PFPeA	2530	1000	ng/l	2500	101	72-129			
PFPeS	2530	1000	ng/l	2500	101	71-127			
PFTeDA	2510	1000	ng/l	2500	100	71-132			
PFTTrDA	1920	1000	ng/l	2500	77	65-144			
PFUnA	2040	1000	ng/l	2500	82	69-133			
LCS Dup (W1E0349-BSD1)									
				Prepared: 05/06/21 Analyzed: 05/12/21					
11Cl-PF3OUdS	2320	1000	ng/l	2500	93	70-130	12	30	
4:2 FTS	2710	1000	ng/l	2500	109	63-143	2	30	
6:2 FTS	2890	1000	ng/l	2500	116	64-140	5	30	
8:2 FTS	2450	1000	ng/l	2500	98	67-138	9	30	
9Cl-PF3ONS	2770	1000	ng/l	2500	111	70-130	3	30	
ADONA	2530	1000	ng/l	2500	101	70-130	2	30	
EtFOSA	1820	1000	ng/l	2500	73	70-130	23	30	
EtFOSAA	2310	1000	ng/l	2500	92	61-135	11	30	
EtFOSE	2450	1000	ng/l	2500	98	70-130	10	30	
FOSA	2390	1000	ng/l	2500	96	67-137	5	30	
HFPO-DA	2240	1000	ng/l	2500	90	70-130	12	30	
MeFOSA	2620	1000	ng/l	2500	105	68-141	6	30	



Certificate of Analysis

FINAL REPORT

City of Springfield
218 E. Central
Springfield, MO 65802

Project Number: PFAS

Reported:

06/24/2021 12:54

Project Manager: Todd Cox

Quality Control Results

(Continued)

Per- and Polyfluorinated Alkyl Substances (PFAS) by Dir.Inj/LCMSMS (Continued)

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	Limits	RPD	Limit	Qualifier
Batch: W1E0349 - EPA 537M (Continued)										
LCS Dup (W1E0349-BSD1)										
				Prepared: 05/06/21 Analyzed: 05/12/21						
MeFOSAA	2270	1000	ng/l	2500	91	65-136	5	30		
MeFOSE	2470	1000	ng/l	2500	99	70-130	6	30		
Perfluorooctanoic acid (PFOA)	2630	1000	ng/l	2500	105	71-133	6	30		
PFBA	2400	1000	ng/l	2500	96	73-129	4	30		
PFBS	2650	1000	ng/l	2500	106	72-130	3	30		
PFDA	2560	1000	ng/l	2500	103	71-129	3	30		
PFDoA	1930	1000	ng/l	2500	77	72-134	14	30		
PFDS	2350	1000	ng/l	2500	94	53-142	8	30		
PFHpA	2500	1000	ng/l	2500	100	72-130	0.8	30		
PFHpS	2660	1000	ng/l	2500	107	69-134	4	30		
PFHxA	2390	1000	ng/l	2500	96	72-129	5	30		
PFHxS	2480	1000	ng/l	2500	99	68-131	1	30		
PFNA	2360	1000	ng/l	2500	94	69-130	2	30		
PFNS	2480	1000	ng/l	2500	99	69-127	2	30		
PFOS	2480	1000	ng/l	2500	99	65-140	4	30		
PFPeA	2470	1000	ng/l	2500	99	72-129	2	30		
PFPeS	2540	1000	ng/l	2500	102	71-127	0.6	30		
PFTeDA	2480	1000	ng/l	2500	99	71-132	1	30		
PFTrDA	1850	1000	ng/l	2500	74	65-144	4	30		
PFUnA	2340	1000	ng/l	2500	94	69-133	14	30		



WECK LABORATORIES, INC.

Certificate of Analysis

FINAL REPORT

City of Springfield
218 E. Central
Springfield, MO 65802

Project Number: PFAS

Reported:

06/24/2021 12:54

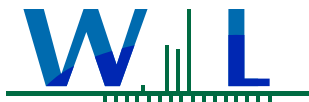
Project Manager: Todd Cox

Quality Control Results

(Continued)

Per- and Polyfluorinated Alkyl Substances (PFAS) by SPE/LCMSMS

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	Limits	RPD	RPD Limit	Qualifier
Batch: W1E0130 - EPA 537M										
Blank (W1E0130-BLK1)				Prepared: 05/04/21 Analyzed: 05/07/21						
11CI-PF3OUdS	ND	2.0	ng/l							
4:2 FTS	ND	1.0	ng/l							
6:2 FTS	ND	1.0	ng/l							
8:2 FTS	ND	1.0	ng/l							
9CI-PF3ONS	ND	1.0	ng/l							
ADONA	ND	1.0	ng/l							
EtFOSA	ND	2.0	ng/l							
EtFOSAA	ND	2.0	ng/l							
EtFOSE	ND	1.0	ng/l							
FOSA	ND	1.0	ng/l							
HFPO-DA	ND	1.0	ng/l							
MeFOSA	ND	2.0	ng/l							
MeFOSAA	ND	1.0	ng/l							
MeFOSE	ND	2.0	ng/l							
Perfluorooctanoic acid (PFOA)	ND	1.0	ng/l							
PFBA	ND	1.0	ng/l							
PFBS	ND	1.0	ng/l							
PFDA	ND	1.0	ng/l							
PFDoA	ND	1.0	ng/l							
PFDS	ND	1.0	ng/l							
PFHpA	ND	4.0	ng/l							
PFHpS	ND	1.0	ng/l							
PFHxA	ND	2.0	ng/l							
PFHxS	ND	1.0	ng/l							
PFNA	ND	1.0	ng/l							
PFNS	ND	1.0	ng/l							
PFOS	ND	2.0	ng/l							
PFPeA	ND	1.0	ng/l							
PFPeS	ND	1.0	ng/l							
PFTeDA	ND	2.0	ng/l							
PFTrDA	ND	1.0	ng/l							
PFOUnA	ND	1.0	ng/l							
LCS (W1E0130-BS1)				Prepared: 05/04/21 Analyzed: 05/07/21						
11CI-PF3OUdS	5.43	2.0	ng/l	5.00	109	70-130				
4:2 FTS	6.07	1.0	ng/l	5.00	121	63-143				
6:2 FTS	5.96	1.0	ng/l	5.00	119	64-140				
8:2 FTS	5.63	1.0	ng/l	5.00	113	67-138				
9CI-PF3ONS	5.52	1.0	ng/l	5.00	110	70-130				
ADONA	5.37	1.0	ng/l	5.00	107	70-130				



WECK LABORATORIES, INC.

Certificate of Analysis

FINAL REPORT

City of Springfield
218 E. Central
Springfield, MO 65802

Project Number: PFAS
Project Manager: Todd Cox

Reported:
06/24/2021 12:54

Quality Control Results

(Continued)

Per- and Polyfluorinated Alkyl Substances (PFAS) by SPE/LCMSMS (Continued)

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	Limits	RPD	RPD Limit	Qualifier
Batch: W1E0130 - EPA 537M (Continued)										
LCS (W1E0130-BS1)										
				Prepared: 05/04/21 Analyzed: 05/07/21						
EtFOSA	4.61	2.0	ng/l	5.00		92	70-130			
EtFOSAA	4.99	2.0	ng/l	5.00		100	61-135			
EtFOSE	5.46	1.0	ng/l	5.00		109	70-130			
FOSA	5.54	1.0	ng/l	5.00		111	67-137			
HFPO-DA	5.74	1.0	ng/l	5.00		115	70-130			
MeFOSA	5.47	2.0	ng/l	5.00		109	68-141			
MeFOSAA	6.02	1.0	ng/l	5.00		120	65-136			
MeFOSE	5.42	2.0	ng/l	5.00		108	70-130			
Perfluorooctanoic acid (PFOA)	5.71	1.0	ng/l	5.00		114	71-133			
PFBA	5.49	1.0	ng/l	5.00		110	73-129			
PFBS	6.09	1.0	ng/l	5.00		122	72-130			
PFDA	5.46	1.0	ng/l	5.00		109	71-129			
PFDoA	5.69	1.0	ng/l	5.00		114	72-134			
PFDS	5.27	1.0	ng/l	5.00		105	53-142			
PFHpA	5.58	4.0	ng/l	5.00		112	72-130			
PFHpS	6.05	1.0	ng/l	5.00		121	69-134			
PFHxA	5.46	2.0	ng/l	5.00		109	72-129			
PFHxS	5.83	1.0	ng/l	5.00		117	68-131			
PFNA	5.43	1.0	ng/l	5.00		109	69-130			
PFNS	5.04	1.0	ng/l	5.00		101	69-127			
PFOS	5.66	2.0	ng/l	5.00		113	65-140			
PFPeA	5.47	1.0	ng/l	5.00		109	72-129			
PFPeS	5.85	1.0	ng/l	5.00		117	71-127			
PFTeDA	5.52	2.0	ng/l	5.00		110	71-132			
PFTTrDA	5.72	1.0	ng/l	5.00		114	65-144			
PFUnA	5.55	1.0	ng/l	5.00		111	69-133			
LCS Dup (W1E0130-BSD1)										
				Prepared: 05/04/21 Analyzed: 05/07/21						
11Cl-PF3OUdS	5.52	2.0	ng/l	5.00		110	70-130	2	30	
4:2 FTS	5.75	1.0	ng/l	5.00		115	63-143	5	30	
6:2 FTS	6.01	1.0	ng/l	5.00		120	64-140	0.9	30	
8:2 FTS	5.54	1.0	ng/l	5.00		111	67-138	2	30	
9Cl-PF3ONS	5.44	1.0	ng/l	5.00		109	70-130	1	30	
ADONA	5.62	1.0	ng/l	5.00		112	70-130	5	30	
EtFOSA	5.77	2.0	ng/l	5.00		115	70-130	22	30	
EtFOSAA	5.36	2.0	ng/l	5.00		107	61-135	7	30	
EtFOSE	5.04	1.0	ng/l	5.00		101	70-130	8	30	
FOSA	5.60	1.0	ng/l	5.00		112	67-137	1	30	
HFPO-DA	5.76	1.0	ng/l	5.00		115	70-130	0.4	30	
MeFOSA	4.91	2.0	ng/l	5.00		98	68-141	11	30	



WECK LABORATORIES, INC.

Certificate of Analysis

FINAL REPORT

City of Springfield
218 E. Central
Springfield, MO 65802

Project Number: PFAS

Reported:

06/24/2021 12:54

Project Manager: Todd Cox

Quality Control Results

(Continued)

Per- and Polyfluorinated Alkyl Substances (PFAS) by SPE/LCMSMS (Continued)

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	Limits	RPD	Limit	Qualifier
Batch: W1E0130 - EPA 537M (Continued)										
LCS Dup (W1E0130-BSD1)										
Prepared: 05/04/21 Analyzed: 05/07/21										
MeFOSAA	5.93	1.0	ng/l	5.00	119	65-136	1	30		
MeFOSE	5.31	2.0	ng/l	5.00	106	70-130	2	30		
Perfluorooctanoic acid (PFOA)	5.76	1.0	ng/l	5.00	115	71-133	0.9	30		
PFBA	5.56	1.0	ng/l	5.00	111	73-129	1	30		
PFBS	5.87	1.0	ng/l	5.00	117	72-130	4	30		
PFDA	5.39	1.0	ng/l	5.00	108	71-129	1	30		
PFDoA	5.96	1.0	ng/l	5.00	119	72-134	5	30		
PFDS	5.07	1.0	ng/l	5.00	101	53-142	4	30		
PFHpA	5.63	4.0	ng/l	5.00	113	72-130	0.9	30		
PFHpS	5.96	1.0	ng/l	5.00	119	69-134	1	30		
PFHxA	5.52	2.0	ng/l	5.00	110	72-129	1	30		
PFHxS	6.10	1.0	ng/l	5.00	122	68-131	4	30		
PFNA	5.52	1.0	ng/l	5.00	110	69-130	2	30		
PFNS	5.39	1.0	ng/l	5.00	108	69-127	7	30		
PFOS	5.82	2.0	ng/l	5.00	116	65-140	3	30		
PFPeA	5.49	1.0	ng/l	5.00	110	72-129	0.4	30		
PFPeS	5.99	1.0	ng/l	5.00	120	71-127	2	30		
PFTeDA	5.66	2.0	ng/l	5.00	113	71-132	2	30		
PFTrDA	5.82	1.0	ng/l	5.00	116	65-144	2	30		
PFUnA	5.29	1.0	ng/l	5.00	106	69-133	5	30		



WECK LABORATORIES, INC.

City of Springfield
218 E. Central
Springfield, MO 65802

Project Number: PFAS
Project Manager: Todd Cox

Certificate of Analysis

FINAL REPORT

Reported:
06/24/2021 12:54



Notes and Definitions

Item	Definition
*	Recovery or RPD outside control limits
I-05	Low internal standard recovery possibly due to matrix interference. The result is suspect.
J	Estimated value
U	Not detected
%REC	Percent Recovery
Dil	Dilution
dry	Sample results reported on a dry weight basis
MDL	Method Detection Limit
MRL	The minimum levels, concentrations, or quantities of a target variable (e.g., target analyte) that can be reported with a specified degree of confidence. The MRL is also known as Limit of Quantitation (LOQ)
ND	NOT DETECTED at or above the Method Reporting Limit (MRL). If Method Detection Limit (MDL) is reported, then ND means not detected at or above the MDL.
RPD	Relative Percent Difference

Any remaining sample(s) will be disposed of one month from the final report date unless other arrangements are made in advance.

All results are expressed on wet weight basis unless otherwise specified.

All samples collected by Weck Laboratories have been sampled in accordance to laboratory SOP Number MIS002.