



WECK LABORATORIES, INC.

# Certificate of Analysis

FINAL REPORT

Work Orders: 0G31007

Report Date: 8/27/2020

Project: EPA 537

Received Date: 8/3/2020

Turnaround Time: Normal

Phones: (562) 220-2112

Fax: (562) 220-2144

Attn: Norm Mamea

P.O. #:

Client: City of Paramount  
15300 Downey Ave.  
Paramount, CA 90723

Billing Code:

Dear Norm Mamea,

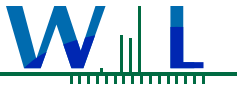
Enclosed are the results of analyses for samples received 8/03/20 with the Chain-of-Custody document. The samples were received in good condition, at 3.4 °C and on ice. All analyses met the method criteria except as noted in the case narrative or in the report with data qualifiers.

## Sample Results

Sample: Well 14  
0G31007-01 (Water)

Sampled: 08/03/20 10:08 by Carlos Navarro (wecklabs)

Analyte	Result	MRL	Units	Dil	Analyzed	Qualifier
<b>Method:</b> EPA 537.1		<b>Instr:</b> LCMS06				
<b>Batch ID:</b> W0H0893	<b>Preparation:</b> EPA 537/SPE	<b>Prepared:</b> 08/17/20 09:48				<b>Analyst:</b> jna
11CI-PF3OUdS	ND	1.8	ng/l	1	08/19/20	
9CI-PF3ONS	ND	1.8	ng/l	1	08/19/20	
ADONA	ND	1.8	ng/l	1	08/19/20	
EiFOSAA	ND	1.8	ng/l	1	08/19/20	
HFPO-DA	ND	1.8	ng/l	1	08/19/20	
MeFOSAA	ND	1.8	ng/l	1	08/19/20	
PFBS	ND	1.8	ng/l	1	08/19/20	
PFDA	ND	1.8	ng/l	1	08/19/20	
PFDoA	ND	1.8	ng/l	1	08/19/20	
PFHpA	ND	1.8	ng/l	1	08/19/20	
PFHxA	ND	1.8	ng/l	1	08/19/20	
PFHxS	ND	1.8	ng/l	1	08/19/20	
PFNA	ND	1.8	ng/l	1	08/19/20	
PFOA	ND	1.8	ng/l	1	08/19/20	
<b>PFOS</b>	<b>6.0</b>	1.8	ng/l	1	08/19/20	
PFTeDA	ND	1.8	ng/l	1	08/19/20	
PFTTrDA	ND	1.8	ng/l	1	08/19/20	
PFUnA	ND	1.8	ng/l	1	08/19/20	
<i>Surrogate(s)</i>						
13C2-PFDA	57%	70-130	Conc: 20.3		08/19/20	S-11



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## Sample Results

(Continued)

Sample: Well 14  
0G31007-01 (Water)

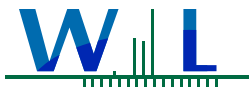
Sampled: 08/03/20 10:08 by Carlos Navarro (wecklabs)  
(Continued)

Analyte	Result	MRL	Units	Dil	Analyzed	Qualifier
<b>Method:</b> EPA 537.1		<b>Instr:</b> LCMS06				
<b>Batch ID:</b> W0H0893	<b>Preparation:</b> EPA 537/SPE	<b>Prepared:</b> 08/17/20 09:48		<b>Analyst:</b> jna		
13C2-PFHxA	91%	70-130	Conc: 32.1		08/19/20	
d5-EtFOSAA	59%	70-130	Conc: 20.9		08/19/20	S-11
HFPO-DA-13C3	91%	70-130	Conc: 32.1		08/19/20	

Sample: Well 14 FB  
0G31007-02 (Water)

Sampled: 08/03/20 0:00 by Carlos Navarro (wecklabs)

Analyte	Result	MRL	Units	Dil	Analyzed	Qualifier
<b>Method:</b> EPA 537.1		<b>Instr:</b> LCMS06				
<b>Batch ID:</b> W0H0893	<b>Preparation:</b> EPA 537/SPE	<b>Prepared:</b> 08/17/20 09:48		<b>Analyst:</b> jna		
11CI-PF3OUdS	ND	2.0	ng/l	1	08/19/20	
9CI-PF3ONS	ND	2.0	ng/l	1	08/19/20	
ADONA	ND	2.0	ng/l	1	08/19/20	
EtFOSAA	ND	2.0	ng/l	1	08/19/20	
HFPO-DA	ND	2.0	ng/l	1	08/19/20	
MeFOSAA	ND	2.0	ng/l	1	08/19/20	
PFBS	ND	2.0	ng/l	1	08/19/20	
PFDA	ND	2.0	ng/l	1	08/19/20	
PFDoA	ND	2.0	ng/l	1	08/19/20	
PFHpA	ND	2.0	ng/l	1	08/19/20	
PFHxA	ND	2.0	ng/l	1	08/19/20	
PFHxS	ND	2.0	ng/l	1	08/19/20	
PFNA	ND	2.0	ng/l	1	08/19/20	
PFOA	ND	2.0	ng/l	1	08/19/20	
PFOS	ND	2.0	ng/l	1	08/19/20	
PFTeDA	ND	2.0	ng/l	1	08/19/20	
PFTTrDA	ND	2.0	ng/l	1	08/19/20	
PFUnA	ND	2.0	ng/l	1	08/19/20	
<i>Surrogate(s)</i>						
13C2-PFDA	62%	70-130	Conc: 23.0		08/19/20	S-11
13C2-PFHxA	86%	70-130	Conc: 31.8		08/19/20	
d5-EtFOSAA	61%	70-130	Conc: 22.4		08/19/20	S-11
HFPO-DA-13C3	86%	70-130	Conc: 31.8		08/19/20	



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## Quality Control Results

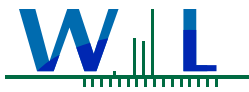
Per- and Polyfluorinated Alkyl Substances (PFAS) by SPE/LCMSMS

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
<b>Batch: W0H0893 - EPA 537/SPE</b>										
<b>Blank (W0H0893-BLK1)</b>				<b>Prepared: 08/17/20 Analyzed: 08/19/20</b>						
11CI-PF3OUdS	ND	2.0	ng/l							
9CI-PF3ONS	ND	2.0	ng/l							
ADONA	ND	2.0	ng/l							
EtFOSAA	ND	2.0	ng/l							
HFPO-DA	ND	2.0	ng/l							
MeFOSAA	ND	2.0	ng/l							
PFBS	ND	2.0	ng/l							
PFDA	ND	2.0	ng/l							
PFDoA	ND	2.0	ng/l							
PFHpA	ND	2.0	ng/l							
PFHxA	ND	2.0	ng/l							
PFHxS	ND	2.0	ng/l							
PFNA	ND	2.0	ng/l							
PFOA	ND	2.0	ng/l							
PFOS	ND	2.0	ng/l							
PFTeDA	ND	2.0	ng/l							
PFTTrDA	ND	2.0	ng/l							
PFUnA	ND	2.0	ng/l							

<i>Surrogate(s)</i>										
13C2-PFDA	24.7		ng/l	40.0		62	70-130			S-11
13C2-PFHxA	35.6		ng/l	40.0		89	70-130			
d5-EtFOSAA	25.1		ng/l	40.0		63	70-130			S-11
HFPO-DA-13C3	34.5		ng/l	40.0		86	70-130			

<b>Blank (W0H0893-BLK2)</b>				<b>Prepared: 08/17/20 Analyzed: 08/24/20</b>						
11CI-PF3OUdS	ND	2.0	ng/l							QC-2
9CI-PF3ONS	ND	2.0	ng/l							QC-2
ADONA	ND	2.0	ng/l							QC-2
EtFOSAA	ND	2.0	ng/l							QC-2
HFPO-DA	ND	2.0	ng/l							QC-2
MeFOSAA	ND	2.0	ng/l							QC-2
PFBS	ND	2.0	ng/l							QC-2
PFDA	ND	2.0	ng/l							QC-2
PFDoA	ND	2.0	ng/l							QC-2
PFHpA	ND	2.0	ng/l							QC-2
PFHxA	ND	2.0	ng/l							QC-2
PFHxS	ND	2.0	ng/l							QC-2
PFNA	ND	2.0	ng/l							QC-2
PFOA	ND	2.0	ng/l							QC-2
PFOS	ND	2.0	ng/l							QC-2
PFTeDA	ND	2.0	ng/l							QC-2
PFTTrDA	ND	2.0	ng/l							QC-2
PFUnA	ND	2.0	ng/l							QC-2

*Surrogate(s)*



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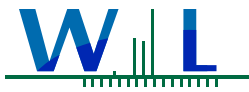
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## Quality Control Results

(Continued)

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

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
<b>Batch: W0H0893 - EPA 537/SPE (Continued)</b>										
<b>Blank (W0H0893-BLK2)</b>										
Prepared: 08/17/20 Analyzed: 08/24/20										
<i>Surrogate(s)</i>										
13C2-PFDA	27.6		ng/l	40.0		69	70-130			QC-2, S-11
13C2-PFHxA	38.3		ng/l	40.0		96	70-130			QC-2
d5-EtFOSAA	24.2		ng/l	40.0		61	70-130			QC-2, S-11
HFPO-DA-13C3	36.9		ng/l	40.0		92	70-130			QC-2
<b>LCS (W0H0893-BS1)</b>										
Prepared: 08/17/20 Analyzed: 08/19/20										
11Cl-PF3OUdS	1.35	2.0	ng/l	2.00		67	50-150			
9Cl-PF3ONS	1.58	2.0	ng/l	2.00		79	50-150			
ADONA	2.05	2.0	ng/l	2.00		102	50-150			
EtFOSAA	1.48	2.0	ng/l	2.00		74	50-150			
HFPO-DA	2.01	2.0	ng/l	2.00		101	50-150			
MeFOSAA	1.73	2.0	ng/l	2.00		87	50-150			
PFBS	2.08	2.0	ng/l	2.00		104	50-150			
PFDA	1.72	2.0	ng/l	2.00		86	50-150			
PFDoA	1.46	2.0	ng/l	2.00		73	50-150			
PFHpA	2.40	2.0	ng/l	2.00		120	50-150			
PFHxA	2.20	2.0	ng/l	2.00		110	50-150			
PFHxS	2.12	2.0	ng/l	2.00		106	50-150			
PFNA	1.91	2.0	ng/l	2.00		95	50-150			
PFOA	2.10	2.0	ng/l	2.00		105	50-150			
PFOS	1.72	2.0	ng/l	2.00		86	50-150			
PFTeDA	1.28	2.0	ng/l	2.00		64	50-150			
PFTTrDA	1.32	2.0	ng/l	2.00		66	50-150			
PFUnA	1.40	2.0	ng/l	2.00		70	50-150			
<i>Surrogate(s)</i>										
13C2-PFDA	25.5		ng/l	40.0		64	70-130			S-11
13C2-PFHxA	35.1		ng/l	40.0		88	70-130			
d5-EtFOSAA	26.2		ng/l	40.0		66	70-130			S-11
HFPO-DA-13C3	33.9		ng/l	40.0		85	70-130			
<b>LCS (W0H0893-BS2)</b>										
Prepared: 08/17/20 Analyzed: 08/24/20										
11Cl-PF3OUdS	1.34	2.0	ng/l	2.00		67	50-150			QC-2
9Cl-PF3ONS	1.87	2.0	ng/l	2.00		93	50-150			QC-2
ADONA	2.20	2.0	ng/l	2.00		110	50-150			QC-2
EtFOSAA	1.04	2.0	ng/l	2.00		52	50-150			QC-2
HFPO-DA	2.51	2.0	ng/l	2.00		125	50-150			QC-2
MeFOSAA	1.75	2.0	ng/l	2.00		87	50-150			QC-2
PFBS	2.42	2.0	ng/l	2.00		121	50-150			QC-2
PFDA	1.82	2.0	ng/l	2.00		91	50-150			QC-2
PFDoA	1.33	2.0	ng/l	2.00		67	50-150			QC-2
PFHpA	2.59	2.0	ng/l	2.00		130	50-150			QC-2
PFHxA	2.42	2.0	ng/l	2.00		121	50-150			QC-2
PFHxS	2.26	2.0	ng/l	2.00		113	50-150			QC-2
PFNA	2.02	2.0	ng/l	2.00		101	50-150			QC-2



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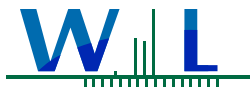
FINAL REPORT

## Quality Control Results

(Continued)

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

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
<b>Batch: W0H0893 - EPA 537/SPE (Continued)</b>										
<b>LCS (W0H0893-BS2)</b>				<b>Prepared: 08/17/20 Analyzed: 08/24/20</b>						
PFOA	2.24	2.0	ng/l	2.00		112	50-150			QC-2
PFOS	2.22	2.0	ng/l	2.00		111	50-150			QC-2
PFTeDA	1.32	2.0	ng/l	2.00		66	50-150			QC-2
PFTrDA	1.34	2.0	ng/l	2.00		67	50-150			QC-2
PFUnA	1.60	2.0	ng/l	2.00		80	50-150			QC-2
<i>Surrogate(s)</i>										
13C2-PFDA	28.4		ng/l	40.0		71	70-130			QC-2
13C2-PFHxA	37.4		ng/l	40.0		93	70-130			QC-2
d5-EtFOSAA	25.5		ng/l	40.0		64	70-130			QC-2, S-11
HFPO-DA-13C3	37.5		ng/l	40.0		94	70-130			QC-2
<b>Matrix Spike (W0H0893-MS1)</b>				<b>Source: 0G17018-01 Prepared: 08/17/20 Analyzed: 08/19/20</b>						
11CI-PF3OUdS	1.14	1.7	ng/l	1.66	ND	68	50-150			
9CI-PF3ONS	1.28	1.7	ng/l	1.66	ND	77	50-150			
ADONA	1.67	1.7	ng/l	1.66	ND	101	50-150			
EtFOSAA	1.61	1.7	ng/l	1.66	ND	97	50-150			
HFPO-DA	1.67	1.7	ng/l	1.66	ND	100	50-150			
MeFOSAA	1.40	1.7	ng/l	1.66	ND	84	50-150			
PFBS	1.71	1.7	ng/l	1.66	ND	103	50-150			
PFDA	1.42	1.7	ng/l	1.66	ND	86	50-150			
PFDaA	1.26	1.7	ng/l	1.66	ND	76	50-150			
PFHpA	1.90	1.7	ng/l	1.66	ND	115	50-150			
PFHxA	1.80	1.7	ng/l	1.66	ND	109	50-150			
PFHxS	1.66	1.7	ng/l	1.66	ND	100	50-150			
PFNA	1.49	1.7	ng/l	1.66	ND	90	50-150			
PFOA	1.71	1.7	ng/l	1.66	ND	103	50-150			
PFOS	1.37	1.7	ng/l	1.66	ND	83	50-150			
PFTeDA	1.19	1.7	ng/l	1.66	ND	72	50-150			
PFTrDA	1.15	1.7	ng/l	1.66	ND	69	50-150			
PFUnA	1.24	1.7	ng/l	1.66	ND	74	50-150			
<i>Surrogate(s)</i>										
13C2-PFDA	21.4		ng/l	33.2		64	70-130			S-11
13C2-PFHxA	27.9		ng/l	33.2		84	70-130			
d5-EtFOSAA	22.7		ng/l	33.2		68	70-130			S-11
HFPO-DA-13C3	28.3		ng/l	33.2		85	70-130			
<b>Matrix Spike Dup (W0H0893-MSD1)</b>				<b>Source: 0G17018-01 Prepared: 08/17/20 Analyzed: 08/19/20</b>						
11CI-PF3OUdS	1.24	1.7	ng/l	1.66	ND	75	50-150	8	30	
9CI-PF3ONS	1.34	1.7	ng/l	1.66	ND	81	50-150	4	30	
ADONA	2.00	1.7	ng/l	1.66	ND	121	50-150	18	30	
EtFOSAA	1.47	1.7	ng/l	1.66	ND	89	50-150	9	30	
HFPO-DA	1.95	1.7	ng/l	1.66	ND	118	50-150	15	30	
MeFOSAA	1.52	1.7	ng/l	1.66	ND	92	50-150	8	30	
PFBS	2.04	1.7	ng/l	1.66	ND	123	50-150	18	30	
PFDA	1.63	1.7	ng/l	1.66	ND	99	50-150	14	30	



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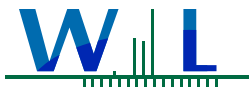
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## Quality Control Results

(Continued)

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

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
Batch: W0H0893 - EPA 537/SPE (Continued)										
Matrix Spike Dup (W0H0893-MSD1) Source: OG17018-01 Prepared: 08/17/20 Analyzed: 08/19/20										
PFD <sub>o</sub> A	1.49	1.7	ng/l	1.66	ND	90	50-150	17	30	
PFHpA	2.26	1.7	ng/l	1.66	ND	136	50-150	17	30	
PFHxA	2.16	1.7	ng/l	1.66	ND	131	50-150	18	30	
PFHxS	2.14	1.7	ng/l	1.66	ND	129	50-150	25	30	
PFNA	1.87	1.7	ng/l	1.66	ND	113	50-150	23	30	
PFOA	2.10	1.7	ng/l	1.66	ND	127	50-150	20	30	
PFOS	1.86	1.7	ng/l	1.66	ND	112	50-150	30	30	
PFTeDA	1.41	1.7	ng/l	1.66	ND	85	50-150	17	30	
PFT <sub>r</sub> DA	1.39	1.7	ng/l	1.66	ND	84	50-150	19	30	
PFUnA	1.34	1.7	ng/l	1.66	ND	81	50-150	8	30	
Surrogate(s)										
<sup>13</sup> C <sub>2</sub> -PFDA	25.3		ng/l	33.1		76	70-130			
<sup>13</sup> C <sub>2</sub> -PFHxA	35.9		ng/l	33.1		108	70-130			
d <sub>5</sub> -EtFOSAA	28.1		ng/l	33.1		85	70-130			
HFPO-DA-13C <sub>3</sub>	35.2		ng/l	33.1		106	70-130			



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## Notes and Definitions

Item	Definition
QC-2	This QC sample was reanalyzed to complement samples that require re-analysis on different date. See analysis date.
S-11	Surrogate recovery outside of control limits. The data was accepted based on valid recovery of the remaining surrogate.
%REC	Percent Recovery
Dil	Dilution
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
Source	Sample that was matrix spiked or duplicated.

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.

### Reviewed by:

Valerie I. Rejuso  
Project Manager



DoD-ISO ANAB # • ELAP-CA #1132 • EPA-UCMR #CA00211 • HW-DOH # • ISO17025 ANAB #L2457.01 • LACSD #10143 •  
NELAP-OR #4047 • NJ-DEP #CA015 • 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.*