

**PFAS Results for Costner Entry Point 101 (Wells 1, 2, 6), Method 537.1**

Contaminant	June 11, 2020	July 9, 2020	July 21, 2020	Aug 6, 2020	Aug 18, 2020	Sept 1, 2020	Sept 15, 2020	Sept 29, 2020	Oct 22, 2020
	Result (ppt)	Result (ppt)	Result (ppt)	Result (ppt)	Result (ppt)	Result (ppt)	Result (ppt)	Result (ppt)	Result (ppt)
Perfluorooctanoic acid (PFOA)	ND	ND	ND	ND	ND	ND	ND	ND	ND
Perfluorooctanesulfonic acid (PFOS)	ND	ND	ND	ND	ND	ND	ND	ND	ND
Perfluorobutanesulfonic acid (PFBS)	ND	ND	ND	ND	ND	ND	ND	ND	ND
Perfluoroheptanoic acid (PFHpA)	ND	ND	ND	ND	ND	ND	ND	ND	ND
Perfluorohexanesulfonic acid (PFHxS)	ND	ND	ND	ND	ND	ND	ND	ND	ND
Perfluorononanoic acid (PFNA)	ND	ND	ND	ND	ND	ND	ND	ND	ND
Perfluorodecanoic acid (PFDA)	ND	ND	ND	ND	ND	ND	ND	ND	ND
Perfluorohexanoic acid (PFHxA)	ND	ND	ND	ND	ND	ND	ND	ND	ND
Perfluorododecanoic acid (PFDoA)	ND	ND	ND	ND	ND	ND	ND	ND	ND
Perfluorotridecanoic acid (PFTrDA)	ND	ND	ND	ND	ND	ND	ND	ND	ND
Perfluoroundecanoic acid (PFUnA)	ND	ND	ND	ND	ND	ND	ND	ND	ND
Perfluorotetradecanoic acid (PFTeDA)	ND	ND	ND	ND	ND	ND	ND	ND	ND

Between 2014 and 2015, the Warrington wells were taken out of service from the distribution system due to various per- and polyfluoroalkyl substances (PFAS) contaminating the groundwater. Warrington now has a large filter building at each site which contains two granular activated carbon (GAC) tanks that filter PFAS out of the groundwater. For the sake of transparency with our residents, you can find the PFAS sample results posted here. NWWA will continuously sample the water for PFAS to maintain the integrity of the drinking water entering the Warrington distribution system. If you have any questions or concerns, call Vanessa Heindel at 267-482-6957 or email [vheindel@nwwater.com](mailto:vheindel@nwwater.com).

ND = Non-Detect, <2.0 ppt

**PFAS Results for Costner Entry Point 101 (Wells 1, 2, 6), Method 537.1**

Contaminant	Nov 17, 2020	Dec 21, 2020	Jan 12, 2021	Feb 8, 2021	Mar 9, 2021	Apr 15, 2021	May 11, 2021	Jun 8, 2021	Aug 10, 2021
	Result (ppt)	Result (ppt)	Result (ppt)	Result (ppt)	Result (ppt)	Result (ppt)	Result (ppt)	Result (ppt)	Result (ppt)
Perfluorooctanoic acid (PFOA)	ND	ND	ND	ND	ND	ND	ND	ND	ND
Perfluorooctanesulfonic acid (PFOS)	ND	ND	ND	ND	ND	ND	ND	ND	ND
Perfluorobutanesulfonic acid (PFBS)	ND	ND	ND	ND	ND	ND	ND	ND	ND
Perfluoroheptanoic acid (PFHpA)	ND	ND	ND	ND	ND	ND	ND	ND	ND
Perfluorohexanesulfonic acid (PFHxS)	ND	ND	ND	ND	ND	ND	ND	ND	ND
Perfluorononanoic acid (PFNA)	ND	ND	ND	ND	ND	ND	ND	ND	ND
Perfluorodecanoic acid (PFDA)	ND	ND	ND	ND	ND	ND	ND	ND	ND
Perfluorohexanoic acid (PFHxA)	ND	ND	ND	ND	ND	ND	ND	ND	ND
Perfluorododecanoic acid (PFDoA)	ND	ND	ND	ND	ND	ND	ND	ND	ND
Perfluorotridecanoic acid (PFTrDA)	ND	ND	ND	ND	ND	ND	ND	ND	ND
Perfluoroundecanoic acid (PFUnA)	ND	ND	ND	ND	ND	ND	ND	ND	ND
Perfluorotetradecanoic acid (PFTeDA)	ND	ND	ND	ND	ND	ND	ND	ND	ND

Contaminant	Nov 16, 2021	Jan 11, 2022	May 10, 2022	Aug 10, 2022	Nov 10, 2022	Feb 9, 2023	May 11, 2023	Aug 10, 2023	Nov 9, 2023
	Result (ppt)	Result (ppt)	Result (ppt)	Result (ng/L)	Result (ng/L)	Result (ppt)	Result (ppt)	Result (ppt)	Result (ppt)
Perfluorooctanoic acid (PFOA)	ND	ND	ND	ND	ND	ND	ND	ND	ND
Perfluorooctanesulfonic acid (PFOS)	ND	ND	ND	ND	ND	ND	ND	ND	ND
Perfluorobutanesulfonic acid (PFBS)	ND	ND	ND	ND	ND	ND	ND	ND	ND
Perfluoroheptanoic acid (PFHpA)	ND	ND	ND	ND	ND	ND	ND	ND	ND
Perfluorohexanesulfonic acid (PFHxS)	ND	ND	ND	ND	ND	ND	ND	ND	ND
Perfluorononanoic acid (PFNA)	ND	ND	ND	ND	ND	ND	ND	ND	ND
Perfluorodecanoic acid (PFDA)	ND	ND	ND	ND	ND	ND	ND	ND	ND
Perfluorohexanoic acid (PFHxA)	ND	ND	ND	ND	ND	ND	ND	ND	ND
Perfluorododecanoic acid (PFDoA)	ND	ND	ND	ND	ND	ND	ND	ND	ND
Perfluorotridecanoic acid (PFTrDA)	ND	ND	ND	ND	ND	ND	ND	ND	ND
Perfluoroundecanoic acid (PFUnA)	ND	ND	ND	ND	ND	ND	ND	ND	ND
Perfluorotetradecanoic acid (PFTeDA)	ND	ND	ND	ND	ND	ND	ND	ND	ND

ND = Non-Detect, <2.0 ppt

**PFAS Results for Costner Entry Point 101 (Wells 1, 2, 6), Method 537.1**

Contaminant	Feb 8, 2024	May 5, 2024	Aug 8, 2024	Nov 7, 2024
	Result (ppt)	Result (ppt)	Result (ppt)	Result (ppt)
Perfluorooctanoic acid (PFOA)	ND	ND	ND	ND
Perfluorooctanesulfonic acid (PFOS)	ND	ND	ND	ND
Perfluorobutanesulfonic acid (PFBS)	ND	ND	ND	ND
Perfluoroheptanoic acid (PFHpA)	ND	ND	ND	ND
Perfluorohexanesulfonic acid (PFHxS)	ND	ND	ND	ND
Perfluorononanoic acid (PFNA)	ND	ND	ND	ND
Perfluorodecanoic acid (PFDA)	ND	ND	ND	ND
Perfluorohexanoic acid (PFHxA)	ND	ND	ND	ND
Perfluorododecanoic acid (PFDoA)	ND	ND	ND	ND
Perfluorotridecanoic acid (PFTrDA)	ND	ND	ND	ND
Perfluoroundecanoic acid (PFUnA)	ND	ND	ND	ND
Perfluorotetradecanoic acid (PFTeDA)	ND	ND	ND	ND

ND = Non-Detect, <2.0 ppt

**PFAS Results for Well 1 Raw Water\*, Method 537.1**

Contaminant	June 11, 2020	July 9, 2020	July 21, 2020	Aug 6, 2020	Aug 18, 2020	Sept 1, 2020	Sept 15, 2020	Sept 29, 2020	Oct 22, 2020	Nov 17, 2020
	Result (ppt)	Result (ppt)	Result (ppt)	Result (ppt)	Result (ppt)	Result (ppt)	Result (ppt)	Result (ppt)	Result (ppt)	Result (ppt)
Perfluorooctanesulfonic acid (PFOS)	29	14	11	12	13	9.2	11.8	20	13	15
Perfluoroundecanoic acid (PFUnA)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Perfluorohexanoic acid (PFHxA)	3.2	4.9	3.7	4.5	4.8	2.1	4.8	4.3	3.9	4.8
Perfluorododecanoic acid (PFDoA)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Perfluorooctanoic acid (PFOA)	7.8	10	8.3	9.3	10	5.5	10.3	9.8	10	10
Perfluorodecanoic acid (PFDA)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Perfluorohexanesulfonic acid (PFHxS)	9.5	6.5	5.2	6.7	5.8	3.3	6.6	6.7	5.3	6.6
Perfluorobutanesulfonic acid (PFBS)	2.8	4.1	3.3	4.8	3.9	ND	4.0	3.3	3.8	4.5
Perfluoroheptanoic acid (PFHpA)	ND	3.2	2.6	3.1	3.2	ND	3.1	2.8	3.1	3.3
Perfluorononanoic acid (PFNA)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Perfluorotetradecanoic acid (PFTeDA) §	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Perfluorotridecanoic acid (PFTrDA)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

Contaminant	Dec 21, 2020	Jan 12, 2021	Feb 8, 2021	Mar 9, 2021	Apr 15, 2021	May 11, 2021	Jun 8, 2021	Aug 10, 2021	Nov 16, 2021	Jan 11, 2022
	Result (ppt)	Result (ppt)	Result (ppt)	Result (ppt)	Result (ppt)	Result (ppt)	Result (ppt)	Result (ppt)	Result (ppt)	Result (ppt)
Perfluorooctanesulfonic acid (PFOS)	13	12	11	12	11	9.7	11	11	13	13
Perfluoroundecanoic acid (PFUnA)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Perfluorohexanoic acid (PFHxA)	4.3	4.2	4.2	4.2	4.6	4.0	4.3	4.2	5.1	4.7
Perfluorododecanoic acid (PFDoA)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Perfluorooctanoic acid (PFOA)	9.8	9.2	9.9	9.0	9.5	8.4	11	9.0	12	11
Perfluorodecanoic acid (PFDA)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Perfluorohexanesulfonic acid (PFHxS)	6.3	6.0	6.1	5.4	6.2	4.7	6.0	6.1	6.9	6.2
Perfluorobutanesulfonic acid (PFBS)	3.7	3.5	3.7	2.9	3.6	3.3	3.6	3.7	4.5	4.0
Perfluoroheptanoic acid (PFHpA)	3.0	2.8	3.2	2.8	3.2	2.8	3.1	2.9	2.4	3.2
Perfluorononanoic acid (PFNA)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Perfluorotetradecanoic acid (PFTeDA) §	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Perfluorotridecanoic acid (PFTrDA)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

**ND = Non-Detect, <2.0 ppt**

\*As of 2023, raw water sampling will occur only during the fourth quarter of the year

**PFAS Results for Well 1 Raw Water\*, Method 537.1**

Contaminant	May 10, 2022	Aug 10, 2022	Nov 10, 2022	Feb 9, 2023	May 11, 2023	Aug 10, 2023	Nov 9, 2023	Nov 7, 2024
	Result (ppt)	Result (ppt)	Result (ppt)	Result (ppt)	Result (ppt)	Result (ppt)	Result (ppt)	Result (ppt)
Perfluorooctanesulfonic acid (PFOS)	13	29	23	14	22	16	17	16
Perfluoroundecanoic acid (PFUnA)	ND	ND	ND	ND	ND	ND	ND	ND
Perfluorohexanoic acid (PFHxA)	4.7	6.0	4.8	4.9	6.1	5.8	5.3	5
Perfluorododecanoic acid (PFDoA)	ND	ND	ND	ND	ND	ND	ND	ND
Perfluorooctanoic acid (PFOA)	11	21	17	13	18	13	14	13
Perfluorodecanoic acid (PFDA)	ND	ND	ND	ND	ND	ND	ND	ND
Perfluorohexanesulfonic acid (PFHxS)	6.3	9.2	7.3	6.2	7.6	6.2	6.5	6.5
Perfluorobutanesulfonic acid (PFBS)	3.7	5.1	4.7	4.6	5.6	5.6	6.0	5.8
Perfluoroheptanoic acid (PFHpA)	3.4	5.1	4.1	3.8	4.9	4.1	4.0	3.9
Perfluorononanoic acid (PFNA)	ND	2.1	ND	ND	ND	ND	ND	ND
Perfluorotetradecanoic acid (PFTeDA) §	ND	ND	ND	ND	ND	ND	ND	ND
Perfluorotridecanoic acid (PFTrDA)	ND	ND	ND	ND	ND	ND	ND	ND

**ND = Non-Detect, <2.0 ppt**

\*As of 2023, raw water sampling will occur only during the fourth quarter of the year

**PFAS Results for Well 2 Raw Water\*, Method 537.1**

Contaminant	June 11, 2020	July 9, 2020	July 21, 2020	Aug 6, 2020	Aug 18, 2020	Sept 1, 2020	Sept 15, 2020	Sept 29, 2020	Oct 22, 2020	Nov 17, 2020
	Result (ppt)	Result (ppt)	Result (ppt)	Result (ppt)	Result (ppt)	Result (ppt)	Result (ppt)	Result (ppt)	Result (ppt)	Result (ppt)
Perfluorooctanesulfonic acid (PFOS)	1400	1200	1100	920	1100	1000	956	1100	1100	1100
Perfluoroundecanoic acid (PFUnA)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Perfluorohexanoic acid (PFHxA)	74	76	72	74	73	69	95.6	78	65	76
Perfluorododecanoic acid (PFDoA)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Perfluorooctanoic acid (PFOA)	180	150	140	130	140	150	157	150	140	140
Perfluorodecanoic acid (PFDA)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Perfluorohexanesulfonic acid (PFHxS)	380	320	300	240	310	280	315	290	320	320
Perfluorobutanesulfonic acid (PFBS)	52	58	53	53	45	43	52.6	51	50	48
Perfluoroheptanoic acid (PFHpA)	27	27	26	27	28	27	28.1	27	25	27
Perfluorononanoic acid (PFNA)	3.5	3.1	2.9	3.1	2.9	2.9	4.07	2.8	3.1	3.6
Perfluorotetradecanoic acid (PFTeDA) §	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Perfluorotridecanoic acid (PFTrDA)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

Contaminant	Dec 21, 2020	Jan 12, 2021	Feb 8, 2021	Mar 9, 2021	Apr 15, 2021	May 11, 2021	Jun 8, 2021	Aug 10, 2021	Nov 16, 2021	Jan 11, 2022
	Result (ppt)	Result (ppt)	Result (ppt)	Result (ppt)	Result (ppt)	Result (ppt)	Result (ppt)	Result (ppt)	Result (ppt)	Result (ppt)
Perfluorooctanesulfonic acid (PFOS)	950	850	1000	780	1000	860	960	960	1100	970
Perfluoroundecanoic acid (PFUnA)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Perfluorohexanoic acid (PFHxA)	67	62	69	58	71	64	69	74	77	72
Perfluorododecanoic acid (PFDoA)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Perfluorooctanoic acid (PFOA)	130	120	140	110	130	120	150	140	170	150
Perfluorodecanoic acid (PFDA)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Perfluorohexanesulfonic acid (PFHxS)	270	230	280	240	280	240	270	280	340	310
Perfluorobutanesulfonic acid (PFBS)	46	44	47	34	48	41	47	47	55	59
Perfluoroheptanoic acid (PFHpA)	25	23	27	21	26	23	26	27	30	26
Perfluorononanoic acid (PFNA)	3.3	3.0	3.2	2.9	3.1	2.8	3.2	3.1	3.5	3.2
Perfluorotetradecanoic acid (PFTeDA) §	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Perfluorotridecanoic acid (PFTrDA)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

**ND = Non-Detect, <2.0 ppt**

\*As of 2023, raw water sampling will occur only during the fourth quarter of the year

**PFAS Results for Well 2 Raw Water\*, Method 537.1**

Contaminant	May 10, 2022	Aug 10, 2022	Nov 10, 2022	Feb 9, 2023	May 11, 2023	Aug 10, 2023	Nov 9, 2023	Nov 7, 2024
	Result (ppt)	Result (ppt)	Result (ppt)	Result (ppt)	Result (ppt)	Result (ppt)	Result (ppt)	Result (ppt)
Perfluorooctanesulfonic acid (PFOS)	780	1100	870	980	1000	1000	1000	990
Perfluoroundecanoic acid (PFUnA)	ND	ND	ND	ND	ND	ND	ND	ND
Perfluorohexanoic acid (PFHxA)	65	90	76	72	85	83	84	81
Perfluorododecanoic acid (PFDoA)	ND	ND	ND	ND	ND	ND	ND	ND
Perfluorooctanoic acid (PFOA)	140	200	160	160	190	160	180	170
Perfluorodecanoic acid (PFDA)	ND	ND	ND	ND	ND	ND	ND	ND
Perfluorohexanesulfonic acid (PFHxS)	240	320	270	290	310	320	330	350
Perfluorobutanesulfonic acid (PFBS)	43	57	50	48	56	52	53	53
Perfluoroheptanoic acid (PFHpA)	24	32	26	27	30	29	28	28
Perfluorononanoic acid (PFNA)	3.0	3.8	3.2	3.3	3.5	3.5	3.4	4.5
Perfluorotetradecanoic acid (PFTeDA) §	ND	ND	ND	ND	ND	ND	ND	ND
Perfluorotridecanoic acid (PFTrDA)	ND	ND	ND	ND	ND	ND	ND	ND

**ND = Non-Detect, <2.0 ppt**

\*As of 2023, raw water sampling will occur only during the fourth quarter of the year

**PFAS Results for Well 6 Raw Water\*, Method 537.1**

Contaminant	June 11, 2020	July 9, 2020	July 21, 2020	Aug 6, 2020	Aug 18, 2020	Sept 1, 2020	Sept 15, 2020	Sept 29, 2020	Oct 22, 2020	Nov 17, 2020
	Result (ng/L)	Result (ng/L)	Result (ng/L)	Result (ng/L)	Result (ng/L)	Result (ng/L)	Result (ng/L)	Result (ng/L)	Result (ng/L)	Result (ng/L)
Perfluorooctanesulfonic acid (PFOS)	42	42	39	40	44	40	38.2	37	37	43
Perfluoroundecanoic acid (PFUnA)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Perfluorohexanoic acid (PFHxA)	9.9	11	11	11	10	10	12	10	11	12
Perfluorododecanoic acid (PFDoA)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Perfluorooctanoic acid (PFOA)	18	17	17	17	19	18	19.5	17	18	19
Perfluorodecanoic acid (PFDA)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Perfluorohexanesulfonic acid (PFHxS)	18	19	17	20	17	17	19.9	16	16	20
Perfluorobutanesulfonic acid (PFBS)	12	12	9.7	13	10	9.4	11.3	9.1	11	12
Perfluoroheptanoic acid (PFHpA)	6.1	5.9	6.1	6.6	6.7	6.5	6.4	5.9	6.4	6.8
Perfluorononanoic acid (PFNA)	ND	ND	ND	ND	ND	ND	2.5	ND	ND	ND
Perfluorotetradecanoic acid (PFTeDA) §	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Perfluorotridecanoic acid (PFTrDA)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

Contaminant	Dec 21, 2020	Jan 28, 2021	Feb 8, 2021	Mar 9, 2021	Apr 15, 2021	May 11, 2021	Jun 8, 2021	Aug 10, 2021	Nov 16, 2021	Jan 11, 2022
	Result (ng/L)	Result (ppt)	Result (ppt)	Result (ppt)	Result (ppt)	Result (ppt)	Result (ppt)	Result (ppt)	Result (ppt)	Result (ppt)
Perfluorooctanesulfonic acid (PFOS)	39	38	41	38	42	37	39	36	40	40
Perfluoroundecanoic acid (PFUnA)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Perfluorohexanoic acid (PFHxA)	11	10	12	9.6	12	10	11	11	11	12
Perfluorododecanoic acid (PFDoA)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Perfluorooctanoic acid (PFOA)	18	17	19	17	18	17	20	17	21	21
Perfluorodecanoic acid (PFDA)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Perfluorohexanesulfonic acid (PFHxS)	19	18	18	16	19	16	17	16	19	19
Perfluorobutanesulfonic acid (PFBS)	10	11	10	9.5	11	11	11	10	13	13
Perfluoroheptanoic acid (PFHpA)	6.4	6.2	7	5.9	6.8	6.4	7.1	6.5	7.4	7.7
Perfluorononanoic acid (PFNA)	ND	ND	ND	ND	ND	ND	ND	ND	2.0	2.1
Perfluorotetradecanoic acid (PFTeDA) §	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Perfluorotridecanoic acid (PFTrDA)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

**ND = Non-Detect, <2.0 ppt**

\*As of 2023, raw water sampling will occur only during the fourth quarter of the year



**PFAS Results for Well 6 Raw Water\*, Method 537.1**

Contaminant	May 10, 2022	Aug 10, 2022	Nov 10, 2022	Feb 9, 2023	May 11, 2023	Aug 10, 2023	Nov 9, 2023	Nov 7, 2024
	Result (ppt)	Result (ppt)	Result (ppt)	Result (ppt)	Result (ppt)	Result (ppt)	Result (ppt)	Result (ppt)
Perfluorooctanesulfonic acid (PFOS)	35	39	33	35	37	30	30	27
Perfluoroundecanoic acid (PFUnA)	ND	ND	ND	ND	ND	ND	ND	ND
Perfluorohexanoic acid (PFHxA)	11	13	11	10	12	12	11	11
Perfluorododecanoic acid (PFDoA)	ND	ND	ND	ND	ND	ND	ND	ND
Perfluorooctanoic acid (PFOA)	19	25	19	20	22	19	19	18
Perfluorodecanoic acid (PFDA)	ND	ND	ND	ND	ND	ND	ND	ND
Perfluorohexanesulfonic acid (PFHxS)	16	15	14	15	16	12	13	12
Perfluorobutanesulfonic acid (PFBS)	11	15	13	12	13	13	14	15
Perfluoroheptanoic acid (PFHpA)	6.8	9.1	6.9	7.1	7.5	7.9	7.6	7.5
Perfluorononanoic acid (PFNA)	1.9	2.5	ND	ND	2.1	2.1	2.0	2.9
Perfluorotetradecanoic acid (PFTeDA) §	ND	ND	ND	ND	ND	ND	ND	ND
Perfluorotridecanoic acid (PFTrDA)	ND	ND	ND	ND	ND	ND	ND	ND

**ND = Non-Detect, <2.0 ppt**

\*As of 2023, raw water sampling will occur only during the fourth quarter of the year

**PFAS Results for Costner Midpoint, Method 537.1**

Contaminant	July 9, 2020	July 21, 2020	Aug 6, 2020	Aug 18, 2020	Sept 1, 2020	Sept 15, 2020	Sept 29, 2020	Oct 22, 2020	Nov 17, 2020	Dec 21, 2020
	Result (ppt)	Result (ppt)	Result (ppt)	Result (ppt)	Result (ppt)	Result (ppt)	Result (ppt)	Result (ppt)	Result (ppt)	Result (ppt)
Perfluorooctanesulfonic acid (PFOS)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Perfluoroundecanoic acid (PFUnA)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Perfluorohexanoic acid (PFHxA)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Perfluorododecanoic acid (PFDoA)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Perfluorooctanoic acid (PFOA)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Perfluorodecanoic acid (PFDA)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Perfluorohexanesulfonic acid (PFHxS)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Perfluorobutanesulfonic acid (PFBS)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Perfluoroheptanoic acid (PFHpA)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Perfluorononanoic acid (PFNA)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Perfluorotetradecanoic acid (PFTeDA) §	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Perfluorotridecanoic acid (PFTrDA)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

Contaminant	Jan 12, 2021	Feb 8, 2021	Mar 9, 2021	Apr 15, 2021	May 11, 2021	Jun 8, 2021	Aug 10, 2021	Nov 16, 2021	Jan 11, 2022	May 10, 2022
	Result (ppt)	Result (ppt)	Result (ppt)	Result (ppt)	Result (ppt)	Result (ppt)	Result (ppt)	Result (ppt)	Result (ppt)	Result (ppt)
Perfluorooctanesulfonic acid (PFOS)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Perfluoroundecanoic acid (PFUnA)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Perfluorohexanoic acid (PFHxA)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Perfluorododecanoic acid (PFDoA)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Perfluorooctanoic acid (PFOA)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Perfluorodecanoic acid (PFDA)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Perfluorohexanesulfonic acid (PFHxS)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Perfluorobutanesulfonic acid (PFBS)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Perfluoroheptanoic acid (PFHpA)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Perfluorononanoic acid (PFNA)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Perfluorotetradecanoic acid (PFTeDA) §	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Perfluorotridecanoic acid (PFTrDA)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

ND = Non-Detect, <2.0 ppt

**PFAS Results for Costner Midpoint, Method 537.1**

Contaminant	Aug 10, 2022	Nov 10, 2022	Feb 9, 2023	May 11, 2023	Aug 10, 2023	Nov 9, 2023	Feb 8, 2024	May 5, 2024	Aug 8, 2024	Nov 7, 2024
	Result (ppt)	Result (ppt)	Result (ppt)	Result (ppt)	Result (ppt)	Result (ppt)	Result (ppt)	Result (ppt)	Result (ppt)	Result (ppt)
Perfluorooctanesulfonic acid (PFOS)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Perfluoroundecanoic acid (PFUnA)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Perfluorohexanoic acid (PFHxA)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Perfluorododecanoic acid (PFDoA)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Perfluorooctanoic acid (PFOA)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Perfluorodecanoic acid (PFDA)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Perfluorohexanesulfonic acid (PFHxS)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Perfluorobutanesulfonic acid (PFBS)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Perfluoroheptanoic acid (PFHpA)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Perfluorononanoic acid (PFNA)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Perfluorotetradecanoic acid (PFTeDA) §	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Perfluorotridecanoic acid (PFTrDA)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

ND = Non-Detect, <2.0 ppt

PFAS Results for Costner Entry Point 101 (Wells 1, 2, 6), Method 533

Contaminant	Feb 10, 2025
	Result (ppt)
11CI-PF3OUdS	ND
9CI-PF3ONS	ND
ADONA	ND
HFPO-DA	ND
NFDHA	ND
PFBA	ND
PFBS	ND
8:2FTS	ND
PFDA	ND
PFDoA	ND
PFEESA	ND
PFHpS	ND
PFHpA	ND
4:2FTS	ND
PFHxS	ND
PFHxA	ND
PFMPA	ND
PFMBA	ND
PFNA	ND
6:2FTS	ND
PFOS	ND
PFOA	ND
PFPeA	ND
PFPeS	ND
PFUnA	ND

ND = Non-Detect, <2.0 ppt

PFAS Results for Costner Midpoint, Method 533

Contaminant	March 5, 2025
	Result (ppt)
11CI-PF3OUdS	ND
9CI-PF3ONS	ND
ADONA	ND
HFPO-DA	ND
NFDHA	ND
PFBA	17
PFBS	ND
8:2FTS	ND
PFDA	ND
PFDoA	ND
PFEESA	ND
PFHpS	ND
PFHpA	ND
4:2FTS	ND
PFHxS	ND
PFHxA	ND
PFMPA	ND
PFMBA	ND
PFNA	ND
6:2FTS	ND
PFOS	ND
PFOA	ND
PFPeA	ND
PFPeS	ND
PFUnA	ND

ND = Non-Detect, <2.0 ppt