**Coulee Environmental Solutions™** 



### 444 21st Street South · La Crosse, Wisconsin · 54601

January 1, 2021

David Rozeboom DNR Service Center 1300 W Clairemont Ave. Eau Claire Wi 54701

### Re: Private Well Sampling Results Letters La Crosse Municipal Wells 23 & 24 WDNR BRRTS # 02-32-000065

Dear Mr. Rozeboom:

Please find attached 105 letters to property owners and occupants conveying the PFAS results of the private wells sampling in the target sampling area adjoining the La Crosse Regional Airport. This represents all lab reports received and letters sent through December 30, 2020. We have yet to receive the lab reports for ten (10) additional private well samples, the last of which was collected on December 23, 2020. A table of private well sampling points is attached. It provides the sampling point number keyed to tax parcel number, address, owner, occupant, well information, sampling date, lab report date, results letter and email dates, and the date of the occupant signed the bottled water agreement.

A status update describing the private well sampling, other public participation activities and recommendations for next steps is being prepared and should be submitted next week.

Please me let me know if you have any questions or require additional information.

Sincerely,

John C. Storlie, PG Principal Consultant Direct: 608-433-9389 Cell: 608-769-2433 John.storlie@theOSgrp.com

- Attachment:Table of Private Well Sampling PointsPrivate well results letters (through 12/30/2020)
- Cc: Mayor Kabat (w/o letter attachments) Randy Turtenwald (w/o letter attachments)

# Table of Private Well Sampling Points, through 12/30/2020

Consultan								Completed		Well	Static				
Point	Tax Parcel			Property	Prope	Owner	Occupant Name (if dff	Sampling		interval	water level (ft	Lab Report	Results e-mail	Results Letter	Bottled Water
Number	Number	Owner Name	Property Address	City	rty Zip	Occupied?	from owner)	Date	UWID	(ft bgs)	bgs)	Date	Date	Date	Ack. Date
10267-80	17-10267-80		2604 FANTA REED RD	LA CROSSE	54603-	No	Kathy Raymond	12/23/2020							
103-0	4-103-0		2606 FANTA REED RD	LA CROSSE	54603	Yes		10/27/2020	VD532	50-52		11/16/2020	na	11/17/2020	11/20/2020
104-0	4-104-0		2608 FANTA REED RD	LA CROSSE	54603	Yes		10/27/2020				11/16/2020	11/17/2020	11/17/2020	
106-0	4-106-0		2640 FANTA REED RD	LA CROSSE	54603	Yes	Nicole Burks	11/9/2020				12/9/2020	12/9/2020	12/9/2020	12/16/2020
110-1	4-110-1		2552 BAINBRIDGE ST	LA CROSSE	54603	Yes		10/27/2020	UV464	60-63	24	11/16/2020	11/18/2020	11/18/2020	11/19/2020
110-2	4-110-2		2556 BAINBRIDGE ST	LA CROSSE	54603	Yes		10/27/2020		X - 35'		11/16/2020	11/18/2020	11/18/2020	11/20/2020
115-0	4-115-0		2425 BAINBRIDGE ST	LA CROSSE	54603	Yes		10/27/2020				11/16/2020	na	11/17/2020	
116-0	4-116-0		2421 BAINBRIDGE ST	LA CROSSE	54603	Yes		10/29/2020				11/20/2020	11/23/2020	11/23/2020	
147-3	4-147-3		102 MITCHELL ST	LA CROSSE	54603	Yes		11/12/2020				11/30/2020	12/1/2020	12/1/2020	
178-0	4-178-0		2560 2ND AVE E	LA CROSSE	54603	Yes		11/19/2020	TG626	63-66	20	12/17/2020	12/17/2020	12/17/2020	
179-0	4-179-0		2556 2ND AVE E	LA CROSSE	54603	Yes		10/27/2020	XA025	60-63	25	11/16/2020	11/17/2020	11/17/2020	12/13/2020
181-0	4-181-0		2548 2ND AVE E	LA CROSSE	54603	Yes		11/2/2020				11/30/2020	12/1/2020	12/1/2020	
184-0	4-184-0		2532 2ND AVE E	LA CROSSE	54603	No	Fred Betthauser	11/2/2020	YW864	52-55	15	11/30/2020	12/1/2020	12/1/2020	
185-0	4-185-0		2530 2ND AVE E	LA CROSSE	54603	Yes		10/29/2020				11/20/2020	11/23/2020	11/23/2020	11/23/2020
186-0	4-186-0		2524 2ND AVE E	LA CROSSE	54603	Yes		10/29/2020				11/20/2020	11/23/2020	11/23/2020	11/23/2020
188-0	4-188-0		2512 2ND AVE E	LA CROSSE	54603	Yes		11/5/2020				12/1/2020	12/2/2020	12/2/2020	12/3/2020
189-0	4-189-0		2508 2ND AVE E	LA CROSSE	54603	Yes		12/2/2020				12/29/2020	12/30/2020	12/30/2020	12/30/2020
192-0	4-192-0		202 FANTA REED RD	LA CROSSE	54603	Yes		10/27/2020	ZH086	X - 63		11/16/2020	11/17/2020	11/17/2020	
193-0	4-193-0		2560 1ST AVE E	LA CROSSE	54603	No	Dave Forer	10/27/2020	ZH080	63-66	18	11/16/2020	na	11/17/2020	
194-0	4-194-0		2556 1ST AVE E	LA CROSSE	54603	Yes		11/2/2020				11/30/2020	12/1/2020	12/1/2020	

Sampling								Completed		Well Screen	Static water				
Point	Tax Parcel	Owner Name	Broporty Addross	Property	Prope	Owner	Occupant Name (if dff	Sampling		interval (ft bgs)	level (ft	Lab Report	Results e-mail	Results Letter	Bottled Water
195-0	4-195-0		2548 1ST AVE E	LA CROSSE	54603	Yes	from owner)	11/5/2020	RT826	62-65	17	12/1/2020	12/2/2020	12/2/2020	ACK. Date
197-0	4-197-0		2544 1ST AVE E	LA CROSSE	54603	Yes		12/17/2020	UV469	60-63	28				
200-0	4-200-0		2532 1ST AVE E	LA CROSSE	54603	Yes		12/8/2020							
202-0	4-202-0		2524 1ST AVE E	LA CROSSE	54603	Yes		11/2/2020	ER481	63-66	23	11/30/2020	12/1/2020	12/1/2020	12/5/2020
203-0	4-203-0		2520 1ST AVE E	LA CROSSE	54603	Yes		12/17/2020	CQ197	63-66	25				
204-0	4-204-0		2516 1ST AVE E	LA CROSSE	54603	Yes		11/9/2020				12/9/2020	na	12/9/2020	
205-0	4-205-0		2512 1ST AVE E	LA CROSSE	54603	Yes		10/27/2020	OW215	60-63	23	11/16/2020	11/17/2020	11/17/2020	
206-0	4-206-0		2508 1ST AVE E	LA CROSSE	54603	Yes		11/12/2020	KP591	60-63	25	11/30/2020	12/1/2020	12/1/2020	12/7/2020
207-0	4-207-0		2504 1ST AVE E	LA CROSSE	54603	Yes		10/27/2020				11/16/2020	11/17/2020	11/17/2020	
209-0	4-209-0		2500 1ST AVE E	LA CROSSE	54603	Yes		11/2/2020				11/30/2020	12/1/2020	12/1/2020	
210-0	4-210-0		2501 2ND AVE E	LA CROSSE	54603	No	Dawn & Adam Hansen	11/3/2020				11/30/2020	12/1/2020	12/1/2020	
211-0	4-211-0		2505 2ND AVE E	LA CROSSE	54603	Yes		11/5/2020				12/1/2020	12/2/2020	12/2/2020	
212-0	4-212-0		2509 2ND AVE E	LA CROSSE	54603	Yes		11/18/2020				12/23/2020	12/23/2020	12/23/2020	
215-0	4-215-0		2521 2ND AVE E	LA CROSSE	54603	Yes		11/3/2020	QT290	63-66	22	11/30/2020	12/1/2020	12/1/2020	
218-0	4-218-0		2525 2ND AVE E	LA CROSSE	54603	Yes		11/2/2020				11/30/2020	12/1/2020	12/1/2020	12/4/2020
219-0	4-219-0		2529 2ND AVE E	LA CROSSE	54603	Yes		11/3/2020 12/2/20	YY997	59-63	22	11/30/2020 12/29/20	12/1/2020 12/30/20	12/1/2020 12/30/20	12/23/2020
220-0	4-220-0		2531 2ND AVE E	LA CROSSE	54603	Yes		11/2/2020				11/30/2020	12/1/2020	12/1/2020	
221-0	4-221-0		2537 2ND AVE E	LA CROSSE	54603	Yes		10/27/2020				11/16/2020	11/18/2020	11/18/2020	
224-0	4-224-0		2549 2ND AVE E	LA CROSSE	54603	Yes		12/22/2020							
225-0	4-225-0		2553 2ND AVE E	LA CROSSE	54603	Yes		10/29/2020				11/20/2020	11/26/2020	11/23/2020	12/1/2020

Sampling								Completed		Well Screen	Static water				
Point	Tax Parcel	Ourses News	Duonoutu Adduose	Property	Prope	Owner	Occupant Name (if dff	Sampling		interval	level (ft	Lab Report	Results e-mail	Results Letter	Bottled Water
226-0	4-226-0		2557 2ND AVE E	LA CROSSE	54603	Yes	from owner)	10/29/2020	UWID	(IT Dgs)	Dgs)	11/20/2020	11/24/2020	11/23/2020	ACK. Date
227-0	4-227-0		2561 2ND AVE E	LA CROSSE	54603	Yes		11/17/2020				12/23/2020			
228-0	4-228-0		206 FANTA REED RD	LA CROSSE	54603	Yes		12/2/2020	XX699	63-66	23	12/29/2020	12/30/2020	12/30/2020	
229-0	4-229-0		2544 BAINBRIDGE ST	LA CROSSE	54603	Yes		11/3/2020		Shallow Driven		11/30/2020	12/1/2020	12/1/2020	12/8/2020
230-0	4-230-0		2540 BAINBRIDGE ST	LA CROSSE	54603	Yes		10/29/2020				11/20/2020	11/23/2020	11/23/2020	11/26/2020
233-0	4-233-0		2534 BAINBRIDGE ST	LA CROSSE	54603	Yes		11/3/2020				11/30/2020	12/1/2020	12/1/2020	
234-0	4-234-0		2528 BAINBRIDGE ST	LA CROSSE	54603	Yes		12/2/2020				12/29/2020	na	12/30/2020	
236-0	4-236-0		2524 BAINBRIDGE ST	LA CROSSE	54603	Yes		10/27/2020	TR311	60-64	25	11/16/2020	11/18/2020	11/18/2020	
237-0	4-237-0		2520 BAINBRIDGE ST	LA CROSSE	54603	Yes		10/29/2020		X-64		11/20/2020	11/23/2020	11/23/2020	
238-0	4-238-0		2514 BAINBRIDGE ST	LA CROSSE	54603	Yes		10/27/2020				11/16/2020	11/18/2020	11/18/2020	
239-0	4-239-0		2512 BAINBRIDGE ST	LA CROSSE	54603	Yes		11/3/2020	ZJ579	62-65	25	11/30/2020	na	12/1/2020	
240-0	4-240-0		2508 BAINBRIDGE ST	LA CROSSE	54603	Yes		10/27/2020				11/16/2020	11/18/2020	11/18/2020	
242-0	4-242-0		2500 BAINBRIDGE ST	LA CROSSE	54603	Yes		12/17/2020							
244-0	4-244-0		2505 1ST AVE E	LA CROSSE	54603	Yes		10/27/2020	CQ321	60-63	25	11/16/2020	11/18/2020	11/18/2020	
245-0	4-245-0		2507 1ST AVE E	LA CROSSE	54603	Yes		11/5/2020				12/1/2020	12/2/2020	12/2/2020	
246-0	4-246-0		2513 1ST AVE E	LA CROSSE	54603	Yes		10/29/2020				11/20/2020	na	11/23/2020	
247-0	4-247-0		2517 1ST AVE E	LA CROSSE	54603	Yes		11/3/2020	UO923	63-66	22	11/30/2020	12/1/2020	12/1/2020	
248-0	4-248-0		2521 1ST AVE E	LA CROSSE	54603	Yes		10/27/2020				11/16/2020	11/18/2020	11/18/2020	
250-0	4-250-0		2529 1ST AVE E	LA CROSSE	54603	No	Janice Bolstad	10/29/2020				11/20/2020	11/23/2020	11/23/2020	
251-0	4-251-0		2533 1ST AVE E	LA CROSSE	54603	Yes		10/29/2020	OE615	62-65	26	11/20/2020	12/3/2020	11/23/2020	12/3/2020

										Well	Static				
Sampling	Tax Parcol			Broparty	Brono	Owner	Occupant Name (if dff	Completed		Screen	water	Lab Poport	Posults o mail	Posults Lottor	Rottlad Water
Number	Number	Owner Name	Property Address	City	rty Zip	Occupied?	from owner)	Date	UWID	(ft bgs)	bgs)	Date	Date	Date	Ack. Date
252-0	4-252-0		2537 1ST AVE E	LA CROSSE	54603	NO	Donald & Kathleen Ferguson	11/3/2020				11/30/2020	12/1/2020	12/1/2020	12/2/2020
255-0	4-255-0		2545 1ST AVE E	LA CROSSE	54603	Yes		11/5/2020	XX691	63-66	21	12/1/2020	12/2/2020	12/2/2020	12/3/2020
256-0	4-256-0		2553 1ST AVE E	LA CROSSE	54603	Yes		10/27/2020				11/16/2020	11/18/2020	11/18/2020	11/19/2020
2717-FR	17-10253-20		2717 Fanta Reed Road			No	Colgan Air Services	11/17/2020				12/23/2020	12/23/2020	12/23/2020	na
328-0	4-328-0	, ,	2530 1ST AVE W	LA CROSSE	54603	Yes		11/3/2020	KU556	63-66	34	11/30/2020	na	12/1/2020	12/10/2020
329-0	4-329-0		2529 BAINBRIDGE ST	LA CROSSE	54603	Yes		10/29/2020	RI599	63-66	18	11/20/2020	11/23/2020	11/23/2020	12/12/2020
330-0	4-330-0		2533 BAINBRIDGE ST	LA CROSSE	54603	Yes		10/27/2020				11/16/2020	11/18/2020	11/18/2020	11/23/2020
332-0	4-332-0		2538 1ST AVE W	LA CROSSE	54603	Yes		12/23/2020							
333-0	4-333-0		2537 BAINBRIDGE ST	LA CROSSE	54603	No	Jaime Lenex	11/3/2020	IK401	60-63	30	11/30/2020	12/1/2020	12/1/2020	
334-0	4-334-0		2541 BAINBRIDGE ST	LA CROSSE	54603	Yes		11/3/2020	NX283	60-63	20	11/30/2020	na	12/1/2020	
337-0	4-337-0		2545 BAINBRIDGE ST	LA CROSSE	54603	Yes		12/2/2020	VD532	63-66	22	12/29/2020	12/30/2020	12/30/2020	
338-0	4-338-0		2549 BAINBRIDGE ST	LA CROSSE	54603	Yes		11/18/2020	XX704	63-66	25	12/23/2020	12/23/2020	12/23/2020	12/27/2020
339-0	4-339-0		2550 1ST AVE W	LA CROSSE	54603	Yes		10/27/2020				11/16/2020	11/17/2020	11/17/2020	
340-0	4-340-0		2554 1ST AVE W	LA CROSSE	54603	Yes		10/29/2020				11/20/2020	11/24/2020	11/24/2020	
341-0	4-341-0		2555 BAINBRIDGE ST	LA CROSSE	54603	Yes		10/29/2020				11/20/2020	11/24/2020	11/24/2020	11/24/2020
342-0	4-342-0		2559 BAINBRIDGE ST	LA CROSSE	54603	Yes		11/24/2020	UV497	60-63	28	12/23/2020	12/23/2020	12/23/2020	12/28/2020
343-0	4-343-0		2558 1ST AVE W	LA CROSSE	54603	Yes		11/3/2020				11/30/2020	12/1/2020	12/1/2020	
344-0	4-344-0		111 CALLAWAY BLVD	LA CROSSE	54603	Yes		10/29/2020				11/20/2020	na	11/24/2020	
345-0	4-345-0		2509 BAINBRIDGE ST	LA CROSSE	54603	Yes		10/27/2020				11/16/2020	11/18/2020	11/18/2020	
346-0	4-346-0		2504 1ST AVE W	LA CROSSE	54603	Yes		11/9/2020	TY398	60-63	20	12/9/2020	12/9/2020	12/9/2020	

Sampling								Completed		Well	Static				
Point	Tax Parcel			Property	Prope	Owner	Occupant Name (if dff	Sampling		interval	level (ft	Lab Report	Results e-mail	Results Letter	Bottled Water
Number	Number	Owner Name	Property Address	City	rty Zip	Occupied?	from owner)	Date	UWID	(ft bgs)	bgs)	Date	Date	Date	Ack. Date
347-0	4-347-0		2510 1ST AVE W	LA CROSSE	54603	Yes		11/5/2020	RI582	63-66	30	12/1/2020	12/2/2020	12/2/2020	
349-0	4-349-0		2521 BAINBRIDGE ST	LA CROSSE	54603	Yes		12/8/2020							
350-0	4-350-0		2514 1ST AVE W	LA CROSSE	54603	Yes		11/2/2020				11/30/2020	12/1/2020	12/1/2020	
351-0	4-351-0		2518 1ST AVE W	LA CROSSE	54603	Yes		10/29/2020				11/20/2020	na	11/24/2020	
352-0	4-352-0		2526 1ST AVE W	LA CROSSE	54603	Yes		10/29/2020	ER442	63-66	27	11/20/2020	11/24/2020	11/24/2020	
360-0	4-360-0		208 CALLAWAY BLVD	LA CROSSE	54603	No	Christina Tanner-Sass	10/27/2020				11/16/2020	11/18/2020	11/18/2020	11/23/2020
361-0	4-361-0		204 CALLAWAY BLVD	LA CROSSE	54603	Yes		10/29/2020				11/20/2020	11/24/2020	11/24/2020	
363-0	4-363-0		2501 BAINBRIDGE ST	LA CROSSE	54603	Yes		11/3/2020	RK320	63-66	25	11/30/2020	12/1/2020	12/1/2020	
365-0	4-365-0		2501 1ST AVE W	LA CROSSE	54603	Yes		11/16/2020	XX703	63-63	25	12/23/2020	12/23/2020	12/23/2020	
366-0	4-366-0		2505 1ST AVE W	LA CROSSE	54603	Yes	Stacey's Adult Family Home	11/9/2020	TY391	60-63	19	12/9/2020	12/9/2020	12/9/2020	
369-0	4-369-0		2511 1ST AVE W	LA CROSSE	54603	Yes		10/27/2020	VD833	63-66	28	11/16/2020	11/18/2020	11/18/2020	
370-0	4-370-0		2515 1ST AVE W	LA CROSSE	54603	Yes		10/29/2020				11/20/2020	11/24/2020	11/24/2020	
373-0	4-373-0		2519 1ST AVE W	LA CROSSE	54603	Yes		10/29/2020	WU600	59-62	30	11/20/2020	na	11/24/2020	
383-0	4-383-0		2531 1ST AVE W	LA CROSSE	54603	Yes		11/17/2020				12/23/2020	12/23/2020	12/23/2020	
384-0	4-384-0		2535 1ST AVE W	LA CROSSE	54603	Yes		12/22/2020							
385-0	4-385-0		2539 1ST AVE W	LA CROSSE	54603	Yes		11/3/2020				11/30/2020	12/1/2020	12/1/2020	12/2/2020
386-0	4-386-0		2543 1ST AVE W	LA CROSSE	54603	Yes		10/27/2020	ZJ581	62-65	25	11/16/2020	11/18/2020	11/18/2020	11/20/2020
387-0	4-387-0		2547 1ST AVE W	LA CROSSE	54603	Yes		12/22/2020							
388-0	4-388-0		2551 1ST AVE W	LA CROSSE	54603	Yes		10/29/2020				11/20/2020	11/24/2020	11/24/2020	11/27/2020
389-0-A	4-389-0	,	2557 1ST AVE W	LA CROSSE	54603	NO		11/2/2020				11/30/2020	12/1/2020	12/1/2020	

										Well	Static				
Sampling								Completed		Screen	water				
Point	Tax Parcel			Property	Prope	Owner	Occupant Name (if dff	Sampling		interval	level (ft	Lab Report	<b>Results e-mail</b>	<b>Results Letter</b>	<b>Bottled Water</b>
Number	Number	Owner Name	Property Address	City	rty Zip	Occupied?	from owner)	Date	UWID	(ft bgs)	bgs)	Date	Date	Date	Ack. Date
389-0-B	4-389-0	, <u> </u>	2555 1ST AVE W	LA CROSSE	54603	No	Samantha Scott	11/2/2020				11/30/2020	12/1/2020	12/1/2020	12/2/2020
623-0	4-623-0		1820 Bainbridge St.	La Crosse	54601			11/19/2020				12/4/2020	12/4/2020	12/4/2020	
BG122	4-97-2		2630 FANTA REED RD	LA CROSSE	54603	Yes		10/28/2020	BG122 - Well House 1 -			11/20/2020	11/23/2020	11/23/2020	na
									North						
BG123	4-97-2		2630 FANTA REED RD	LA CROSSE	54603	Yes		10/28/2020	BG123 - Well House 2 -			11/20/2020	11/23/2020	11/23/2020	na
									Center						
BG124	4-97-2		2630 FANTA REED RD	LA CROSSE	54603	Yes		10/28/2020	BG124 - Well House 3 -			11/20/2020	11/23/2020	11/23/2020	na
									South						
WR972	4-97-2		2630 FANTA REED RD	LA CROSSE	54603	Yes		10/28/2020	WR972 - Office			11/20/2020	11/23/2020	11/23/2020	



444 21st Street South · La Crosse, Wisconsin · 54601

November 30, 2020

2630 Fanta Reed Road La Crosse, WI 54603

Subject: CORRECTED Summary of Private Well Sampling Results

2630 Fanta Reed Road La Crosse, WI 54603 Tax parcel # 4-97-2 Sample ID # WR972, BG122, BG123 and BG124

Dear :

This letter corrects and supplants our November 23, 2020 letter, which conveyed and summarized the test results for the samples collected on October 29, 2020 at the above address. In that letter, *Table 1 – Office (UWID WR972) Sample Results* erroneously contained results for four (4) PFAs compounds from another property altogether; it has been corrected below. No PFAS compounds were detected in the samples collected from the potable well serving the office building (Unique Well ID # WR972).

We apologize for the error in our summary table. The lab reports attached to the November 23, 2020 letter, and also attached to this letter, were correct. It was just an error, albeit a regrettable one, in the summary table. We apologize for any undue anxiety regarding the safety of your drinking water.

Some PFAS compounds were found at levels <u>above</u> the Department of Health Services (DHS) levels recommended for protecting health. These levels are called the "Recommended Public Health Standard" in the table below. The levels found in your wells are called the "Sample Result" in the tables below.

2630 Fanta Reed Road, La Crosse, WI 54603 Tax parcel # 4-97-2 November 30, 2020

Please note that we collected a total of five (5) samples from the four (4) wells on the property. Four (4) of the samples were analyzed for thirty-six (36) compounds via isotope dilution; this is referred to the WI-36 method. In addition, a "split" sample was sample collected from the potable well serving the office building (Unique Well ID # WR972). It was sent to a different lab and analyzed for eighteen (18) PFAS compounds via EPA method 537.1, the Safe Drinking Water Act method. <u>No PFAS compounds were detected in the potable well serving the office building by either method</u>.

The following five tables summarize the results from the five (5) samples. **Bolded results** are above a current recommended level intended to protect health according to the Department of Health Services (DHS).

Compound	Sample Result (unit)	Recomm Public H Standard	ended lealth (unit <sup>e</sup> )
N-Ethyl Perfluorooctane sulfonamide (NEtFOSA) CAS # 4151-50-2	Not Detected	20 ppt <sup>a,b</sup>	ot for or the
N-Ethyl perfluorooctane sulfonamidoacetic acid (NEtFOSAA) CAS # 2991-50-6	Not Detected	20 ppt <sup>a,b</sup>	is 20 pp ounds c all 6
N-Ethyl perfluorooctane sulfonamidoethanol (NEtFOSE) CAS # 1691-99-2	Not Detected	20 ppt <sup>a,b</sup>	d limit i compo otal of
Perfluorooctane sulfonamide (FOSA) CAS # 754-91-6	Not Detected	20 ppt <sup>a,b</sup>	nende hese 6 <i>bined</i> t
Perfluorooctanoic acid (PFOA) CAS # 335-67-1	Not Detected	20 ppt <sup>a,b</sup>	ecomr <i>ine</i> of t <i>com</i>
Perfluorooctanesulfonic acid (PFOS) CAS # 1763-23-1	Not Detected	20 ppt <sup>a,b</sup>	The I
Hexafluoropropylene oxide dimer acid (HPFO-DA; GenX) CAS # 13252-13-6	Not Detected		300 ppt <sup>a</sup>
Perfluorobutanesulfonic acid (PFBS) CAS # 375-73-5	Not Detected		300 ppt ª
Perfluorohexanesulfonic acid (PFHxS) CAS # 355-46-4	Not Detected		300 ppt <sup>a</sup>
Perfluorobutanoic acid (PFBA) CAS # 375-22-4	Not Detected		300 ppt <sup>a</sup>
Perfluorodecanoic acid (PFDA) CAS # 335-76-2	Not Detected		300 ppt <sup>a</sup>

### Table 1 – Office (UWID WR972) Sample Results

2630 Fanta Reed Road, La Crosse, WI 54603 Tax parcel # 4-97-2 November 30, 2020

Perfluorododecanoic acid (PFDoA) CAS # 307-55-1	Not Detected	500 ppt ª
Perfluorohexanoic acid (PFHxA) CAS # 307-24-4	Not Detected	300 ppt <sup>a</sup>
Perfluorononanoic acid (PFNA) CAS # 375-95-1	Not Detected	30 ppt ª
Perfluorotetradecanoic acid (PFTeA) CAS # 376-06-7	Not Detected	10,000 ppt <sup>a</sup>
Perfluoroundecanoic acid (PFUnA) CAS # 2058-94-8	Not Detected	3,000 ppt <sup>a</sup>
4,8-Dioxa-3H-perfluorononanoic acid (DONA) CAS # 919005-14-4	Not Detected	3,000 ppt <sup>a</sup>
Perfluorooctadecanoic acid (PFODA) CAS # 16517-11-6	Not Detected	400,000 ppt <sup>a</sup>
Perfluoro-1-heptanesulfonic acid (PFHpS) CAS # 375-92-8	Not Detected	None Established <sup>c</sup>
Perfluoro-1-pentanesulfonic acid (PFPeS) CAS # 2706-91-4	Not Detected	None Established <sup>c</sup>
Perfluoro-n-heptanoic acid (PFHpA) CAS # 375-85-9	Not Detected	None Established <sup>c</sup>
Perfluoro-n-pentanoic acid (PFPeA) CAS #2706-90-3	Not Detected	None Established <sup>c</sup>

<sup>a</sup> Public health enforcement standard (ES) recommended by DHS.

<sup>b</sup> DHS recommends a combined enforcement standard of 20 ng/L and combined preventive action limit of 2 ng/L for FOSA, NEt-FOSA, NetFOSAA, PFOS, and PFOA.

<sup>c</sup> A current standard is not available; the compound is currently under review by DHS for potential public health standard recommendation.

<sup>d</sup> Public health enforcement standard (ES) in NR 140, Wisconsin Administrative Code.

<sup>e</sup> Units: Parts per trillion (ppt) = nanograms of substance per liter of water (ng/L)

2630 Fanta Reed Road, La Crosse, WI 54603 Tax parcel # 4-97-2 November 30, 2020

## Table 2. Office (UWID WR972) "Split" Sample Results

Compound	Sample Result (unit)	Recomm Public H Standard	ended lealth (unit <sup>e</sup> )
N-Ethyl Perfluorooctane sulfonamide (NEtFOSA) CAS # 4151-50-2	Not Analyzed	20 ppt <sup>a,b</sup>	) ppt unds 16
N-Ethyl perfluorooctane sulfonamidoacetic acid (NEtFOSAA) CAS # 2991-50-6	Not detected	20 ppt <sup>a,b</sup>	it is 20 ompo // of all
N-Ethyl perfluorooctane sulfonamidoethanol (NEtFOSE) CAS # 1691-99-2	Not Analyzed	20 ppt <sup>a,b</sup>	ed lim ese 6 c ed tota
Perfluorooctane sulfonamide (FOSA) CAS # 754-91-6	Not Analyzed	20 ppt <sup>a,b</sup>	mende of the mbine
Perfluorooctanoic acid (PFOA) CAS # 335-67-1	Not detected	20 ppt <sup>a,b</sup>	recom <i>y one</i> the <i>cc</i>
Perfluorooctanesulfonic acid (PFOS) CAS # 1763-23-1	Not detected	20 ppt <sup>a,b</sup>	The for al
Hexafluoropropylene oxide dimer acid (HPFO-DA; GenX) CAS # 13252-13-6	Not detected		300 ppt <sup>a</sup>
Perfluorobutanesulfonic acid (PFBS) CAS # 375-73-5	Not detected	450	),000 ppt <sup>a</sup>
Perfluorohexanesulfonic acid (PFHxS) CAS # 355-46-4	Not detected		40 ppt <sup>a</sup>
Perfluorobutanoic acid (PFBA) CAS # 375-22-4	Not Analyzed	10	),000 ppt <sup>a</sup>
Perfluorodecanoic acid (PFDA) CAS # 335-76-2	Not detected		300 ppt <sup>a</sup>
Perfluorododecanoic acid (PFDoA) CAS # 307-55-1	Not detected		500 ppt <sup>a</sup>
Perfluorohexanoic acid (PFHxA) CAS # 307-24-4	Not detected	150	),000 ppt <sup>a</sup>
Perfluorononanoic acid (PFNA) CAS # 375-95-1	Not detected		30 ppt <sup>a</sup>
Perfluorotetradecanoic acid (PFTeA) CAS # 376-06-7	Not detected	10	),000 ppt <sup>a</sup>
Perfluoroundecanoic acid (PFUnA) CAS # 2058-94-8	Not detected	3	8,000 ppt <sup>a</sup>
4,8-Dioxa-3H-perfluorononanoic acid (DONA) CAS # 919005-14-4	Not detected	3	3,000 ppt <sup>a</sup>

2630 Fanta Reed Road, La Crosse, WI 54603 Tax parcel # 4-97-2 November 30, 2020

Perfluorooctadecanoic acid (PFODA) CAS # 16517-11-6	Not Analyzed	400,000 ppt <sup>a</sup>						
<sup>a</sup> Public health enforcement standard (ES) recommended by DHS.								
<sup>b</sup> DHS recommends a combined enforcement standard of 20 ng/L and of DHS recommends a combined enforcement standard of 20 ng/L and of DHS recommends a combined enforcement standard of 20 ng/L and of DHS recommends a combined enforcement standard of 20 ng/L and of DHS recommends a combined enforcement standard of 20 ng/L and of DHS recommends a combined enforcement standard of 20 ng/L and of DHS recommends a combined enforcement standard of 20 ng/L and of DHS recommends a combined enforcement standard of 20 ng/L and of DHS recommends a combined enforcement standard of 20 ng/L and of DHS recommends a combined enforcement standard of 20 ng/L and of DHS recommends a combined enforcement standard of 20 ng/L and of DHS recommends a combined enforcement standard of 20 ng/L and of DHS recommends a combined enforcement standard based a combined enforcement stand	combined preventive	action limit of 2 ng/L for						
FOSA, NEt-FOSE, NEt-FOSA, NetFOSAA, PFOS, and PFOA.								
<sup>c</sup> A current standard is not available; the compound is currently under	review by DHS for pot	tential public health						

standard recommendation.

<sup>d</sup> Public health enforcement standard (ES) in NR 140, Wisconsin Administrative Code.

<sup>e</sup> Units: Parts per trillion (ppt) = nanograms of substance per liter of water (ng/L)

<sup>BL</sup> Detected in the method blank. Possible lab contaminant.

### Table 3 – Wellhouse 1 (UWID BG122) Sample Results

Compound	Sample Result (unit)	Recomm Public H Standard	ended lealth (unit <sup>e</sup> )
N-Ethyl Perfluorooctane sulfonamide (NEtFOSA) CAS # 4151-50-2	Not Detected	20 ppt <sup>a,b</sup>	) ppt unds I 6
N-Ethyl perfluorooctane sulfonamidoacetic acid (NEtFOSAA) CAS # 2991-50-6	Not Detected	20 ppt <sup>a,b</sup>	it is 2C compo <i>il</i> of al
N-Ethyl perfluorooctane sulfonamidoethanol (NEtFOSE) CAS # 1691-99-2	Not Detected	20 ppt <sup>a,b</sup>	ed lim ese 6 c ed toto
Perfluorooctane sulfonamide (FOSA) CAS # 754-91-6	Not Detected	20 ppt <sup>a,b</sup>	mend of the
Perfluorooctanoic acid (PFOA) CAS # 335-67-1	44 ppt	20 ppt <sup>a,b</sup>	recom ny <i>one</i> the co
Perfluorooctanesulfonic acid (PFOS) CAS # 1763-23-1	360 ppt	20 ppt <sup>a,b</sup>	The for a or
Hexafluoropropylene oxide dimer acid (HPFO-DA; GenX) CAS # 13252-13-6	Not Detected		300 ppt <sup>a</sup>
Perfluorobutanesulfonic acid (PFBS) CAS # 375-73-5	37 ppt		300 ppt <sup>a</sup>
Perfluorohexanesulfonic acid (PFHxS) CAS # 355-46-4	460 ppt		300 ppt <sup>a</sup>
Perfluorobutanoic acid (PFBA) CAS # 375-22-4	88 ppt		300 ppt <sup>a</sup>
Perfluorodecanoic acid (PFDA) CAS # 335-76-2	Not Detected		300 ppt <sup>a</sup>
Perfluorododecanoic acid (PFDoA) CAS # 307-55-1	Not Detected		500 ppt <sup>a</sup>

2630 Fanta Reed Road, La Crosse, WI 54603 Tax parcel # 4-97-2 November 30, 2020

Perfluorohexanoic acid (PFHxA) CAS # 307-24-4	57 ppt	300 ppt <sup>a</sup>
Perfluorononanoic acid (PFNA) CAS # 375-95-1	1.6 ppt	30 ppt <sup>a</sup>
Perfluorotetradecanoic acid (PFTeA) CAS # 376-06-7	Not Detected	10,000 ppt <sup>a</sup>
Perfluoroundecanoic acid (PFUnA) CAS # 2058-94-8	Not Detected	3,000 ppt <sup>a</sup>
4,8-Dioxa-3H-perfluorononanoic acid (DONA) CAS # 919005-14-4	Not Detected	3,000 ppt <sup>a</sup>
Perfluorooctadecanoic acid (PFODA) CAS # 16517-11-6	Not Detected	400,000 ppt <sup>a</sup>
1H, 1H, 2H, 2H-perflorodecane sulfonic acid (8:2 FTS) CAS # 39108-34-4	2.9 ppt	None Established <sup>c</sup>
1H, 1H, 2H, 2H-perflurooctane sulfonic acid (6:2 FTS) CAS # 27619-97-2	16 ppt	None Established <sup>c</sup>
Perfluoro-1-heptanesulfonic acid (PFHpS) CAS # 375-92-8	13 ppt	None Established <sup>c</sup>
Perfluoro-1-pentanesulfonic acid (PFPeS) CAS # 2706-91-4	55 ppt	None Established <sup>c</sup>
Perfluoro-n-heptanoic acid (PFHpA) CAS # 375-85-9	21 ppt	None Established <sup>c</sup>
Perfluoro-n-pentanoic acid (PFPeA) CAS #2706-90-3	49 ppt	None Established <sup>c</sup>

<sup>a</sup> Public health enforcement standard (ES) recommended by DHS.

<sup>b</sup> DHS recommends a combined enforcement standard of 20 ng/L and combined preventive action limit of 2 ng/L for FOSA, NEt-FOSA, NetFOSAA, PFOS, and PFOA.

<sup>2</sup> A current standard is not available; the compound is currently under review by DHS for potential public health standard recommendation.

<sup>d</sup> Public health enforcement standard (ES) in NR 140, Wisconsin Administrative Code.

<sup>e</sup> Units: Parts per trillion (ppt) = nanograms of substance per liter of water (ng/L)

2630 Fanta Reed Road, La Crosse, WI 54603 Tax parcel # 4-97-2 November 30, 2020

## Table 4 – Wellhouse 2 (UWID BG123) Sample Results

Compound	Sample Result (unit)	Recomm Public H Standard	ended lealth (unit <sup>e</sup> )
N-Ethyl Perfluorooctane sulfonamide (NEtFOSA) CAS # 4151-50-2	Not Detected	20 ppt <sup>a,b</sup>	) ppt unds I 6
N-Ethyl perfluorooctane sulfonamidoacetic acid (NEtFOSAA) CAS # 2991-50-6	Not Detected	20 ppt <sup>a,b</sup>	it is 20 ompo // of all
N-Ethyl perfluorooctane sulfonamidoethanol (NEtFOSE) CAS # 1691-99-2	Not Detected	20 ppt <sup>a,b</sup>	ed lim ese 6 c ed tota
Perfluorooctane sulfonamide (FOSA) CAS # 754-91-6	Not Detected	20 ppt <sup>a,b</sup>	mend of the mbine
Perfluorooctanoic acid (PFOA) CAS # 335-67-1	11 ppt	20 ppt <sup>a,b</sup>	recom 1y <i>one</i> the <i>cc</i>
Perfluorooctanesulfonic acid (PFOS) CAS # 1763-23-1	53 ppt	20 ppt <sup>a,b</sup>	The for al or
Hexafluoropropylene oxide dimer acid (HPFO-DA; GenX) CAS # 13252-13-6	Not Detected		300 ppt <sup>a</sup>
Perfluorobutanesulfonic acid (PFBS) CAS # 375-73-5	12 ppt		300 ppt <sup>a</sup>
Perfluorohexanesulfonic acid (PFHxS) CAS # 355-46-4	50 ppt		300 ppt <sup>a</sup>
Perfluorobutanoic acid (PFBA) CAS # 375-22-4	57 ppt		300 ppt <sup>a</sup>
Perfluorodecanoic acid (PFDA) CAS # 335-76-2	Not Detected		300 ppt <sup>a</sup>
Perfluorododecanoic acid (PFDoA) CAS # 307-55-1	Not Detected		500 ppt <sup>a</sup>
Perfluorohexanoic acid (PFHxA) CAS # 307-24-4	14 ppt		300 ppt <sup>a</sup>
Perfluorononanoic acid (PFNA) CAS # 375-95-1	Not Detected		30 ppt <sup>a</sup>
Perfluorotetradecanoic acid (PFTeA) CAS # 376-06-7	Not Detected	10	0,000 ppt <sup>a</sup>
Perfluoroundecanoic acid (PFUnA) CAS # 2058-94-8	Not Detected	3,000 ppt <sup>a</sup>	
4,8-Dioxa-3H-perfluorononanoic acid (DONA) CAS # 919005-14-4	Not Detected 3,000 ppt		

2630 Fanta Reed Road, La Crosse, WI 54603 Tax parcel # 4-97-2 November 30, 2020

Perfluorooctadecanoic acid (PFODA) CAS # 16517-11-6	Not Detected	400,000 ppt <sup>a</sup>
1H, 1H, 2H, 2H-perflurooctane sulfonic acid (6:2 FTS) CAS # 27619-97-2	3.1 ppt	None Established <sup>c</sup>
Perfluoro-1-heptanesulfonic acid (PFHpS) CAS # 375-92-8	1.6 ppt	None Established <sup>c</sup>
Perfluoro-1-pentanesulfonic acid (PFPeS) CAS # 2706-91-4	10 ppt	None Established <sup>c</sup>
Perfluoro-n-heptanoic acid (PFHpA) CAS # 375-85-9	5.3 ppt	None Established <sup>c</sup>
Perfluoro-n-pentanoic acid (PFPeA) CAS #2706-90-3	14 ppt	None Established <sup>c</sup>

<sup>a</sup> Public health enforcement standard (ES) recommended by DHS.

<sup>b</sup> DHS recommends a combined enforcement standard of 20 ng/L and combined preventive action limit of 2 ng/L for FOSA, NEt-FOSA, NetFOSAA, PFOS, and PFOA.

<sup>c</sup> A current standard is not available; the compound is currently under review by DHS for potential public health standard recommendation.

<sup>d</sup> Public health enforcement standard (ES) in NR 140, Wisconsin Administrative Code.

<sup>e</sup> Units: Parts per trillion (ppt) = nanograms of substance per liter of water (ng/L)

<sup>BL</sup> Detected in the method blank. Possible lab contaminant.

### Table 5 – Wellhouse 3 (UWID BG124) Sample Results

Compound	Sample Result (unit)	Recomm Public H Standard	ended lealth (unit <sup>e</sup> )
N-Ethyl Perfluorooctane sulfonamide (NEtFOSA) CAS # 4151-50-2	Not Detected	20 ppt <sup>a,b</sup>	) ppt unds I 6
N-Ethyl perfluorooctane sulfonamidoacetic acid (NEtFOSAA) CAS # 2991-50-6	Not Detected	20 ppt <sup>a,b</sup>	it is 2C ompo // of al
N-Ethyl perfluorooctane sulfonamidoethanol (NEtFOSE) CAS # 1691-99-2	Not Detected	20 ppt <sup>a,b</sup>	ed lim ese 6 c ed toto
Perfluorooctane sulfonamide (FOSA) CAS # 754-91-6	Not Detected	20 ppt <sup>a,b</sup>	mend of the mbine
Perfluorooctanoic acid (PFOA) CAS # 335-67-1	37 ppt	20 ppt <sup>a,b</sup>	recom ny <i>one</i> the <i>cc</i>
Perfluorooctanesulfonic acid (PFOS) CAS # 1763-23-1	63 ppt	20 ppt <sup>a,b</sup>	The for al or
Hexafluoropropylene oxide dimer acid (HPFO-DA; GenX) CAS # 13252-13-6	Not Detected		300 ppt <sup>a</sup>

2630 Fanta Reed Road, La Crosse, WI 54603 Tax parcel # 4-97-2 November 30, 2020

Perfluorobutanesulfonic acid (PFBS) CAS # 375-73-5	7.9 ppt	300 ppt <sup>a</sup>
Perfluorohexanesulfonic acid (PFHxS) CAS # 355-46-4	62 ppt	300 ppt <sup>a</sup>
Perfluorobutanoic acid (PFBA) CAS # 375-22-4	20 ppt	300 ppt <sup>a</sup>
Perfluorodecanoic acid (PFDA) CAS # 335-76-2	Not Detected	300 ppt <sup>a</sup>
Perfluorododecanoic acid (PFDoA) CAS # 307-55-1	Not Detected	500 ppt <sup>a</sup>
Perfluorohexanoic acid (PFHxA) CAS # 307-24-4	41 ppt	300 ppt <sup>a</sup>
Perfluorononanoic acid (PFNA) CAS # 375-95-1	1.1 ppt	30 ppt <sup>a</sup>
Perfluorotetradecanoic acid (PFTeA) CAS # 376-06-7	Not Detected	10,000 ppt <sup>a</sup>
Perfluoroundecanoic acid (PFUnA) CAS # 2058-94-8	Not Detected	3,000 ppt <sup>a</sup>
4,8-Dioxa-3H-perfluorononanoic acid (DONA) CAS # 919005-14-4	Not Detected	3,000 ppt <sup>a</sup>
Perfluorooctadecanoic acid (PFODA) CAS # 16517-11-6	Not Detected	400,000 ppt <sup>a</sup>
1H, 1H, 2H, 2H-perflurooctane sulfonic acid (6:2 FTS) CAS # 27619-97-2	3.2 ppt	None Established <sup>c</sup>
Perfluoro-1-hetanesulfonic acid (PFHpS) CAS # 375-92-8	1.9 ppt	None Established <sup>c</sup>
Perfluoro-1-pentanesulfonic acid (PFPeS) CAS # 2706-91-4	6.9 ppt	None Established <sup>c</sup>
Perfluoro-n-heptanoic acid (PFHpA) CAS # 375-85-9	19 ppt	None Established <sup>c</sup>
Perfluoro-n-pentanoic acid (PFPeA) CAS #2706-90-3	41 ppt	None Established <sup>c</sup>

<sup>a</sup> Public health enforcement standard (ES) recommended by DHS.

<sup>b</sup> DHS recommends a combined enforcement standard of 20 ng/L and combined preventive action limit of 2 ng/L for FOSA, NEt-FOSA, NetFOSAA, PFOS, and PFOA.

<sup>c</sup> A current standard is not available; the compound is currently under review by DHS for potential public health standard recommendation.

<sup>d</sup> Public health enforcement standard (ES) in NR 140, Wisconsin Administrative Code.

<sup>e</sup> Units: Parts per trillion (ppt) = nanograms of substance per liter of water (ng/L)

2630 Fanta Reed Road, La Crosse, WI 54603 Tax parcel # 4-97-2 November 30, 2020

As required by law, we will be submitting these results to the Department of Natural Resources (DNR). The DNR may consult with the Department of Health Services (DHS) about these test results. DHS may review all PFAS tests and follow-up with you directly if any actions are recommended to protect your health.

Thank you for your patience and assistance with our investigation. We will provide updates on the project at <u>https://www.cityoflacrosse.org/wells</u> as our work continues. If you have any questions, please call The OS Group at (608) 668-2718 or email them at <u>PFAS@theOSgrp.com</u>.

You can also contact the DNR and DHS with questions about PFAS or the water sample results at the numbers provided below.

Questions about		<u>Contact</u>	<u>Phone</u>	E-mail Address
Soil & Groundwate Testing, Clean Up	<sup>r</sup> DNR	David Rozeboom	715-215-2078	David.Rozeboom@wisconsin.gov
Drinking Water or Private wells	DNR	Kyle Burton	920-360-2112	kyle.burton@wisconsin.gov
Health Concerns	DHS	Curtis Hedman	608-266-6677	Curtis.Hedman@dhs.wisconsin.gov

On behalf of The City of La Crosse, *The OS Group, LLC* 

John C. Kere

John C. Storlie, PG Principal Hydrogeologist

Attachment: Lab reports for your wells

Client: Pace Analytical Services, LLC				Laboratory I	D: VK03016-	001	
Description: WR972				Matrix	: Aqueous		
Date Sampled:10/28/2020 0915	Project Nar	ne: LACROSSE WELL #	#23 & 24		-		
Date Received: 11/03/2020 Pr	oject Numb	oer: 40217496					
Run Prep Method Analytical Method	Dilution	Analysis Date Analyst	Prep Date	Batch			
1 SOP SPE PFAS by ID SOP	1 SOP SPE PFAS by ID SOP 1 11/13/2020 1626 MMM 11/11/2020 1108 73065						
Parameter	C <i>A</i> Numb	AS Analytical er Method	Result Q	LOQ	DL	Units	Run
9-chlorohexadecafluoro-3-oxanone-1-sulfonic acid (9CI-PF3ONS)	756426-5	8-1 PFAS by ID SOP	ND	6.9	1.7	ng/L	1
11-chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11CI-PF3	) 763051-92	2-9 PFAS by ID SOP	ND	6.9	1.7	ng/L	1
1H, 1H, 2H, 2H-perfluorodecane sulfonic acid (8:2 FTS)	39108-34	4-4 PFAS by ID SOP	ND	6.9	1.7	ng/L	1
1H, 1H, 2H, 2H-perfluorooctane sulfonic acid (6:2 FTS)	27619-9	7-2 PFAS by ID SOP	ND	6.9	1.7	ng/L	1
1H,1H,2H,2H-perfluorododecane sulfonic acid (10:2 FTS)	120226-60	0-0 PFAS by ID SOP	ND	6.9	1.7	ng/L	1
1H,1H,2H,2H-perfluorohexane sulfonic acid (4:2 FTS)	757124-72	2-4 PFAS by ID SOP	ND	6.9	1.7	ng/L	1
Hexafluoropropylene oxide dimer acid (GenX)	13252-13	3-6 PFAS by ID SOP	ND	6.9	1.7	ng/L	1
4,8-dioxa-3H-perfluorononanoic acid (ADONA)	919005-14	4-4 PFAS by ID SOP	ND	6.9	1.7	ng/L	1
N-ethylperfluoro-1-octanesulfonamide (EtFOSA)	4151-50	)-2 PFAS by ID SOP	ND	6.9	1.7	ng/L	1
N-ethylperfluoro-1-octanesulfonamidoacetic acid (EtFOSAA)	2991-50	)-6 PFAS by ID SOP	ND	6.9	1.7	ng/L	1
2-N-ethylperfluoro-1-octanesulfonamido-ethanol (EtFOSE)	1691-99	9-2 PFAS by ID SOP	ND	6.9	1.7	ng/L	1
N-methylperfluoro-1-octanesulfonamide (MeFOSA)	31506-32	2-8 PFAS by ID SOP	ND	14	3.5	ng/L	1
N-methylperfluoro-1-octanesulfonamidoacetic acid (MeFOSAA)	2355-31	I-9 PFAS by ID SOP	ND	6.9	1.7	ng/L	1
2-N-methylperfluoro-1-octanesulfonamido-ethanol (MeFOSE)	24448-0	9-7 PFAS by ID SOP	ND	6.9	1.7	ng/L	1
Perfluoro-1-butanesulfonic acid (PFBS)	375-73	3-5 PFAS by ID SOP	ND	3.5	0.87	ng/L	1
Perfluoro-1-decanesulfonic acid (PFDS)	335-77	7-3 PFAS by ID SOP	ND	3.5	0.87	ng/L	1
Perfluoro-1-heptanesulfonic acid (PFHpS)	375-92	2-8 PFAS by ID SOP	ND	3.5	0.87	ng/L	1
Perfluoro-1-nonanesulfonic acid (PFNS)	68259-12	2-1 PFAS by ID SOP	ND	3.5	0.87	ng/L	1
Perfluoro-1-octanesulfonamide (PFOSA)	754-91	I-6 PFAS by ID SOP	ND	3.5	0.87	ng/L	1
Perfluoro-1-pentanesulfonic acid (PFPeS)	2706-91	I-4 PFAS by ID SOP	ND	3.5	0.87	ng/L	1
Perfluorododecanesulfonic acid (PFDOS)	79780-3	9-5 PFAS by ID SOP	ND	6.9	1.7	ng/L	1
Perfluorohexanesulfonic acid (PFHxS)	355-46	6-4 PFAS by ID SOP	ND	3.5	0.87	ng/L	1
Perfluoro-n-butanoic acid (PFBA)	375-22	2-4 PFAS by ID SOP	ND	3.5	0.87	ng/L	1
Perfluoro-n-decanoic acid (PFDA)	335-76	6-2 PFAS by ID SOP	ND	3.5	0.87	ng/L	1
Perfluoro-n-dodecanoic acid (PFDoA)	307-55	5-1 PFAS by ID SOP	ND	3.5	0.87	ng/L	1
Perfluoro-n-heptanoic acid (PFHpA)	375-85	5-9 PFAS by ID SOP	ND	3.5	0.87	ng/L	1
Perfluoro-n-hexadecanoic acid (PFHxDA)	67905-19	9-5 PFAS by ID SOP	ND	6.9	1.7	ng/L	1
Perfluoro-n-hexanoic acid (PFHxA)	307-24	1-4 PFAS by ID SOP	ND	3.5	0.87	ng/L	1
Perfluoro-n-nonanoic acid (PFNA)	375-95	5-1 PFAS by ID SOP	ND	3.5	0.87	ng/L	1
Perfluoro-n-octadecanoic acid (PFODA)	16517-1	1-6 PFAS by ID SOP	ND	6.9	1.7	ng/L	1
Perfluoro-n-octanoic acid (PFOA)	335-67	7-1 PFAS by ID SOP	ND	3.5	0.87	ng/L	1
Perfluoro-n-pentanoic acid (PFPeA)	2706-90	)-3 PFAS by ID SOP	ND	3.5	0.87	ng/L	1
Perfluoro-n-tetradecanoic acid (PFTeDA)	376-06	5-7 PFAS by ID SOP	ND	3.5	0.87	ng/L	1
Perfluoro-n-tridecanoic acid (PFTrDA)	72629-94	4-8 PFAS by ID SOP	ND	3.5	0.87	ng/L	1
Perfluoro-n-undecanoic acid (PFUdA)	2058-94	1-8 PFAS by ID SOP	ND	3.5	0.87	ng/L	1
Perfluorooctanesulfonic acid (PFOS)	1763-23	3-1 PFAS by ID SOP	ND	3.5	0.87	ng/L	1
R Surrogate Q % Re	un 1 Ac covery	ceptance Limits					
13C2_4:2FTS	96	25-150					
13C2_6:2FTS	86	25-150					
13C2_8:2FTS	99	25-150					
13C2_PFDoA	86	25-150					
13C2_PFHxDA	63	25-150					
13C2_PFTeDA	87	25-150					
LOQ = Limit of Quantitation B = Detected in the method blank	E = Quantita	tion of compound exceeded the	calibration range	DL = Detection I im	iit		
ND = Not detected at or above the DL N = Recovery is out of criteria	P = The RPE	between two GC columns exce	eds 40%	J = Estimated resu	It < LOQ and $\geq$ D	DL	
H = Out of holding time W = Reported on wet weight basis							

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Laboratory ID: VK03016-001 Matrix: Aqueous

Client: Pace Analytical Services, LLC	
Description: WR972	
Date Sampled:10/28/2020 0915	Project Name: LACROSSE WELL #23 & 24
Date Received: 11/03/2020	Project Number: 40217496

Surrogate	Run 1 A Q % Recoverv	cceptance Limits
13C3_PFBS	89	25-150
13C3_PFHxS	83	25-150
13C3-HFPO-DA	103	25-150
13C4_PFBA	95	25-150
13C4_PFHpA	94	25-150
13C5_PFHxA	93	25-150
13C5_PFPeA	100	25-150
13C6_PFDA	90	25-150
13C7_PFUdA	87	25-150
13C8_PFOA	95	25-150
13C8_PFOS	73	25-150
13C8_PFOSA	101	10-150
13C9_PFNA	92	25-150
d-EtFOSA	86	10-150
d5-EtFOSAA	87	25-150
d9-EtFOSE	88	10-150
d-MeFOSA	81	10-150
d3-MeFOSAA	95	25-150
d7-MeFOSE	94	10-150

H = Out of holding time	W = Reported on wet weight basis		
ND = Not detected at or above the DL	N = Recovery is out of criteria	P = The RPD between two GC columns exceeds 40%	J = Estimated result < LOQ and $\ge$ DL
LOQ = Limit of Quantitation	B = Detected in the method blank	E = Quantitation of compound exceeded the calibration range	DL = Detection Limit

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### ANALYTICAL RESULTS

#### Project: LACROSSE WELL #23 & 24

Pace Project No.: 40217479

Sample: WR972	Lab ID:	40217479001	Collecte	d: 10/28/20	0 09:15	Received: 10/	30/20 09:30 Ma	atrix: Water	
Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
537.1 PFAS Compounds, Water	Analytical	Method: EPA 5	37.1 Prep	aration Meth	od: EP	PA 537.1			
	Pace Ana	lytical Services	- Ormond I	Beach					
11CI-PF3OUdS	<0.0015	ug/L	0.0019	0.0015	1	11/03/20 22:57	11/04/20 22:50	763051-92-9	
9CI-PF3ONS	<0.0011	ug/L	0.0019	0.0011	1	11/03/20 22:57	11/04/20 22:50	756426-58-1	
ADONA	<0.00069	ug/L	0.0019	0.00069	1	11/03/20 22:57	11/04/20 22:50	919005-14-4	
HFPO-DA	<0.0016	ug/L	0.0019	0.0016	1	11/03/20 22:57	11/04/20 22:50	13252-13-6	
NEtFOSAA	<0.00089	ug/L	0.0019	0.00089	1	11/03/20 22:57	11/04/20 22:50	2991-50-6	
NMeFOSAA	<0.0015	ug/L	0.0019	0.0015	1	11/03/20 22:57	11/04/20 22:50	2355-31-9	
Perfluorobutanesulfonic acid	<0.00063	ug/L	0.0019	0.00063	1	11/03/20 22:57	11/04/20 22:50	375-73-5	
Perfluorodecanoic acid	<0.0019	ug/L	0.0019	0.0019	1	11/03/20 22:57	11/04/20 22:50	335-76-2	
Perfluorohexanoic acid	<0.0012	ug/L	0.0019	0.0012	1	11/03/20 22:57	11/04/20 22:50	307-24-4	
Perfluorododecanoic acid	<0.0014	ug/L	0.0019	0.0014	1	11/03/20 22:57	11/04/20 22:50	307-55-1	
Perfluoroheptanoic acid	<0.00096	ug/L	0.0019	0.00096	1	11/03/20 22:57	11/04/20 22:50	375-85-9	
Perfluorohexanesulfonic acid	<0.00070	ug/L	0.0019	0.00070	1	11/03/20 22:57	11/04/20 22:50	355-46-4	
Perfluorononanoic acid	<0.0019	ug/L	0.0019	0.0019	1	11/03/20 22:57	11/04/20 22:50	375-95-1	
Perfluorooctanesulfonic acid	<0.0011	ug/L	0.0019	0.0011	1	11/03/20 22:57	11/04/20 22:50	1763-23-1	
Perfluorooctanoic acid	<0.00083	ug/L	0.0019	0.00083	1	11/03/20 22:57	11/04/20 22:50	335-67-1	
Perfluorotetradecanoic acid	<0.0018	ug/L	0.0019	0.0018	1	11/03/20 22:57	11/04/20 22:50	376-06-7	
Perfluorotridecanoic acid	<0.0017	ug/L	0.0019	0.0017	1	11/03/20 22:57	11/04/20 22:50	72629-94-8	
Perfluoroundecanoic acid	<0.0019	ug/L	0.0019	0.0019	1	11/03/20 22:57	11/04/20 22:50	2058-94-8	
Surrogates									
13C2-PFDA (S)	88	%	70-130		1	11/03/20 22:57	11/04/20 22:50		
13C2-PFHxA (S)	101	%	70-130		1	11/03/20 22:57	11/04/20 22:50		
NEtFOSAA-d5 (S)	72	%	70-130		1	11/03/20 22:57	11/04/20 22:50		
HFPO-DAS (S)	92	%	70-130		1	11/03/20 22:57	11/04/20 22:50		

### **REPORT OF LABORATORY ANALYSIS**

Client: Pace Analytical Services, LLC	al Services, LLC Laboratory ID: VK03016-004						
Description: BG122							
Date Sampled:10/28/2020 0945	Project Nam	e: LACROSSE WELL #	#23 & 24		·		
Date Received: 11/03/2020	piect Numbe	≏r <sup>.</sup> 40217496					
RunPrep MethodAnalytical MethodD1SOP SPEPFAS by ID SOP	ilution A 1 11	nalysis Date Analyst I/12/2020 1418 MMM	Prep Date 11/11/2020 11	Batch 108 73065			
Parameter	CA Numbe	S Analytical er Method	Result Q	LOQ	DL	Units	Run
9-chlorohexadecafluoro-3-oxanone-1-sulfonic acid (9CI-PF3ONS)	756426-58	-1 PFAS by ID SOP	ND	6.9	1.7	ng/L	1
11-chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11CI-PF3)	763051-92	-9 PFAS by ID SOP	ND	6.9	1.7	ng/L	1
1H, 1H, 2H, 2H-perfluorodecane sulfonic acid (8:2 FTS)	39108-34	-4 PFAS by ID SOP	2.9 J	6.9	1.7	ng/L	1
1H, 1H, 2H, 2H-perfluorooctane sulfonic acid (6:2 FTS)	27619-97	-2 PFAS by ID SOP	16	6.9	1.7	ng/L	1
1H,1H,2H,2H-perfluorododecane sulfonic acid (10:2 FTS)	120226-60	-0 PFAS by ID SOP	ND	6.9	1.7	ng/L	1
1H,1H,2H,2H-perfluorohexane sulfonic acid (4:2 FTS)	757124-72	-4 PFAS by ID SOP	ND	6.9	1.7	ng/L	1
Hexafluoropropylene oxide dimer acid (GenX)	13252-13	-6 PFAS by ID SOP	ND	6.9	1.7	ng/L	1
4,8-dioxa-3H-perfluorononanoic acid (ADONA)	919005-14	-4 PFAS by ID SOP	ND	6.9	1.7	ng/L	1
N-ethylperfluoro-1-octanesulfonamide (EtFOSA)	4151-50	-2 PFAS by ID SOP	ND	6.9	1.7	ng/L	1
N-ethylperfluoro-1-octanesulfonamidoacetic acid (EtFOSAA)	2991-50-	-6 PFAS by ID SOP	ND	6.9	1.7	ng/L	1
2-N-ethylperfluoro-1-octanesulfonamido-ethanol (EtFOSE)	1691-99	-2 PFAS by ID SOP	ND	6.9	1.7	ng/L	1
N-methylperfluoro-1-octanesulfonamide (MeFOSA)	31506-32	-8 PFAS by ID SOP	ND	14	3.4	ng/L	1
N-methylperfluoro-1-octanesulfonamidoacetic acid (MeFOSAA)	2355-31-	-9 PFAS by ID SOP	ND	6.9	1.7	ng/L	1
2-N-methylperfluoro-1-octanesulfonamido-ethanol (MeFOSE)	24448-09	-7 PFAS by ID SOP	ND	6.9	1.7	ng/L	1
Perfluoro-1-butanesulfonic acid (PFBS)	375-73-	-5 PFAS by ID SOP	37	3.4	0.86	ng/L	1
Perfluoro-1-decanesulfonic acid (PFDS)	335-77-	-3 PFAS by ID SOP	ND	3.4	0.86	ng/L	1
Perfluoro-1-heptanesulfonic acid (PFHpS)	375-92-	-8 PFAS by ID SOP	13	3.4	0.86	ng/L	1
Perfluoro-1-nonanesulfonic acid (PFNS)	68259-12	-1 PFAS by ID SOP	ND	3.4	0.86	ng/L	1
Perfluoro-1-octanesulfonamide (PFOSA)	754-91	-6 PFAS by ID SOP	ND	3.4	0.86	ng/L	1
Perfluoro-1-pentanesulfonic acid (PFPeS)	2706-91	-4 PFAS by ID SOP	55	3.4	0.86	ng/L	1
Perfluorododecanesulfonic acid (PFDOS)	79780-39	-5 PFAS by ID SOP	ND	6.9	1.7	ng/L	1
Perfluorohexanesulfonic acid (PFHxS)	355-46	-4 PFAS by ID SOP	460	3.4	0.86	ng/L	1
Perfluoro-n-butanoic acid (PFBA)	375-22-	-4 PFAS by ID SOP	88	3.4	0.86	ng/L	1
Perfluoro-n-decanoic acid (PFDA)	335-76	-2 PFAS by ID SOP	ND	3.4	0.86	ng/L	1
Perfluoro-n-dodecanoic acid (PFDoA)	307-55	-1 PFAS by ID SOP	ND	3.4	0.86	ng/L	1
Perfluoro-n-heptanoic acid (PFHpA)	375-85	-9 PFAS by ID SOP	21	3.4	0.86	ng/L	1
Perfluoro-n-hexadecanoic acid (PFHxDA)	67905-19	-5 PFAS by ID SOP	ND	6.9	1.7	ng/L	1
Perfluoro-n-hexanoic acid (PFHxA)	307-24	-4 PFAS by ID SOP	57	3.4	0.86	ng/L	1
Perfluoro-n-nonanoic acid (PFNA)	375-95	-1 PFAS by ID SOP	1.6 J	3.4	0.86	ng/L	1
Perfluoro-n-octadecanoic acid (PFODA)	16517-11	-6 PFAS by ID SOP	ND	6.9	1.7	ng/L	1
Perfluoro-n-octanoic acid (PFOA)	335-67-	-1 PFAS by ID SOP	44	3.4	0.86	ng/L	1
Perliuoro-n-penianoic acid (PEPEA)	2706-90	-3 PFAS by ID SOP	49	3.4	0.86	ng/L	1
Perfluoro-n-letradecanoic acid (PFTeDA)	3/6-06		ND	3.4	0.86	ng/L	1
Perliuoro-n-tridecanoic acid (PETIDA)	72629-94	-8 PFAS by ID SOP	ND	3.4	0.86	ng/L	1
Perlluoro-n-undecanoic acid (PFOdA)	2058-94	-8 PFAS by ID SOP		3.4	0.86	ng/L	1
Perfluorooctanesulfonic acid (PFOS)	1/63-23	- I PEAS BY ID SOP	360	3.4	0.86	ng/L	I
Surrogate Q % Re	un 1 Aco covery	ceptance Limits					
13C2_4:2F1S	111	25-150					
1302_0:2FTS	99 99	25-150					
1302_8:2FTS	86	25-150					
	ರ <b>ು</b>	25-150					
I3C2_PFHXDA	82	25-150					
I3UZ_PFTEDA	ŏ/	29-150					
LOQ = Limit of Quantitation B = Detected in the method blank	E = Quantitati	on of compound exceeded the o	calibration range D	DL = Detection Lim	iit		
ND = Not detected at or above the DL N = Recovery is out of criteria H = Out of holding time. W = Reported on wet weight basis	P = The RPD	between two GC columns exce	eds 40% J	= Estimated resul	It < LOQ and $\geq$ D	L	

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Client: Pace Analytical Services, LLC		Laboratory ID: VK03016-004
Description: BG122		Matrix: Aqueous
Date Sampled:10/28/2020 0945	Project Name: LACROSSE WELL #23 & 24	
Date Received: 11/03/2020	Project Number: 40217496	

Surrogate	Q % Recovery	Limits
13C3_PFBS	90	25-150
13C3_PFHxS	83	25-150
13C3-HFPO-DA	94	25-150
13C4_PFBA	97	25-150
13C4_PFHpA	95	25-150
13C5_PFHxA	98	25-150
13C5_PFPeA	98	25-150
13C6_PFDA	97	25-150
13C7_PFUdA	95	25-150
13C8_PFOA	92	25-150
13C8_PFOS	83	25-150
13C8_PFOSA	99	10-150
13C9_PFNA	83	25-150
d-EtFOSA	81	10-150
d5-EtFOSAA	90	25-150
d9-EtFOSE	92	10-150
d-MeFOSA	89	10-150
d3-MeFOSAA	88	25-150
d7-MeFOSE	92	10-150

LOQ = Limit of Quantitation	B = Detected in the method blank	E = Quantitation of compound exceeded the calibration range	DL = Detection Limit
ND = Not detected at or above the DL	N = Recovery is out of criteria	P = The RPD between two GC columns exceeds 40%	J = Estimated result < LOQ and $\ge$ DL
H = Out of holding time	W = Reported on wet weight basis		

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Client: Pace Analytical Services, LLC						Laboratory II	D: VK03016-0	003	
Description: BG123						Matrix	: Aqueous		
Date Sampled:10/28/2020 1000	Project Nar	me: L	_ACROSSE WELL #	£23 & 24			·		
Date Received: 11/03/2020	niect Numł	her 4	10217496						
	ojeet Num		10217470						
RunPrep MethodAnalytical MethodE1SOP SPEPFAS by ID SOP	0ilution 1 1 1	Anal 1/12	ysis Date Analyst 2/2020 1408 MMM	Prep 11/11/2	Date 2020 1	Batch 108 73065			
Deserve the	C	٩S	Analytical	Desult	0	1.00		l la la	Dur
Parameter 9 chlorobovadocafluoro 2 ovapopo 1 sulfonic acid (0CL RE2ONS)	756426 5			Result	Q		DL	Units	Run
9-chiloronexadecandoro-5-oxalione-1-suitonic acid (9CI-PF3ON3)	730420-3	0-1 2 0	PFAS by ID SOP			7.0	1.7	ng/L	1
14 14 24 24 porfluorodocano sulfonic acid (9:2 ETS)	20100 2	2-9 1 1	PFAS by ID SOP			7.0	1.7	ng/L	1
14 14 24 24 porfluoroactane sulfonic acid (6:2 FTS)	27610.0	7 2	PEAS by ID SOP	2 1		7.0	1.7	ng/L	1
1H 1H 2H 2H-perfluorododecane sulfonic acid (0.2 FTS)	120226-6	0-0	PEAS by ID SOP		J	7.0	1.7	ng/L	1
1H 1H 2H 2H perfluorobeyane sulfonic acid (12 ETS)	757124-7	2-4	PEAS by ID SOP			7.0	1.7	ng/L	1
Hexafluoronronylene oxide dimer acid (GenX)	13252-1	2-4	PEAS by ID SOP			7.0	1.7	ng/L	1
4 8-dioxa-3H-nerfluorononanoic acid (ADONA)	919005-1	A-4	PEAS by ID SOP			7.0	1.7	ng/L	1
N-ethylnerfluoro-1-octanesulfonamide (EtEOSA)	4151-5	0_2	PEAS by ID SOP			7.0	1.7	ng/L	1
N-ethylperfluoro-1-octanesulfonamidoacetic acid (EtEOSAA)	2001-5	0-6	PEAS by ID SOP			7.0	1.7	ng/L	1
2-N-ethylperfluoro-1-octanesulfonamido-ethanol (EtEOSE)	1691-9	9-2	PEAS by ID SOP	ND		7.0	1.7	ng/L	1
N-methylperfluoro-1-octanesulfonamide (MeEOSA)	31506-3	7-2 2-8	PEAS by ID SOP			14	3.5	ng/L	1
N-methylperfluoro-1-octanesulfonamidoacetic acid (MeEOSAA)	2355-3	20 1-9	PEAS by ID SOP			7.0	17	ng/L	1
2.N-methylnerfluoro_1-octanesulfonamido-ethanol (MEFOSE)	24448-0	9.7	PEAS by ID SOP			7.0	1.7	ng/L	1
Perfluoro-1-butanesulfonic acid (PEBS)	375-7	3-5	PFAS by ID SOP	12		3.5	0.87	ng/L	1
Perfluoro-1-decanesulfonic acid (PEDS)	335-7	7-3	PFAS by ID SOP	ND		3.5	0.87	ng/L	1
Perfluoro-1-heptanesulfonic acid (PEHpS)	375-9	2-8	PFAS by ID SOP	1.6	J	3.5	0.87	ng/L	1
Perfluoro-1-nonanesulfonic acid (PENS)	68259-1	2-1	PFAS by ID SOP	ND	0	3.5	0.87	ng/L	1
Perfluoro-1-octanesulfonamide (PEOSA)	754-9	- · 1-6	PFAS by ID SOP	ND		3.5	0.87	ng/L	1
Perfluoro-1-pentanesulfonic acid (PEPeS)	2706-9	1-4	PFAS by ID SOP	10		3.5	0.87	ng/L	1
Perfluorododecanesulfonic acid (PEDOS)	79780-3	9-5	PFAS by ID SOP	ND		7.0	17	ng/L	1
Perfluorohexanesulfonic acid (PEHxS)	355-4	6-4	PFAS by ID SOP	50		3.5	0.87	ng/L	1
Perfluoro-n-butanoic acid (PFBA)	375-2	2-4	PFAS by ID SOP	57		3.5	0.87	ng/L	1
Perfluoro-n-decanoic acid (PFDA)	335-7	6-2	PFAS by ID SOP	ND		3.5	0.87	ng/L	1
Perfluoro-n-dodecanoic acid (PFDoA)	307-5	5-1	PFAS by ID SOP	ND		3.5	0.87	ng/L	1
Perfluoro-n-heptanoic acid (PFHpA)	375-8	5-9	PFAS by ID SOP	5.3		3.5	0.87	ng/L	1
Perfluoro-n-hexadecanoic acid (PFHxDA)	67905-1	9-5	PFAS by ID SOP	ND		7.0	1.7	ng/L	1
Perfluoro-n-hexanoic acid (PFHxA)	307-2	4-4	PFAS by ID SOP	14		3.5	0.87	ng/L	1
Perfluoro-n-nonanoic acid (PFNA)	375-9	5-1	PFAS by ID SOP	ND		3.5	0.87	ng/L	1
Perfluoro-n-octadecanoic acid (PFODA)	16517-1	1-6	PFAS by ID SOP	ND		7.0	1.7	ng/L	1
Perfluoro-n-octanoic acid (PFOA)	335-6	7-1	PFAS by ID SOP	11		3.5	0.87	ng/L	1
Perfluoro-n-pentanoic acid (PFPeA)	2706-9	0-3	PFAS by ID SOP	14		3.5	0.87	ng/L	1
Perfluoro-n-tetradecanoic acid (PFTeDA)	376-0	6-7	PFAS by ID SOP	ND		3.5	0.87	ng/L	1
Perfluoro-n-tridecanoic acid (PFTrDA)	72629-9	4-8	PFAS by ID SOP	ND		3.5	0.87	ng/L	1
Perfluoro-n-undecanoic acid (PFUdA)	2058-9	4-8	PFAS by ID SOP	ND		3.5	0.87	ng/L	1
Perfluorooctanesulfonic acid (PFOS)	1763-2	3-1	PFAS by ID SOP	53		3.5	0.87	ng/L	1
Surrogate O % Re	un 1 Ac	ccep Lim	tance						
13C2_4:2FTS	99	25-	150						
13C2_6:2FTS	98	25-	150						
13C2_8:2FTS	86	25-	150						
13C2_PFDoA	88	25-	150						
13C2_PFHxDA	80	25-	150						
13C2_PFTeDA	84	25-	150						
LOQ = Limit of QuantitationB = Detected in the method blankND = Not detected at or above the DLN = Recovery is out of criteriaH = Out of holding timeW = Reported on wet weight basis	E = Quantita P = The RP	ation of D betw	f compound exceeded the over two GC columns exceeded the other two GC colu	calibration r eds 40%	ange [	DL = Detection Lim J = Estimated resu	nit It < LOQ and ≥ D	L	

 Pace Analytical Services, LLC (formerly Shealy Environmental Services, Inc.)

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Laboratory ID: VK03016-003 Matrix: Aqueous

Client: Pace Analytical Services, LLC	
Description: BG123	
Date Sampled:10/28/2020 1000	Project Name: LACROSSE WELL #23 & 24
Date Received: 11/03/2020	Project Number: 40217496

	D	
Surrogate	Q % Recovery	Limits
13C3_PFBS	86	25-150
13C3_PFHxS	82	25-150
13C3-HFPO-DA	110	25-150
13C4_PFBA	94	25-150
13C4_PFHpA	94	25-150
13C5_PFHxA	95	25-150
13C5_PFPeA	92	25-150
13C6_PFDA	93	25-150
13C7_PFUdA	89	25-150
13C8_PFOA	97	25-150
13C8_PFOS	77	25-150
13C8_PFOSA	99	10-150
13C9_PFNA	88	25-150
d-EtFOSA	80	10-150
d5-EtFOSAA	87	25-150
d9-EtFOSE	87	10-150
d-MeFOSA	86	10-150
d3-MeFOSAA	85	25-150
d7-MeFOSE	85	10-150

LOQ = Limit of QuantitationB = Detected in the method blankE = Quantitation of compound exceeded the calibration rangeDL = Detection LimitND = Not detected at or above the DLN = Recovery is out of criteriaP = The RPD between two GC columns exceeds 40%J = Estimated result < LOQ and ≥ DL</td>H = Out of holding timeW = Reported on wet weight basis

Pace Analytical Services, LLC (formerly Shealy Environmental Services, Inc.)106 Vantage Point DriveWest Columbia, SC 29172 (803) 791-9700 Fax (803) 791-9111 www.pacelabs.com

Client: Pace Analytical Services, LLC				Laboratory I	D: VK03016-	002	
Description: BG124				Matri	x: Aqueous		
Date Sampled:10/28/2020 1015	Project Name	e: LACROSSE WELL #	#23 & 24				
Date Received: 11/03/2020	- oiect Numbe	r: 40217496					
		alucio Doto Analuct	Dram Dat	Dotob			
Run Prep MethodAnalytical Method1SOP SPEPFAS by ID SOP	1 11	/12/2020 1347 MMM	11/11/2020	) 1108 73065			
Parameter	CAS Number	6 Analytical r Method	Result Q	LOQ	DL	Units	Run
9-chlorohexadecafluoro-3-oxanone-1-sulfonic acid (9CI-PF3ONS)	756426-58-	1 PFAS by ID SOP	ND	6.9	1.7	ng/L	1
11-chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11CI-PF3	) 763051-92-	9 PFAS by ID SOP	ND	6.9	1.7	ng/L	1
1H, 1H, 2H, 2H-perfluorodecane sulfonic acid (8:2 FTS)	39108-34-	4 PFAS by ID SOP	ND	6.9	1.7	ng/L	1
1H, 1H, 2H, 2H-perfluorooctane sulfonic acid (6:2 FTS)	27619-97-	2 PFAS by ID SOP	3.2 J	6.9	1.7	ng/L	1
1H,1H,2H,2H-perfluorododecane sulfonic acid (10:2 FTS)	120226-60-	0 PFAS by ID SOP	ND	6.9	1.7	ng/L	1
1H,1H,2H,2H-perfluorohexane sulfonic acid (4:2 FTS)	757124-72-	4 PFAS by ID SOP	ND	6.9	1.7	ng/L	1
Hexafluoropropylene oxide dimer acid (GenX)	13252-13-	6 PFAS by ID SOP	ND	6.9	1.7	ng/L	1
4,8-dioxa-3H-perfluorononanoic acid (ADONA)	919005-14-	4 PFAS by ID SOP	ND	6.9	1.7	ng/L	1
N-ethylperfluoro-1-octanesulfonamide (EtFOSA)	4151-50-2	2 PFAS by ID SOP	ND	6.9	1.7	ng/L	1
N-ethylperfluoro-1-octanesulfonamidoacetic acid (EtFOSAA)	2991-50-0	6 PFAS by ID SOP	ND	6.9	1.7	ng/L	1
2-N-ethylperfluoro-1-octanesulfonamido-ethanol (EtFOSE)	1691-99-2	2 PFAS by ID SOP	ND	6.9	1.7	ng/L	1
N-methylperfluoro-1-octanesulfonamide (MeFOSA)	31506-32-	8 PFAS by ID SOP	ND	14	3.5	ng/L	1
N-methylperfluoro-1-octanesulfonamidoacetic acid (MeFOSAA)	2355-31-9	9 PFAS by ID SOP	ND	6.9	1.7	ng/L	1
2-N-methylperfluoro-1-octanesulfonamido-ethanol (MeFOSE)	24448-09-	7 PFAS by ID SOP	ND	6.9	1.7	ng/L	1
Perfluoro-1-butanesulfonic acid (PFBS)	375-73-	5 PFAS by ID SOP	7.9	3.5	0.87	ng/L	1
Perfluoro-1-decanesulfonic acid (PFDS)	335-77-3	3 PFAS by ID SOP	ND	3.5	0.87	ng/L	1
Perfluoro-1-heptanesulfonic acid (PFHpS)	375-92-8	8 PFAS by ID SOP	1.9 J	3.5	0.87	ng/L	1
Perfluoro-1-nonanesulfonic acid (PFNS)	68259-12-	1 PFAS by ID SOP	ND	3.5	0.87	ng/L	1
Perfluoro-1-octanesulfonamide (PFOSA)	754-91-0	6 PFAS by ID SOP	ND	3.5	0.87	ng/L	1
Perfluoro-1-pentanesulfonic acid (PFPeS)	2706-91-4	4 PFAS by ID SOP	6.9	3.5	0.87	ng/L	1
Perfluorododecanesulfonic acid (PFDOS)	79780-39-	5 PFAS by ID SOP	ND	6.9	1.7	ng/L	1
Perfluorohexanesulfonic acid (PFHxS)	355-46-4	4 PFAS by ID SOP	62	3.5	0.87	ng/L	1
Perfluoro-n-butanoic acid (PFBA)	375-22-4	4 PFAS by ID SOP	20	3.5	0.87	ng/L	1
Perfluoro-n-decanoic acid (PFDA)	335-76-2	2 PFAS by ID SOP	ND	3.5	0.87	ng/L	1
Perfluoro-n-dodecanoic acid (PFDoA)	307-55-1	1 PFAS by ID SOP	ND	3.5	0.87	ng/L	1
Perfluoro-n-heptanoic acid (PFHpA)	375-85-9	9 PFAS by ID SOP	19	3.5	0.87	ng/L	1
Perfluoro-n-hexadecanoic acid (PFHxDA)	67905-19-	5 PFAS by ID SOP	ND	6.9	1.7	ng/L	1
Perfluoro-n-hexanoic acid (PFHxA)	307-24-4	4 PFAS by ID SOP	41	3.5	0.87	ng/L	1
Perfluoro-n-nonanoic acid (PFNA)	375-95-1	1 PFAS by ID SOP	1.1 J	3.5	0.87	ng/L	1
Perfluoro-n-octadecanoic acid (PFODA)	16517-11-	6 PEAS by ID SOP	ND	6.9	1.7	ng/L	1
Perliuoro-n-ocianoic acid (PFOA)	335-67-		37	3.5	0.87	ng/L	1
Periluoro-n-pentanoic acid (PFPeA)	2706-90-	3 PFAS by ID SOP	41	3.5	0.87	ng/L	1
Perliuoro-n-letradecanoic acid (PFTeDA)	370-00-	7 PFAS by ID SOP	ND	3.5	0.87	ng/L	1
Perlluoro-n-Indecanoic acid (PETIDA)	2050.04	8 PFAS by ID SOP	ND	3.5	0.87	ng/L	1
Perliuoro-n-undecanoic acid (PFOGA)	2058-94-8		ND (2	3.5	0.87	ng/L	1
Perhuorooctanesuitoriic acid (PFOS)	1/03-23-	I PFAS DY ID SOP	03	3.5	0.87	ng/L	I
Surrogate Q % Re	un 1 Acc ecovery L	eptance ₋imits					
13C2_4:2FTS	99	25-150					
13C2_6:2FTS	90	25-150					
13C2_8:2FTS	80	25-150					
13C2_PFDoA	80	25-150					
13C2_PFHxDA	71 :	25-150					
13C2_PFTeDA	78	25-150					
LOQ = Limit of Quantitation B = Detected in the method blank	E = Quantitatio	on of compound exceeded the	calibration range	DL = Detection Lir	nit		
ND = Not detected at or above the DL N = Recovery is out of criteria	P = The RPD b	between two GC columns exce	eds 40%	J = Estimated resu	ult < LOQ and $\geq$ [	DL	
H = Out of holding time W = Reported on wet weight basis							

 Pace Analytical Services, LLC (formerly Shealy Environmental Services, Inc.)

 106 Vantage Point Drive West Columbia, SC 29172 (803) 791-9700 Fax (803) 791-9111 www.pacelabs.com

Client: Pace Analytical Services, LLC		Laboratory ID: VK03016-002
Description: BG124		Matrix: Aqueous
Date Sampled:10/28/2020 1015	Project Name: LACROSSE WELL #23 & 24	
Date Received: 11/03/2020	Project Number: 40217496	

Surrogate	Run 1 A Q % Recovery	cceptance Limits
13C3_PFBS	84	25-150
13C3_PFHxS	78	25-150
13C3-HFPO-DA	86	25-150
13C4_PFBA	92	25-150
13C4_PFHpA	87	25-150
13C5_PFHxA	93	25-150
13C5_PFPeA	97	25-150
13C6_PFDA	88	25-150
13C7_PFUdA	84	25-150
13C8_PFOA	87	25-150
13C8_PFOS	73	25-150
13C8_PFOSA	97	10-150
13C9_PFNA	87	25-150
d-EtFOSA	79	10-150
d5-EtFOSAA	79	25-150
d9-EtFOSE	93	10-150
d-MeFOSA	82	10-150
d3-MeFOSAA	82	25-150
d7-MeFOSE	88	10-150

LOQ = Limit of Quantitation	B = Detected in the method blank	E = Quantitation of compound exceeded the calibration range	DL = Detection Limit
ND = Not detected at or above the DL	N = Recovery is out of criteria	P = The RPD between two GC columns exceeds 40%	J = Estimated result < LOQ and $\ge$ DL
H = Out of holding time	W = Reported on wet weight basis		

Pace Analytical Services, LLC (formerly Shealy Environmental Services, Inc.) 106 Vantage Point Drive West Columbia, SC 29172 (803) 791-9700 Fax (803) 791-9111 www.pacelabs.com



444 21st Street South · La Crosse, Wisconsin · 54601

November 23, 2020

2630 Fanta Reed Road La Crosse, WI 54603

Subject: Private Well Sampling Results

:

2630 Fanta Reed Road La Crosse, WI 54603 Tax parcel # 4-97-2 Sample ID # WR972, BG122, BG123 and BG124

Dear

We have received and reviewed the test results for the samples collected on October 29, 2020 at the above address. Some PFAS compounds were found at levels <u>above</u> the Department of Health Services (DHS) levels recommended for protecting health. These levels are called the "Recommended Public Health Standard" in the table below. The levels found in your wells are called the "Sample Result" in the tables below.

Please note that we collected a total of five (5) samples from the wells on the property. Four (4) of the samples were analyzed for thirty-six (36) compounds via isotope dilution; This is referred to the WI-36 method. A "split" sample was sample collected from the potable well serving the office building (Unique Well ID # WR972). It was sent to a different lab an analyzed for eighteen (18) PFAS compounds via EPA method 537.1, the Safe Drinking Water Act method. <u>No PFAS compounds were detected in the potable well</u> <u>serving the office building</u>. The following tables summarize the results from the five (5) samples. **Bolded results** are above a current recommended level intended to protect health according to the Department of Health Services (DHS).

2630 Fanta Reed Road, La Crosse, WI 54603 Tax parcel # 4-97-2 November 23, 2020

## Table 1 – Office (UWID WR972) Sample Results

Compound	Sample Result (unit)	Recomm Public H Standard	ended Iealth (unit <sup>e</sup> )
N-Ethyl Perfluorooctane sulfonamide (NEtFOSA) CAS # 4151-50-2	Not Detected	20 ppt <sup>a,b</sup>	ot for or the
N-Ethyl perfluorooctane sulfonamidoacetic acid (NEtFOSAA) CAS # 2991-50-6	Not Detected	20 ppt <sup>a,b</sup>	is 20 pp ounds c all 6
N-Ethyl perfluorooctane sulfonamidoethanol (NEtFOSE) CAS # 1691-99-2	Not Detected	20 ppt <sup>a,b</sup>	d limit i compc otal of
Perfluorooctane sulfonamide (FOSA) CAS # 754-91-6	Not Detected	20 ppt <sup>a,b</sup>	nended hese 6 <i>bined t</i>
Perfluorooctanoic acid (PFOA) CAS # 335-67-1	Not Detected	20 ppt <sup>a,b</sup>	ecomn ne of t com
Perfluorooctanesulfonic acid (PFOS) CAS # 1763-23-1	Not Detected	20 ppt <sup>a,b</sup>	The r any <i>o</i>
Hexafluoropropylene oxide dimer acid (HPFO-DA; GenX) CAS # 13252-13-6	Not Detected		300 ppt <sup>a</sup>
Perfluorobutanesulfonic acid (PFBS) CAS # 375-73-5	Not Detected		300 ppt <sup>a</sup>
Perfluorohexanesulfonic acid (PFHxS) CAS # 355-46-4	Not Detected		300 ppt <sup>a</sup>
Perfluorobutanoic acid (PFBA) CAS # 375-22-4	Not Detected		300 ppt <sup>a</sup>
Perfluorodecanoic acid (PFDA) CAS # 335-76-2	Not Detected		300 ppt <sup>a</sup>
Perfluorododecanoic acid (PFDoA) CAS # 307-55-1	Not Detected		500 ppt <sup>a</sup>
Perfluorohexanoic acid (PFHxA) CAS # 307-24-4	Not Detected		300 ppt ª
Perfluorononanoic acid (PFNA) CAS # 375-95-1	Not Detected		30 ppt <sup>a</sup>
Perfluorotetradecanoic acid (PFTeA) CAS # 376-06-7	Not Detected	1	L0,000 ppt <sup>a</sup>
Perfluoroundecanoic acid (PFUnA) CAS # 2058-94-8	Not Detected		3,000 ppt <sup>a</sup>
4,8-Dioxa-3H-perfluorononanoic acid (DONA) CAS # 919005-14-4	Not Detected		3,000 ppt <sup>a</sup>

2630 Fanta Reed Road, La Crosse, WI 54603 Tax parcel # 4-97-2 November 23, 2020

Perfluorooctadecanoic acid (PFODA) CAS # 16517-11-6	Not Detected	400,000 ppt <sup>a</sup>		
Perfluoro-1-hetanesulfonic acid CAS # 375-92-8	46 ppt	None Established <sup>c</sup>		
Perfluoro-1-pentanesulfonic acid CAS # 2706-91-4	44 ppt	None Established <sup>c</sup>		
Perfluoro-n-heptanoic acid CAS # 375-85-9	2.5 ppt	None Established <sup>c</sup>		
Perfluoro-n-pentanoic acid CAS #2706-90-3	4.1 ppt	None Established <sup>c</sup>		
<ul> <li><sup>a</sup> Public health enforcement standard (ES) recommended by DHS.</li> <li><sup>b</sup> DHS recommends a combined enforcement standard of 20 ng/L and combined preventive action limit of 2 ng/L for FOSA, NEt-FOSE, NEt-FOSA, NetFOSAA, PFOS, and PFOA.</li> </ul>				

<sup>c</sup> A current standard is not available; the compound is currently under review by DHS for potential public health standard recommendation.

<sup>d</sup> Public health enforcement standard (ES) in NR 140, Wisconsin Administrative Code.

<sup>e</sup> Units: Parts per trillion (ppt) = nanograms of substance per liter of water (ng/L)

<sup>BL</sup> Detected in the method blank. Possible lab contaminant.

Compound	Sample Result (unit)	Recomm Public H Standard	ended Iealth (unit <sup>e</sup> )
N-Ethyl Perfluorooctane sulfonamide (NEtFOSA) CAS # 4151-50-2	Not Analyzed	20 ppt <sup>a,b</sup>	) ppt unds I 6
N-Ethyl perfluorooctane sulfonamidoacetic acid (NEtFOSAA) CAS # 2991-50-6	Not detected	20 ppt <sup>a,b</sup>	it is 2C compo <i>Il</i> of al
N-Ethyl perfluorooctane sulfonamidoethanol (NEtFOSE) CAS # 1691-99-2	Not Analyzed	20 ppt <sup>a,b</sup>	ed lim ese 6 c ed totc
Perfluorooctane sulfonamide (FOSA) CAS # 754-91-6	Not Analyzed	20 ppt <sup>a,b</sup>	mend of the mbine
Perfluorooctanoic acid (PFOA) CAS # 335-67-1	Not detected	20 ppt <sup>a,b</sup>	recom ny <i>one</i> the co
Perfluorooctanesulfonic acid (PFOS) CAS # 1763-23-1	Not detected	20 ppt <sup>a,b</sup>	The for a or
Hexafluoropropylene oxide dimer acid (HPFO-DA; GenX) CAS # 13252-13-6	Not detected		300 ppt <sup>a</sup>

### Table 2 - Office (UWID WR972) "Split" Sample Results

2630 Fanta Reed Road, La Crosse, WI 54603 Tax parcel # 4-97-2 November 23, 2020

Perfluorobutanesulfonic acid (PFBS) CAS # 375-73-5	Not detected	450,000 ppt <sup>a</sup>
Perfluorohexanesulfonic acid (PFHxS) CAS # 355-46-4	Not Analyzed	40 ppt <sup>a</sup>
Perfluorobutanoic acid (PFBA) CAS # 375-22-4	Not Analyzed	10,000 ppt <sup>a</sup>
Perfluorodecanoic acid (PFDA) CAS # 335-76-2	Not detected	300 ppt ª
Perfluorododecanoic acid (PFDoA) CAS # 307-55-1	Not detected	500 ppt <sup>a</sup>
Perfluorohexanoic acid (PFHxA) CAS # 307-24-4	Not detected	150,000 ppt <sup>a</sup>
Perfluorononanoic acid (PFNA) CAS # 375-95-1	Not detected	30 ppt <sup>a</sup>
Perfluorotetradecanoic acid (PFTeA) CAS # 376-06-7	Not detected	10,000 ppt <sup>a</sup>
Perfluoroundecanoic acid (PFUnA) CAS # 2058-94-8	Not detected	3,000 ppt <sup>a</sup>
4,8-Dioxa-3H-perfluorononanoic acid (DONA) CAS # 919005-14-4	Not detected	3,000 ppt <sup>a</sup>
Perfluorooctadecanoic acid (PFODA) CAS # 16517-11-6	Not Analyzed	400,000 ppt <sup>a</sup>

<sup>a</sup> Public health enforcement standard (ES) recommended by DHS.

<sup>b</sup> DHS recommends a combined enforcement standard of 20 ng/L and combined preventive action limit of 2 ng/L for FOSA, NEt-FOSA, NetFOSAA, PFOS, and PFOA.

<sup>c</sup> A current standard is not available; the compound is currently under review by DHS for potential public health standard recommendation.

<sup>d</sup> Public health enforcement standard (ES) in NR 140, Wisconsin Administrative Code.

<sup>e</sup> Units: Parts per trillion (ppt) = nanograms of substance per liter of water (ng/L)

2630 Fanta Reed Road, La Crosse, WI 54603 Tax parcel # 4-97-2 November 23, 2020

## Table 3 – Wellhouse 1 (UWID BG122) Sample Results

Compound	Sample Result (unit)	Recomm Public H Standard	ended lealth (unit <sup>e</sup> )
N-Ethyl Perfluorooctane sulfonamide (NEtFOSA) CAS # 4151-50-2	Not Detected	20 ppt <sup>a,b</sup>	) ppt unds I 6
N-Ethyl perfluorooctane sulfonamidoacetic acid (NEtFOSAA) CAS # 2991-50-6	Not Detected	20 ppt <sup>a,b</sup>	it is 2C compo <i>il</i> of al
N-Ethyl perfluorooctane sulfonamidoethanol (NEtFOSE) CAS # 1691-99-2	Not Detected	20 ppt <sup>a,b</sup>	ed lim ese 6 c ed toto
Perfluorooctane sulfonamide (FOSA) CAS # 754-91-6	Not Detected	20 ppt <sup>a,b</sup>	mend of the mbine
Perfluorooctanoic acid (PFOA) CAS # 335-67-1	44 ppt	20 ppt <sup>a,b</sup>	recom ny <i>one</i> the <i>cc</i>
Perfluorooctanesulfonic acid (PFOS) CAS # 1763-23-1	360 ppt	20 ppt <sup>a,b</sup>	The for a or
Hexafluoropropylene oxide dimer acid (HPFO-DA; GenX) CAS # 13252-13-6	Not Detected		300 ppt <sup>a</sup>
Perfluorobutanesulfonic acid (PFBS) CAS # 375-73-5	37 ppt		300 ppt <sup>a</sup>
Perfluorohexanesulfonic acid (PFHxS) CAS # 355-46-4	460 ppt		300 ppt <sup>a</sup>
Perfluorobutanoic acid (PFBA) CAS # 375-22-4	88 ppt		300 ppt <sup>a</sup>
Perfluorodecanoic acid (PFDA) CAS # 335-76-2	Not Detected		300 ppt <sup>a</sup>
Perfluorododecanoic acid (PFDoA) CAS # 307-55-1	Not Detected		500 ppt <sup>a</sup>
Perfluorohexanoic acid (PFHxA) CAS # 307-24-4	57 ppt		300 ppt <sup>a</sup>
Perfluorononanoic acid (PFNA) CAS # 375-95-1	1.6 ppt		30 ppt <sup>a</sup>
Perfluorotetradecanoic acid (PFTeA) CAS # 376-06-7	Not Detected	10	0,000 ppt ª
Perfluoroundecanoic acid (PFUnA) CAS # 2058-94-8	Not Detected	3	3,000 ppt <sup>a</sup>

2630 Fanta Reed Road, La Crosse, WI 54603 Tax parcel # 4-97-2 November 23, 2020

4,8-Dioxa-3H-perfluorononanoic acid (DONA) CAS # 919005-14-4	Not Detected	3,000 ppt <sup>a</sup>
Perfluorooctadecanoic acid (PFODA) CAS # 16517-11-6	Not Detected	400,000 ppt <sup>a</sup>
1H, 1H, 2H, 2H-perflorodecane sulfonic acid (8:2 FTS) CAS # 39108-34-4	2.9 ppt	None Established <sup>c</sup>
1H, 1H, 2H, 2H-perflurooctane sulfonic acid (6:2 FTS) CAS # 27619-97-2	16 ppt	None Established <sup>c</sup>
Perfluoro-1-hetanesulfonic acid CAS # 375-92-8	13 ppt	None Established <sup>c</sup>
Perfluoro-1-pentanesulfonic acid CAS # 2706-91-4	55 ppt	None Established <sup>c</sup>
Perfluoro-n-heptanoic acid CAS # 375-85-9	21 ppt	None Established <sup>c</sup>
Perfluoro-n-pentanoic acid CAS #2706-90-3	49 ppt	None Established <sup>c</sup>

<sup>a</sup> Public health enforcement standard (ES) recommended by DHS.

<sup>b</sup> DHS recommends a combined enforcement standard of 20 ng/L and combined preventive action limit of 2 ng/L for FOSA, NEt-FOSA, NetFOSAA, PFOS, and PFOA.

<sup>c</sup> A current standard is not available; the compound is currently under review by DHS for potential public health standard recommendation.

<sup>d</sup> Public health enforcement standard (ES) in NR 140, Wisconsin Administrative Code.

<sup>e</sup> Units: Parts per trillion (ppt) = nanograms of substance per liter of water (ng/L)

2630 Fanta Reed Road, La Crosse, WI 54603 Tax parcel # 4-97-2 November 23, 2020

## Table 4 – Wellhouse 2 (UWID BG123) Sample Results

Compound	Sample Result (unit)	Recomm Public H Standard	ended lealth (unit <sup>e</sup> )
N-Ethyl Perfluorooctane sulfonamide (NEtFOSA) CAS # 4151-50-2	Not Detected	20 ppt <sup>a,b</sup>	) ppt unds I 6
N-Ethyl perfluorooctane sulfonamidoacetic acid (NEtFOSAA) CAS # 2991-50-6	Not Detected	20 ppt <sup>a,b</sup>	it is 20 ompo // of al
N-Ethyl perfluorooctane sulfonamidoethanol (NEtFOSE) CAS # 1691-99-2	Not Detected	20 ppt <sup>a,b</sup>	ed lim ese 6 c ed totc
Perfluorooctane sulfonamide (FOSA) CAS # 754-91-6	Not Detected	20 ppt <sup>a,b</sup>	mend of the ombine
Perfluorooctanoic acid (PFOA) CAS # 335-67-1	11 ppt	20 ppt <sup>a,b</sup>	recom ny <i>one</i> the co
Perfluorooctanesulfonic acid (PFOS) CAS # 1763-23-1	53 ppt	20 ppt <sup>a,b</sup>	The for al or
Hexafluoropropylene oxide dimer acid (HPFO-DA; GenX) CAS # 13252-13-6	Not Detected		300 ppt <sup>a</sup>
Perfluorobutanesulfonic acid (PFBS) CAS # 375-73-5	12 ppt		300 ppt <sup>a</sup>
Perfluorohexanesulfonic acid (PFHxS) CAS # 355-46-4	50 ppt		300 ppt <sup>a</sup>
Perfluorobutanoic acid (PFBA) CAS # 375-22-4	57 ppt		300 ppt <sup>a</sup>
Perfluorodecanoic acid (PFDA) CAS # 335-76-2	Not Detected		300 ppt <sup>a</sup>
Perfluorododecanoic acid (PFDoA) CAS # 307-55-1	Not Detected		500 ppt <sup>a</sup>
Perfluorohexanoic acid (PFHxA) CAS # 307-24-4	14 ppt		300 ppt <sup>a</sup>
Perfluorononanoic acid (PFNA) CAS # 375-95-1	Not Detected		30 ppt <sup>a</sup>
Perfluorotetradecanoic acid (PFTeA) CAS # 376-06-7	Not Detected	10	),000 ppt <sup>a</sup>
Perfluoroundecanoic acid (PFUnA) CAS # 2058-94-8	Not Detected	3	3,000 ppt <sup>a</sup>
4,8-Dioxa-3H-perfluorononanoic acid (DONA) CAS # 919005-14-4	Not Detected	3	3,000 ppt <sup>a</sup>

2630 Fanta Reed Road, La Crosse, WI 54603 Tax parcel # 4-97-2 November 23, 2020

Perfluorooctadecanoic acid (PFODA) CAS # 16517-11-6	Not Detected	400,000 ppt <sup>a</sup>
1H, 1H, 2H, 2H-perflurooctane sulfonic acid (6:2 FTS) CAS # 27619-97-2	3.1 ppt	None Established <sup>c</sup>
Perfluoro-1-hetanesulfonic acid (PFHpS) CAS # 375-92-8	1.6 ppt	None Established <sup>c</sup>
Perfluoro-1-pentanesulfonic acid (PFPeS) CAS # 2706-91-4	10 ppt	None Established <sup>c</sup>
Perfluoro-n-heptanoic acid (PFHpA) CAS # 375-85-9	5.3 ppt	None Established <sup>c</sup>
Perfluoro-n-pentanoic acid (PFPeA) CAS #2706-90-3	14 ppt	None Established <sup>c</sup>

<sup>a</sup> Public health enforcement standard (ES) recommended by DHS.

<sup>b</sup> DHS recommends a combined enforcement standard of 20 ng/L and combined preventive action limit of 2 ng/L for FOSA, NEt-FOSA, NetFOSAA, PFOS, and PFOA.

<sup>c</sup> A current standard is not available; the compound is currently under review by DHS for potential public health standard recommendation.

<sup>d</sup> Public health enforcement standard (ES) in NR 140, Wisconsin Administrative Code.

<sup>e</sup> Units: Parts per trillion (ppt) = nanograms of substance per liter of water (ng/L)

2630 Fanta Reed Road, La Crosse, WI 54603 Tax parcel # 4-97-2 November 23, 2020

## Table 5 – Wellhouse 3 (UWID BG124) Sample Results

Compound	Sample Result (unit)	Recomm Public H Standard	ended lealth (unit <sup>e</sup> )
N-Ethyl Perfluorooctane sulfonamide (NEtFOSA) CAS # 4151-50-2	Not Detected	20 ppt <sup>a,b</sup>	) ppt unds I 6
N-Ethyl perfluorooctane sulfonamidoacetic acid (NEtFOSAA) CAS # 2991-50-6	Not Detected	20 ppt <sup>a,b</sup>	it is 2C ompo // of al
N-Ethyl perfluorooctane sulfonamidoethanol (NEtFOSE) CAS # 1691-99-2	Not Detected	20 ppt <sup>a,b</sup>	ed lim ese 6 c ed totc
Perfluorooctane sulfonamide (FOSA) CAS # 754-91-6	Not Detected	20 ppt <sup>a,b</sup>	mend of the
Perfluorooctanoic acid (PFOA) CAS # 335-67-1	37 ppt	20 ppt <sup>a,b</sup>	recom ny <i>one</i> the <i>cc</i>
Perfluorooctanesulfonic acid (PFOS) CAS # 1763-23-1	63 ppt	20 ppt <sup>a,b</sup>	The for al or
Hexafluoropropylene oxide dimer acid (HPFO-DA; GenX) CAS # 13252-13-6	Not Detected		300 ppt <sup>a</sup>
Perfluorobutanesulfonic acid (PFBS) CAS # 375-73-5	7.9 ppt		300 ppt <sup>a</sup>
Perfluorohexanesulfonic acid (PFHxS) CAS # 355-46-4	62 ppt		300 ppt <sup>a</sup>
Perfluorobutanoic acid (PFBA) CAS # 375-22-4	20 ppt		300 ppt <sup>a</sup>
Perfluorodecanoic acid (PFDA) CAS # 335-76-2	Not Detected		300 ppt <sup>a</sup>
Perfluorododecanoic acid (PFDoA) CAS # 307-55-1	Not Detected		500 ppt <sup>a</sup>
Perfluorohexanoic acid (PFHxA) CAS # 307-24-4	41 ppt		300 ppt <sup>a</sup>
Perfluorononanoic acid (PFNA) CAS # 375-95-1	1.1 ppt		30 ppt <sup>a</sup>
Perfluorotetradecanoic acid (PFTeA) CAS # 376-06-7	Not Detected	10	),000 ppt <sup>a</sup>
Perfluoroundecanoic acid (PFUnA) CAS # 2058-94-8	Not Detected	3	3,000 ppt <sup>a</sup>
4,8-Dioxa-3H-perfluorononanoic acid (DONA) CAS # 919005-14-4	Not Detected	3	3,000 ppt <sup>a</sup>

2630 Fanta Reed Road, La Crosse, WI 54603 Tax parcel # 4-97-2 November 23, 2020

Perfluorooctadecanoic acid (PFODA) CAS # 16517-11-6	Not Detected	400,000 ppt <sup>a</sup>
1H, 1H, 2H, 2H-perflurooctane sulfonic acid (6:2 FTS) CAS # 27619-97-2	3.2 ppt	None Established <sup>c</sup>
Perfluoro-1-hetanesulfonic acid (PFHpS) CAS # 375-92-8	1.9 ppt	None Established <sup>c</sup>
Perfluoro-1-pentanesulfonic acid (PFPeS) CAS # 2706-91-4	6.9 ppt	None Established <sup>c</sup>
Perfluoro-n-heptanoic acid (PFHpA) CAS # 375-85-9	19 ppt	None Established <sup>c</sup>
Perfluoro-n-pentanoic acid (PFPeA) CAS #2706-90-3	41 ppt	None Established <sup>c</sup>

<sup>a</sup> Public health enforcement standard (ES) recommended by DHS.

<sup>b</sup> DHS recommends a combined enforcement standard of 20 ng/L and combined preventive action limit of 2 ng/L for FOSA, NEt-FOSA, NetFOSAA, PFOS, and PFOA.

<sup>c</sup> A current standard is not available; the compound is currently under review by DHS for potential public health standard recommendation.

<sup>d</sup> Public health enforcement standard (ES) in NR 140, Wisconsin Administrative Code.

<sup>e</sup> Units: Parts per trillion (ppt) = nanograms of substance per liter of water (ng/L)
Private Well Sampling Results for

2630 Fanta Reed Road, La Crosse, WI 54603 Tax parcel # 4-97-2 November 23, 2020

As required by law, we will be submitting these results to the Department of Natural Resources (DNR). The DNR may consult with the Department of Health Services (DHS) about these test results. DHS may review all PFAS tests and follow-up with you directly if any actions are recommended to protect your health.

Thank you for your patience and assistance with our investigation. We will provide updates on the project at <u>https://www.cityoflacrosse.org/wells</u> as our work continues. If you have any questions, please call The OS Group at (608) 668-2718 or email them at <u>PFAS@theOSgrp.com</u>.

You can also contact the DNR and DHS with questions about PFAS or the water sample results at the numbers provided below.

Questions about		<u>Contact</u>	<u>Phone</u>	E-mail Address
Soil & Groundwate Testing, Clean Up	<sup>r</sup> DNR	David Rozeboom	715-215-2078	David.Rozeboom@wisconsin.gov
Drinking Water or Private wells	DNR	Kyle Burton	920-360-2112	kyle.burton@wisconsin.gov
Health Concerns	DHS	Curtis Hedman	608-266-6677	Curtis.Hedman@dhs.wisconsin.gov

On behalf of The City of La Crosse, *The OS Group, LLC* 

John C. C Kere

John C. Storlie, PG Principal Hydrogeologist

Attachment: Lab report for your well

Client: Pace Analytical Services, LLC				Laboratory I	D: VK03016-0	001	
Description: WR972				Matrix	: Aqueous		
Date Sampled:10/28/2020 0915	Project Name	: LACROSSE WELL #	#23 & 24		·		
Date Received: 11/03/2020	piect Number	: 40217496					
Due Dree Mathed Application Mathed D		aluaia Data Analuat	Dren Data	Datab			
RunPrep MethodAnalytical MethodL1SOP SPEPFAS by ID SOP	1 11/	13/2020 1626 MMM	Prep Date 11/11/2020 11	Batch 08 73065			
Parameter	CAS Number	Analytical Method	Result Q	LOQ	DL	Units	Run
9-chlorohexadecafluoro-3-oxanone-1-sulfonic acid (9CI-PF3ONS)	756426-58-1	PFAS by ID SOP	ND	6.9	1.7	ng/L	1
11-chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11CI-PF3)	763051-92-9	PFAS by ID SOP	ND	6.9	1.7	ng/L	1
1H, 1H, 2H, 2H-perfluorodecane sulfonic acid (8:2 FTS)	39108-34-4	PFAS by ID SOP	ND	6.9	1.7	ng/L	1
1H, 1H, 2H, 2H-perfluorooctane sulfonic acid (6:2 FTS)	27619-97-2	2 PFAS by ID SOP	ND	6.9	1.7	ng/L	1
1H,1H,2H,2H-perfluorododecane sulfonic acid (10:2 FTS)	120226-60-0	PFAS by ID SOP	ND	6.9	1.7	ng/L	1
1H,1H,2H,2H-perfluorohexane sulfonic acid (4:2 FTS)	757124-72-4	PFAS by ID SOP	ND	6.9	1.7	ng/L	1
Hexafluoropropylene oxide dimer acid (GenX)	13252-13-6	5 PFAS by ID SOP	ND	6.9	1.7	ng/L	1
4,8-dioxa-3H-perfluorononanoic acid (ADONA)	919005-14-4	PFAS by ID SOP	ND	6.9	1.7	ng/L	1
N-ethylperfluoro-1-octanesulfonamide (EtFOSA)	4151-50-2	PFAS by ID SOP	ND	6.9	1.7	ng/L	1
N-ethylperfluoro-1-octanesulfonamidoacetic acid (EtFOSAA)	2991-50-6	PFAS by ID SOP	ND	6.9	1.7	ng/L	1
2-N-ethylperfluoro-1-octanesulfonamido-ethanol (EtFOSE)	1691-99-2	PFAS by ID SOP	ND	6.9	1.7	ng/L	1
N-methylperfluoro-1-octanesulfonamide (MeFOSA)	31506-32-8	B PFAS by ID SOP	ND	14	3.5	ng/L	1
N-methylperfluoro-1-octanesulfonamidoacetic acid (MeFOSAA)	2355-31-9	PFAS by ID SOP	ND	6.9	1.7	ng/L	1
2-N-methylperfluoro-1-octanesulfonamido-ethanol (MeFOSE)	24448-09-7	PFAS by ID SOP	ND	6.9	1.7	ng/L	1
Perfluoro-1-butanesulfonic acid (PFBS)	375-73-5	PFAS by ID SOP	ND	3.5	0.87	ng/L	1
Perfluoro-1-decanesulfonic acid (PFDS)	335-77-3	PFAS by ID SOP	ND	3.5	0.87	ng/L	1
Perfluoro-1-heptanesulfonic acid (PFHpS)	375-92-8	PFAS by ID SOP	ND	3.5	0.87	ng/L	1
Perfluoro-1-nonanesulfonic acid (PFNS)	68259-12-1	PFAS by ID SOP	ND	3.5	0.87	ng/L	1
Perfluoro-1-octanesulfonamide (PFOSA)	754-91-6	PFAS by ID SOP	ND	3.5	0.87	ng/L	1
Perfluoro-1-pentanesulfonic acid (PFPeS)	2706-91-4	PFAS by ID SOP	ND	3.5	0.87	ng/L	1
Perfluorododecanesulfonic acid (PFDOS)	79780-39-5	5 PFAS by ID SOP	ND	6.9	1.7	ng/L	1
Perfluorohexanesulfonic acid (PFHxS)	355-46-4	PFAS by ID SOP	ND	3.5	0.87	ng/L	1
Perfluoro-n-butanoic acid (PFBA)	375-22-4	PFAS by ID SOP	ND	3.5	0.87	ng/L	1
Perfluoro-n-decanoic acid (PFDA)	335-76-2	PFAS by ID SOP	ND	3.5	0.87	ng/L	1
Perfluoro-n-dodecanoic acid (PFDoA)	307-55-1	PFAS by ID SOP	ND	3.5	0.87	ng/L	1
Perfluoro-n-neptanoic acid (PFHpA)	3/5-85-9	PFAS by ID SOP	ND	3.5	0.87	ng/L	1
Perfluoro-n-nexadecanoic acid (PFHxDA)	6/905-19-5	PFAS by ID SOP	ND	6.9	1.7	ng/L	1
Perfluoro-n-nexanoic acid (PENIA)	307-24-4	PFAS by ID SOP	ND	3.5	0.87	ng/L	1
Perliuoro-n-nonanoic acid (PFNA)	3/5-95-1	PFAS by ID SOP	ND	3.5	0.87	ng/L	1
Perliuoro-n-octadecanoic acid (PFODA)	225 67 1	DEAS by ID SOP		0.9 2.5	1.7	ng/L	1
Perfluere a postancia acid (PEPeA)	2706 00 2	PEAS by ID SOP		2.5	0.87	ng/L	1
Porfluoro n totradocanois acid (PEToDA)	2700-90-3			2.5	0.87	ng/L	1
Perfluoro n tridecanoic acid (PETrDA)	72620.04 0			2.5	0.87	ng/L	1
Perfluoro-n-undecanoic acid (PELIdA)	2029-94-0			3.5	0.87	ng/L	1
Perfluorooctanesulfonic acid (PEOS)	1763-23-1	PEAS by ID SOP		3.5	0.87	ng/L	1
remultionesulionic acid (ri 03)	1703-23-1	FTAS by ID SOF	ND	3.0	0.87	ng/L	I
Surrogate Q % Re	un 1 Acce covery L	eptance imits					
13C2_4:2F1S	96 2	25-150					
1302_0:2F15	οο 2	:D-15U					
13C2_8:2F15	99 <u>2</u> 04 0	20-10U					
	ຮວ 2 (ລ	25-150					
	o3 2	20-10U					
ISUZ_PETEDA	0/ 2	061-02					
LOQ = Limit of QuantitationB = Detected in the method blankND = Not detected at or above the DLN = Recovery is out of criteria	E = Quantitation P = The RPD b	n of compound exceeded the e etween two GC columns exce	calibration range D eds 40% J	L = Detection Lim = Estimated resu	iit It < LOQ and ≥ D	L	
H = Out of holding time W = Reported on wet weight basis							

Client: Pace Analytical Services, LLC		Laboratory ID: VK03016-001
Description: WR972		Matrix: Aqueous
Date Sampled:10/28/2020 0915	Project Name: LACROSSE WELL #23 & 24	
Date Received: 11/03/2020	Project Number: 40217496	

	Run 1 A	cceptance
Surrogate	Q % Recovery	Limits
13C3_PFBS	89	25-150
13C3_PFHxS	83	25-150
13C3-HFPO-DA	103	25-150
13C4_PFBA	95	25-150
13C4_PFHpA	94	25-150
13C5_PFHxA	93	25-150
13C5_PFPeA	100	25-150
13C6_PFDA	90	25-150
13C7_PFUdA	87	25-150
13C8_PFOA	95	25-150
13C8_PFOS	73	25-150
13C8_PFOSA	101	10-150
13C9_PFNA	92	25-150
d-EtFOSA	86	10-150
d5-EtFOSAA	87	25-150
d9-EtFOSE	88	10-150
d-MeFOSA	81	10-150
d3-MeFOSAA	95	25-150
d7-MeFOSE	94	10-150

LOQ = Limit of Quantitation	B = Detected in the method blank	E = Quantitation of compound exceeded the calibration range	DL = Detection Limit
ND = Not detected at or above the DL	N = Recovery is out of criteria	P = The RPD between two GC columns exceeds 40%	J = Estimated result < LOQ and $\ge$ DL
H = Out of holding time	W = Reported on wet weight basis		



#### ANALYTICAL RESULTS

#### Project: LACROSSE WELL #23 & 24

Pace Project No.: 40217479

Sample: WR972	Lab ID:	40217479001	Collecte	d: 10/28/20	0 09:15	Received: 10/	30/20 09:30 Ma	atrix: Water	
Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
537.1 PFAS Compounds, Water	Analytical	Method: EPA 5	37.1 Prep	aration Meth	od: EP	PA 537.1			
	Pace Ana	lytical Services	- Ormond I	Beach					
11CI-PF3OUdS	<0.0015	ug/L	0.0019	0.0015	1	11/03/20 22:57	11/04/20 22:50	763051-92-9	
9CI-PF3ONS	<0.0011	ug/L	0.0019	0.0011	1	11/03/20 22:57	11/04/20 22:50	756426-58-1	
ADONA	<0.00069	ug/L	0.0019	0.00069	1	11/03/20 22:57	11/04/20 22:50	919005-14-4	
HFPO-DA	<0.0016	ug/L	0.0019	0.0016	1	11/03/20 22:57	11/04/20 22:50	13252-13-6	
NEtFOSAA	<0.00089	ug/L	0.0019	0.00089	1	11/03/20 22:57	11/04/20 22:50	2991-50-6	
NMeFOSAA	<0.0015	ug/L	0.0019	0.0015	1	11/03/20 22:57	11/04/20 22:50	2355-31-9	
Perfluorobutanesulfonic acid	<0.00063	ug/L	0.0019	0.00063	1	11/03/20 22:57	11/04/20 22:50	375-73-5	
Perfluorodecanoic acid	<0.0019	ug/L	0.0019	0.0019	1	11/03/20 22:57	11/04/20 22:50	335-76-2	
Perfluorohexanoic acid	<0.0012	ug/L	0.0019	0.0012	1	11/03/20 22:57	11/04/20 22:50	307-24-4	
Perfluorododecanoic acid	<0.0014	ug/L	0.0019	0.0014	1	11/03/20 22:57	11/04/20 22:50	307-55-1	
Perfluoroheptanoic acid	<0.00096	ug/L	0.0019	0.00096	1	11/03/20 22:57	11/04/20 22:50	375-85-9	
Perfluorohexanesulfonic acid	<0.00070	ug/L	0.0019	0.00070	1	11/03/20 22:57	11/04/20 22:50	355-46-4	
Perfluorononanoic acid	<0.0019	ug/L	0.0019	0.0019	1	11/03/20 22:57	11/04/20 22:50	375-95-1	
Perfluorooctanesulfonic acid	<0.0011	ug/L	0.0019	0.0011	1	11/03/20 22:57	11/04/20 22:50	1763-23-1	
Perfluorooctanoic acid	<0.00083	ug/L	0.0019	0.00083	1	11/03/20 22:57	11/04/20 22:50	335-67-1	
Perfluorotetradecanoic acid	<0.0018	ug/L	0.0019	0.0018	1	11/03/20 22:57	11/04/20 22:50	376-06-7	
Perfluorotridecanoic acid	<0.0017	ug/L	0.0019	0.0017	1	11/03/20 22:57	11/04/20 22:50	72629-94-8	
Perfluoroundecanoic acid	<0.0019	ug/L	0.0019	0.0019	1	11/03/20 22:57	11/04/20 22:50	2058-94-8	
Surrogates									
13C2-PFDA (S)	88	%	70-130		1	11/03/20 22:57	11/04/20 22:50		
13C2-PFHxA (S)	101	%	70-130		1	11/03/20 22:57	11/04/20 22:50		
NEtFOSAA-d5 (S)	72	%	70-130		1	11/03/20 22:57	11/04/20 22:50		
HFPO-DAS (S)	92	%	70-130		1	11/03/20 22:57	11/04/20 22:50		

#### **REPORT OF LABORATORY ANALYSIS**

Client: Pace Analytical Services, LLC				Laboratory ID	D: VK03016-0	004	
Description: BG122				Matrix	: Aqueous		
Date Sampled:10/28/2020 0945	Project Nam	e: LACROSSE WELL #	#23 & 24		·		
Date Received: 11/03/2020	piect Numbe	≏r <sup>.</sup> 40217496					
RunPrep MethodAnalytical MethodD1SOP SPEPFAS by ID SOP	ilution A 1 11	nalysis Date Analyst I/12/2020 1418 MMM	Prep Date 11/11/2020 11	Batch 108 73065			
Parameter	CA Numbe	S Analytical er Method	Result Q	LOQ	DL	Units	Run
9-chlorohexadecafluoro-3-oxanone-1-sulfonic acid (9CI-PF3ONS)	756426-58	-1 PFAS by ID SOP	ND	6.9	1.7	ng/L	1
11-chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11CI-PF3)	763051-92	-9 PFAS by ID SOP	ND	6.9	1.7	ng/L	1
1H, 1H, 2H, 2H-perfluorodecane sulfonic acid (8:2 FTS)	39108-34	-4 PFAS by ID SOP	2.9 J	6.9	1.7	ng/L	1
1H, 1H, 2H, 2H-perfluorooctane sulfonic acid (6:2 FTS)	27619-97	-2 PFAS by ID SOP	16	6.9	1.7	ng/L	1
1H,1H,2H,2H-perfluorododecane sulfonic acid (10:2 FTS)	120226-60	-0 PFAS by ID SOP	ND	6.9	1.7	ng/L	1
1H,1H,2H,2H-perfluorohexane sulfonic acid (4:2 FTS)	757124-72	-4 PFAS by ID SOP	ND	6.9	1.7	ng/L	1
Hexafluoropropylene oxide dimer acid (GenX)	13252-13	-6 PFAS by ID SOP	ND	6.9	1.7	ng/L	1
4,8-dioxa-3H-perfluorononanoic acid (ADONA)	919005-14	-4 PFAS by ID SOP	ND	6.9	1.7	ng/L	1
N-ethylperfluoro-1-octanesulfonamide (EtFOSA)	4151-50	-2 PFAS by ID SOP	ND	6.9	1.7	ng/L	1
N-ethylperfluoro-1-octanesulfonamidoacetic acid (EtFOSAA)	2991-50-	-6 PFAS by ID SOP	ND	6.9	1.7	ng/L	1
2-N-ethylperfluoro-1-octanesulfonamido-ethanol (EtFOSE)	1691-99	-2 PFAS by ID SOP	ND	6.9	1.7	ng/L	1
N-methylperfluoro-1-octanesulfonamide (MeFOSA)	31506-32	-8 PFAS by ID SOP	ND	14	3.4	ng/L	1
N-methylperfluoro-1-octanesulfonamidoacetic acid (MeFOSAA)	2355-31-	-9 PFAS by ID SOP	ND	6.9	1.7	ng/L	1
2-N-methylperfluoro-1-octanesulfonamido-ethanol (MeFOSE)	24448-09	-7 PFAS by ID SOP	ND	6.9	1.7	ng/L	1
Perfluoro-1-butanesulfonic acid (PFBS)	375-73-	-5 PFAS by ID SOP	37	3.4	0.86	ng/L	1
Perfluoro-1-decanesulfonic acid (PFDS)	335-77-	-3 PFAS by ID SOP	ND	3.4	0.86	ng/L	1
Perfluoro-1-heptanesulfonic acid (PFHpS)	375-92-	-8 PFAS by ID SOP	13	3.4	0.86	ng/L	1
Perfluoro-1-nonanesulfonic acid (PFNS)	68259-12	-1 PFAS by ID SOP	ND	3.4	0.86	ng/L	1
Perfluoro-1-octanesulfonamide (PFOSA)	754-91	-6 PFAS by ID SOP	ND	3.4	0.86	ng/L	1
Perfluoro-1-pentanesulfonic acid (PFPeS)	2706-91	-4 PFAS by ID SOP	55	3.4	0.86	ng/L	1
Perfluorododecanesulfonic acid (PFDOS)	79780-39	-5 PFAS by ID SOP	ND	6.9	1.7	ng/L	1
Perfluorohexanesulfonic acid (PFHxS)	355-46	-4 PFAS by ID SOP	460	3.4	0.86	ng/L	1
Perfluoro-n-butanoic acid (PFBA)	375-22-	-4 PFAS by ID SOP	88	3.4	0.86	ng/L	1
Perfluoro-n-decanoic acid (PFDA)	335-76	-2 PFAS by ID SOP	ND	3.4	0.86	ng/L	1
Perfluoro-n-dodecanoic acid (PFDoA)	307-55	-1 PFAS by ID SOP	ND	3.4	0.86	ng/L	1
Perfluoro-n-heptanoic acid (PFHpA)	375-85	-9 PFAS by ID SOP	21	3.4	0.86	ng/L	1
Perfluoro-n-hexadecanoic acid (PFHxDA)	67905-19	-5 PFAS by ID SOP	ND	6.9	1.7	ng/L	1
Perfluoro-n-hexanoic acid (PFHxA)	307-24	-4 PFAS by ID SOP	57	3.4	0.86	ng/L	1
Perfluoro-n-nonanoic acid (PFNA)	375-95	-1 PFAS by ID SOP	1.6 J	3.4	0.86	ng/L	1
Perfluoro-n-octadecanoic acid (PFODA)	16517-11	-6 PFAS by ID SOP	ND	6.9	1.7	ng/L	1
Perfluoro-n-octanoic acid (PFOA)	335-67-	-1 PFAS by ID SOP	44	3.4	0.86	ng/L	1
Perliuoro-n-penianoic acid (PEPEA)	2706-90	-3 PFAS by ID SOP	49	3.4	0.86	ng/L	1
Perfluoro-n-letradecanoic acid (PFTeDA)	3/6-06	-7 PFAS by ID SOP	ND	3.4	0.86	ng/L	1
Perliuoro-n-tridecanoic acid (PETIDA)	72629-94	-8 PFAS by ID SOP	ND	3.4	0.86	ng/L	1
Perlluoro-n-undecanoic acid (PFOdA)	2058-94-	-8 PFAS by ID SOP		3.4	0.86	ng/L	1
Perfluorooctanesulfonic acid (PFOS)	1/63-23	- I PEAS BY ID SOP	360	3.4	0.86	ng/L	I
Surrogate Q % Re	un 1 Aco covery	ceptance Limits					
13C2_4:2F1S	111	25-150					
1302_0:2FTS	99 99	25-150					
1302_8:2FTS	86	25-150					
	ರ <b>ು</b>	25-150					
I3C2_PFHXDA	82	25-150					
I3UZ_PFTEDA	ŏ/	29-150					
LOQ = Limit of Quantitation B = Detected in the method blank	E = Quantitati	on of compound exceeded the o	calibration range D	DL = Detection Lim	iit		
ND = Not detected at or above the DL N = Recovery is out of criteria H = Out of holding time. W = Reported on wet weight basis	P = The RPD	between two GC columns exce	eds 40% J	= Estimated resul	It < LOQ and $\geq$ D	L	

Client: Pace Analytical Services, LLC		Laboratory ID: VK03016-004
Description: BG122		Matrix: Aqueous
Date Sampled:10/28/2020 0945	Project Name: LACROSSE WELL #23 & 24	
Date Received: 11/03/2020	Project Number: 40217496	

Surrogate	Q % Recovery	Limits
13C3_PFBS	90	25-150
13C3_PFHxS	83	25-150
13C3-HFPO-DA	94	25-150
13C4_PFBA	97	25-150
13C4_PFHpA	95	25-150
13C5_PFHxA	98	25-150
13C5_PFPeA	98	25-150
13C6_PFDA	97	25-150
13C7_PFUdA	95	25-150
13C8_PFOA	92	25-150
13C8_PFOS	83	25-150
13C8_PFOSA	99	10-150
13C9_PFNA	83	25-150
d-EtFOSA	81	10-150
d5-EtFOSAA	90	25-150
d9-EtFOSE	92	10-150
d-MeFOSA	89	10-150
d3-MeFOSAA	88	25-150
d7-MeFOSE	92	10-150

LOQ = Limit of Quantitation	B = Detected in the method blank	E = Quantitation of compound exceeded the calibration range	DL = Detection Limit
ND = Not detected at or above the DL	N = Recovery is out of criteria	P = The RPD between two GC columns exceeds 40%	J = Estimated result < LOQ and $\ge$ DL
H = Out of holding time	W = Reported on wet weight basis		

Client: Pace Analytical Services, LLC						Laboratory II	D: VK03016-0	003	
Description: BG123						Matrix	: Aqueous		
Date Sampled:10/28/2020 1000	Project Nar	me: L	_ACROSSE WELL #	£23 & 24			·		
Date Received: 11/03/2020	niect Numł	her 4	10217496						
	ojeet Num		10217470						
RunPrep MethodAnalytical MethodE1SOP SPEPFAS by ID SOP	Dilution 1	Anal 1/12	ysis Date Analyst 2/2020 1408 MMM	Prep 11/11/2	Date 2020 1	Batch 108 73065			
Deserve the	C	٩S	Analytical	Desult	0	1.00		L La Sta	Dur
Parameter 9 chlorobovadocafluoro 2 ovapopo 1 sulfonic acid (0CL RE2ONS)	756426 5			Result	Q		DL	Units	Run
9-chiloronexadecandoro-5-oxalione-1-suitonic acid (9CI-PF3ON3)	730420-3	0-1 2 0	PFAS by ID SOP			7.0	1.7	ng/L	1
11 11 21 21 porfluorodocano sulfonic acid (9:2 ETS)	20100 2	2-9 1 1	PFAS by ID SOP			7.0	1.7	ng/L	1
14, 14, 24, 24 porfluoroactane sulfonic acid (6:2 FTS)	27610.0	7 2	PEAS by ID SOP	2 1		7.0	1.7	ng/L	1
1H 1H 2H 2H-perfluorododecane sulfonic acid (0.2 FTS)	120226-6	0-0	PEAS by ID SOP		J	7.0	1.7	ng/L	1
1H 1H 2H 2H perfluorobeyane sulfonic acid (12 ETS)	757124-7	2-4	PEAS by ID SOP			7.0	1.7	ng/L	1
Hexafluoronronylene oxide dimer acid (GenX)	13252-1	2-4	PEAS by ID SOP			7.0	1.7	ng/L	1
4 8-dioxa-3H-nerfluorononanoic acid (ADONA)	919005-1	л_л	PEAS by ID SOP			7.0	1.7	ng/L	1
N-ethylnerfluoro-1-octanesulfonamide (EtEOSA)	4151-5	0_2	PEAS by ID SOP			7.0	1.7	ng/L	1
N-ethylperfluoro-1-octanesulfonamidoacetic acid (EtEOSAA)	2001-5	0-6	PEAS by ID SOP			7.0	1.7	ng/L	1
2-N-ethylperfluoro-1-octanesulfonamido-ethanol (EtEOSE)	1691-9	9-2	PEAS by ID SOP	ND		7.0	1.7	ng/L	1
N-methylperfluoro-1-octanesulfonamide (MeEOSA)	31506-3	7-2 2-8	PEAS by ID SOP			14	3.5	ng/L	1
N-methylperfluoro-1-octanesulfonamidoacetic acid (MeEOSAA)	2355-3	20 1-9	PEAS by ID SOP			7.0	17	ng/L	1
2.N-methylnerfluoro.1-octanesulfonamido.ethanol (MEFOSE)	24448-0	9.7	PEAS by ID SOP			7.0	1.7	ng/L	1
Perfluoro-1-butanesulfonic acid (PEBS)	375-7	3-5	PFAS by ID SOP	12		3.5	0.87	ng/L	1
Perfluoro-1-decanesulfonic acid (PEDS)	335-7	7-3	PFAS by ID SOP	ND		3.5	0.87	ng/L	1
Perfluoro-1-heptanesulfonic acid (PEHpS)	375-9	2-8	PFAS by ID SOP	1.6	J	3.5	0.87	ng/L	1
Perfluoro-1-nonanesulfonic acid (PENS)	68259-1	2-1	PFAS by ID SOP	ND	0	3.5	0.87	ng/L	1
Perfluoro-1-octanesulfonamide (PEOSA)	754-9	- · 1-6	PFAS by ID SOP	ND		3.5	0.87	ng/L	1
Perfluoro-1-pentanesulfonic acid (PEPeS)	2706-9	1-4	PFAS by ID SOP	10		3.5	0.87	ng/L	1
Perfluorododecanesulfonic acid (PEDOS)	79780-3	9-5	PFAS by ID SOP	ND		7.0	17	ng/L	1
Perfluorohexanesulfonic acid (PEHxS)	355-4	6-4	PFAS by ID SOP	50		3.5	0.87	ng/L	1
Perfluoro-n-butanoic acid (PFBA)	375-2	2-4	PFAS by ID SOP	57		3.5	0.87	ng/L	1
Perfluoro-n-decanoic acid (PFDA)	335-7	6-2	PFAS by ID SOP	ND		3.5	0.87	ng/L	1
Perfluoro-n-dodecanoic acid (PFDoA)	307-5	5-1	PFAS by ID SOP	ND		3.5	0.87	ng/L	1
Perfluoro-n-heptanoic acid (PFHpA)	375-8	5-9	PFAS by ID SOP	5.3		3.5	0.87	ng/L	1
Perfluoro-n-hexadecanoic acid (PFHxDA)	67905-1	9-5	PFAS by ID SOP	ND		7.0	1.7	ng/L	1
Perfluoro-n-hexanoic acid (PFHxA)	307-2	4-4	PFAS by ID SOP	14		3.5	0.87	ng/L	1
Perfluoro-n-nonanoic acid (PFNA)	375-9	5-1	PFAS by ID SOP	ND		3.5	0.87	ng/L	1
Perfluoro-n-octadecanoic acid (PFODA)	16517-1	1-6	PFAS by ID SOP	ND		7.0	1.7	ng/L	1
Perfluoro-n-octanoic acid (PFOA)	335-6	7-1	PFAS by ID SOP	11		3.5	0.87	ng/L	1
Perfluoro-n-pentanoic acid (PFPeA)	2706-9	0-3	PFAS by ID SOP	14		3.5	0.87	ng/L	1
Perfluoro-n-tetradecanoic acid (PFTeDA)	376-0	6-7	PFAS by ID SOP	ND		3.5	0.87	ng/L	1
Perfluoro-n-tridecanoic acid (PFTrDA)	72629-9	4-8	PFAS by ID SOP	ND		3.5	0.87	ng/L	1
Perfluoro-n-undecanoic acid (PFUdA)	2058-9	4-8	PFAS by ID SOP	ND		3.5	0.87	ng/L	1
Perfluorooctanesulfonic acid (PFOS)	1763-2	3-1	PFAS by ID SOP	53		3.5	0.87	ng/L	1
Surrogate O % Re	un 1 Ac	ccep Lim	tance						
13C2_4:2FTS	99	25-	150						
13C2_6:2FTS	98	25-	150						
13C2_8:2FTS	86	25-	150						
13C2_PFDoA	88	25-	150						
13C2_PFHxDA	80	25-	150						
13C2_PFTeDA	84	25-	150						
LOQ = Limit of QuantitationB = Detected in the method blankND = Not detected at or above the DLN = Recovery is out of criteriaH = Out of holding timeW = Reported on wet weight basis	E = Quantita P = The RP	ation of D betw	f compound exceeded the over two GC columns exceeded the over two GC columns exceeded the over the ove	calibration r eds 40%	ange [	DL = Detection Lim J = Estimated resu	nit It < LOQ and ≥ D	L	

Laboratory ID: VK03016-003 Matrix: Aqueous

Client: Pace Analytical Services, LLC	
Description: BG123	
Date Sampled:10/28/2020 1000	Project Name: LACROSSE WELL #23 & 24
Date Received: 11/03/2020	Project Number: 40217496

	D	
Surrogate	Q % Recovery	Limits
13C3_PFBS	86	25-150
13C3_PFHxS	82	25-150
13C3-HFPO-DA	110	25-150
13C4_PFBA	94	25-150
13C4_PFHpA	94	25-150
13C5_PFHxA	95	25-150
13C5_PFPeA	92	25-150
13C6_PFDA	93	25-150
13C7_PFUdA	89	25-150
13C8_PFOA	97	25-150
13C8_PFOS	77	25-150
13C8_PFOSA	99	10-150
13C9_PFNA	88	25-150
d-EtFOSA	80	10-150
d5-EtFOSAA	87	25-150
d9-EtFOSE	87	10-150
d-MeFOSA	86	10-150
d3-MeFOSAA	85	25-150
d7-MeFOSE	85	10-150

LOQ = Limit of QuantitationB = Detected in the method blankE = Quantitation of compound exceeded the calibration rangeDL = Detection LimitND = Not detected at or above the DLN = Recovery is out of criteriaP = The RPD between two GC columns exceeds 40%J = Estimated result < LOQ and ≥ DL</td>H = Out of holding timeW = Reported on wet weight basis

Client: Pace Analytical Services, LLC				Laboratory I	D: VK03016-	002	
Description: BG124				Matri	x: Aqueous		
Date Sampled:10/28/2020 1015	Project Name	e: LACROSSE WELL #	#23 & 24				
Date Received: 11/03/2020	- oiect Numbe	r: 40217496					
		alucio Doto Analuct	Dram Dat	Dotob			
Run Prep MethodAnalytical Method1SOP SPEPFAS by ID SOP	1 11	/12/2020 1347 MMM	11/11/2020	) 1108 73065			
Parameter	CAS Number	6 Analytical r Method	Result Q	LOQ	DL	Units	Run
9-chlorohexadecafluoro-3-oxanone-1-sulfonic acid (9CI-PF3ONS)	756426-58-	1 PFAS by ID SOP	ND	6.9	1.7	ng/L	1
11-chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11CI-PF3	) 763051-92-	9 PFAS by ID SOP	ND	6.9	1.7	ng/L	1
1H, 1H, 2H, 2H-perfluorodecane sulfonic acid (8:2 FTS)	39108-34-	4 PFAS by ID SOP	ND	6.9	1.7	ng/L	1
1H, 1H, 2H, 2H-perfluorooctane sulfonic acid (6:2 FTS)	27619-97-	2 PFAS by ID SOP	3.2 J	6.9	1.7	ng/L	1
1H,1H,2H,2H-perfluorododecane sulfonic acid (10:2 FTS)	120226-60-	0 PFAS by ID SOP	ND	6.9	1.7	ng/L	1
1H,1H,2H,2H-perfluorohexane sulfonic acid (4:2 FTS)	757124-72-	4 PFAS by ID SOP	ND	6.9	1.7	ng/L	1
Hexafluoropropylene oxide dimer acid (GenX)	13252-13-	6 PFAS by ID SOP	ND	6.9	1.7	ng/L	1
4,8-dioxa-3H-perfluorononanoic acid (ADONA)	919005-14-	4 PFAS by ID SOP	ND	6.9	1.7	ng/L	1
N-ethylperfluoro-1-octanesulfonamide (EtFOSA)	4151-50-2	2 PFAS by ID SOP	ND	6.9	1.7	ng/L	1
N-ethylperfluoro-1-octanesulfonamidoacetic acid (EtFOSAA)	2991-50-0	6 PFAS by ID SOP	ND	6.9	1.7	ng/L	1
2-N-ethylperfluoro-1-octanesulfonamido-ethanol (EtFOSE)	1691-99-2	2 PFAS by ID SOP	ND	6.9	1.7	ng/L	1
N-methylperfluoro-1-octanesulfonamide (MeFOSA)	31506-32-	8 PFAS by ID SOP	ND	14	3.5	ng/L	1
N-methylperfluoro-1-octanesulfonamidoacetic acid (MeFOSAA)	2355-31-9	9 PFAS by ID SOP	ND	6.9	1.7	ng/L	1
2-N-methylperfluoro-1-octanesulfonamido-ethanol (MeFOSE)	24448-09-	7 PFAS by ID SOP	ND	6.9	1.7	ng/L	1
Perfluoro-1-butanesulfonic acid (PFBS)	375-73-	5 PFAS by ID SOP	7.9	3.5	0.87	ng/L	1
Perfluoro-1-decanesulfonic acid (PFDS)	335-77-3	3 PFAS by ID SOP	ND	3.5	0.87	ng/L	1
Perfluoro-1-heptanesulfonic acid (PFHpS)	375-92-8	8 PFAS by ID SOP	1.9 J	3.5	0.87	ng/L	1
Perfluoro-1-nonanesulfonic acid (PFNS)	68259-12-	1 PFAS by ID SOP	ND	3.5	0.87	ng/L	1
Perfluoro-1-octanesulfonamide (PFOSA)	754-91-0	6 PFAS by ID SOP	ND	3.5	0.87	ng/L	1
Perfluoro-1-pentanesulfonic acid (PFPeS)	2706-91-4	4 PFAS by ID SOP	6.9	3.5	0.87	ng/L	1
Perfluorododecanesulfonic acid (PFDOS)	79780-39-	5 PFAS by ID SOP	ND	6.9	1.7	ng/L	1
Perfluorohexanesulfonic acid (PFHxS)	355-46-4	4 PFAS by ID SOP	62	3.5	0.87	ng/L	1
Perfluoro-n-butanoic acid (PFBA)	375-22-4	4 PFAS by ID SOP	20	3.5	0.87	ng/L	1
Perfluoro-n-decanoic acid (PFDA)	335-76-2	2 PFAS by ID SOP	ND	3.5	0.87	ng/L	1
Perfluoro-n-dodecanoic acid (PFDoA)	307-55-1	1 PFAS by ID SOP	ND	3.5	0.87	ng/L	1
Perfluoro-n-heptanoic acid (PFHpA)	375-85-9	9 PFAS by ID SOP	19	3.5	0.87	ng/L	1
Perfluoro-n-hexadecanoic acid (PFHxDA)	67905-19-	5 PFAS by ID SOP	ND	6.9	1.7	ng/L	1
Perfluoro-n-hexanoic acid (PFHxA)	307-24-4	4 PFAS by ID SOP	41	3.5	0.87	ng/L	1
Perfluoro-n-nonanoic acid (PFNA)	375-95-1	1 PFAS by ID SOP	1.1 J	3.5	0.87	ng/L	1
Perfluoro-n-octadecanoic acid (PFODA)	16517-11-	6 PEAS by ID SOP	ND	6.9	1.7	ng/L	1
Perliuoro-n-ocianoic acid (PFOA)	335-67-		37	3.5	0.87	ng/L	1
Periluoro-n-pentanoic acid (PFPeA)	2706-90-	3 PFAS by ID SOP	41	3.5	0.87	ng/L	1
Perliuoro-n-letradecanoic acid (PFTeDA)	370-00-	7 PFAS by ID SOP	ND	3.5	0.87	ng/L	1
Perlluoro-n-Indecanoic acid (PETIDA)	2050.04	8 PFAS by ID SOP	ND	3.5	0.87	ng/L	1
Perliuoro-n-undecanoic acid (PFOGA)	2058-94-8		ND (2	3.5	0.87	ng/L	1
Perhuorooctanesuitoriic acid (PFOS)	1/03-23-	I PFAS DY ID SOP	03	3.5	0.87	ng/L	I
Surrogate Q % Re	un 1 Acc ecovery L	eptance ₋imits					
13C2_4:2FTS	99	25-150					
13C2_6:2FTS	90	25-150					
13C2_8:2FTS	80	25-150					
13C2_PFDoA	80	25-150					
13C2_PFHxDA	71 :	25-150					
13C2_PFTeDA	78	25-150					
LOQ = Limit of Quantitation B = Detected in the method blank	E = Quantitatio	on of compound exceeded the	calibration range	DL = Detection Lir	nit		
ND = Not detected at or above the DL N = Recovery is out of criteria	P = The RPD b	between two GC columns exce	eds 40%	J = Estimated resu	ult < LOQ and $\geq$ [	DL	
H = Out of holding time W = Reported on wet weight basis							

Client: Pace Analytical Services, LLC		Laboratory ID: VK03016-002
Description: BG124		Matrix: Aqueous
Date Sampled:10/28/2020 1015	Project Name: LACROSSE WELL #23 & 24	
Date Received: 11/03/2020	Project Number: 40217496	

Surrogate	Run 1 Ao Q % Recovery	cceptance Limits
13C3_PFBS	84	25-150
13C3_PFHxS	78	25-150
13C3-HFPO-DA	86	25-150
13C4_PFBA	92	25-150
13C4_PFHpA	87	25-150
13C5_PFHxA	93	25-150
13C5_PFPeA	97	25-150
13C6_PFDA	88	25-150
13C7_PFUdA	84	25-150
13C8_PFOA	87	25-150
13C8_PFOS	73	25-150
13C8_PFOSA	97	10-150
13C9_PFNA	87	25-150
d-EtFOSA	79	10-150
d5-EtFOSAA	79	25-150
d9-EtFOSE	93	10-150
d-MeFOSA	82	10-150
d3-MeFOSAA	82	25-150
d7-MeFOSE	88	10-150

LOQ = Limit of Quantitation	B = Detected in the method blank	E = Quantitation of compound exceeded the calibration range	DL = Detection Limit
ND = Not detected at or above the DL	N = Recovery is out of criteria	P = The RPD between two GC columns exceeds 40%	J = Estimated result < LOQ and $\ge$ DL
H = Out of holding time	W = Reported on wet weight basis		



444 21st Street South · La Crosse, Wisconsin · 54601

November 23, 2020

2421 Bainbridge Street La Crosse, WI 54603

Subject: Private Well Sampling Results 2421 Bainbridge Street, La Crosse, WI 54603 Tax parcel # 4-116-0 Well ID # 116-0

:

Dear

We have received and reviewed the test results for the sample collected on October 29, 2020 at the above address. Some PFAS compounds were found, but the levels found were **below** the Department of Health Services (DHS) levels recommended for protecting health. These levels are called the "Recommended Public Health Standard" in the table below. The levels found in *your* well are called the "Sample Result" in the table below.

#### Sample Results

Compound	Sample Result (unit)	Recomm Public H Standard	ended lealth (unit <sup>e</sup> )
N-Ethyl Perfluorooctane sulfonamide (NEtFOSA) CAS # 4151-50-2	Not Detected	20 ppt <sup>a,b</sup>	) ppt unds I 6
N-Ethyl perfluorooctane sulfonamidoacetic acid (NEtFOSAA) CAS # 2991-50-6	Not Detected	20 ppt <sup>a,b</sup>	it is 20 ompo <i>il</i> of al
N-Ethyl perfluorooctane sulfonamidoethanol (NEtFOSE) CAS # 1691-99-2	Not Detected	20 ppt <sup>a,b</sup>	ed lim ese 6 c ed toto
Perfluorooctane sulfonamide (FOSA) CAS # 754-91-6	Not Detected	20 ppt <sup>a,b</sup>	mend of the ombine
Perfluorooctanoic acid (PFOA) CAS # 335-67-1	2.2 ppt <sup>BL</sup>	20 ppt <sup>a,b</sup>	recom ny <i>one</i> the <i>c</i> c
Perfluorooctanesulfonic acid (PFOS) CAS # 1763-23-1	2.9 ppt <sup>BL</sup>	20 ppt <sup>a,b</sup>	The for a

Private Well Sampling Results for 2421 Bainbridge Street, La Crosse, WI 54603 Tax parcel # 4-116-0 Well ID # 116-0 November 23, 2020

Compound	Sample Result (unit)	Recommended Public Health Standard (unit <sup>e</sup> )
Hexafluoropropylene oxide dimer acid (HPFO-DA; GenX) CAS # 13252-13-6	Not Detected	300 ppt <sup>a</sup>
Perfluorobutanesulfonic acid (PFBS) CAS # 375-73-5	2.1 ppt <sup>BL</sup>	450,000 ppt <sup>a</sup>
Perfluorohexanesulfonic acid (PFHxS) CAS # 355-46-4	2.0 ppt	40 ppt <sup>a</sup>
Perfluorobutanoic acid (PFBA) CAS # 375-22-4	4.4 ppt <sup>BL</sup>	10,000 ppt <sup>a</sup>
Perfluorodecanoic acid (PFDA) CAS # 335-76-2	Not Detected	300 ppt <sup>a</sup>
Perfluorododecanoic acid (PFDoA) CAS # 307-55-1	Not Detected	500 ppt <sup>a</sup>
Perfluorohexanoic acid (PFHxA) CAS # 307-24-4	Not Detected	150,000 ppt <sup>a</sup>
Perfluorononanoic acid (PFNA) CAS # 375-95-1	Not Detected	30 ppt <sup>a</sup>
Perfluorotetradecanoic acid (PFTeA) CAS # 376-06-7	Not Detected	10,000 ppt <sup>a</sup>
Perfluoroundecanoic acid (PFUnA) CAS # 2058-94-8	Not Detected	3,000 ppt <sup>a</sup>
4,8-Dioxa-3H-perfluorononanoic acid (DONA) CAS # 919005-14-4	Not Detected	3,000 ppt <sup>a</sup>
Perfluorooctadecanoic acid (PFODA) CAS # 16517-11-6	Not Detected	400,000 ppt <sup>a</sup>
Perfluoro-n-pentanoic acid (PFPeA) CAS # 2706-90-3	1.1 ppt	None Established <sup>c</sup>

<sup>a</sup> Public health enforcement standard (ES) recommended by DHS.

<sup>b</sup> DHS recommends a combined enforcement standard of 20 ng/L and combined preventive action limit of 2 ng/L for FOSA, NEt-FOSA, NetFOSAA, PFOS, and PFOA.

<sup>c</sup> A current standard is not available; the compound is currently under review by DHS for potential public health standard recommendation.

<sup>d</sup> Public health enforcement standard (ES) in NR 140, Wisconsin Administrative Code.

<sup>e</sup> Units: Parts per trillion (ppt) = nanograms of substance per liter of water (ng/L)

<sup>BL</sup> Detected in the method blank. Possible lab contaminant.

Private Well Sampling Results for 2421 Bainbridge Street, La Crosse, WI 54603 Tax parcel # 4-116-0 Well ID # 116-0 November 23, 2020

As required by law, we will be submitting these results to the Department of Natural Resources (DNR). The DNR may consult with the Department of Health Services (DHS) about these test results. DHS may review all PFAS tests and follow-up with you directly if any actions are recommended to protect your health.

Thank you for your patience and assistance with our investigation. We will provide updates on the project at <u>https://www.cityoflacrosse.org/wells</u> as our work continues. If you have any questions, please call The OS Group at (608) 668-2718 or email them at <u>PFAS@theOSgrp.com</u>.

You can also contact the DNR and DHS with questions about PFAS or the water sample results at the numbers provided below.

Questions about		<u>Contact</u>	<u>Phone</u>	E-mail Address
Soil & Groundwater Testing, Clean Up	DNR	David Rozeboom	715-215-2078	David.Rozeboom@wisconsin.gov
Drinking Water or Private wells	DNR	Kyle Burton	920-360-2112	kyle.burton@wisconsin.gov
Health Concerns	DHS	Curtis Hedman	608-266-6677	Curtis.Hedman@dhs.wisconsin.gov

On behalf of The City of La Crosse *The OS Group, LLC* 

Attachment: Lab report for your well

Client: Pace Analytical Services, LLC						Laboratory II	D: VK03016-0	)18	
Description: 116-0						Matrix	: Aqueous		
Date Sampled:10/29/2020 1105	Project Na	me: I	LACROSSE WELL #	<sup>≠</sup> 23 & 24			·		
Date Received: 11/03/2020 P	roiect Numl	her 4	40217496						
		001.	10217470						
RunPrep MethodAnalytical Method1SOP SPEPFAS by ID SOP	Dilution 1	Anal 11/13	lysis Date Analyst 3/2020 1257 SES	Prep 11/11/2	Date 2020 16	Batch 36 73134			
Parameter	C. Numb	AS ber	Analytical Method	Result	Q	LOQ	DL	Units	Run
9-chlorohexadecafluoro-3-oxanone-1-sulfonic acid (9CI-PF3ONS)	756426-5	58-1	PFAS by ID SOP	ND		7.0	1.7	ng/L	1
11-chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11CI-PF3.	.) 763051-9	92-9	PFAS by ID SOP	ND		7.0	1.7	ng/L	1
1H, 1H, 2H, 2H-perfluorodecane sulfonic acid (8:2 FTS)	39108-3	34-4	PFAS by ID SOP	ND		7.0	1.7	ng/L	1
1H, 1H, 2H, 2H-perfluorooctane sulfonic acid (6:2 FTS)	27619-9	97-2	PFAS by ID SOP	ND		7.0	1.7	ng/L	1
1H,1H,2H,2H-perfluorododecane sulfonic acid (10:2 FTS)	120226-6	6-0	PFAS by ID SOP	ND		7.0	1.7	ng/L	1
1H,1H,2H,2H-perfluorohexane sulfonic acid (4:2 FTS)	757124-7	2-4	PFAS by ID SOP	ND		7.0	1.7	ng/L	1
Hexafluoropropylene oxide dimer acid (GenX)	13252-1	3-6	PFAS by ID SOP	ND		7.0	1.7	ng/L	1
4,8-dioxa-3H-perfluorononanoic acid (ADONA)	919005-1	4-4	PFAS by ID SOP	ND		7.0	1.7	ng/L	1
N-ethylperfluoro-1-octanesulfonamide (EtFOSA)	4151-5	0-2	PFAS by ID SOP	ND		7.0	1.7	ng/L	1
N-ethylperfluoro-1-octanesulfonamidoacetic acid (EtFOSAA)	2991-5	0-6	PFAS by ID SOP	ND		7.0	1.7	ng/L	1
2-N-ethylperfluoro-1-octanesulfonamido-ethanol (EtFOSE)	1691-9	9-2	PFAS by ID SOP	ND		7.0	1.7	ng/L	1
N-methylperfluoro-1-octanesulfonamide (MeFOSA)	31506-3	32-8	PFAS by ID SOP	ND		14	3.5	ng/L	1
N-methylperfluoro-1-octanesulfonamidoacetic acid (MeFOSAA)	2355-3	1-9	PFAS by ID SOP	ND		7.0	1.7	ng/L	1
2-N-methylperfluoro-1-octanesulfonamido-ethanol (MeFOSE)	24448-0	)9-7	PFAS by ID SOP	ND		7.0	1.7	ng/L	1
Perfluoro-1-butanesulfonic acid (PFBS)	375-7	3-5	PFAS by ID SOP	2.1	BJ	3.5	0.87	ng/L	1
Perfluoro-1-decanesulfonic acid (PFDS)	335-7	7-3	PFAS by ID SOP	ND		3.5	0.87	ng/L	1
Perfluoro-1-heptanesulfonic acid (PFHpS)	375-9	2-8	PFAS by ID SOP	ND		3.5	0.87	ng/L	1
Perfluoro-1-nonanesulfonic acid (PFNS)	68259-1	2-1	PFAS by ID SOP	ND		3.5	0.87	ng/L	1
Perfluoro-1-octanesulfonamide (PFOSA)	754-9	1-6	PFAS by ID SOP	ND		3.5	0.87	ng/L	1
Perfluoro-1-pentanesulfonic acid (PFPeS)	2706-9	1-4	PFAS by ID SOP	ND		3.5	0.87	ng/L	1
Perfluorododecanesulfonic acid (PFDOS)	79780-3	39-5	PFAS by ID SOP	ND		7.0	1.7	ng/L	1
Perfluorohexanesulfonic acid (PFHxS)	355-4	6-4	PFAS by ID SOP	2.0	J	3.5	0.87	ng/L	1
Perfluoro-n-butanoic acid (PFBA)	375-2	2-4	PFAS by ID SOP	4.4	В	3.5	0.87	ng/L	1
Perfluoro-n-decanoic acid (PFDA)	335-7	6-2	PFAS by ID SOP	ND		3.5	0.87	ng/L	1
Perfluoro-n-dodecanoic acid (PFDoA)	307-5	5-1	PFAS by ID SOP	ND		3.5	0.87	ng/L	1
Perfluoro-n-heptanoic acid (PFHpA)	375-8	5-9	PFAS by ID SOP	ND		3.5	0.87	ng/L	1
Perfluoro-n-hexadecanoic acid (PFHxDA)	67905-1	9-5	PFAS by ID SOP	ND		7.0	1.7	ng/L	1
Perfluoro-n-hexanoic acid (PFHxA)	307-2	4-4	PFAS by ID SOP	ND		3.5	0.87	ng/L	1
Perfluoro-n-nonanoic acid (PFNA)	375-9	5-1	PFAS by ID SOP	ND		3.5	0.87	ng/L	1
Perfluoro-n-octadecanoic acid (PFODA)	16517-1	1-6	PFAS by ID SOP	ND		7.0	1.7	ng/L	1
Perfluoro-n-octanoic acid (PFOA)	335-6	/-1	PFAS by ID SOP	2.2	BJ	3.5	0.87	ng/L	1
Perfluoro-n-pentanoic acid (PFPeA)	2706-9	0-3	PFAS by ID SOP	1.1 ND	J	3.5	0.87	ng/L	1
Perliuoro-n-tetradecanoic acid (PFTeDA)	376-0	0-7	PFAS by ID SOP	ND		3.5	0.87	ng/L	1
Perfluoro-n-tridecanoic acid (PF1rDA)	/2629-9	4-8	PFAS by ID SOP	ND		3.5	0.87	ng/L	1
Perliuoro-n-undecanoic acid (PFOdA)	2058-9	4-8	PFAS by ID SOP	ND		3.5	0.87	ng/L	1
Perhuorooctanesuironic acid (PFOS)	1/63-2	3-1	PFAS by ID SOP	2.9	BJ	3.5	0.87	ng/L	I
Surrogate Q % R	Run 1 Ao ecovery	ccep Lin	tance hits						
13C2_4:2ETS	102	25-	150						
1302_0:2F15	93	25-	150						
13C2_8:2F15	94	25-	150						
	86	25-	150						
I3C2_PFHXDA 13C2_PFTeDA	91 83	25- 25-	150 150						
LOQ = Limit of Quantitation     B = Detected in the method blank       ND = Not detected at or above the DL     N = Recovery is out of criteria	E = Quantita P = The RP	ation c D betv	f compound exceeded the o	calibration r eds 40%	ange D J	L = Detection Lim = Estimated resu	nit It < LOQ and ≥ D	L	
H = Out of holding time W = Reported on wet weight basis									

Client: Pace Analytical Services, LLC		Laboratory ID: VK03016-018
Description: 116-0		Matrix: Aqueous
Date Sampled:10/29/2020 1105	Project Name: LACROSSE WELL #23 & 24	
Date Received: 11/03/2020	Project Number: 40217496	

		aantanaa
Surrogate	Q % Recovery	Limits
13C3_PFBS	87	25-150
13C3_PFHxS	90	25-150
13C3-HFPO-DA	96	25-150
13C4_PFBA	96	25-150
13C4_PFHpA	94	25-150
13C5_PFHxA	94	25-150
13C5_PFPeA	94	25-150
13C6_PFDA	93	25-150
13C7_PFUdA	83	25-150
13C8_PFOA	92	25-150
13C8_PFOS	86	25-150
13C8_PFOSA	98	10-150
13C9_PFNA	94	25-150
d-EtFOSA	88	10-150
d5-EtFOSAA	88	25-150
d9-EtFOSE	91	10-150
d-MeFOSA	85	10-150
d3-MeFOSAA	94	25-150
d7-MeFOSE	100	10-150

 LOQ = Limit of Quantitation
 B = Detected in the method blank
 E = Quantitation of compound exceeded the calibration range
 DL = Detection Limit

 ND = Not detected at or above the DL
 N = Recovery is out of criteria
 P = The RPD between two GC columns exceeds 40%
 J = Estimated result < LOQ and ≥ DL</td>

 H = Out of holding time
 W = Reported on wet weight basis
 W = Reported on wet weight basis
 H = Out of holding time



444 21st Street South · La Crosse, Wisconsin · 54601

November 23, 2020

2530 2nd Avenue East La Crosse, WI 54603

Subject: Private Well Sampling Results 2530 2nd Avenue East, La Crosse, WI 54603 Tax parcel # 4-185-0 Sample ID # 185-0

#### Dear

We have received and reviewed the test results for the sample collected on October 29, 2020 at the above address. Some PFAS compounds were found at levels <u>above</u> the Department of Health Services (DHS) levels recommended for protecting health. These levels are called the "Recommended Public Health Standard" in the table below. The levels found in your well are called the "Sample Result" in the table below.

Because some of the levels are above the recommended Public Health Standard, the City is offering to provide bottled water delivered to your home for drinking, cooking, and brushing your teeth. There will be no cost to you for the bottled water. Please complete the attached form and mail it to The OS Group to make arrangements for having a water dispenser and bottles delivered to your home. Call 608-668-2718 or email <u>PFAS@theOSgrp.com</u>. You may also complete this form on line at www.cityoflacrosse.org/bottledwater

The following table summarizes the test results from the sample. **Bolded results** are above a current recommended level intended to protect your health according to the Department of Health Services (DHS).

Private Well Sampling Results for 2530 2nd Avenue East, La Crosse, WI 54603 Tax parcel # 4-185-0 Sample ID # 185-0 November 23, 2020

Compound	Sample Result (unit)	Recomm Public H Standard	ended Iealth (unit <sup>e</sup> )
N-Ethyl Perfluorooctane sulfonamide (NEtFOSA) CAS # 4151-50-2	Not Detected	20 ppt <sup>a,b</sup>	) ppt unds I 6
N-Ethyl perfluorooctane sulfonamidoacetic acid (NEtFOSAA) CAS # 2991-50-6	Not Detected	20 ppt <sup>a,b</sup>	it is 20 ompo // of all
N-Ethyl perfluorooctane sulfonamidoethanol (NEtFOSE) CAS # 1691-99-2	Not Detected	20 ppt <sup>a,b</sup>	ed lim ese 6 c ed totc
Perfluorooctane sulfonamide (FOSA) CAS # 754-91-6	Not Detected	20 ppt <sup>a,b</sup>	mend of the
Perfluorooctanoic acid (PFOA) CAS # 335-67-1	Not Detected	20 ppt <sup>a,b</sup>	recom ny <i>one</i> the <i>c</i> c
Perfluorooctanesulfonic acid (PFOS) CAS # 1763-23-1	4.8 ppt	20 ppt <sup>a,b</sup>	The for a or
Hexafluoropropylene oxide dimer acid (HPFO-DA; GenX) CAS # 13252-13-6	Not Detected		300 ppt <sup>a</sup>
Perfluorobutanesulfonic acid (PFBS) CAS # 375-73-5	7.7 ppt	450,000 ppt <sup>a</sup>	
Perfluorohexanesulfonic acid (PFHxS) CAS # 355-46-4	77 ppt		40 ppt <sup>a</sup>
Perfluorobutanoic acid (PFBA) CAS # 375-22-4	19 ppt	10	0,000 ppt <sup>a</sup>
Perfluorodecanoic acid (PFDA) CAS # 335-76-2	Not Detected		300 ppt <sup>a</sup>
Perfluorododecanoic acid (PFDoA) CAS # 307-55-1	Not Detected		500 ppt <sup>a</sup>
Perfluorohexanoic acid (PFHxA) CAS # 307-24-4	2.5 ppt 150,000		0,000 ppt <sup>a</sup>
Perfluorononanoic acid (PFNA) CAS # 375-95-1	Not Detected	lot Detected 30 pp	
Perfluorotetradecanoic acid (PFTeA) CAS # 376-06-7	Not Detected	10,000 ppt <sup>a</sup>	
Perfluoroundecanoic acid (PFUnA) CAS # 2058-94-8	Not Detected	Not Detected 3,000	
4,8-Dioxa-3H-perfluorononanoic acid (DONA) CAS # 919005-14-4	Not Detected	3	3,000 ppt <sup>a</sup>

### Sample Results

Private Well Sampling Results for 2530 2nd Avenue East, La Crosse, WI 54603 Tax parcel # 4-185-0 Sample ID # 185-0 November 23, 2020

Perfluorooctadecanoic acid (PFODA) CAS # 16517-11-6	Not Detected	400,000 ppt <sup>a</sup>
Perfluoro-1-pentanesulfonic acid (PFPeS) CAS # 2706-91-4	6.6 ppt	None Established <sup>c</sup>
Perfluoro-n-pentanoic acid (PFPeA) CAS #2706-90-3	1.8 ppt	None Established <sup>c</sup>
<ul> <li><sup>a</sup> Public health enforcement standard (ES) recommended by DHS.</li> <li><sup>b</sup> DHS recommends a combined enforcement standard of 20 ng/L and a FOSA, NEt-FOSE, NEt-FOSA, NetFOSAA, PFOS, and PFOA.</li> <li><sup>c</sup> A current standard is not available; the compound is currently under standard recommendation.</li> <li><sup>d</sup> Public health enforcement standard (ES) in NR 140, Wisconsin Admin <sup>e</sup> Units: Parts per trillion (ppt) = nanograms of substance per liter of wa <sup>BL</sup> Detected in the method blank. Possible lab contaminant.</li> </ul>	combined preventive review by DHS for por istrative Code. iter (ng/L)	action limit of 2 ng/L for tential public health

As required by law, we will be submitting these results to the Department of Natural Resources (DNR). The DNR may consult with the Department of Health Services (DHS) about these test results. DHS may review all PFAS tests and follow-up with you directly if any actions are recommended to protect your health.

Thank you for your patience and assistance with our investigation. We will provide updates on the project at <u>https://www.cityoflacrosse.org/wells</u> as our work continues. If you have any questions, please call The OS Group at (608) 668-2718 or email them at <u>PFAS@theOSgrp.com</u>.

You can also contact the DNR and DHS with questions about PFAS or the water sample results at the numbers provided below.

Questions about	oout <u>Contact</u>		<u>Phone</u>	E-mail Address		
Soil & Groundwater Testing, Clean Up	DNR	David Rozeboom	715-215-2078	<u>David.Rozeboom@wisconsin.go</u> ⊻		
Drinking Water or Private wells	DNR	Kyle Burton	920-360-2112	kyle.burton@wisconsin.gov		
Health Concerns	DHS	Curtis Hedman	608-266-6677	Curtis.Hedman@dhs.wisconsin. gov_		

On behalf of The City of La Crosse *The OS Group, LLC* 

Attachment: Lab report for your well Bottled Water Acknowledgement

Client: Pace Analytical Services, LLC				Laboratory	ID: VK03016-	019	
Description: 185-0				Matr	ix: Aqueous		
Date Sampled:10/29/2020 1130	Project Nam	ne: LACROSSE WELL #	<sup>∉</sup> 23 & 24				
Date Received: 11/03/2020	niect Numb	er· 40217496					
RunPrep MethodAnalytical MethodE2SOP SPEPFAS by ID SOP	ilution A 1 1 <sup>-</sup>	nalysis Date Analyst I/17/2020 2054 SES	Prep D 11/16/20	ate Batch 20 1613 73668			
Parameter	CA Numbe	S Analytical er Method	Result (	2 LOQ	DL	Units	Run
9-chlorohexadecafluoro-3-oxanone-1-sulfonic acid (9CI-PF3ONS)	756426-58	-1 PFAS by ID SOP	ND	7.4	1.9	ng/L	2
11-chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11CI-PF3)	763051-92	-9 PFAS by ID SOP	ND	7.4	1.9	ng/L	2
1H, 1H, 2H, 2H-perfluorodecane sulfonic acid (8:2 FTS)	39108-34	-4 PFAS by ID SOP	ND	7.4	1.9	ng/L	2
1H, 1H, 2H, 2H-perfluorooctane sulfonic acid (6:2 FTS)	27619-97	-2 PFAS by ID SOP	ND	7.4	1.9	ng/L	2
1H,1H,2H,2H-perfluorododecane sulfonic acid (10:2 FTS)	120226-60	-0 PFAS by ID SOP	ND	7.4	1.9	ng/L	2
1H,1H,2H,2H-perfluorohexane sulfonic acid (4:2 FTS)	757124-72	-4 PFAS by ID SOP	ND	7.4	1.9	ng/L	2
Hexafluoropropylene oxide dimer acid (GenX)	13252-13	-6 PFAS by ID SOP	ND	7.4	1.9	ng/L	2
4,8-dioxa-3H-perfluorononanoic acid (ADONA)	919005-14	-4 PFAS by ID SOP	ND	7.4	1.9	ng/L	2
N-ethylperfluoro-1-octanesulfonamide (EtFOSA)	4151-50	-2 PFAS by ID SOP	ND	7.4	1.9	ng/L	2
N-ethylperfluoro-1-octanesulfonamidoacetic acid (EtFOSAA)	2991-50	-6 PFAS by ID SOP	ND	7.4	1.9	ng/L	2
2-N-ethylperfluoro-1-octanesulfonamido-ethanol (EtFOSE)	1691-99	-2 PFAS by ID SOP	ND	7.4	1.9	ng/L	2
N-methylperfluoro-1-octanesulfonamide (MeFOSA)	31506-32	-8 PFAS by ID SOP	ND	15	3.7	ng/L	2
N-methylperfluoro-1-octanesulfonamidoacetic acid (MeFOSAA)	2355-31	-9 PFAS by ID SOP	ND	7.4	1.9	ng/L	2
2-N-methylperfluoro-1-octanesulfonamido-ethanol (MeFOSE)	24448-09	-7 PFAS by ID SOP	ND	7.4	1.9	ng/L	2
Perfluoro-1-butanesulfonic acid (PFBS)	375-73	-5 PFAS by ID SOP	7.7	3.7	0.93	ng/L	2
Perfluoro-1-decanesulfonic acid (PFDS)	335-77	-3 PFAS by ID SOP	ND	3.7	0.93	ng/L	2
Perfluoro-1-heptanesulfonic acid (PFHpS)	375-92	-8 PFAS by ID SOP	ND	3.7	0.93	ng/L	2
Perfluoro-1-nonanesulfonic acid (PFNS)	68259-12	-1 PFAS by ID SOP	ND	3.7	0.93	ng/L	2
Perfluoro-1-octanesulfonamide (PFOSA)	754-91	-6 PFAS by ID SOP	ND	3.7	0.93	ng/L	2
Perfluoro-1-pentanesulfonic acid (PFPeS)	2706-91	-4 PFAS by ID SOP	6.6	3.7	0.93	ng/L	2
Perfluorododecanesulfonic acid (PFDOS)	79780-39	-5 PFAS by ID SOP	ND	7.4	1.9	ng/L	2
Perfluorohexanesulfonic acid (PFHxS)	355-46	-4 PFAS by ID SOP	77	3.7	0.93	ng/L	2
Perfluoro-n-butanoic acid (PFBA)	375-22	-4 PFAS by ID SOP	19	3.7	0.93	ng/L	2
Perfluoro-n-decanoic acid (PFDA)	335-76	-2 PFAS by ID SOP	ND	3.7	0.93	ng/L	2
Perfluoro-n-dodecanoic acid (PFDoA)	307-55	-1 PFAS by ID SOP	ND	3.7	0.93	ng/L	2
Perfluoro-n-heptanoic acid (PFHpA)	375-85	-9 PFAS by ID SOP	ND	3.7	0.93	ng/L	2
Perfluoro-n-hexadecanoic acid (PFHxDA)	67905-19	-5 PFAS by ID SOP	ND	7.4	1.9	ng/L	2
Perfluoro-n-hexanoic acid (PFHxA)	307-24	-4 PFAS by ID SOP	2.5 J	J 3.7	0.93	ng/L	2
Perfluoro-n-nonanoic acid (PFNA)	375-95	-1 PFAS by ID SOP	ND	3.7	0.93	ng/L	2
Perfluoro-n-octadecanoic acid (PFODA)	16517-11	-6 PFAS by ID SOP	ND	7.4	1.9	ng/L	2
Perfluoro-n-octanoic acid (PFOA)	335-67	-1 PFAS by ID SOP	ND	3.7	0.93	ng/L	2
Perfluoro-n-pentanoic acid (PFPeA)	2706-90	-3 PFAS by ID SOP	1.8 J	J 3.7	0.93	ng/L	2
Perfluoro-n-tetradecanoic acid (PFTeDA)	376-06	-7 PFAS by ID SOP	ND	3.7	0.93	ng/L	2
Perfluoro-n-tridecanoic acid (PFTrDA)	72629-94	-8 PFAS by ID SOP	ND	3.7	0.93	ng/L	2
Perfluoro-n-undecanoic acid (PFUdA)	2058-94	-8 PFAS by ID SOP	ND	3.7	0.93	ng/L	2
Perfluorooctanesulfonic acid (PFOS)	1763-23	-1 PFAS by ID SOP	4.8	3.7	0.93	ng/L	2
Surrogate Q % Re	un 2 Ac covery	ceptance Limits					
13C2_4:2FTS	90	25-150					
13C2_6:2FTS	92	25-150					
13C2_8:2FTS	87	25-150					
13C2_PFDoA	84	25-150					
13C2_PFHxDA	85	25-150					
13C2_PFTeDA	74	25-150					
LOQ = Limit of Quantitation B = Detected in the method blank ND = Not detected at or above the DI N = Recovery is out of criteria	E = Quantitat	ion of compound exceeded the o	calibration ran	ge DL = Detection Li	mit ult < LOO and > F	ור	
H = Out of holding time W = Reported on wet weight basis	. mentio			5 Estimated 163	e d i u _ L		

Laboratory ID: VK03016-019 Matrix: Aqueous

Client: Pace Analytical Services, LLC	
Description: 185-0	
Date Sampled:10/29/2020 1130	Project Name: LACROSSE WELL #23 & 24
Date Received: 11/03/2020	Project Number: 40217496

	Run 2 Ac	rcentance
Surrogate	Q % Recovery	Limits
13C3_PFBS	79	25-150
13C3_PFHxS	82	25-150
13C3-HFPO-DA	90	25-150
13C4_PFBA	93	25-150
13C4_PFHpA	89	25-150
13C5_PFHxA	86	25-150
13C5_PFPeA	90	25-150
13C6_PFDA	90	25-150
13C7_PFUdA	84	25-150
13C8_PFOA	91	25-150
13C8_PFOS	84	25-150
13C8_PFOSA	96	10-150
13C9_PFNA	87	25-150
d-EtFOSA	75	10-150
d5-EtFOSAA	86	25-150
d9-EtFOSE	75	10-150
d-MeFOSA	73	10-150
d3-MeFOSAA	88	25-150
d7-MeFOSE	78	10-150

LOQ = Limit of Quantitation	B = Detected in the method blank	E = Quantitation of compound exceeded the calibration range	DL = Detection Limit
ND = Not detected at or above the DL	N = Recovery is out of criteria	P = The RPD between two GC columns exceeds 40%	J = Estimated result < LOQ and $\ge$ DL
H = Out of holding time	W = Reported on wet weight basis		

## BOTTLED WATER ACKNOWLEDGEMENT

2530 2nd Avenue East, La Crosse, WI 54603

If you desire to accept the bottled water delivery, please complete and sign this form and return it to The OS Group at <u>PFAS@TheOSgrp.com</u> or mail to 444 21<sup>st</sup> St. S, La Crosse, WI 54601. You may also complete this form electronically on line at <u>www.cityoflacrosse.org/bottledwater</u>. Call 608-668-2718 with any question you may have.

As pre-caution for the protection of human health, the City of La Crosse (The City) will provide, on a temporary basis, bottled water for drinking, cooking and toothbrushing purposes at the above referenced address. The water will be delivered to your home or business by a commercial water delivery service. At the City's cost, a dispenser / cooler and regular deliveries of 5-gallon containers of water will be provided. The City reserves the right to dictate the conditions of delivery, such as minimum and maximum number of containers per delivery, frequency and timing of deliveries. The City reserves the right to periodically review whether The City should continue to provide bottled water, considering factors such as State and Federal standards and guidance, evolving knowledge and understanding of the sources, cause and responsibility for the contamination, new or reinterpreted test results, and the availability of more permanent or cost-effective sources of water for the above purposes. The City of La Crosse makes no warranty or representation regarding the suitability of the bottled water beyond those made by the commercial water delivery service.

Check ownership: \_\_\_\_\_ Owner-Occupant \_\_\_\_\_ Occupant Only

Number of Occupants: \_\_\_\_\_

All reusable or returnable equipment and supplies, such as the containers and cooler/dispenser, are the property of the commercial water delivery service or the City of La Crosse. By signing below, the Occupant of the above referenced property acknowledges that all reusable or returnable equipment and supplies shall be returned to the commercial water delivery service or the City of La Crosse upon request. The Occupant agrees to provide reasonable access for delivery of bottled water and pick up of reusable or returnable equipment and supplies. Occupant(s) acknowledges that they may be required to sign an agreement with the commercial water delivery service as a condition of receiving bottled water.

Signed:	Dated:

Printed Name: \_\_\_\_\_

## BOTTLED WATER ACKNOWLEDGEMENT

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Signed:	Dated:

Printed Name: \_\_\_\_\_



444 21st Street South · La Crosse, Wisconsin · 54601

November 23, 2020

2524 2nd Avenue East La Crosse, WI 54603

Subject: Private Well Sampling Results 2524 2nd Avenue East, La Crosse, WI 54603 Tax parcel # 4-186-0 Sample ID # 186-0

#### Dear

We have received and reviewed the test results for the sample collected on October 29, 2020 at the above address. Some PFAS compounds were found at levels <u>above</u> the Department of Health Services (DHS) levels recommended for protecting health. These levels are called the "Recommended Public Health Standard" in the table below. The levels found in your well are called the "Sample Result" in the table below.

Because some of the levels are above the recommended Public Health Standard, the City is offering to provide bottled water delivered to your home for drinking, cooking, and brushing your teeth. There will be no cost to you for the bottled water. Please complete the attached form and mail it to The OS Group to make arrangements for having a water dispenser and bottles delivered to your home. Call 608-668-2718 or email <u>PFAS@theOSgrp.com</u>. You may also complete this form on line at <u>www.cityoflacrosse.org/bottledwater</u>

The following table summarizes the test results from the sample. **Bolded results** are above a current recommended level intended to protect your health according to the Department of Health Services (DHS).

Private Well Sampling Results for 2524 2nd Avenue East, La Crosse, WI 54603 Tax parcel # 4-186-0 Sample ID # 186-0 November 23, 2020

Compound	Sample Result (unit)	Recommended Public Health Standard (unit <sup>e</sup> )			
N-Ethyl Perfluorooctane sulfonamide (NEtFOSA) CAS # 4151-50-2	Not Detected	20 ppt <sup>a,b</sup> t d d u			
N-Ethyl perfluorooctane sulfonamidoacetic acid (NEtFOSAA) CAS # 2991-50-6	Not Detected	20 ppt <sup>a,b</sup>	it is 20 ompo // of all		
N-Ethyl perfluorooctane sulfonamidoethanol (NEtFOSE) CAS # 1691-99-2	Not Detected	50 bbt <sub>a'p</sub> 50 bbt a'p			
Perfluorooctane sulfonamide (FOSA) CAS # 754-91-6	Not Detected	20 ppt <sup>a,b</sup>	mend of the mbine		
Perfluorooctanoic acid (PFOA) CAS # 335-67-1	5.2 ppt	20 ppt <sup>a,b</sup>	recom N <i>one</i> the <i>cc</i>		
Perfluorooctanesulfonic acid (PFOS) CAS # 1763-23-1	22 ppt	20 ppt <sup>a,b</sup>	The for an		
Hexafluoropropylene oxide dimer acid (HPFO-DA; GenX) CAS # 13252-13-6	Not Detected		300 ppt <sup>a</sup>		
Perfluorobutanesulfonic acid (PFBS) CAS # 375-73-5	15 ppt	450,000 ppt <sup>a</sup>			
Perfluorohexanesulfonic acid (PFHxS) CAS # 355-46-4	37 ppt	40 ppt <sup>a</sup>			
Perfluorobutanoic acid (PFBA) CAS # 375-22-4	79 ppt	10,000 ppt <sup>a</sup>			
Perfluorodecanoic acid (PFDA) CAS # 335-76-2	Not Detected	300 ppt <sup>a</sup>			
Perfluorododecanoic acid (PFDoA) CAS # 307-55-1	Not Detected	500 ppt <sup>a</sup>			
Perfluorohexanoic acid (PFHxA) CAS # 307-24-4	1.9 ppt	150	0,000 ppt <sup>a</sup>		
Perfluorononanoic acid (PFNA) CAS # 375-95-1	Not Detected		30 ppt <sup>a</sup>		
Perfluorotetradecanoic acid (PFTeA) CAS # 376-06-7	Not Detected	10	0,000 ppt <sup>a</sup>		
Perfluoroundecanoic acid (PFUnA) CAS # 2058-94-8	Not Detected	:	3,000 ppt <sup>a</sup>		
4,8-Dioxa-3H-perfluorononanoic acid (DONA) CAS # 919005-14-4	Not Detected	:	3,000 ppt <sup>a</sup>		

### Sample Results

Private Well Sampling Results for 2524 2nd Avenue East, La Crosse, WI 54603 Tax parcel # 4-186-0 Sample ID # 186-0 November 23, 2020

Perfluorooctadecanoic acid (PFODA) CAS # 16517-11-6	Not Detected	400,000 ppt <sup>a</sup>				
Perfluoro-1-hetanesulfonic acid (PFHpS) CAS # 375-92-8	1.5 ppt	None Established <sup>c</sup>				
Perfluoro-1-pentanesulfonic acid (PFPeS) CAS # 2706-91-4	11 ppt	None Established <sup>c</sup>				
Perfluoro-n-pentanoic acid (PFPeA) CAS #2706-90-3	1.8 ppt	None Established <sup>c</sup>				
CAS #2706-90-3 <sup>a</sup> Public health enforcement standard (ES) recommended by DHS. <sup>b</sup> DHS recommends a combined enforcement standard of 20 ng/L and combined preventive action limit of 2 ng/L for FOSA, NEt-FOSE, NEt-FOSA, NetFOSAA, PFOS, and PFOA. <sup>c</sup> A current standard is not available; the compound is currently under review by DHS for potential public health standard recommendation. <sup>d</sup> Public health enforcement standard (ES) in NR 140, Wisconsin Administrative Code. <sup>e</sup> Units: Parts per trillion (ppt) = nanograms of substance per liter of water (ng/L)						

As required by law, we will be submitting these results to the Department of Natural Resources (DNR). The DNR may consult with the Department of Health Services (DHS) about these test results. DHS may review all PFAS tests and follow-up with you directly if any actions are recommended to protect your health.

Thank you for your patience and assistance with our investigation. We will provide updates on the project at <u>https://www.cityoflacrosse.org/wells</u> as our work continues. If you have any questions, please call The OS Group at (608) 668-2718 or email them at <u>PFAS@theOSgrp.com</u>.

You can also contact the DNR and DHS with questions about PFAS or the water sample results at the numbers provided below.

Questions about		Contact Phone		E-mail Address
Soil & Groundwater Testing, Clean Up	DNR	David Rozeboom	715-215-2078	David.Rozeboom@wisconsin.gov
Drinking Water or Private wells	DNR	Kyle Burton	920-360-2112	kyle.burton@wisconsin.gov
Health Concerns	DHS	Curtis Hedman	608-266-6677	Curtis.Hedman@dhs.wisconsin.gov

On behalf of The City of La Crosse *The OS Group, LLC* 

Attachment: Lab report for your well Bottled Water Acknowledgement

						, , , , , , , , , , , , , , , , , , ,		20	
Description: 186-0						Matrix	: Aqueous		
Date Sampled:10/29/2020 1155	Proiect Na	ame: L	ACROSSE WELL #	<sup>£</sup> 23 & 24					
Date Received: 11/03/2020	Project Num	her /	10217/96						
			10217470						
RunPrep MethodAnalytical Method2SOP SPEPFAS by ID SOP	Dilution 1	Anal 11/17	ysis Date Analyst /2020 2104 SES	Prep 11/16/2	Date 2020 161	Batch 3 73668			
Parameter	C Num	AS ber	Analytical Method	Result	Q	LOQ	DL	Units	Run
9-chlorohexadecafluoro-3-oxanone-1-sulfonic acid (9CI-PF3ONS	) 756426-	58-1	PFAS by ID SOP	ND		7.1	1.8	ng/L	2
11-chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11CI-PF3.	) 763051-	92-9	PFAS by ID SOP	ND		7.1	1.8	ng/L	2
1H, 1H, 2H, 2H-perfluorodecane sulfonic acid (8:2 FTS)	39108-	34-4	PFAS by ID SOP	ND		7.1	1.8	ng/L	2
1H, 1H, 2H, 2H-perfluorooctane sulfonic acid (6:2 FTS)	27619-	97-2	PFAS by ID SOP	ND		7.1	1.8	ng/L	2
1H,1H,2H,2H-perfluorododecane sulfonic acid (10:2 FTS)	120226-	60-0	PFAS by ID SOP	ND		7.1	1.8	ng/L	2
1H,1H,2H,2H-perfluorohexane sulfonic acid (4:2 FTS)	757124-	72-4	PFAS by ID SOP	ND		7.1	1.8	ng/L	2
Hexafluoropropylene oxide dimer acid (GenX)	13252-	13-6	PFAS by ID SOP	ND		7.1	1.8	ng/L	2
4,8-dioxa-3H-perfluorononanoic acid (ADONA)	919005-	14-4	PFAS by ID SOP	ND		7.1	1.8	ng/L	2
N-ethylperfluoro-1-octanesulfonamide (EtFOSA)	4151-5	50-2	PFAS by ID SOP	ND		7.1	1.8	ng/L	2
N-ethylperfluoro-1-octanesulfonamidoacetic acid (EtFOSAA)	2991-5	50-6	PFAS by ID SOP	ND		7.1	1.8	ng/L	2
2-N-ethylperfluoro-1-octanesulfonamido-ethanol (EtFOSE)	1691-9	99-2	PFAS by ID SOP	ND		7.1	1.8	ng/L	2
N-methylperfluoro-1-octanesulfonamide (MeFOSA)	31506-	32-8	PFAS by ID SOP	ND		14	3.5	ng/L	2
N-methylperfluoro-1-octanesulfonamidoacetic acid (MeFOSAA)	2355-3	31-9	PFAS by ID SOP	ND		7.1	1.8	ng/L	2
2-N-methylperfluoro-1-octanesulfonamido-ethanol (MeFOSE)	24448-	09-7	PFAS by ID SOP	ND		7.1	1.8	ng/L	2
Perfluoro-1-butanesulfonic acid (PFBS)	375-1	73-5	PFAS by ID SOP	15		3.5	0.88	ng/L	2
Perfluoro-1-decanesulfonic acid (PFDS)	335-	77-3	PFAS by ID SOP	ND		3.5	0.88	ng/L	2
Perfluoro-1-heptanesulfonic acid (PFHpS)	375-9	92-8	PFAS by ID SOP	1.5	J	3.5	0.88	ng/L	2
Perfluoro-1-nonanesulfonic acid (PFNS)	68259-	12-1	PFAS by ID SOP	ND		3.5	0.88	ng/L	2
Perfluoro-1-octanesulfonamide (PFOSA)	754-9	91-6	PFAS by ID SOP	ND		3.5	0.88	ng/L	2
Perfluoro-1-pentanesulfonic acid (PFPeS)	2706-9	91-4	PFAS by ID SOP	11		3.5	0.88	ng/L	2
Perfluorododecanesulfonic acid (PFDOS)	79780-	39-5	PFAS by ID SOP	ND		7.1	1.8	ng/L	2
Perfluorohexanesulfonic acid (PFHxS)	355-4	46-4	PFAS by ID SOP	37		3.5	0.88	ng/L	2
Perfluoro-n-butanoic acid (PFBA)	375-2	22-4	PFAS by ID SOP	79		3.5	0.88	ng/L	2
Perfluoro-n-decanoic acid (PFDA)	335-1	76-2	PFAS by ID SOP	ND		3.5	0.88	ng/L	2
Perfluoro-n-dodecanoic acid (PFDoA)	307-5	55-1	PFAS by ID SOP	ND		3.5	0.88	ng/L	2
Perfluoro-n-heptanoic acid (PFHpA)	375-8	85-9	PFAS by ID SOP	ND		3.5	0.88	ng/L	2
Perfluoro-n-hexadecanoic acid (PFHxDA)	67905-	19-5	PFAS by ID SOP	ND		7.1	1.8	ng/L	2
Perfluoro-n-hexanoic acid (PFHxA)	307-2	24-4	PFAS by ID SOP	1.9	J	3.5	0.88	ng/L	2
Perfluoro-n-nonanoic acid (PFNA)	375-9	95-1	PFAS by ID SOP	ND		3.5	0.88	ng/L	2
Perfluoro-n-octadecanoic acid (PFODA)	16517-	11-6	PFAS by ID SOP	ND		7.1	1.8	ng/L	2
Perfluoro-n-octanoic acid (PFOA)	335-6	57-1	PFAS by ID SOP	5.2		3.5	0.88	ng/L	2
Perfluoro-n-pentanoic acid (PFPeA)	2706-9	90-3 27 - 7	PFAS by ID SOP	1.8	J	3.5	0.88	ng/L	2
Perfluoro-n-tetradecanoic acid (PFTeDA)	3/6-0	J6-7	PFAS by ID SOP	ND		3.5	0.88	ng/L	2
Perfluoro-n-tridecanoic acid (PFTrDA)	/2629-	94-8	PFAS by ID SOP	ND		3.5	0.88	ng/L	2
	2058-9	94-8	PFAS by ID SOP	ND		3.5	0.88	ng/L	2
Perfluorooctanesulfonic acid (PFOS)	1763-2	23-1	PEAS by ID SOP	22		3.5	0.88	ng/L	2
Surrogate Q % R	Run 2 A Recovery	ccep Lin	tance hits						
13C2_4:2FTS	87	25-	150						
13C2_6:2FTS	88	25-	150						
13C2_8:2FTS	92	25-	150						
13C2_PFDoA	76	25-	150						
13C2_PFHxDA	76	25-	150						
13C2_PFTeDA	67	25-	150						
LOQ = Limit of Quantitation     B = Detected in the method blank       ND = Not detected at or above the DL     N = Recovery is out of criteria       H = Out of holding time     W = Reported on wet weight basis	E = Quanti P = The RF	tation o PD betv	f compound exceeded the over two GC columns exceeded the order two GC columns exceeded the other two sets two sets the other two sets two sets the other two sets the other two sets two sets the other two sets t	calibration i eds 40%	ange DL J =	<ul> <li>Detection Lim</li> <li>Estimated resu</li> </ul>	nit It < LOQ and ≥ D	Ľ	

Client: Pace Analytical Services, LLC		Laboratory ID: VK03016-020
Description: 186-0		Matrix: Aqueous
Date Sampled:10/29/2020 1155	Project Name: LACROSSE WELL #23 & 24	
Date Received: 11/03/2020	Project Number: 40217496	

Surrogate	Run 2 A	cceptance
13C3 PEBS	79	25-150
1202 DEHVS	94	25 150
	84	25-150
13C3-HEPO-DA	86	25-150
13C4_PFBA	88	25-150
13C4_PFHpA	83	25-150
13C5_PFHxA	86	25-150
13C5_PFPeA	80	25-150
13C6_PFDA	82	25-150
13C7_PFUdA	78	25-150
13C8_PFOA	82	25-150
13C8_PFOS	76	25-150
13C8_PFOSA	92	10-150
13C9 PFNA	86	25-150
d-EtFOSA	70	10-150
d5-EtFOSAA	85	25-150
d9-EtFOSE	70	10-150
d-MeFOSA	73	10-150
d3-MeFOSAA	79	25-150
d7-MeFOSE	66	10-150

H = Out of holding time	W = Reported on wet weight basis		
ND = Not detected at or above the DL	N = Recovery is out of criteria	P = The RPD between two GC columns exceeds 40%	J = Estimated result < LOQ and $\geq$ DL
LOQ = Limit of Quantitation	B = Detected in the method blank	E = Quantitation of compound exceeded the calibration range	DL = Detection Limit

## BOTTLED WATER ACKNOWLEDGEMENT

2524 2nd Avenue East, La Crosse, WI 54603

If you desire to accept the bottled water delivery, please complete and sign this form and return it to The OS Group at <u>PFAS@TheOSgrp.com</u> or mail to 444 21<sup>st</sup> St. S, La Crosse, WI 54601. You may also complete this form electronically on line at <u>www.cityoflacrosse.org/bottledwater</u>. Call 608-668-2718 with any question you may have.

As pre-caution for the protection of human health, the City of La Crosse (The City) will provide, on a temporary basis, bottled water for drinking, cooking and toothbrushing purposes at the above referenced address. The water will be delivered to your home or business by a commercial water delivery service. At the City's cost, a dispenser / cooler and regular deliveries of 5-gallon containers of water will be provided. The City reserves the right to dictate the conditions of delivery, such as minimum and maximum number of containers per delivery, frequency and timing of deliveries. The City reserves the right to periodically review whether The City should continue to provide bottled water, considering factors such as State and Federal standards and guidance, evolving knowledge and understanding of the sources, cause and responsibility for the contamination, new or reinterpreted test results, and the availability of more permanent or cost-effective sources of water for the above purposes. The City of La Crosse makes no warranty or representation regarding the suitability of the bottled water beyond those made by the commercial water delivery service.

Check ownership: \_\_\_\_\_ Owner-Occupant \_\_\_\_\_ Occupant Only

Number of Occupants: \_\_\_\_\_

All reusable or returnable equipment and supplies, such as the containers and cooler/dispenser, are the property of the commercial water delivery service or the City of La Crosse. By signing below, the Occupant of the above referenced property acknowledges that all reusable or returnable equipment and supplies shall be returned to the commercial water delivery service or the City of La Crosse upon request. The Occupant agrees to provide reasonable access for delivery of bottled water and pick up of reusable or returnable equipment and supplies. Occupant(s) acknowledges that they may be required to sign an agreement with the commercial water delivery service as a condition of receiving bottled water.

Signed:	Dated:

Printed Name: \_\_\_\_\_



444 21st Street South · La Crosse, Wisconsin · 54601

November 23, 2020

2553 2nd Avenue East La Crosse, WI 54603

Subject: Private Well Sampling Results 2553 2nd Avenue East, La Crosse, WI 54603 Tax parcel # 4-225-0 Sample ID # 225-0

#### Dear

We have received and reviewed the test results for the sample collected on October 29, 2020 at the above address. Some PFAS compounds were found at levels <u>above</u> the Department of Health Services (DHS) levels recommended for protecting health. These levels are called the "Recommended Public Health Standard" in the table below. The levels found in your well are called the "Sample Result" in the table below.

Because some of the levels are above the recommended Public Health Standard, the City is offering to provide bottled water delivered to your home for drinking, cooking, and brushing your teeth. There will be no cost to you for the bottled water. Please complete the attached form and mail it to The OS Group to make arrangements for having a water dispenser and bottles delivered to your home or business. Call 608-668-2718 or email <u>PFAS@theOSgrp.com</u>. You may also complete this form on line at <u>www.cityoflacrosse.org/bottledwater</u>

The following table summarizes the test results from the sample. **Bolded results** are above a current recommended level intended to protect your health according to the Department of Health Services (DHS).

Private Well Sampling Results for 2553 2nd Avenue East, La Crosse, WI 54603 Tax parcel # 4-225-0 Sample ID # 225-0 November 23, 2020

#### Sample Results

Compound	Sample Result (unit)	Recomm Public H Standard	ended lealth (unit <sup>e</sup> )
N-Ethyl Perfluorooctane sulfonamide (NEtFOSA) CAS # 4151-50-2	Not Detected	20 ppt <sup>a,b</sup>	) ppt unds I 6
N-Ethyl perfluorooctane sulfonamidoacetic acid (NEtFOSAA) CAS # 2991-50-6	Not Detected	20 ppt <sup>a,b</sup>	it is 20 compo <i>il</i> of all
N-Ethyl perfluorooctane sulfonamidoethanol (NEtFOSE) CAS # 1691-99-2	Not Detected	20 ppt <sup>a,b</sup>	ed lim ese 6 c ed toto
Perfluorooctane sulfonamide (FOSA) CAS # 754-91-6	Not Detected	20 ppt <sup>a,b</sup>	mend of the
Perfluorooctanoic acid (PFOA) CAS # 335-67-1	7.5 ppt	20 ppt <sup>a,b</sup>	recom ny <i>one</i> the <i>c</i> c
Perfluorooctanesulfonic acid (PFOS) CAS # 1763-23-1	21 ppt	20 ppt <sup>a,b</sup>	The for a or
Hexafluoropropylene oxide dimer acid (HPFO-DA; GenX) CAS # 13252-13-6	Not Detected		300 ppt <sup>a</sup>
Perfluorobutanesulfonic acid (PFBS) CAS # 375-73-5	6.1 ppt	450	0,000 ppt <sup>a</sup>
Perfluorohexanesulfonic acid (PFHxS) CAS # 355-46-4	18 ppt		40 ppt <sup>a</sup>
Perfluorobutanoic acid (PFBA) CAS # 375-22-4	10 ppt	10	0,000 ppt <sup>a</sup>
Perfluorodecanoic acid (PFDA) CAS # 335-76-2	Not Detected		300 ppt <sup>a</sup>
Perfluorododecanoic acid (PFDoA) CAS # 307-55-1	Not Detected		500 ppt <sup>a</sup>
Perfluorohexanoic acid (PFHxA) CAS # 307-24-4	2.3 ppt	150	0,000 ppt <sup>a</sup>
Perfluorononanoic acid (PFNA) CAS # 375-95-1	1.6 ppt		30 ppt <sup>a</sup>
Perfluorotetradecanoic acid (PFTeA) CAS # 376-06-7	Not Detected	10	0,000 ppt <sup>a</sup>
Perfluoroundecanoic acid (PFUnA) CAS # 2058-94-8	Not Detected	:	3,000 ppt <sup>a</sup>
4,8-Dioxa-3H-perfluorononanoic acid (DONA) CAS # 919005-14-4	Not Detected	d 3,000 ppt <sup>a</sup>	
Perfluorooctadecanoic acid (PFODA) CAS # 16517-11-6	Not Detected	400	0,000 ppt <sup>a</sup>

Private Well Sampling Results for 2553 2nd Avenue East, La Crosse, WI 54603 Tax parcel # 4-225-0 Sample ID # 225-0 November 23, 2020

Perfluoro-1-hetanesulfonic acid (PFHpS) CAS # 375-92-8	1.1 ppt	None Established <sup>c</sup>	
Perfluoro-1-pentanesulfonic acid (PFPeS) CAS # 2706-91-4	1.3 ppt	None Established <sup>c</sup>	
Perfluoro-n-heptanoic acid (PFHpA) CAS # 375-85-9	2.0 ppt	None Established <sup>c</sup>	
Perfluoro-n-pentanoic acid (PFPeA) CAS #2706-90-3	1.8 ppt	None Established <sup>c</sup>	
<sup>a</sup> Public health enforcement standard (ES) recommended by DHS. <sup>b</sup> DHS recommends a combined enforcement standard of 20 ng/L and combined preventive action limit of 2 ng/L for FOSA, NEt-FOSE, NEt-FOSA, NetFOSAA, PFOS, and PFOA.			

<sup>c</sup> A current standard is not available; the compound is currently under review by DHS for potential public health standard recommendation.

<sup>d</sup> Public health enforcement standard (ES) in NR 140, Wisconsin Administrative Code.

<sup>e</sup> Units: Parts per trillion (ppt) = nanograms of substance per liter of water (ng/L)

<sup>BL</sup> Detected in the method blank. Possible lab contaminant.

As required by law, we will be submitting these results to the Department of Natural Resources (DNR). The DNR may consult with the Department of Health Services (DHS) about these test results. DHS may review all PFAS tests and follow-up with you directly if any actions are recommended to protect your health.

Thank you for your patience and assistance with our investigation. We will provide updates on the project at <u>https://www.cityoflacrosse.org/wells</u> as our work continues. If you have any questions, please call The OS Group at (608) 668-2718 or email them at <u>PFAS@theOSgrp.com</u>.

You can also contact the DNR and DHS with questions about PFAS or the water sample results at the numbers provided below.

Questions about		<u>Contact</u>	<u>Phone</u>	E-mail Address
Soil & Groundwater Testing, Clean Up	DNR	David Rozeboom	715-215-2078	David.Rozeboom@wisconsin.gov
Drinking Water or Private wells	DNR	Kyle Burton	920-360-2112	kyle.burton@wisconsin.gov
Health Concerns	DHS	Curtis Hedman	608-266-6677	Curtis.Hedman@dhs.wisconsin.gov

On behalf of The City of La Crosse The OS Group, LLC

Attachment: Lab report for your well Bottled Water Acknowledgement

Client: Pace Analytical Services, LLC				L	aboratory II	D: VK03016-0	)21	
Description: 225-0					Matrix	: Aqueous		
Date Sampled:10/29/2020 1210 P	roject Nan	me: LACROSSE WELL #	23 & 24					
Date Received: 11/03/2020 Pro	iect Numb	r = 10217/106						
		JCI. 402 17470						
RunPrep MethodAnalytical MethodD2SOP SPEPFAS by ID SOP	ilution <i>F</i> 1 1	Analysis Date Analyst 1/17/2020 2115 SES	Prep 11/16/2	Date 2020 161	Batch 3 73668			
Parameter	CA Numb	AS Analytical er Method	Result	Q	LOQ	DL	Units	Run
9-chlorohexadecafluoro-3-oxanone-1-sulfonic acid (9CI-PF3ONS)	756426-58	8-1 PFAS by ID SOP	ND		7.5	1.9	ng/L	2
11-chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11CI-PF3)	763051-92	2-9 PFAS by ID SOP	ND		7.5	1.9	ng/L	2
1H, 1H, 2H, 2H-perfluorodecane sulfonic acid (8:2 FTS)	39108-34	4-4 PFAS by ID SOP	ND		7.5	1.9	ng/L	2
1H, 1H, 2H, 2H-perfluorooctane sulfonic acid (6:2 FTS)	27619-97	7-2 PFAS by ID SOP	ND		7.5	1.9	ng/L	2
1H,1H,2H,2H-perfluorododecane sulfonic acid (10:2 FTS)	120226-60	0-0 PFAS by ID SOP	ND		7.5	1.9	ng/L	2
1H,1H,2H,2H-perfluorohexane sulfonic acid (4:2 FTS)	757124-72	2-4 PFAS by ID SOP	ND		7.5	1.9	ng/L	2
Hexafluoropropylene oxide dimer acid (GenX)	13252-13	3-6 PFAS by ID SOP	ND		7.5	1.9	ng/L	2
4,8-dioxa-3H-perfluorononanoic acid (ADONA)	919005-14	4-4 PFAS by ID SOP	ND		7.5	1.9	ng/L	2
N-ethylperfluoro-1-octanesulfonamide (EtFOSA)	4151-50	0-2 PFAS by ID SOP	ND		7.5	1.9	ng/L	2
N-ethylperfluoro-1-octanesulfonamidoacetic acid (EtFOSAA)	2991-50	0-6 PFAS by ID SOP	ND		7.5	1.9	ng/L	2
2-N-ethylperfluoro-1-octanesulfonamido-ethanol (EtFOSE)	1691-99	9-2 PFAS by ID SOP	ND		7.5	1.9	ng/L	2
N-methylperfluoro-1-octanesulfonamide (MeFOSA)	31506-32	2-8 PFAS by ID SOP	ND		15	3.7	ng/L	2
N-methylperfluoro-1-octanesulfonamidoacetic acid (MeFOSAA)	2355-31	1-9 PFAS by ID SOP	ND		7.5	1.9	ng/L	2
2-N-methylperfluoro-1-octanesulfonamido-ethanol (MeFOSE)	24448-09	9-7 PFAS by ID SOP	ND		7.5	1.9	ng/L	2
Perfluoro-1-butanesulfonic acid (PFBS)	375-73	3-5 PFAS by ID SOP	6.1		3.7	0.93	ng/L	2
Perfluoro-1-decanesulfonic acid (PFDS)	335-77	7-3 PFAS by ID SOP	ND		3.7	0.93	ng/L	2
Perfluoro-1-heptanesulfonic acid (PFHpS)	375-92	2-8 PFAS by ID SOP	1.1	J	3.7	0.93	ng/L	2
Perfluoro-1-nonanesulfonic acid (PFNS)	68259-12	2-1 PFAS by ID SOP	ND		3.7	0.93	ng/L	2
Perfluoro-1-octanesulfonamide (PFOSA)	754-91	1-6 PFAS by ID SOP	ND		3.7	0.93	ng/L	2
Perfluoro-1-pentanesulfonic acid (PFPeS)	2706-91	1-4 PFAS by ID SOP	1.3	J	3.7	0.93	ng/L	2
Perfluorododecanesulfonic acid (PFDOS)	79780-39	9-5 PFAS by ID SOP	ND		7.5	1.9	ng/L	2
Perfluorohexanesulfonic acid (PFHxS)	355-46	6-4 PFAS by ID SOP	18		3.7	0.93	ng/L	2
Perfluoro-n-butanoic acid (PFBA)	375-22	2-4 PFAS by ID SOP	10		3.7	0.93	ng/L	2
Perfluoro-n-decanoic acid (PFDA)	335-76	6-2 PFAS by ID SOP	ND		3.7	0.93	ng/L	2
Perfluoro-n-dodecanoic acid (PFDoA)	307-55	5-1 PFAS by ID SOP	ND		3.7	0.93	ng/L	2
Perfluoro-n-heptanoic acid (PFHpA)	375-85	5-9 PFAS by ID SOP	2.0	J	3.7	0.93	ng/L	2
Perfluoro-n-hexadecanoic acid (PFHxDA)	67905-19	9-5 PFAS by ID SOP	ND		7.5	1.9	ng/L	2
Perfluoro-n-hexanoic acid (PFHxA)	307-24	4-4 PFAS by ID SOP	2.3	J	3.7	0.93	ng/L	2
Perfluoro-n-nonanoic acid (PFNA)	375-95	5-1 PFAS by ID SOP	1.6	J	3.7	0.93	ng/L	2
Perfluoro-n-octadecanoic acid (PFODA)	16517-11	1-6 PFAS by ID SOP	ND		7.5	1.9	ng/L	2
Perfluoro-n-octanoic acid (PFOA)	335-67	7-1 PFAS by ID SOP	7.5		3.7	0.93	ng/L	2
Periluoro-n-pentanoic acid (PEPEA)	2706-90	U-3 PFAS DY ID SOP	1.8	J	3.7	0.93	ng/L	2
Perliuoro-n-letradecanoic acid (PFTeDA)	3/6-00	6-7 PFAS by ID SOP	ND		3.7	0.93	ng/L	2
Perliuoro-n-indecanoic acid (PETIDA)	2050.04	4-8 PFAS by ID SOP			3.7	0.93	ng/L	2
Perlluoro-n-undecanoic acid (PFOdA)	2058-94	4-8 PFAS by ID SOP	ND 21		3.7	0.93	ng/L	2
Periluorooctanesuironic acid (PFOS)	1/63-23	3-1 PFAS DY ID SOP	21		3.7	0.93	ng/L	2
Surrogate Q % Rec	in 2 Ac covery	cceptance Limits						
13C2_4:2F1S	93	25-150						
1302_0:2F15	90	∠p-150						
13C2_8:2F1S	80 70	25-150						
	18	∠p-150						
	8U 70	20-15U						
IJUZ_PETEDA	10	20-150						
LOQ = Limit of Quantitation B = Detected in the method blank	E = Quantitat	tion of compound exceeded the c	alibration r	ange DL	= Detection Lim	iit	I	
ND = Not detected at or above the DL         N = Recovery is out of criteria           H = Out of holding time         W = Reported on wet weight basis	P = The RPD	D between two GC columns excee	as 40%	J =	Estimated resu	$tt < LOQ and \ge D$	L	

Client: Pace Analytical Services, LLC		Laboratory ID: VK03016-021
Description: 225-0		Matrix: Aqueous
Date Sampled:10/29/2020 1210	Project Name: LACROSSE WELL #23 & 24	
Date Received: 11/03/2020	Project Number: 40217496	

Surrogate	Run 2 Accepta Q % Recovery Limit
13C3_PFBS	78 25-15
13C3_PFHxS	83 25-15
13C3-HFPO-DA	86 25-15
13C4_PFBA	89 25-15
13C4_PFHpA	85 25-15
13C5_PFHxA	80 25-15
13C5_PFPeA	87 25-15
13C6_PFDA	87 25-15
13C7_PFUdA	81 25-15
13C8_PFOA	87 25-15
13C8_PFOS	82 25-15
13C8_PFOSA	88 10-15
13C9_PFNA	86 25-15
d-EtFOSA	80 10-15
d5-EtFOSAA	84 25-15
d9-EtFOSE	70 10-15
d-MeFOSA	75 10-15
d3-MeFOSAA	81 25-15
d7-MeFOSE	65 10-15

H = Out of holding time	W = Reported on wet weight basis		
ND = Not detected at or above the DL	N = Recovery is out of criteria	P = The RPD between two GC columns exceeds 40%	J = Estimated result < LOQ and $\ge$ DL
LOQ = Limit of Quantitation	B = Detected in the method blank	E = Quantitation of compound exceeded the calibration range	DL = Detection Limit

## BOTTLED WATER ACKNOWLEDGEMENT

2553 2nd Avenue East, La Crosse, WI 54603

If you desire to accept the bottled water delivery, please complete and sign this form and return it to The OS Group at <u>PFAS@TheOSgrp.com</u> or mail to 444 21<sup>st</sup> St. S, La Crosse, WI 54601. You may also complete this form electronically on line at <u>www.cityoflacrosse.org/bottledwater</u>. Call 608-668-2718 with any question you may have.

As pre-caution for the protection of human health, the City of La Crosse (The City) will provide, on a temporary basis, bottled water for drinking, cooking and toothbrushing purposes at the above referenced address. The water will be delivered to your home or business by a commercial water delivery service. At the City's cost, a dispenser / cooler and regular deliveries of 5-gallon containers of water will be provided. The City reserves the right to dictate the conditions of delivery, such as minimum and maximum number of containers per delivery, frequency and timing of deliveries. The City reserves the right to periodically review whether The City should continue to provide bottled water, considering factors such as State and Federal standards and guidance, evolving knowledge and understanding of the sources, cause and responsibility for the contamination, new or reinterpreted test results, and the availability of more permanent or cost-effective sources of water for the above purposes. The City of La Crosse makes no warranty or representation regarding the suitability of the bottled water beyond those made by the commercial water delivery service.

Check ownership: \_\_\_\_\_ Owner-Occupant \_\_\_\_\_ Occupant Only

Number of Occupants: \_\_\_\_\_

All reusable or returnable equipment and supplies, such as the containers and cooler/dispenser, are the property of the commercial water delivery service or the City of La Crosse. By signing below, the Occupant of the above referenced property acknowledges that all reusable or returnable equipment and supplies shall be returned to the commercial water delivery service or the City of La Crosse upon request. The Occupant agrees to provide reasonable access for delivery of bottled water and pick up of reusable or returnable equipment and supplies. Occupant(s) acknowledges that they may be required to sign an agreement with the commercial water delivery service as a condition of receiving bottled water.

Signed:	Dated:

Printed Name: \_\_\_\_\_



444 21st Street South · La Crosse, Wisconsin · 54601

November 23, 2020

2557 2nd Avenue East La Crosse, WI 54603

Subject: Private Well Sampling Results 2557 2nd Avenue East, La Crosse, WI 54603 Tax parcel # 4-226-0 Sample ID # 226-0

:

Dear

We have received and reviewed the test results for the sample collected on October 29, 2020 at the above address. Some PFAS compounds were found, but the levels found were **below** the Department of Health Services (DHS) levels recommended for protecting health. These levels are called the "Recommended Public Health Standard" in the table below. The levels found in *your* well are called the "Sample Result" in the table below.

#### Sample Results

Compound	Sample Result (unit)	Recommended Public Health Standard (unit <sup>e</sup> )	
N-Ethyl Perfluorooctane sulfonamide (NEtFOSA) CAS # 4151-50-2	Not Detected	20 ppt <sup>a,b</sup>	) ppt unds I 6
N-Ethyl perfluorooctane sulfonamidoacetic acid (NEtFOSAA) CAS # 2991-50-6	Not Detected	20 ppt <sup>a,b</sup>	it is 20 ompo <i>il</i> of al
N-Ethyl perfluorooctane sulfonamidoethanol (NEtFOSE) CAS # 1691-99-2	Not Detected	20 ppt <sup>a,b</sup>	ed lim ese 6 c ed toto
Perfluorooctane sulfonamide (FOSA) CAS # 754-91-6	Not Detected	20 ppt <sup>a,b</sup>	mend of the ombine
Perfluorooctanoic acid (PFOA) CAS # 335-67-1	5.5 ppt	20 ppt <sup>a,b</sup>	recom ny <i>one</i> the <i>c</i> c
Perfluorooctanesulfonic acid (PFOS) CAS # 1763-23-1	13 ppt	20 ppt <sup>a,b</sup>	The for a or

Private Well Sampling Results for 2557 2nd Avenue East, La Crosse, WI 54603 Tax parcel # 4-226-0 Sample ID # 226-0 November 23, 2020

Compound	Sample Result (unit)	Recommended Public Health Standard (unit <sup>e</sup> )	
Hexafluoropropylene oxide dimer acid (HPFO-DA; GenX) CAS # 13252-13-6	Not Detected	300 ppt <sup>a</sup>	
Perfluorobutanesulfonic acid (PFBS) CAS # 375-73-5	6.5 ppt	450,000 ppt <sup>a</sup>	
Perfluorohexanesulfonic acid (PFHxS) CAS # 355-46-4	8.2 ppt	40 ppt <sup>a</sup>	
Perfluorobutanoic acid (PFBA) CAS # 375-22-4	71 ppt	10,000 ppt <sup>a</sup>	
Perfluorodecanoic acid (PFDA) CAS # 335-76-2	Not Detected	300 ppt <sup>a</sup>	
Perfluorododecanoic acid (PFDoA) CAS # 307-55-1	Not Detected	500 ppt <sup>a</sup>	
Perfluorohexanoic acid (PFHxA) CAS # 307-24-4	Not Detected	150,000 ppt <sup>a</sup>	
Perfluorononanoic acid (PFNA) CAS # 375-95-1	Not Detected	30 ppt <sup>a</sup>	
Perfluorotetradecanoic acid (PFTeA) CAS # 376-06-7	Not Detected	10,000 ppt <sup>a</sup>	
Perfluoroundecanoic acid (PFUnA) CAS # 2058-94-8	Not Detected	3,000 ppt <sup>a</sup>	
4,8-Dioxa-3H-perfluorononanoic acid (DONA) CAS # 919005-14-4	Not Detected	3,000 ppt <sup>a</sup>	
Perfluorooctadecanoic acid (PFODA) CAS # 16517-11-6	Not Detected	400,000 ppt <sup>a</sup>	
Perfluoro-1-pentanesulfonic acid (PFPeS) CAS # 2706-91-4	4.8 ppt	None Established <sup>c</sup>	

<sup>a</sup> Public health enforcement standard (ES) recommended by DHS.

<sup>b</sup> DHS recommends a combined enforcement standard of 20 ng/L and combined preventive action limit of 2 ng/L for FOSA, NEt-FOSA, NetFOSAA, PFOS, and PFOA.

<sup>c</sup> A current standard is not available; the compound is currently under review by DHS for potential public health standard recommendation.

<sup>d</sup> Public health enforcement standard (ES) in NR 140, Wisconsin Administrative Code.

<sup>e</sup> Units: Parts per trillion (ppt) = nanograms of substance per liter of water (ng/L)

<sup>BL</sup> Detected in the method blank. Possible lab contaminant.
Private Well Sampling Results for 2557 2nd Avenue East, La Crosse, WI 54603 Tax parcel # 4-226-0 Sample ID # 226-0 November 23, 2020

As required by law, we will be submitting these results to the Department of Natural Resources (DNR). The DNR may consult with the Department of Health Services (DHS) about these test results. DHS may review all PFAS tests and follow-up with you directly if any actions are recommended to protect your health.

Thank you for your patience and assistance with our investigation. We will provide updates on the project at <u>https://www.cityoflacrosse.org/wells</u> as our work continues. If you have any questions, please call The OS Group at (608) 668-2718 or email them at <u>PFAS@theOSgrp.com</u>.

You can also contact the DNR and DHS with questions about PFAS or the water sample results at the numbers provided below.

Questions about		<u>Contact</u>	<u>Phone</u>	E-mail Address
Soil & Groundwater Testing, Clean Up	DNR	David Rozeboom	715-215- 2078	David.Rozeboom@wisconsin.gov
Drinking Water or Private wells	DNR	Kyle Burton	920-360- 2112	kyle.burton@wisconsin.gov
Health Concerns	DHS	Curtis Hedman	608-266- 6677	Curtis.Hedman@dhs.wisconsin.gov

On behalf of The City of La Crosse *The OS Group, LLC* 

Attachment: Lab report for your well

Client: Pace Analytical Services, LLC						Laboratory II	D: VK03016-0	022	
Description: 226-0						Matrix	k: Aqueous		
Date Sampled:10/29/2020 1225	Project Na	me:	LACROSSE WELL #	<sup>∉</sup> 23 & 24					
Date Received: 11/03/2020 Pr	, niect Num	her .	40217496						
				_					
RunPrep MethodAnalytical MethodI2SOP SPEPFAS by ID SOP	Dilution 1	Ana 11/1	lysis Date Analyst 7/2020 2125 SES	Prep 11/16/2	Date 2020 16	Batch 13 73668			
Parameter	C Numl	AS per	Analytical Method	Result	Q	LOQ	DL	Units	Run
9-chlorohexadecafluoro-3-oxanone-1-sulfonic acid (9CI-PF3ONS)	756426-	58-1	PFAS by ID SOP	ND		7.2	1.8	ng/L	2
11-chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11CI-PF3)	) 763051-0	92-9	PFAS by ID SOP	ND		7.2	1.8	ng/L	2
1H, 1H, 2H, 2H-perfluorodecane sulfonic acid (8:2 FTS)	39108-3	34-4	PFAS by ID SOP	ND		7.2	1.8	ng/L	2
1H, 1H, 2H, 2H-perfluorooctane sulfonic acid (6:2 FTS)	27619-0	97-2	PFAS by ID SOP	ND		7.2	1.8	ng/L	2
1H,1H,2H,2H-perfluorododecane sulfonic acid (10:2 FTS)	120226-0	60-0	PFAS by ID SOP	ND		7.2	1.8	ng/L	2
1H,1H,2H,2H-perfluorohexane sulfonic acid (4:2 FTS)	757124-	72-4	PFAS by ID SOP	ND		7.2	1.8	ng/L	2
Hexafluoropropylene oxide dimer acid (GenX)	13252-1	13-6	PFAS by ID SOP	ND		7.2	1.8	ng/L	2
4,8-dioxa-3H-perfluorononanoic acid (ADONA)	919005-	14-4	PFAS by ID SOP	ND		7.2	1.8	ng/L	2
N-ethylperfluoro-1-octanesulfonamide (EtFOSA)	4151-5	50-2	PFAS by ID SOP	ND		7.2	1.8	ng/L	2
N-ethylperfluoro-1-octanesulfonamidoacetic acid (EtFOSAA)	2991-5	50-6	PFAS by ID SOP	ND		7.2	1.8	ng/L	2
2-N-ethylperfluoro-1-octanesulfonamido-ethanol (EtFOSE)	1691-9	9-2	PFAS by ID SOP	ND		7.2	1.8	ng/L	2
N-methylperfluoro-1-octanesulfonamide (MeFOSA)	31506-3	32-8	PFAS by ID SOP	ND		14	3.6	ng/L	2
N-methylperfluoro-1-octanesulfonamidoacetic acid (MeFOSAA)	2355-3	31-9	PFAS by ID SOP	ND		7.2	1.8	ng/L	2
2-N-methylperfluoro-1-octanesulfonamido-ethanol (MeFOSE)	24448-0	09-7	PFAS by ID SOP	ND		7.2	1.8	ng/L	2
Perfluoro-1-butanesulfonic acid (PFBS)	375-7	73-5	PFAS by ID SOP	6.5		3.6	0.90	ng/L	2
Perfluoro-1-decanesulfonic acid (PFDS)	335-7	7-3	PFAS by ID SOP	ND		3.6	0.90	ng/L	2
Perfluoro-1-heptanesulfonic acid (PFHpS)	375-9	92-8	PFAS by ID SOP	ND		3.6	0.90	ng/L	2
Perfluoro-1-nonanesulfonic acid (PFNS)	68259-	12-1	PFAS by ID SOP	ND		3.6	0.90	ng/L	2
Perfluoro-1-octanesulfonamide (PFOSA)	754-9	91-6	PFAS by ID SOP	ND		3.6	0.90	ng/L	2
Perfluoro-1-pentanesulfonic acid (PFPeS)	2706-9	91-4	PFAS by ID SOP	4.8		3.6	0.90	ng/L	2
Perfluorododecanesulfonic acid (PFDOS)	79780-3	39-5	PFAS by ID SOP	ND		7.2	1.8	ng/L	2
Perfluorohexanesulfonic acid (PFHxS)	355-4	16-4	PFAS by ID SOP	8.2		3.6	0.90	ng/L	2
Perfluoro-n-butanoic acid (PFBA)	375-2	22-4	PFAS by ID SOP	71		3.6	0.90	ng/L	2
Perfluoro-n-decanoic acid (PFDA)	335-7	6-2	PFAS by ID SOP	ND		3.6	0.90	ng/L	2
Perfluoro-n-dodecanoic acid (PFDoA)	307-5	5-1	PFAS by ID SOP	ND		3.6	0.90	ng/L	2
Perfluoro-n-heptanoic acid (PFHpA)	375-8	35-9	PFAS by ID SOP	ND		3.6	0.90	ng/L	2
Perfluoro-n-hexadecanoic acid (PFHxDA)	67905-1	19-5	PFAS by ID SOP	ND		7.2	1.8	ng/L	2
Perfluoro-n-hexanoic acid (PFHxA)	307-2	24-4	PFAS by ID SOP	ND		3.6	0.90	ng/L	2
Perfluoro-n-nonanoic acid (PFNA)	375-9	95-1	PFAS by ID SOP	ND		3.6	0.90	ng/L	2
Perfluoro-n-octadecanoic acid (PFODA)	16517-1	11-6	PFAS by ID SOP	ND		7.2	1.8	ng/L	2
Perfluoro-n-octanoic acid (PFOA)	335-6	57-1	PFAS by ID SOP	5.5		3.6	0.90	ng/L	2
Perfluoro-n-pentanoic acid (PFPeA)	2706-9	90-3	PFAS by ID SOP	ND		3.6	0.90	ng/L	2
Perfluoro-n-tetradecanoic acid (PFTeDA)	376-0	)6-7	PFAS by ID SOP	ND		3.6	0.90	ng/L	2
Perfluoro-n-tridecanoic acid (PFTrDA)	72629-9	94-8	PFAS by ID SOP	ND		3.6	0.90	ng/L	2
Perfluoro-n-undecanoic acid (PFUdA)	2058-9	94-8	PFAS by ID SOP	ND		3.6	0.90	ng/L	2
Perfluorooctanesulfonic acid (PFOS)	1763-2	23-1	PFAS by ID SOP	13		3.6	0.90	ng/L	2
Surrogate Q % Re	un 2 A covery	ccep Lin	otance nits						
13C2_4:2FTS	88	25	-150						
13C2_6:2FTS	89	25	-150						
13C2_8:2FTS	82	25	-150						
13C2_PFDoA	70	25	-150						
13C2_PFHxDA	71	25	-150						
13C2_PFTeDA	63	25	-150						
LOQ = Limit of QuantitationB = Detected in the method blankND = Not detected at or above the DLN = Recovery is out of criteriaH = Out of holding timeW = Reported on wet weight basis	E = Quantit P = The RF	ation o PD betv	of compound exceeded the o ween two GC columns exce	calibration r eds 40%	ange Dl J :	- = Detection Lin = Estimated resu	nit It < LOQ and <u>≥</u> D	IL	

Client: Pace Analytical Services, LLC		Laboratory ID: VK03016-022
Description: 226-0		Matrix: Aqueous
Date Sampled:10/29/2020 1225	Project Name: LACROSSE WELL #23 & 24	
Date Received: 11/03/2020	Project Number: 40217496	

Surrogate	Run 2 A Q % Recovery	cceptance Limits
13C3_PFBS	75	25-150
13C3_PFHxS	82	25-150
13C3-HFPO-DA	85	25-150
13C4_PFBA	88	25-150
13C4_PFHpA	82	25-150
13C5_PFHxA	82	25-150
13C5_PFPeA	84	25-150
13C6_PFDA	80	25-150
13C7_PFUdA	72	25-150
13C8_PFOA	82	25-150
13C8_PFOS	76	25-150
13C8_PFOSA	89	10-150
13C9_PFNA	82	25-150
d-EtFOSA	69	10-150
d5-EtFOSAA	76	25-150
d9-EtFOSE	66	10-150
d-MeFOSA	67	10-150
d3-MeFOSAA	76	25-150
d7-MeFOSE	59	10-150

LOQ = Limit of Quantitation	B = Detected in the method blank	E = Quantitation of compound exceeded the calibration range	DL = Detection Limit
ND = Not detected at or above the DL	N = Recovery is out of criteria	P = The RPD between two GC columns exceeds 40%	J = Estimated result < LOQ and $\ge$ DL
H = Out of holding time	W = Reported on wet weight basis		



444 21st Street South  $\cdot$  La Crosse, Wisconsin  $\cdot$  54601

November 23, 2020

2540 Bainbridge Street La Crosse, WI 54603

Subject: Private Well Sampling Results 2540 Bainbridge Street, La Crosse, WI 54603 Tax parcel # 4-230-0 Sample ID # 230-0

Dear :

We have received and reviewed the test results for the sample collected on October 29, 2020 at the above address. Some PFAS compounds were found at levels <u>above</u> the Department of Health Services (DHS) levels recommended for protecting health. These levels are called the "Recommended Public Health Standard" in the table below. The levels found in your well are called the "Sample Result" in the table below.

Because some of the levels are above the recommended Public Health Standard, the City is offering to provide bottled water delivered to your home for drinking, cooking, and brushing your teeth. There will be no cost to you for the bottled water. Please complete the attached form and mail it to The OS Group to make arrangements for having a water dispenser and bottles delivered to your home or business. Call 608-668-2718 or email <u>PFAS@theOSgrp.com</u>. You may also complete this form on line at <u>www.cityoflacrosse.org/bottledwater</u>

The following table summarizes the test results from the sample. **Bolded results** are above a current recommended level intended to protect your health according to the Department of Health Services (DHS).

Private Well Sampling Results for 2540 Bainbridge Street, La Crosse, WI 54603 Tax parcel # 4-230-0 Sample ID # 230-0 November 23, 2020

Compound	Sample Result (unit)	Recomm Public H Standard	ended Iealth (unit <sup>e</sup> )	
N-Ethyl Perfluorooctane sulfonamide (NEtFOSA) CAS # 4151-50-2	Not Detected	20 ppt <sup>a,b</sup>	) ppt unds I 6	
N-Ethyl perfluorooctane sulfonamidoacetic acid (NEtFOSAA) CAS # 2991-50-6	Not Detected	20 ppt <sup>a,b</sup>	it is 20 ompo // of all	
N-Ethyl perfluorooctane sulfonamidoethanol (NEtFOSE) CAS # 1691-99-2	Not Detected	20 ppt <sup>a,b</sup>	ed lim ese 6 c ed totc	
Perfluorooctane sulfonamide (FOSA) CAS # 754-91-6	Not Detected	20 ppt <sup>a,b</sup>	mend of the mbine	
Perfluorooctanoic acid (PFOA) CAS # 335-67-1	8.2 ppt	20 ppt <sup>a,b</sup>	recom 1y <i>one</i> the <i>cc</i>	
Perfluorooctanesulfonic acid (PFOS) CAS # 1763-23-1	140 ppt	20 ppt <sup>a,b</sup>	The for al or	
Hexafluoropropylene oxide dimer acid (HPFO-DA; GenX) CAS # 13252-13-6	Not Detected		300 ppt <sup>a</sup>	
Perfluorobutanesulfonic acid (PFBS) CAS # 375-73-5	12 ppt	450	),000 ppt <sup>a</sup>	
Perfluorohexanesulfonic acid (PFHxS) CAS # 355-46-4	220 ppt		40 ppt <sup>a</sup>	
Perfluorobutanoic acid (PFBA) CAS # 375-22-4	20 ppt	10	),000 ppt <sup>a</sup>	
Perfluorodecanoic acid (PFDA) CAS # 335-76-2	Not Detected		300 ppt <sup>a</sup>	
Perfluorododecanoic acid (PFDoA) CAS # 307-55-1	Not Detected		500 ppt <sup>a</sup>	
Perfluorohexanoic acid (PFHxA) CAS # 307-24-4	7.9 ppt	150	),000 ppt <sup>a</sup>	
Perfluorononanoic acid (PFNA) CAS # 375-95-1	Not Detected		30 ppt <sup>a</sup>	
Perfluorotetradecanoic acid (PFTeA) CAS # 376-06-7	Not Detected	10	),000 ppt <sup>a</sup>	
Perfluoroundecanoic acid (PFUnA) CAS # 2058-94-8	Not Detected	Not Detected 3,000 pp		
4,8-Dioxa-3H-perfluorononanoic acid (DONA) CAS # 919005-14-4	Not Detected	3	3,000 ppt <sup>a</sup>	

## Sample Results

Private Well Sampling Results for 2540 Bainbridge Street, La Crosse, WI 54603 Tax parcel # 4-230-0 Sample ID # 230-0 November 23, 2020

Perfluorooctadecanoic acid (PFODA) CAS # 16517-11-6	Not Detected	400,000 ppt <sup>a</sup>			
Perfluoro-1-pentanesulfonic acid (PFPeS) CAS # 2706-91-4	6.3 ppt	None Established <sup>c</sup>			
Perfluoro-n-heptanoic acid (PFHpA) CAS # 375-85-9	1.1 ppt	None Established <sup>c</sup>			
Perfluoro-n-pentanoic acid (PFPeA) CAS #2706-90-3	0.95 ppt	None Established <sup>c</sup>			
<sup>3</sup> Public health enforcement standard (ES) recommended by DHS.					

<sup>b</sup> DHS recommends a combined enforcement standard of 20 ng/L and combined preventive action limit of 2 ng/L for FOSA, NEt-FOSA, NetFOSAA, PFOS, and PFOA.

<sup>c</sup> A current standard is not available; the compound is currently under review by DHS for potential public health standard recommendation.

<sup>d</sup> Public health enforcement standard (ES) in NR 140, Wisconsin Administrative Code.

<sup>e</sup> Units: Parts per trillion (ppt) = nanograms of substance per liter of water (ng/L)

<sup>BL</sup> Detected in the method blank. Possible lab contaminant.

As required by law, we will be submitting these results to the Department of Natural Resources (DNR). The DNR may consult with the Department of Health Services (DHS) about these test results. DHS may review all PFAS tests and follow-up with you directly if any actions are recommended to protect your health.

Thank you for your patience and assistance with our investigation. We will provide updates on the project at <u>https://www.cityoflacrosse.org/wells</u> as our work continues. If you have any questions, please call The OS Group at (608) 668-2718 or email them at <u>PFAS@theOSgrp.com</u>.

You can also contact the DNR and DHS with questions about PFAS or the water sample results at the numbers provided below.

Questions about		<u>Contact</u>	<u>Phone</u>	<u>E-mail Address</u>
Soil & Groundwater Testing, Clean Up	DNR	David Rozeboom	715-215-2078	David.Rozeboom@wisconsin.gov
Drinking Water or Private wells	DNR	Kyle Burton	920-360-2112	kyle.burton@wisconsin.gov
Health Concerns	DHS	Curtis Hedman	608-266-6677	Curtis.Hedman@dhs.wisconsin.gov

On behalf of The City of La Crosse *The OS Group, LLC* 

Attachment: Lab report for your well Bottled Water Acknowledgement

Client: Pace Analytical Services, LLC					L	aboratory II.	D: VK03016-0	026	
Description: 230-0						Matrix	: Aqueous		
Date Sampled:10/29/2020 1420	Project Na	me:	LACROSSE WELL #	#23 & 24			·		
Date Received: 11/03/2020 Pro	, Diect Num	her	40217496						
RunPrep MethodAnalytical MethodE2SOP SPEPFAS by ID SOP	Dilution 1	Ana 11/1	lysis Date Analyst 7/2020 2208 SES	Prep 11/16/2	Date 2020 161	Batch 3 73668			
Parameter	C Num	AS ber	Analytical Method	Result	Q	LOQ	DL	Units	Run
9-chlorohexadecafluoro-3-oxanone-1-sulfonic acid (9CI-PF3ONS)	756426-	58-1	PFAS by ID SOP	ND		7.1	1.8	ng/L	2
11-chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11CI-PF3)	763051-	92-9	PFAS by ID SOP	ND		7.1	1.8	ng/L	2
1H, 1H, 2H, 2H-perfluorodecane sulfonic acid (8:2 FTS)	39108-	34-4	PFAS by ID SOP	ND		7.1	1.8	ng/L	2
1H, 1H, 2H, 2H-perfluorooctane sulfonic acid (6:2 FTS)	27619-	97-2	PFAS by ID SOP	ND		7.1	1.8	ng/L	2
1H,1H,2H,2H-perfluorododecane sulfonic acid (10:2 FTS)	120226-	60-0	PFAS by ID SOP	ND		7.1	1.8	ng/L	2
1H,1H,2H,2H-perfluorohexane sulfonic acid (4:2 FTS)	757124-	72-4	PFAS by ID SOP	ND		7.1	1.8	ng/L	2
Hexafluoropropylene oxide dimer acid (GenX)	13252-	13-6	PFAS by ID SOP	ND		7.1	1.8	ng/L	2
4,8-dioxa-3H-perfluorononanoic acid (ADONA)	919005-	14-4	PFAS by ID SOP	ND		7.1	1.8	ng/L	2
N-ethylperfluoro-1-octanesulfonamide (EtFOSA)	4151-	50-2	PFAS by ID SOP	ND		7.1	1.8	ng/L	2
N-ethylperfluoro-1-octanesulfonamidoacetic acid (EtFOSAA)	2991-	50-6	PFAS by ID SOP	ND		7.1	1.8	ng/L	2
2-N-ethylperfluoro-1-octanesulfonamido-ethanol (EtFOSE)	1691-	99-2	PFAS by ID SOP	ND		7.1	1.8	ng/L	2
N-methylperfluoro-1-octanesulfonamide (MeFOSA)	31506-	32-8	PFAS by ID SOP	ND		14	3.6	ng/L	2
N-methylperfluoro-1-octanesulfonamidoacetic acid (MeFOSAA)	2355-	31-9	PFAS by ID SOP	ND		7.1	1.8	ng/L	2
2-N-methylperfluoro-1-octanesulfonamido-ethanol (MeFOSE)	24448-	09-7	PFAS by ID SOP	ND		7.1	1.8	ng/L	2
Perfluoro-1-butanesulfonic acid (PFBS)	375-	73-5	PFAS by ID SOP	12		3.6	0.89	ng/L	2
Perfluoro-1-decanesulfonic acid (PFDS)	335-	77-3	PFAS by ID SOP	ND		3.6	0.89	ng/L	2
Perfluoro-1-heptanesulfonic acid (PFHpS)	375-	92-8	PFAS by ID SOP	7.6		3.6	0.89	ng/L	2
Perfluoro-1-nonanesulfonic acid (PFNS)	68259-	12-1	PFAS by ID SOP	ND		3.6	0.89	ng/L	2
Perfluoro-1-octanesulfonamide (PFOSA)	754-	91-6	PFAS by ID SOP	ND		3.6	0.89	ng/L	2
Perfluoro-1-pentanesulfonic acid (PFPeS)	2706-	91-4	PFAS by ID SOP	22		3.6	0.89	ng/L	2
Perfluorododecanesulfonic acid (PFDOS)	79780-	39-5	PFAS by ID SOP	ND		7.1	1.8	ng/L	2
Perfluorohexanesulfonic acid (PFHxS)	355-	46-4	PFAS by ID SOP	220		3.6	0.89	ng/L	2
Perfluoro-n-butanoic acid (PFBA)	375-	22-4	PFAS by ID SOP	20		3.6	0.89	ng/L	2
Perfluoro-n-decanoic acid (PFDA)	335-	76-2	PFAS by ID SOP	ND		3.6	0.89	ng/L	2
Perfluoro-n-dodecanoic acid (PFDoA)	307-	55-1	PFAS by ID SOP	ND		3.6	0.89	ng/L	2
Perfluoro-n-heptanoic acid (PFHpA)	375-	35-9	PFAS by ID SOP	1.2	J	3.6	0.89	ng/L	2
Perfluoro-n-hexadecanoic acid (PFHxDA)	67905-	19-5	PFAS by ID SOP	ND		7.1	1.8	ng/L	2
Perfluoro-n-hexanoic acid (PFHxA)	307-3	24-4	PFAS by ID SOP	7.9		3.6	0.89	ng/L	2
Perfluoro-n-nonanoic acid (PFNA)	375-	95-1	PFAS by ID SOP	ND		3.6	0.89	ng/L	2
Perfluoro-n-octadecanoic acid (PFODA)	16517-	11-6	PFAS by ID SOP	ND		7.1	1.8	ng/L	2
Perfluoro-n-octanoic acid (PFOA)	335-	57-1	PFAS by ID SOP	8.2		3.6	0.89	ng/L	2
Perfluoro-n-pentanoic acid (PFPeA)	2706-	70-3	PFAS by ID SOP	3.6		3.6	0.89	ng/L	2
Perfluoro-n-tetradecanoic acid (PFTeDA)	3/6-	)6-7	PFAS by ID SOP	ND		3.6	0.89	ng/L	2
Perfluoro-n-tridecanoic acid (PF1rDA)	72629-	94-8	PEAS by ID SOP	ND		3.6	0.89	ng/L	2
Perfluoro-n-undecanoic acid (PFUdA)	2058-	74-8	PEAS by ID SOP	ND		3.6	0.89	ng/L	2
Perfluorooctanesulfonic acid (PFOS)	1763-	23-1	PFAS by ID SOP	140		3.6	0.89	ng/L	2
Surrogate Q % Re	un 2 A covery	ccep Lin	otance nits						
13C2_4:2FTS	88	25	-150						
13C2_6:2F1S	92	25	-150						
13C2_8:2F1S	90	25	-150						
13C2_PFD0A	73	25	-150						
T3C2_PEHXDA	78	25	-150						
I3C2_PFTEDA	64	25	- 150						
LOQ = Limit of Quantitation B = Detected in the method blank ND = Not detected at or above the DL N = Recovery is out of criteria	E = Quanti	tation o	of compound exceeded the o	calibration r	ange DL	= Detection Lim	hit It < LOO and > P	1	
H = Out of holding time W = Reported on wet weight basis	, men	2 000			5 -			_	

Client: Pace Analytical Services, LLC		Laboratory ID: VK03016-026
Description: 230-0		Matrix: Aqueous
Date Sampled:10/29/2020 1420	Project Name: LACROSSE WELL #23 & 24	
Date Received: 11/03/2020	Project Number: 40217496	

		aantanaa
Surrogate	Q % Recovery	Limits
13C3_PFBS	79	25-150
13C3_PFHxS	85	25-150
13C3-HFPO-DA	85	25-150
13C4_PFBA	90	25-150
13C4_PFHpA	82	25-150
13C5_PFHxA	83	25-150
13C5_PFPeA	88	25-150
13C6_PFDA	84	25-150
13C7_PFUdA	71	25-150
13C8_PFOA	86	25-150
13C8_PFOS	85	25-150
13C8_PFOSA	91	10-150
13C9_PFNA	83	25-150
d-EtFOSA	63	10-150
d5-EtFOSAA	81	25-150
d9-EtFOSE	66	10-150
d-MeFOSA	72	10-150
d3-MeFOSAA	74	25-150
d7-MeFOSE	69	10-150

H = Out of holding time	W = Reported on wet weight basis		
ND = Not detected at or above the DL	N = Recovery is out of criteria	P = The RPD between two GC columns exceeds 40%	J = Estimated result < LOQ and $\geq$ DL
LOQ = Limit of Quantitation	B = Detected in the method blank	E = Quantitation of compound exceeded the calibration range	DL = Detection Limit

## BOTTLED WATER ACKNOWLEDGEMENT

2540 Bainbridge Street, La Crosse, WI 54603

If you desire to accept the bottled water delivery, please complete and sign this form and return it to The OS Group at <u>PFAS@TheOSgrp.com</u> or mail to 444 21<sup>st</sup> St. S, La Crosse, WI 54601. You may also complete this form electronically on line at <u>www.cityoflacrosse.org/bottledwater</u>. Call 608-668-2718 with any question you may have.

As pre-caution for the protection of human health, the City of La Crosse (The City) will provide, on a temporary basis, bottled water for drinking, cooking and toothbrushing purposes at the above referenced address. The water will be delivered to your home or business by a commercial water delivery service. At the City's cost, a dispenser / cooler and regular deliveries of 5-gallon containers of water will be provided. The City reserves the right to dictate the conditions of delivery, such as minimum and maximum number of containers per delivery, frequency and timing of deliveries. The City reserves the right to periodically review whether The City should continue to provide bottled water, considering factors such as State and Federal standards and guidance, evolving knowledge and understanding of the sources, cause and responsibility for the contamination, new or reinterpreted test results, and the availability of more permanent or costeffective sources of water for the above purposes. The City of La Crosse makes no warranty or representation regarding the suitability of the bottled water beyond those made by the commercial water delivery service.

Check ownership:

\_\_\_\_\_ Owner-Occupant \_\_\_\_\_ Occupant Only

Number of Occupants: \_\_\_\_\_

All reusable or returnable equipment and supplies, such as the containers and cooler/dispenser, are the property of the commercial water delivery service or the City of La Crosse. By signing below, the Occupant of the above referenced property acknowledges that all reusable or returnable equipment and supplies shall be returned to the commercial water delivery service or the City of La Crosse upon request. The Occupant agrees to provide reasonable access for delivery of bottled water and pick up of reusable or returnable equipment and supplies. Occupant(s) acknowledges that they may be required to sign an agreement with the commercial water delivery service as a condition of receiving bottled water.

Signed:	Dated:
---------	--------

Printed Name: \_\_\_\_\_\_



444 21st Street South  $\cdot$  La Crosse, Wisconsin  $\cdot$  54601

November 23, 2020

2520 Bainbridge Street La Crosse, WI 54603

Subject: Private Well Sampling Results 2520 Bainbridge Street, La Crosse, WI 54603 Tax parcel # 4-237-0 Sample ID # 237-0

:

Dear

We have received and reviewed the test results for the sample collected on October 29, 2020 at the above address. Some PFAS compounds were found, but the levels found were **below** the Department of Health Services (DHS) levels recommended for protecting health. These levels are called the "Recommended Public Health Standard" in the table below. The levels found in *your* well are called the "Sample Result" in the table below.

#### **Sample Results**

Compound	Sample Result (unit)	Recomm Public H Standard	ended lealth (unit <sup>e</sup> )
N-Ethyl Perfluorooctane sulfonamide (NEtFOSA) CAS # 4151-50-2	Not Detected	20 ppt <sup>a,b</sup>	) ppt unds I 6
N-Ethyl perfluorooctane sulfonamidoacetic acid (NEtFOSAA) CAS # 2991-50-6	Not Detected	20 ppt <sup>a,b</sup>	it is 20 compo <i>il</i> of al
N-Ethyl perfluorooctane sulfonamidoethanol (NEtFOSE) CAS # 1691-99-2	Not Detected	20 ppt <sup>a,b</sup>	ed lim ese 6 c ed toto
Perfluorooctane sulfonamide (FOSA) CAS # 754-91-6	Not Detected	20 ppt <sup>a,b</sup>	mend of the mbine
Perfluorooctanoic acid (PFOA) CAS # 335-67-1	2.2 ppt	20 ppt <sup>a,b</sup>	recom ny <i>one</i> the <i>cc</i>
Perfluorooctanesulfonic acid (PFOS) CAS # 1763-23-1	11 ppt	20 ppt <sup>a,b</sup>	The for a or
Hexafluoropropylene oxide dimer acid (HPFO-DA; GenX) CAS # 13252-13-6	Not Detected		300 ppt <sup>a</sup>
Perfluorobutanesulfonic acid (PFBS) CAS # 375-73-5	10 ppt	450	),000 ppt ª

Private Well Sampling Results for 2520 Bainbridge Street, La Crosse, WI 54603 Tax parcel # 4-237-0 Sample ID # 237-0 November 23, 2020

Compound	Sample Result (unit)	Recommended Public Health Standard (unit <sup>e</sup> )
Perfluorohexanesulfonic acid (PFHxS) CAS # 355-46-4	17 ppt	40 ppt <sup>a</sup>
Perfluorobutanoic acid (PFBA) CAS # 375-22-4	20 ppt	10,000 ppt <sup>a</sup>
Perfluorodecanoic acid (PFDA) CAS # 335-76-2	Not Detected	300 ppt <sup>a</sup>
Perfluorododecanoic acid (PFDoA) CAS # 307-55-1	Not Detected	500 ppt <sup>a</sup>
Perfluorohexanoic acid (PFHxA) CAS # 307-24-4	1.4 ppt	150,000 ppt <sup>a</sup>
Perfluorononanoic acid (PFNA) CAS # 375-95-1	Not Detected	30 ppt <sup>a</sup>
Perfluorotetradecanoic acid (PFTeA) CAS # 376-06-7	Not Detected	10,000 ppt <sup>a</sup>
Perfluoroundecanoic acid (PFUnA) CAS # 2058-94-8	Not Detected	3,000 ppt ª
4,8-Dioxa-3H-perfluorononanoic acid (DONA) CAS # 919005-14-4	Not Detected	3,000 ppt ª
Perfluorooctadecanoic acid (PFODA) CAS # 16517-11-6	Not Detected	400,000 ppt <sup>a</sup>
Perfluoro-1-pentanesulfonic acid (PFPeS) CAS # 2706-91-4	6.3 ppt	None Established <sup>c</sup>
Perfluoro-n-heptanoic acid (PFHpA) CAS # 375-85-9	1.1 ppt	None Established <sup>c</sup>
Perfluoro-n-pentanoic acid (PFPeA) CAS # 2706-90-3	0.95 ppt	None Established <sup>c</sup>

<sup>a</sup> Public health enforcement standard (ES) recommended by DHS.

<sup>b</sup> DHS recommends a combined enforcement standard of 20 ng/L and combined preventive action limit of 2 ng/L for FOSA, NEt-FOSE, NEt-FOSA, NetFOSAA, PFOS, and PFOA.

<sup>c</sup> A current standard is not available; the compound is currently under review by DHS for potential public health standard recommendation.

<sup>d</sup> Public health enforcement standard (ES) in NR 140, Wisconsin Administrative Code.

<sup>e</sup> Units: Parts per trillion (ppt) = nanograms of substance per liter of water (ng/L)

<sup>BL</sup> Detected in the method blank. Possible lab contaminant.

Private Well Sampling Results for 2520 Bainbridge Street, La Crosse, WI 54603 Tax parcel # 4-237-0 Sample ID # 237-0 November 23, 2020

As required by law, we will be submitting these results to the Department of Natural Resources (DNR). The DNR may consult with the Department of Health Services (DHS) about these test results. DHS may review all PFAS tests and follow-up with you directly if any actions are recommended to protect your health.

Thank you for your patience and assistance with our investigation. We will provide updates on the project at <u>https://www.cityoflacrosse.org/wells</u> as our work continues. If you have any questions, please call The OS Group at (608) 668-2718 or email them at <u>PFAS@theOSgrp.com</u>.

You can also contact the DNR and DHS with questions about PFAS or the water sample results at the numbers provided below.

Questions about		<u>Contact</u>	<u>Phone</u>	E-mail Address
Soil & Groundwater Testing, Clean Up	DNR	David Rozeboom	715-215-2078	David.Rozeboom@wisconsin.gov
Drinking Water or Private wells	DNR	Kyle Burton	920-360-2112	kyle.burton@wisconsin.gov
Health Concerns	DHS	Curtis Hedman	608-266-6677	Curtis.Hedman@dhs.wisconsin.gov

On behalf of The City of La Crosse *The OS Group, LLC* 

Attachment: Lab report for your well

Client: Pace Analytical Services, LLC				Labor	atory ID:	VK03016-0	25	
Description: 237-0					Matrix:	Aqueous		
Date Sampled:10/29/2020 1420	Proiect Nan	ne: LACROSSE WELL #	23 & 24					
Date Received: 11/03/2020	niect Numb	per: 10217196						
		0217470						
RunPrep MethodAnalytical MethodD2SOP SPEPFAS by ID SOP	ilution A 1 1	Analysis Date Analyst 1/17/2020 2157 SES	Prep 11/16/2	Date Ba 020 1613 73	ntch 668			
Parameter	CA Numb	AS Analytical er Method	Result	Q LO	Q	DL	Units	Run
9-chlorohexadecafluoro-3-oxanone-1-sulfonic acid (9CI-PF3ONS)	756426-58	B-1 PFAS by ID SOP	ND	6	.8	1.7	ng/L	2
11-chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11CI-PF3)	763051-92	2-9 PFAS by ID SOP	ND	6	.8	1.7	ng/L	2
1H, 1H, 2H, 2H-perfluorodecane sulfonic acid (8:2 FTS)	39108-34	4-4 PFAS by ID SOP	ND	6	.8	1.7	ng/L	2
1H, 1H, 2H, 2H-perfluorooctane sulfonic acid (6:2 FTS)	27619-9	7-2 PFAS by ID SOP	ND	6	.8	1.7	ng/L	2
1H,1H,2H,2H-perfluorododecane sulfonic acid (10:2 FTS)	120226-60	0-0 PFAS by ID SOP	ND	6	.8	1.7	ng/L	2
1H,1H,2H,2H-perfluorohexane sulfonic acid (4:2 FTS)	757124-72	2-4 PFAS by ID SOP	ND	6	.8	1.7	ng/L	2
Hexafluoropropylene oxide dimer acid (GenX)	13252-13	3-6 PFAS by ID SOP	ND	6	.8	1.7	ng/L	2
4,8-dioxa-3H-perfluorononanoic acid (ADONA)	919005-14	4-4 PFAS by ID SOP	ND	6	.8	1.7	ng/L	2
N-ethylperfluoro-1-octanesulfonamide (EtFOSA)	4151-50	0-2 PFAS by ID SOP	ND	6	.8	1.7	ng/L	2
N-ethylperfluoro-1-octanesulfonamidoacetic acid (EtFOSAA)	2991-50	0-6 PFAS by ID SOP	ND	6	.8	1.7	ng/L	2
2-N-ethylperfluoro-1-octanesulfonamido-ethanol (EtFOSE)	1691-99	P-2 PFAS by ID SOP	ND	6	.8	1.7	ng/L	2
N-methylperfluoro-1-octanesulfonamide (MeFOSA)	31506-32	2-8 PFAS by ID SOP	ND		14	3.4	ng/L	2
N-methylperfluoro-1-octanesulfonamidoacetic acid (MeFOSAA)	2355-31	-9 PFAS by ID SOP	ND	6	.8	1.7	ng/L	2
2-N-methylperfluoro-1-octanesulfonamido-ethanol (MeFOSE)	24448-09	9-7 PFAS by ID SOP	ND	6	.8	1.7	ng/L	2
Perfluoro-1-butanesulfonic acid (PFBS)	375-73	3-5 PFAS by ID SOP	10	3	.4	0.86	ng/L	2
Perfluoro-1-decanesulfonic acid (PFDS)	335-77	7-3 PFAS by ID SOP	ND	3	.4	0.86	ng/L	2
Perfluoro-1-heptanesulfonic acid (PFHpS)	375-92	2-8 PFAS by ID SOP	ND	3	.4	0.86	ng/L	2
Perfluoro-1-nonanesulfonic acid (PFNS)	68259-12	2-1 PFAS by ID SOP	ND	3	.4	0.86	ng/L	2
Perfluoro-1-octanesulfonamide (PFOSA)	754-91	-6 PFAS by ID SOP	ND	3	.4	0.86	ng/L	2
Perfluoro-1-pentanesulfonic acid (PFPeS)	2706-91	-4 PFAS by ID SOP	6.3	3	.4	0.86	ng/L	2
Perfluorododecanesulfonic acid (PFDOS)	79780-39	9-5 PFAS by ID SOP	ND	6	.8	1.7	ng/L	2
Perfluorohexanesulfonic acid (PFHxS)	355-46	-4 PFAS by ID SOP	17	3	.4	0.86	ng/L	2
Perfluoro-n-butanoic acid (PFBA)	375-22	2-4 PFAS by ID SOP	20	3	.4	0.86	ng/L	2
Perfluoro-n-decanoic acid (PFDA)	335-76	5-2 PFAS by ID SOP	ND	3	.4	0.86	ng/L	2
Perfluoro-n-dodecanoic acid (PFDoA)	307-55	5-1 PFAS by ID SOP	ND	3	.4	0.86	ng/L	2
Perfluoro-n-heptanoic acid (PFHpA)	375-85	5-9 PFAS by ID SOP	1.1	J 3	.4	0.86	ng/L	2
Perfluoro-n-hexadecanoic acid (PFHxDA)	67905-19	9-5 PFAS by ID SOP	ND	6	.8	1.7	ng/L	2
Perfluoro-n-hexanoic acid (PFHxA)	307-24	I-4 PEAS by ID SOP	1.4	J 3	.4	0.86	ng/L	2
Perfluoro-n-nonanoic acid (PFNA)	375-95	5-1 PEAS by ID SOP	ND	3	.4	0.86	ng/L	2
Perfluoro-n-octadecanoic acid (PFODA)	16517-1	1-6 PEAS by ID SOP	ND	6	.8	1.7	ng/L	2
Periluoro-n-ocianoic acid (PFOA)	335-07	PFAS by ID SOP	2.2	J 3	.4	0.86	ng/L	2
Perliuoro-n-pentanoic acid (PEPeA)	2706-90	-3 PFAS by ID SOP	0.95	J 3	.4	0.86	ng/L	2
Perliuoro-n-letradecanoic acid (PFTeDA)	376-00	PFAS by ID SOP		3	.4	0.86	ng/L	2
Periluoro-n-indecanoic acid (PETIDA)	2059.0/			3	.4	0.86	ng/L	2
Perfluoro-II-undecatioic acid (PFOGA)	2058-94		11	3	.4	0.86	ng/L	2
Period ooctanesuitoric acid (PFOS)	1/03-23	S-1 PFAS DY ID SOP	11	3	.4	0.86	ng/L	2
Surrogate Q % Rev	un 2 Ac covery	ceptance Limits						
13C2_4:2FTS	79	25-150						
1302_0:2FTS	89	25-150						
1302_8:2F15	88	25-150						
	74	25-150						
13C2_PFHxDA	/8	25-150						
I3UZ_PETEDA	10	25-150						
LOQ = Limit of Quantitation B = Detected in the method blank   ND = Not detected at or above the DL N = Recovery is out of criteria	E = Quantita P = The RPE	tion of compound exceeded the o between two GC columns exce	calibration ra	ange DL = Dete J = Estima	ection Limit ated result <	$\leq$ LOQ and $\geq$ DL		
H = Out of holding time W = Reported on wet weight basis								

Laboratory ID: VK03016-025 Matrix: Aqueous

Client: Pace Analytical Services, LLC	
Description: 237-0	
Date Sampled:10/29/2020 1420	Project Name: LACROSSE WELL #23 & 24
Date Received: 11/03/2020	Project Number: 40217496

Surrogate	Run 2 A Q % Recovery	cceptance Limits
13C3_PFBS	80	25-150
13C3_PFHxS	80	25-150
13C3-HFPO-DA	84	25-150
13C4_PFBA	90	25-150
13C4_PFHpA	83	25-150
13C5_PFHxA	83	25-150
13C5_PFPeA	85	25-150
13C6_PFDA	82	25-150
13C7_PFUdA	81	25-150
13C8_PFOA	85	25-150
13C8_PFOS	77	25-150
13C8_PFOSA	88	10-150
13C9_PFNA	83	25-150
d-EtFOSA	72	10-150
d5-EtFOSAA	84	25-150
d9-EtFOSE	72	10-150
d-MeFOSA	79	10-150
d3-MeFOSAA	77	25-150
d7-MeFOSE	71	10-150

LOQ = Limit of QuantitationB = Detected in the method blankE = Quantitation of compound exceeded the calibration rangeDL = Detection LimitND = Not detected at or above the DLN = Recovery is out of criteriaP = The RPD between two GC columns exceeds 40%J = Estimated result < LOQ and  $\geq$  DLH = Out of holding timeW = Reported on wet weight basis



444 21st Street South · La Crosse, Wisconsin · 54601

November 23, 2020

2513 1st Avenue East La Crosse, WI 54603

Subject: Private Well Sampling Results 2513 1st Avenue East, La Crosse, WI 54603 Tax parcel # 4-246-0 Well ID # 246-0

Dear

:

We have received and reviewed the test results for the sample collected on October 29, 2020 at the above address. Some PFAS compounds were found, but the levels found were **below** the Department of Health Services (DHS) levels recommended for protecting health. These levels are called the "Recommended Public Health Standard" in the table below. The levels found in *your* well are called the "Sample Result" in the table below.

#### Sample Results

Compound	Sample Result (unit)	Recomm Public H Standard	ended Iealth (unit <sup>e</sup> )
N-Ethyl Perfluorooctane sulfonamide (NEtFOSA) CAS # 4151-50-2	Not Detected	20 ppt <sup>a,b</sup>	) ppt unds I 6
N-Ethyl perfluorooctane sulfonamidoacetic acid (NEtFOSAA) CAS # 2991-50-6	Not Detected	20 ppt <sup>a,b</sup>	it is 2C ompo <i>il</i> of al
N-Ethyl perfluorooctane sulfonamidoethanol (NEtFOSE) CAS # 1691-99-2	Not Detected	20 ppt <sup>a,b</sup>	ed lim ese 6 c ed totc
Perfluorooctane sulfonamide (FOSA) CAS # 754-91-6	Not Detected	20 ppt <sup>a,b</sup>	mend of the
Perfluorooctanoic acid (PFOA) CAS # 335-67-1	4.0 ppt	20 ppt <sup>a,b</sup>	recom ny <i>one</i> the <i>cc</i>
Perfluorooctanesulfonic acid (PFOS) CAS # 1763-23-1	12 ppt	20 ppt <sup>a,b</sup>	The for a or
Hexafluoropropylene oxide dimer acid (HPFO-DA; GenX) CAS # 13252-13-6	Not Detected		300 ppt <sup>a</sup>

Private Well Sampling Results for 2513 1st Avenue East, La Crosse, WI 54603 Tax parcel # 4-246-0 Well ID # 246-0 November 23, 2020

Compound	Sample Result (unit)	Recommended Public Health Standard (unit <sup>e</sup> )
Perfluorobutanesulfonic acid (PFBS) CAS # 375-73-5	7.7 ppt	450,000 ppt <sup>a</sup>
Perfluorohexanesulfonic acid (PFHxS) CAS # 355-46-4	11 ppt	40 ppt <sup>a</sup>
Perfluorobutanoic acid (PFBA) CAS # 375-22-4	14 ppt	10,000 ppt <sup>a</sup>
Perfluorodecanoic acid (PFDA) CAS # 335-76-2	Not Detected	300 ppt <sup>a</sup>
Perfluorododecanoic acid (PFDoA) CAS # 307-55-1	Not Detected	500 ppt <sup>a</sup>
Perfluorohexanoic acid (PFHxA) CAS # 307-24-4	2.0 ppt	150,000 ppt <sup>a</sup>
Perfluorononanoic acid (PFNA) CAS # 375-95-1	Not Detected	30 ppt <sup>a</sup>
Perfluorotetradecanoic acid (PFTeA) CAS # 376-06-7	Not Detected	10,000 ppt <sup>a</sup>
Perfluoroundecanoic acid (PFUnA) CAS # 2058-94-8	Not Detected	3,000 ppt <sup>a</sup>
4,8-Dioxa-3H-perfluorononanoic acid (DONA) CAS # 919005-14-4	Not Detected	3,000 ppt <sup>a</sup>
Perfluorooctadecanoic acid (PFODA) CAS # 16517-11-6	Not Detected	400,000 ppt <sup>a</sup>
Perfluoro-1-pentanesulfonic acid (PFPeS) CAS #2706-91-4	4.3 ppt	None Established <sup>c</sup>
Perfluoro-n-heptanoic acid (PFPeA) CAS # 375-85-9	1.3 ppt	None Established <sup>c</sup>
Perfluoro-n-pentanoic acid CAS # 2706-90-3	2.4 ppt	None Established <sup>c</sup>

<sup>a</sup> Public health enforcement standard (ES) recommended by DHS.

<sup>b</sup> DHS recommends a combined enforcement standard of 20 ng/L and combined preventive action limit of 2 ng/L for FOSA, NEt-FOSE, NEt-FOSA, NetFOSAA, PFOS, and PFOA.

<sup>c</sup> A current standard is not available; the compound is currently under review by DHS for potential public health standard recommendation.

<sup>d</sup> Public health enforcement standard (ES) in NR 140, Wisconsin Administrative Code.

<sup>e</sup> Units: Parts per trillion (ppt) = nanograms of substance per liter of water (ng/L)

<sup>BL</sup> Detected in the method blank. Possible lab contaminant.

Private Well Sampling Results for 2513 1st Avenue East, La Crosse, WI 54603 Tax parcel # 4-246-0 Well ID # 246-0 November 23, 2020

As required by law, we will be submitting these results to the Department of Natural Resources (DNR). The DNR may consult with the Department of Health Services (DHS) about these test results. DHS may review all PFAS tests and follow-up with you directly if any actions are recommended to protect your health.

Thank you for your patience and assistance with our investigation. We will provide updates on the project at <u>https://www.cityoflacrosse.org/wells</u> as our work continues. If you have any questions, please call The OS Group at (608) 668-2718 or email them at <u>PFAS@theOSgrp.com</u>.

You can also contact the DNR and DHS with questions about PFAS or the water sample results at the numbers provided below.

Questions about		<u>Contact</u>	<u>Phone</u>	E-mail Address
Soil & Groundwater Testing, Clean Up	DNR	David Rozeboom	715-215-2078	David.Rozeboom@wisconsin.gov
Drinking Water or Private wells	DNR	Kyle Burton	920-360-2112	kyle.burton@wisconsin.gov
Health Concerns	DHS	Curtis Hedman	608-266-6677	Curtis.Hedman@dhs.wisconsin.gov

On behalf of The City of La Crosse *The OS Group, LLC* 

Attachment: Lab report for your well

Client: Pace Analytical Services, LLC				Laboratory II	D: VK03016-0	800	
Description: 246-0				Matrix	: Aqueous		
Date Sampled:10/29/2020 1510	Project Name	: LACROSSE WELL #	#23 & 24		-		
Date Received: 11/03/2020	Project Number	: 40217496					
	Dilution An	aluaia Data Analuat	Dren Data	Datab			
Run Prep MethodAnalytical Method1SOP SPEPFAS by ID SOF	P 1 $11/^{\circ}$	12/2020 1451 MMM	11/11/2020 11	Balch 108 73065			
Parameter	CAS Number	Analytical Method	Result Q	LOQ	DL	Units	Run
9-chlorohexadecafluoro-3-oxanone-1-sulfonic acid (9CI-PF3ON	IS) 756426-58-1	PFAS by ID SOP	ND	7.2	1.8	ng/L	1
11-chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11CI-PF	3) 763051-92-9	PFAS by ID SOP	ND	7.2	1.8	ng/L	1
1H, 1H, 2H, 2H-perfluorodecane sulfonic acid (8:2 FTS)	39108-34-4	PFAS by ID SOP	ND	7.2	1.8	ng/L	1
1H, 1H, 2H, 2H-perfluorooctane sulfonic acid (6:2 FTS)	27619-97-2	PFAS by ID SOP	ND	7.2	1.8	ng/L	1
1H,1H,2H,2H-perfluorododecane sulfonic acid (10:2 FTS)	120226-60-0	PFAS by ID SOP	ND	7.2	1.8	ng/L	1
1H,1H,2H,2H-perfluorohexane sulfonic acid (4:2 FTS)	757124-72-4	PFAS by ID SOP	ND	7.2	1.8	ng/L	1
Hexafluoropropylene oxide dimer acid (GenX)	13252-13-6	PFAS by ID SOP	ND	7.2	1.8	ng/L	1
4,8-dioxa-3H-perfluorononanoic acid (ADONA)	919005-14-4	PFAS by ID SOP	ND	7.2	1.8	ng/L	1
N-ethylperfluoro-1-octanesulfonamide (EtFOSA)	4151-50-2	PFAS by ID SOP	ND	7.2	1.8	ng/L	1
N-ethylperfluoro-1-octanesulfonamidoacetic acid (EtFOSAA)	2991-50-6	PFAS by ID SOP	ND	7.2	1.8	ng/L	1
2-N-ethylperfluoro-1-octanesulfonamido-ethanol (EtFOSE)	1691-99-2	PFAS by ID SOP	ND	7.2	1.8	ng/L	1
N-methylperfluoro-1-octanesulfonamide (MeFOSA)	31506-32-8	PFAS by ID SOP	ND	14	3.6	ng/L	1
N-methylperfluoro-1-octanesulfonamidoacetic acid (MeFOSAA)	2355-31-9	PFAS by ID SOP	ND	7.2	1.8	ng/L	1
2-N-methylperfluoro-1-octanesulfonamido-ethanol (MeFOSE)	24448-09-7	PFAS by ID SOP	ND	7.2	1.8	ng/L	1
Perfluoro-1-butanesulfonic acid (PFBS)	375-73-5	PFAS by ID SOP	7.7	3.6	0.90	ng/L	1
Perfluoro-1-decanesulfonic acid (PFDS)	335-77-3	PFAS by ID SOP	ND	3.6	0.90	ng/L	1
Perfluoro-1-heptanesulfonic acid (PFHpS)	375-92-8	PFAS by ID SOP	ND	3.6	0.90	ng/L	1
Perfluoro-1-nonanesulfonic acid (PFNS)	68259-12-1	PFAS by ID SOP	ND	3.6	0.90	ng/L	1
Perfluoro-1-octanesulfonamide (PFOSA)	754-91-6	PFAS by ID SOP	ND	3.6	0.90	ng/L	1
Perfluoro-1-pentanesulfonic acid (PFPeS)	2706-91-4	PFAS by ID SOP	4.3	3.6	0.90	ng/L	1
Perfluorododecanesulfonic acid (PFDOS)	79780-39-5	PFAS by ID SOP	ND	7.2	1.8	ng/L	1
Perfluorohexanesulfonic acid (PFHxS)	355-46-4	PFAS by ID SOP	11	3.6	0.90	ng/L	1
Perfluoro-n-butanoic acid (PFBA)	375-22-4	PFAS by ID SOP	14	3.6	0.90	ng/L	1
Perfluoro-n-decanoic acid (PFDA)	335-76-2	PFAS by ID SOP	ND	3.6	0.90	ng/L	1
Perfluoro-n-dodecanoic acid (PFDoA)	307-55-1	PFAS by ID SOP	ND	3.6	0.90	ng/L	1
Perfluoro-n-heptanoic acid (PFHpA)	375-85-9	PFAS by ID SOP	1.3 J	3.6	0.90	ng/L	1
Perfluoro-n-hexadecanoic acid (PFHxDA)	67905-19-5	PFAS by ID SOP	ND	7.2	1.8	ng/L	1
Perfluoro-n-hexanoic acid (PFHxA)	307-24-4	PFAS by ID SOP	2.0 J	3.6	0.90	ng/L	1
Perfluoro-n-nonanoic acid (PFNA)	375-95-1	PFAS by ID SOP	ND	3.6	0.90	ng/L	1
Perfluoro-n-octadecanoic acid (PFODA)	16517-11-6	PFAS by ID SOP	ND	7.2	1.8	ng/L	1
Perliuoro-n-ocianoic acid (PFOA)	335-67-1	PFAS by ID SOP	4.0	3.0	0.90	ng/L	1
Periluoro-n-pentanoic acid (PFPeA)	2706-90-3	PFAS by ID SOP	2.4 J	3.0	0.90	ng/L	1
Perliuoro-n-tetradecanoic acid (PFTeDA)	3/6-06-7		ND	3.0	0.90	ng/L	1
Perlluoro-n-Indecanoic acid (PETIDA)	72629-94-8		ND	3.0	0.90	ng/L	1
Perliuoro-n-undecanoic acid (PFOdA)	2058-94-8	PFAS by ID SOP	ND 12	3.0	0.90	ng/L	1
Perhuorooctanesulionic acid (PFOS)	1/63-23-1	PFAS by ID SOP	12	3.0	0.90	ng/L	I
Surrogate Q %	Run 1 Acce Recovery L	eptance imits					
13C2_4:2FTS	101 2	5-150					
1302_0:2F15	94 2	5-150					
13C2_8:2F1S	84 2	5-150					
13C2_PFD0A	95 2	5-150					
13C2_PEHXDA	93 2	5-150					
I3C2_PFTeDA	93 2	5-150					
LOQ = Limit of Quantitation B = Detected in the method blar	k E = Quantitation	n of compound exceeded the	calibration range D	L = Detection Lim	iit		
ND = Not detected at or above the DL N = Recovery is out of criteria	P = The RPD be	etween two GC columns exce	eds 40% J	= Estimated resu	It < LOQ and $\geq$ D	L	
H = Out of holding time W = Reported on wet weight bar	sis						
							-

Client: Pace Analytical Services, LLC		Laboratory ID: VK03016-008
Description: 246-0		Matrix: Aqueous
Date Sampled:10/29/2020 1510	Project Name: LACROSSE WELL #23 & 24	
Date Received: 11/03/2020	Project Number: 40217496	

	Run 1 A	ccentance
Surrogate	Q % Recovery	Limits
13C3_PFBS	88	25-150
13C3_PFHxS	90	25-150
13C3-HFPO-DA	101	25-150
13C4_PFBA	97	25-150
13C4_PFHpA	104	25-150
13C5_PFHxA	98	25-150
13C5_PFPeA	99	25-150
13C6_PFDA	100	25-150
13C7_PFUdA	102	25-150
13C8_PFOA	94	25-150
13C8_PFOS	86	25-150
13C8_PFOSA	104	10-150
13C9_PFNA	94	25-150
d-EtFOSA	91	10-150
d5-EtFOSAA	98	25-150
d9-EtFOSE	92	10-150
d-MeFOSA	100	10-150
d3-MeFOSAA	94	25-150
d7-MeFOSE	92	10-150

LOQ = Limit of Quantitation B = Detected in the method blank E = Quantitation of compound exceeded the calibration range DL = Detection Limit ND = Not detected at or above the DL N = Recovery is out of criteria P = The RPD between two GC columns exceeds 40% J = Estimated result < LOQ and  $\ge$  DL H = Out of holding time W = Reported on wet weight basis



444 21st Street South · La Crosse, Wisconsin · 54601

November 23, 2020

2529 1st Avenue East La Crosse, WI 54603

Subject: Private Well Sampling Results 2529 1st Avenue East, La Crosse, WI 54603 Tax parcel # 4-250-0 Well ID # 250-0

:

Dear

We have received and reviewed the test results for the sample collected on October 29, 2020 at the above address. Some PFAS compounds were found, but the levels found were **below** the Department of Health Services (DHS) levels recommended for protecting health. These levels are called the "Recommended Public Health Standard" in the table below. The levels found in *your* well are called the "Sample Result" in the table below. **PLEASE NOTE:** At your residence we took a second "duplicate" sample for quality control / quality assurance purposes. The two samples' tests confirmed each other, and there were only minor differences. The results in the table below are based on the highest concentration of contaminants observed in either of the two samples.

#### **Sample Results**

Compound	Sample Result (unit)	Recom Public Standar	mended Health d (unit <sup>e</sup> )
N-Ethyl Perfluorooctane sulfonamide (NEtFOSA) CAS # 4151-50-2	Not Detected	20 ppt <sup>a,b</sup>	) ppt unds I 6
N-Ethyl perfluorooctane sulfonamidoacetic acid (NEtFOSAA) CAS # 2991-50-6	Not Detected	20 ppt <sup>a,b</sup>	it is 2C ompo // of all
N-Ethyl perfluorooctane sulfonamidoethanol (NEtFOSE) CAS # 1691-99-2	Not Detected	20 ppt <sup>a,b</sup>	ed lim ese 6 c ed toto
Perfluorooctane sulfonamide (FOSA) CAS # 754-91-6	Not Detected	20 ppt <sup>a,b</sup>	mend of the mbine
Perfluorooctanoic acid (PFOA) CAS # 335-67-1	Not Detected	20 ppt <sup>a,b</sup>	recom ny <i>one</i> the <i>c</i> c
Perfluorooctanesulfonic acid (PFOS) CAS # 1763-23-1	7.0 ppt	20 ppt <sup>a,b</sup>	The for a

Private Well Sampling Results for 2529 1st Avenue East, La Crosse, WI 54603 Tax parcel # 4-250-0 Well ID # 250-0 November 23, 2020

Compound	Sample Result (unit)	Recommended Public Health Standard (unit <sup>e</sup> )
Hexafluoropropylene oxide dimer acid (HPFO-DA; GenX) CAS # 13252-13-6	Not Detected	300 ppt <sup>a</sup>
Perfluorobutanesulfonic acid (PFBS) CAS # 375-73-5	9.2 ppt	450,000 ppt <sup>a</sup>
Perfluorohexanesulfonic acid (PFHxS) CAS # 355-46-4	13 ppt	40 ppt <sup>a</sup>
Perfluorobutanoic acid (PFBA) CAS # 375-22-4	99 ppt	10,000 ppt <sup>a</sup>
Perfluorodecanoic acid (PFDA) CAS # 335-76-2	Not Detected	300 ppt <sup>a</sup>
Perfluorododecanoic acid (PFDoA) CAS # 307-55-1	Not Detected	500 ppt <sup>a</sup>
Perfluorohexanoic acid (PFHxA) CAS # 307-24-4	1.4 ppt	150,000 ppt <sup>a</sup>
Perfluorononanoic acid (PFNA) CAS # 375-95-1	Not Detected	30 ppt <sup>a</sup>
Perfluorotetradecanoic acid (PFTeA) CAS # 376-06-7	Not Detected	10,000 ppt <sup>a</sup>
Perfluoroundecanoic acid (PFUnA) CAS # 2058-94-8	Not Detected	3,000 ppt <sup>a</sup>
4,8-Dioxa-3H-perfluorononanoic acid (DONA) CAS # 919005-14-4	Not Detected	3,000 ppt <sup>a</sup>
Perfluorooctadecanoic acid (PFODA) CAS # 16517-11-6	Not Detected	400,000 ppt <sup>a</sup>
Perfluoro-1-pentanesulfonic acid (PFPeS) CAS # 2706-91-4	6.6 ppt	None Established <sup>c</sup>

<sup>a</sup> Public health enforcement standard (ES) recommended by DHS.

<sup>b</sup> DHS recommends a combined enforcement standard of 20 ng/L and combined preventive action limit of 2 ng/L for FOSA, NEt-FOSA, NetFOSAA, PFOS, and PFOA.

<sup>c</sup> A current standard is not available; the compound is currently under review by DHS for potential public health standard recommendation.

<sup>d</sup> Public health enforcement standard (ES) in NR 140, Wisconsin Administrative Code.

<sup>e</sup> Units: Parts per trillion (ppt) = nanograms of substance per liter of water (ng/L)

<sup>BL</sup> Detected in the method blank. Possible lab contaminant.

Private Well Sampling Results for 2529 1st Avenue East, La Crosse, WI 54603 Tax parcel # 4-250-0 Well ID # 250-0 November 23, 2020

As required by law, we will be submitting these results to the Department of Natural Resources (DNR). The DNR may consult with the Department of Health Services (DHS) about these test results. DHS may review all PFAS tests and follow-up with you directly if any actions are recommended to protect your health.

Thank you for your patience and assistance with our investigation. We will provide updates on the project at <u>https://www.cityoflacrosse.org/wells</u> as our work continues. If you have any questions, please call The OS Group at (608) 668-2718 or email them at <u>PFAS@theOSgrp.com</u>.

You can also contact the DNR and DHS with questions about PFAS or the water sample results at the numbers provided below.

Questions about		<u>Contact</u>	<u>Phone</u>	E-mail Address
Soil & Groundwater Testing, Clean Up	DNR	David Rozeboom	715-215-2078	David.Rozeboom@wisconsin.gov
Drinking Water or Private wells	DNR	Kyle Burton	920-360-2112	kyle.burton@wisconsin.gov
Health Concerns	DHS	Curtis Hedman	608-266-6677	Curtis.Hedman@dhs.wisconsin.gov

On behalf of The City of La Crosse *The OS Group, LLC* 

Attachment: Lab report for your well

Client: Pace Analytical Services, LLC				Laboratory ID	D: VK03016-0	011	
Description: 250-0				Matrix	: Aqueous		
Date Sampled:10/29/2020 1530	Project Nam	ne: LACROSSE WELL #	¥23 & 24		·		
Date Received: 11/03/2020	piect Numb	er∙ 40217496					
RunPrep MethodAnalytical MethodD1SOP SPEPFAS by ID SOP	ilution A	nalysis Date Analyst I/13/2020 1636 MMM	Prep Date 11/11/2020 11	Batch 108 73065			
Parameter	CA Numbe	S Analytical er Method	Result Q	LOQ	DL	Units	Run
9-chlorohexadecafluoro-3-oxanone-1-sulfonic acid (9CI-PF3ONS)	756426-58	-1 PFAS by ID SOP	ND	7.9	2.0	ng/L	1
11-chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3)	763051-92	-9 PFAS by ID SOP	ND	7.9	2.0	ng/L	1
1H, 1H, 2H, 2H-perfluorodecane sulfonic acid (8:2 FTS)	39108-34	-4 PFAS by ID SOP	ND	7.9	2.0	ng/L	1
1H, 1H, 2H, 2H-perfluorooctane sulfonic acid (6:2 FTS)	27619-97	-2 PFAS by ID SOP	ND	7.9	2.0	ng/L	1
1H,1H,2H,2H-perfluorododecane sulfonic acid (10:2 FTS)	120226-60	-0 PFAS by ID SOP	ND	7.9	2.0	ng/L	1
1H,1H,2H,2H-perfluorohexane sulfonic acid (4:2 FTS)	757124-72	-4 PFAS by ID SOP	ND	7.9	2.0	ng/L	1
Hexafluoropropylene oxide dimer acid (GenX)	13252-13	-6 PFAS by ID SOP	ND	7.9	2.0	ng/L	1
4,8-dioxa-3H-perfluorononanoic acid (ADONA)	919005-14	-4 PFAS by ID SOP	ND	7.9	2.0	ng/L	1
N-ethylperfluoro-1-octanesulfonamide (EtFOSA)	4151-50	-2 PFAS by ID SOP	ND	7.9	2.0	ng/L	1
N-ethylperfluoro-1-octanesulfonamidoacetic acid (EtFOSAA)	2991-50	-6 PFAS by ID SOP	ND	7.9	2.0	ng/L	1
2-N-ethylperfluoro-1-octanesulfonamido-ethanol (EtFOSE)	1691-99	-2 PFAS by ID SOP	ND	7.9	2.0	ng/L	1
N-methylperfluoro-1-octanesulfonamide (MeFOSA)	31506-32	-8 PFAS by ID SOP	ND	16	4.0	ng/L	1
N-methylperfluoro-1-octanesulfonamidoacetic acid (MeFOSAA)	2355-31	-9 PFAS by ID SOP	ND	7.9	2.0	ng/L	1
2-N-methylperfluoro-1-octanesulfonamido-ethanol (MeFOSE)	24448-09	-7 PFAS by ID SOP	ND	7.9	2.0	ng/L	1
Perfluoro-1-butanesulfonic acid (PFBS)	375-73	-5 PFAS by ID SOP	9.2	4.0	0.99	ng/L	1
Perfluoro-1-decanesulfonic acid (PFDS)	335-77	-3 PFAS by ID SOP	ND	4.0	0.99	ng/L	1
Perfluoro-1-heptanesulfonic acid (PFHpS)	375-92	-8 PFAS by ID SOP	ND	4.0	0.99	ng/L	1
Perfluoro-1-nonanesulfonic acid (PFNS)	68259-12	-1 PFAS by ID SOP	ND	4.0	0.99	ng/L	1
Perfluoro-1-octanesulfonamide (PFOSA)	754-91	-6 PFAS by ID SOP	ND	4.0	0.99	ng/L	1
Perfluoro-1-pentanesulfonic acid (PFPeS)	2706-91	-4 PFAS by ID SOP	6.1	4.0	0.99	ng/L	1
Perfluorododecanesulfonic acid (PFDOS)	79780-39	-5 PFAS by ID SOP	ND	7.9	2.0	ng/L	1
Perfluorohexanesulfonic acid (PFHxS)	355-46	-4 PFAS by ID SOP	13	4.0	0.99	ng/L	1
Perfluoro-n-butanoic acid (PFBA)	375-22	-4 PFAS by ID SOP	87	4.0	0.99	ng/L	1
Perfluoro-n-decanoic acid (PFDA)	335-76	-2 PFAS by ID SOP	ND	4.0	0.99	ng/L	1
Perfluoro-n-dodecanoic acid (PFDoA)	307-55	-1 PFAS by ID SOP	ND	4.0	0.99	ng/L	1
Perfluoro-n-heptanoic acid (PFHpA)	375-85	-9 PFAS by ID SOP	ND	4.0	0.99	ng/L	1
Perfluoro-n-hexadecanoic acid (PFHxDA)	67905-19	-5 PFAS by ID SOP	ND	7.9	2.0	ng/L	1
Perfluoro-n-hexanoic acid (PFHxA)	307-24	-4 PFAS by ID SOP	1.4 J	4.0	0.99	ng/L	1
Perfluoro-n-nonanoic acid (PFNA)	375-95	-1 PFAS by ID SOP	ND	4.0	0.99	ng/L	1
Perfluoro-n-octadecanoic acid (PFODA)	16517-11	-6 PFAS by ID SOP	ND	7.9	2.0	ng/L	1
Perfluoro-n-octanoic acid (PFOA)	335-67	-1 PFAS by ID SOP	ND	4.0	0.99	ng/L	1
Perliuoro-n-penianoic acid (PEPeA)	2706-90	-3 PFAS by ID SOP	ND	4.0	0.99	ng/L	1
Perfluoro-n-tetradecanoic acid (PFTeDA)	3/6-06	-7 PFAS by ID SOP	ND	4.0	0.99	ng/L	1
Perluoro-n-tridecanoic acid (PETIDA)	72629-94	-8 PFAS by ID SOP	ND	4.0	0.99	ng/L	1
Perliuoro-n-undecanoic acid (PFOdA)	2058-94	-8 PFAS by ID SOP	ND 7.0	4.0	0.99	ng/L	1
Periluorooctanesuironic acid (PFOS)	1/63-23	- I PFAS by ID SOP	7.0	4.0	0.99	ng/L	I
Surrogate Q % Ret	un 1 Aco covery	ceptance Limits					
1302_4:2FTS	1U3 105	25-15U					
1302_0.2F13	05	20-100 25-150					
1302_8:2F13	67 CV	20-10U					
	73	20-10U					
	90	20-100					
	74	20-100					
LOQ = Limit of Quantitation B = Detected in the method blank	E = Quantitat	ion of compound exceeded the o	calibration range D	DL = Detection Lim	it		
ND = Not detected at or above the DL     N = Recovery is out of criteria       H = Out of holding time     W = Reported on wet weight basis	P = The RPD	between two GC columns exce	eds 40% J	= Estimated resul	t < LOQ and ≥ D	ÞL	

Laboratory ID: VK03016-011 Matrix: Aqueous

Client: Pace Analytical Services, LLC	
Description: 250-0	
Date Sampled:10/29/2020 1530	Project Name: LACROSSE WELL #23 & 24
Date Received: 11/03/2020	Project Number: 40217496

Surrogate	Run 1 Ac O % Recovery	ceptance Limits
13C3_PFBS	90	25-150
13C3_PFHxS	93	25-150
13C3-HFPO-DA	106	25-150
13C4_PFBA	99	25-150
13C4_PFHpA	93	25-150
13C5_PFHxA	105	25-150
13C5_PFPeA	99	25-150
13C6_PFDA	105	25-150
13C7_PFUdA	100	25-150
13C8_PFOA	99	25-150
13C8_PFOS	86	25-150
13C8_PFOSA	109	10-150
13C9_PFNA	102	25-150
d-EtFOSA	86	10-150
d5-EtFOSAA	92	25-150
d9-EtFOSE	96	10-150
d-MeFOSA	85	10-150
d3-MeFOSAA	99	25-150
d7-MeFOSE	98	10-150

LOQ = Limit of Quantitation	B = Detected in the method blank	E = Quantitation of compound exceeded the calibration range	DL = Detection Limit
ND = Not detected at or above the DL	N = Recovery is out of criteria	P = The RPD between two GC columns exceeds 40%	J = Estimated result < LOQ and $\ge$ DL
H = Out of holding time	W = Reported on wet weight basis		

Description: DUP #2 Date Sampled:10/27/0201 1535     Matrix: Aqueous       Date Received: 11/03/2020     Project Name: LACROSSE WELL #23 & 24       Date Received: 11/03/2020     Analytical Method 1     SOP SPE     Analytical Method PFAS by ID SOP     Project Name: LACROSSE WELL #23 & 24       Parameter     CAS     Analytical Method     Method 11/11/2020 1108 73065     Batch 11/11/2020 1108 73065       Parameter     CAS     Analytical Method     Result Q     LOQ     DL       0:dotationary constraints     CAS     Analytical Method     Result Q     LOQ     DL       0:dotationary constraints     CAS     Analytical Method     Result Q     LOQ     DL     Up       0:dotationary constraints     CAS     Analytical Method     Result Q     LOQ     DL     Up       0:dotationary constraints     CAS     Analytical Method     Result Q     LOQ     DL     Up       0:dotationary constraints     CAS     Analytical Method     Result Q     LOQ     DL     Up       1:dotationary constraints     CAS     Analytical Method     Project Numeer     Result Q     LOQ     DL	
Date Sampled:10/29/2020 1535     Project Name: LACROSSE WELL #23 & 24       Date Received: 11/03/2020     Project Number: 40217496       Run Prep Method     Analytical Method Dilution     Analysis Date Analysis     Prep Date     Batch       1     SOP SPE     PFAS by ID SOP     1     11/11/2020 1108 73065     DL     UL       Parameter     CAS     Analytical Method     Result Q     LOQ     DL     UL       Othorsheadecafluoro 3 oxannen-1-sulfonic acid (ICC PF30NS)     7640 rsp     PFAS by ID SOP     ND     7.6     1.9     n       11     11/12/241-perfluorodcane sulfonic acid (ICC PF30NS)     7640 rsp     PFAS by ID SOP     ND     7.6     1.9     n       11     11/12/241-perfluorodcane sulfonic acid (IC2 FTS)     39108 344     PFAS by ID SOP     ND     7.6     1.9     n       11     11/12/241-perfluorodcane sulfonic acid (IC2 FTS)     126226-60     PFAS by ID SOP     ND     7.6     1.9     n       11     11/12/241-perfluorodcane sulfonic acid (IC2 FTS)     1374724     PFAS by ID SOP     ND     7.6     1.9     n     n <td< td=""><td></td></td<>	
Date Received: 11/03/2020     Project Number: 40217496       Run     Prep Method     Analytical Method     Dilution     Analytical     Prep Date     Batch       1     SOP SPE     Analytical     Method     Prep Method     LOQ     DL     U/r       9 chiconbexadecalluoro 3 coxonone 1 sulfonic acid (9C1 PF30NS)     756426.561     PFAS by ID SOP     ND     7.6     1.9     nn       11 chicoreciscostandecane 1 sulfonic acid (9C1 FF30NS)     756426.561     PFAS by ID SOP     ND     7.6     1.9     nn       11 chicoreciscostane sulfonic acid (12 FTS)     37018.344     PFAS by ID SOP     ND     7.6     1.9     nn       11 H114/214/perfluorobdcane sulfonic acid (12 FTS)     37018.344     PFAS by ID SOP     ND     7.6     1.9     nn       11 H114/214/perfluorobdcane sulfonic acid (12 FTS)     12022.640     PFAS by ID SOP     ND     7.6     1.9     nn       12 H14/24/perfluorobane acid (Cic PTSA)     13222.134     PFAS by ID SOP     ND     7.6     1.9     nn       1.9     nn     H1111/20201108     PFAS by ID SOP     ND     7.6	
Run     Prep Method 1     Analytical Method PFAS by ID SOP     Prep Date 1     Batch 11/11/2020 1108 73065       Parameter     CAS Number     Analytical Method     Result O     LOO     DL     Ur       9-chlorohexadecalluoro-3-oxanone-1-sulfonic acid (9CI-PF3ONS)     756426-58-1     PFAS by ID SOP     ND     7.6     1.9     n       11 -chlorohexadecalluoro-3-oxanodecane -1-sulfonic acid (10CI-PF3ONS)     756426-58-1     PFAS by ID SOP     ND     7.6     1.9     n       11 + 11, 12, 21, 42-perfluorobcane sulfonic acid (02-FTS)     27619-97-2     PFAS by ID SOP     ND     7.6     1.9     n       11 + 11, 12, 21, 42-perfluorobcane sulfonic acid (02-FTS)     120226-600     PFAS by ID SOP     ND     7.6     1.9     n       11 + 11, 12, 21, 42-perfluorobcane sulfonic acid (4, ETS)     17124-724     PFAS by ID SOP     ND     7.6     1.9     n       11 + 11, 12, 21, 42-perfluorobcane sulfonic acid (602-FTS)     120226-600     PFAS by ID SOP     ND     7.6     1.9     n       11 + 11, 12, 12, 42-perfluorobcane sulfonic acid (4DNA)     19005-14.4     PFAS by ID SOP     ND     7.6     1.9     n	
Hun Prep Method     Analysical Method     Diction     Analysics Date Analysic     Prep Date     Batch       1     SOP SPE     PFAs by ID SOP     1     11/13/2020 1647     MMM     11/11/2020 1108 73065       Parameter     CAS     Analytical     Method     Result Q     LOO     DL     Ub       9-ditor/basedicafluoro3-axaundecane-1-sulfonic acid (10C+PF30N)     756426-88+     PFAS by ID SOP     ND     7.6     1.9     n       1H, 1H, 2H, 2H-perfluorodcaceane sulfonic acid (2FTS)     27619-97.2     PFAS by ID SOP     ND     7.6     1.9     n       1H, 1H, 2H, 2H-perfluorodcaceane sulfonic acid (102 FTS)     120226-600     PFAS by ID SOP     ND     7.6     1.9     n       1H, 1H, 2H, 2H-perfluorodcaceane sulfonic acid (12 FTS)     757124-724     PFAS by ID SOP     ND     7.6     1.9     n       1H, 1H, 2H, 2H-perfluorodcaceane sulfonic acid (4E FTS)     757124-724     PFAS by ID SOP     ND     7.6     1.9     n       1H, 1H, 2H, 2H-perfluorodcaceane sulfonic acid (4E FTS)     757124-724     PFAS by ID SOP     ND     7.6     1.9     n       He	
CAS     Analytical Number     Result O     LOQ     DL     Unit       9-chlorohexadecalluoro-3-oxanone-1-sulfonic acid (9C1PF3ONS)     756426-581     PFAS by ID SOP     ND     7.6     1.9     n       11-chloroeicosalluoro-3-oxanotecane-sulfonic acid (10:12F3)     760319-29     PFAS by ID SOP     ND     7.6     1.9     n       1H, 1H, 2H, 2H-perfluorodecane sulfonic acid (0:2 FTS)     27619-377.2     PFAS by ID SOP     ND     7.6     1.9     n       1H, 1H, 2H, 2H-perfluorodecane sulfonic acid (0:2 FTS)     120226-00     PFAS by ID SOP     ND     7.6     1.9     n       1H, 1H, 2H, 2H-perfluorodecane sulfonic acid (10:2 FTS)     120226-00     PFAS by ID SOP     ND     7.6     1.9     n       Hacatuoropropriene oxide dimer acid (GenX)     13225-13.6     PFAS by ID SOP     ND     7.6     1.9     n       N-ethyperfluoro-1-octanesulfonamidocetina cid (GENSA)     4151-50.2     PFAS by ID SOP     ND     7.6     1.9     n       N-methyperfluoro-1-octanesulfonamidocetina cid (EFOSA)     1356-32.8     PFAS by ID SOP     ND     7.6     1.9     n       N-met	
e-Interopheradecafluoro-3-oxannene-1-sulfonic acid (9CLPF30NS)     756426-581     PFAS by ID SOP     ND     7.6     1.9     n       11-chloroeicosafluoro-3-oxannee-sulfonic acid (12 LPF3)     76305192.9     PFAS by ID SOP     ND     7.6     1.9     n       11-11, 11, 21, 21-perfluorodcane sulfonic acid (6.2 FTS)     29109-97.2     PFAS by ID SOP     ND     7.6     1.9     n       11+11, 12, 12-ty-perfluorodcane sulfonic acid (12 FTS)     120226-60.0     PFAS by ID SOP     ND     7.6     1.9     n       11+11, 12, 12-ty-perfluoronbace sulfonic acid (12 FTS)     120226-60.0     PFAS by ID SOP     ND     7.6     1.9     n       4.8-dioxa-3H-perfluoronbace sulfonic acid (ADONA)     13252-13.6     PFAS by ID SOP     ND     7.6     1.9     n       -ethyloperfluoro-1-octanesulfonamido (EFOSA)     1915-02     PFAS by ID SOP     ND     7.6     1.9     n       -ethyloperfluoro-1-octanesulfonamido ethanol (EFOSA)     1919-92     PFAS by ID SOP     ND     7.6     1.9     n       -ethyloperfluoro-1-octanesulfonamido ethanol (EFOSE)     1919-92     PFAS by ID SOP     ND     7.6     1.9 <td>iits Ru</td>	iits Ru
11-chloroelcosafluoro-3 exatundecane-1-sulfonic acid (112-FF3) 76081-92-9     PFAS by ID SOP     ND     7.6     1.9     nn       11+, 11+, 24, 24-perfluorodecane sulfonic acid (6.2 FTS)     39108-344     PFAS by ID SOP     ND     7.6     1.9       11+, 11+, 24, 24-perfluorodecane sulfonic acid (6.2 FTS)     120226-60-0     PFAS by ID SOP     ND     7.6     1.9       11+, 11+, 24, 24-perfluorodexane sulfonic acid (4.2 FTS)     751724-724     PFAS by ID SOP     ND     7.6     1.9     nn       Hexafluoroproylene oxide dimer acid (GRON)     13225-134     PFAS by ID SOP     ND     7.6     1.9     nn       Hexafluoroproylene oxide dimer acid (GRON)     13252-134     PFAS by ID SOP     ND     7.6     1.9     nn       Nethylperfluoro-1-octanesulfonamido cEIFOSA)     2591-500     PAS by ID SOP     ND     7.6     1.9     nn       N=thylperfluoro-1-octanesulfonamido-celhanol (EIFOSA)     31506-32.8     PFAS by ID SOP     ND     7.6     1.9     nn       N=thylperfluoro-1-octanesulfonamido-celhanol (EIFOSA)     31506-32.8     PFAS by ID SOP     ND     7.6     1.9     nn       N=thylp	g/L 1
H1, H1, 2H, 2H-perfluorodcane sulfonic acid (8:2 FTS)   3708-344   PFAS by ID SOP   ND   7.6   1.9   n     H1, H1, 2H, 2H-perfluorodcane sulfonic acid (6:2 FTS)   12026-00   PFAS by ID SOP   ND   7.6   1.9   n     H1, H1, 2H, 2H-perfluorodcane sulfonic acid (10:2 FTS)   12026-00   PFAS by ID SOP   ND   7.6   1.9   n     H4, H1, H2, H2, H-perfluorodcane sulfonic acid (10:2 FTS)   12026-00   PFAS by ID SOP   ND   7.6   1.9   n     H4, adioxa 3H-perfluoronanoic acid (GENX)   13252-13-6   PFAS by ID SOP   ND   7.6   1.9   n     N-ethylperfluoro-1-octanesulfonamido cacid (GETOSA)   14151-50-2   PFAS by ID SOP   ND   7.6   1.9   n     N-methylperfluoro-1-octanesulfonamido celtroSA)   1291-50-6   PFAS by ID SOP   ND   7.6   1.9   n     N-methylperfluoro-1-octanesulfonamido (MeFOSA)   3156-32-8   PFAS by ID SOP   ND   7.6   1.9   n     N-methylperfluoro-1-octanesulfonamido-ethanol (MeFOSE)   24448-97   PFAS by ID SOP   ND   7.6   1.9   n     Perfluoro-1-betanesulfonamido-ethanol (MeFOSE)   335-77-3   PFAS by I	3/L 1
H1, H1, 2H, 2H perfluoroctane sulfonic acid (6:2 FTS)     27619-97.2     PFAS by ID SOP     ND     7.6     1.9     n       H1, H1, 2H, 2H perfluoroctane sulfonic acid (10:2 FTS)     120226-60.0     PFAS by ID SOP     ND     7.6     1.9     n       H1, H1, H2, H2, Hperfluorononancic acid (ADONA)     91905-14.4     PFAS by ID SOP     ND     7.6     1.9     n       Hexafluoropropylene oxide dimer acid (GenX)     13252-13.6     PFAS by ID SOP     ND     7.6     1.9     n       N-ethylperfluoro-1-octanesulfonamido cettorONA     4151-50.2     PFAS by ID SOP     ND     7.6     1.9     n       N-ethylperfluoro-1-octanesulfonamido-ethanol (EFOSA)     2991-50.6     PFAS by ID SOP     ND     7.6     1.9     n       N-methylperfluoro-1-octanesulfonamido-ethanol (EFOSA)     2151-31.9     PFAS by ID SOP     ND     7.6     1.9     n       Perfluoro-1-octanesulfonamido-ethanol (MeFOSE)     24448-09-7     PFAS by ID SOP     ND     7.6     1.9     n       Perfluoro-1-octanesulfonamido-ethanol (MeFOSE)     24448-09-7     PFAS by ID SOP     ND     3.8     0.95     n	3/L 1
IH 1H,2H,2H perfluorododecane sulfonic acid (10:2 FTS)   120226-60.0   PFAS by ID SOP   ND   7.6   1.9   n     IH,1H,2H,2H,2H perfluorodoexane sulfonic acid (4:2 FTS)   757124-72.4   PFAS by ID SOP   ND   7.6   1.9   n     Hexafluoroproyene oxide dimer acid (GeNX)   13252-13.6   PFAS by ID SOP   ND   7.6   1.9   n     A.8-dioxa-3H-perfluoro-1-octanesulfonamido (EFOSA)   1915-02   PFAS by ID SOP   ND   7.6   1.9   n     N-ethylperfluoro-1-octanesulfonamido (EFOSA)   2991-50-6   PFAS by ID SOP   ND   7.6   1.9   n     N-methylperfluoro-1-octanesulfonamido-(EFOSA)   2355-31-9   PFAS by ID SOP   ND   7.6   1.9   n     PA-thylperfluoro-1-octanesulfonamido-ethanol (MeFOSA)   31506-32-8   PFAS by ID SOP   ND   7.6   1.9   n     Perfluoro-1-octanesulfonamido-ethanol (MeFOSA)   31507-33-8   PFAS by ID SOP   ND   7.6   1.9   n     Perfluoro-1-octanesulfonamido-ethanol (MeFOSA)   375-73-8   PFAS by ID SOP   ND   3.8   0.95   n     Perfluoro-1-butanesulfonic acid (PFDS)   375-73-8   PFAS by ID SOP   N	3/L 1
H1,H1,2H,2H,perfluoronexane sulfonic acid (42 FTS)     757124-72-4     PFAS by ID SOP     ND     7.6     1.9       Hexafluoropropylene oxide dimer acid (GenX)     13252-13-6     PFAS by ID SOP     ND     7.6     1.9     nn       48-dioxa-3H-perfluoron-nanoic acid (ADONA)     919005-14-4     PFAS by ID SOP     ND     7.6     1.9     nn       N-ethylperfluoro-1-octanesulfonamido-ethanol (EIFOSA)     4151-50-2     PFAS by ID SOP     ND     7.6     1.9     nn       N-ethylperfluoro-1-octanesulfonamido-ethanol (EIFOSE)     1691-99-2     PFAS by ID SOP     ND     7.6     1.9     nn       N-methylperfluoro-1-octanesulfonamido-ethanol (MeFOSA)     2355-31-9     PFAS by ID SOP     ND     7.6     1.9     nn       Perfluoro-1-butanesulfonamido-acetic acid (MeFOSA)     2355-37-3     PFAS by ID SOP     ND     7.6     1.9     nn       Perfluoro-1-butanesulfonamido-acetic acid (MeFOSE)     24448-09-7     PFAS by ID SOP     ND     3.8     0.95     nn       Perfluoro-1-butanesulfonic acid (PFBS)     375-73-8     PFAS by ID SOP     ND     3.8     0.95     nn       P	з/L 1
Hexafluoropropylene oxide dimer acid (GenX)     13252-13.6     PFAS by ID SOP     ND     7.6     1.9     n       4.8-dioxa-3H-perfluorononanoic acid (ADONA)     919005-14.4     PFAS by ID SOP     ND     7.6     1.9     n       N-ethylperfluoro-1-octanesulfonamido celic acid (EIFOSA)     4151-50-2     PFAS by ID SOP     ND     7.6     1.9     n       N-ethylperfluoro-1-octanesulfonamido-ethanol (EIFOSE)     1691-99-2     PFAS by ID SOP     ND     7.6     1.9     n       N-methylperfluoro-1-octanesulfonamido-ethanol (MeFOSA)     2355-14-9     PFAS by ID SOP     ND     7.6     1.9     n       Perfluoro-1-octanesulfonamido-ethanol (MeFOSA)     2355-17-9     PFAS by ID SOP     ND     7.6     1.9     n       Perfluoro-1-butanesulfonic acid (PFBS)     375-73-5     PFAS by ID SOP     ND     3.8     0.95     n       Perfluoro-1-butanesulfonic acid (PFDS)     375-73-5     PFAS by ID SOP     ND     3.8     0.95     n       Perfluoro-1-otanesulfonic acid (PFDS)     375-92-8     PFAS by ID SOP     ND     3.8     0.95     n       Perfluoro-1-otanesu	з/L 1
4.8-cloxa-3H-perfluorononanoic acid (ADONA)   919005-14-4   PFAS by ID SOP   ND   7.6   1.9   n     N-ethylperfluoro-1-octanesulfonamido etitra cid (EIFOSA)   2991-50-6   PFAS by ID SOP   ND   7.6   1.9   n     N-ethylperfluoro-1-octanesulfonamido-ethanol (EIFOSA)   2991-50-6   PFAS by ID SOP   ND   7.6   1.9   n     N-methylperfluoro-1-octanesulfonamido-ethanol (EIFOSE)   1491-99-2   PFAS by ID SOP   ND   7.6   1.9   n     N-methylperfluoro-1-octanesulfonamido-ethanol (MeFOSE)   235-31-9   PFAS by ID SOP   ND   7.6   1.9   n     2-N-methylperfluoro-1-octanesulfonamido-ethanol (MeFOSE)   24448-09-7   PFAS by ID SOP   ND   7.6   1.9   n     Perfluoro-1-butanesulfonic acid (PFDS)   335-73-5   PFAS by ID SOP   ND   3.8   0.95   n     Perfluoro-1-beptanesulfonic acid (PFHOS)   375-92-8   PFAS by ID SOP   ND   3.8   0.95   n     Perfluoro-1-octanesulfonamide (PFOSA)   756-91-4   PFAS by ID SOP   ND   3.8   0.95   n     Perfluoro-1-pentanesulfonic acid (PFHOS)   2706-91-4   PFAS by ID SOP   ND </td <td>з/L 1</td>	з/L 1
N-ethylperfluoro-1-octanesulfonamide (EIFOSA)     4151-50-2     PFAS by ID SOP     ND     7.6     1.9     n       N-ethylperfluoro-1-octanesulfonamido-ethanol (EIFOSA)     2991-50-6     PFAS by ID SOP     ND     7.6     1.9     n       2-N-ethylperfluoro-1-octanesulfonamido-ethanol (EIFOSE)     1691-99-2     PFAS by ID SOP     ND     7.6     1.9     n       N-methylperfluoro-1-octanesulfonamido-ethanol (MeFOSA)     2355-31-9     PFAS by ID SOP     ND     7.6     1.9     n       N-methylperfluoro-1-octanesulfonamido-ethanol (MeFOSE)     24448-09-7     PFAS by ID SOP     ND     7.6     1.9     nn       Perfluoro-1-butanesulfonic acid (PFDS)     375-73-     PFAS by ID SOP     ND     3.8     0.95     nn       Perfluoro-1-heptanesulfonic acid (PFDS)     375-72-8     PFAS by ID SOP     ND     3.8     0.95     nn       Perfluoro-1-nonanesulfonic acid (PFDS)     66259-12-1     PFAS by ID SOP     ND     3.8     0.95     nn       Perfluoro-1-pentanesulfonic acid (PFDAS)     754-91-6     PFAS by ID SOP     ND     3.8     0.95     nn       Perfluo	з/L 1
N-ethylperfluoro-1-octanesulfonamidoacetic acid (EIFOSAA)     2991-50-6     PFAS by ID SOP     ND     7.6     1.9     n       2-N-ethylperfluoro-1-octanesulfonamido-ethanol (EIFOSE)     1691-99-2     PFAS by ID SOP     ND     7.6     1.9     n       N-methylperfluoro-1-octanesulfonamido-ethanol (MeFOSA)     31506-32.8     PFAS by ID SOP     ND     7.6     1.9     n       N-methylperfluoro-1-octanesulfonamido-ethanol (MeFOSE)     24448-09-7     PFAS by ID SOP     ND     7.6     1.9     n       Perfluoro-1-butanesulfonic acid (PFDS)     375-73-5     PFAS by ID SOP     ND     3.8     0.95     n       Perfluoro-1-hedeanesulfonic acid (PFDS)     375-73-8     PFAS by ID SOP     ND     3.8     0.95     n       Perfluoro-1-nonanesulfonic acid (PFDS)     375-92-8     PFAS by ID SOP     ND     3.8     0.95     n       Perfluoro-1-nonanesulfonic acid (PFDS)     6259-12-1     PFAS by ID SOP     ND     3.8     0.95     n       Perfluoro-1-pentanesulfonic acid (PFDS)     2706-91-4     PFAS by ID SOP     ND     3.8     0.95     n       Perfluoro-n-bu	з/L 1
2-N-ethylperfluoro-1-octanesulfonamido-ethanol (EIFOSE)     1691-99-2     PFAS by ID SOP     ND     7.6     1.9     n       N-methylperfluoro-1-octanesulfonamido (MeFOSA)     31506-32-8     PFAS by ID SOP     ND     15     3.8     n       N-methylperfluoro-1-octanesulfonamido-ethanol (MeFOSE)     24448-09-7     PFAS by ID SOP     ND     7.6     1.9     n       Perfluoro-1-octanesulfoni acid (PFBS)     375-73-5     PFAS by ID SOP     ND     3.8     0.95     n       Perfluoro-1-butanesulfonic acid (PFBS)     375-73-5     PFAS by ID SOP     ND     3.8     0.95     n       Perfluoro-1-hetanesulfonic acid (PFBS)     375-73-5     PFAS by ID SOP     ND     3.8     0.95     n       Perfluoro-1-hetanesulfonic acid (PFDS)     375-72-8     PFAS by ID SOP     ND     3.8     0.95     n       Perfluoro-1-octanesulfonamide (PFOSA)     75-64-8     PFAS by ID SOP     ND     3.8     0.95     n       Perfluoro-1-pentanesulfonic acid (PFDS)     2706-914     PFAS by ID SOP     ND     7.6     1.9     n       Perfluoro-n-betanesulfonic acid (PFHAS)	з/L 1
N-methylperfluoro-1-octanesulfonamidacetic acid (MeFOSA)     31506-32-8     PFAS by ID SOP     ND     15     3.8     n       N-methylperfluoro-1-octanesulfonamidacetic acid (MeFOSA)     2355-31-9     PFAS by ID SOP     ND     7.6     1.9     n       2-N-methylperfluoro-1-octanesulfonic acid (PFBS)     2448-09-7     PFAS by ID SOP     ND     7.6     1.9     n       Perfluoro-1-butanesulfonic acid (PFDS)     335-77-3     PFAS by ID SOP     ND     3.8     0.95     n       Perfluoro-1-heptanesulfonic acid (PFDS)     335-77-3     PFAS by ID SOP     ND     3.8     0.95     n       Perfluoro-1-heptanesulfonic acid (PFDS)     375-92-8     PFAS by ID SOP     ND     3.8     0.95     n       Perfluoro-1-octanesulfonic acid (PFDS)     66259-12-1     PFAS by ID SOP     ND     3.8     0.95     n       Perfluoro-1-octanesulfonic acid (PFDA)     746-91-4     PFAS by ID SOP     ND     7.6     1.9     n       Perfluoro-1-bettanesulfonic acid (PFDA)     355-46-4     PFAS by ID SOP     ND     7.6     1.9     n       Perfluoro-n-decanic acid (PFDA)	з/L 1
N-methylperfluoro-1-octanesulfonamido-ethanol (MeFOSA)     2355-31-9     PFAS by ID SOP     ND     7.6     1.9     n       2-N-methylperfluoro-1-octanesulfonic acid (PFBS)     375-73-5     PFAS by ID SOP     ND     7.6     1.9     n       Perfluoro-1-butanesulfonic acid (PFDS)     375-73-5     PFAS by ID SOP     ND     3.8     0.95     n       Perfluoro-1-heptanesulfonic acid (PFDS)     335-77-3     PFAS by ID SOP     ND     3.8     0.95     n       Perfluoro-1-neptanesulfonic acid (PFDS)     335-77-3     PFAS by ID SOP     ND     3.8     0.95     n       Perfluoro-1-nonanesulfonic acid (PFDS)     68259-12-1     PFAS by ID SOP     ND     3.8     0.95     n       Perfluoro-1-octanesulfonic acid (PFDS)     79780-39-5     PFAS by ID SOP     ND     7.6     1.9     n       Perfluoro-n-decanoic acid (PFDA)     375-22-8     PFAS by ID SOP     ND     7.6     1.9     n       Perfluoro-n-decanoic acid (PFDA)     79780-39-5     PFAS by ID SOP     ND     7.6     1.9     n       Perfluoro-n-decanoic acid (PFDA)     375-22-	з/L 1
2-N-methylperfluoro-1-octanesulfonamido-ethanol (MeFOSE)     24448-09-7     PFAS by ID SOP     ND     7.6     1.9     n       Perfluoro-1-butanesulfonic acid (PFBS)     375-73-5     PFAS by ID SOP     9.0     3.8     0.95     n       Perfluoro-1-butanesulfonic acid (PFDS)     335-77-3     PFAS by ID SOP     ND     3.8     0.95     n       Perfluoro-1-heptanesulfonic acid (PFDS)     68259-12-1     PFAS by ID SOP     ND     3.8     0.95     n       Perfluoro-1-octanesulfonamide (PFOSA)     754-91-6     PFAS by ID SOP     ND     3.8     0.95     n       Perfluoro-1-pentanesulfonic acid (PFDOS)     7076-91-4     PFAS by ID SOP     ND     3.8     0.95     n       Perfluoro-1-pentanesulfonic acid (PFDOS)     79780-39-5     PFAS by ID SOP     ND     7.6     1.9     n       Perfluoro-n-betanoic acid (PFDA)     355-46-4     PFAS by ID SOP     ND     3.8     0.95     n       Perfluoro-n-betanoic acid (PFDA)     375-22-4     PFAS by ID SOP     ND     3.8     0.95     n       Perfluoro-n-betanoic acid (PFDA)     375-51 <t< td=""><td>ј/L 1</td></t<>	ј/L 1
Perfluoro-1-butanesulfonic acid (PFBS)     375-73-5     PFAS by ID SOP     9.0     3.8     0.95     n.       Perfluoro-1-decanesulfonic acid (PFDS)     335-77-3     PFAS by ID SOP     ND     3.8     0.95     n.       Perfluoro-1-betanesulfonic acid (PFHpS)     375-92-8     PFAS by ID SOP     ND     3.8     0.95     n.       Perfluoro-1-nonanesulfonic acid (PFNS)     68259-12-1     PFAS by ID SOP     ND     3.8     0.95     n.       Perfluoro-1-octanesulfonic acid (PFOS)     754-91-6     PFAS by ID SOP     ND     3.8     0.95     n.       Perfluoro-1-pentanesulfonic acid (PFOS)     7778-91-6     PFAS by ID SOP     ND     7.6     1.9     n.       Perfluoro-1-pentanesulfonic acid (PFDOS)     79780-39-5     PFAS by ID SOP     ND     7.6     1.9     n.       Perfluoro-n-butanoic acid (PFDA)     355-46-4     PFAS by ID SOP     ND     3.8     0.95     n.       Perfluoro-n-butanoic acid (PFDA)     375-22-4     PFAS by ID SOP     ND     3.8     0.95     n.       Perfluoro-n-decanoic acid (PFDA)     375-51     PFAS by I	g/L 1
Perfluoro-1-decanesulfonic acid (PFDS)     335-77-3     PFAS by ID SOP     ND     3.8     0.95     n       Perfluoro-1-heptanesulfonic acid (PFHpS)     375-92-8     PFAS by ID SOP     ND     3.8     0.95     n       Perfluoro-1-nonanesulfonic acid (PFNS)     68259-12-1     PFAS by ID SOP     ND     3.8     0.95     n       Perfluoro-1-octanesulfonic acid (PFOSA)     754-91-6     PFAS by ID SOP     ND     3.8     0.95     n       Perfluoro-1-pentanesulfonic acid (PFDOS)     79780-39-5     PFAS by ID SOP     ND     7.6     1.9     n       Perfluoro-n-butanoic acid (PFDOS)     79780-39-5     PFAS by ID SOP     ND     7.6     1.9     n       Perfluoro-n-butanoic acid (PFDAS)     355-46-4     PFAS by ID SOP     ND     3.8     0.95     n       Perfluoro-n-butanoic acid (PFBA)     375-22-4     PFAS by ID SOP     ND     3.8     0.95     n       Perfluoro-n-decanoic acid (PFDA)     375-52-1     PFAS by ID SOP     ND     3.8     0.95     n       Perfluoro-n-heptanoic acid (PFHADA)     67905-19-5     PFAS by ID SOP	J∕L 1
Perfluoro-1-heptanesulfonic acid (PFHpS)     375-92-8     PFAS by ID SOP     ND     3.8     0.95     n       Perfluoro-1-nonanesulfonic acid (PFNS)     68259-12-1     PFAS by ID SOP     ND     3.8     0.95     n       Perfluoro-1-octanesulfonic acid (PFOSA)     754-91-6     PFAS by ID SOP     ND     3.8     0.95     n       Perfluoro-1-pentanesulfonic acid (PFDOS)     7706-91-4     PFAS by ID SOP     6.6     3.8     0.95     n       Perfluoro-1-pentanesulfonic acid (PFDOS)     79780-39-5     PFAS by ID SOP     ND     7.6     1.9     n       Perfluoro-n-bexanesulfonic acid (PFHxS)     355-46-4     PFAS by ID SOP     ND     3.8     0.95     n       Perfluoro-n-decanoic acid (PFHXS)     355-46-4     PFAS by ID SOP     ND     3.8     0.95     n       Perfluoro-n-decanoic acid (PFHA)     375-22-4     PFAS by ID SOP     ND     3.8     0.95     n       Perfluoro-n-decanoic acid (PFDA)     375-55-7     PFAS by ID SOP     ND     3.8     0.95     n       Perfluoro-n-heptanoic acid (PFDA)     375-55-7     PFAS by ID SOP<	g/L 1
Perfluoro-1-nonanesulfonic acid (PFNS)     68259-12-1     PFAS by ID SOP     ND     3.8     0.95     n       Perfluoro-1-octanesulfonamide (PFOSA)     754-91-6     PFAS by ID SOP     ND     3.8     0.95     n       Perfluoro-1-pentanesulfonic acid (PFDS)     2706-91-4     PFAS by ID SOP     6.6     3.8     0.95     n       Perfluorododecanesulfonic acid (PFDOS)     79780-39-5     PFAS by ID SOP     ND     7.6     1.9     n       Perfluorohexanesulfonic acid (PFDAS)     355-46-4     PFAS by ID SOP     12     3.8     0.95     n       Perfluoro-n-butanoic acid (PFBA)     375-22-4     PFAS by ID SOP     ND     3.8     0.95     n       Perfluoro-n-decanoic acid (PFDA)     335-76-2     PFAS by ID SOP     ND     3.8     0.95     n       Perfluoro-n-hetxanoic acid (PFDA)     307-55-1     PFAS by ID SOP     ND     3.8     0.95     n       Perfluoro-n-hexadecanoic acid (PFIDA)     375-85-9     PFAS by ID SOP     ND     3.8     0.95     n       Perfluoro-n-hexanoic acid (PFIDA)     377-95-1     PFAS by ID SOP	g/L 1
Perfluoro-1-octanesulfonamide (PFOSA)     754-91-6     PFAS by ID SOP     ND     3.8     0.95     n       Perfluoro-1-pentanesulfonic acid (PFPeS)     2706-91-4     PFAS by ID SOP     6.6     3.8     0.95     n       Perfluorododecanesulfonic acid (PFDOS)     79780-39-5     PFAS by ID SOP     ND     7.6     1.9     n       Perfluorohexanesulfonic acid (PFDA)     355-46-4     PFAS by ID SOP     12     3.8     0.95     n       Perfluoro-n-butanoic acid (PFDA)     355-46-4     PFAS by ID SOP     ND     3.8     0.95     n       Perfluoro-n-decanoic acid (PFDA)     355-76-2     PFAS by ID SOP     ND     3.8     0.95     n       Perfluoro-n-decanoic acid (PFDA)     307-55-1     PFAS by ID SOP     ND     3.8     0.95     n       Perfluoro-n-hexadecanoic acid (PFDA)     307-55-1     PFAS by ID SOP     ND     3.8     0.95     n       Perfluoro-n-hexadecanoic acid (PFHxA)     307-24-4     PFAS by ID SOP     ND     7.6     1.9     n       Perfluoro-n-nonanoic acid (PFNA)     375-95-1     PFAS by ID SOP     N	g/L 1
Perfluoro-1-pentanesulfonic acid (PFPeS)     2706-91-4     PFAS by ID SOP     6.6     3.8     0.95     n       Perfluorododecanesulfonic acid (PFDOS)     79780-39-5     PFAS by ID SOP     ND     7.6     1.9     n       Perfluorohexanesulfonic acid (PFHxS)     355-46-4     PFAS by ID SOP     12     3.8     0.95     n       Perfluoro-n-butanoic acid (PFBA)     375-22-4     PFAS by ID SOP     88     3.8     0.95     n       Perfluoro-n-decanoic acid (PFDA)     335-76-2     PFAS by ID SOP     ND     3.8     0.95     n       Perfluoro-n-decanoic acid (PFDA)     307-55-1     PFAS by ID SOP     ND     3.8     0.95     n       Perfluoro-n-heptanoic acid (PFDA)     307-55-1     PFAS by ID SOP     ND     3.8     0.95     n       Perfluoro-n-hexadecanoic acid (PFHxA)     307-24-4     PFAS by ID SOP     ND     3.8     0.95     n       Perfluoro-n-nonanoic acid (PFHxA)     307-24-4     PFAS by ID SOP     ND     3.8     0.95     n       Perfluoro-n-octanoic acid (PFNA)     375-95-1     PFAS by ID SOP     ND <td>g/L 1</td>	g/L 1
Perfluorododecanesulfonic acid (PFDOS)     79780-39-5     PFAS by ID SOP     ND     7.6     1.9     n       Perfluorohexanesulfonic acid (PFHxS)     355-46-4     PFAS by ID SOP     12     3.8     0.95     n       Perfluoro-n-butanoic acid (PFBA)     375-22-4     PFAS by ID SOP     88     3.8     0.95     n       Perfluoro-n-decanoic acid (PFDA)     335-76-2     PFAS by ID SOP     ND     3.8     0.95     n       Perfluoro-n-decanoic acid (PFDA)     307-55-1     PFAS by ID SOP     ND     3.8     0.95     n       Perfluoro-n-heptanoic acid (PFDA)     307-55-1     PFAS by ID SOP     ND     3.8     0.95     n       Perfluoro-n-heptanoic acid (PFHxA)     307-51-5     PFAS by ID SOP     ND     7.6     1.9     n       Perfluoro-n-hexanoic acid (PFHxA)     307-24-4     PFAS by ID SOP     ND     7.6     1.9     n       Perfluoro-n-nonanoic acid (PFNA)     375-95-1     PFAS by ID SOP     ND     3.8     0.95     n       Perfluoro-n-octadecanoic acid (PFNA)     375-95-1     PFAS by ID SOP     ND     <	j/L 1
Perfluorohexanesulfonic acid (PFHxS)     355-46-4     PFAS by ID SOP     12     3.8     0.95     n.       Perfluoro-n-butanoic acid (PFDA)     375-22-4     PFAS by ID SOP     88     3.8     0.95     n.       Perfluoro-n-decanoic acid (PFDA)     335-76-2     PFAS by ID SOP     ND     3.8     0.95     n.       Perfluoro-n-decanoic acid (PFDA)     307-55-1     PFAS by ID SOP     ND     3.8     0.95     n.       Perfluoro-n-heptanoic acid (PFDA)     307-55-1     PFAS by ID SOP     ND     3.8     0.95     n.       Perfluoro-n-heptanoic acid (PFDA)     375-85-9     PFAS by ID SOP     ND     3.8     0.95     n.       Perfluoro-n-hexadecanoic acid (PFHxDA)     67905-19-5     PFAS by ID SOP     ND     7.6     1.9     n.       Perfluoro-n-nonanoic acid (PFHxA)     307-24-4     PFAS by ID SOP     ND     3.8     0.95     n.       Perfluoro-n-nonanoic acid (PFNA)     375-95-1     PFAS by ID SOP     ND     3.8     0.95     n.       Perfluoro-n-octadecanoic acid (PFOA)     356-7-1     PFAS by ID SOP     ND	g/L 1
Perfluoro-n-butanoic acid (PFBA)375-22-4PFAS by ID SOP883.80.95nPerfluoro-n-decanoic acid (PFDA)335-76-2PFAS by ID SOPND3.80.95nPerfluoro-n-decanoic acid (PFDA)307-55-1PFAS by ID SOPND3.80.95nPerfluoro-n-heptanoic acid (PFHpA)375-85-9PFAS by ID SOPND3.80.95nPerfluoro-n-hexadecanoic acid (PFHxDA)67905-19-5PFAS by ID SOPND7.61.9nPerfluoro-n-hexanoic acid (PFHxA)307-24-4PFAS by ID SOPND3.80.95nPerfluoro-n-nonanoic acid (PFHxA)375-95-1PFAS by ID SOPND3.80.95nPerfluoro-n-nonanoic acid (PFDA)375-95-1PFAS by ID SOPND3.80.95nPerfluoro-n-octadecanoic acid (PFOA)375-95-1PFAS by ID SOPND3.80.95nPerfluoro-n-octadecanoic acid (PFOA)356-71PFAS by ID SOPND3.80.95nPerfluoro-n-pentanoic acid (PFOA)376-06-7PFAS by ID SOPND3.80.95nPerfluoro-n-tridecanoic acid (PFTeDA)376-06-7PFAS by ID SOPND3.80.95nPerfluoro-n-tridecanoic acid (PFTrDA)72629-94-8PFAS by ID SOPND3.80.95nPerfluoro-n-tridecanoic acid (PFTrDA)2760-04-3PFAS by ID SOPND3.80.95nPerfluoro-n-tridecanoic acid (PFTrDA)2760-04-8PFAS by ID SOPND<	J∕L 1
Perfluoro-n-decanoic acid (PFDA)335-76-2PFAS by ID SOPND3.80.95nPerfluoro-n-dodecanoic acid (PFDoA)307-55-1PFAS by ID SOPND3.80.95nPerfluoro-n-heptanoic acid (PFHpA)375-85-9PFAS by ID SOPND3.80.95nPerfluoro-n-hexadecanoic acid (PFHxA)67905-19-5PFAS by ID SOPND7.61.9nPerfluoro-n-hexanoic acid (PFHxA)307-24-4PFAS by ID SOPND3.80.95nPerfluoro-n-nonanoic acid (PFNA)375-95-1PFAS by ID SOPND3.80.95nPerfluoro-n-octadecanoic acid (PFOA)16517-11-6PFAS by ID SOPND7.61.9nPerfluoro-n-pentanoic acid (PFOA)335-67-1PFAS by ID SOPND3.80.95nPerfluoro-n-tetradecanoic acid (PFDA)376-06-7PFAS by ID SOPND3.80.95nPerfluoro-n-tetradecanoic acid (PFTeDA)376-06-7PFAS by ID SOPND3.80.95nPerfluoro-n-tidecanoic acid (PFTrDA)72629-94-8PFAS by	J∕L 1
Perfluoro-n-dodecanoic acid (PFDoA)     307-55-1     PFAS by ID SOP     ND     3.8     0.95     n       Perfluoro-n-heptanoic acid (PFHpA)     375-85-9     PFAS by ID SOP     ND     3.8     0.95     n       Perfluoro-n-hexadecanoic acid (PFHxDA)     67905-19-5     PFAS by ID SOP     ND     7.6     1.9     n       Perfluoro-n-hexanoic acid (PFHxA)     307-24-4     PFAS by ID SOP     ND     3.8     0.95     n       Perfluoro-n-nexanoic acid (PFNA)     307-24-4     PFAS by ID SOP     ND     3.8     0.95     n       Perfluoro-n-nexanoic acid (PFNA)     307-24-4     PFAS by ID SOP     ND     3.8     0.95     n       Perfluoro-n-noctacid cacid (PFNA)     375-95-1     PFAS by ID SOP     ND     3.8     0.95     n       Perfluoro-n-octadecanoic acid (PFOA)     16517-11-6     PFAS by ID SOP     ND     3.8     0.95     n       Perfluoro-n-pentanoic acid (PFOA)     335-67-1     PFAS by ID SOP     ND     3.8     0.95     n       Perfluoro-n-tertadecanoic acid (PFPA)     2706-90-3     PFAS by ID SOP     ND	J∕L 1
Perfluoro-n-heptanoic acid (PFHpA)     375-85-9     PFAS by ID SOP     ND     3.8     0.95     n       Perfluoro-n-hexadecanoic acid (PFHxDA)     67905-19-5     PFAS by ID SOP     ND     7.6     1.9     n       Perfluoro-n-hexanoic acid (PFHxA)     307-24-4     PFAS by ID SOP     1.3     J     3.8     0.95     n       Perfluoro-n-hexanoic acid (PFNA)     307-24-4     PFAS by ID SOP     1.3     J     3.8     0.95     n       Perfluoro-n-nonanoic acid (PFNA)     375-95-1     PFAS by ID SOP     ND     3.8     0.95     n       Perfluoro-n-octadecanoic acid (PFODA)     16517-11-6     PFAS by ID SOP     ND     7.6     1.9     n       Perfluoro-n-octanoic acid (PFOA)     335-67-1     PFAS by ID SOP     ND     3.8     0.95     n       Perfluoro-n-pentanoic acid (PFOA)     376-06-7     PFAS by ID SOP     ND     3.8     0.95     n       Perfluoro-n-titeradecanoic acid (PFTeDA)     376-06-7     PFAS by ID SOP     ND     3.8     0.95     n       Perfluoro-n-tridecanoic acid (PFTrDA)     72629-94-8	J∕L 1
Perfluoro-n-hexadecanoic acid (PFHxDA)     67905-19-5     PFAS by ID SOP     ND     7.6     1.9     n       Perfluoro-n-hexanoic acid (PFHxA)     307-24-4     PFAS by ID SOP     1.3     J     3.8     0.95     n       Perfluoro-n-nonanoic acid (PFNA)     375-95-1     PFAS by ID SOP     ND     3.8     0.95     n       Perfluoro-n-octadecanoic acid (PFODA)     16517-11-6     PFAS by ID SOP     ND     7.6     1.9     n       Perfluoro-n-octadecanoic acid (PFODA)     16517-11-6     PFAS by ID SOP     ND     3.8     0.95     n       Perfluoro-n-octanoic acid (PFOA)     335-67-1     PFAS by ID SOP     ND     3.8     0.95     n       Perfluoro-n-pentanoic acid (PFPA)     2706-90-3     PFAS by ID SOP     ND     3.8     0.95     n       Perfluoro-n-tetradecanoic acid (PFTeDA)     376-06-7     PFAS by ID SOP     ND     3.8     0.95     n       Perfluoro-n-tridecanoic acid (PFTrDA)     72629-94-8     PFAS by ID SOP     ND     3.8     0.95     n       Pathers p. undecannic acid (PFTrDA)     72629-94-8     PFAS	J∕L 1
Perfluoro-n-hexanoic acid (PFHxA)     307-24-4     PFAS by ID SOP     1.3     J     3.8     0.95     n.       Perfluoro-n-nonanoic acid (PFNA)     375-95-1     PFAS by ID SOP     ND     3.8     0.95     n.       Perfluoro-n-octadecanoic acid (PFODA)     16517-11-6     PFAS by ID SOP     ND     7.6     1.9     n.       Perfluoro-n-octanoic acid (PFOA)     335-67-1     PFAS by ID SOP     ND     3.8     0.95     n.       Perfluoro-n-pentanoic acid (PFOA)     335-67-1     PFAS by ID SOP     ND     3.8     0.95     n.       Perfluoro-n-pentanoic acid (PFPeA)     2706-90-3     PFAS by ID SOP     ND     3.8     0.95     n.       Perfluoro-n-tetradecanoic acid (PFTeDA)     376-06-7     PFAS by ID SOP     ND     3.8     0.95     n.       Perfluoro-n-tridecanoic acid (PFTrDA)     72629-94-8     PFAS by ID SOP     ND     3.8     0.95     n.       Perfluoro-n-tridecanoic acid (PFTrDA)     72629-94-8     PFAS by ID SOP     ND     3.8     0.95     n.       Perfluoro-n-tridecanoic acid (PFTrDA)     72629-94-8 <t< td=""><td>J∕L 1</td></t<>	J∕L 1
Perfluoro-n-nonanoic acid (PFNA)     375-95-1     PFAS by ID SOP     ND     3.8     0.95     n       Perfluoro-n-octadecanoic acid (PFODA)     16517-11-6     PFAS by ID SOP     ND     7.6     1.9     n       Perfluoro-n-octadecanoic acid (PFOA)     335-67-1     PFAS by ID SOP     ND     3.8     0.95     n       Perfluoro-n-octanoic acid (PFOA)     335-67-1     PFAS by ID SOP     ND     3.8     0.95     n       Perfluoro-n-pentanoic acid (PFPeA)     2706-90-3     PFAS by ID SOP     ND     3.8     0.95     n       Perfluoro-n-tetradecanoic acid (PFTeDA)     376-06-7     PFAS by ID SOP     ND     3.8     0.95     n       Perfluoro-n-tridecanoic acid (PFTrDA)     72629-94-8     PFAS by ID SOP     ND     3.8     0.95     n       Perfluoro-n-tridecanoic acid (PFTrDA)     72629-94-8     PFAS by ID SOP     ND     3.8     0.95     n       Perfluoro-n-tridecanoic acid (PFTrDA)     72629-94-8     PFAS by ID SOP     ND     3.8     0.95     n	J∕L 1
Perfluoro-n-octadecanoic acid (PFODA)     16517-11-6     PFAS by ID SOP     ND     7.6     1.9     n       Perfluoro-n-octanoic acid (PFOA)     335-67-1     PFAS by ID SOP     ND     3.8     0.95     n       Perfluoro-n-pentanoic acid (PFPeA)     2706-90-3     PFAS by ID SOP     ND     3.8     0.95     n       Perfluoro-n-tetradecanoic acid (PFTeDA)     376-06-7     PFAS by ID SOP     ND     3.8     0.95     n       Perfluoro-n-tridecanoic acid (PFTrDA)     72629-94-8     PFAS by ID SOP     ND     3.8     0.95     n       Perfluoro-n-tridecanoic acid (PFTrDA)     72629-94-8     PFAS by ID SOP     ND     3.8     0.95     n       Perfluoro-n-tridecanoic acid (PFTrDA)     72629-94-8     PFAS by ID SOP     ND     3.8     0.95     n	J∕L 1
Perfluoro-n-octanoic acid (PFOA)     335-67-1     PFAS by ID SOP     ND     3.8     0.95     n       Perfluoro-n-pentanoic acid (PFPeA)     2706-90-3     PFAS by ID SOP     ND     3.8     0.95     n       Perfluoro-n-pentanoic acid (PFTeDA)     376-06-7     PFAS by ID SOP     ND     3.8     0.95     n       Perfluoro-n-tietradecanoic acid (PFTeDA)     376-06-7     PFAS by ID SOP     ND     3.8     0.95     n       Perfluoro-n-tridecanoic acid (PFTrDA)     72629-94-8     PFAS by ID SOP     ND     3.8     0.95     n       Defluoro n-tridecanoic acid (PFTrDA)     72629-94-8     PFAS by ID SOP     ND     3.8     0.95     n       Defluoro n-tridecanoic acid (PFTrDA)     72629-94-8     PFAS by ID SOP     ND     3.8     0.95     n	J/L 1
Perfluoro-n-pentanoic acid (PFPeA)     2706-90-3     PFAS by ID SOP     ND     3.8     0.95     n       Perfluoro-n-tetradecanoic acid (PFTeDA)     376-06-7     PFAS by ID SOP     ND     3.8     0.95     n       Perfluoro-n-tridecanoic acid (PFTrDA)     376-06-7     PFAS by ID SOP     ND     3.8     0.95     n       Perfluoro-n-tridecanoic acid (PFTrDA)     72629-94-8     PFAS by ID SOP     ND     3.8     0.95     n       Defluoro-n-tridecanoic acid (PFTrDA)     72629-94-8     PFAS by ID SOP     ND     3.8     0.95     n	J/L 1
Perfluoro-n-tetradecanoic acid (PFTeDA)     376-06-7     PFAS by ID SOP     ND     3.8     0.95     n       Perfluoro-n-tridecanoic acid (PFTrDA)     72629-94-8     PFAS by ID SOP     ND     3.8     0.95     n       Derfluoro-n-tridecanoic acid (PFTrDA)     72629-94-8     PFAS by ID SOP     ND     3.8     0.95     n       Derfluoro-n-tridecanoic acid (PFTrDA)     72629-94-8     PFAS by ID SOP     ND     3.8     0.95     n	]/L I
Perfluoro-n-tridecanoic acid (PFTrDA)     72629-94-8     PFAS by ID SOP     ND     3.8     0.95     n       Defluoro-n-tridecanoic acid (PFTrDA)     2050.04.9     DE66 by ID SOP     ND     3.8     0.95     n	]/L I
	J/L 1
Perindoro-in-undecanoic acid (PF0dA) 2058-94-8 PFAS by ID SOP ND 3.8 ().95 II	]/L I
Perfluorooctanesultonic acid (PFOS) 1763-23-1 PFAS by ID SOP 6.5 3.8 0.95 h	j/∟ I
Surrogate Q % Recovery Limits	
13C2_4:2FTS 101 25-150	
T3C2_6:2F1S     104     25-150	
T3C2_8:2F1S     107     25-150	
T3C2_PF DoA     95     25-150	
13U2_PFHXDA 94 25-150	
1302_PFTeDA 100 25-150	
LOQ = Limit of Quantitation   B = Detected in the method blank   E = Quantitation of compound exceeded the calibration range   DL = Detection Limit     ND = Not detected at or above the DL   N = Recovery is out of criteria   P = The RPD between two GC columns exceeds 40%   J = Estimated result < LOQ and > DL	

Client: Pace Analytical Services, LLC		Laboratory ID: VK03016-013
Description: DUP #2		Matrix: Aqueous
Date Sampled:10/29/2020 1535	Project Name: LACROSSE WELL #23 & 24	
Date Received: 11/03/2020	Project Number: 40217496	

Surrogate	Run 1 Ac Q % Recovery	cceptance Limits
13C3_PFBS	91	25-150
13C3_PFHxS	95	25-150
13C3-HFPO-DA	99	25-150
13C4_PFBA	98	25-150
13C4_PFHpA	95	25-150
13C5_PFHxA	101	25-150
13C5_PFPeA	100	25-150
13C6_PFDA	99	25-150
13C7_PFUdA	94	25-150
13C8_PFOA	103	25-150
13C8_PFOS	82	25-150
13C8_PFOSA	106	10-150
13C9_PFNA	96	25-150
d-EtFOSA	89	10-150
d5-EtFOSAA	91	25-150
d9-EtFOSE	90	10-150
d-MeFOSA	88	10-150
d3-MeFOSAA	98	25-150
d7-MeFOSE	95	10-150

H = Out of holding time	W = Reported on wet weight basis		
ND = Not detected at or above the DL	N = Recovery is out of criteria	P = The RPD between two GC columns exceeds 40%	J = Estimated result < LOQ and $\geq$ DL
LOQ = Limit of Quantitation	B = Detected in the method blank	E = Quantitation of compound exceeded the calibration range	DL = Detection Limit



444 21st Street South · La Crosse, Wisconsin · 54601

November 23, 2020

### 1836 Aiken Road La Crosse, WI 54603

Subject: Private Well Sampling Results 2529 1st Avenue East, La Crosse, WI 54603 Tax parcel # 4-250-0 Well ID # 250-0

:

Dear

We have received and reviewed the test results for the sample collected on October 29, 2020 at the above address. Some PFAS compounds were found, but the levels found were **below** the Department of Health Services (DHS) levels recommended for protecting health. These levels are called the "Recommended Public Health Standard" in the table below. The levels found in *your* well are called the "Sample Result" in the table below. **PLEASE NOTE:** At your residence we took a second "duplicate" sample for quality control / quality assurance purposes. The two samples' tests confirmed each other, and there were only minor differences. The results in the table below are based on the highest concentration of contaminants observed in either of the two samples.

#### **Sample Results**

Compound	Sample Result (unit)	Recom Public Standar	mended Health d (unit <sup>e</sup> )
N-Ethyl Perfluorooctane sulfonamide (NEtFOSA) CAS # 4151-50-2	Not Detected	20 ppt <sup>a,b</sup>	) ppt unds I 6
N-Ethyl perfluorooctane sulfonamidoacetic acid (NEtFOSAA) CAS # 2991-50-6	Not Detected	20 ppt <sup>a,b</sup>	it is 20 ompo <i>II</i> of al
N-Ethyl perfluorooctane sulfonamidoethanol (NEtFOSE) CAS # 1691-99-2	Not Detected	20 ppt <sup>a,b</sup>	ed lim ese 6 c ed toto
Perfluorooctane sulfonamide (FOSA) CAS # 754-91-6	Not Detected	20 ppt <sup>a,b</sup>	mend of the ombine
Perfluorooctanoic acid (PFOA) CAS # 335-67-1	Not Detected	20 ppt <sup>a,b</sup>	recom ny <i>one</i> the <i>c</i> c
Perfluorooctanesulfonic acid (PFOS) CAS # 1763-23-1	7.0 ppt	20 ppt <sup>a,b</sup>	The for a or

Private Well Sampling Results for 2529 1st Avenue East, La Crosse, WI 54603 Tax parcel # 4-250-0 Well ID # 250-0 November 23, 2020

Compound	Sample Result (unit)	Recommended Public Health Standard (unit <sup>e</sup> )
Hexafluoropropylene oxide dimer acid (HPFO-DA; GenX) CAS # 13252-13-6	Not Detected	300 ppt <sup>a</sup>
Perfluorobutanesulfonic acid (PFBS) CAS # 375-73-5	9.2 ppt	450,000 ppt <sup>a</sup>
Perfluorohexanesulfonic acid (PFHxS) CAS # 355-46-4	13 ppt	40 ppt <sup>a</sup>
Perfluorobutanoic acid (PFBA) CAS # 375-22-4	99 ppt	10,000 ppt <sup>a</sup>
Perfluorodecanoic acid (PFDA) CAS # 335-76-2	Not Detected	300 ppt <sup>a</sup>
Perfluorododecanoic acid (PFDoA) CAS # 307-55-1	Not Detected	500 ppt <sup>a</sup>
Perfluorohexanoic acid (PFHxA) CAS # 307-24-4	1.4 ppt	150,000 ppt <sup>a</sup>
Perfluorononanoic acid (PFNA) CAS # 375-95-1	Not Detected	30 ppt <sup>a</sup>
Perfluorotetradecanoic acid (PFTeA) CAS # 376-06-7	Not Detected	10,000 ppt <sup>a</sup>
Perfluoroundecanoic acid (PFUnA) CAS # 2058-94-8	Not Detected	3,000 ppt <sup>a</sup>
4,8-Dioxa-3H-perfluorononanoic acid (DONA) CAS # 919005-14-4	Not Detected	3,000 ppt <sup>a</sup>
Perfluorooctadecanoic acid (PFODA) CAS # 16517-11-6	Not Detected	400,000 ppt <sup>a</sup>
Perfluoro-1-pentanesulfonic acid (PFPeS) CAS # 2706-91-4	6.6 ppt	None Established <sup>c</sup>

<sup>a</sup> Public health enforcement standard (ES) recommended by DHS.

<sup>b</sup> DHS recommends a combined enforcement standard of 20 ng/L and combined preventive action limit of 2 ng/L for FOSA, NEt-FOSA, NetFOSAA, PFOS, and PFOA.

<sup>c</sup> A current standard is not available; the compound is currently under review by DHS for potential public health standard recommendation.

<sup>d</sup> Public health enforcement standard (ES) in NR 140, Wisconsin Administrative Code.

<sup>e</sup> Units: Parts per trillion (ppt) = nanograms of substance per liter of water (ng/L)

<sup>BL</sup> Detected in the method blank. Possible lab contaminant.

Private Well Sampling Results for 2529 1st Avenue East, La Crosse, WI 54603 Tax parcel # 4-250-0 Well ID # 250-0 November 23, 2020

As required by law, we will be submitting these results to the Department of Natural Resources (DNR). The DNR may consult with the Department of Health Services (DHS) about these test results. DHS may review all PFAS tests and follow-up with you directly if any actions are recommended to protect your health.

Thank you for your patience and assistance with our investigation. We will provide updates on the project at <u>https://www.cityoflacrosse.org/wells</u> as our work continues. If you have any questions, please call The OS Group at (608) 668-2718 or email them at <u>PFAS@theOSgrp.com</u>.

You can also contact the DNR and DHS with questions about PFAS or the water sample results at the numbers provided below.

Questions about		<u>Contact</u>	<u>Phone</u>	E-mail Address
Soil & Groundwater Testing, Clean Up	DNR	David Rozeboom	715-215-2078	David.Rozeboom@wisconsin.gov
Drinking Water or Private wells	DNR	Kyle Burton	920-360-2112	kyle.burton@wisconsin.gov
Health Concerns	DHS	Curtis Hedman	608-266-6677	Curtis.Hedman@dhs.wisconsin.gov

On behalf of The City of La Crosse *The OS Group, LLC* 

Attachment: Lab report for your well

Client: Pace Analytical Services, LLC				Laboratory ID	D: VK03016-0	011	
Description: 250-0				Matrix	: Aqueous		
Date Sampled:10/29/2020 1530	Project Nam	ne: LACROSSE WELL #	¥23 & 24		·		
Date Received: 11/03/2020	piect Numb	er∙ 40217496					
RunPrep MethodAnalytical MethodD1SOP SPEPFAS by ID SOP	ilution A 1 1 <sup>-</sup>	nalysis Date Analyst I/13/2020 1636 MMM	Prep Date 11/11/2020 11	Batch 108 73065			
Parameter	CA Numbe	S Analytical er Method	Result Q	LOQ	DL	Units	Run
9-chlorohexadecafluoro-3-oxanone-1-sulfonic acid (9CI-PF3ONS)	756426-58	-1 PFAS by ID SOP	ND	7.9	2.0	ng/L	1
11-chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3)	763051-92	-9 PFAS by ID SOP	ND	7.9	2.0	ng/L	1
1H, 1H, 2H, 2H-perfluorodecane sulfonic acid (8:2 FTS)	39108-34	-4 PFAS by ID SOP	ND	7.9	2.0	ng/L	1
1H, 1H, 2H, 2H-perfluorooctane sulfonic acid (6:2 FTS)	27619-97	-2 PFAS by ID SOP	ND	7.9	2.0	ng/L	1
1H,1H,2H,2H-perfluorododecane sulfonic acid (10:2 FTS)	120226-60	-0 PFAS by ID SOP	ND	7.9	2.0	ng/L	1
1H,1H,2H,2H-perfluorohexane sulfonic acid (4:2 FTS)	757124-72	-4 PFAS by ID SOP	ND	7.9	2.0	ng/L	1
Hexafluoropropylene oxide dimer acid (GenX)	13252-13	-6 PFAS by ID SOP	ND	7.9	2.0	ng/L	1
4,8-dioxa-3H-perfluorononanoic acid (ADONA)	919005-14	-4 PFAS by ID SOP	ND	7.9	2.0	ng/L	1
N-ethylperfluoro-1-octanesulfonamide (EtFOSA)	4151-50	-2 PFAS by ID SOP	ND	7.9	2.0	ng/L	1
N-ethylperfluoro-1-octanesulfonamidoacetic acid (EtFOSAA)	2991-50	-6 PFAS by ID SOP	ND	7.9	2.0	ng/L	1
2-N-ethylperfluoro-1-octanesulfonamido-ethanol (EtFOSE)	1691-99	-2 PFAS by ID SOP	ND	7.9	2.0	ng/L	1
N-methylperfluoro-1-octanesulfonamide (MeFOSA)	31506-32	-8 PFAS by ID SOP	ND	16	4.0	ng/L	1
N-methylperfluoro-1-octanesulfonamidoacetic acid (MeFOSAA)	2355-31	-9 PFAS by ID SOP	ND	7.9	2.0	ng/L	1
2-N-methylperfluoro-1-octanesulfonamido-ethanol (MeFOSE)	24448-09	-7 PFAS by ID SOP	ND	7.9	2.0	ng/L	1
Perfluoro-1-butanesulfonic acid (PFBS)	375-73	-5 PFAS by ID SOP	9.2	4.0	0.99	ng/L	1
Perfluoro-1-decanesulfonic acid (PFDS)	335-77	-3 PFAS by ID SOP	ND	4.0	0.99	ng/L	1
Perfluoro-1-heptanesulfonic acid (PFHpS)	375-92	-8 PFAS by ID SOP	ND	4.0	0.99	ng/L	1
Perfluoro-1-nonanesulfonic acid (PFNS)	68259-12	-1 PFAS by ID SOP	ND	4.0	0.99	ng/L	1
Perfluoro-1-octanesulfonamide (PFOSA)	754-91	-6 PFAS by ID SOP	ND	4.0	0.99	ng/L	1
Perfluoro-1-pentanesulfonic acid (PFPeS)	2706-91	-4 PFAS by ID SOP	6.1	4.0	0.99	ng/L	1
Perfluorododecanesulfonic acid (PFDOS)	79780-39	-5 PFAS by ID SOP	ND	7.9	2.0	ng/L	1
Perfluorohexanesulfonic acid (PFHxS)	355-46	-4 PFAS by ID SOP	13	4.0	0.99	ng/L	1
Perfluoro-n-butanoic acid (PFBA)	375-22	-4 PFAS by ID SOP	87	4.0	0.99	ng/L	1
Perfluoro-n-decanoic acid (PFDA)	335-76	-2 PFAS by ID SOP	ND	4.0	0.99	ng/L	1
Perfluoro-n-dodecanoic acid (PFDoA)	307-55	-1 PFAS by ID SOP	ND	4.0	0.99	ng/L	1
Perfluoro-n-heptanoic acid (PFHpA)	375-85	-9 PFAS by ID SOP	ND	4.0	0.99	ng/L	1
Perfluoro-n-hexadecanoic acid (PFHxDA)	67905-19	-5 PFAS by ID SOP	ND	7.9	2.0	ng/L	1
Perfluoro-n-hexanoic acid (PFHxA)	307-24	-4 PFAS by ID SOP	1.4 J	4.0	0.99	ng/L	1
Perfluoro-n-nonanoic acid (PFNA)	375-95	-1 PFAS by ID SOP	ND	4.0	0.99	ng/L	1
Perfluoro-n-octadecanoic acid (PFODA)	16517-11	-6 PFAS by ID SOP	ND	7.9	2.0	ng/L	1
Perfluoro-n-octanoic acid (PFOA)	335-67	-1 PFAS by ID SOP	ND	4.0	0.99	ng/L	1
Perliuoro-n-penianoic acid (PEPeA)	2706-90	-3 PFAS by ID SOP	ND	4.0	0.99	ng/L	1
Perfluoro-n-tetradecanoic acid (PFTeDA)	3/6-06	-7 PFAS by ID SOP	ND	4.0	0.99	ng/L	1
Perluoro-n-tridecanoic acid (PETIDA)	72629-94	-8 PFAS by ID SOP	ND	4.0	0.99	ng/L	1
Perfluoro-n-undecanoic acid (PFOdA)	2058-94	-8 PFAS by ID SOP	ND 7.0	4.0	0.99	ng/L	1
Periluorooctanesuironic acid (PFOS)	1/63-23	- I PFAS by ID SOP	7.0	4.0	0.99	ng/L	I
Surrogate Q % Ret	un 1 Aco covery	ceptance Limits					
1302_4:2FTS	1U3 105	25-15U					
1302_0.2F13	05	20-100 25-150					
1302_8:2F13	67 CV	20-10U					
	73	20-10U					
	90	20-100					
	74	20-100					
LOQ = Limit of Quantitation B = Detected in the method blank	E = Quantitat	ion of compound exceeded the o	calibration range D	DL = Detection Lim	it		
ND = Not detected at or above the DL     N = Recovery is out of criteria       H = Out of holding time     W = Reported on wet weight basis	P = The RPD	between two GC columns exce	eds 40% J	= Estimated resul	t < LOQ and ≥ D	ÞL	

Laboratory ID: VK03016-011 Matrix: Aqueous

Client: Pace Analytical Services, LLC	
Description: 250-0	
Date Sampled:10/29/2020 1530	Project Name: LACROSSE WELL #23 & 24
Date Received: 11/03/2020	Project Number: 40217496

Surrogate	Run 1 Ac O % Recovery	ceptance Limits
13C3_PFBS	90	25-150
13C3_PFHxS	93	25-150
13C3-HFPO-DA	106	25-150
13C4_PFBA	99	25-150
13C4_PFHpA	93	25-150
13C5_PFHxA	105	25-150
13C5_PFPeA	99	25-150
13C6_PFDA	105	25-150
13C7_PFUdA	100	25-150
13C8_PFOA	99	25-150
13C8_PFOS	86	25-150
13C8_PFOSA	109	10-150
13C9_PFNA	102	25-150
d-EtFOSA	86	10-150
d5-EtFOSAA	92	25-150
d9-EtFOSE	96	10-150
d-MeFOSA	85	10-150
d3-MeFOSAA	99	25-150
d7-MeFOSE	98	10-150

LOQ = Limit of Quantitation	B = Detected in the method blank	E = Quantitation of compound exceeded the calibration range	DL = Detection Limit
ND = Not detected at or above the DL	N = Recovery is out of criteria	P = The RPD between two GC columns exceeds 40%	J = Estimated result < LOQ and $\ge$ DL
H = Out of holding time	W = Reported on wet weight basis		

Description: DUP #2 Date Sampled:10/27/0201 1535     Matrix: Aqueous       Date Received: 11/03/2020     Project Name: LACROSSE WELL #23 & 24       Date Received: 11/03/2020     Analytical Method 1     SOP SPE     Analytical Method PFAS by ID SOP     Project Name: LACROSSE WELL #23 & 24       Parameter     CAS     Analytical Method     Method 11/11/2020 1108 73065     Batch 11/11/2020 1108 73065       Parameter     CAS     Analytical Method     Result Q     LOQ     DL       0:dotationary constraints     CAS     Analytical Method     Result Q     LOQ     DL       0:dotationary constraints     CAS     Analytical Method     Result Q     LOQ     DL     Up       0:dotationary constraints     CAS     Analytical Method     Result Q     LOQ     DL     Up       0:dotationary constraints     CAS     Analytical Method     Result Q     LOQ     DL     Up       0:dotationary constraints     CAS     Analytical Method     Result Q     LOQ     DL     Up       1:dotationary constraints     CAS     Analytical Method     Project Numeer     Result Q     LOQ     DL	
Date Sampled:10/29/2020 1535     Project Name: LACROSSE WELL #23 & 24       Date Received: 11/03/2020     Project Number: 40217496       Run Prep Method     Analytical Method Dilution     Analysis Date Analysis     Prep Date     Batch       1     SOP SPE     PFAS by ID SOP     1     11/11/2020 1108 73065     DL     UL       Parameter     CAS     Analytical Method     Result Q     LOQ     DL     UL       Othorsheadecafluoro 3 oxannen-1-sulfonic acid (ICC PF30NS)     7640 rsp     PFAS by ID SOP     ND     7.6     1.9     n       11     11/12/241-perfluorodcane sulfonic acid (ICC PF30NS)     7640 rsp     PFAS by ID SOP     ND     7.6     1.9     n       11     11/12/241-perfluorodcane sulfonic acid (IC2 FTS)     39108 344     PFAS by ID SOP     ND     7.6     1.9     n       11     11/12/241-perfluorodcane sulfonic acid (IC2 FTS)     126226-60     PFAS by ID SOP     ND     7.6     1.9     n       11     11/12/241-perfluorodcane sulfonic acid (IC2 FTS)     1374724     PFAS by ID SOP     ND     7.6     1.9     n     n <td< td=""><td></td></td<>	
Date Received: 11/03/2020     Project Number: 40217496       Run     Prep Method     Analytical Method     Dilution     Analytical     Prep Date     Batch       1     SOP SPE     Analytical     Method     Prep Method     LOQ     DL     U/r       9 chiconbexadecalluoro 3 coxonone 1 sulfonic acid (9C1 PF30NS)     756426.561     PFAS by ID SOP     ND     7.6     1.9     nn       11 chicoreciscostandecane 1 sulfonic acid (9C1 FF30NS)     756426.561     PFAS by ID SOP     ND     7.6     1.9     nn       11 chicoreciscostane sulfonic acid (12 FTS)     37018.344     PFAS by ID SOP     ND     7.6     1.9     nn       11 H114/214/perfluorobdcane sulfonic acid (12 FTS)     37018.344     PFAS by ID SOP     ND     7.6     1.9     nn       11 H114/214/perfluorobdcane sulfonic acid (12 FTS)     12022.640     PFAS by ID SOP     ND     7.6     1.9     nn       12 H14/24/perfluorobane acid (Cic PTSA)     13222.134     PFAS by ID SOP     ND     7.6     1.9     nn       1.9     nn     H1111/20201108     PFAS by ID SOP     ND     7.6	
Run     Prep Method 1     Analytical Method PFAS by ID SOP     Prep Date 1     Batch 11/11/2020 1108 73065       Parameter     CAS Number     Analytical Method     Result O     LOO     DL     Ur       9-chlorohexadecalluoro-3-oxanone-1-sulfonic acid (9CI-PF3ONS)     756426-58-1     PFAS by ID SOP     ND     7.6     1.9     n       11 -chlorohexadecalluoro-3-oxanodecane -1-sulfonic acid (10CI-PF3ONS)     756426-58-1     PFAS by ID SOP     ND     7.6     1.9     n       11 + 11, 12, 21, 42-perfluorobcane sulfonic acid (02-FTS)     27619-97-2     PFAS by ID SOP     ND     7.6     1.9     n       11 + 11, 12, 21, 42-perfluorobcane sulfonic acid (02-FTS)     120226-600     PFAS by ID SOP     ND     7.6     1.9     n       11 + 11, 12, 21, 42-perfluorobcane sulfonic acid (4, ETS)     17124-724     PFAS by ID SOP     ND     7.6     1.9     n       11 + 11, 12, 21, 42-perfluorobcane sulfonic acid (602-FTS)     120226-600     PFAS by ID SOP     ND     7.6     1.9     n       11 + 11, 12, 12, 42-perfluorobcane sulfonic acid (4DNA)     19005-14.4     PFAS by ID SOP     ND     7.6     1.9     n	
Hun Prep Method     Analysical Method     Diction     Analysics Date Analysic     Prep Date     Batch       1     SOP SPE     PFAs by ID SOP     1     11/13/2020 1647     MMM     11/11/2020 1108 73065       Parameter     CAS     Analytical     Method     Result Q     LOO     DL     Ub       9-ditor/basedicafluoro3-axaundecane-1-sulfonic acid (10C+PF30N)     756426-88+     PFAS by ID SOP     ND     7.6     1.9     n       1H, 1H, 2H, 2H-perfluorodcaceane sulfonic acid (2FTS)     27619-97.2     PFAS by ID SOP     ND     7.6     1.9     n       1H, 1H, 2H, 2H-perfluorodcaceane sulfonic acid (102 FTS)     120226-600     PFAS by ID SOP     ND     7.6     1.9     n       1H, 1H, 2H, 2H-perfluorodcaceane sulfonic acid (12 FTS)     757124-724     PFAS by ID SOP     ND     7.6     1.9     n       1H, 1H, 2H, 2H-perfluorodcaceane sulfonic acid (4E FTS)     757124-724     PFAS by ID SOP     ND     7.6     1.9     n       1H, 1H, 2H, 2H-perfluorodcaceane sulfonic acid (4E FTS)     757124-724     PFAS by ID SOP     ND     7.6     1.9     n       He	
CAS     Analytical Number     Result O     LOQ     DL     Unit       9-chlorohexadecalluoro-3-oxanone-1-sulfonic acid (9C1PF3ONS)     756426-581     PFAS by ID SOP     ND     7.6     1.9     n       11-chloroeicosalluoro-3-oxanotecane-sulfonic acid (10:12F3)     760319-29     PFAS by ID SOP     ND     7.6     1.9     n       1H, 1H, 2H, 2H-perfluorodecane sulfonic acid (0:2 FTS)     27619-377.2     PFAS by ID SOP     ND     7.6     1.9     n       1H, 1H, 2H, 2H-perfluorodecane sulfonic acid (0:2 FTS)     120226-00     PFAS by ID SOP     ND     7.6     1.9     n       1H, 1H, 2H, 2H-perfluorodecane sulfonic acid (10:2 FTS)     120226-00     PFAS by ID SOP     ND     7.6     1.9     n       Hacatuoropropriene oxide dimer acid (GenX)     13225-13.6     PFAS by ID SOP     ND     7.6     1.9     n       N-ethyperfluoro-1-octanesulfonamidocetina cid (GENSA)     4151-50.2     PFAS by ID SOP     ND     7.6     1.9     n       N-methyperfluoro-1-octanesulfonamidocetina cid (EFOSA)     1356-32.8     PFAS by ID SOP     ND     7.6     1.9     n       N-met	
e-Interopheradecafluoro-3-oxannene-1-sulfonic acid (9CLPF30NS)     756426-581     PFAS by ID SOP     ND     7.6     1.9     n       11-chloroeicosafluoro-3-oxannee-sulfonic acid (12 LPF3)     76305192.9     PFAS by ID SOP     ND     7.6     1.9     n       11-11, 11, 21, 21-perfluorodcane sulfonic acid (6.2 FTS)     29109-97.2     PFAS by ID SOP     ND     7.6     1.9     n       11+11, 12, 12-ty-perfluorodcane sulfonic acid (12 FTS)     120226-60.0     PFAS by ID SOP     ND     7.6     1.9     n       11+11, 12, 12-ty-perfluoronbace sulfonic acid (12 FTS)     120226-60.0     PFAS by ID SOP     ND     7.6     1.9     n       4.8-dioxa-3H-perfluoronbace sulfonic acid (ADONA)     13252-13.6     PFAS by ID SOP     ND     7.6     1.9     n       -ethyloperfluoro-1-octanesulfonamido (EFOSA)     1915-02     PFAS by ID SOP     ND     7.6     1.9     n       -ethyloperfluoro-1-octanesulfonamido ethanol (EFOSA)     1919-92     PFAS by ID SOP     ND     7.6     1.9     n       -ethyloperfluoro-1-octanesulfonamido ethanol (EFOSE)     1919-92     PFAS by ID SOP     ND     7.6     1.9 <td>iits Ru</td>	iits Ru
11-chloroelcosafluoro-3 exatundecane-1-sulfonic acid (112-FF3) 76081-92-9     PFAS by ID SOP     ND     7.6     1.9     nn       11+, 11+, 24, 24-perfluorodecane sulfonic acid (6.2 FTS)     39108-344     PFAS by ID SOP     ND     7.6     1.9       11+, 11+, 24, 24-perfluorodecane sulfonic acid (6.2 FTS)     120226-60-0     PFAS by ID SOP     ND     7.6     1.9       11+, 11+, 24, 24-perfluorodexane sulfonic acid (4.2 FTS)     751724-724     PFAS by ID SOP     ND     7.6     1.9     nn       Hexafluoroproylene oxide dimer acid (GRON)     13225-134     PFAS by ID SOP     ND     7.6     1.9     nn       Hexafluoroproylene oxide dimer acid (GRON)     13252-134     PFAS by ID SOP     ND     7.6     1.9     nn       Nethylperfluoro-1-octanesulfonamido cEIFOSA)     2591-500     PAS by ID SOP     ND     7.6     1.9     nn       N=thylperfluoro-1-octanesulfonamido-celhanol (EIFOSA)     31506-32.8     PFAS by ID SOP     ND     7.6     1.9     nn       N=thylperfluoro-1-octanesulfonamido-celhanol (EIFOSA)     31506-32.8     PFAS by ID SOP     ND     7.6     1.9     nn       N=thylp	g/L 1
H1, H1, 2H, 2H-perfluorodcane sulfonic acid (8:2 FTS)   3708-344   PFAS by ID SOP   ND   7.6   1.9   n     H1, H1, 2H, 2H-perfluorodcane sulfonic acid (6:2 FTS)   12026-00   PFAS by ID SOP   ND   7.6   1.9   n     H1, H1, 2H, 2H-perfluorodcane sulfonic acid (10:2 FTS)   12026-00   PFAS by ID SOP   ND   7.6   1.9   n     H4, H1, H2, H2, H-perfluorodcane sulfonic acid (10:2 FTS)   12026-00   PFAS by ID SOP   ND   7.6   1.9   n     H4, adioxa 3H-perfluoronanoic acid (GENX)   13252-13-6   PFAS by ID SOP   ND   7.6   1.9   n     N-ethylperfluoro-1-octanesulfonamido cacid (GETOSA)   14151-50-2   PFAS by ID SOP   ND   7.6   1.9   n     N-methylperfluoro-1-octanesulfonamido celtroSA)   1291-50-6   PFAS by ID SOP   ND   7.6   1.9   n     N-methylperfluoro-1-octanesulfonamido (MeFOSA)   3156-32-8   PFAS by ID SOP   ND   7.6   1.9   n     N-methylperfluoro-1-octanesulfonamido-ethanol (MeFOSE)   24448-97   PFAS by ID SOP   ND   7.6   1.9   n     Perfluoro-1-betanesulfonamido-ethanol (MeFOSE)   335-77-3   PFAS by I	3/L 1
H1, H1, 2H, 2H perfluoroctane sulfonic acid (6:2 FTS)     27619-97.2     PFAS by ID SOP     ND     7.6     1.9     n       H1, H1, 2H, 2H perfluoroctane sulfonic acid (10:2 FTS)     120226-60.0     PFAS by ID SOP     ND     7.6     1.9     n       H1, H1, H2, H2, Hperfluorononancic acid (ADONA)     91905-14.4     PFAS by ID SOP     ND     7.6     1.9     n       Hexafluoropropylene oxide dimer acid (GenX)     13252-13.6     PFAS by ID SOP     ND     7.6     1.9     n       N-ethylperfluoro-1-octanesulfonamido cettorONA     4151-50.2     PFAS by ID SOP     ND     7.6     1.9     n       N-ethylperfluoro-1-octanesulfonamido-ethanol (EFOSA)     2991-50.6     PFAS by ID SOP     ND     7.6     1.9     n       N-methylperfluoro-1-octanesulfonamido-ethanol (EFOSA)     2151-31.9     PFAS by ID SOP     ND     7.6     1.9     n       Perfluoro-1-octanesulfonamido-ethanol (MeFOSE)     24448-09-7     PFAS by ID SOP     ND     7.6     1.9     n       Perfluoro-1-octanesulfonamido-ethanol (MeFOSE)     24448-09-7     PFAS by ID SOP     ND     3.8     0.95     n	3/L 1
IH 1H,2H,2H perfluorododecane sulfonic acid (10:2 FTS)   120226-60.0   PFAS by ID SOP   ND   7.6   1.9   n     IH,1H,2H,2H,2H perfluorodoexane sulfonic acid (4:2 FTS)   757124-72.4   PFAS by ID SOP   ND   7.6   1.9   n     Hexafluoroproyene oxide dimer acid (GeNX)   13252-13.6   PFAS by ID SOP   ND   7.6   1.9   n     A.8-dioxa-3H-perfluoro-1-octanesulfonamido (EFOSA)   1915-02   PFAS by ID SOP   ND   7.6   1.9   n     N-ethylperfluoro-1-octanesulfonamido (EFOSA)   2991-50-6   PFAS by ID SOP   ND   7.6   1.9   n     N-methylperfluoro-1-octanesulfonamido-(EFOSA)   2355-31-9   PFAS by ID SOP   ND   7.6   1.9   n     PA-thylperfluoro-1-octanesulfonamido-ethanol (MeFOSA)   31506-32-8   PFAS by ID SOP   ND   7.6   1.9   n     Perfluoro-1-octanesulfonamido-ethanol (MeFOSA)   31507-33-8   PFAS by ID SOP   ND   7.6   1.9   n     Perfluoro-1-octanesulfonamido-ethanol (MeFOSA)   375-73-8   PFAS by ID SOP   ND   3.8   0.95   n     Perfluoro-1-butanesulfonic acid (PFDS)   375-73-8   PFAS by ID SOP   N	3/L 1
H1,H1,2H,2H,perfluoronexane sulfonic acid (42 FTS)     757124-72-4     PFAS by ID SOP     ND     7.6     1.9       Hexafluoropropylene oxide dimer acid (GenX)     13252-13-6     PFAS by ID SOP     ND     7.6     1.9     nn       48-dioxa-3H-perfluoron-nanoic acid (ADONA)     919005-14-4     PFAS by ID SOP     ND     7.6     1.9     nn       N-ethylperfluoro-1-octanesulfonamido-ethanol (EIFOSA)     4151-50-2     PFAS by ID SOP     ND     7.6     1.9     nn       N-ethylperfluoro-1-octanesulfonamido-ethanol (EIFOSE)     1691-99-2     PFAS by ID SOP     ND     7.6     1.9     nn       N-methylperfluoro-1-octanesulfonamido-ethanol (MeFOSA)     2355-31-9     PFAS by ID SOP     ND     7.6     1.9     nn       Perfluoro-1-butanesulfonamido-acetic acid (MeFOSA)     2355-37-3     PFAS by ID SOP     ND     7.6     1.9     nn       Perfluoro-1-butanesulfonamido-acetic acid (MeFOSE)     24448-09-7     PFAS by ID SOP     ND     3.8     0.95     nn       Perfluoro-1-butanesulfonic acid (PFBS)     375-73-8     PFAS by ID SOP     ND     3.8     0.95     nn       P	з/L 1
Hexafluoropropylene oxide dimer acid (GenX)     13252-13.6     PFAS by ID SOP     ND     7.6     1.9     n       4.8-dioxa-3H-perfluorononanoic acid (ADONA)     919005-14.4     PFAS by ID SOP     ND     7.6     1.9     n       N-ethylperfluoro-1-octanesulfonamido celic acid (EIFOSA)     4151-50-2     PFAS by ID SOP     ND     7.6     1.9     n       N-ethylperfluoro-1-octanesulfonamido-ethanol (EIFOSE)     1691-99-2     PFAS by ID SOP     ND     7.6     1.9     n       N-methylperfluoro-1-octanesulfonamido-ethanol (MeFOSA)     2355-14-9     PFAS by ID SOP     ND     7.6     1.9     n       Perfluoro-1-octanesulfonamido-ethanol (MeFOSA)     2355-17-9     PFAS by ID SOP     ND     7.6     1.9     n       Perfluoro-1-butanesulfonic acid (PFBS)     375-73-5     PFAS by ID SOP     ND     3.8     0.95     n       Perfluoro-1-butanesulfonic acid (PFDS)     375-73-5     PFAS by ID SOP     ND     3.8     0.95     n       Perfluoro-1-otanesulfonic acid (PFDS)     375-92-8     PFAS by ID SOP     ND     3.8     0.95     n       Perfluoro-1-otanesu	з/L 1
4.8-cloxa-3H-perfluorononanoic acid (ADONA)   919005-14-4   PFAS by ID SOP   ND   7.6   1.9   n     N-ethylperfluoro-1-octanesulfonamido etitra cid (EIFOSA)   2991-50-6   PFAS by ID SOP   ND   7.6   1.9   n     N-ethylperfluoro-1-octanesulfonamido acetic acid (EIFOSA)   2991-50-6   PFAS by ID SOP   ND   7.6   1.9   n     N-methylperfluoro-1-octanesulfonamido-ethanol (EIFOSE)   1491-99-2   PFAS by ID SOP   ND   7.6   1.9   n     N-methylperfluoro-1-octanesulfonamido-ethanol (MeFOSE)   235-31-9   PFAS by ID SOP   ND   7.6   1.9   n     2-N-methylperfluoro-1-octanesulfonamido-ethanol (MeFOSE)   24448-09-7   PFAS by ID SOP   ND   7.6   1.9   n     Perfluoro-1-butanesulfonic acid (PFDS)   335-73-5   PFAS by ID SOP   ND   3.8   0.95   n     Perfluoro-1-beptanesulfonic acid (PFPS)   375-92-8   PFAS by ID SOP   ND   3.8   0.95   n     Perfluoro-1-octanesulfonamide (PFOSA)   756-91-4   PFAS by ID SOP   ND   3.8   0.95   n     Perfluoro-1-octanesulfonic acid (PFNS)   2706-91-4   PFAS by ID SOP   ND<	з/L 1
N-ethylperfluoro-1-octanesulfonamide (EIFOSA)     4151-50-2     PFAS by ID SOP     ND     7.6     1.9     n       N-ethylperfluoro-1-octanesulfonamido-ethanol (EIFOSA)     2991-50-6     PFAS by ID SOP     ND     7.6     1.9     n       2-N-ethylperfluoro-1-octanesulfonamido-ethanol (EIFOSE)     1691-99-2     PFAS by ID SOP     ND     7.6     1.9     n       N-methylperfluoro-1-octanesulfonamido-ethanol (MeFOSA)     2355-31-9     PFAS by ID SOP     ND     7.6     1.9     n       N-methylperfluoro-1-octanesulfonamido-ethanol (MeFOSE)     24448-09-7     PFAS by ID SOP     ND     7.6     1.9     nn       Perfluoro-1-butanesulfonic acid (PFDS)     375-73-     PFAS by ID SOP     ND     3.8     0.95     nn       Perfluoro-1-heptanesulfonic acid (PFDS)     375-72-8     PFAS by ID SOP     ND     3.8     0.95     nn       Perfluoro-1-nonanesulfonic acid (PFDS)     66259-12-1     PFAS by ID SOP     ND     3.8     0.95     nn       Perfluoro-1-pentanesulfonic acid (PFDAS)     754-91-6     PFAS by ID SOP     ND     7.6     1.9     nn       Perfluor	з/L 1
N-ethylperfluoro-1-octanesulfonamidoacetic acid (EIFOSAA)     2991-50-6     PFAS by ID SOP     ND     7.6     1.9     n       2-N-ethylperfluoro-1-octanesulfonamido-ethanol (EIFOSE)     1691-99-2     PFAS by ID SOP     ND     7.6     1.9     n       N-methylperfluoro-1-octanesulfonamido-ethanol (MeFOSA)     31506-32.8     PFAS by ID SOP     ND     7.6     1.9     n       N-methylperfluoro-1-octanesulfonamido-ethanol (MeFOSE)     24448-09-7     PFAS by ID SOP     ND     7.6     1.9     n       Perfluoro-1-butanesulfonic acid (PFDS)     375-73-5     PFAS by ID SOP     ND     3.8     0.95     n       Perfluoro-1-hedeanesulfonic acid (PFDS)     375-73-8     PFAS by ID SOP     ND     3.8     0.95     n       Perfluoro-1-nonanesulfonic acid (PFDS)     375-92-8     PFAS by ID SOP     ND     3.8     0.95     n       Perfluoro-1-nonanesulfonic acid (PFDS)     6259-12-1     PFAS by ID SOP     ND     3.8     0.95     n       Perfluoro-1-pentanesulfonic acid (PFDS)     2706-91-4     PFAS by ID SOP     ND     3.8     0.95     n       Perfluoro-n-bu	з/L 1
2-N-ethylperfluoro-1-octanesulfonamido-ethanol (EIFOSE)     1691-99-2     PFAS by ID SOP     ND     7.6     1.9     n       N-methylperfluoro-1-octanesulfonamido (MeFOSA)     31506-32-8     PFAS by ID SOP     ND     15     3.8     n       N-methylperfluoro-1-octanesulfonamido-ethanol (MeFOSE)     24448-09-7     PFAS by ID SOP     ND     7.6     1.9     n       Perfluoro-1-octanesulfoni acid (PFBS)     375-73-5     PFAS by ID SOP     ND     3.8     0.95     n       Perfluoro-1-butanesulfonic acid (PFBS)     375-73-5     PFAS by ID SOP     ND     3.8     0.95     n       Perfluoro-1-hetanesulfonic acid (PFBS)     375-73-5     PFAS by ID SOP     ND     3.8     0.95     n       Perfluoro-1-hetanesulfonic acid (PFDS)     375-72-8     PFAS by ID SOP     ND     3.8     0.95     n       Perfluoro-1-octanesulfonamide (PFOSA)     75-64-8     PFAS by ID SOP     ND     3.8     0.95     n       Perfluoro-1-pentanesulfonic acid (PFDS)     2706-914     PFAS by ID SOP     ND     7.6     1.9     n       Perfluoro-n-betanesulfonic acid (PFHAS)	з/L 1
N-methylperfluoro-1-octanesulfonamidacetic acid (MeFOSA)     31506-32-8     PFAS by ID SOP     ND     15     3.8     n       N-methylperfluoro-1-octanesulfonamidacetic acid (MeFOSA)     2355-31-9     PFAS by ID SOP     ND     7.6     1.9     n       2-N-methylperfluoro-1-octanesulfonic acid (PFBS)     2448-09-7     PFAS by ID SOP     ND     7.6     1.9     n       Perfluoro-1-butanesulfonic acid (PFDS)     335-77-3     PFAS by ID SOP     ND     3.8     0.95     n       Perfluoro-1-heptanesulfonic acid (PFDS)     335-77-3     PFAS by ID SOP     ND     3.8     0.95     n       Perfluoro-1-heptanesulfonic acid (PFDS)     375-92-8     PFAS by ID SOP     ND     3.8     0.95     n       Perfluoro-1-octanesulfonic acid (PFDS)     66259-12-1     PFAS by ID SOP     ND     3.8     0.95     n       Perfluoro-1-octanesulfonic acid (PFDA)     746-91-4     PFAS by ID SOP     ND     7.6     1.9     n       Perfluoro-1-bettanesulfonic acid (PFDA)     355-46-4     PFAS by ID SOP     ND     7.6     1.9     n       Perfluoro-n-decanic acid (PFDA)	з/L 1
N-methylperfluoro-1-octanesulfonamido-ethanol (MeFOSA)     2355-31-9     PFAS by ID SOP     ND     7.6     1.9     n       2-N-methylperfluoro-1-octanesulfonic acid (PFBS)     375-73-5     PFAS by ID SOP     ND     7.6     1.9     n       Perfluoro-1-butanesulfonic acid (PFDS)     375-73-5     PFAS by ID SOP     ND     3.8     0.95     n       Perfluoro-1-heptanesulfonic acid (PFDS)     335-77-3     PFAS by ID SOP     ND     3.8     0.95     n       Perfluoro-1-neptanesulfonic acid (PFDS)     335-77-3     PFAS by ID SOP     ND     3.8     0.95     n       Perfluoro-1-nonanesulfonic acid (PFDS)     68259-12-1     PFAS by ID SOP     ND     3.8     0.95     n       Perfluoro-1-octanesulfonic acid (PFDS)     79780-39-5     PFAS by ID SOP     ND     7.6     1.9     n       Perfluoro-n-decanoic acid (PFDA)     375-22-8     PFAS by ID SOP     ND     7.6     1.9     n       Perfluoro-n-decanoic acid (PFDA)     79780-39-5     PFAS by ID SOP     ND     7.6     1.9     n       Perfluoro-n-decanoic acid (PFDA)     375-22-	з/L 1
2-N-methylperfluoro-1-octanesulfonamido-ethanol (MeFOSE)     24448-09-7     PFAS by ID SOP     ND     7.6     1.9     n       Perfluoro-1-butanesulfonic acid (PFBS)     375-73-5     PFAS by ID SOP     9.0     3.8     0.95     n       Perfluoro-1-butanesulfonic acid (PFDS)     335-77-3     PFAS by ID SOP     ND     3.8     0.95     n       Perfluoro-1-heptanesulfonic acid (PFDS)     68259-12-1     PFAS by ID SOP     ND     3.8     0.95     n       Perfluoro-1-octanesulfonamide (PFOSA)     754-91-6     PFAS by ID SOP     ND     3.8     0.95     n       Perfluoro-1-pentanesulfonic acid (PFDOS)     7076-91-4     PFAS by ID SOP     ND     3.8     0.95     n       Perfluoro-1-pentanesulfonic acid (PFDOS)     79780-39-5     PFAS by ID SOP     ND     7.6     1.9     n       Perfluoro-n-betanoic acid (PFDA)     355-46-4     PFAS by ID SOP     ND     3.8     0.95     n       Perfluoro-n-betanoic acid (PFDA)     375-22-4     PFAS by ID SOP     ND     3.8     0.95     n       Perfluoro-n-betanoic acid (PFDA)     375-51 <t< td=""><td>ј/L 1</td></t<>	ј/L 1
Perfluoro-1-butanesulfonic acid (PFBS)     375-73-5     PFAS by ID SOP     9.0     3.8     0.95     n.       Perfluoro-1-decanesulfonic acid (PFDS)     335-77-3     PFAS by ID SOP     ND     3.8     0.95     n.       Perfluoro-1-betanesulfonic acid (PFHpS)     375-92-8     PFAS by ID SOP     ND     3.8     0.95     n.       Perfluoro-1-nonanesulfonic acid (PFNS)     68259-12-1     PFAS by ID SOP     ND     3.8     0.95     n.       Perfluoro-1-octanesulfonic acid (PFOS)     754-91-6     PFAS by ID SOP     ND     3.8     0.95     n.       Perfluoro-1-pentanesulfonic acid (PFOS)     7778-91-6     PFAS by ID SOP     ND     7.6     1.9     n.       Perfluoro-1-pentanesulfonic acid (PFDOS)     79780-39-5     PFAS by ID SOP     ND     7.6     1.9     n.       Perfluoro-n-butanoic acid (PFDA)     355-46-4     PFAS by ID SOP     ND     3.8     0.95     n.       Perfluoro-n-butanoic acid (PFDA)     375-22-4     PFAS by ID SOP     ND     3.8     0.95     n.       Perfluoro-n-decanoic acid (PFDA)     375-51     PFAS by I	g/L 1
Perfluoro-1-decanesulfonic acid (PFDS)     335-77-3     PFAS by ID SOP     ND     3.8     0.95     n       Perfluoro-1-heptanesulfonic acid (PFHpS)     375-92-8     PFAS by ID SOP     ND     3.8     0.95     n       Perfluoro-1-nonanesulfonic acid (PFNS)     68259-12-1     PFAS by ID SOP     ND     3.8     0.95     n       Perfluoro-1-octanesulfonic acid (PFOSA)     754-91-6     PFAS by ID SOP     ND     3.8     0.95     n       Perfluoro-1-pentanesulfonic acid (PFDOS)     79780-39-5     PFAS by ID SOP     ND     7.6     1.9     n       Perfluoro-n-butanoic acid (PFDOS)     79780-39-5     PFAS by ID SOP     ND     7.6     1.9     n       Perfluoro-n-butanoic acid (PFDAS)     355-46-4     PFAS by ID SOP     ND     3.8     0.95     n       Perfluoro-n-butanoic acid (PFBA)     375-22-4     PFAS by ID SOP     ND     3.8     0.95     n       Perfluoro-n-decanoic acid (PFDA)     375-52-1     PFAS by ID SOP     ND     3.8     0.95     n       Perfluoro-n-heptanoic acid (PFHADA)     67905-19-5     PFAS by ID SOP	J∕L 1
Perfluoro-1-heptanesulfonic acid (PFHpS)     375-92-8     PFAS by ID SOP     ND     3.8     0.95     n       Perfluoro-1-nonanesulfonic acid (PFNS)     68259-12-1     PFAS by ID SOP     ND     3.8     0.95     n       Perfluoro-1-octanesulfonic acid (PFOSA)     754-91-6     PFAS by ID SOP     ND     3.8     0.95     n       Perfluoro-1-pentanesulfonic acid (PFDOS)     7706-91-4     PFAS by ID SOP     6.6     3.8     0.95     n       Perfluoro-1-pentanesulfonic acid (PFDOS)     79780-39-5     PFAS by ID SOP     ND     7.6     1.9     n       Perfluoro-n-bexanesulfonic acid (PFHxS)     355-46-4     PFAS by ID SOP     ND     3.8     0.95     n       Perfluoro-n-decanoic acid (PFHXS)     355-46-4     PFAS by ID SOP     ND     3.8     0.95     n       Perfluoro-n-decanoic acid (PFHA)     375-22-4     PFAS by ID SOP     ND     3.8     0.95     n       Perfluoro-n-decanoic acid (PFDA)     375-55-7     PFAS by ID SOP     ND     3.8     0.95     n       Perfluoro-n-heptanoic acid (PFDA)     375-55-7     PFAS by ID SOP<	g/L 1
Perfluoro-1-nonanesulfonic acid (PFNS)     68259-12-1     PFAS by ID SOP     ND     3.8     0.95     n       Perfluoro-1-octanesulfonamide (PFOSA)     754-91-6     PFAS by ID SOP     ND     3.8     0.95     n       Perfluoro-1-pentanesulfonic acid (PFDS)     2706-91-4     PFAS by ID SOP     6.6     3.8     0.95     n       Perfluorododecanesulfonic acid (PFDOS)     79780-39-5     PFAS by ID SOP     ND     7.6     1.9     n       Perfluorohexanesulfonic acid (PFDAS)     355-46-4     PFAS by ID SOP     12     3.8     0.95     n       Perfluoro-n-butanoic acid (PFBA)     375-22-4     PFAS by ID SOP     ND     3.8     0.95     n       Perfluoro-n-decanoic acid (PFDA)     335-76-2     PFAS by ID SOP     ND     3.8     0.95     n       Perfluoro-n-hetxanoic acid (PFDA)     307-55-1     PFAS by ID SOP     ND     3.8     0.95     n       Perfluoro-n-hexadecanoic acid (PFIDA)     375-85-9     PFAS by ID SOP     ND     3.8     0.95     n       Perfluoro-n-hexanoic acid (PFIDA)     377-95-1     PFAS by ID SOP	g/L 1
Perfluoro-1-octanesulfonamide (PFOSA)     754-91-6     PFAS by ID SOP     ND     3.8     0.95     n       Perfluoro-1-pentanesulfonic acid (PFPeS)     2706-91-4     PFAS by ID SOP     6.6     3.8     0.95     n       Perfluorododecanesulfonic acid (PFDOS)     79780-39-5     PFAS by ID SOP     ND     7.6     1.9     n       Perfluorohexanesulfonic acid (PFDA)     355-46-4     PFAS by ID SOP     12     3.8     0.95     n       Perfluoro-n-butanoic acid (PFDA)     355-46-4     PFAS by ID SOP     ND     3.8     0.95     n       Perfluoro-n-decanoic acid (PFDA)     355-76-2     PFAS by ID SOP     ND     3.8     0.95     n       Perfluoro-n-decanoic acid (PFDA)     307-55-1     PFAS by ID SOP     ND     3.8     0.95     n       Perfluoro-n-hexadecanoic acid (PFDA)     307-55-1     PFAS by ID SOP     ND     3.8     0.95     n       Perfluoro-n-hexadecanoic acid (PFHxA)     307-24-4     PFAS by ID SOP     ND     7.6     1.9     n       Perfluoro-n-nonanoic acid (PFNA)     375-95-1     PFAS by ID SOP     N	g/L 1
Perfluoro-1-pentanesulfonic acid (PFPeS)     2706-91-4     PFAS by ID SOP     6.6     3.8     0.95     n       Perfluorododecanesulfonic acid (PFDOS)     79780-39-5     PFAS by ID SOP     ND     7.6     1.9     n       Perfluorohexanesulfonic acid (PFHxS)     355-46-4     PFAS by ID SOP     12     3.8     0.95     n       Perfluoro-n-butanoic acid (PFBA)     375-22-4     PFAS by ID SOP     88     3.8     0.95     n       Perfluoro-n-decanoic acid (PFDA)     335-76-2     PFAS by ID SOP     ND     3.8     0.95     n       Perfluoro-n-decanoic acid (PFDA)     307-55-1     PFAS by ID SOP     ND     3.8     0.95     n       Perfluoro-n-heptanoic acid (PFDA)     307-55-1     PFAS by ID SOP     ND     3.8     0.95     n       Perfluoro-n-hexadecanoic acid (PFHxA)     307-24-4     PFAS by ID SOP     ND     3.8     0.95     n       Perfluoro-n-nonanoic acid (PFHxA)     307-24-4     PFAS by ID SOP     ND     3.8     0.95     n       Perfluoro-n-octanoic acid (PFNA)     375-95-1     PFAS by ID SOP     ND <td>g/L 1</td>	g/L 1
Perfluorododecanesulfonic acid (PFDOS)     79780-39-5     PFAS by ID SOP     ND     7.6     1.9     n       Perfluorohexanesulfonic acid (PFHxS)     355-46-4     PFAS by ID SOP     12     3.8     0.95     n       Perfluoro-n-butanoic acid (PFBA)     375-22-4     PFAS by ID SOP     88     3.8     0.95     n       Perfluoro-n-decanoic acid (PFDA)     335-76-2     PFAS by ID SOP     ND     3.8     0.95     n       Perfluoro-n-decanoic acid (PFDA)     307-55-1     PFAS by ID SOP     ND     3.8     0.95     n       Perfluoro-n-heptanoic acid (PFDA)     307-55-1     PFAS by ID SOP     ND     3.8     0.95     n       Perfluoro-n-heptanoic acid (PFHxA)     307-51-5     PFAS by ID SOP     ND     7.6     1.9     n       Perfluoro-n-hexanoic acid (PFHxA)     307-24-4     PFAS by ID SOP     ND     7.6     1.9     n       Perfluoro-n-nonanoic acid (PFNA)     375-95-1     PFAS by ID SOP     ND     3.8     0.95     n       Perfluoro-n-octadecanoic acid (PFNA)     375-95-1     PFAS by ID SOP     ND     <	j/L 1
Perfluorohexanesulfonic acid (PFHxS)     355-46-4     PFAS by ID SOP     12     3.8     0.95     n.       Perfluoro-n-butanoic acid (PFDA)     375-22-4     PFAS by ID SOP     88     3.8     0.95     n.       Perfluoro-n-decanoic acid (PFDA)     335-76-2     PFAS by ID SOP     ND     3.8     0.95     n.       Perfluoro-n-decanoic acid (PFDA)     307-55-1     PFAS by ID SOP     ND     3.8     0.95     n.       Perfluoro-n-heptanoic acid (PFDA)     307-55-1     PFAS by ID SOP     ND     3.8     0.95     n.       Perfluoro-n-heptanoic acid (PFDA)     375-85-9     PFAS by ID SOP     ND     3.8     0.95     n.       Perfluoro-n-hexadecanoic acid (PFHxDA)     67905-19-5     PFAS by ID SOP     ND     7.6     1.9     n.       Perfluoro-n-nonanoic acid (PFHxA)     307-24-4     PFAS by ID SOP     ND     3.8     0.95     n.       Perfluoro-n-nonanoic acid (PFNA)     375-95-1     PFAS by ID SOP     ND     3.8     0.95     n.       Perfluoro-n-octadecanoic acid (PFOA)     356-7-1     PFAS by ID SOP     ND	g/L 1
Perfluoro-n-butanoic acid (PFBA)375-22-4PFAS by ID SOP883.80.95nPerfluoro-n-decanoic acid (PFDA)335-76-2PFAS by ID SOPND3.80.95nPerfluoro-n-decanoic acid (PFDA)307-55-1PFAS by ID SOPND3.80.95nPerfluoro-n-heptanoic acid (PFHpA)375-85-9PFAS by ID SOPND3.80.95nPerfluoro-n-hexadecanoic acid (PFHxDA)67905-19-5PFAS by ID SOPND7.61.9nPerfluoro-n-hexanoic acid (PFHxA)307-24-4PFAS by ID SOPND3.80.95nPerfluoro-n-nonanoic acid (PFHxA)375-95-1PFAS by ID SOPND3.80.95nPerfluoro-n-nonanoic acid (PFDA)375-95-1PFAS by ID SOPND3.80.95nPerfluoro-n-octadecanoic acid (PFOA)375-95-1PFAS by ID SOPND3.80.95nPerfluoro-n-octadecanoic acid (PFOA)356-71PFAS by ID SOPND3.80.95nPerfluoro-n-pentanoic acid (PFOA)376-06-7PFAS by ID SOPND3.80.95nPerfluoro-n-tridecanoic acid (PFTeDA)376-06-7PFAS by ID SOPND3.80.95nPerfluoro-n-tridecanoic acid (PFTrDA)72629-94-8PFAS by ID SOPND3.80.95nPerfluoro-n-tridecanoic acid (PFTrDA)2760-04-3PFAS by ID SOPND3.80.95nPerfluoro-n-tridecanoic acid (PFTrDA)2760-04-8PFAS by ID SOPND<	J∕L 1
Perfluoro-n-decanoic acid (PFDA)335-76-2PFAS by ID SOPND3.80.95nPerfluoro-n-dodecanoic acid (PFDoA)307-55-1PFAS by ID SOPND3.80.95nPerfluoro-n-heptanoic acid (PFHpA)375-85-9PFAS by ID SOPND3.80.95nPerfluoro-n-hexadecanoic acid (PFHxA)67905-19-5PFAS by ID SOPND7.61.9nPerfluoro-n-hexanoic acid (PFHxA)307-24-4PFAS by ID SOPND3.80.95nPerfluoro-n-nonanoic acid (PFNA)375-95-1PFAS by ID SOPND3.80.95nPerfluoro-n-octadecanoic acid (PFOA)16517-11-6PFAS by ID SOPND7.61.9nPerfluoro-n-pentanoic acid (PFOA)335-67-1PFAS by ID SOPND3.80.95nPerfluoro-n-tetradecanoic acid (PFDA)376-06-7PFAS by ID SOPND3.80.95nPerfluoro-n-tetradecanoic acid (PFTeDA)376-06-7PFAS by ID SOPND3.80.95nPerfluoro-n-tidecanoic acid (PFTrDA)72629-94-8PFAS by	J∕L 1
Perfluoro-n-dodecanoic acid (PFDoA)     307-55-1     PFAS by ID SOP     ND     3.8     0.95     n       Perfluoro-n-heptanoic acid (PFHpA)     375-85-9     PFAS by ID SOP     ND     3.8     0.95     n       Perfluoro-n-hexadecanoic acid (PFHxDA)     67905-19-5     PFAS by ID SOP     ND     7.6     1.9     n       Perfluoro-n-hexanoic acid (PFHxA)     307-24-4     PFAS by ID SOP     ND     3.8     0.95     n       Perfluoro-n-nexanoic acid (PFNA)     307-24-4     PFAS by ID SOP     ND     3.8     0.95     n       Perfluoro-n-nexanoic acid (PFNA)     307-24-4     PFAS by ID SOP     ND     3.8     0.95     n       Perfluoro-n-noctacid cacid (PFNA)     375-95-1     PFAS by ID SOP     ND     3.8     0.95     n       Perfluoro-n-octadecanoic acid (PFOA)     16517-11-6     PFAS by ID SOP     ND     3.8     0.95     n       Perfluoro-n-pentanoic acid (PFOA)     335-67-1     PFAS by ID SOP     ND     3.8     0.95     n       Perfluoro-n-tertadecanoic acid (PFPA)     2706-90-3     PFAS by ID SOP     ND	J∕L 1
Perfluoro-n-heptanoic acid (PFHpA)     375-85-9     PFAS by ID SOP     ND     3.8     0.95     n       Perfluoro-n-hexadecanoic acid (PFHxDA)     67905-19-5     PFAS by ID SOP     ND     7.6     1.9     n       Perfluoro-n-hexanoic acid (PFHxA)     307-24-4     PFAS by ID SOP     1.3     J     3.8     0.95     n       Perfluoro-n-hexanoic acid (PFNA)     307-24-4     PFAS by ID SOP     1.3     J     3.8     0.95     n       Perfluoro-n-nonanoic acid (PFNA)     375-95-1     PFAS by ID SOP     ND     3.8     0.95     n       Perfluoro-n-octadecanoic acid (PFODA)     16517-11-6     PFAS by ID SOP     ND     7.6     1.9     n       Perfluoro-n-octanoic acid (PFOA)     335-67-1     PFAS by ID SOP     ND     3.8     0.95     n       Perfluoro-n-pentanoic acid (PFOA)     376-06-7     PFAS by ID SOP     ND     3.8     0.95     n       Perfluoro-n-titeradecanoic acid (PFTeDA)     376-06-7     PFAS by ID SOP     ND     3.8     0.95     n       Perfluoro-n-tridecanoic acid (PFTrDA)     72629-94-8	J∕L 1
Perfluoro-n-hexadecanoic acid (PFHxDA)     67905-19-5     PFAS by ID SOP     ND     7.6     1.9     n       Perfluoro-n-hexanoic acid (PFHxA)     307-24-4     PFAS by ID SOP     1.3     J     3.8     0.95     n       Perfluoro-n-nonanoic acid (PFNA)     375-95-1     PFAS by ID SOP     ND     3.8     0.95     n       Perfluoro-n-octadecanoic acid (PFODA)     16517-11-6     PFAS by ID SOP     ND     7.6     1.9     n       Perfluoro-n-octadecanoic acid (PFODA)     16517-11-6     PFAS by ID SOP     ND     3.8     0.95     n       Perfluoro-n-octanoic acid (PFOA)     335-67-1     PFAS by ID SOP     ND     3.8     0.95     n       Perfluoro-n-pentanoic acid (PFPA)     2706-90-3     PFAS by ID SOP     ND     3.8     0.95     n       Perfluoro-n-tetradecanoic acid (PFTeDA)     376-06-7     PFAS by ID SOP     ND     3.8     0.95     n       Perfluoro-n-tridecanoic acid (PFTrDA)     72629-94-8     PFAS by ID SOP     ND     3.8     0.95     n       Pathers p. undecannic acid (PFTrDA)     72629-94-8     PFAS	J∕L 1
Perfluoro-n-hexanoic acid (PFHxA)     307-24-4     PFAS by ID SOP     1.3     J     3.8     0.95     n.       Perfluoro-n-nonanoic acid (PFNA)     375-95-1     PFAS by ID SOP     ND     3.8     0.95     n.       Perfluoro-n-octadecanoic acid (PFODA)     16517-11-6     PFAS by ID SOP     ND     7.6     1.9     n.       Perfluoro-n-octanoic acid (PFOA)     335-67-1     PFAS by ID SOP     ND     3.8     0.95     n.       Perfluoro-n-pentanoic acid (PFOA)     335-67-1     PFAS by ID SOP     ND     3.8     0.95     n.       Perfluoro-n-pentanoic acid (PFPeA)     2706-90-3     PFAS by ID SOP     ND     3.8     0.95     n.       Perfluoro-n-tetradecanoic acid (PFTeDA)     376-06-7     PFAS by ID SOP     ND     3.8     0.95     n.       Perfluoro-n-tridecanoic acid (PFTrDA)     72629-94-8     PFAS by ID SOP     ND     3.8     0.95     n.       Perfluoro-n-tridecanoic acid (PFTrDA)     72629-94-8     PFAS by ID SOP     ND     3.8     0.95     n.       Perfluoro-n-tridecanoic acid (PFTrDA)     72629-94-8 <t< td=""><td>J∕L 1</td></t<>	J∕L 1
Perfluoro-n-nonanoic acid (PFNA)     375-95-1     PFAS by ID SOP     ND     3.8     0.95     n       Perfluoro-n-octadecanoic acid (PFODA)     16517-11-6     PFAS by ID SOP     ND     7.6     1.9     n       Perfluoro-n-octadecanoic acid (PFOA)     335-67-1     PFAS by ID SOP     ND     3.8     0.95     n       Perfluoro-n-octanoic acid (PFOA)     335-67-1     PFAS by ID SOP     ND     3.8     0.95     n       Perfluoro-n-pentanoic acid (PFPeA)     2706-90-3     PFAS by ID SOP     ND     3.8     0.95     n       Perfluoro-n-tetradecanoic acid (PFTeDA)     376-06-7     PFAS by ID SOP     ND     3.8     0.95     n       Perfluoro-n-tridecanoic acid (PFTrDA)     72629-94-8     PFAS by ID SOP     ND     3.8     0.95     n       Perfluoro-n-tridecanoic acid (PFTrDA)     72629-94-8     PFAS by ID SOP     ND     3.8     0.95     n       Perfluoro-n-tridecanoic acid (PFTrDA)     72629-94-8     PFAS by ID SOP     ND     3.8     0.95     n	J∕L 1
Perfluoro-n-octadecanoic acid (PFODA)     16517-11-6     PFAS by ID SOP     ND     7.6     1.9     n       Perfluoro-n-octanoic acid (PFOA)     335-67-1     PFAS by ID SOP     ND     3.8     0.95     n       Perfluoro-n-pentanoic acid (PFPeA)     2706-90-3     PFAS by ID SOP     ND     3.8     0.95     n       Perfluoro-n-tetradecanoic acid (PFTeDA)     376-06-7     PFAS by ID SOP     ND     3.8     0.95     n       Perfluoro-n-tridecanoic acid (PFTrDA)     72629-94-8     PFAS by ID SOP     ND     3.8     0.95     n       Pacfluoro n- tridecanoic acid (PFTrDA)     72629-94-8     PFAS by ID SOP     ND     3.8     0.95     n       Pacfluoro n- tridecanoic acid (PFTrDA)     72629-94-8     PFAS by ID SOP     ND     3.8     0.95     n	J∕L 1
Perfluoro-n-octanoic acid (PFOA)     335-67-1     PFAS by ID SOP     ND     3.8     0.95     n       Perfluoro-n-pentanoic acid (PFPeA)     2706-90-3     PFAS by ID SOP     ND     3.8     0.95     n       Perfluoro-n-pentanoic acid (PFTeDA)     376-06-7     PFAS by ID SOP     ND     3.8     0.95     n       Perfluoro-n-tietradecanoic acid (PFTeDA)     376-06-7     PFAS by ID SOP     ND     3.8     0.95     n       Perfluoro-n-tridecanoic acid (PFTrDA)     72629-94-8     PFAS by ID SOP     ND     3.8     0.95     n       Defluoro n-tridecanoic acid (PFTrDA)     72629-94-8     PFAS by ID SOP     ND     3.8     0.95     n       Defluoro n-tridecanoic acid (PFTrDA)     72629-94-8     PFAS by ID SOP     ND     3.8     0.95     n	J/L 1
Perfluoro-n-pentanoic acid (PFPeA)     2706-90-3     PFAS by ID SOP     ND     3.8     0.95     n       Perfluoro-n-tetradecanoic acid (PFTeDA)     376-06-7     PFAS by ID SOP     ND     3.8     0.95     n       Perfluoro-n-tridecanoic acid (PFTrDA)     376-06-7     PFAS by ID SOP     ND     3.8     0.95     n       Perfluoro-n-tridecanoic acid (PFTrDA)     72629-94-8     PFAS by ID SOP     ND     3.8     0.95     n       Defluoro-n-tridecanoic acid (PFTrDA)     72629-94-8     PFAS by ID SOP     ND     3.8     0.95     n	J/L 1
Perfluoro-n-tetradecanoic acid (PFTeDA)     376-06-7     PFAS by ID SOP     ND     3.8     0.95     n       Perfluoro-n-tridecanoic acid (PFTrDA)     72629-94-8     PFAS by ID SOP     ND     3.8     0.95     n       Derfluoro-n-tridecanoic acid (PFTrDA)     72629-94-8     PFAS by ID SOP     ND     3.8     0.95     n       Derfluoro-n-tridecanoic acid (PFTrDA)     72629-94-8     PFAS by ID SOP     ND     3.8     0.95     n	]/L I
Perfluoro-n-tridecanoic acid (PFTrDA)     72629-94-8     PFAS by ID SOP     ND     3.8     0.95     n       Defluoro-n-tridecanoic acid (PFTrDA)     2050.04.9     DE66 by ID SOP     ND     3.8     0.95     n	]/L I
	J/L 1
Perindoro-in-undecanoic acid (PF0dA) 2058-94-8 PFAS by ID SOP ND 3.8 ().95 II	]/L I
Perfluorooctanesultonic acid (PFOS) 1763-23-1 PFAS by ID SOP 6.5 3.8 0.95 h	j/∟ I
Surrogate Q % Recovery Limits	
13C2_4:2FTS 101 25-150	
T3C2_6:2F1S     104     25-150	
T3C2_8:2F1S     107     25-150	
T3C2_PF DoA     95     25-150	
13U2_PFHXDA 94 25-150	
1302_PFTeDA 100 25-150	
LOQ = Limit of Quantitation   B = Detected in the method blank   E = Quantitation of compound exceeded the calibration range   DL = Detection Limit     ND = Not detected at or above the DL   N = Recovery is out of criteria   P = The RPD between two GC columns exceeds 40%   J = Estimated result < LOQ and > DL	

Client: Pace Analytical Services, LLC		Laboratory ID: VK03016-013
Description: DUP #2		Matrix: Aqueous
Date Sampled:10/29/2020 1535	Project Name: LACROSSE WELL #23 & 24	
Date Received: 11/03/2020	Project Number: 40217496	

Surrogate	Run 1 Ac Q % Recovery	cceptance Limits
13C3_PFBS	91	25-150
13C3_PFHxS	95	25-150
13C3-HFPO-DA	99	25-150
13C4_PFBA	98	25-150
13C4_PFHpA	95	25-150
13C5_PFHxA	101	25-150
13C5_PFPeA	100	25-150
13C6_PFDA	99	25-150
13C7_PFUdA	94	25-150
13C8_PFOA	103	25-150
13C8_PFOS	82	25-150
13C8_PFOSA	106	10-150
13C9_PFNA	96	25-150
d-EtFOSA	89	10-150
d5-EtFOSAA	91	25-150
d9-EtFOSE	90	10-150
d-MeFOSA	88	10-150
d3-MeFOSAA	98	25-150
d7-MeFOSE	95	10-150

H = Out of holding time	W = Reported on wet weight basis		
ND = Not detected at or above the DL	N = Recovery is out of criteria	P = The RPD between two GC columns exceeds 40%	J = Estimated result < LOQ and $\geq$ DL
LOQ = Limit of Quantitation	B = Detected in the method blank	E = Quantitation of compound exceeded the calibration range	DL = Detection Limit



444 21st Street South · La Crosse, Wisconsin · 54601

November 23, 2020

### 2533 1st Avenue East La Crosse, WI 54603

Subject: Private Well Sampling Results 2533 1st Avenue East, La Crosse, WI 54603 Tax parcel # 4-251-0 Sample ID # 251-0

### Dear

We have received and reviewed the test results for the sample collected on October 29, 2020 at the above address. Some PFAS compounds were found at levels <u>above</u> the Department of Health Services (DHS) levels recommended for protecting health. These levels are called the "Recommended Public Health Standard" in the table below. The levels found in your well are called the "Sample Result" in the table below.

Because some of the levels are above the recommended Public Health Standard, the City is offering to provide bottled water delivered to your home for drinking, cooking, and brushing your teeth. There will be no cost to you for the bottled water. Please complete the attached form and mail it to The OS Group to make arrangements for having a water dispenser and bottles delivered to your home. Call 608-668-2718 or email <u>PFAS@theOSgrp.com</u>. You may also complete this form on line at www.cityoflacrosse.org/bottledwater

The following table summarizes the test results from the sample. **Bolded results** are above a current recommended level intended to protect your health according to the Department of Health Services (DHS).

Private Well Sampling Results for 2533 1st Avenue East, La Crosse, WI 54603 Tax parcel # 4-251-0 Sample ID # 251-0 November 23, 2020

### Sample Results

Compound	Sample Result (unit)	Recomm Public H Standard	ended lealth (unit <sup>e</sup> )
N-Ethyl Perfluorooctane sulfonamide (NEtFOSA) CAS # 4151-50-2	Not Detected	20 ppt <sup>a,b</sup> td spun	
N-Ethyl perfluorooctane sulfonamidoacetic acid (NEtFOSAA) CAS # 2991-50-6	Not Detected	20 ppt <sup>a,b</sup>	
N-Ethyl perfluorooctane sulfonamidoethanol (NEtFOSE) CAS # 1691-99-2	Not Detected	20 ppt <sup>a,b</sup> 20 ppt <sup>a,b</sup>	
Perfluorooctane sulfonamide (FOSA) CAS # 754-91-6	Not Detected	20 ppt <sup>a,b</sup>	mend of the ombine
Perfluorooctanoic acid (PFOA) CAS # 335-67-1	70 ppt	20 ppt <sup>a,b</sup>	recom ny <i>on€</i> the <i>c</i> c
Perfluorooctanesulfonic acid (PFOS) CAS # 1763-23-1	1300 ppt	20 ppt <sup>a,b</sup>	The for a or
Hexafluoropropylene oxide dimer acid (HPFO-DA; GenX) CAS # 13252-13-6	Not Detected		300 ppt <sup>a</sup>
Perfluorobutanesulfonic acid (PFBS) CAS # 375-73-5	39 ppt	450,000 ppt <sup>a</sup>	
Perfluorohexanesulfonic acid (PFHxS) CAS # 355-46-4	1900 ppt		40 ppt <sup>a</sup>
Perfluorobutanoic acid (PFBA) CAS # 375-22-4	33 ppt	10	0,000 ppt <sup>a</sup>
Perfluorodecanoic acid (PFDA) CAS # 335-76-2	Not Detected	300 ppt <sup>a</sup>	
Perfluorododecanoic acid (PFDoA) CAS # 307-55-1	Not Detected	500 ppt <sup>a</sup>	
Perfluorohexanoic acid (PFHxA) CAS # 307-24-4	37 ppt	150,000 ppt <sup>a</sup>	
Perfluorononanoic acid (PFNA) CAS # 375-95-1	Not Detected	30 ppt <sup>a</sup>	
Perfluorotetradecanoic acid (PFTeA) CAS # 376-06-7	Not Detected	10,000 ppt <sup>a</sup>	
Perfluoroundecanoic acid (PFUnA) CAS # 2058-94-8	Not Detected	3,000 ppt <sup>a</sup>	

Private Well Sampling Results for 2533 1st Avenue East, La Crosse, WI 54603 Tax parcel # 4-251-0 Sample ID # 251-0 November 23, 2020

4,8-Dioxa-3H-perfluorononanoic acid (DONA) CAS # 919005-14-4	Not Detected	3,000 ppt <sup>a</sup>
Perfluorooctadecanoic acid (PFODA) CAS # 16517-11-6	Not Detected	400,000 ppt <sup>a</sup>
Perfluoro-1-hetanesulfonic acid (PFHpS) CAS # 375-92-8	110 ppt	None Established <sup>c</sup>
Perfluoro-1-pentanesulfonic acid (PFPeS) CAS # 2706-91-4	120 ppt	None Established <sup>c</sup>
Perfluoro-n-heptanoic acid (PFHpA) CAS # 375-85-9	6.8 ppt	None Established <sup>c</sup>
Perfluoro-n-pentanoic acid (PFPeA) CAS #2706-90-3	8.9 ppt	None Established <sup>c</sup>

<sup>a</sup> Public health enforcement standard (ES) recommended by DHS.

<sup>b</sup> DHS recommends a combined enforcement standard of 20 ng/L and combined preventive action limit of 2 ng/L for FOSA, NEt-FOSA, NetFOSAA, PFOS, and PFOA.

<sup>c</sup> A current standard is not available; the compound is currently under review by DHS for potential public health standard recommendation.

<sup>d</sup> Public health enforcement standard (ES) in NR 140, Wisconsin Administrative Code.

<sup>e</sup> Units: Parts per trillion (ppt) = nanograms of substance per liter of water (ng/L)

<sup>BL</sup> Detected in the method blank. Possible lab contaminant.

As required by law, we will be submitting these results to the Department of Natural Resources (DNR). The DNR may consult with the Department of Health Services (DHS) about these test results. DHS may review all PFAS tests and follow-up with you directly if any actions are recommended to protect your health.

Thank you for your patience and assistance with our investigation. We will provide updates on the project at <u>https://www.cityoflacrosse.org/wells</u> as our work continues. If you have any questions, please call The OS Group at (608) 668-2718 or email them at <u>PFAS@theOSgrp.com</u>.
Private Well Sampling Results for 2533 1st Avenue East, La Crosse, WI 54603 Tax parcel # 4-251-0 Sample ID # 251-0 November 23, 2020

You can also contact the DNR and DHS with questions about PFAS or the water sample results at the numbers provided below.

Questions about		<u>Contact</u>	<u>Phone</u>	<u>E-mail Address</u>
Soil & Groundwater Testing, Clean Up	DNR	David Rozeboom	715-215-2078	David.Rozeboom@wisconsin.gov
Drinking Water or Private wells	DNR	Kyle Burton	920-360-2112	kyle.burton@wisconsin.gov
Health Concerns	DHS	Curtis Hedman	608-266-6677	Curtis.Hedman@dhs.wisconsin.gov

On behalf of The City of La Crosse The OS Group, LLC

Attachment: Lab report for your well Bottled Water Acknowledgement Form

Client: Pace Analytical Services, LLC				Laboratory ID	D: VK03016-	012	
Description: 251-0				Matrix	: Aqueous		
Date Sampled:10/29/2020 1530	Project Nam	e: LACROSSE WELL #	<sup>‡</sup> 23 & 24		•		
Date Received: 11/03/2020	, Proiect Numbe	or: 40217496					
		1. 402 17 470					
Run Prep Method Analytical Method	Dilution A	nalysis Date Analyst	Prep Date	Batch			
1 SOP SPE PEAS by ID SOP	I II E 11	/12/2020 1005 IVIIVIIVI	11/11/2020 1	108 73005			
2 SOF SPE PFAS by ID SOF	5 11	113/2020 1907 KIVIIVIZ	11/11/2020 1	106 / 3005			
Parameter	CAS Numbe	S Analytical r Method	Result Q	LOQ	DL	Units	Run
9-chlorohexadecafluoro-3-oxanone-1-sulfonic acid (9CI-PF3ONS	) 756426-58	1 PFAS by ID SOP	ND	7.0	1.7	ng/L	1
11-chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11CI-PF3.	) 763051-92-	9 PFAS by ID SOP	ND	7.0	1.7	ng/L	1
1H, 1H, 2H, 2H-perfluorodecane sulfonic acid (8:2 FTS)	39108-34	4 PFAS by ID SOP	ND	7.0	1.7	ng/L	1
1H, 1H, 2H, 2H-perfluorooctane sulfonic acid (6:2 FTS)	27619-97-	2 PFAS by ID SOP	ND	7.0	1.7	ng/L	1
1H,1H,2H,2H-perfluorododecane sulfonic acid (10:2 FTS)	120226-60-	0 PFAS by ID SOP	ND	7.0	1.7	ng/L	1
1H,1H,2H,2H-perfluorohexane sulfonic acid (4:2 FTS)	757124-72	4 PFAS by ID SOP	ND	7.0	1.7	ng/L	1
Hexafluoropropylene oxide dimer acid (GenX)	13252-13-	6 PFAS by ID SOP	ND	7.0	1.7	ng/L	1
4,8-dioxa-3H-perfluorononanoic acid (ADONA)	919005-14-	4 PFAS by ID SOP	ND	7.0	1.7	ng/L	1
N-ethylperfluoro-1-octanesulfonamide (EtFOSA)	4151-50-	2 PFAS by ID SOP	ND	7.0	1.7	ng/L	1
N-ethylperfluoro-1-octanesulfonamidoacetic acid (EtFOSAA)	2991-50-	6 PFAS by ID SOP	ND	7.0	1.7	ng/L	1
2-N-ethylperfluoro-1-octanesulfonamido-ethanol (EtFOSE)	1691-99-	2 PFAS by ID SOP	ND	7.0	1.7	ng/L	1
N-methylperfluoro-1-octanesulfonamide (MeFOSA)	31506-32-	8 PFAS by ID SOP	ND	14	3.5	ng/L	1
N-methylperfluoro-1-octanesulfonamidoacetic acid (MeFOSAA)	2355-31-	9 PFAS by ID SOP	ND	7.0	1.7	ng/L	1
2-N-methylperfluoro-1-octanesulfonamido-ethanol (MeFOSE)	24448-09-	7 PFAS by ID SOP	ND	7.0	1.7	ng/L	1
Perfluoro-1-butanesulfonic acid (PFBS)	375-73-	5 PFAS by ID SOP	39	3.5	0.87	ng/L	1
Perfluoro-1-decanesulfonic acid (PFDS)	335-77-	3 PFAS by ID SOP	ND	3.5	0.87	ng/L	1
Perfluoro-1-heptanesulfonic acid (PFHpS)	375-92-	8 PFAS by ID SOP	110	3.5	0.87	ng/L	1
Perfluoro-1-nonanesulfonic acid (PFNS)	68259-12-	1 PFAS by ID SOP	ND	3.5	0.87	ng/L	1
Perfluoro-1-octanesulfonamide (PFOSA)	754-91-	6 PFAS by ID SOP	ND	3.5	0.87	ng/L	1
Perfluoro-1-pentanesulfonic acid (PFPeS)	2706-91-	4 PFAS by ID SOP	120	3.5	0.87	ng/L	1
Perfluorododecanesulfonic acid (PFDOS)	79780-39	5 PFAS by ID SOP	ND	7.0	1.7	ng/L	1
Perfluorohexanesulfonic acid (PFHxS)	355-46-	4 PFAS by ID SOP	1900	17	4.4	ng/L	2
Perfluoro-n-butanoic acid (PFBA)	375-22-	4 PFAS by ID SOP	33	3.5	0.87	ng/L	1
Perfluoro-n-decanoic acid (PFDA)	335-76-	2 PFAS by ID SOP	ND	3.5	0.87	ng/L	1
Perfluoro-n-dodecanoic acid (PFDoA)	307-55-	1 PFAS by ID SOP	ND	3.5	0.87	ng/L	1
Perfluoro-n-heptanoic acid (PFHpA)	375-85-	9 PFAS by ID SOP	6.8	3.5	0.87	ng/L	1
Perfluoro-n-hexadecanoic acid (PFHxDA)	67905-19-	5 PFAS by ID SOP	ND	7.0	1.7	ng/L	1
Perfluoro-n-hexanoic acid (PFHxA)	307-24-	4 PFAS by ID SOP	37	3.5	0.87	ng/L	1
Perfluoro-n-nonanoic acid (PFNA)	375-95-	1 PFAS by ID SOP	ND	3.5	0.87	ng/L	1
Perfluoro-n-octadecanoic acid (PFODA)	16517-11-	6 PFAS by ID SOP	ND	7.0	1.7	ng/L	1
Perfluoro-n-octanoic acid (PFOA)	335-67-	1 PFAS by ID SOP	70	3.5	0.87	ng/L	1
Perfluoro-n-pentanoic acid (PFPeA)	2706-90-	3 PFAS by ID SOP	8.9	3.5	0.87	ng/L	1
Perfluoro-n-tetradecanoic acid (PFTeDA)	376-06-	7 PFAS by ID SOP	ND	3.5	0.87	ng/L	1
Perfluoro-n-tridecanoic acid (PFTrDA)	72629-94	8 PFAS by ID SOP	ND	3.5	0.87	ng/L	1
Perfluoro-n-undecanoic acid (PFUdA)	2058-94-	8 PFAS by ID SOP	ND	3.5	0.87	ng/L	1
Perfluorooctanesulfonic acid (PFOS)	1763-23-	1 PFAS by ID SOP	1300	17	4.4	ng/L	2
		entance Dur	2 Acconta				
Surrogate Q % R	lecovery I	Limits Q % Rec	overy Limits	S			

Surrogate	Q %	Recovery	Limits	Q	% Recovery	Limits
13C2_4:2FTS		98	25-150		98	25-150
13C2_6:2FTS		89	25-150		111	25-150
13C2_8:2FTS		91	25-150		108	25-150
13C2_PFDoA		93	25-150		93	25-150
13C2_PFHxDA		93	25-150		100	25-150
LOQ = Limit of Quantitation	B = Detected in the method blan	k E = Quantil	ation of compo	und exc	ceeded the calibration	range DL = Detection Limit
ND = Not detected at or above the DL H = Out of holding time	N = Recovery is out of criteria W = Reported on wet weight bas	P = The RF	PD between two	J = Estimated result < LOQ and $\geq$ DL		

Pace Analytical Services, LLC (formerly Shealy Environmental Services, Inc.) 106 Vantage Point Drive West Columbia, SC 29172 (803) 791-9700 Fax (803) 791-9111 www.pacelabs.com

Project Number: 40217496

Client: Pace Analytical Services, LLC Description: 251-0 Date Sampled:10/29/2020 1530 Date Received: 11/03/2020

Project Name: LACROSSE WELL #23 & 24

Laboratory ID: VK03016-012

Matrix: Aqueous

Surrogate	Q	% Recoverv	Limits	Q	Run 2 A % Recoverv	Limits
13C2_PFTeDA		90	25-150	_	102	25-150
13C3_PFBS		92	25-150		94	25-150
13C3_PFHxS		78	25-150		98	25-150
13C3-HFPO-DA		100	25-150		110	25-150
13C4_PFBA		96	25-150		99	25-150
13C4_PFHpA		92	25-150		92	25-150
13C5_PFHxA		95	25-150		97	25-150
13C5_PFPeA		99	25-150		98	25-150
13C6_PFDA		100	25-150		95	25-150
13C7_PFUdA		90	25-150		95	25-150
13C8_PFOA		93	25-150		93	25-150
13C8_PFOS		89	25-150		90	25-150
13C8_PFOSA		105	10-150		110	10-150
13C9_PFNA		92	25-150		96	25-150
d-EtFOSA		78	10-150		98	10-150
d5-EtFOSAA		95	25-150		98	25-150
d9-EtFOSE		97	10-150		101	10-150
d-MeFOSA		87	10-150		98	10-150
d3-MeFOSAA		99	25-150		105	25-150
d7-MeFOSE		87	10-150		99	10-150

LOQ = Limit of QuantitationB = Detected in the method blankE = Quantitation of compound exceeded the calibration rangeDL = Detection LimitND = Not detected at or above the DLN = Recovery is out of criteriaP = The RPD between two GC columns exceeds 40%J = Estimated result < LOQ and ≥ DL</td>H = Out of holding timeW = Reported on wet weight basis

 Pace Analytical Services, LLC (formerly Shealy Environmental Services, Inc.)

 106 Vantage Point Drive
 West Columbia, SC 29172 (803) 791-9700 Fax (803) 791-9111 www.pacelabs.com

## BOTTLED WATER ACKNOWLEDGEMENT

2533 1st Avenue East, La Crosse, WI 54603

If you desire to accept the bottled water delivery, please complete and sign this form and return it to The OS Group at <u>PFAS@TheOSgrp.com</u> or mail to 444 21<sup>st</sup> St. S, La Crosse, WI 54601. You may also complete this form electronically on line at <u>www.cityoflacrosse.org/bottledwater</u>. Call 608-668-2718 with any question you may have.

As pre-caution for the protection of human health, the City of La Crosse (The City) will provide, on a temporary basis, bottled water for drinking, cooking and toothbrushing purposes at the above referenced address. The water will be delivered to your home or business by a commercial water delivery service. At the City's cost, a dispenser / cooler and regular deliveries of 5-gallon containers of water will be provided. The City reserves the right to dictate the conditions of delivery, such as minimum and maximum number of containers per delivery, frequency and timing of deliveries. The City reserves the right to periodically review whether The City should continue to provide bottled water, considering factors such as State and Federal standards and guidance, evolving knowledge and understanding of the sources, cause and responsibility for the contamination, new or reinterpreted test results, and the availability of more permanent or cost-effective sources of water for the above purposes. The City of La Crosse makes no warranty or representation regarding the suitability of the bottled water beyond those made by the commercial water delivery service.

Check ownership: \_\_\_\_\_ Owner-Occupant \_\_\_\_\_ Occupant Only

Number of Occupants: \_\_\_\_\_

All reusable or returnable equipment and supplies, such as the containers and cooler/dispenser, are the property of the commercial water delivery service or the City of La Crosse. By signing below, the Occupant of the above referenced property acknowledges that all reusable or returnable equipment and supplies shall be returned to the commercial water delivery service or the City of La Crosse upon request. The Occupant agrees to provide reasonable access for delivery of bottled water and pick up of reusable or returnable equipment and supplies. Occupant(s) acknowledges that they may be required to sign an agreement with the commercial water delivery service as a condition of receiving bottled water.

Signed:	Dated:

Printed Name: \_\_\_\_\_



444 21st Street South · La Crosse, Wisconsin · 54601

November 23, 2020

2529 Bainbridge Street La Crosse, WI 54603

Subject: Private Well Sampling Results 2529 Bainbridge Street, La Crosse, WI 54603 Tax parcel # 4-329-0 Sample ID # 329-0

Dear

We have received and reviewed the test results for the sample collected on October 29, 2020 at the above address. Some PFAS compounds were found at levels <u>above</u> the Department of Health Services (DHS) levels recommended for protecting health. These levels are called the "Recommended Public Health Standard" in the table below. The levels found in your well are called the "Sample Result" in the table below.

Because some of the levels are above the recommended Public Health Standard, the City is offering to provide bottled water delivered to your home for drinking, cooking, and brushing your teeth. There will be no cost to you for the bottled water. Please complete the attached form and mail it to The OS Group to make arrangements for having a water dispenser and bottles delivered to your home or business. Call 608-668-2718 or email <u>PFAS@theOSgrp.com</u>. You may also complete this form on line at www.cityoflacrosse.org/bottledwater

The following table summarizes the test results from the sample. **Bolded results** are above a current recommended level intended to protect your health according to the Department of Health Services (DHS).

Private Well Sampling Results for 2529 Bainbridge Street, La Crosse, WI 54603 Tax parcel # 4-329-0 Sample ID # 329-0 November 23, 2020

Compound	Sample Result (unit)	Recomm Public H Standard	ended Iealth (unit <sup>e</sup> )	
N-Ethyl Perfluorooctane sulfonamide (NEtFOSA) CAS # 4151-50-2	Not Detected	20 ppt <sup>a,b</sup>	) ppt unds I 6	
N-Ethyl perfluorooctane sulfonamidoacetic acid (NEtFOSAA) CAS # 2991-50-6	Not Detected	20 ppt <sup>a,b</sup>	it is 20 compo <i>x</i> / of all	
N-Ethyl perfluorooctane sulfonamidoethanol (NEtFOSE) CAS # 1691-99-2	Not Detected	20 ppt <sup>a,b</sup> 20 ppt <sup>a,b</sup>		
Perfluorooctane sulfonamide (FOSA) CAS # 754-91-6	Not Detected	20 ppt <sup>a,b</sup> under		
Perfluorooctanoic acid (PFOA) CAS # 335-67-1	13 ppt	20 ppt <sup>a,b</sup>		
Perfluorooctanesulfonic acid (PFOS) CAS # 1763-23-1	8.2 ppt	20 ppt <sup>a,b</sup>	The for a or	
Hexafluoropropylene oxide dimer acid (HPFO-DA; GenX) CAS # 13252-13-6	Not Detected		300 ppt <sup>a</sup>	
Perfluorobutanesulfonic acid (PFBS) CAS # 375-73-5	4.1 ppt	450	0,000 ppt <sup>a</sup>	
Perfluorohexanesulfonic acid (PFHxS) CAS # 355-46-4	10 ppt		40 ppt <sup>a</sup>	
Perfluorobutanoic acid (PFBA) CAS # 375-22-4	37 ppt	10	0,000 ppt <sup>a</sup>	
Perfluorodecanoic acid (PFDA) CAS # 335-76-2	Not Detected		300 ppt <sup>a</sup>	
Perfluorododecanoic acid (PFDoA) CAS # 307-55-1	Not Detected		500 ppt <sup>a</sup>	
Perfluorohexanoic acid (PFHxA) CAS # 307-24-4	1.2 ppt	150	0,000 ppt <sup>a</sup>	
Perfluorononanoic acid (PFNA) CAS # 375-95-1	Not Detected		30 ppt <sup>a</sup>	
Perfluorotetradecanoic acid (PFTeA) CAS # 376-06-7	Not Detected	10	),000 ppt <sup>a</sup>	
Perfluoroundecanoic acid (PFUnA) CAS # 2058-94-8	Not Detected	:	3,000 ppt <sup>a</sup>	

### Sample Results

Private Well Sampling Results for 2529 Bainbridge Street, La Crosse, WI 54603 Tax parcel # 4-329-0 Sample ID # 329-0 November 23, 2020

4,8-Dioxa-3H-perfluorononanoic acid (DONA) CAS # 919005-14-4	Not Detected	3,000 ppt <sup>a</sup>
Perfluorooctadecanoic acid (PFODA) CAS # 16517-11-6	Not Detected	400,000 ppt <sup>a</sup>
Perfluoro-1-pentanesulfonic acid (PFPeS) CAS # 2706-91-4	2.7 ppt	None Established <sup>c</sup>

<sup>a</sup> Public health enforcement standard (ES) recommended by DHS.

<sup>b</sup> DHS recommends a combined enforcement standard of 20 ng/L and combined preventive action limit of 2 ng/L for FOSA, NEt-FOSA, NetFOSAA, PFOS, and PFOA.

<sup>c</sup> A current standard is not available; the compound is currently under review by DHS for potential public health standard recommendation.

<sup>d</sup> Public health enforcement standard (ES) in NR 140, Wisconsin Administrative Code.

<sup>e</sup> Units: Parts per trillion (ppt) = nanograms of substance per liter of water (ng/L)

<sup>BL</sup> Detected in the method blank. Possible lab contaminant.

As required by law, we will be submitting these results to the Department of Natural Resources (DNR). The DNR may consult with the Department of Health Services (DHS) about these test results. DHS may review all PFAS tests and follow-up with you directly if any actions are recommended to protect your health.

Thank you for your patience and assistance with our investigation. We will provide updates on the project at <u>https://www.cityoflacrosse.org/wells</u> as our work continues. If you have any questions, please call The OS Group at (608) 668-2718 or email them at <u>PFAS@theOSgrp.com</u>.

You can also contact the DNR and DHS with questions about PFAS or the water sample results at the numbers provided below:

Questions about		<u>Contact</u>	<u>Phone</u>	E-mail Address
Soil & Groundwater Testing, Clean Up	DNR	David Rozeboom	715-215-2078	David.Rozeboom@wisconsin.gov
Drinking Water or Private wells	DNR	Kyle Burton	920-360-2112	kyle.burton@wisconsin.gov
Health Concerns	DHS	Curtis Hedman	608-266-6677	Curtis.Hedman@dhs.wisconsin.gov

On behalf of The City of La Crosse The OS Group, LLC

Attachment: Lab report for your well Bottled Water Acknowledgement Form

Client: Pace Analytical Services, LLC						Laboratory ID: VK03016-024				
Description: 329-0						Matrix	: Aqueous			
Date Sampled:10/29/2020 1405	Project Na	ame:	LACROSSE WELL #	<sup>£</sup> 23 & 24			·			
Date Received: 11/03/2020	niect Nun	nher.	40217496							
		iber.	40217470	-	_					
RunPrep MethodAnalytical MethodE2SOP SPEPFAS by ID SOP	Dilution 1	Ana 11/1	lysis Date Analyst 7/2020 2147 SES	Prep 11/16/2	Date 2020 16	Batch 13 73668				
Parameter	C Num	CAS ber	Analytical Method	Result	Q	LOQ	DL	Units	Run	
9-chlorohexadecafluoro-3-oxanone-1-sulfonic acid (9CI-PF3ONS)	756426-	58-1	PFAS by ID SOP	ND		7.4	1.8	ng/L	2	
11-chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11CI-PF3)	763051-	92-9	PFAS by ID SOP	ND		7.4	1.8	ng/L	2	
1H, 1H, 2H, 2H-perfluorodecane sulfonic acid (8:2 FTS)	39108-	34-4	PFAS by ID SOP	ND		7.4	1.8	ng/L	2	
1H, 1H, 2H, 2H-perfluorooctane sulfonic acid (6:2 FTS)	27619-	97-2	PFAS by ID SOP	ND		7.4	1.8	ng/L	2	
1H,1H,2H,2H-perfluorododecane sulfonic acid (10:2 FTS)	120226-	60-0	PFAS by ID SOP	ND		7.4	1.8	ng/L	2	
1H,1H,2H,2H-perfluorohexane sulfonic acid (4:2 FTS)	757124-	72-4	PFAS by ID SOP	ND		7.4	1.8	ng/L	2	
Hexafluoropropylene oxide dimer acid (GenX)	13252-	13-6	PFAS by ID SOP	ND		7.4	1.8	ng/L	2	
4,8-dioxa-3H-perfluorononanoic acid (ADONA)	919005-	14-4	PFAS by ID SOP	ND		7.4	1.8	ng/L	2	
N-ethylperfluoro-1-octanesulfonamide (EtFOSA)	4151-	50-2	PFAS by ID SOP	ND		7.4	1.8	ng/L	2	
N-ethylperfluoro-1-octanesulfonamidoacetic acid (EtFOSAA)	2991-	50-6	PFAS by ID SOP	ND		7.4	1.8	ng/L	2	
2-N-ethylperfluoro-1-octanesulfonamido-ethanol (EtFOSE)	1691-	99-2	PFAS by ID SOP	ND		7.4	1.8	ng/L	2	
N-methylperfluoro-1-octanesulfonamide (MeFOSA)	31506-	32-8	PFAS by ID SOP	ND		15	3.7	ng/L	2	
N-methylperfluoro-1-octanesulfonamidoacetic acid (MeFOSAA)	2355-	31-9	PFAS by ID SOP	ND		7.4	1.8	ng/L	2	
2-N-methylperfluoro-1-octanesulfonamido-ethanol (MeFOSE)	24448-	09-7	PFAS by ID SOP	ND		7.4	1.8	ng/L	2	
Perfluoro-1-butanesulfonic acid (PFBS)	375-	73-5	PFAS by ID SOP	4.1		3.7	0.92	ng/L	2	
Perfluoro-1-decanesulfonic acid (PFDS)	335-	77-3	PFAS by ID SOP	ND		3.7	0.92	ng/L	2	
Perfluoro-1-heptanesulfonic acid (PFHpS)	375-	92-8	PFAS by ID SOP	ND		3.7	0.92	ng/L	2	
Perfluoro-1-nonanesulfonic acid (PFNS)	68259-	12-1	PFAS by ID SOP	ND		3.7	0.92	ng/L	2	
Perfluoro-1-octanesulfonamide (PFOSA)	754-	91-6	PFAS by ID SOP	ND		3.7	0.92	ng/L	2	
Perfluoro-1-pentanesulfonic acid (PFPeS)	2706-	91-4	PFAS by ID SOP	2.7	J	3.7	0.92	ng/L	2	
Perfluorododecanesulfonic acid (PFDOS)	79780-	39-5	PFAS by ID SOP	ND		7.4	1.8	ng/L	2	
Perfluorohexanesulfonic acid (PFHxS)	355-	46-4	PFAS by ID SOP	10		3.7	0.92	ng/L	2	
Perfluoro-n-butanoic acid (PFBA)	375-	22-4	PFAS by ID SOP	37		3.7	0.92	ng/L	2	
Perfluoro-n-decanoic acid (PFDA)	335-	76-2	PEAS by ID SOP	ND		3.7	0.92	ng/L	2	
Perfluoro-n-dodecanoic acid (PFDoA)	307-	55-1	PEAS by ID SOP	ND		3.7	0.92	ng/L	2	
Perfluoro-n-neptanoic acid (PEHpA)	3/5-	85-9	PFAS by ID SOP	ND		3.7	0.92	ng/L	2	
Perfluoro-n-nexadecanoic acid (PFHxDA)	6/905-	19-5	PFAS by ID SOP	ND		7.4	1.8	ng/L	2	
Perfluoro-n-nexanoic acid (PFHXA)	307-	24-4	PFAS by ID SOP	1.2	J	3.7	0.92	ng/L	2	
Perfluoro-n-nonanoic acid (PENA)	3/5-	95-I	PEAS by ID SOP	ND		3.7	0.92	ng/L	2	
Perfluoro-n-octadecanoic acid (PFODA)	10517-	67 1	PFAS by ID SOP	ND 12		7.4	1.8	ng/L	2	
Perfluere a postanoic acid (PEDeA)	2706	0/-1	PEAS by ID SOP			27	0.92	ng/L	2	
Porfluoro n totradocanois asid (PETADA)	2700-	90-3 06 7	PEAS by ID SOP			27	0.92	ng/L	2	
Perfluoro n-tridecanoic acid (PETrDA)	72620	00-7	PEAS by ID SOP			3.7	0.92	ng/L	2	
Perfluoro-n-undecanoic acid (PELIdA)	2023-	01-8	PEAS by ID SOP			3.7	0.92	ng/L	2	
Perfluorooctanesulfonic acid (PEOS)	1763-	74-0 22-1	PEAS by ID SOP	8.2		3.7	0.92	ng/L	2	
remuorooctariesuronic acid (ri 03)	1703-	23-1	FI AS BY ID SOF	0.2		5.7	0.92	lig/∟	2	
Surrogate Q % Re	un 2 A covery	Accep Lir	otance nits							
1302_4:2F13 1302_6:2ETS	ರ∠ 01	25 วศ	-150							
13C2_0.21113	78	∠ວ ว⊧	- 150							
13C2 ΡΕDοΔ	70 81	∠ວ ว⊧	-150							
1302_1 FUA	77	∠ວ ว⊧	-150							
13C2_PFTeDA	72	25 25	-150							
LOQ = Limit of QuantitationB = Detected in the method blankND = Not detected at or above the DLN = Recovery is out of criteriaH = Out of holding timeW = Reported on wet weight basis	E = Quant P = The R	tation o	of compound exceeded the of ween two GC columns exceeded the official states of the second st	calibration eds 40%	range DI J :	<ul> <li>Detection Lim</li> <li>Estimated result</li> </ul>	nit It < LOQ and ≥ D	L		

 Pace Analytical Services, LLC (formerly Shealy Environmental Services, Inc.)

 106 Vantage Point Drive West Columbia, SC 29172 (803) 791-9700 Fax (803) 791-9111 www.pacelabs.com

Client: Pace Analytical Services, LL	с	Laboratory ID: VK03016-024
Description: 329-0		Matrix: Aqueous
Date Sampled:10/29/2020 1405	Project Name: LACROSSE WELL #23 & 24	
Date Received: 11/03/2020	Project Number: 40217496	
Surrogate	Run 2 Acceptance Q % Recovery Limits	
13C3_PFBS	81 25-150	
13C3 PFHxS	83 25-150	

1303_1111x3	05	25-150	
13C3-HFPO-DA	81	25-150	
13C4_PFBA	87	25-150	
13C4_PFHpA	84	25-150	
13C5_PFHxA	80	25-150	
13C5_PFPeA	85	25-150	
13C6_PFDA	84	25-150	
13C7_PFUdA	76	25-150	
13C8_PFOA	86	25-150	
13C8_PFOS	78	25-150	
13C8_PFOSA	88	10-150	
13C9_PFNA	85	25-150	
d-EtFOSA	73	10-150	
d5-EtFOSAA	84	25-150	
d9-EtFOSE	72	10-150	
d-MeFOSA	80	10-150	
d3-MeFOSAA	82	25-150	
d7-MeFOSE	74	10-150	

LOQ = Limit of QuantitationB = Detected in the method blankE = Quantitation of compound exceeded the calibration rangeDL = Detection LimitND = Not detected at or above the DLN = Recovery is out of criteriaP = The RPD between two GC columns exceeds 40%J = Estimated result < LOQ and  $\geq$  DLH = Out of holding timeW = Reported on wet weight basisW = Reported on wet weight basisH = Out of holding timeH = Out of holding time

Pace Analytical Services, LLC (formerly Shealy Environmental Services, Inc.) 106 Vantage Point Drive West Columbia, SC 29172 (803) 791-9700 Fax (803) 791-9111 www.pacelabs.com

## BOTTLED WATER ACKNOWLEDGEMENT

2529 Bainbridge Street, La Crosse, WI 54603

If you desire to accept the bottled water delivery, please complete and sign this form and return it to The OS Group at <u>PFAS@TheOSgrp.com</u> or mail to 444 21<sup>st</sup> St. S, La Crosse, WI 54601. You may also complete this form electronically on line at <u>www.cityoflacrosse.org/bottledwater</u>. Call 608-668-2718 with any question you may have.

As pre-caution for the protection of human health, the City of La Crosse (The City) will provide, on a temporary basis, bottled water for drinking, cooking and toothbrushing purposes at the above referenced address. The water will be delivered to your home or business by a commercial water delivery service. At the City's cost, a dispenser / cooler and regular deliveries of 5-gallon containers of water will be provided. The City reserves the right to dictate the conditions of delivery, such as minimum and maximum number of containers per delivery, frequency and timing of deliveries. The City reserves the right to periodically review whether The City should continue to provide bottled water, considering factors such as State and Federal standards and guidance, evolving knowledge and understanding of the sources, cause and responsibility for the contamination, new or reinterpreted test results, and the availability of more permanent or costeffective sources of water for the above purposes. The City of La Crosse makes no warranty or representation regarding the suitability of the bottled water beyond those made by the commercial water delivery service.

Check ownership:

Owner-Occupant
Occupant Only

Number of Occupants: \_\_\_\_\_

All reusable or returnable equipment and supplies, such as the containers and cooler/dispenser, are the property of the commercial water delivery service or the City of La Crosse. By signing below, the Occupant of the above referenced property acknowledges that all reusable or returnable equipment and supplies shall be returned to the commercial water delivery service or the City of La Crosse upon request. The Occupant agrees to provide reasonable access for delivery of bottled water and pick up of reusable or returnable equipment and supplies. Occupant(s) acknowledges that they may be required to sign an agreement with the commercial water delivery service as a condition of receiving bottled water.

Signed.	Dated.	
JIGHUU	Duttu.	

Printed Name: \_\_\_\_\_\_



444 21st Street South  $\cdot$  La Crosse, Wisconsin  $\cdot$  54601

November 24, 2020

2554 1st Avenue West La Crosse, WI 54603

Subject: Private Well Sampling Results 2554 1st Avenue West, La Crosse, WI 54603 Tax parcel # 4-340-0 Sample ID # 340-0

#### Dear

We have received and reviewed the test results for the sample collected on October 29, 2020 at the above address. Some PFAS compounds were found, but the levels found were **below** the Department of Health Services (DHS) levels recommended for protecting health. These levels are called the "Recommended Public Health Standard" in the table below. The levels found in *your* well are called the "Sample Result" in the table below.

Also, please note, we collected two samples from your house for quality assurance / quality control purposes. The second sample is considered a "split" sample and was sent to a different laboratory for analysis. The "split" sample was analyzed by a different EPA method. That method analyzes for 18 compounds as compared to the 36 compounds under the other method. Thus, in the second table for the "Split" sample provided below, you will see some results listed as "Not Analyzed".

Private Well Sampling Results for 2554 1st Avenue West, La Crosse, WI 54603 Tax parcel # 4-340-0 Sample ID # 340-0 November 24, 2020

### Sample Results

Compound	Sample Result (unit)	Recomm Public H Standard	ended Iealth (unit <sup>e</sup> )	
N-Ethyl Perfluorooctane sulfonamide (NEtFOSA) CAS # 4151-50-2	Not Detected	20 ppt <sup>a,b</sup>	) ppt unds I 6	
N-Ethyl perfluorooctane sulfonamidoacetic acid (NEtFOSAA) CAS # 2991-50-6	Not Detected	20 ppt <sup>a,b</sup>	it is 2C compo <i>il</i> of al	
N-Ethyl perfluorooctane sulfonamidoethanol (NEtFOSE) CAS # 1691-99-2	Not Detected	20 ppt <sup>a,b</sup>	ed lim ese 6 c ed totc	
Perfluorooctane sulfonamide (FOSA) CAS # 754-91-6	Not Detected	20 ppt <sup>a,b</sup>	mend of the	
Perfluorooctanoic acid (PFOA) CAS # 335-67-1	5.8 ppt	20 ppt <sup>a,b</sup>	recom 1y <i>one</i> the <i>cc</i>	
Perfluorooctanesulfonic acid (PFOS) CAS # 1763-23-1	4.0 ppt	20 ppt <sup>a,b</sup> L of		
Hexafluoropropylene oxide dimer acid (HPFO-DA; GenX) CAS # 13252-13-6	Not Detected		300 ppt <sup>a</sup>	
Perfluorobutanesulfonic acid (PFBS) CAS # 375-73-5	6.9 ppt	450	0,000 ppt <sup>a</sup>	
Perfluorohexanesulfonic acid (PFHxS) CAS # 355-46-4	32 ppt		40 ppt <sup>a</sup>	
Perfluorobutanoic acid (PFBA) CAS # 375-22-4	48 ppt	10,000 ppt <sup>a</sup>		
Perfluorodecanoic acid (PFDA) CAS # 335-76-2	Not Detected	300 ppt <sup>a</sup>		
Perfluorododecanoic acid (PFDoA) CAS # 307-55-1	Not Detected	500 ppt <sup>a</sup>		
Perfluorohexanoic acid (PFHxA) CAS # 307-24-4	2.4 ppt	150	0,000 ppt <sup>a</sup>	
Perfluorononanoic acid (PFNA) CAS # 375-95-1	Not Detected	30 ppt <sup>a</sup>		
Perfluorotetradecanoic acid (PFTeA) CAS # 376-06-7	Not Detected	10,000 ppt <sup>a</sup>		
Perfluoroundecanoic acid (PFUnA) CAS # 2058-94-8	Not Detected	3,000 ppt <sup>a</sup>		
4,8-Dioxa-3H-perfluorononanoic acid (DONA) CAS # 919005-14-4	Not Detected	:	3,000 ppt <sup>a</sup>	

Private Well Sampling Results for 2554 1st Avenue West, La Crosse, WI 54603 Tax parcel # 4-340-0 Sample ID # 340-0 November 24, 2020

Compound	Sample Result (unit)	Recommended Public Health Standard (unit <sup>e</sup> )
Perfluorooctadecanoic acid (PFODA) CAS # 16517-11-6	Not Detected	400,000 ppt <sup>a</sup>
Perfluoro-1-pentanesulfonic acid (PFPeS) CAS #2706-91-4	7.5 ppt	None Established <sup>c</sup>
Perfluoro-n-pentanoic acid (PFPeA) CAS # 2706-90-3	1.9 ppt	None Established <sup>c</sup>

<sup>a</sup> Public health enforcement standard (ES) recommended by DHS.

<sup>b</sup> DHS recommends a combined enforcement standard of 20 ng/L and combined preventive action limit of 2 ng/L for FOSA, NEt-FOSA, NetFOSAA, PFOS, and PFOA.

<sup>c</sup> A current standard is not available; the compound is currently under review by DHS for potential public health standard recommendation.

<sup>d</sup> Public health enforcement standard (ES) in NR 140, Wisconsin Administrative Code.

<sup>e</sup> Units: Parts per trillion (ppt) = nanograms of substance per liter of water (ng/L)

<sup>BL</sup> Detected in the method blank. Possible lab contaminant.

#### "Split" Sample Results

Compound	Sample Result (unit)	Recomm Public H Standard	ended lealth (unit <sup>e</sup> )
N-Ethyl Perfluorooctane sulfonamide (NEtFOSA) CAS # 4151-50-2	Not Analyzed	20 ppt <sup>a,b</sup>	) ppt unds I 6
N-Ethyl perfluorooctane sulfonamidoacetic acid (NEtFOSAA) CAS # 2991-50-6	Not Detected	20 ppt <sup>a,b</sup>	it is 20 ompo <i>I</i> of al
N-Ethyl perfluorooctane sulfonamidoethanol (NEtFOSE) CAS # 1691-99-2	Not Analyzed	20 ppt <sup>a,b</sup>	ed lim ese 6 c ed totc
Perfluorooctane sulfonamide (FOSA) CAS # 754-91-6	Not Analyzed	20 ppt <sup>a,b</sup>	mend of the ombine
Perfluorooctanoic acid (PFOA) CAS # 335-67-1	2.5 ppt	20 ppt <sup>a,b</sup>	recom ny <i>one</i> the <i>cc</i>
Perfluorooctanesulfonic acid (PFOS) CAS # 1763-23-1	3.5 ppt	20 ppt <sup>a,b</sup>	The for an or

Hexafluoropropylene oxide dimer acid (HPFO-DA; GenX) CAS # 13252-13-6	Not Detected	300 ppt <sup>a</sup>
Perfluorobutanesulfonic acid (PFBS) CAS # 375-73-5	7.1 ppt	450,000 ppt <sup>a</sup>
Perfluorohexanesulfonic acid (PFHxS) CAS # 355-46-4	32 ppt	40 ppt <sup>a</sup>
Perfluorobutanoic acid (PFBA) CAS # 375-22-4	Not Analyzed	10,000 ppt <sup>a</sup>
Perfluorodecanoic acid (PFDA) CAS # 335-76-2	Not Detected	300 ppt <sup>a</sup>
Perfluorododecanoic acid (PFDoA) CAS # 307-55-1	Not Detected	500 ppt <sup>a</sup>
Perfluorohexanoic acid (PFHxA) CAS # 307-24-4	1.7 ppt	150,000 ppt <sup>a</sup>
Perfluorononanoic acid (PFNA) CAS # 375-95-1	Not Detected	30 ppt <sup>a</sup>
Perfluorotetradecanoic acid (PFTeA) CAS # 376-06-7	Not Detected	10,000 ppt <sup>a</sup>
Perfluoroundecanoic acid (PFUnA) CAS # 2058-94-8	Not Detected	3,000 ppt <sup>a</sup>
4,8-Dioxa-3H-perfluorononanoic acid (DONA) CAS # 919005-14-4	Not Detected	3,000 ppt <sup>a</sup>
Perfluorooctadecanoic acid (PFODA) CAS # 16517-11-6	Not Analyzed	400,000 ppt <sup>a</sup>

<sup>a</sup> Public health enforcement standard (ES) recommended by DHS.

<sup>b</sup> DHS recommends a combined enforcement standard of 20 ng/L and combined preventive action limit of 2 ng/L for FOSA, NEt-FOSA, NetFOSAA, PFOS, and PFOA.

<sup>2</sup> A current standard is not available; the compound is currently under review by DHS for potential public health standard recommendation.

<sup>d</sup> Public health enforcement standard (ES) in NR 140, Wisconsin Administrative Code.

<sup>e</sup> Units: Parts per trillion (ppt) = nanograms of substance per liter of water (ng/L)

<sup>BL</sup> Detected in the method blank. Possible lab contaminant.

Private Well Sampling Results for 2554 1st Avenue West, La Crosse, WI 54603 Tax parcel # 4-340-0 Sample ID # 340-0 November 24, 2020

As required by law, we will be submitting these results to the Department of Natural Resources (DNR). The DNR may consult with the Department of Health Services (DHS) about these test results. DHS may review all PFAS tests and follow-up with you directly if any actions are recommended to protect your health.

Thank you for your patience and assistance with our investigation. We will provide updates on the project at <u>https://www.cityoflacrosse.org/wells</u> as our work continues. If you have any questions, please call The OS Group at (608) 668-2718 or email them at <u>PFAS@theOSgrp.com</u>.

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Questions about		<u>Contact</u>	<u>Phone</u>	E-mail Address
Soil & Groundwater Testing, Clean Up	DNR	David Rozeboom	715-215-2078	David.Rozeboom@wisconsin.gov
Drinking Water or Private wells	DNR	Kyle Burton	920-360-2112	kyle.burton@wisconsin.gov
Health Concerns	DHS	Curtis Hedman	608-266-6677	Curtis.Hedman@dhs.wisconsin.gov

On behalf of The City of La Crosse *The OS Group, LLC* 

Attachment: Lab report for your well

Client: Pace Analytical Services, LLC				Laboratory I	D: VK03016-0	009	
Description: 340-0				Matrix	: Aqueous		
Date Sampled:10/29/2020 1455	Project Nam	e: LACROSSE WELL #	#23 & 24				
Date Received: 11/03/2020	piect Numbe	er: 40217496					
				5			
RunPrep MethodAnalytical MethodD1SOP SPEPFAS by ID SOP	Dilution A	nalysis Date Analyst I/12/2020 1512 MMM	Prep Date 11/11/2020	e Batch 1108 73065			
Parameter	CA Numbe	S Analytical er Method	Result Q	LOQ	DL	Units	Run
9-chlorohexadecafluoro-3-oxanone-1-sulfonic acid (9CI-PF3ONS)	756426-58	-1 PFAS by ID SOP	ND	8.2	2.1	ng/L	1
11-chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11CI-PF3)	763051-92	-9 PFAS by ID SOP	ND	8.2	2.1	ng/L	1
1H, 1H, 2H, 2H-perfluorodecane sulfonic acid (8:2 FTS)	39108-34	-4 PFAS by ID SOP	ND	8.2	2.1	ng/L	1
1H, 1H, 2H, 2H-perfluorooctane sulfonic acid (6:2 FTS)	27619-97	-2 PFAS by ID SOP	ND	8.2	2.1	ng/L	1
1H,1H,2H,2H-perfluorododecane sulfonic acid (10:2 FTS)	120226-60	-0 PFAS by ID SOP	ND	8.2	2.1	ng/L	1
1H,1H,2H,2H-perfluorohexane sulfonic acid (4:2 FTS)	757124-72	-4 PFAS by ID SOP	ND	8.2	2.1	ng/L	1
Hexafluoropropylene oxide dimer acid (GenX)	13252-13	-6 PFAS by ID SOP	ND	8.2	2.1	ng/L	1
4,8-dioxa-3H-perfluorononanoic acid (ADONA)	919005-14	-4 PFAS by ID SOP	ND	8.2	2.1	ng/L	1
N-ethylperfluoro-1-octanesulfonamide (EtFOSA)	4151-50	-2 PFAS by ID SOP	ND	8.2	2.1	ng/L	1
N-ethylperfluoro-1-octanesulfonamidoacetic acid (EtFOSAA)	2991-50	-6 PFAS by ID SOP	ND	8.2	2.1	ng/L	1
2-N-ethylperfluoro-1-octanesulfonamido-ethanol (EtFOSE)	1691-99	-2 PFAS by ID SOP	ND	8.2	2.1	ng/L	1
N-methylperfluoro-1-octanesulfonamide (MeFOSA)	31506-32	-8 PFAS by ID SOP	ND	16	4.1	ng/L	1
N-methylperfluoro-1-octanesulfonamidoacetic acid (MeFOSAA)	2355-31	-9 PFAS by ID SOP	ND	8.2	2.1	ng/L	1
2-N-methylperfluoro-1-octanesulfonamido-ethanol (MeFOSE)	24448-09	-7 PFAS by ID SOP	ND	8.2	2.1	ng/L	1
Perfluoro-1-butanesulfonic acid (PFBS)	375-73	-5 PFAS by ID SOP	6.9	4.1	1.0	ng/L	1
Perfluoro-1-decanesulfonic acid (PFDS)	335-77	-3 PFAS by ID SOP	ND	4.1	1.0	ng/L	1
Perfluoro-1-heptanesulfonic acid (PFHpS)	375-92	-8 PFAS by ID SOP	ND	4.1	1.0	ng/L	1
Perfluoro-1-nonanesulfonic acid (PFNS)	68259-12	-1 PFAS by ID SOP	ND	4.1	1.0	ng/L	1
Perfluoro-1-octanesulfonamide (PFOSA)	754-91	-6 PFAS by ID SOP	ND	4.1	1.0	ng/L	1
Perfluoro-1-pentanesulfonic acid (PFPeS)	2706-91	-4 PFAS by ID SOP	7.5	4.1	1.0	ng/L	1
Perfluorododecanesulfonic acid (PFDOS)	79780-39	-5 PFAS by ID SOP	ND	8.2	2.1	ng/L	1
Perfluorohexanesulfonic acid (PFHxS)	355-46	-4 PFAS by ID SOP	32	4.1	1.0	ng/L	1
Perfluoro-n-butanoic acid (PFBA)	375-22	-4 PFAS by ID SOP	48	4.1	1.0	ng/L	1
Perfluoro-n-decanoic acid (PFDA)	335-76	-2 PFAS by ID SOP	ND	4.1	1.0	ng/L	1
Perfluoro-n-dodecanoic acid (PFDoA)	307-55	-1 PFAS by ID SOP	ND	4.1	1.0	ng/L	1
Perfluoro-n-heptanoic acid (PFHpA)	375-85	-9 PEAS by ID SOP	ND	4.1	1.0	ng/L	1
Perfluoro-n-hexadecanoic acid (PFHxDA)	67905-19	-5 PEAS by ID SOP	ND	8.2	2.1	ng/L	1
Perfluoro-n-hexanoic acid (PFHxA)	307-24	-4 PFAS by ID SOP	2.4 J	4.1	1.0	ng/L	1
Perfluoro-n-nonanoic acid (PFNA)	375-95	-1 PFAS by ID SOP	ND	4.1	1.0	ng/L	1
Perfluoro-n-octadecanoic acid (PFODA)	16517-11	-6 PFAS by ID SOP	ND F 0	8.2	2.1	ng/L	1
Periluoro-n-octanoic acid (PFOA)	335-07	2 DEAS by ID SOP	5.8 1.0 I	4.1	1.0	ng/L	1
	2700-90		1.9 J	4.1	1.0	ng/L	1
Perfluoro-n-tetradecanoic acid (PFTreDA)	3/0-00	PFAS by ID SOP		4.1	1.0	ng/L	1
Perfluoro-n-indecanoic acid (PETIDA)	2029-94	PFAS by ID SOP		4.1	1.0	ng/L	1
	1742.22			4.1	1.0	ng/L	1
Perhuor ooctanesuronic acid (PPOS)	1703-23	-1 PFAS by ID SOP	4.0 J	4.1	1.0	Hg/∟	I
Surrogate Q % Re	un 1 Aco covery	ceptance Limits					
13C2_4:2E1S	111	25-150					
1302_0:2F13	00	20-10U					
13C2_8:2F13	92	20-150					
	94 02	20-150					
13C2_PFTeDA	95	25-150					
LOQ = Limit of QuantitationB = Detected in the method blankND = Not detected at or above the DLN = Recovery is out of criteriaH = Out of holding timeW = Reported on wet weight basis	E = Quantitati P = The RPD	on of compound exceeded the obligation between two GC columns exce	calibration range eeds 40%	DL = Detection Lim J = Estimated resu	hit It < LOQ and $\geq$ E	DL	

 Pace Analytical Services, LLC (formerly Shealy Environmental Services, Inc.)

 106 Vantage Point Drive West Columbia, SC 29172 (803) 791-9700 Fax (803) 791-9111 www.pacelabs.com

& 24

Laboratory ID: VK03016-009 Matrix: Aqueous

Client: Pace Analytical Services, LLC	
Description: 340-0	
Date Sampled:10/29/2020 1455	Project Name: LACROSSE WELL #23
Date Received: 11/03/2020	Project Number: 40217496

Surrogate	Q % Recovery	cceptance Limits
13C3_PFBS	95	25-150
13C3_PFHxS	91	25-150
13C3-HFPO-DA	105	25-150
13C4_PFBA	102	25-150
13C4_PFHpA	102	25-150
13C5_PFHxA	99	25-150
13C5_PFPeA	105	25-150
13C6_PFDA	102	25-150
13C7_PFUdA	98	25-150
13C8_PFOA	101	25-150
13C8_PFOS	86	25-150
13C8_PFOSA	106	10-150
13C9_PFNA	99	25-150
d-EtFOSA	83	10-150
d5-EtFOSAA	95	25-150
d9-EtFOSE	104	10-150
d-MeFOSA	88	10-150
d3-MeFOSAA	94	25-150
d7-MeFOSE	93	10-150

 LOQ = Limit of Quantitation
 B = Detected in the method blank
 E = Quantitation of compound exceeded the calibration range
 DL = Detection Limit

 ND = Not detected at or above the DL
 N = Recovery is out of criteria
 P = The RPD between two GC columns exceeds 40%
 J = Estimated result < LOQ and ≥ DL</td>

 H = Out of holding time
 W = Reported on wet weight basis
 W = Reported on wet weight basis
 H = Out of holding time
 H = Out of holding time

Pace Analytical Services, LLC (formerly Shealy Environmental Services, Inc.)106 Vantage Point DriveWest Columbia, SC 29172 (803) 791-9700 Fax (803) 791-9111 www.pacelabs.com



#### ANALYTICAL RESULTS

#### Project: LACROSSE WELL #23 & 24

Pace Project No.: 40217479

Sample: 340-0	Lab ID:	40217479009	Collecte	d: 10/29/20	) 14:55	Received: 10/	30/20 09:30 Ma	atrix: Water	
Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
537.1 PFAS Compounds, Water	Analytical Pace Ana	Method: EPA (	537.1 Prepa	aration Meth	nod: EP	PA 537.1			
11CI-PE3OUdS	<0.0015	ug/l	0.0019	0.0015	1	11/04/20 08.14	11/06/20 06:50	763051-92-9	
9CI-PE3ONS	<0.0010	ug/L	0.0010	0.0010	1	11/04/20 08:14	11/06/20 06:50	756426-58-1	
ADONA	<0.00070	ug/L	0.0019	0.00070	1	11/04/20 08:14	11/06/20 06:50	919005-14-4	
HFPO-DA	<0.0016	ug/L	0.0019	0.0016	1	11/04/20 08:14	11/06/20 06:50	13252-13-6	
NEtFOSAA	<0.00090	ua/L	0.0019	0.00090	1	11/04/20 08:14	11/06/20 06:50	2991-50-6	
NMeFOSAA	<0.0015	ug/L	0.0019	0.0015	1	11/04/20 08:14	11/06/20 06:50	2355-31-9	
Perfluorobutanesulfonic acid	0.0071	ug/L	0.0019	0.00065	1	11/04/20 08:14	11/06/20 06:50	375-73-5	
Perfluorodecanoic acid	<0.0019	ug/L	0.0019	0.0019	1	11/04/20 08:14	11/06/20 06:50	335-76-2	
Perfluorohexanoic acid	0.0017J	ug/L	0.0019	0.0012	1	11/04/20 08:14	11/06/20 06:50	307-24-4	
Perfluorododecanoic acid	<0.0014	ug/L	0.0019	0.0014	1	11/04/20 08:14	11/06/20 06:50	307-55-1	
Perfluoroheptanoic acid	<0.00098	ug/L	0.0019	0.00098	1	11/04/20 08:14	11/06/20 06:50	375-85-9	
Perfluorohexanesulfonic acid	0.032	ug/L	0.0019	0.00071	1	11/04/20 08:14	11/06/20 06:50	355-46-4	
Perfluorononanoic acid	<0.0019	ug/L	0.0019	0.0019	1	11/04/20 08:14	11/06/20 06:50	375-95-1	
Perfluorooctanesulfonic acid	0.0035	ug/L	0.0019	0.0012	1	11/04/20 08:14	11/06/20 06:50	1763-23-1	
Perfluorooctanoic acid	0.0025	ug/L	0.0019	0.00085	1	11/04/20 08:14	11/06/20 06:50	335-67-1	
Perfluorotetradecanoic acid	<0.0018	ug/L	0.0019	0.0018	1	11/04/20 08:14	11/06/20 06:50	376-06-7	
Perfluorotridecanoic acid	<0.0017	ug/L	0.0019	0.0017	1	11/04/20 08:14	11/06/20 06:50	72629-94-8	
Perfluoroundecanoic acid	<0.0019	ug/L	0.0019	0.0019	1	11/04/20 08:14	11/06/20 06:50	2058-94-8	
Surrogates									
13C2-PFDA (S)	88	%	70-130		1	11/04/20 08:14	11/06/20 06:50		
13C2-PFHxA (S)	88	%	70-130		1	11/04/20 08:14	11/06/20 06:50		
NEtFOSAA-d5 (S)	87	%	70-130		1	11/04/20 08:14	11/06/20 06:50		
HFPO-DAS (S)	79	%	70-130		1	11/04/20 08:14	11/06/20 06:50		

#### **REPORT OF LABORATORY ANALYSIS**



444 21st Street South · La Crosse, Wisconsin · 54601

November 24, 2020

### 2555 Bainbridge Street La Crosse, WI 54603

Subject: Private Well Sampling Results 2555 Bainbridge Street, La Crosse, WI 54603 Tax parcel # 4-341-0 Sample ID # 341-0

## Dear :

We have received and reviewed the test results for the sample collected on October 29, 2020 at the above address. Some PFAS compounds were found at levels <u>above</u> the Department of Health Services (DHS) levels recommended for protecting health. These levels are called the "Recommended Public Health Standard" in the table below. The levels found in your well are called the "Sample Result" in the table below.

Because some of the levels are above the recommended Public Health Standard, the City is offering to provide bottled water delivered to your home for drinking, cooking, and brushing your teeth. There will be no cost to you for the bottled water. Please complete the attached form and mail it to The OS Group to make arrangements for having a water dispenser and bottles delivered to your home or business. Call 608-668-2718 or email <u>PFAS@theOSgrp.com</u>. You may also complete this form on line at <u>www.cityoflacrosse.org/bottledwater</u>

The following table summarizes the test results from the sample. **Bolded results** are above a current recommended level intended to protect your health according to the Department of Health Services (DHS).

Private Well Sampling Results for 2555 Bainbridge Street, La Crosse, WI 54603 Tax parcel # 4-341-0 Sample ID # 341-0 November 24, 2020

### Sample Results

Compound	Sample Result (unit)	Recomm Public H Standard	ended Iealth (unit <sup>e</sup> )	
N-Ethyl Perfluorooctane sulfonamide (NEtFOSA) CAS # 4151-50-2	Not Detected	20 ppt <sup>a,b</sup>	) ppt unds I 6	
N-Ethyl perfluorooctane sulfonamidoacetic acid (NEtFOSAA) CAS # 2991-50-6	Not Detected	20 ppt <sup>a,b</sup>	it is 2C compo <i>il</i> of al	
N-Ethyl perfluorooctane sulfonamidoethanol (NEtFOSE) CAS # 1691-99-2	Not Detected	20 ppt <sup>a,b</sup> 20 ppt <sup>a,b</sup>		
Perfluorooctane sulfonamide (FOSA) CAS # 754-91-6	Not Detected	20 ppt <sup>a,b</sup>	mend of the ombine	
Perfluorooctanoic acid (PFOA) CAS # 335-67-1	21 ppt	20 ppt <sup>a,b</sup>		
Perfluorooctanesulfonic acid (PFOS) CAS # 1763-23-1	1400 ppt	20 ppt <sup>a,b</sup>	The for a or	
Hexafluoropropylene oxide dimer acid (HPFO-DA; GenX) CAS # 13252-13-6	Not Detected		300 ppt <sup>a</sup>	
Perfluorobutanesulfonic acid (PFBS) CAS # 375-73-5	22 ppt	450	0,000 ppt <sup>a</sup>	
Perfluorohexanesulfonic acid (PFHxS) CAS # 355-46-4	760 ppt		40 ppt <sup>a</sup>	
Perfluorobutanoic acid (PFBA) CAS # 375-22-4	30 ppt	10	0,000 ppt <sup>a</sup>	
Perfluorodecanoic acid (PFDA) CAS # 335-76-2	Not Detected		300 ppt <sup>a</sup>	
Perfluorododecanoic acid (PFDoA) CAS # 307-55-1	Not Detected		500 ppt <sup>a</sup>	
Perfluorohexanoic acid (PFHxA) CAS # 307-24-4	13 ppt	150	0,000 ppt <sup>a</sup>	
Perfluorononanoic acid (PFNA) CAS # 375-95-1	Not Detected		30 ppt <sup>a</sup>	
Perfluorotetradecanoic acid (PFTeA) CAS # 376-06-7	Not Detected	10,000 ppt <sup>a</sup>		
Perfluoroundecanoic acid (PFUnA) CAS # 2058-94-8	Not Detected	3,000 ppt <sup>a</sup>		

Private Well Sampling Results for 2555 Bainbridge Street, La Crosse, WI 54603 Tax parcel # 4-341-0 Sample ID # 341-0 November 24, 2020

4,8-Dioxa-3H-perfluorononanoic acid (DONA) CAS # 919005-14-4	Not Detected	3,000 ppt <sup>a</sup>
Perfluorooctadecanoic acid (PFODA) CAS # 16517-11-6	Not Detected	400,000 ppt ª
Perfluoro-1-hetanesulfonic acid CAS # 375-92-8	46 ppt	None Established <sup>c</sup>
Perfluoro-1-pentanesulfonic acid CAS # 2706-91-4	44 ppt	None Established <sup>c</sup>
Perfluoro-n-heptanoic acid CAS # 375-85-9	2.5 ppt	None Established <sup>c</sup>
Perfluoro-n-pentanoic acid CAS #2706-90-3	4.1 ppt	None Established <sup>c</sup>

<sup>a</sup> Public health enforcement standard (ES) recommended by DHS.

<sup>b</sup> DHS recommends a combined enforcement standard of 20 ng/L and combined preventive action limit of 2 ng/L for FOSA, NEt-FOSA, NetFOSAA, PFOS, and PFOA.

<sup>c</sup> A current standard is not available; the compound is currently under review by DHS for potential public health standard recommendation.

<sup>d</sup> Public health enforcement standard (ES) in NR 140, Wisconsin Administrative Code.

<sup>e</sup> Units: Parts per trillion (ppt) = nanograms of substance per liter of water (ng/L)

<sup>BL</sup> Detected in the method blank. Possible lab contaminant.

As required by law, we will be submitting these results to the Department of Natural Resources (DNR). The DNR may consult with the Department of Health Services (DHS) about these test results. DHS may review all PFAS tests and follow-up with you directly if any actions are recommended to protect your health.

Thank you for your patience and assistance with our investigation. We will provide updates on the project at <u>https://www.cityoflacrosse.org/wells</u> as our work continues. If you have any questions, please call The OS Group at (608) 668-2718 or email them at <u>PFAS@theOSgrp.com</u>.

Private Well Sampling Results for 2555 Bainbridge Street, La Crosse, WI 54603 Tax parcel # 4-341-0 Sample ID # 341-0 November 24, 2020

You can also contact the DNR and DHS with questions about PFAS or the water sample results at the numbers provided below.

Questions about		<u>Contact</u>	<u>Phone</u>	E-mail Address
Soil & Groundwater Testing, Clean Up	DNR	David Rozeboom	715-215-2078	David.Rozeboom@wisconsin.gov
Drinking Water or Private wells	DNR	Kyle Burton	920-360-2112	kyle.burton@wisconsin.gov
Health Concerns	DHS	Curtis Hedman	608-266-6677	Curtis.Hedman@dhs.wisconsin.gov

On behalf of The City of La Crosse *The OS Group, LLC* 

Attachment: Lab report for your well Bottled Water Acknowledgement

Client: Pace Analytical Services, LLC				Laboratory I	D: VK03016-	010	
Description: 341-0				Matrix	: Aqueous		
Date Sampled:10/29/2020 1510	Proiect Na	me: LACROSSE WELL #	#23 & 24		•		
Date Received: 11/03/2020	oject Num	per: 10217106					
Date Received. 11/03/2020	oject Num	JEI. 402 174 90					
RunPrep MethodAnalytical Method	Dilution	Analysis Date Analyst	Prep D	ate Batch			
1 SOP SPE PFAS by ID SOP	1 1	1/12/2020 1534 MMM	11/11/202	20 1108 73065			
2 SOP SPE PFAS by ID SOP	5 1	1/13/2020 1856 KMM2	11/11/20:	20 1108 73065			
Deserves above	C	AS Analytical	Desult			11-24-2	Dur
Parameter			Result (		DL	Units	Run
11 chloropicocoffuoro 2 ovoundocono 1 cultonic acid (11CL DE2	700420-0 ) 7420E1 0	2.0 DEAS by ID SOP		0.3	2.1	ng/L	1
11 11 21 21 porfluorodocano sulfonic acid (9.2 ETS)	20100 2	4 A DEAS by ID SOP		0.3	2.1	ng/L	1
1H, 1H, 2H, 2H perfluereestape sulfepie seid (6:2 FTS)	37100-3	7.2 DEAS by ID SOP		0.3	2.1	ng/L	1
1H 1H 2H 2H perfluerededesage sulferie acid (10:2 FTS)	120224 4	0.0 DEAS by ID SOP		0.3	2.1	ng/L	1
1H 1H 2H 2H perfluerebeyane sulfenie acid (4/2 ETS)	757124 7	2.4 DEAS by ID SOP		0.3	2.1	ng/L	1
In, In, 2n, 2n-periluoronexane suitonic aciu (4.2 FTS)	107124-7	2-4 PFAS by ID SOP		0.3	2.1	ng/L	1
4.9 diava 211 perfuerenzanzia asid (ADONA)	13232-1	4.4 DEAS by ID SOP		8.3	2.1	ng/L	1
4,8-dioxa-3H-periluoiononanoic acid (ADONA)	919005-1	4-4 PFAS by ID SOP		8.3	2.1	ng/L	1
N-ethylperiluoio-1-octanesulonamide (EtFOSA)	4151-5	D-2 PFAS by ID SOP		8.3	2.1	ng/L	1
N-einyiperiluoro-1-ocianesuironamidoacetic acid (EFOSAA)	2991-5	D-6 PFAS by ID SOP	ND	8.3	2.1	ng/L	1
2-N-ethylperiluoro-1-octanesulfonamido-ethanol (ELFOSE)	1691-9	9-2 PFAS by ID SOP	ND	8.3	2.1	ng/L	1
N-metnylperfluoro-I-octanesulfonamide (MeFOSA)	31506-3	2-8 PFAS by ID SOP	ND	17	4.2	ng/L	1
N-methylperfluoro-1-octanesulfonamidoacetic acid (MeFOSAA)	2355-3	1-9 PFAS by ID SOP	ND	8.3	2.1	ng/L	1
2-N-methylperiluoro-1-octanesulionamido-ethanol (MeFOSE)	24448-0	9-7 PFAS by ID SOP	ND	8.3	2.1	ng/L	1
Periluoro-i-butanesuironic acid (PFBS)	3/5-/	3-5 PFAS by ID SOP	22	4.2	1.0	ng/L	1
Perfluoro- I-decanesultonic acid (PFDS)	335-7	7-3 PFAS by ID SOP	ND	4.2	1.0	ng/L	1
Perfluoro-1-heptanesulfonic acid (PFHpS)	375-9	2-8 PEAS by ID SOP	46	4.2	1.0	ng/L	1
Perfluoro-1-nonanesulfonic acid (PENS)	68259-1	2-1 PFAS by ID SOP	ND	4.2	1.0	ng/L	1
Pertluoro-1-octanesultonamide (PFOSA)	754-9	1-6 PEAS by ID SOP	ND	4.2	1.0	ng/L	1
Perfluoro-1-pentanesulfonic acid (PFPeS)	2706-9	1-4 PFAS by ID SOP	44	4.2	1.0	ng/L	1
Perfluorododecanesulfonic acid (PFDOS)	79780-3	9-5 PFAS by ID SOP	ND	8.3	2.1	ng/L	1
Perfluorohexanesulfonic acid (PFHxS)	355-4	6-4 PFAS by ID SOP	/60	4.2	1.0	ng/L	1
Perfluoro-n-butanoic acid (PFBA)	375-2	2-4 PEAS by ID SOP	30	4.2	1.0	ng/L	1
Perfluoro-n-decanoic acid (PFDA)	335-7	6-2 PEAS by ID SOP	ND	4.2	1.0	ng/L	1
Perfluoro-n-dodecanoic acid (PFDoA)	307-5	5-1 PEAS by ID SOP	ND	4.2	1.0	ng/L	1
Perfluoro-n-heptanoic acid (PFHpA)	375-8	5-9 PFAS by ID SOP	2.5 J	4.2	1.0	ng/L	1
Perfluoro-n-hexadecanoic acid (PFHxDA)	67905-1	9-5 PFAS by ID SOP	ND	8.3	2.1	ng/L	1
Perfluoro-n-hexanoic acid (PFHxA)	307-2	4-4 PFAS by ID SOP	13	4.2	1.0	ng/L	1
Perfluoro-n-nonanoic acid (PFNA)	375-9	5-1 PFAS by ID SOP	ND	4.2	1.0	ng/L	1
Perfluoro-n-octadecanoic acid (PFODA)	16517-1	1-6 PFAS by ID SOP	ND	8.3	2.1	ng/L	1
Perfluoro-n-octanoic acid (PFOA)	335-6	7-1 PFAS by ID SOP	21	4.2	1.0	ng/L	1
Perfluoro-n-pentanoic acid (PFPeA)	2706-9	0-3 PEAS by ID SOP	4.1 J	4.2	1.0	ng/L	1
Perfluoro-n-tetradecanoic acid (PFTeDA)	376-0	6-7 PFAS by ID SOP	ND	4.2	1.0	ng/L	1
Perfluoro-n-tridecanoic acid (PF TrDA)	72629-9	4-8 PEAS by ID SOP	ND	4.2	1.0	ng/L	1
Perfluoro-n-undecanoic acid (PFUdA)	2058-9	4-8 PFAS by ID SOP	ND	4.2	1.0	ng/L	1
Perfluorooctanesulfonic acid (PFOS)	1763-2	3-1 PFAS by ID SOP	1400	21	5.2	ng/L	2
Я	Run 1 Ao	cceptance Rur	n 2 Acce	eptance			
Surrogate Q % Re	ecovery	Limits Q % Rec	overy L	imits			

Surrogate	Q % R	ecovery	Limits	Q	% Recovery	Limits
13C2_4:2FTS		108	25-150		95	25-150
13C2_6:2FTS		104	25-150		103	25-150
13C2_8:2FTS		88	25-150		105	25-150
13C2_PFDoA		96	25-150		91	25-150
13C2_PFHxDA		93	25-150		99	25-150
LOQ = Limit of Quantitation	B = Detected in the method blank	E = Quantita	tion of compou	nd exc	eeded the calibration ratio	ange DL = Detection Limit
ND = Not detected at or above the DL	N = Recovery is out of criteria	P = The RPE	D between two	GC col	umns exceeds 40%	J = Estimated result < LOQ and $\geq$ DL
H = Out of holding time	W = Reported on wet weight basis					

Pace Analytical Services, LLC (formerly Shealy Environmental Services, Inc.) 106 Vantage Point Drive West Columbia, SC 29172 (803) 791-9700 Fax (803) 791-9111 www.pacelabs.com

Project Name: LACROSSE WELL #23 & 24

Project Number: 40217496

Client: Pace Analytical Services, LLC Description: 341-0 Date Sampled:10/29/2020 1510 Date Received: 11/03/2020

Laboratory ID: VK03016-010

Matrix: Aqueous

Surrogate	Q	Run 1 % Recovery	Acceptance Limits	Q	Run 2 % Recovery	Acceptance / Limits
13C2_PFTeDA		93	25-150		94	25-150
13C3_PFBS		95	25-150		92	25-150
13C3_PFHxS		88	25-150		96	25-150
13C3-HFPO-DA		116	25-150		99	25-150
13C4_PFBA		102	25-150		96	25-150
13C4_PFHpA		101	25-150		87	25-150
13C5_PFHxA		104	25-150		93	25-150
13C5_PFPeA		107	25-150		95	25-150
13C6_PFDA		102	25-150		91	25-150
13C7_PFUdA		102	25-150		92	25-150
13C8_PFOA		98	25-150		94	25-150
13C8_PFOS		84	25-150		85	25-150
13C8_PFOSA		107	10-150		111	10-150
13C9_PFNA		90	25-150		93	25-150
d-EtFOSA		96	10-150		94	10-150
d5-EtFOSAA		100	25-150		102	25-150
d9-EtFOSE		102	10-150		98	10-150
d-MeFOSA		101	10-150		92	10-150
d3-MeFOSAA		101	25-150		102	25-150
d7-MeFOSE		97	10-150		105	10-150

LOQ = Limit of Quantitation B = Detected in the method blank E = Quantitation of compound exceeded the calibration range DL = Detection Limit ND = Not detected at or above the DL N = Recovery is out of criteria P = The RPD between two GC columns exceeds 40% J = Estimated result < LOQ and  $\ge$  DL H = Out of holding time W = Reported on wet weight basis

Pace Analytical Services, LLC (formerly Shealy Environmental Services, Inc.) 106 Vantage Point Drive West Columbia, SC 29172 (803) 791-9700 Fax (803) 791-9111 www.pacelabs.com

## BOTTLED WATER ACKNOWLEDGEMENT

2555 Bainbridge Street, La Crosse, WI 54603

If you desire to accept the bottled water delivery, please complete and sign this form and return it to The OS Group at <u>PFAS@TheOSgrp.com</u> or mail to 444 21<sup>st</sup> St. S, La Crosse, WI 54601. You may also complete this form electronically on line at <u>www.cityoflacrosse.org/bottledwater</u>. Call 608-668-2718 with any question you may have.

As pre-caution for the protection of human health, the City of La Crosse (The City) will provide, on a temporary basis, bottled water for drinking, cooking and toothbrushing purposes at the above referenced address. The water will be delivered to your home or business by a commercial water delivery service. At the City's cost, a dispenser / cooler and regular deliveries of 5-gallon containers of water will be provided. The City reserves the right to dictate the conditions of delivery, such as minimum and maximum number of containers per delivery, frequency and timing of deliveries. The City reserves the right to periodically review whether The City should continue to provide bottled water, considering factors such as State and Federal standards and guidance, evolving knowledge and understanding of the sources, cause and responsibility for the contamination, new or reinterpreted test results, and the availability of more permanent or costeffective sources of water for the above purposes. The City of La Crosse makes no warranty or representation regarding the suitability of the bottled water beyond those made by the commercial water delivery service.

**Check ownership:** 

Owner-Occupant
Occupant Only

Number of Occupants: \_\_\_\_\_

All reusable or returnable equipment and supplies, such as the containers and cooler/dispenser, are the property of the commercial water delivery service or the City of La Crosse. By signing below, the Occupant of the above referenced property acknowledges that all reusable or returnable equipment and supplies shall be returned to the commercial water delivery service or the City of La Crosse upon request. The Occupant agrees to provide reasonable access for delivery of bottled water and pick up of reusable or returnable equipment and supplies. Occupant(s) acknowledges that they may be required to sign an agreement with the commercial water delivery service as a condition of receiving bottled water.

Signed:	Dated:
	Dutcu.

Printed Name: \_\_\_\_\_\_



444 21st Street South · La Crosse, Wisconsin · 54601

November 24, 2020

111 Calloway Blvd La Crosse, WI 54603

Subject: Private Well Sampling Results 111 Calloway Blvd, La Crosse, WI 54603 Tax parcel # 4-344-0 Sample ID # 344-0

:

Dear

We have received and reviewed the test results for the sample collected on October 29, 2020 at the above address. Some PFAS compounds were found, but the levels found were **below** the Department of Health Services (DHS) levels recommended for protecting health. These levels are called the "Recommended Public Health Standard" in the table below. The levels found in *your* well are called the "Sample Result" in the table below.

#### Sample Results

Compound	Sample Result (unit)	Recommended Public Health Standard (unit <sup>e</sup> )		
N-Ethyl Perfluorooctane sulfonamide (NEtFOSA) CAS # 4151-50-2	Not Detected	20 ppt <sup>a,b</sup>	) ppt unds I 6	
N-Ethyl perfluorooctane sulfonamidoacetic acid (NEtFOSAA) CAS # 2991-50-6	Not Detected	20 ppt <sup>a,b</sup>	it is 20 ompo <i>il</i> of all	
N-Ethyl perfluorooctane sulfonamidoethanol (NEtFOSE) CAS # 1691-99-2	Not Detected	20 ppt <sup>a,b</sup>	ed lim ese 6 c ed toto	
Perfluorooctane sulfonamide (FOSA) CAS # 754-91-6	Not Detected	20 ppt <sup>a,b</sup>	mend of the mbine	
Perfluorooctanoic acid (PFOA) CAS # 335-67-1	4.3 ppt	20 ppt <sup>a,b</sup>	recom ny <i>one</i> the <i>cc</i>	
Perfluorooctanesulfonic acid (PFOS) CAS # 1763-23-1	1.8 ppt	20 ppt <sup>a,b</sup>	The for ai or	

Private Well Sampling Results for 111 Calloway Blvd, La Crosse, WI 54603 Tax parcel # 4-344-0 Sample ID # 344-0 November 24, 2020

Compound	Sample Result (unit)	Recommended Public Health Standard (unit <sup>e</sup> )
Hexafluoropropylene oxide dimer acid (HPFO-DA; GenX) CAS # 13252-13-6	Not Detected	300 ppt <sup>a</sup>
Perfluorobutanesulfonic acid (PFBS) CAS # 375-73-5	1.3 ppt	450,000 ppt <sup>a</sup>
Perfluorohexanesulfonic acid (PFHxS) CAS # 355-46-4	2.3 ppt	40 ppt <sup>a</sup>
Perfluorobutanoic acid (PFBA) CAS # 375-22-4	3.5 ppt	10,000 ppt <sup>a</sup>
Perfluorodecanoic acid (PFDA) CAS # 335-76-2	Not Detected	300 ppt <sup>a</sup>
Perfluorododecanoic acid (PFDoA) CAS # 307-55-1	Not Detected	500 ppt <sup>a</sup>
Perfluorohexanoic acid (PFHxA) CAS # 307-24-4	1.4 ppt	150,000 ppt <sup>a</sup>
Perfluorononanoic acid (PFNA) CAS # 375-95-1	Not Detected	30 ppt <sup>a</sup>
Perfluorotetradecanoic acid (PFTeA) CAS # 376-06-7	Not Detected	10,000 ppt <sup>a</sup>
Perfluoroundecanoic acid (PFUnA) CAS # 2058-94-8	Not Detected	3,000 ppt <sup>a</sup>
4,8-Dioxa-3H-perfluorononanoic acid (DONA) CAS # 919005-14-4	Not Detected	3,000 ppt <sup>a</sup>
Perfluorooctadecanoic acid (PFODA) CAS # 16517-11-6	Not Detected	400,000 ppt <sup>a</sup>
Perfluoro-n-pentanoic acid (PFPeA) CAS #2706-90-3	1.1 ppt	None Established <sup>c</sup>

<sup>a</sup> Public health enforcement standard (ES) recommended by DHS.

<sup>b</sup> DHS recommends a combined enforcement standard of 20 ng/L and combined preventive action limit of 2 ng/L for FOSA, NEt-FOSA, NetFOSAA, PFOS, and PFOA.

<sup>c</sup> A current standard is not available; the compound is currently under review by DHS for potential public health standard recommendation.

<sup>d</sup> Public health enforcement standard (ES) in NR 140, Wisconsin Administrative Code.

<sup>e</sup> Units: Parts per trillion (ppt) = nanograms of substance per liter of water (ng/L)

<sup>BL</sup> Detected in the method blank. Possible lab contaminant.

Private Well Sampling Results for 111 Calloway Blvd, La Crosse, WI 54603 Tax parcel # 4-344-0 Sample ID # 344-0 November 24, 2020

As required by law, we will be submitting these results to the Department of Natural Resources (DNR). The DNR may consult with the Department of Health Services (DHS) about these test results. DHS may review all PFAS tests and follow-up with you directly if any actions are recommended to protect your health.

Thank you for your patience and assistance with our investigation. We will provide updates on the project at <u>https://www.cityoflacrosse.org/wells</u> as our work continues. If you have any questions, please call The OS Group at (608) 668-2718 or email them at <u>PFAS@theOSgrp.com</u>.

You can also contact the DNR and DHS with questions about PFAS or the water sample results at the numbers provided below.

Questions about		<u>Contact</u>	<u>Phone</u>	E-mail Address
Soil & Groundwater Testing, Clean Up	DNR	David Rozeboom	715-215-2078	David.Rozeboom@wisconsin.gov
Drinking Water or Private wells	DNR	Kyle Burton	920-360-2112	kyle.burton@wisconsin.gov
Health Concerns	DHS	Curtis Hedman	608-266-6677	Curtis.Hedman@dhs.wisconsin.gov

On behalf of The City of La Crosse *The OS Group, LLC* 

Attachment: Lab report for your well

Client: Pace Analytical Services, LLC				Labora	atory ID: VK	03016-015	
Description: 344-0					Matrix: Aqu	ueous	
Date Sampled:10/29/2020 1010	Project Nan	ne: LACROSSE WELL #	#23 & 24				
Date Received: 11/03/2020	roiect Numb	er <sup>.</sup> 40217496					
RunPrep MethodAnalytical Method1SOP SPEPFAS by ID SOP	Dilution A	Analysis Date Analyst 1/12/2020 1638 MMM	Prep 11/11/2	Date Ba 020 1108 73	tch 065		
Parameter	CA Numbe	AS Analytical er Method	Result	Q LO	Q D	DL Units	Run
9-chlorohexadecafluoro-3-oxanone-1-sulfonic acid (9CI-PF3ONS)	756426-58	3-1 PFAS by ID SOP	ND	7	.1 '	1.8 ng/L	1
11-chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11CI-PF3.	.) 763051-92	2-9 PFAS by ID SOP	ND	7	.1 ·	1.8 ng/L	1
1H, 1H, 2H, 2H-perfluorodecane sulfonic acid (8:2 FTS)	39108-34	4-4 PFAS by ID SOP	ND	7	.1 ·	1.8 ng/L	1
1H, 1H, 2H, 2H-perfluorooctane sulfonic acid (6:2 FTS)	27619-97	7-2 PFAS by ID SOP	ND	7	.1 ·	1.8 ng/L	1
1H,1H,2H,2H-perfluorododecane sulfonic acid (10:2 FTS)	120226-60	0-0 PFAS by ID SOP	ND	7	.1 ·	1.8 ng/L	1
1H,1H,2H,2H-perfluorohexane sulfonic acid (4:2 FTS)	757124-72	2-4 PFAS by ID SOP	ND	7	.1 ·	1.8 ng/L	1
Hexafluoropropylene oxide dimer acid (GenX)	13252-13	3-6 PFAS by ID SOP	ND	7	.1 <sup>.</sup>	1.8 ng/L	1
4,8-dioxa-3H-perfluorononanoic acid (ADONA)	919005-14	4-4 PFAS by ID SOP	ND	7	.1 <sup>.</sup>	1.8 ng/L	1
N-ethylperfluoro-1-octanesulfonamide (EtFOSA)	4151-50	0-2 PFAS by ID SOP	ND	7	.1 <sup>.</sup>	1.8 ng/L	1
N-ethylperfluoro-1-octanesulfonamidoacetic acid (EtFOSAA)	2991-50	0-6 PFAS by ID SOP	ND	7	.1 <sup>.</sup>	1.8 ng/L	1
2-N-ethylperfluoro-1-octanesulfonamido-ethanol (EtFOSE)	1691-99	P-2 PFAS by ID SOP	ND	7	.1 <sup>.</sup>	1.8 ng/L	1
N-methylperfluoro-1-octanesulfonamide (MeFOSA)	31506-32	2-8 PFAS by ID SOP	ND	1	4	3.5 ng/L	1
N-methylperfluoro-1-octanesulfonamidoacetic acid (MeFOSAA)	2355-31	-9 PFAS by ID SOP	ND	7	.1 '	1.8 ng/L	1
2-N-methylperfluoro-1-octanesulfonamido-ethanol (MeFOSE)	24448-09	9-7 PFAS by ID SOP	ND	7	.1 '	1.8 ng/L	1
Perfluoro-1-butanesulfonic acid (PFBS)	375-73	3-5 PFAS by ID SOP	1.3	J 3	.5 0.	.88 ng/L	1
Perfluoro-1-decanesulfonic acid (PFDS)	335-77	7-3 PFAS by ID SOP	ND	3	.5 0.	.88 ng/L	1
Perfluoro-1-heptanesulfonic acid (PFHpS)	375-92	2-8 PFAS by ID SOP	ND	3	.5 0.	.88 ng/L	1
Perfluoro-1-nonanesulfonic acid (PFNS)	68259-12	2-1 PFAS by ID SOP	ND	3	.5 0.	.88 ng/L	1
Perfluoro-1-octanesulfonamide (PFOSA)	754-91	-6 PFAS by ID SOP	ND	3	.5 0.	.88 ng/L	1
Perfluoro-1-pentanesulfonic acid (PFPeS)	2706-91	-4 PFAS by ID SOP	ND	3	.5 0.	.88 ng/L	1
Perfluorododecanesulfonic acid (PFDOS)	79780-39	9-5 PFAS by ID SOP	ND	7	.1 ·	1.8 ng/L	1
Perfluorohexanesulfonic acid (PFHxS)	355-46	-4 PFAS by ID SOP	2.3	J 3	.5 0.	.88 ng/L	1
Perfluoro-n-butanoic acid (PFBA)	375-22	2-4 PFAS by ID SOP	3.5	3	.5 0.	.88 ng/L	1
Perfluoro-n-decanoic acid (PFDA)	335-76	5-2 PFAS by ID SOP	ND	3	.5 0.	.88 ng/L	1
Perfluoro-n-dodecanoic acid (PFDoA)	307-55	5-1 PFAS by ID SOP	ND	3	.5 0.	.88 ng/L	1
Perfluoro-n-heptanoic acid (PFHpA)	375-85	5-9 PFAS by ID SOP	ND	3	.5 0.	.88 ng/L	1
Perfluoro-n-hexadecanoic acid (PFHxDA)	67905-19	9-5 PFAS by ID SOP	ND	7.	.1 ·	1.8 ng/L	1
Perfluoro-n-hexanoic acid (PFHxA)	307-24	I-4 PFAS by ID SOP	1.4	J 3	.5 0.	.88 ng/L	1
Perfluoro-n-nonanoic acid (PFNA)	375-95	5-1 PFAS by ID SOP	ND	3	.5 0.	.88 ng/L	1
Perfluoro-n-octadecanoic acid (PFODA)	16517-11	1-6 PFAS by ID SOP	ND	7	.1 ·	1.8 ng/L	1
Perfluoro-n-octanoic acid (PFOA)	335-67	7-1 PFAS by ID SOP	4.3	3	.5 0.	.88 ng/L	1
Perfluoro-n-pentanoic acid (PFPeA)	2706-90	D-3 PFAS by ID SOP	1.1	J 3	.5 0.	.88 ng/L	1
Perfluoro-n-tetradecanoic acid (PFTeDA)	376-06	5-7 PEAS by ID SOP	ND	3	.5 0.	.88 ng/L	1
Perfluoro-n-tridecanoic acid (PFTrDA)	/2629-94	4-8 PEAS by ID SOP	ND	3	.5 0.	.88 ng/L	1
Perfluoro-n-undecanoic acid (PFUdA)	2058-94	I-8 PEAS by ID SOP	ND	3	.5 O.	.88 ng/L	1
Periluorooctanesuironic acid (PFOS)	1/63-23	S-1 PFAS DY ID SOP	1.8	J 3.	.5 0.	.88 ng/L	I
Surrogate Q % R	Run 1 Ac ecovery	ceptance Limits					
13C2_4:2FTS	107	25-150					
13C2_6:2FTS	103	25-150					
13C2_8:2FTS	90	25-150					
13C2_PFDoA	90	25-150					
13C2_PFHxDA	95	25-150					
13C2_PFTeDA	97	25-150					
LOQ = Limit of Quantitation B = Detected in the method blank	E = Quantitat	tion of compound exceeded the	calibration ra	ange DL = Dete	ction Limit		
ND = Not detected at or above the DL $N$ = Recovery is out of criteria	P = The RPD	between two GC columns exce	eds 40%	J = Estima	ited result < LO	Q and $\geq$ DL	
H = Out of holding time W = Reported on wet weight basis							

 Pace Analytical Services, LLC (formerly Shealy Environmental Services, Inc.)

 106 Vantage Point Drive West Columbia, SC 29172 (803) 791-9700 Fax (803) 791-9111 www.pacelabs.com

Client: Pace Analytical Services, LLC		Laboratory ID: VK03016-015
Description: 344-0		Matrix: Aqueous
Date Sampled:10/29/2020 1010	Project Name: LACROSSE WELL #23 & 24	
Date Received: 11/03/2020	Project Number: 40217496	

Curra note	Run 1 A	cceptance
Surrogate	Q % Recovery	Limits
13C3_PFBS	100	25-150
13C3_PFHxS	94	25-150
13C3-HFPO-DA	92	25-150
13C4_PFBA	102	25-150
13C4_PFHpA	101	25-150
13C5_PFHxA	97	25-150
13C5_PFPeA	104	25-150
13C6_PFDA	101	25-150
13C7_PFUdA	98	25-150
13C8_PFOA	97	25-150
13C8_PFOS	87	25-150
13C8_PFOSA	110	10-150
13C9_PFNA	102	25-150
d-EtFOSA	80	10-150
d5-EtFOSAA	101	25-150
d9-EtFOSE	101	10-150
d-MeFOSA	97	10-150
d3-MeFOSAA	101	25-150
d7-MeFOSE	91	10-150

H = Out of holding time	W = Reported on wet weight basis		
ND = Not detected at or above the DL	N = Recovery is out of criteria	P = The RPD between two GC columns exceeds 40%	J = Estimated result < LOQ and $\ge$ DL
LOQ = Limit of Quantitation	B = Detected in the method blank	E = Quantitation of compound exceeded the calibration range	DL = Detection Limit

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444 21st Street South · La Crosse, Wisconsin · 54601

November 24, 2020

### 2518 1st Avenue West La Crosse, WI 54603

Subject: Private Well Sampling Results 2518 1st Avenue West, La Crosse, WI 54603 Tax parcel # 4-351-0 Sample ID # 351-0

Dear

We have received and reviewed the test results for the sample collected on October 29, 2020 at the above address. Some PFAS compounds were found, but the levels found were **below** the Department of Health Services (DHS) levels recommended for protecting health. These levels are called the "Recommended Public Health Standard" in the table below. The levels found in *your* well are called the "Sample Result" in the table below.

#### Sample Results

Compound	Sample Result (unit)	Recomm Public H Standard	ended ealth (unit <sup>e</sup> )
N-Ethyl Perfluorooctane sulfonamide (NEtFOSA) CAS # 4151-50-2	Not Detected	20 ppt <sup>a,b</sup>	) ppt unds I 6
N-Ethyl perfluorooctane sulfonamidoacetic acid (NEtFOSAA) CAS # 2991-50-6	Not Detected	20 ppt <sup>a,b</sup>	it is 2C ompo <i>il</i> of al
N-Ethyl perfluorooctane sulfonamidoethanol (NEtFOSE) CAS # 1691-99-2	Not Detected	20 ppt <sup>a,b</sup>	ed lim ese 6 c ed toto
Perfluorooctane sulfonamide (FOSA) CAS # 754-91-6	Not Detected	20 ppt <sup>a,b</sup>	mend of the ombine
Perfluorooctanoic acid (PFOA) CAS # 335-67-1	Not Detected	20 ppt <sup>a,b</sup>	recom ny <i>one</i> the <i>cc</i>
Perfluorooctanesulfonic acid (PFOS) CAS # 1763-23-1	8.4 ppt	20 ppt <sup>a,b</sup>	The for ai or

Private Well Sampling Results for 2518 1st Avenue West, La Crosse, WI 54603 Tax parcel # 4-351-0 Sample ID # 351-0 November 24, 2020

Compound	Sample Result (unit)	Recommended Public Health Standard (unit <sup>e</sup> )
Hexafluoropropylene oxide dimer acid (HPFO-DA; GenX) CAS # 13252-13-6	Not Detected	300 ppt <sup>a</sup>
Perfluorobutanesulfonic acid (PFBS) CAS # 375-73-5	5.4 ppt	450,000 ppt <sup>a</sup>
Perfluorohexanesulfonic acid (PFHxS) CAS # 355-46-4	6.7 ppt	40 ppt <sup>a</sup>
Perfluorobutanoic acid (PFBA) CAS # 375-22-4	34 ppt	10,000 ppt <sup>a</sup>
Perfluorodecanoic acid (PFDA) CAS # 335-76-2	Not Detected	300 ppt <sup>a</sup>
Perfluorododecanoic acid (PFDoA) CAS # 307-55-1	Not Detected	500 ppt <sup>a</sup>
Perfluorohexanoic acid (PFHxA) CAS # 307-24-4	Not Detected	150,000 ppt <sup>a</sup>
Perfluorononanoic acid (PFNA) CAS # 375-95-1	Not Detected	30 ppt <sup>a</sup>
Perfluorotetradecanoic acid (PFTeA) CAS # 376-06-7	Not Detected	10,000 ppt <sup>a</sup>
Perfluoroundecanoic acid (PFUnA) CAS # 2058-94-8	Not Detected	3,000 ppt <sup>a</sup>
4,8-Dioxa-3H-perfluorononanoic acid (DONA) CAS # 919005-14-4	Not Detected	3,000 ppt <sup>a</sup>
Perfluorooctadecanoic acid (PFODA) CAS # 16517-11-6	Not Detected	400,000 ppt <sup>a</sup>
Perfluoro-1-pentanesulfonic acid (PFPeS) CAS #2706-91-4	3.5 ppt	None Established <sup>c</sup>

<sup>a</sup> Public health enforcement standard (ES) recommended by DHS.

<sup>b</sup> DHS recommends a combined enforcement standard of 20 ng/L and combined preventive action limit of 2 ng/L for FOSA, NEt-FOSA, NetFOSAA, PFOS, and PFOA.

<sup>c</sup> A current standard is not available; the compound is currently under review by DHS for potential public health standard recommendation.

<sup>d</sup> Public health enforcement standard (ES) in NR 140, Wisconsin Administrative Code.

<sup>e</sup> Units: Parts per trillion (ppt) = nanograms of substance per liter of water (ng/L)

<sup>BL</sup> Detected in the method blank. Possible lab contaminant.

Private Well Sampling Results for 2518 1st Avenue West, La Crosse, WI 54603 Tax parcel # 4-351-0 Sample ID # 351-0 November 24, 2020

As required by law, we will be submitting these results to the Department of Natural Resources (DNR). The DNR may consult with the Department of Health Services (DHS) about these test results. DHS may review all PFAS tests and follow-up with you directly if any actions are recommended to protect your health.

Thank you for your patience and assistance with our investigation. We will provide updates on the project at <u>https://www.cityoflacrosse.org/wells</u> as our work continues. If you have any questions, please call The OS Group at (608) 668-2718 or email them at <u>PFAS@theOSgrp.com</u>.

You can also contact the DNR and DHS with questions about PFAS or the water sample results at the numbers provided below.

Questions about		<u>Contact</u>	<u>Phone</u>	E-mail Address
Soil & Groundwater Testing, Clean Up	DNR	David Rozeboom	715-215-2078	David.Rozeboom@wisconsin.gov
Drinking Water or Private wells	DNR	Kyle Burton	920-360-2112	kyle.burton@wisconsin.gov
Health Concerns	DHS	Curtis Hedman	608-266-6677	Curtis.Hedman@dhs.wisconsin.gov

On behalf of The City of La Crosse *The OS Group, LLC* 

Attachment: Lab report for your well

Client: Pace Analytical Services, LLC				Laboratory	ID: VK03016-	014	
Description: 351-0				Matr	ix: Aqueous		
Date Sampled:10/29/2020 1000	roject Nam		#73 & 74				
Date Received: 11/02/2020	viact Numbo	r: 40217406	25 0 24				
Date Received. 11/03/2020 Plo	ject Numbe	1.40217490					
RunPrep MethodAnalytical MethodD1SOP SPEPFAS by ID SOP	ilution Ar 1 11	nalysis Date Analyst /12/2020 1628 MMM	Prep D 11/11/20	Date Batch 020 1108 73065			
Parameter	CAS	6 Analytical	Result	0 100	וח	Units	Run
9-chlorobexadecafluoro-3-oxanone-1-sulfonic acid (9CI-PE3ONS)	756426-58-	1 PEAS by ID SOP	ND	74	1.0	ng/l	1
11-chloroeicosafluoro-3-ovaundecane-1-sulfonic acid (11Cl-PE3)	763051-92-	9 PEAS by ID SOP		7.4	1.7	ng/L	1
1H 1H 2H 2H-perfluorodecane sulfonic acid (8:2 FTS)	39108-34-	4 PEAS by ID SOP		7.4	1.9	ng/L	1
1H 1H 2H 2H-perfluorooctane sulfonic acid (6:2 FTS)	27619-97-	2 PEAS by ID SOP	ND	7.4	1.7	ng/L	1
1H 1H 2H 2H-perfluorododecane sulfonic acid (0.2 FTS)	120226-60-	0 PEAS by ID SOP	ND	7.4	1.9	ng/L	1
1H 1H 2H 2H-perfluorobexane sulfonic acid (4:2 FTS)	757124-72-	4 PEAS by ID SOP	ND	7.4	1.9	ng/L	1
Hexafluoronronylene ovide dimer acid (GenX)	13252-13-	6 PEAS by ID SOP		7.4	1.7	ng/L	1
4.8-dioxa-3H-perfluoropopanoic acid (ADONA)	919005-14-	4 PEAS by ID SOP		7.4	1.9	ng/L	1
N-ethylperfluoro-1-octanesulfonamide (EtEOSA)	4151-50-	2 PEAS by ID SOP		7.4	1.9	ng/L	1
N-ethylperilaoro 1-octanesulfonamidoacetic acid (EtEOSAA)	2001-50-	6 PEAS by ID SOP		7.4	1.9	ng/L	1
2-N-ethylperfluoro-1-octanesulfonamido-ethanol (EtEOSE)	1691-99-	2 PEAS by ID SOP	ND	7.4	1.7	ng/L	1
N-methylperfluoro-1-octanesulfonamide (MeEOSA)	31506-32-	8 PEAS by ID SOP	ND	15	3.7	ng/L	1
N-methylperfluoro-1-octanesulfonamidoacetic acid (MeEOSAA)	2355-31-	9 PEAS by ID SOP	ND	7.4	1.9	ng/L	1
2-N-methylperfluoro-1-octanesulfonamido-ethanol (MEROSE)	24448-09-	7 PEAS by ID SOP	ND	7.4	1.9	ng/L	1
Perfluoro-1-butanesulfonic acid (PFBS)	375-73-	5 PFAS by ID SOP	5.4	3.7	0.93	ng/L	1
Perfluoro-1-decanesulfonic acid (PFDS)	335-77-	3 PFAS by ID SOP	ND	3.7	0.93	ng/L	1
Perfluoro-1-heptanesulfonic acid (PFHpS)	375-92-	8 PFAS by ID SOP	ND	3.7	0.93	ng/L	1
Perfluoro-1-nonanesulfonic acid (PFNS)	68259-12-	1 PFAS by ID SOP	ND	3.7	0.93	ng/L	1
Perfluoro-1-octanesulfonamide (PFOSA)	754-91-	6 PFAS by ID SOP	ND	3.7	0.93	ng/L	1
Perfluoro-1-pentanesulfonic acid (PFPeS)	2706-91-	4 PFAS by ID SOP	3.5	J 3.7	0.93	ng/L	1
Perfluorododecanesulfonic acid (PFDOS)	79780-39-	5 PFAS by ID SOP	ND	7.4	1.9	ng/L	1
Perfluorohexanesulfonic acid (PFHxS)	355-46-	4 PFAS by ID SOP	6.7	3.7	0.93	ng/L	1
Perfluoro-n-butanoic acid (PFBA)	375-22-	4 PFAS by ID SOP	34	3.7	0.93	ng/L	1
Perfluoro-n-decanoic acid (PFDA)	335-76-2	2 PFAS by ID SOP	ND	3.7	0.93	ng/L	1
Perfluoro-n-dodecanoic acid (PFDoA)	307-55-	1 PFAS by ID SOP	ND	3.7	0.93	ng/L	1
Perfluoro-n-heptanoic acid (PFHpA)	375-85-9	9 PFAS by ID SOP	ND	3.7	0.93	ng/L	1
Perfluoro-n-hexadecanoic acid (PFHxDA)	67905-19-	5 PFAS by ID SOP	ND	7.4	1.9	ng/L	1
Perfluoro-n-hexanoic acid (PFHxA)	307-24-	4 PFAS by ID SOP	ND	3.7	0.93	ng/L	1
Perfluoro-n-nonanoic acid (PFNA)	375-95-	1 PFAS by ID SOP	ND	3.7	0.93	ng/L	1
Perfluoro-n-octadecanoic acid (PFODA)	16517-11-	6 PFAS by ID SOP	ND	7.4	1.9	ng/L	1
Perfluoro-n-octanoic acid (PFOA)	335-67-	1 PFAS by ID SOP	ND	3.7	0.93	ng/L	1
Perfluoro-n-pentanoic acid (PFPeA)	2706-90-	3 PFAS by ID SOP	ND	3.7	0.93	ng/L	1
Perfluoro-n-tetradecanoic acid (PFTeDA)	376-06-	7 PFAS by ID SOP	ND	3.7	0.93	ng/L	1
Perfluoro-n-tridecanoic acid (PFTrDA)	72629-94-	8 PFAS by ID SOP	ND	3.7	0.93	ng/L	1
Perfluoro-n-undecanoic acid (PFUdA)	2058-94-	8 PFAS by ID SOP	ND	3.7	0.93	ng/L	1
Perfluorooctanesulfonic acid (PFOS)	1763-23-	1 PFAS by ID SOP	8.4	3.7	0.93	ng/L	1
Pi		ontanco					
Surrogate Q % Rec	covery L	_imits					
13C2_4:2FTS 1	101	25-150					
13C2_6:2FTS	95	25-150					
13C2_8:2FTS	86	25-150					
13C2_PFDoA	87	25-150					
13C2_PFHxDA	89	25-150					
13C2_PFTeDA	88	25-150					
100 limit of Ouentitelian D. Detected in the world.	E 0000000	n of compound dd-1	oolibrott		ing it		
LOG = Limit or Quantitation     B = Detected in the method blank       ND = Not detected at or above the DI     N = Recovery is out of criteria	E = QuantitationP = The RPD F	on or compound exceeded the petween two GC columns exce	eds 40%	J = Estimated res	sult < LOO and > F	DL	
H = Out of holding time W = Reported on wet weight basis							

Pace Analytical Services, LLC (formerly Shealy Environmental Services, Inc.) 106 Vantage Point Drive West Columbia, SC 29172 (803) 791-9700 Fax (803) 791-9111 www.pacelabs.com

Client: Pace Analytical Services, LLC
Description: 351-0
Date Sampled:10/29/2020 1000

Laboratory ID: VK03016-014

Matrix: Aqueous Project Name: LACROSSE WELL #23 & 24 Date Received: 11/03/2020 Project Number: 40217496 Run 1 Acceptance Surrogate % Recovery Q Limits 13C3\_PFBS 85 25-150 13C3\_PFHxS 86 25-150 93 13C3-HFPO-DA 25-150 93 13C4\_PFBA 25-150 13C4\_PFHpA 92 25-150 13C5\_PFHxA 88 25-150 13C5\_PFPeA 93 25-150 91 13C6\_PFDA 25-150 13C7\_PFUdA 90 25-150 13C8\_PFOA 95 25-150 13C8\_PFOS 84 25-150 13C8\_PFOSA 95 10-150 13C9\_PFNA 87 25-150 d-EtFOSA 74 10-150 90 d5-EtFOSAA 25-150 d9-EtFOSE 92 10-150 d-MeFOSA 87 10-150 d3-MeFOSAA 94 25-150 d7-MeFOSE 81 10-150

LOQ = Limit of Quantitation B = Detected in the method blank E = Quantitation of compound exceeded the calibration range DL = Detection Limit ND = Not detected at or above the DL N = Recovery is out of criteria P = The RPD between two GC columns exceeds 40% J = Estimated result < LOQ and  $\ge$  DL H = Out of holding time W = Reported on wet weight basis

Pace Analytical Services, LLC (formerly Shealy Environmental Services, Inc.) 106 Vantage Point Drive West Columbia, SC 29172 (803) 791-9700 Fax (803) 791-9111 www.pacelabs.com



444 21st Street South · La Crosse, Wisconsin · 54601

November 24, 2020

2526 1st Avenue West La Crosse, WI 54603

Subject: Private Well Sampling Results 2526 1st Avenue West, La Crosse, WI 54603 Tax Parcel # 4-352-0 Sample ID # 352-0

:

Dear

We have received and reviewed the test results for the sample collected on October 29, 2020 at the above address. Some PFAS compounds were found, but the levels found were **below** the Department of Health Services (DHS) levels recommended for protecting health. These levels are called the "Recommended Public Health Standard" in the table below. The levels found in *your* well are called the "Sample Result" in the table below.

#### Sample Results

Compound	Sample Result (unit)	Recommended Public Health Standard (unit <sup>e</sup> )		
N-Ethyl Perfluorooctane sulfonamide (NEtFOSA) CAS # 4151-50-2	Not Detected	20 ppt <sup>a,b</sup>	) ppt unds I 6	
N-Ethyl perfluorooctane sulfonamidoacetic acid (NEtFOSAA) CAS # 2991-50-6	Not Detected	20 ppt <sup>a,b</sup>	it is 20 ompo <i>il</i> of al	
N-Ethyl perfluorooctane sulfonamidoethanol (NEtFOSE) CAS # 1691-99-2	Not Detected	20 ppt <sup>a,b</sup>	ed lim ese 6 c ed toto	
Perfluorooctane sulfonamide (FOSA) CAS # 754-91-6	Not Detected	20 ppt <sup>a,b</sup>	mend of the	
Perfluorooctanoic acid (PFOA) CAS # 335-67-1	Not Detected	20 ppt <sup>a,b</sup>	recom ny <i>one</i> the <i>cc</i>	
Perfluorooctanesulfonic acid (PFOS) CAS # 1763-23-1	Not Detected	20 ppt <sup>a,b</sup>	The for a	
Private Well Sampling Results for 2526 1st Avenue West, La Crosse, WI 54603 Tax Parcel # 4-352-0 Sample ID # 352-0 November 24, 2020

Compound	Sample Result (unit)	Recommended Public Health Standard (unit <sup>e</sup> )
Hexafluoropropylene oxide dimer acid (HPFO-DA; GenX) CAS # 13252-13-6	Not Detected	300 ppt <sup>a</sup>
Perfluorobutanesulfonic acid (PFBS) CAS # 375-73-5	4.3 ppt	450,000 ppt <sup>a</sup>
Perfluorohexanesulfonic acid (PFHxS) CAS # 355-46-4	6.2 ppt	40 ppt <sup>a</sup>
Perfluorobutanoic acid (PFBA) CAS # 375-22-4	34 ppt	10,000 ppt <sup>a</sup>
Perfluorodecanoic acid (PFDA) CAS # 335-76-2	Not Detected	300 ppt <sup>a</sup>
Perfluorododecanoic acid (PFDoA) CAS # 307-55-1	Not Detected	500 ppt <sup>a</sup>
Perfluorohexanoic acid (PFHxA) CAS # 307-24-4	Not Detected	150,000 ppt <sup>a</sup>
Perfluorononanoic acid (PFNA) CAS # 375-95-1	Not Detected	30 ppt <sup>a</sup>
Perfluorotetradecanoic acid (PFTeA) CAS # 376-06-7	Not Detected	10,000 ppt <sup>a</sup>
Perfluoroundecanoic acid (PFUnA) CAS # 2058-94-8	Not Detected	3,000 ppt <sup>a</sup>
4,8-Dioxa-3H-perfluorononanoic acid (DONA) CAS # 919005-14-4	Not Detected	3,000 ppt <sup>a</sup>
Perfluorooctadecanoic acid (PFODA) CAS # 16517-11-6	Not Detected	400,000 ppt <sup>a</sup>
Perfluoro-1-pentanesulfonic acid (PFPeS) CAS #2706-91-4	3.2 ppt	None Established <sup>c</sup>

<sup>a</sup> Public health enforcement standard (ES) recommended by DHS.

<sup>b</sup> DHS recommends a combined enforcement standard of 20 ng/L and combined preventive action limit of 2 ng/L for FOSA, NEt-FOSA, NetFOSAA, PFOS, and PFOA.

<sup>c</sup> A current standard is not available; the compound is currently under review by DHS for potential public health standard recommendation.

<sup>d</sup> Public health enforcement standard (ES) in NR 140, Wisconsin Administrative Code.

<sup>e</sup> Units: Parts per trillion (ppt) = nanograms of substance per liter of water (ng/L)

<sup>BL</sup> Detected in the method blank. Possible lab contaminant.

Private Well Sampling Results for 2526 1st Avenue West, La Crosse, WI 54603 Tax Parcel # 4-352-0 Sample ID # 352-0 November 24, 2020

As required by law, we will be submitting these results to the Department of Natural Resources (DNR). The DNR may consult with the Department of Health Services (DHS) about these test results. DHS may review all PFAS tests and follow-up with you directly if any actions are recommended to protect your health.

Thank you for your patience and assistance with our investigation. We will provide updates on the project at <u>https://www.cityoflacrosse.org/wells</u> as our work continues. If you have any questions, please call The OS Group at (608) 668-2718 or email them at <u>PFAS@theOSgrp.com</u>.

You can also contact the DNR and DHS with questions about PFAS or the water sample results at the numbers provided below.

Questions about		<u>Contact</u>	<u>Phone</u>	E-mail Address
Soil & Groundwate Testing, Clean Up	<sup>r</sup> DNR	David Rozeboom	715-215-2078	David.Rozeboom@wisconsin.gov
Drinking Water or Private wells	DNR	Kyle Burton	920-360-2112	kyle.burton@wisconsin.gov
Health Concerns	DHS	Curtis Hedman	608-266-6677	Curtis.Hedman@dhs.wisconsin.gov

On behalf of The City of La Crosse *The OS Group, LLC* 

Attachment: Lab report for your well

Description: 352-0				Matrix	k: Aqueous		
Date Sampled:10/29/2020 1455	Project Nam	ne: LACROSSE WELL #	#23 & 24				
Date Received: 11/03/2020	oiect Numb	er: 40217496					
Due Dree Mathed Archited Mathed		Analysia Data Analyst	Dren Data	Datab			
RunPrep MethodAnalytical Method1SOP SPEPFAS by ID SOP	$1 1^{\circ}$	1/12/2020 1440 MMM	11/11/2020 1	108 73065			
Parameter	CA Numbe	AS Analytical er Method	Result Q	LOQ	DL	Units	Run
9-chlorohexadecafluoro-3-oxanone-1-sulfonic acid (9CI-PF3ONS)	756426-58	B-1 PFAS by ID SOP	ND	7.2	1.8	ng/L	1
11-chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11CI-PF3	) 763051-92	2-9 PFAS by ID SOP	ND	7.2	1.8	ng/L	1
1H, 1H, 2H, 2H-perfluorodecane sulfonic acid (8:2 FTS)	39108-34	1-4 PFAS by ID SOP	ND	7.2	1.8	ng/L	1
1H, 1H, 2H, 2H-perfluorooctane sulfonic acid (6:2 FTS)	27619-97	7-2 PFAS by ID SOP	ND	7.2	1.8	ng/L	1
1H,1H,2H,2H-perfluorododecane sulfonic acid (10:2 FTS)	120226-60	0-0 PFAS by ID SOP	ND	7.2	1.8	ng/L	1
1H,1H,2H,2H-perfluorohexane sulfonic acid (4:2 FTS)	757124-72	2-4 PFAS by ID SOP	ND	7.2	1.8	ng/L	1
Hexafluoropropylene oxide dimer acid (GenX)	13252-13	3-6 PFAS by ID SOP	ND	7.2	1.8	ng/L	1
4,8-dioxa-3H-perfluorononanoic acid (ADONA)	919005-14	4-4 PFAS by ID SOP	ND	7.2	1.8	ng/L	1
N-ethylperfluoro-1-octanesulfonamide (EtFOSA)	4151-50	0-2 PFAS by ID SOP	ND	7.2	1.8	ng/L	1
N-ethylperfluoro-1-octanesulfonamidoacetic acid (EtFOSAA)	2991-50	-6 PFAS by ID SOP	ND	7.2	1.8	ng/L	1
2-N-ethylperfluoro-1-octanesulfonamido-ethanol (EtFOSE)	1691-99	P-2 PFAS by ID SOP	ND	7.2	1.8	ng/L	1
N-methylperfluoro-1-octanesulfonamide (MeFOSA)	31506-32	2-8 PFAS by ID SOP	ND	14	3.6	ng/L	1
N-methylperfluoro-1-octanesulfonamidoacetic acid (MeFOSAA)	2355-31	-9 PFAS by ID SOP	ND	7.2	1.8	ng/L	1
2-N-methylperfluoro-1-octanesulfonamido-ethanol (MeFOSE)	24448-09	9-7 PFAS by ID SOP	ND	7.2	1.8	ng/L	1
Perfluoro-1-butanesulfonic acid (PFBS)	375-73	-5 PFAS by ID SOP	4.3	3.6	0.91	ng/L	1
Perfluoro-1-decanesulfonic acid (PFDS)	335-77	-3 PFAS by ID SOP	ND	3.6	0.91	ng/L	1
Perfluoro-1-heptanesulfonic acid (PFHpS)	375-92	2-8 PFAS by ID SOP	ND	3.6	0.91	ng/L	1
Perfluoro-1-nonanesulfonic acid (PFNS)	68259-12	2-1 PFAS by ID SOP	ND	3.6	0.91	ng/L	1
Perfluoro-1-octanesulfonamide (PFOSA)	754-91	-6 PFAS by ID SOP	ND	3.6	0.91	ng/L	1
Perfluoro-1-pentanesulfonic acid (PFPeS)	2706-91	-4 PFAS by ID SOP	3.2 J	3.6	0.91	ng/L	1
Perfluorododecanesulfonic acid (PFDOS)	79780-39	9-5 PFAS by ID SOP	ND	7.2	1.8	ng/L	1
Perfluorohexanesulfonic acid (PFHxS)	355-46	-4 PFAS by ID SOP	6.2	3.6	0.91	ng/L	1
Perfluoro-n-butanoic acid (PFBA)	3/5-22	2-4 PFAS by ID SOP	34	3.6	0.91	ng/L	1
Perfluoro-n-decanoic acid (PFDA)	335-76	-2 PFAS by ID SOP	ND	3.6	0.91	ng/L	1
Perliuoro-n-dodecanoic acid (PFDOA)	307-55	- I PFAS by ID SOP	ND	3.0	0.91	ng/L	1
Perfluere p bevedesepsis esid (PEHvDA)	3/3-83 4700E 10	DE DEAS by ID SOP	ND	3.0	0.91	ng/L	1
Periluoro-n-nexadecanoic acid (PEHxA)	0/905-15	P-5 PFAS by ID SOP	ND	1.Z 2.4	1.8	ng/L	1
Periluoro-n-nexanoic acid (PENA)	307-24	1 DEAS by ID SOP	ND	3.0	0.91	ng/L	1
Periluoro-n-nonanoic acid (PENA)	3/3-93	I A DEAS by ID SOP	ND	3.0	0.91	ng/L	1
Perfluoro-n-octanoic acid ( $PFODA$ )	335-67	-6 PFAS by ID SOP		7.Z 3.6	1.8	ng/L	1
Perfluoro-n-pentanoic acid (PEPeA)	2706-90	1-3 PEAS by ID SOP	ND	3.6	0.91	ng/L	1
Perfluoro-n-tetradecanoic acid (PETeDA)	376-06	-7 PEAS by ID SOP	ND	3.6	0.91	ng/L	1
Perfluoro-n-tridecanoic acid (PETrDA)	72629-94	4-8 PEAS by ID SOP	ND	3.6	0.91	ng/L	1
Perfluoro-n-undecanoic acid (PEUdA)	2058-94	-8 PEAS by ID SOP	ND	3.6	0.91	na/L	1
Perfluorooctanesulfonic acid (PFOS)	1763-23	-1 PFAS by ID SOP	ND	3.6	0.91	na/L	1
- F	Run 1 Ac	ceptance			0.71		
Surrogate Q % Re	ecovery	Limits					
13C2_4:2FTS	110	25-150					
1302_0.2F13	90 90	20-100					
$1302_0.2FIS$	9U 05	20-100					
	07 04	20-100					
	74 03	25-150					
1302_11 TEDA	70	20-100					
LOQ = Limit of Quantitation B = Detected in the method blank	E = Quantitat	tion of compound exceeded the o	calibration range	DL = Detection Lin	nit		
ND = Not detected at or above the DL     N = Recovery is out of criteria       H = Out of holding time     W = Reported on wet weight basis	P = The RPD	between two GC columns exce	eds 40% .	J = Estimated resu	It < LOQ and <u>&gt;</u> D	)L	

Client: Pace Analytical Services, LLC	
Description: 352-0	
Date Sampled:10/29/2020 1455	Project Name: LACROSSE WELL #23 & 24
Date Received: 11/03/2020	Project Number: 40217496

Laboratory ID: VK03016-007

Matrix: Aqueous

Surrogato	Run 1 A	cceptance
Surroyate	Q % Recovery	Limits
13C3_PFBS	94	25-150
13C3_PFHxS	89	25-150
13C3-HFPO-DA	96	25-150
13C4_PFBA	102	25-150
13C4_PFHpA	99	25-150
13C5_PFHxA	90	25-150
13C5_PFPeA	102	25-150
13C6_PFDA	102	25-150
13C7_PFUdA	98	25-150
13C8_PFOA	102	25-150
13C8_PFOS	86	25-150
13C8_PFOSA	106	10-150
13C9_PFNA	98	25-150
d-EtFOSA	84	10-150
d5-EtFOSAA	98	25-150
d9-EtFOSE	100	10-150
d-MeFOSA	100	10-150
d3-MeFOSAA	99	25-150
d7-MeFOSE	96	10-150

LOQ = Limit of QuantitationB = Detected in the method blankE = Quantitation of compound exceeded the calibration rangeDL = Detection LimitND = Not detected at or above the DLN = Recovery is out of criteriaP = The RPD between two GC columns exceeds 40%J = Estimated result < LOQ and ≥ DL</td>H = Out of holding timeW = Reported on wet weight basis



444 21st Street South · La Crosse, Wisconsin · 54601

November 24, 2020

204 Calloway Blvd La Crosse, WI 54603

Subject: Private Well Sampling Results 204 Calloway Blvd, La Crosse, WI 54603 Tax Parcel # 4-361-0 Sample ID # 361-0

:

Dear

We have received and reviewed the test results for the sample collected on October 29, 2020 at the above address. Some PFAS compounds were found, but the levels found were **below** the Department of Health Services (DHS) levels recommended for protecting health. These levels are called the "Recommended Public Health Standard" in the table below. The levels found in *your* well are called the "Sample Result" in the table below.

#### Sample Results

Compound	Sample Result (unit)	Recommended Public Health Standard (unit <sup>e</sup> )		
N-Ethyl Perfluorooctane sulfonamide (NEtFOSA) CAS # 4151-50-2	Not Detected	20 ppt <sup>a,b</sup>	) ppt unds I 6	
N-Ethyl perfluorooctane sulfonamidoacetic acid (NEtFOSAA) CAS # 2991-50-6	Not Detected	20 ppt <sup>a,b</sup>	it is 2C compo <i>il</i> of all	
N-Ethyl perfluorooctane sulfonamidoethanol (NEtFOSE) CAS # 1691-99-2	Not Detected	20 ppt <sup>a,b</sup>	ed lim ese 6 c ed toto	
Perfluorooctane sulfonamide (FOSA) CAS # 754-91-6	Not Detected	20 ppt <sup>a,b</sup>	mend of the ombine	
Perfluorooctanoic acid (PFOA) CAS # 335-67-1	0.93 ppt <sup>BL</sup>	20 ppt <sup>a,b</sup>	recom ny <i>one</i> the <i>cc</i>	
Perfluorooctanesulfonic acid (PFOS) CAS # 1763-23-1	1.9 ppt <sup>BL</sup>	20 ppt <sup>a,b</sup>	The for ai or	

Private Well Sampling Results for 204 Calloway Blvd, La Crosse, WI 54603 Tax Parcel # 4-361-0 Sample ID # 361-0 November 24, 2020

Compound	Sample Result (unit)	Recommended Public Health Standard (unit <sup>e</sup> )
Hexafluoropropylene oxide dimer acid (HPFO-DA; GenX) CAS # 13252-13-6	Not Detected	300 ppt <sup>a</sup>
Perfluorobutanesulfonic acid (PFBS) CAS # 375-73-5	3.1 ppt <sup>BL</sup>	450,000 ppt <sup>a</sup>
Perfluorohexanesulfonic acid (PFHxS) CAS # 355-46-4	3.7 ppt	40 ppt <sup>a</sup>
Perfluorobutanoic acid (PFBA) CAS # 375-22-4	8.6 ppt <sup>BL</sup>	10,000 ppt <sup>a</sup>
Perfluorodecanoic acid (PFDA) CAS # 335-76-2	Not Detected	300 ppt <sup>a</sup>
Perfluorododecanoic acid (PFDoA) CAS # 307-55-1	Not Detected	500 ppt <sup>a</sup>
Perfluorohexanoic acid (PFHxA) CAS # 307-24-4	Not Detected	150,000 ppt <sup>a</sup>
Perfluorononanoic acid (PFNA) CAS # 375-95-1	Not Detected	30 ppt <sup>a</sup>
Perfluorotetradecanoic acid (PFTeA) CAS # 376-06-7	Not Detected	10,000 ppt <sup>a</sup>
Perfluoroundecanoic acid (PFUnA) CAS # 2058-94-8	Not Detected	3,000 ppt <sup>a</sup>
4,8-Dioxa-3H-perfluorononanoic acid (DONA) CAS # 919005-14-4	Not Detected	3,000 ppt <sup>a</sup>
Perfluorooctadecanoic acid (PFODA) CAS # 16517-11-6	Not Detected	400,000 ppt <sup>a</sup>
Perfluoro-1-pentanesulfonic acid ((PFPeS) CAS # 2706-91-4	2.0 ppt	None Established <sup>c</sup>

<sup>a</sup> Public health enforcement standard (ES) recommended by DHS.

<sup>b</sup> DHS recommends a combined enforcement standard of 20 ng/L and combined preventive action limit of 2 ng/L for FOSA, NEt-FOSA, NetFOSAA, PFOS, and PFOA.

<sup>c</sup> A current standard is not available; the compound is currently under review by DHS for potential public health standard recommendation.

<sup>d</sup> Public health enforcement standard (ES) in NR 140, Wisconsin Administrative Code.

<sup>e</sup> Units: Parts per trillion (ppt) = nanograms of substance per liter of water (ng/L)

<sup>BL</sup> Detected in the method blank. Possible lab contaminant.

Private Well Sampling Results for 204 Calloway Blvd, La Crosse, WI 54603 Tax Parcel # 4-361-0 Sample ID # 361-0 November 24, 2020

As required by law, we will be submitting these results to the Department of Natural Resources (DNR). The DNR may consult with the Department of Health Services (DHS) about these test results. DHS may review all PFAS tests and follow-up with you directly if any actions are recommended to protect your health.

Thank you for your patience and assistance with our investigation. We will provide updates on the project at <u>https://www.cityoflacrosse.org/wells</u> as our work continues. If you have any questions, please call The OS Group at (608) 668-2718 or email them at <u>PFAS@theOSgrp.com</u>.

You can also contact the DNR and DHS with questions about PFAS or the water sample results at the numbers provided below.

Questions about		<u>Contact</u>	<u>Phone</u>	E-mail Address
Soil & Groundwater Testing, Clean Up	DNR	David Rozeboom	715-215-2078	David.Rozeboom@wisconsin.gov
Drinking Water or Private wells	DNR	Kyle Burton	920-360-2112	kyle.burton@wisconsin.gov
Health Concerns	DHS	Curtis Hedman	608-266-6677	Curtis.Hedman@dhs.wisconsin.gov

On behalf of The City of La Crosse *The OS Group, LLC* 

Attachment: Lab report for your well

Client: Pace Analytical Services, LLC				I	Laboratory I	D: VK03016-0	017	
Description: 361-0					Matrix	k: Aqueous		
Date Sampled:10/29/2020 1045	Project Nar	ne: LACROSSE WELL #	#23 & 24					
Date Received: 11/03/2020	roject Numb	per: 40217496						
				<b>D</b> :	<b>D</b> · · ·			
RunPrep MethodAnalytical Method1SOP SPEPFAS by ID SOP	Dilution 1 1	Analysis Date Analyst 1/13/2020 1236 SES	Prep 11/11/2	Date 2020 16	Batch 36 73134			
Parameter	CA Numb	AS Analytical er Method	Result	Q	LOQ	DL	Units	Run
9-chlorohexadecafluoro-3-oxanone-1-sulfonic acid (9CI-PF3ONS	) 756426-5	8-1 PFAS by ID SOP	ND		6.9	1.7	ng/L	1
11-chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11CI-PF3.	) 763051-9	2-9 PFAS by ID SOP	ND		6.9	1.7	ng/L	1
1H, 1H, 2H, 2H-perfluorodecane sulfonic acid (8:2 FTS)	39108-3	4-4 PFAS by ID SOP	ND		6.9	1.7	ng/L	1
1H, 1H, 2H, 2H-perfluorooctane sulfonic acid (6:2 FTS)	27619-9	7-2 PFAS by ID SOP	ND		6.9	1.7	ng/L	1
1H,1H,2H,2H-perfluorododecane sulfonic acid (10:2 FTS)	120226-6	0-0 PFAS by ID SOP	ND		6.9	1.7	ng/L	1
1H,1H,2H,2H-perfluorohexane sulfonic acid (4:2 FTS)	757124-7	2-4 PFAS by ID SOP	ND		6.9	1.7	ng/L	1
Hexafluoropropylene oxide dimer acid (GenX)	13252-1	3-6 PFAS by ID SOP	ND		6.9	1.7	ng/L	1
4,8-dioxa-3H-perfluorononanoic acid (ADONA)	919005-1	4-4 PFAS by ID SOP	ND		6.9	1.7	ng/L	1
N-ethylperfluoro-1-octanesulfonamide (EtFOSA)	4151-50	D-2 PFAS by ID SOP	ND		6.9	1.7	ng/L	1
N-ethylperfluoro-1-octanesulfonamidoacetic acid (EtFOSAA)	2991-50	D-6 PFAS by ID SOP	ND		6.9	1.7	ng/L	1
2-N-ethylperfluoro-1-octanesulfonamido-ethanol (EtFOSE)	1691-99	9-2 PFAS by ID SOP	ND		6.9	1.7	ng/L	1
N-methylperfluoro-1-octanesulfonamide (MeFOSA)	31506-3	2-8 PFAS by ID SOP	ND		14	3.4	ng/L	1
N-methylperfluoro-1-octanesulfonamidoacetic acid (MeFOSAA)	2355-37	1-9 PFAS by ID SOP	ND		6.9	1.7	ng/L	1
2-N-methylperfluoro-1-octanesulfonamido-ethanol (MeFOSE)	24448-0	9-7 PFAS by ID SOP	ND		6.9	1.7	ng/L	1
Perfluoro-1-butanesulfonic acid (PFBS)	375-73	3-5 PFAS by ID SOP	3.1	BJ	3.4	0.86	ng/L	1
Perfluoro-1-decanesulfonic acid (PFDS)	335-77	7-3 PFAS by ID SOP	ND		3.4	0.86	ng/L	1
Perfluoro-1-heptanesulfonic acid (PFHpS)	375-92	2-8 PFAS by ID SOP	ND		3.4	0.86	ng/L	1
Perfluoro-1-nonanesulfonic acid (PFNS)	68259-1	2-1 PFAS by ID SOP	ND		3.4	0.86	ng/L	1
Perfluoro-1-octanesulfonamide (PFOSA)	754-91	1-6 PFAS by ID SOP	ND		3.4	0.86	ng/L	1
Perfluoro-1-pentanesulfonic acid (PFPeS)	2706-91	1-4 PFAS by ID SOP	2.0	J	3.4	0.86	ng/L	1
Perfluorododecanesulfonic acid (PFDOS)	79780-3	9-5 PFAS by ID SOP	ND		6.9	1.7	ng/L	1
Perfluorohexanesulfonic acid (PFHxS)	355-46	6-4 PFAS by ID SOP	3.7	_	3.4	0.86	ng/L	1
Perfluoro-n-butanoic acid (PFBA)	375-22	2-4 PFAS by ID SOP	8.6	В	3.4	0.86	ng/L	1
Perfluoro-n-decanoic acid (PFDA)	335-76	6-2 PFAS by ID SOP	ND		3.4	0.86	ng/L	1
Perfluoro-n-dodecanoic acid (PFDoA)	307-55	5-1 PFAS by ID SOP	ND		3.4	0.86	ng/L	1
Perfluoro-n-heptanoic acid (PFHpA)	375-85	5-9 PFAS by ID SOP	ND		3.4	0.86	ng/L	1
Perfluoro-n-hexadecanoic acid (PFHxDA)	67905-1	9-5 PFAS by ID SOP	ND		6.9	1.7	ng/L	1
Perfluoro-n-hexanoic acid (PFHxA)	307-24	4-4 PFAS by ID SOP	ND		3.4	0.86	ng/L	1
Perfluoro-n-nonanoic acid (PFNA)	375-95	5-1 PFAS by ID SOP	ND		3.4	0.86	ng/L	1
Perfluoro-n-octadecanoic acid (PFODA)	16517-1	1-6 PFAS by ID SOP	ND 0.02	ы	6.9	1.7	ng/L	1
	2204.00	7-1 PFAS by ID SOP	0.93	ВJ	3.4	0.86	ng/L	1
Periluoro-n-perilanoic acid (PFPeA)	2700-90	J-3 PFAS by ID SOP			3.4	0.86	ng/L	1
Perfluoro n tridecanoic acid (PETrDA)	3/0-00	4.9 DEAS by ID SOP			3.4	0.86	ng/L	1
Perfluoro-n-tindecanoic acid (PETIDA)	2029-9	4-8 PFAS by ID SOP			3.4	0.86	ng/L	1
	2000-94		1.0	РТ	3.4 2.4	0.86	ng/L	1
Periluoi ooctanesuironic acid (PFOS)	1/03-23	3-1 PFAS DY ID SOP	1.9	ВJ	3.4	0.86	ng/L	I
Surrogate Q % R	Run 1 Ac Recovery	cceptance Limits						
13C2_4:2FTS	96	25-150						
13C2_6:2F1S	97	25-150						
13C2_8:2FTS	91	25-150						
13C2_PFD0A	86	25-150						
13C2_PFHxDA	92	25-150						
I3UZ_PFTEDA	δI	20-150						
LOQ = Limit of Quantitation B = Detected in the method blank	E = Quantita	tion of compound exceeded the	calibration r	ange DL	= Detection Lim	nit		
ND = Not detected at or above the DL $N$ = Recovery is out of criteria	P = The RPI	D between two GC columns exce	eds 40%	- J :	= Estimated resu	It < LOQ and $\geq$ D	DL	
H = Out of holding time W = Reported on wet weight basis	5							

Client: Pace Analytical Services, LLC		Laboratory ID: VK03016-017
Description: 361-0		Matrix: Aqueous
Date Sampled:10/29/2020 1045	Project Name: LACROSSE WELL #23 & 24	
Date Received: 11/03/2020	Project Number: 40217496	

Surrogate	Run 1 Acc Q % Recovery	ceptance Limits
13C3_PFBS	86	25-150
13C3_PFHxS	86	25-150
13C3-HFPO-DA	95	25-150
13C4_PFBA	98	25-150
13C4_PFHpA	90	25-150
13C5_PFHxA	97	25-150
13C5_PFPeA	95	25-150
13C6_PFDA	92	25-150
13C7_PFUdA	83	25-150
13C8_PFOA	93	25-150
13C8_PFOS	87	25-150
13C8_PFOSA	96	10-150
13C9_PFNA	89	25-150
d-EtFOSA	85	10-150
d5-EtFOSAA	87	25-150
d9-EtFOSE	89	10-150
d-MeFOSA	85	10-150
d3-MeFOSAA	94	25-150
d7-MeFOSE	92	10-150

LOQ = Limit of Quantitation	B = Detected in the method blank	E = Quantitation of compound exceeded the calibration range	DL = Detection Limit
ND = Not detected at or above the DL	N = Recovery is out of criteria	P = The RPD between two GC columns exceeds 40%	J = Estimated result < LOQ and $\ge$ DL
H = Out of holding time	W = Reported on wet weight basis		



444 21st Street South · La Crosse, Wisconsin · 54601

November 24, 2020

2515 1st Avenue West La Crosse, WI 54603

Subject: Private Well Sampling Results 2515 1st Avenue West, La Crosse, WI 54603 Tax Parcel # 4-370-0 Sample ID # 370-0

Dear

We have received and reviewed the test results for the sample collected on October 29, 2020 at the above address. Some PFAS compounds were found, but the levels found were **below** the Department of Health Services (DHS) levels recommended for protecting health. These levels are called the "Recommended Public Health Standard" in the table below. The levels found in *your* well are called the "Sample Result" in the table below.

:

#### Sample Results

Compound	Sample Result (unit)	Recommended Public Health Standard (unit <sup>e</sup> )		
N-Ethyl Perfluorooctane sulfonamide (NEtFOSA) CAS # 4151-50-2	Not Detected	20 ppt <sup>a,b</sup>	) ppt unds I 6	
N-Ethyl perfluorooctane sulfonamidoacetic acid (NEtFOSAA) CAS # 2991-50-6	Not Detected	20 ppt <sup>a,b</sup>	it is 20 ompo <i>il</i> of all	
N-Ethyl perfluorooctane sulfonamidoethanol (NEtFOSE) CAS # 1691-99-2	Not Detected	20 ppt <sup>a,b</sup>	ed lim ese 6 c ed toto	
Perfluorooctane sulfonamide (FOSA) CAS # 754-91-6	Not Detected	20 ppt <sup>a,b</sup>	mend of the mbine	
Perfluorooctanoic acid (PFOA) CAS # 335-67-1	Not Detected	20 ppt <sup>a,b</sup>	recom ny <i>one</i> the <i>cc</i>	
Perfluorooctanesulfonic acid (PFOS) CAS # 1763-23-1	1.8 ppt	20 ppt <sup>a,b</sup>	The for ai or	

Private Well Sampling Results for 2515 1st Avenue West, La Crosse, WI 54603 Tax Parcel # 4-370-0 Sample ID # 370-0 November 24, 2020

Compound	Sample Result (unit)	Recommended Public Health Standard (unit <sup>e</sup> )
Hexafluoropropylene oxide dimer acid (HPFO-DA; GenX) CAS # 13252-13-6	Not Detected	300 ppt <sup>a</sup>
Perfluorobutanesulfonic acid (PFBS) CAS # 375-73-5	1.9 ppt	450,000 ppt <sup>a</sup>
Perfluorohexanesulfonic acid (PFHxS) CAS # 355-46-4	3.9 ppt	40 ppt <sup>a</sup>
Perfluorobutanoic acid (PFBA) CAS # 375-22-4	6.1 ppt	10,000 ppt ª
Perfluorodecanoic acid (PFDA) CAS # 335-76-2	Not Detected	300 ppt <sup>a</sup>
Perfluorododecanoic acid (PFDoA) CAS # 307-55-1	Not Detected	500 ppt <sup>a</sup>
Perfluorohexanoic acid (PFHxA) CAS # 307-24-4	Not Detected	150,000 ppt <sup>a</sup>
Perfluorononanoic acid (PFNA) CAS # 375-95-1	Not Detected	30 ppt <sup>a</sup>
Perfluorotetradecanoic acid (PFTeA) CAS # 376-06-7	Not Detected	10,000 ppt <sup>a</sup>
Perfluoroundecanoic acid (PFUnA) CAS # 2058-94-8	Not Detected	3,000 ppt ª
4,8-Dioxa-3H-perfluorononanoic acid (DONA) CAS # 919005-14-4	Not Detected	3,000 ppt <sup>a</sup>
Perfluorooctadecanoic acid (PFODA) CAS # 16517-11-6	Not Detected	400,000 ppt <sup>a</sup>

<sup>a</sup> Public health enforcement standard (ES) recommended by DHS.

<sup>b</sup> DHS recommends a combined enforcement standard of 20 ng/L and combined preventive action limit of 2 ng/L for FOSA, NEt-FOSE, NEt-FOSA, NetFOSAA, PFOS, and PFOA.

<sup>c</sup> A current standard is not available; the compound is currently under review by DHS for potential public health standard recommendation.

<sup>d</sup> Public health enforcement standard (ES) in NR 140, Wisconsin Administrative Code.

<sup>e</sup> Units: Parts per trillion (ppt) = nanograms of substance per liter of water (ng/L)

<sup>BL</sup> Detected in the method blank. Possible lab contaminant.

Private Well Sampling Results for 2515 1st Avenue West, La Crosse, WI 54603 Tax Parcel # 4-370-0 Sample ID # 370-0 November 24, 2020

As required by law, we will be submitting these results to the Department of Natural Resources (DNR). The DNR may consult with the Department of Health Services (DHS) about these test results. DHS may review all PFAS tests and follow-up with you directly if any actions are recommended to protect your health.

Thank you for your patience and assistance with our investigation. We will provide updates on the project at <u>https://www.cityoflacrosse.org/wells</u> as our work continues. If you have any questions, please call The OS Group at (608) 668-2718 or email them at <u>PFAS@theOSgrp.com</u>.

You can also contact the DNR and DHS with questions about PFAS or the water sample results at the numbers provided below.

Questions about		<u>Contact</u>	<u>Phone</u>	<u>E-mail Address</u>
Soil & Groundwater Testing, Clean Up	DNR	David Rozeboom	715-215-2078	David.Rozeboom@wisconsin.gov
Drinking Water or Private wells	DNR	Kyle Burton	920-360-2112	kyle.burton@wisconsin.gov
Health Concerns	DHS	Curtis Hedman	608-266-6677	Curtis.Hedman@dhs.wisconsin.gov

On behalf of The City of La Crosse *The OS Group, LLC* 

Attachment: Lab report for your well

Client: Pace Analytical Services, LLC						Laboratory I	D: VK03016-0	005	
Description: 370-0						Matrix	: Aqueous		
Date Sampled:10/29/2020 1435	Project Na	me:	LACROSSE WELL #	<sup>#</sup> 23 & 24					
Date Received: 11/03/2020 P	roiect Num	ber:	40217496						
RunPrep MethodAnalytical Method2SOP SPEPFAS by ID SOP	Dilution 1	Ana 11/10	lysis Date Analyst 6/2020 1617 MMM	Prep 11/13/2	Date 2020 15	Batch 523 73472			
Parameter	C Numl	AS ber	Analytical Method	Result	0	LOO	DL	Units	Run
9-chlorohexadecafluoro-3-oxanone-1-sulfonic acid (9CI-PF3ONS)	756426-	58-1	PFAS by ID SOP	ND	_	7.3	1.8	ng/L	2
11-chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11CI-PF3	.) 763051-9	92-9	PFAS by ID SOP	ND		7.3	1.8	ng/L	2
1H, 1H, 2H, 2H-perfluorodecane sulfonic acid (8:2 FTS)	39108-3	34-4	PFAS by ID SOP	ND		7.3	1.8	ng/L	2
1H, 1H, 2H, 2H-perfluorooctane sulfonic acid (6:2 FTS)	27619-0	97-2	PFAS by ID SOP	ND		7.3	1.8	ng/L	2
1H,1H,2H,2H-perfluorododecane sulfonic acid (10:2 FTS)	120226-0	50-0	PFAS by ID SOP	ND		7.3	1.8	ng/L	2
1H,1H,2H,2H-perfluorohexane sulfonic acid (4:2 FTS)	757124-	72-4	PFAS by ID SOP	ND		7.3	1.8	ng/L	2
Hexafluoropropylene oxide dimer acid (GenX)	13252-	13-6	PFAS by ID SOP	ND		7.3	1.8	ng/L	2
4,8-dioxa-3H-perfluorononanoic acid (ADONA)	919005-	4-4	PFAS by ID SOP	ND		7.3	1.8	ng/L	2
N-ethylperfluoro-1-octanesulfonamide (EtFOSA)	4151-5	0-2	PFAS by ID SOP	ND		7.3	1.8	ng/L	2
N-ethylperfluoro-1-octanesulfonamidoacetic acid (EtFOSAA)	2991-5	0-6	PFAS by ID SOP	ND		7.3	1.8	ng/L	2
2-N-ethylperfluoro-1-octanesulfonamido-ethanol (EtFOSE)	1691-9	9-2	PFAS by ID SOP	ND		7.3	1.8	ng/L	2
N-methylperfluoro-1-octanesulfonamide (MeFOSA)	31506-3	32-8	PFAS by ID SOP	ND		15	3.6	ng/L	2
N-methylperfluoro-1-octanesulfonamidoacetic acid (MeFOSAA)	2355-3	1-9	PFAS by ID SOP	ND		7.3	1.8	ng/L	2
2-N-methylperfluoro-1-octanesulfonamido-ethanol (MeFOSE)	24448-0	)9-7	PFAS by ID SOP	ND		7.3	1.8	ng/L	2
Perfluoro-1-butanesulfonic acid (PFBS)	375-7	3-5	PFAS by ID SOP	1.9	J	3.6	0.91	ng/L	2
Perfluoro-1-decanesulfonic acid (PFDS)	335-7	7-3	PFAS by ID SOP	ND		3.6	0.91	ng/L	2
Perfluoro-1-heptanesulfonic acid (PFHpS)	375-9	2-8	PFAS by ID SOP	ND		3.6	0.91	ng/L	2
Perfluoro-1-nonanesulfonic acid (PFNS)	68259-	12-1	PFAS by ID SOP	ND		3.6	0.91	ng/L	2
Perfluoro-1-octanesulfonamide (PFOSA)	754-9	1-6	PFAS by ID SOP	ND		3.6	0.91	ng/L	2
Perfluoro-1-pentanesulfonic acid (PFPeS)	2706-9	1-4	PFAS by ID SOP	ND		3.6	0.91	ng/L	2
Perfluorododecanesulfonic acid (PFDOS)	79780-3	39-5	PFAS by ID SOP	ND		7.3	1.8	ng/L	2
Perfluorohexanesulfonic acid (PFHxS)	355-4	6-4	PFAS by ID SOP	3.9		3.6	0.91	ng/L	2
Perfluoro-n-butanoic acid (PFBA)	375-2	2-4	PFAS by ID SOP	6.1		3.6	0.91	ng/L	2
Perfluoro-n-decanoic acid (PFDA)	335-7	6-2	PFAS by ID SOP	ND		3.6	0.91	ng/L	2
Perfluoro-n-dodecanoic acid (PFDoA)	307-5	5-1	PFAS by ID SOP	ND		3.6	0.91	ng/L	2
Perfluoro-n-heptanoic acid (PFHpA)	375-8	5-9	PFAS by ID SOP	ND		3.6	0.91	ng/L	2
Perfluoro-n-hexadecanoic acid (PFHxDA)	67905-	19-5	PFAS by ID SOP	ND		7.3	1.8	ng/L	2
Perfluoro-n-hexanoic acid (PFHxA)	307-2	4-4	PFAS by ID SOP	ND		3.6	0.91	ng/L	2
Perfluoro-n-nonanoic acid (PFNA)	375-9	5-1	PFAS by ID SOP	ND		3.6	0.91	ng/L	2
Perfluoro-n-octadecanoic acid (PFODA)	16517-1	11-6	PFAS by ID SOP	ND		7.3	1.8	ng/L	2
Perfluoro-n-octanoic acid (PFOA)	335-6	7-1	PFAS by ID SOP	ND		3.6	0.91	ng/L	2
Perfluoro-n-pentanoic acid (PFPeA)	2706-9	0-3	PFAS by ID SOP	ND		3.6	0.91	ng/L	2
Perfluoro-n-tetradecanoic acid (PFTeDA)	376-0	6-7	PFAS by ID SOP	ND		3.6	0.91	ng/L	2
Perfluoro-n-tridecanoic acid (PFTrDA)	72629-9	94-8	PFAS by ID SOP	ND		3.6	0.91	ng/L	2
Perfluoro-n-undecanoic acid (PFUdA)	2058-9	4-8	PFAS by ID SOP	ND		3.6	0.91	ng/L	2
Perfluorooctanesulfonic acid (PFOS)	1763-2	3-1	PFAS by ID SOP	1.8	J	3.6	0.91	ng/L	2
Surrogate Q % R	Run 2 A ecovery	ccep Lir	nits						
13C2_4:2FTS	94	25	-150						
13C2_6:2FTS	85	25	-150						
13C2_8:2FTS	80	25	-150						
13C2_PFDoA	83	25	-150						
13C2_PFHxDA	84	25	-150						
13C2_PFTeDA	83	25	-150						
LOQ = Limit of QuantitationB = Detected in the method blankND = Not detected at or above the DLN = Recovery is out of criteriaH = Out of holding timeW = Reported on wet weight basis	E = Quantit P = The RF	ation o D bet	of compound exceeded the of ween two GC columns exce	calibration r eds 40%	ange E J	DL = Detection Lim	nit It < LOQ and ≥ E	DL	

Laboratory ID: VK03016-005 Matrix: Aqueous

Client: Pace Analytical Services, LLC	
Description: 370-0	
Date Sampled:10/29/2020 1435	Project Name: LACROSSE WELL #23 & 24
Date Received: 11/03/2020	Project Number: 40217496

d7-MeFOSE

Run 2 Acceptance Surrogate Q % Recovery Limits 13C3\_PFBS 88 25-150 13C3\_PFHxS 89 25-150 13C3-HFPO-DA 98 25-150 13C4\_PFBA 93 25-150 13C4\_PFHpA 93 25-150 13C5\_PFHxA 100 25-150 13C5\_PFPeA 98 25-150 13C6\_PFDA 87 25-150 13C7\_PFUdA 86 25-150 98 13C8\_PFOA 25-150 13C8\_PFOS 82 25-150 13C8\_PFOSA 88 10-150 13C9\_PFNA 92 25-150 77 d-EtFOSA 10-150 d5-EtFOSAA 88 25-150 d9-EtFOSE 86 10-150 d-MeFOSA 86 10-150 d3-MeFOSAA 87 25-150

10-150

82

 LOQ = Limit of Quantitation
 B = Detected in the method blank
 E = Quantitation of compound exceeded the calibration range
 DL = Detection Limit

 ND = Not detected at or above the DL
 N = Recovery is out of criteria
 P = The RPD between two GC columns exceeds 40%
 J = Estimated result < LOQ and ≥ DL</td>

 H = Out of holding time
 W = Reported on wet weight basis
 W = Not detected at or above the DL
 N = Recovery is out of criteria



444 21st Street South · La Crosse, Wisconsin · 54601

November 24, 2020

2519 1st Avenue West La Crosse, WI 54603

Subject: Private Well Sampling Results 2519 1st Avenue West, La Crosse, WI 54603 Tax parcel # 4-373-0 Well ID # 373-0

:

Dear

We have received and reviewed the test results for the sample collected on October 29, 2020 at the above address. Some PFAS compounds were found, but the levels found were **below** the Department of Health Services (DHS) levels recommended for protecting health. These levels are called the "Recommended Public Health Standard" in the table below. The levels found in *your* well are called the "Sample Result" in the table below.

#### Sample Results

Compound	Sample Result (unit)	Recommended Public Health Standard (unit <sup>e</sup> )		
N-Ethyl Perfluorooctane sulfonamide (NEtFOSA) CAS # 4151-50-2	Not Detected	20 ppt <sup>a,b</sup>	) ppt unds I 6	
N-Ethyl perfluorooctane sulfonamidoacetic acid (NEtFOSAA) CAS # 2991-50-6	Not Detected	20 ppt <sup>a,b</sup>	it is 20 compo <i>il</i> of all	
N-Ethyl perfluorooctane sulfonamidoethanol (NEtFOSE) CAS # 1691-99-2	Not Detected	20 ppt <sup>a,b</sup>	ed lim ese 6 c ed toto	
Perfluorooctane sulfonamide (FOSA) CAS # 754-91-6	Not Detected	20 ppt <sup>a,b</sup>	mend of the	
Perfluorooctanoic acid (PFOA) CAS # 335-67-1	Not Detected	20 ppt <sup>a,b</sup>	recom ny <i>one</i> the <i>cc</i>	
Perfluorooctanesulfonic acid (PFOS) CAS # 1763-23-1	Not Detected	20 ppt <sup>a,b</sup>	The for ai or	

Private Well Sampling Results for 2519 1st Avenue West, La Crosse, WI 54603 Tax parcel # 4-373-0 Well ID # 373-0 November 24, 2020

Compound	Sample Result (unit)	Recommended Public Health Standard (unit <sup>e</sup> )
Hexafluoropropylene oxide dimer acid (HPFO-DA; GenX) CAS # 13252-13-6	Not Detected	300 ppt <sup>a</sup>
Perfluorobutanesulfonic acid (PFBS) CAS # 375-73-5	2.0 ppt	450,000 ppt <sup>a</sup>
Perfluorohexanesulfonic acid (PFHxS) CAS # 355-46-4	2.3 ppt	40 ppt <sup>a</sup>
Perfluorobutanoic acid (PFBA) CAS # 375-22-4	4.7 ppt	10,000 ppt <sup>a</sup>
Perfluorodecanoic acid (PFDA) CAS # 335-76-2	Not Detected	300 ppt <sup>a</sup>
Perfluorododecanoic acid (PFDoA) CAS # 307-55-1	Not Detected	500 ppt <sup>a</sup>
Perfluorohexanoic acid (PFHxA) CAS # 307-24-4	Not Detected	150,000 ppt <sup>a</sup>
Perfluorononanoic acid (PFNA) CAS # 375-95-1	Not Detected	30 ppt <sup>a</sup>
Perfluorotetradecanoic acid (PFTeA) CAS # 376-06-7	Not Detected	10,000 ppt <sup>a</sup>
Perfluoroundecanoic acid (PFUnA) CAS # 2058-94-8	Not Detected	3,000 ppt <sup>a</sup>
4,8-Dioxa-3H-perfluorononanoic acid (DONA) CAS # 919005-14-4	Not Detected	3,000 ppt <sup>a</sup>
Perfluorooctadecanoic acid (PFODA) CAS # 16517-11-6	Not Detected	400,000 ppt <sup>a</sup>
Perfluoro-1-pentanesulfonic acid (PFPeS) CAS #2706-91-4	1.2 ppt	None Established <sup>c</sup>

<sup>a</sup> Public health enforcement standard (ES) recommended by DHS.

<sup>b</sup> DHS recommends a combined enforcement standard of 20 ng/L and combined preventive action limit of 2 ng/L for FOSA, NEt-FOSA, NetFOSAA, PFOS, and PFOA.

<sup>c</sup> A current standard is not available; the compound is currently under review by DHS for potential public health standard recommendation.

<sup>d</sup> Public health enforcement standard (ES) in NR 140, Wisconsin Administrative Code.

<sup>e</sup> Units: Parts per trillion (ppt) = nanograms of substance per liter of water (ng/L)

<sup>BL</sup> Detected in the method blank. Possible lab contaminant.

Private Well Sampling Results for 2519 1st Avenue West, La Crosse, WI 54603 Tax parcel # 4-373-0 Well ID # 373-0 November 24, 2020

As required by law, we will be submitting these results to the Department of Natural Resources (DNR). The DNR may consult with the Department of Health Services (DHS) about these test results. DHS may review all PFAS tests and follow-up with you directly if any actions are recommended to protect your health.

Thank you for your patience and assistance with our investigation. We will provide updates on the project at <u>https://www.cityoflacrosse.org/wells</u> as our work continues. If you have any questions, please call The OS Group at (608) 668-2718 or email them at <u>PFAS@theOSgrp.com</u>.

You can also contact the DNR and DHS with questions about PFAS or the water sample results at the numbers provided below.

Questions about		<u>Contact</u>	<u>Phone</u>	E-mail Address
Soil & Groundwater Testing, Clean Up	DNR	David Rozeboom	715-215-2078	David.Rozeboom@wisconsin.gov
Drinking Water or Private wells	DNR	Kyle Burton	920-360-2112	kyle.burton@wisconsin.gov
Health Concerns	DHS	Curtis Hedman	608-266-6677	Curtis.Hedman@dhs.wisconsin.gov

On behalf of The City of La Crosse *The OS Group, LLC* 

Attachment: Lab report for your well

Client: Pace Analytical Services, LLC				Laboratory I	D: VK03016-0	006		
Description: 373-0				Matrix	: Aqueous			
Date Sampled:10/29/2020 1435	roject Nam	ne: LACROSSE WELL #	¥23 & 24					
Date Received: 11/03/2020	, piect Numb	er∙ 40217496						
RunPrep MethodAnalytical MethodD1SOP SPEPFAS by ID SOP	ilution A 1 1 <sup>-</sup>	nalysis Date Analyst I/12/2020 1429 MMM	Prep Date 11/11/2020 11	Batch 108 73065				
Parameter	CA Numbe	S Analytical er Method	Result Q	LOQ	DL	Units	Run	
9-chlorohexadecafluoro-3-oxanone-1-sulfonic acid (9CI-PF3ONS)	756426-58	-1 PFAS by ID SOP	ND	7.3	1.8	ng/L	1	
11-chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3)	763051-92	-9 PFAS by ID SOP	ND	7.3	1.8	ng/L	1	
1H, 1H, 2H, 2H-perfluorodecane sulfonic acid (8:2 FTS)	39108-34	-4 PFAS by ID SOP	ND	7.3	1.8	ng/L	1	
1H, 1H, 2H, 2H-perfluorooctane sulfonic acid (6:2 FTS)	27619-97	-2 PFAS by ID SOP	ND	7.3	1.8	ng/L	1	
1H,1H,2H,2H-perfluorododecane sulfonic acid (10:2 FTS)	120226-60	-0 PFAS by ID SOP	ND	7.3	1.8	ng/L	1	
1H,1H,2H,2H-perfluorohexane sulfonic acid (4:2 FTS)	757124-72	-4 PFAS by ID SOP	ND	7.3	1.8	ng/L	1	
Hexafluoropropylene oxide dimer acid (GenX)	13252-13	-6 PFAS by ID SOP	ND	7.3	1.8	ng/L	1	
4,8-dioxa-3H-perfluorononanoic acid (ADONA)	919005-14	-4 PFAS by ID SOP	ND	7.3	1.8	ng/L	1	
N-ethylperfluoro-1-octanesulfonamide (EtFOSA)	4151-50	-2 PFAS by ID SOP	ND	7.3	1.8	ng/L	1	
N-ethylperfluoro-1-octanesulfonamidoacetic acid (EtFOSAA)	2991-50	-6 PFAS by ID SOP	ND	7.3	1.8	ng/L	1	
2-N-ethylperfluoro-1-octanesulfonamido-ethanol (EtFOSE)	1691-99	-2 PFAS by ID SOP	ND	7.3	1.8	ng/L	1	
N-methylperfluoro-1-octanesulfonamide (MeFOSA)	31506-32	-8 PFAS by ID SOP	ND	15	3.6	ng/L	1	
N-methylperfluoro-1-octanesulfonamidoacetic acid (MeFOSAA)	2355-31	-9 PFAS by ID SOP	ND	7.3	1.8	ng/L	1	
2-N-methylperfluoro-1-octanesulfonamido-ethanol (MeFOSE)	24448-09	-7 PFAS by ID SOP	ND	7.3	1.8	ng/L	1	
Perfluoro-1-butanesulfonic acid (PFBS)	375-73	-5 PFAS by ID SOP	2.0 J	3.6	0.91	ng/L	1	
Perfluoro-1-decanesulfonic acid (PFDS)	335-77	-3 PFAS by ID SOP	ND	3.6	0.91	ng/L	1	
Perfluoro-1-heptanesulfonic acid (PFHpS)	375-92	-8 PFAS by ID SOP	ND	3.6	0.91	ng/L	1	
Perfluoro-1-nonanesulfonic acid (PFNS)	68259-12	-1 PFAS by ID SOP	ND	3.6	0.91	ng/L	1	
Perfluoro-1-octanesulfonamide (PFOSA)	754-91	-6 PFAS by ID SOP	ND	3.6	0.91	ng/L	1	
Perfluoro-1-pentanesulfonic acid (PFPeS)	2706-91	-4 PFAS by ID SOP	1.2 J	3.6	0.91	ng/L	1	
Perfluorododecanesulfonic acid (PFDOS)	79780-39	-5 PFAS by ID SOP	ND	7.3	1.8	ng/L	1	
Perfluorohexanesulfonic acid (PFHxS)	355-46	-4 PFAS by ID SOP	2.3 J	3.6	0.91	ng/L	1	
Perfluoro-n-butanoic acid (PFBA)	375-22	-4 PFAS by ID SOP	4.7	3.6	0.91	ng/L	1	
Perfluoro-n-decanoic acid (PFDA)	335-76	-2 PFAS by ID SOP	ND	3.6	0.91	ng/L	1	
Perfluoro-n-dodecanoic acid (PFDoA)	307-55	-1 PFAS by ID SOP	ND	3.6	0.91	ng/L	1	
Perfluoro-n-heptanoic acid (PFHpA)	375-85	-9 PFAS by ID SOP	ND	3.6	0.91	ng/L	1	
Perfluoro-n-hexadecanoic acid (PFHxDA)	67905-19	-5 PFAS by ID SOP	ND	7.3	1.8	ng/L	1	
Perfluoro-n-hexanoic acid (PFHxA)	307-24	-4 PFAS by ID SOP	ND	3.6	0.91	ng/L	1	
Perfluoro-n-nonanoic acid (PFNA)	375-95	-1 PFAS by ID SOP	ND	3.6	0.91	ng/L	1	
Perfluoro-n-octadecanoic acid (PFODA)	16517-11	-6 PFAS by ID SOP	ND	7.3	1.8	ng/L	1	
Perfluoro-n-octanoic acid (PFOA)	335-67	-1 PFAS by ID SOP	ND	3.6	0.91	ng/L	1	
Perfluoro-n-pentanoic acid (PFPeA)	2706-90	-3 PFAS by ID SOP	ND	3.6	0.91	ng/L	1	
Perfluoro-n-tetradecanoic acid (PFTeDA)	376-06	-7 PFAS by ID SOP	ND	3.6	0.91	ng/L	1	
Perfluoro-n-tridecanoic acid (PFTrDA)	72629-94	-8 PFAS by ID SOP	ND	3.6	0.91	ng/L	1	
Perfluoro-n-undecanoic acid (PFUdA)	2058-94	-8 PFAS by ID SOP	ND	3.6	0.91	ng/L	1	
Perfluorooctanesulfonic acid (PFOS)	1763-23	-1 PFAS by ID SOP	ND	3.6	0.91	ng/L	1	
Surrogate Q % Rec	un 1 Ac covery	ceptance Limits						
13C2_4:2FTS	97	25-150						
13C2_6:2FTS	103	25-150						
13C2_8:2FTS	90	25-150						
13C2_PFDoA	95	25-150						
13C2_PFHxDA	92	25-150						
13C2_PFTeDA	94	25-150						
LOO = Limit of Quantitation R = Detected in the method blank	F = Ouantitat	ion of compound excooded the	calibration range	I = Detection Lim	hit			
$L = Out of bolding timeB = betected in the method blankE = Outilitation of compound exceeded the calibration rangeDL = Detection LimitVD = Not detected at or above the DLN = Recovery is out of criteriaP = The RPD between two GC columns exceeds 40%J = Estimated result < LOQ and \geq DLH = Out of holding timeW = Reported on wet weight basis$								

Client: Pace Analytical Services, LLC	
Description: 373-0	
Date Sampled:10/29/2020 1435	Project Name: LACROSSE WELL #23 & 24
Date Received: 11/03/2020	Project Number: 40217496

d7-MeFOSE

Laboratory ID: VK03016-006

Matrix: Aqueous

Surrogate	Run 1 A	cceptance
13C3 PFBS	93	25-150
13C3 PFHxS	94	25-150
– 13C3-HFPO-DA	104	25-150
13C4_PFBA	101	25-150
13C4_PFHpA	105	25-150
13C5_PFHxA	102	25-150
13C5_PFPeA	106	25-150
13C6_PFDA	100	25-150
13C7_PFUdA	100	25-150
13C8_PFOA	106	25-150
13C8_PFOS	87	25-150
13C8_PFOSA	108	10-150
13C9_PFNA	99	25-150
d-EtFOSA	92	10-150
d5-EtFOSAA	98	25-150
d9-EtFOSE	103	10-150
d-MeFOSA	95	10-150
d3-MeFOSAA	96	25-150

10-150

94

LOQ = Limit of Quantitation	B = Detected in the method blank	E = Quantitation of compound exceeded the calibration range	DL = Detection Limit
ND = Not detected at or above the DL	N = Recovery is out of criteria	P = The RPD between two GC columns exceeds 40%	J = Estimated result < LOQ and $\ge$ DL
H = Out of holding time	W = Reported on wet weight basis		



444 21st Street South · La Crosse, Wisconsin · 54601

December 1, 2020

## 2741 Grand St La Crosse, WI 54603

Subject: Private Well Sampling Results 102 Mitchell Street, La Crosse, WI 54603 Tax parcel # 4-147-3 Sample ID # 147-3

Dear

We have received and reviewed the test results for the sample collected on November 12, 2020 at the above address. Some PFAS compounds were found, but the levels found were **below** the Department of Health Services (DHS) levels recommended for protecting health. These levels are called the "Recommended Public Health Standard" in the table below. The levels found in *your* well are called the "Sample Result" in the table below.

#### Sample Results

Compound	Sample Result (unit)	Recomm Public H Standard	ended Iealth (unit <sup>e</sup> )
N-Ethyl Perfluorooctane sulfonamide (NEtFOSA) CAS # 4151-50-2	Not Detected	20 ppt <sup>a,b</sup>	) ppt unds I 6
N-Ethyl perfluorooctane sulfonamidoacetic acid (NEtFOSAA) CAS # 2991-50-6	Not Detected	20 ppt <sup>a,b</sup>	it is 2C ompo <i>il</i> of al
N-Ethyl perfluorooctane sulfonamidoethanol (NEtFOSE) CAS # 1691-99-2	Not Detected	20 ppt <sup>a,b</sup>	ed lim ese 6 c ed toto
Perfluorooctane sulfonamide (FOSA) CAS # 754-91-6	Not Detected	20 ppt <sup>a,b</sup>	mend of the mbine
Perfluorooctanoic acid (PFOA) CAS # 335-67-1	Not Detected	20 ppt <sup>a,b</sup>	recom ny <i>one</i> the <i>cc</i>
Perfluorooctanesulfonic acid (PFOS) CAS # 1763-23-1	3.1 ppt	20 ppt <sup>a,b</sup>	The for al or
Hexafluoropropylene oxide dimer acid (HPFO-DA; GenX) CAS # 13252-13-6	Not Detected		300 ppt <sup>a</sup>

Private Well Sampling Results for 102 Mitchell Street, La Crosse, WI 54603 Tax parcel # 4-147-3 Sample ID # 147-3 December 1, 2020

Compound	Sample Result (unit)	Recommended Public Health Standard (unit <sup>e</sup> )
Perfluorobutanesulfonic acid (PFBS) CAS # 375-73-5	1.7 ppt	450,000 ppt <sup>a</sup>
Perfluorohexanesulfonic acid (PFHxS) CAS # 355-46-4	2.0 ppt	40 ppt <sup>a</sup>
Perfluorobutanoic acid (PFBA) CAS # 375-22-4	7.9 ppt	10,000 ppt <sup>a</sup>
Perfluorodecanoic acid (PFDA) CAS # 335-76-2	Not Detected	300 ppt <sup>a</sup>
Perfluorododecanoic acid (PFDoA) CAS # 307-55-1	Not Detected	500 ppt <sup>a</sup>
Perfluorohexanoic acid (PFHxA) CAS # 307-24-4	1.6 ppt	150,000 ppt <sup>a</sup>
Perfluorononanoic acid (PFNA) CAS # 375-95-1	Not Detected	30 ppt <sup>a</sup>
Perfluorotetradecanoic acid (PFTeA) CAS # 376-06-7	Not Detected	10,000 ppt <sup>a</sup>
Perfluoroundecanoic acid (PFUnA) CAS # 2058-94-8	Not Detected	3,000 ppt <sup>a</sup>
4,8-Dioxa-3H-perfluorononanoic acid (DONA) CAS # 919005-14-4	Not Detected	3,000 ppt <sup>a</sup>
Perfluorooctadecanoic acid (PFODA) CAS # 16517-11-6	Not Detected	400,000 ppt <sup>a</sup>
Perfluoro-n-pentanoic acid (PFPeA) CAS # 2706-90-3	1.6 ppt	None Established <sup>c</sup>

<sup>a</sup> Public health enforcement standard (ES) recommended by DHS.

<sup>b</sup> DHS recommends a combined enforcement standard of 20 ng/L and combined preventive action limit of 2 ng/L for FOSA, NEt-FOSA, NetFOSAA, PFOS, and PFOA.

<sup>c</sup> A current standard is not available; the compound is currently under review by DHS for potential public health standard recommendation.

<sup>d</sup> Public health enforcement standard (ES) in NR 140, Wisconsin Administrative Code.

<sup>e</sup> Units: Parts per trillion (ppt) = nanograms of substance per liter of water (ng/L)

<sup>BL</sup> Detected in the method blank. Possible lab contaminant.

Private Well Sampling Results for 102 Mitchell Street, La Crosse, WI 54603 Tax parcel # 4-147-3 Sample ID # 147-3 December 1, 2020

As required by law, we will be submitting these results to the Department of Natural Resources (DNR). The DNR may consult with the Department of Health Services (DHS) about these test results. DHS may review all PFAS tests and follow-up with you directly if any actions are recommended to protect your health.

Thank you for your patience and assistance with our investigation. We will provide updates on the project at <u>https://www.cityoflacrosse.org/wells</u> as our work continues. If you have any questions, please call The OS Group at (608) 668-2718 or email them at <u>PFAS@theOSgrp.com</u>.

You can also contact the DNR and DHS with questions about PFAS or the water sample results at the numbers provided below.

Questions about		<u>Contact</u>	<u>Phone</u>	E-mail Address
Soil & Groundwater Testing, Clean Up	DNR	David Rozeboom	715-215-2078	David.Rozeboom@wisconsin.gov
Drinking Water or Private wells	DNR	Kyle Burton	920-360-2112	kyle.burton@wisconsin.gov
Health Concerns	DHS	Curtis Hedman	608-266-6677	Curtis.Hedman@dhs.wisconsin.gov

On behalf of The City of La Crosse *The OS Group, LLC* 

Attachment: Lab report for your well

Client: Pace Analytical Services, LLC				Labora	atory ID: VK18	030-002	
Description: 147-3					Matrix: Aque	eous	
Date Sampled:11/12/2020 1415	Project Nai	ne: LACROSSE WE	LLS 23 & 24				
Date Received: 11/17/2020 Pri	oiect Numl	per <sup>.</sup> 40218362					
		10210302					
RunPrep MethodAnalytical MethodI1SOP SPEPFAS by ID SOP	Dilution 1	Analysis Date Anal 1/19/2020 1700 MN	yst Prep 1M 11/18/2	Date Ba 020 1701 739	tch 958		
Parameter	C/ Numb	AS Analytical ber Method	Result	Q LO	2 DL	Units	Run
9-chlorohexadecafluoro-3-oxanone-1-sulfonic acid (9CI-PF3ONS)	756426-5	8-1 PFAS by ID SOP	ND	7.	2 1.8	3 ng/L	1
11-chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11CI-PF3)	) 763051-9	2-9 PFAS by ID SOP	ND	7.	2 1.8	3 ng/L	1
1H, 1H, 2H, 2H-perfluorodecane sulfonic acid (8:2 FTS)	39108-3	4-4 PFAS by ID SOP	ND	7.	2 1.8	3 ng/L	1
1H, 1H, 2H, 2H-perfluorooctane sulfonic acid (6:2 FTS)	27619-9	7-2 PFAS by ID SOP	ND	7.	2 1.8	3 ng/L	1
1H,1H,2H,2H-perfluorododecane sulfonic acid (10:2 FTS)	120226-6	0-0 PFAS by ID SOP	ND	7.	2 1.8	3 ng/L	1
1H,1H,2H,2H-perfluorohexane sulfonic acid (4:2 FTS)	757124-7	2-4 PFAS by ID SOP	ND	7.	2 1.8	3 ng/L	1
Hexafluoropropylene oxide dimer acid (GenX)	13252-1	3-6 PFAS by ID SOP	ND	7.	2 1.8	3 ng/L	1
4,8-dioxa-3H-perfluorononanoic acid (ADONA)	919005-1	4-4 PFAS by ID SOP	ND	7.	2 1.8	3 ng/L	1
N-ethylperfluoro-1-octanesulfonamide (EtFOSA)	4151-5	0-2 PFAS by ID SOP	ND	7.	2 1.8	3 ng/L	1
N-ethylperfluoro-1-octanesulfonamidoacetic acid (EtFOSAA)	2991-5	0-6 PFAS by ID SOP	ND	7.	2 1.8	3 ng/L	1
2-N-ethylperfluoro-1-octanesulfonamido-ethanol (EtFOSE)	1691-9	9-2 PFAS by ID SOP	ND	7.	2 1.8	3 ng/L	1
N-methylperfluoro-1-octanesulfonamide (MeFOSA)	31506-3	2-8 PFAS by ID SOP	ND	1	4 3.6	b ng/L	1
N-methylperfluoro-1-octanesulfonamidoacetic acid (MeFOSAA)	2355-3	1-9 PFAS by ID SOP	ND	7.	2 1.8	3 ng/L	1
2-N-methylperfluoro-1-octanesulfonamido-ethanol (MeFOSE)	24448-0	9-7 PFAS by ID SOP	ND	7.	2 1.8	3 ng/L	1
Perfluoro-1-butanesulfonic acid (PFBS)	375-7	3-5 PFAS by ID SOF	P 1.7	J 3.	6 0.91	ng/L	1
Perfluoro-1-decanesulfonic acid (PFDS)	335-7	7-3 PFAS by ID SOP	ND	3.	6 0.91	ng/L	1
Perfluoro-1-heptanesulfonic acid (PFHpS)	375-9	2-8 PFAS by ID SOP	ND	3.	6 0.91	ng/L	1
Perfluoro-1-nonanesulfonic acid (PFNS)	68259-1	2-1 PFAS by ID SOP	ND	3.	6 0.91	ng/L	1
Perfluoro-1-octanesulfonamide (PFOSA)	754-9	1-6 PFAS by ID SOP	ND	3.	6 0.91	ng/L	1
Perfluoro-1-pentanesulfonic acid (PFPeS)	2706-9	1-4 PFAS by ID SOP	ND	3.	6 0.91	ng/L	1
Perfluorododecanesulfonic acid (PFDOS)	79780-3	9-5 PFAS by ID SOP	ND	7.	2 1.8	3 ng/L	1
Perfluorohexanesulfonic acid (PFHxS)	355-4	6-4 PFAS by ID SOF	2.0	J 3.	6 0.91	ng/L	1
Perfluoro-n-butanoic acid (PFBA)	375-2	2-4 PFAS by ID SOF	p 7.9	3.	6 0.91	ng/L	1
Perfluoro-n-decanoic acid (PFDA)	335-7	6-2 PFAS by ID SOP	ND	3.	6 0.91	ng/L	1
Perfluoro-n-dodecanoic acid (PFDoA)	307-5	5-1 PFAS by ID SOP	ND	3.	6 0.91	ng/L	1
Perfluoro-n-heptanoic acid (PFHpA)	375-8	5-9 PFAS by ID SOP	ND	3.	6 0.91	ng/L	1
Perfluoro-n-hexadecanoic acid (PFHxDA)	67905-1	9-5 PFAS by ID SOP	ND	7.	2 1.8	3 ng/L	1
Perfluoro-n-hexanoic acid (PFHxA)	307-2	4-4 PFAS by ID SOF	P 1.6	J 3.	6 0.91	ng/L	1
Perfluoro-n-nonanoic acid (PFNA)	375-9	5-1 PFAS by ID SOP	ND	3.	6 0.91	ng/L	1
Perfluoro-n-octadecanoic acid (PFODA)	16517-1	1-6 PFAS by ID SOP	ND	7.	2 1.8	3 ng/L	1
Perfluoro-n-octanoic acid (PFOA)	335-6	7-1 PEAS by ID SOP	ND	3.	6 0.91	ng/L	1
Perfluoro-n-pentanoic acid (PFPeA)	2706-9	0-3 PEAS by ID SOF	2 1.6	J 3.	6 0.91	ng/L	1
Perfluoro-n-tetradecanoic acid (PFTeDA)	376-0	6-7 PEAS by ID SOP	ND	3.	6 0.91	ng/L	1
Perfluoro-n-tridecanoic acid (PFTrDA)	/2629-9	4-8 PEAS by ID SOP	ND	3.	6 0.91	ng/L	1
Perfluoro-n-undecanoic acid (PFUdA)	2058-9	4-8 PEAS by ID SOP	ND	3.	6 0.91	ng/L	1
Perfluorooctanesulfonic acid (PFOS)	1763-2	3-1 PEAS by ID SOF	3.1	J 3.	6 0.91	ng/L	1
Surrogate Q % Re	un 1 Ao ecovery	cceptance Limits					
13C2_4:2FTS	98	25-150					
1302_6:2FTS	93	25-150					
13U2_8:2FTS	91	25-150					
	66	25-150					
	81	25-150					
I3CZ_PFTEDA	09	25-150					
LOQ = Limit of Quantitation B = Detected in the method blank	E = Quantita	ition of compound exceeded	d the calibration ra	ange DL = Dete	ction Limit		
ND = Not detected at or above the DL N = Recovery is out of criteria	P = The RP	D between two GC columns	exceeds 40%	J = Estima	ted result < LOQ a	and $\geq$ DL	
H = Out of holding time W = Reported on wet weight basis							

Client: Pace Analytical Services, LLC	
Description: 147-3	
Date Sampled:11/12/2020 1415	Project Name: LACROSSE WELLS 23 & 24
Date Received: 11/17/2020	Project Number: 40218362

d7-MeFOSE

Laboratory ID: VK18030-002

Matrix: Aqueous

Surrogate	Run 1 A Q % Recovery	cceptance Limits	
13C3_PFBS	74	25-150	
13C3_PFHxS	75	25-150	
13C3-HFPO-DA	89	25-150	
13C4_PFBA	85	25-150	
13C4_PFHpA	84	25-150	
13C5_PFHxA	79	25-150	
13C5_PFPeA	83	25-150	
13C6_PFDA	74	25-150	
13C7_PFUdA	74	25-150	
13C8_PFOA	83	25-150	
13C8_PFOS	71	25-150	
13C8_PFOSA	93	10-150	
13C9_PFNA	82	25-150	
d-EtFOSA	68	10-150	
d5-EtFOSAA	78	25-150	
d9-EtFOSE	76	10-150	
d-MeFOSA	76	10-150	
d3-MeFOSAA	84	25-150	

10-150

75

LOQ = Limit of Quantitation	B = Detected in the method blank	E = Quantitation of compound exceeded the calibration range	DL = Detection Limit
ND = Not detected at or above the DL	N = Recovery is out of criteria	P = The RPD between two GC columns exceeds 40%	J = Estimated result < LOQ and $\ge$ DL
H = Out of holding time	W = Reported on wet weight basis		



444 21st Street South · La Crosse, Wisconsin · 54601

December 1, 2020

2508 1st Avenue East La Crosse, WI 54603

Subject: Private Well Sampling Results 2508 1st Avenue East, La Crosse, WI 54603 Tax parcel # 4-206-0 Sample ID # 206

## Dear

We have received and reviewed the test results for the sample collected on November 12, 2020 at the above address. Some PFAS compounds were found at levels <u>above</u> the Department of Health Services (DHS) levels recommended for protecting health. These levels are called the "Recommended Public Health Standard" in the table below. The levels found in your well are called the "Sample Result" in the table below.

Because some of the levels are above the recommended Public Health Standard, the City is offering to provide bottled water delivered to your home for drinking, cooking, and brushing your teeth. There will be no cost to you for the bottled water. Please complete the attached form and mail it to The OS Group to make arrangements for having a water dispenser and bottles delivered to your home. Call 608-668-2718 or email <u>PFAS@theOSgrp.com</u>. You may also complete this form on line at <u>www.cityoflacrosse.org/bottledwater</u>

The following table summarizes the test results from the sample. **Bolded results** are above a current recommended level intended to protect your health according to the Department of Health Services (DHS).

Private Well Sampling Results for 2508 1st Avenue East, La Crosse, WI 54603 Tax Parcel # 4-206-0 December 1, 2020

Compound	Sample Result (unit)	Recommended Public Health Standard (unit <sup>e</sup> )		
N-Ethyl Perfluorooctane sulfonamide (NEtFOSA) CAS # 4151-50-2	Not Detected	20 ppt <sup>a,b</sup>	opt nds 6	
N-Ethyl perfluorooctane sulfonamidoacetic acid (NEtFOSAA) CAS # 2991-50-6	Not Detected	20 ppt <sup>a,b</sup>	nit is 20 p compou a/ of all (	
N-Ethyl perfluorooctane sulfonamidoethanol (NEtFOSE) CAS # 1691-99-2	Not Detected	20 ppt <sup>a,b</sup>		
Perfluorooctane sulfonamide (FOSA) CAS # 754-91-6	Not Detected	20 ppt <sup>a,b</sup>	mmen ne of th combir	
Perfluorooctanoic acid (PFOA) CAS # 335-67-1	49 ppt	20 ppt <sup>a,b</sup>		
Perfluorooctanesulfonic acid (PFOS) CAS # 1763-23-1	19 ppt	20 ppt <sup>a,b</sup>	The for	
Hexafluoropropylene oxide dimer acid (HPFO-DA; GenX) CAS # 13252-13-6	Not Detected		300 ppt <sup>a</sup>	
Perfluorobutanesulfonic acid (PFBS) CAS # 375-73-5	110 ppt	450	),000 ppt <sup>a</sup>	
Perfluorohexanesulfonic acid (PFHxS) CAS # 355-46-4	910 ppt		40 ppt <sup>a</sup>	
Perfluorobutanoic acid (PFBA) CAS # 375-22-4	16 ppt	10	),000 ppt <sup>a</sup>	
Perfluorodecanoic acid (PFDA) CAS # 335-76-2	Not Detected		300 ppt <sup>a</sup>	
Perfluorododecanoic acid (PFDoA) CAS # 307-55-1	Not Detected	500 ppt <sup>a</sup>		
Perfluorohexanoic acid (PFHxA) CAS # 307-24-4	51 ppt	150	),000 ppt <sup>a</sup>	
Perfluorononanoic acid (PFNA) CAS # 375-95-1	Not Detected	30 ppt <sup>a</sup>		
Perfluorotetradecanoic acid (PFTeA) CAS # 376-06-7	Not Detected	10	10,000 ppt <sup>a</sup>	
Perfluoroundecanoic acid (PFUnA) CAS # 2058-94-8	Not Detected	3,000 ppt <sup>a</sup>		

### Sample Results

Private Well Sampling Results for 2508 1st Avenue East, La Crosse, WI 54603 Tax Parcel # 4-206-0 December 1, 2020

4,8-Dioxa-3H-perfluorononanoic acid (DONA) CAS # 919005-14-4	Not Detected	3,000 ppt <sup>a</sup>
Perfluorooctadecanoic acid (PFODA) CAS # 16517-11-6	Not Detected	400,000 ppt <sup>a</sup>
Perfluoro-1-pentanesulfonic acid (PFPeS) CAS # 2706-91-4	180 ppt	None Established <sup>c</sup>
Perfluoro-n-heptanoic acid (PFHpA) CAS # 375-85-9	15 ppt	None Established <sup>c</sup>
Perfluoro-n-pentanoic acid (PFPeA) CAS #2706-90-3	13 ppt	None Established <sup>c</sup>

<sup>a</sup> Public health enforcement standard (ES) recommended by DHS.

<sup>b</sup> DHS recommends a combined enforcement standard of 20 ng/L and combined preventive action limit of 2 ng/L for FOSA, NEt-FOSE, NEt-FOSA, NetFOSAA, PFOS, and PFOA.

<sup>2</sup> A current standard is not available; the compound is currently under review by DHS for potential public health standard recommendation.

<sup>d</sup> Public health enforcement standard (ES) in NR 140, Wisconsin Administrative Code.

<sup>e</sup> Units: Parts per trillion (ppt) = nanograms of substance per liter of water (ng/L)

<sup>BL</sup> Detected in the method blank. Possible lab contaminant.

Private Well Sampling Results for 2508 1st Avenue East, La Crosse, WI 54603 Tax Parcel # 4-206-0 December 1, 2020

As required by law, we will be submitting these results to the Department of Natural Resources (DNR). The DNR may consult with the Department of Health Services (DHS) about these test results. DHS may review all PFAS tests and follow-up with you directly if any actions are recommended to protect your health.

Thank you for your patience and assistance with our investigation. We will provide updates on the project at <a href="https://www.cityoflacrosse.org/wells">https://www.cityoflacrosse.org/wells</a> as our work continues. If you have any questions, please call The OS Group at (608) 668-2718 or email them at <a href="https://www.pFAS@theOSgrp.com">PFAS@theOSgrp.com</a>.

You can also contact the DNR and DHS with questions about PFAS or the water sample results at the numbers provided below.

Questions about		<u>Contact</u>	<u>Phone</u>	E-mail Address
Soil & Groundwater Testing, Clean Up	DNR	David Rozeboom	715-215-2078	David.Rozeboom@wisconsin.gov
Drinking Water or Private wells	DNR	Kyle Burton	920-360-2112	kyle.burton@wisconsin.gov
Health Concerns	DHS	Curtis Hedman	608-266-6677	Curtis.Hedman@dhs.wisconsin.gov

On behalf of The City of La Crosse *The OS Group, LLC* 

Attachment: Lab report for your well Bottled Water Acknowledgement

Client: Pace Analytical Services, LLC				Laboratory	D: VK18030-	001	
Description: 206-0	Matr	ix: Aqueous					
Date Sampled:11/12/2020 1305	Project Nam	e: LACROSSE WELLS	23 & 24				
Date Received: 11/17/2020 Pro	oject Numbe	er: 40218362					
Pup Prop Mathed Applytical Mathed D	ilution A	polycic Data Apolyct	Drop D	ata Batab			
Number NetworkAnalytical Method1SOP SPEPFAS by ID SOP	5 11	/20/2020 1714 MMM	11/18/20	20 1701 73958			
Parameter	CAS	S Analytical	Posult (		וח	Units	Pun
9-chlorobexadecafluoro-3-oxanone-1-sulfonic acid (9CI-PE3ONS)	756426-58	-1 PFAS by ID SOP	ND	36		ng/l	1
11-chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PE3)	763051-92	-9 PFAS by ID SOP	ND	36	9.0	na/L	1
1H. 1H. 2H. 2H-perfluorodecane sulfonic acid (8:2 FTS)	39108-34	-4 PFAS by ID SOP	ND	36	9.0	na/L	1
1H, 1H, 2H, 2H-perfluorooctane sulfonic acid (6:2 FTS)	27619-97	-2 PFAS by ID SOP	ND	36	9.0	ng/L	1
1H,1H,2H,2H-perfluorododecane sulfonic acid (10:2 FTS)	120226-60	-0 PFAS by ID SOP	ND	36	9.0	ng/L	1
1H,1H,2H,2H-perfluorohexane sulfonic acid (4:2 FTS)	757124-72	-4 PFAS by ID SOP	ND	36	9.0	ng/L	1
Hexafluoropropylene oxide dimer acid (GenX)	13252-13	-6 PFAS by ID SOP	ND	36	9.0	ng/L	1
4,8-dioxa-3H-perfluorononanoic acid (ADONA)	919005-14	-4 PFAS by ID SOP	ND	36	9.0	ng/L	1
N-ethylperfluoro-1-octanesulfonamide (EtFOSA)	4151-50-	2 PFAS by ID SOP	ND	36	9.0	ng/L	1
N-ethylperfluoro-1-octanesulfonamidoacetic acid (EtFOSAA)	2991-50-	6 PFAS by ID SOP	ND	36	9.0	ng/L	1
2-N-ethylperfluoro-1-octanesulfonamido-ethanol (EtFOSE)	1691-99-	2 PFAS by ID SOP	ND	36	9.0	ng/L	1
N-methylperfluoro-1-octanesulfonamide (MeFOSA)	31506-32	-8 PFAS by ID SOP	ND	72	18	ng/L	1
N-methylperfluoro-1-octanesulfonamidoacetic acid (MeFOSAA)	2355-31-	9 PFAS by ID SOP	ND	36	9.0	ng/L	1
2-N-methylperfluoro-1-octanesulfonamido-ethanol (MeFOSE)	24448-09	-7 PFAS by ID SOP	ND	36	9.0	ng/L	1
Perfluoro-1-butanesulfonic acid (PFBS)	375-73-	5 PFAS by ID SOP	110	18	4.5	ng/L	1
Perfluoro-1-decanesulfonic acid (PFDS)	335-77-	3 PFAS by ID SOP	ND	18	4.5	ng/L	1
Perfluoro-1-heptanesulfonic acid (PFHpS)	375-92-	8 PFAS by ID SOP	ND	18	4.5	ng/L	1
Perfluoro-1-nonanesulfonic acid (PFNS)	68259-12	-1 PFAS by ID SOP	ND	18	4.5	ng/L	1
Perfluoro-1-octanesulfonamide (PFOSA)	754-91-	6 PFAS by ID SOP	ND	18	4.5	ng/L	1
Perfluoro-1-pentanesulfonic acid (PFPeS)	2706-91-	4 PFAS by ID SOP	180	18	4.5	ng/L	1
Perfluorododecanesulfonic acid (PFDOS)	79780-39	-5 PFAS by ID SOP	ND	36	9.0	ng/L	1
Perfluorohexanesulfonic acid (PFHxS)	355-46-	4 PFAS by ID SOP	910	18	4.5	ng/L	1
Perfluoro-n-butanoic acid (PFBA)	375-22-	4 PFAS by ID SOP	16 ၂	J 18	4.5	ng/L	1
Perfluoro-n-decanoic acid (PFDA)	335-76-	2 PFAS by ID SOP	ND	18	4.5	ng/L	1
Perfluoro-n-dodecanoic acid (PFDoA)	307-55-	1 PFAS by ID SOP	ND	18	4.5	ng/L	1
Perfluoro-n-heptanoic acid (PFHpA)	375-85-	9 PFAS by ID SOP	15 J	J 18	4.5	ng/L	1
Perfluoro-n-hexadecanoic acid (PFHxDA)	67905-19	-5 PFAS by ID SOP	ND	36	9.0	ng/L	1
Perfluoro-n-hexanoic acid (PFHxA)	307-24-	4 PFAS by ID SOP	51	18	4.5	ng/L	1
Perfluoro-n-nonanoic acid (PFNA)	375-95-	1 PFAS by ID SOP	ND	18	4.5	ng/L	1
Perfluoro-n-octadecanoic acid (PFODA)	16517-11	-6 PFAS by ID SOP	ND	36	9.0	ng/L	1
Perfluoro-n-octanoic acid (PFOA)	335-67-	1 PFAS by ID SOP	49	18	4.5	ng/L	1
Perfluoro-n-pentanoic acid (PFPeA)	2706-90-	3 PFAS by ID SOP	13 ၂	J 18	4.5	ng/L	1
Perfluoro-n-tetradecanoic acid (PFTeDA)	376-06-	7 PFAS by ID SOP	ND	18	4.5	ng/L	1
Perfluoro-n-tridecanoic acid (PFTrDA)	72629-94	-8 PFAS by ID SOP	ND	18	4.5	ng/L	1
Perfluoro-n-undecanoic acid (PFUdA)	2058-94-	8 PFAS by ID SOP	ND	18	4.5	ng/L	1
Perfluorooctanesulfonic acid (PFOS)	1763-23-	1 PFAS by ID SOP	19	18	4.5	ng/L	1
Surrogate Q % Re	un 1 Acc covery	ceptance Limits					
13C2_4:2FTS	94	25-150					
13C2_6:2FTS	96	25-150					
13C2_8:2FTS	83	25-150					
13C2_PFDoA	88	25-150					
13C2_PFHxDA	95	25-150					
13C2_PFTeDA	86	25-150					
LOQ = Limit of Quantitation B = Detected in the method blank	E = Quantitati	on of compound exceeded the	calibration ran	ge DL = Detection Li	mit		
ND = Not detected at or above the DL N = Recovery is out of criteria	P = The RPD	between two GC columns exce	eds 40%	J = Estimated res	ult < LOQ and $\geq$ [	DL	
H = Out of holding time W = Reported on wet weight basis							

Client: Pace Analytical Services, LLC	
Description: 206-0	
Date Sampled:11/12/2020 1305	Project Name: LACROSS
Date Received: 11/17/2020	Project Number: 40218362

d7-MeFOSE

ect Name: LACROSSE WELLS 23 & 24

Laboratory ID: VK18030-001

Matrix: Aqueous

Surrogate	Run 1 A	cceptance
13C3 PEBS	87	25-150
13C3 PEHXS	91	25-150
13C3-HEPO-DA	96	25-150
13C4 PERA	91	25,150
13C4_PEHpA	90	25,150
13C5 PEHXA	90	25-150
13C5 PEPeA	94	25,150
13C6 PEDA	03	25,150
1207 DELIAA	95	25-150
13C7_FLOUR	09	20-100
	90	20-100
	89	25-150
13C8_PFOSA	98	10-150
13C9_PFNA	89	25-150
d-EtFOSA	73	10-150
d5-EtFOSAA	90	25-150
d9-EtFOSE	85	10-150
d-MeFOSA	93	10-150
d3-MeFOSAA	89	25-150

10-150

100

LOQ = Limit of Quantitation	B = Detected in the method blank	E = Quantitation of compound exceeded the calibration range	DL = Detection Limit
ND = Not detected at or above the DL	N = Recovery is out of criteria	P = The RPD between two GC columns exceeds 40%	J = Estimated result < LOQ and $\ge$ DL
H = Out of holding time	W = Reported on wet weight basis		

## BOTTLED WATER ACKNOWLEDGEMENT

2508 1st Avenue East, La Crosse, WI 54603

If you desire to accept the bottled water delivery, please complete and sign this form and return it to The OS Group at <u>PFAS@TheOSgrp.com</u> or mail to 444 21<sup>st</sup> St. S, La Crosse, WI 54601. You may also complete this form electronically on line at <u>www.cityoflacrosse.org/bottledwater</u>. Call 608-668-2718 with any question you may have.

As pre-caution for the protection of human health, the City of La Crosse (The City) will provide, on a temporary basis, bottled water for drinking, cooking and toothbrushing purposes at the above referenced address. The water will be delivered to your home or business by a commercial water delivery service. At the City's cost, a dispenser / cooler and regular deliveries of 5-gallon containers of water will be provided. The City reserves the right to dictate the conditions of delivery, such as minimum and maximum number of containers per delivery, frequency and timing of deliveries. The City reserves the right to periodically review whether The City should continue to provide bottled water, considering factors such as State and Federal standards and guidance, evolving knowledge and understanding of the sources, cause and responsibility for the contamination, new or reinterpreted test results, and the availability of more permanent or costeffective sources of water for the above purposes. The City of La Crosse makes no warranty or representation regarding the suitability of the bottled water beyond those made by the commercial water delivery service.

All reusable or returnable equipment and supplies, such as the containers and cooler/dispenser, are the property of the commercial water delivery service or the City of La Crosse. By signing below, the Occupant of the above referenced property acknowledges that all reusable or returnable equipment and supplies shall be returned to the commercial water delivery service or the City of La Crosse upon request. The Occupant agrees to provide reasonable access for delivery of bottled water and pick up of reusable or returnable equipment and supplies. Occupant(s) acknowledges that they may be required to sign an agreement with the commercial water delivery service as a condition of receiving bottled water.

Check ownership:

\_\_\_\_\_ Owner-Occupant Occupant Only

Number of Occupants: \_\_\_\_\_

Printed Name: \_\_\_\_\_



444 21st Street South · La Crosse, Wisconsin · 54601

November 24, 2020

2551 1st Avenue West La Crosse, WI 54603

Subject: Private Well Sampling Results 2551 1st Avenue West, La Crosse, WI 54603 Tax Parcel # 4-388-0 Sample ID # 388-0

### Dear

We have received and reviewed the test results for the sample collected on October 29, 2020 at the above address. Some PFAS compounds were found at levels <u>above</u> the Department of Health Services (DHS) levels recommended for protecting health. These levels are called the "Recommended Public Health Standard" in the table below. The levels found in your well are called the "Sample Result" in the table below.

Because some of the levels are above the recommended Public Health Standard, the City is offering to provide bottled water delivered to your home for drinking, cooking, and brushing your teeth. There will be no cost to you for the bottled water. Please complete the attached form and mail it to The OS Group to make arrangements for having a water dispenser and bottles delivered to your home or business. Call 608-668-2718 or email <u>PFAS@theOSgrp.com</u>. You may also complete this form on line at <u>www.cityoflacrosse.org/bottledwater</u>

The following table summarizes the test results from the sample. **Bolded results** are above a current recommended level intended to protect your health according to the Department of Health Services (DHS).

Private Well Sampling Results for 2551 1st Avenue West, La Crosse, WI 54603 Tax Parcel # 4-388-0 Sample ID # 388-0 November 24, 2020

### Sample Results

Compound	Sample Result (unit)	Recommended Public Health Standard (unit <sup>e</sup> )			
N-Ethyl Perfluorooctane sulfonamide (NEtFOSA) CAS # 4151-50-2	Not Detected	20 ppt <sup>a,b</sup>	ppt unds 6		
N-Ethyl perfluorooctane sulfonamidoacetic acid (NEtFOSAA) CAS # 2991-50-6	Not Detected	20 ppt <sup>a,b</sup>	it is 20 compo <i>il</i> of all		
N-Ethyl perfluorooctane sulfonamidoethanol (NEtFOSE) CAS # 1691-99-2	Not Detected	20 ppt <sup>a,b</sup>	ed lim ese 6 c ed toto		
Perfluorooctane sulfonamide (FOSA) CAS # 754-91-6	Not Detected	20 ppt <sup>a,b</sup> 20 pt the			
Perfluorooctanoic acid (PFOA) CAS # 335-67-1	15 ppt	20 ppt <sup>a,b</sup>			
Perfluorooctanesulfonic acid (PFOS) CAS # 1763-23-1	18 ppt	20 ppt <sup>a,b</sup>	The for a or		
Hexafluoropropylene oxide dimer acid (HPFO-DA; GenX) CAS # 13252-13-6	Not Detected		300 ppt <sup>a</sup>		
Perfluorobutanesulfonic acid (PFBS) CAS # 375-73-5	9.9 ppt	450	0,000 ppt <sup>a</sup>		
Perfluorohexanesulfonic acid (PFHxS) CAS # 355-46-4	15 ppt		40 ppt <sup>a</sup>		
Perfluorobutanoic acid (PFBA) CAS # 375-22-4	130 ppt	10	0,000 ppt <sup>a</sup>		
Perfluorodecanoic acid (PFDA) CAS # 335-76-2	Not Detected		300 ppt <sup>a</sup>		
Perfluorododecanoic acid (PFDoA) CAS # 307-55-1	Not Detected		500 ppt <sup>a</sup>		
Perfluorohexanoic acid (PFHxA) CAS # 307-24-4	Not Detected	150	0,000 ppt <sup>a</sup>		
Perfluorononanoic acid (PFNA) CAS # 375-95-1	Not Detected		30 ppt <sup>a</sup>		
Perfluorotetradecanoic acid (PFTeA) CAS # 376-06-7	Not Detected	10,000 ppt <sup>a</sup>			
Perfluoroundecanoic acid (PFUnA) CAS # 2058-94-8	Not Detected	3,000 ppt <sup>a</sup>			

Private Well Sampling Results for 2551 1st Avenue West, La Crosse, WI 54603 Tax Parcel # 4-388-0 Sample ID # 388-0 November 24, 2020

4,8-Dioxa-3H-perfluorononanoic acid (DONA) CAS # 919005-14-4	Not Detected	3,000 ppt <sup>a</sup>
Perfluorooctadecanoic acid (PFODA) CAS # 16517-11-6	Not Detected	400,000 ppt <sup>a</sup>
Perfluoro-1-hetanesulfonic acid (PFHpS) CAS # 375-92-8	1.3 ppt	None Established <sup>c</sup>
Perfluoro-1-pentanesulfonic acid (PFPeS) CAS # 2706-91-4	7.0 ppt	None Established <sup>c</sup>
<ul> <li><sup>a</sup> Public health enforcement standard (ES) recommended by DHS.</li> <li><sup>b</sup> DHS recommends a combined enforcement standard of 20 ng/L and FOSA, NEt-FOSE, NEt-FOSA, NetFOSAA, PFOS, and PFOA.</li> <li><sup>c</sup> A current standard is not available; the compound is currently unde standard recommendation.</li> </ul>	d combined preventive er review by DHS for po	action limit of 2 ng/L for tential public health

<sup>d</sup> Public health enforcement standard (ES) in NR 140, Wisconsin Administrative Code.

<sup>e</sup> Units: Parts per trillion (ppt) = nanograms of substance per liter of water (ng/L)

<sup>BL</sup> Detected in the method blank. Possible lab contaminant.

As required by law, we will be submitting these results to the Department of Natural Resources (DNR). The DNR may consult with the Department of Health Services (DHS) about these test results. DHS may review all PFAS tests and follow-up with you directly if any actions are recommended to protect your health.

Thank you for your patience and assistance with our investigation. We will provide updates on the project at <u>https://www.cityoflacrosse.org/wells</u> as our work continues. If you have any questions, please call The OS Group at (608) 668-2718 or email them at <u>PFAS@theOSgrp.com</u>.

Private Well Sampling Results for 2551 1st Avenue West, La Crosse, WI 54603 Tax Parcel # 4-388-0 Sample ID # 388-0 November 24, 2020

You can also contact the DNR and DHS with questions about PFAS or the water sample results at the numbers provided below.

Questions about		<u>Contact</u>	<u>Phone</u>	E-mail Address
Soil & Groundwater Testing, Clean Up	DNR	David Rozeboom	715-215-2078	David.Rozeboom@wisconsin.gov
Drinking Water or Private wells	DNR	Kyle Burton	920-360-2112	kyle.burton@wisconsin.gov
Health Concerns	DHS	Curtis Hedman	608-266-6677	Curtis.Hedman@dhs.wisconsin.gov

On behalf of The City of La Crosse *The OS Group, LLC* 

Attachment: Lab report for your well Bottled Water Acknowledgement

Client: Pace Analytical Services, LLC						Laboratory ID	D: VK03016-0	023	
Description: 388-0						Matrix	: Aqueous		
Date Sampled:10/29/2020 1345	Project Na	me: I	LACROSSE WELL #	#23 & 24					
Date Received: 11/03/2020 P	roiect Num	ber: 4	40217496						
Dup Drop Mathed Apolytical Mathed	Dilution	Ano	lucia Data Analust	Drop	Data	Datab			
2 SOP SPE PFAS by ID SOP	1	Ana 11/17	7/2020 2136 SES	11/16/2	2020 16	13 73668			
Parameter	C	AS	Analytical Method	Result	0	1.00	וח	Units	Run
9-chlorohexadecafluoro-3-oxanone-1-sulfonic acid (9CI-PE3ONS	756426-	58-1	PEAS by ID SOP	ND	Q	8.8	22	na/L	2
11-chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3.	.) 763051-0	92-9	PFAS by ID SOP	ND		8.8	2.2	na/L	2
1H. 1H. 2H. 2H-perfluorodecane sulfonic acid (8:2 FTS)	39108-3	34-4	PFAS by ID SOP	ND		8.8	2.2	na/L	2
1H, 1H, 2H, 2H-perfluorooctane sulfonic acid (6:2 FTS)	27619-0	97-2	PFAS by ID SOP	ND		8.8	2.2	ng/L	2
1H,1H,2H,2H-perfluorododecane sulfonic acid (10:2 FTS)	120226-0	60-0	PFAS by ID SOP	ND		8.8	2.2	ng/L	2
1H,1H,2H,2H-perfluorohexane sulfonic acid (4:2 FTS)	757124-	72-4	PFAS by ID SOP	ND		8.8	2.2	ng/L	2
Hexafluoropropylene oxide dimer acid (GenX)	13252-1	13-6	PFAS by ID SOP	ND		8.8	2.2	ng/L	2
4,8-dioxa-3H-perfluorononanoic acid (ADONA)	919005-	14-4	PFAS by ID SOP	ND		8.8	2.2	ng/L	2
N-ethylperfluoro-1-octanesulfonamide (EtFOSA)	4151-5	50-2	PFAS by ID SOP	ND		8.8	2.2	ng/L	2
N-ethylperfluoro-1-octanesulfonamidoacetic acid (EtFOSAA)	2991-5	50-6	PFAS by ID SOP	ND		8.8	2.2	ng/L	2
2-N-ethylperfluoro-1-octanesulfonamido-ethanol (EtFOSE)	1691-9	99-2	PFAS by ID SOP	ND		8.8	2.2	ng/L	2
N-methylperfluoro-1-octanesulfonamide (MeFOSA)	31506-3	32-8	PFAS by ID SOP	ND		18	4.4	ng/L	2
N-methylperfluoro-1-octanesulfonamidoacetic acid (MeFOSAA)	2355-3	31-9	PFAS by ID SOP	ND		8.8	2.2	ng/L	2
2-N-methylperfluoro-1-octanesulfonamido-ethanol (MeFOSE)	24448-0	09-7	PFAS by ID SOP	ND		8.8	2.2	ng/L	2
Perfluoro-1-butanesulfonic acid (PFBS)	375-7	/3-5	PFAS by ID SOP	9.9		4.4	1.1	ng/L	2
Perfluoro-1-decanesulfonic acid (PFDS)	335-7	7-3	PFAS by ID SOP	ND		4.4	1.1	ng/L	2
Perfluoro-1-heptanesulfonic acid (PFHpS)	375-9	92-8	PFAS by ID SOP	1.3	J	4.4	1.1	ng/L	2
Perfluoro-1-nonanesulfonic acid (PFNS)	68259-	12-1	PFAS by ID SOP	ND		4.4	1.1	ng/L	2
Perfluoro-1-octanesulfonamide (PFOSA)	754-9	91-6	PFAS by ID SOP	ND		4.4	1.1	ng/L	2
Perfluoro-1-pentanesulfonic acid (PFPeS)	2706-9	91-4	PFAS by ID SOP	7.0		4.4	1.1	ng/L	2
Perfluorododecanesulfonic acid (PFDOS)	79780-3	39-5	PFAS by ID SOP	ND		8.8	2.2	ng/L	2
Perfluorohexanesulfonic acid (PFHxS)	355-4	16-4	PFAS by ID SOP	15		4.4	1.1	ng/L	2
Perfluoro-n-butanoic acid (PFBA)	375-2	22-4	PFAS by ID SOP	130		4.4	1.1	ng/L	2
Perfluoro-n-decanoic acid (PFDA)	335-7	76-2	PFAS by ID SOP	ND		4.4	1.1	ng/L	2
Perfluoro-n-dodecanoic acid (PFDoA)	307-5	55-1	PFAS by ID SOP	ND		4.4	1.1	ng/L	2
Perfluoro-n-heptanoic acid (PFHpA)	375-8	35-9	PFAS by ID SOP	ND		4.4	1.1	ng/L	2
Perfluoro-n-hexadecanoic acid (PFHxDA)	67905-	19-5	PFAS by ID SOP	ND		8.8	2.2	ng/L	2
Perfluoro-n-hexanoic acid (PFHxA)	307-2	24-4	PFAS by ID SOP	ND		4.4	1.1	ng/L	2
Perfluoro-n-nonanoic acid (PFNA)	375-9	95-1	PFAS by ID SOP	ND		4.4	1.1	ng/L	2
Perfluoro-n-octadecanoic acid (PFODA)	16517-1	11-6	PFAS by ID SOP	ND		8.8	2.2	ng/L	2
Perfluoro-n-octanoic acid (PFOA)	335-6	57-1	PFAS by ID SOP	15		4.4	1.1	ng/L	2
Perfluoro-n-pentanoic acid (PFPeA)	2706-9	90-3	PFAS by ID SOP	ND		4.4	1.1	ng/L	2
Perfluoro-n-tetradecanoic acid (PFTeDA)	376-0	)6-7	PFAS by ID SOP	ND		4.4	1.1	ng/L	2
Perfluoro-n-tridecanoic acid (PFTrDA)	72629-9	94-8	PFAS by ID SOP	ND		4.4	1.1	ng/L	2
Perfluoro-n-undecanoic acid (PFUdA)	2058-9	94-8	PFAS by ID SOP	ND		4.4	1.1	ng/L	2
Perfluorooctanesulfonic acid (PFOS)	1763-2	23-1	PFAS by ID SOP	18		4.4	1.1	ng/L	2
Surrogate Q % R	Run 2 A ecovery	ccep Lin	otance nits						
13C2_4:2FTS	91	25-	150						
13C2_6:2FTS	89	25-	150						
13C2_8:2FTS	91	25-	150						
13C2_PFDoA	78	25-	150						
13C2_PFHxDA	80	25-	150						
13C2_PFTeDA	74	25-	150						
LOQ = Limit of Quantitation B = Detected in the method blank	E = Quantit	ation c	of compound exceeded the o	calibration r	ange D	L = Detection Lim	iit		
ND = Not detected at or above the DL $N = $ Recovery is out of criteria	P = The RF	PD betv	ween two GC columns exce	eds 40%	J	= Estimated resul	It < LOQ and $\geq$ D	DL	
H = Out of holding time W = Reported on wet weight basis									
Client: Pace Analytical Services, LLC		Laboratory ID: VK03016-023							
---------------------------------------	--------------------------------------	----------------------------							
Description: 388-0		Matrix: Aqueous							
Date Sampled:10/29/2020 1345	Project Name: LACROSSE WELL #23 & 24								
Date Received: 11/03/2020	Project Number: 40217496								

	Run 2 A	cceptance
Surrogate	Q % Recovery	Limits
13C3_PFBS	81	25-150
13C3_PFHxS	86	25-150
13C3-HFPO-DA	88	25-150
13C4_PFBA	91	25-150
13C4_PFHpA	87	25-150
13C5_PFHxA	87	25-150
13C5_PFPeA	88	25-150
13C6_PFDA	88	25-150
13C7_PFUdA	84	25-150
13C8_PFOA	87	25-150
13C8_PFOS	85	25-150
13C8_PFOSA	92	10-150
13C9_PFNA	85	25-150
d-EtFOSA	73	10-150
d5-EtFOSAA	89	25-150
d9-EtFOSE	80	10-150
d-MeFOSA	80	10-150
d3-MeFOSAA	82	25-150
d7-MeFOSE	79	10-150

LOQ = Limit of Quantitation	B = Detected in the method blank	E = Quantitation of compound exceeded the calibration range	DL = Detection Limit
ND = Not detected at or above the DL	N = Recovery is out of criteria	P = The RPD between two GC columns exceeds 40%	J = Estimated result < LOQ and $\geq$ DL
H = Out of holding time	W = Reported on wet weight basis		

## BOTTLED WATER ACKNOWLEDGEMENT

2551 1st Avenue West, La Crosse, WI 54603

If you desire to accept the bottled water delivery, please complete and sign this form and return it to The OS Group at <u>PFAS@TheOSgrp.com</u> or mail to 444 21<sup>st</sup> St. S, La Crosse, WI 54601. You may also complete this form electronically on line at <u>www.cityoflacrosse.org/bottledwater</u>. Call 608-668-2718 with any question you may have.

As pre-caution for the protection of human health, the City of La Crosse (The City) will provide, on a temporary basis, bottled water for drinking, cooking and toothbrushing purposes at the above referenced address. The water will be delivered to your home or business by a commercial water delivery service. At the City's cost, a dispenser / cooler and regular deliveries of 5-gallon containers of water will be provided. The City reserves the right to dictate the conditions of delivery, such as minimum and maximum number of containers per delivery, frequency and timing of deliveries. The City reserves the right to periodically review whether The City should continue to provide bottled water, considering factors such as State and Federal standards and guidance, evolving knowledge and understanding of the sources, cause and responsibility for the contamination, new or reinterpreted test results, and the availability of more permanent or costeffective sources of water for the above purposes. The City of La Crosse makes no warranty or representation regarding the suitability of the bottled water beyond those made by the commercial water delivery service.

**Check ownership:** 

\_\_\_\_\_ Owner-Occupant \_\_\_\_\_ Occupant Only

Number of Occupants: \_\_\_\_\_

All reusable or returnable equipment and supplies, such as the containers and cooler/dispenser, are the property of the commercial water delivery service or the City of La Crosse. By signing below, the Occupant of the above referenced property acknowledges that all reusable or returnable equipment and supplies shall be returned to the commercial water delivery service or the City of La Crosse upon request. The Occupant agrees to provide reasonable access for delivery of bottled water and pick up of reusable or returnable equipment and supplies. Occupant(s) acknowledges that they may be required to sign an agreement with the commercial water delivery service as a condition of receiving bottled water.

Signed:	Dated:
---------	--------

Printed Name: \_\_\_\_\_\_



444 21st Street South · La Crosse, Wisconsin · 54601

November 17, 2020

2606 FANTA REED RD LA CROSSE, WI 54603

Subject: Private Well Sampling Results 2606 FANTA REED ROAD, La Crosse, WI 54603 Tax Parcel # 4-103-0 Sample ID # 103-0

#### Dear

We have received and reviewed the test results for the sample collected on October 27, 2020 at the above address. Some PFAS compounds were found at levels <u>above</u> the Department of Health Services (DHS) levels recommended for protecting health. These levels are called the "Recommended Public Health Standard" in the table below. The levels found in your well are called the "Sample Result" in the table below.

Because some of the levels are above the recommended Public Health Standard, the City is offering to provide bottled water delivered to your home for drinking, cooking, and brushing your teeth. There will be no cost to you for the bottled water. Please complete the attached form and mail it to The OS Group to make arrangements for having a water dispenser and bottles delivered to your home or business. Call 608-668-2718 or email <u>PFAS@theOSgrp.com</u>. You may also complete this form on line at <u>www.cityoflacrosse.org/bottledwater</u>

The following table summarizes the test results from the sample. **Bolded results** are above a current recommended level intended to protect your health according to the Department of Health Services (DHS).

Sam	ple	Resu	lts
-----	-----	------	-----

Compound	Sample Result (unit)	Recomm Public H Standard	ended Iealth (unit <sup>e</sup> )
Perfluorooctanesulfonic acid (PFOS) CAS # 1763-23-1	140 ppt	20 ppt <sup>a,b</sup>	t for r the
Perfluorooctanoic acid (PFOA) CAS # 335-67-1	8.1 ppt	20 ppt <sup>a,b</sup>	20 pp inds o II 6
Perfluorooctane sulfonamide (FOSA) CAS # 754-91-6	Not Detected	20 ppt <sup>a,b</sup>	imit is ompou <i>al</i> of a
N-Ethyl perfluorooctane sulfonamidoethanol (NEtFOSE) CAS # 1691-99-2	Not Detected	20 ppt <sup>a,b</sup>	nded l se 6 cc <i>ied to</i> t
N-Ethyl Perfluorooctane sulfonamide (NEtFOSA) CAS # 4151-50-2	Not Detected	20 ppt <sup>a,b</sup>	omme of the
N-Ethyl perfluorooctane sulfonamidoacetic acid (NEtFOSAA) CAS # 2991-50-6	Not Detected	20 ppt <sup>a,b</sup>	The reco any <i>one</i>
Hexafluoropropylene oxide dimer acid (HPFO-DA; GenX) CAS # 13252-13-6	2.0 ppt <sup>BL</sup>		300 ppt <sup>a</sup>
Perfluorobutanoic acid (PFBA) CAS # 375-22-4	5.5 ppt	10	),000 ppt <sup>a</sup>
Perfluorobutanesulfonic acid (PFBS) CAS # 375-73-5	2.4 ppt	450	),000 ppt <sup>a</sup>
Perfluorododecanoic acid (PFDoA) CAS # 307-55-1	Not Detected		500 ppt <sup>a</sup>
Perfluorohexanoic acid (PFHxA) CAS # 307-24-4	7.3 ppt	150	),000 ppt <sup>a</sup>
Perfluorotetradecanoic acid (PFTeA) CAS # 376-06-7	Not Detected	10	),000 ppt <sup>a</sup>
Perfluoroundecanoic acid (PFUnA) CAS # 2058-94-8	Not Detected	3	3,000 ppt <sup>a</sup>
4,8-Dioxa-3H-perfluorononanoic acid (DONA) CAS # 919005-14-4	Not Detected	3	3,000 ppt <sup>a</sup>
Perfluorooctadecanoic acid (PFODA) CAS # 16517-11-6	Not Detected	400	),000 ppt <sup>a</sup>
Perfluorohexanesulfonic acid (PFHxS) CAS # 355-46-4	31 ppt		40 ppt <sup>a</sup>
Perfluorononanoic acid (PFNA) CAS # 375-95-1	Not Detected		30 ppt <sup>a</sup>
Perfluorodecanoic acid (PFDA) CAS # 335-76-2	Not Detected		300 ppt <sup>a</sup>

Private Well Sampling Results for 2606 FANTA REED ROAD, La Crosse, WI 54603 Tax Parcel # 4-103-0

November	17.	2020
100 CHIDCI	±,,	2020

Compound	Sample Result (unit)	Recommended Public Health Standard (unit <sup>e</sup> )
1H, 1H, 2H, 2H-perfluorooctane sulfonic acid (6:2 FTS) CAS # 27619-97-2	1.9 ppt	None Established <sup>c</sup>
Perfluoro-1-heptanesulfonic acid (PFHpS) CAS # 375-92-8	2.2 ppt	None Established <sup>c</sup>
Perfluoro-1-pentanesulfonic acid (PFPeS) CAS # 2706-91-4	2.8 ppt	None Established <sup>c</sup>
Perfluoro-n-heptanoic acid (PFHpA) CAS # 375-85-9	3.6 ppt	None Established <sup>c</sup>
Perfluoro-n-pentanoic acid (PFPeA) CAS # 2706-90-3	7.6 ppt	None Established <sup>c</sup>

<sup>a</sup> Public health enforcement standard (ES) recommended by DHS.

<sup>b</sup> DHS recommends a combined enforcement standard of 20 ng/L and combined preventive action limit of 2 ng/L for FOSA, NEt-FOSA, NetFOSAA, PFOS, and PFOA.

<sup>c</sup> A current standard is not available; the compound is currently under review by DHS for potential public health standard recommendation.

<sup>d</sup> Public health enforcement standard (ES) in NR 140, Wisconsin Administrative Code.

<sup>e</sup> Units: Parts per trillion (ppt) = nanograms of substance per liter of water (ng/L)

<sup>BL</sup> Detected in the method blank. Possible lab contaminant.

As required by law, we will be submitting these results to the Department of Natural Resources (DNR). The DNR may consult with the Department of Health Services (DHS) about these test results. DHS may review all PFAS tests and follow-up with you directly if any actions are recommended to protect your health.

Thank you for your patience and assistance with our investigation. We will provide updates on the project at <u>https://www.cityoflacrosse.org/wells</u> as our work continues. If you have any questions, please call The OS Group at (608) 668-2718 or email them at <u>PFAS@theOSgrp.com</u>.

You can also contact the DNR and DHS with questions about PFAS or the water sample results at the numbers provided below.

Questions about		<u>Contact</u>	<u>Phone</u>	E-mail Address
Soil & Water Testing	DNR	David Rozeboom	715-215-2078	David.Rozeboom@wisconsin.gov
Health Concerns	DHS	Curtis Hedman	608-266-6677	Curtis.Hedman@dhs.wisconsin.gov

On behalf of The City of La Crosse, The OS Group, LLC

Attachment: Lab report for your well Bottled Water Acknowledgement

Client: Pace Analytical Services, LLC	2606 FANTA	REED ROAD		Lab	oratory II	D: VJ29068-00	6	
Description: 103-0	Tax Parcel #	4-103-0			Matrix	k: Aqueous		
Date Sampled:10/27/2020 1340	Project Name:	LACROSSE WELL #	<sup>#</sup> 23 & 24					
Pate Received: 10/29/2020 F	Project Number:	40217323						
Run Prep Method Analytical Method	Dilution Ana	Ilysis Date Analyst	Prep	Date I	Batch			
1 SOP SPE PFAS by ID SOP	1 11/0	5/2020 1225 MMM	11/03/2	2020 1007	72053			
Parameter	CAS Number	Analytical Method	Result	Q L	.00	DL	Units	Ru
P-chlorohexadecafluoro-3-oxanone-1-sulfonic acid (9CI-PF3ONS	) 756426-58-1	PFAS by ID SOP	ND		7.4	1.9	ng/L	1
1-chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11CI-PF3.	) 763051-92-9	PFAS by ID SOP	ND		7.4	1.9	ng/L	1
H, 1H, 2H, 2H-perfluorodecane sulfonic acid (8:2 FTS)	39108-34-4	PFAS by ID SOP	ND		7.4	1.9	ng/L	1
H, 1H, 2H, 2H-perfluorooctane sulfonic acid (6:2 FTS)	27619-97-2	PFAS by ID SOP	1.9	J	7.4	1.9	ng/L	1
H,1H,2H,2H-perfluorododecane sulfonic acid (10:2 FTS)	120226-60-0	PFAS by ID SOP	ND		7.4	1.9	ng/L	1
H,1H,2H,2H-perfluorohexane sulfonic acid (4:2 FTS)	757124-72-4	PFAS by ID SOP	ND		7.4	1.9	ng/L	1
lexafluoropropylene oxide dimer acid (GenX)	13252-13-6	PFAS by ID SOP	2.0	BJ	7.4	1.9	ng/L	1
I,8-dioxa-3H-perfluorononanoic acid (ADONA)	919005-14-4	PFAS by ID SOP	ND		7.4	1.9	ng/L	1
J-ethylperfluoro-1-octanesulfonamide (EtFOSA)	4151-50-2	PFAS by ID SOP	ND		7.4	1.9	ng/L	1
J-ethylperfluoro-1-octanesulfonamidoacetic acid (EtFOSAA)	2991-50-6	PFAS by ID SOP	ND		7.4	1.9	ng/L	1
P-N-ethylperfluoro-1-octanesulfonamido-ethanol (EtFOSE)	1691-99-2	PFAS by ID SOP	ND		7.4	1.9	ng/L	1
I-methylperfluoro-1-octanesulfonamide (MeFOSA)	31506-32-8	PFAS by ID SOP	ND		15	3.7	ng/L	1
J-methylperfluoro-1-octanesulfonamidoacetic acid (MeFOSAA)	2355-31-9	PFAS by ID SOP	ND		7.4	1.9	ng/L	1
-N-methylperfluoro-1-octanesulfonamido-ethanol (MeFOSE)	24448-09-7	PFAS by ID SOP	ND		7.4	1.9	ng/L	1
erfluoro-1-butanesulfonic acid (PFBS)	375-73-5	PFAS by ID SOP	2.4	J	3.7	0.93	ng/L	1
erfluoro-1-decanesulfonic acid (PFDS)	335-77-3	PFAS by ID SOP	ND		3.7	0.93	ng/L	1
Perfluoro-1-heptanesulfonic acid (PFHpS)	375-92-8	PFAS by ID SOP	2.2	J	3.7	0.93	ng/L	1
Perfluoro-1-nonanesulfonic acid (PFNS)	68259-12-1	PFAS by ID SOP	ND		3.7	0.93	ng/L	1
Perfluoro-1-octanesulfonamide (PFOSA)	754-91-6	PFAS by ID SOP	ND		3.7	0.93	ng/L	1
Perfluoro-1-pentanesulfonic acid (PFPeS)	2706-91-4	PFAS by ID SOP	2.8	J	3.7	0.93	ng/L	1
Perfluorododecanesulfonic acid (PFDOS)	79780-39-5	PFAS by ID SOP	ND		7.4	1.9	ng/L	1
Perfluorohexanesulfonic acid (PFHxS)	355-46-4	PFAS by ID SOP	31		3.7	0.93	ng/L	1
Perfluoro-n-butanoic acid (PFBA)	375-22-4	PFAS by ID SOP	5.5		3.7	0.93	ng/L	1
Perfluoro-n-decanoic acid (PFDA)	335-76-2	PFAS by ID SOP	ND		3.7	0.93	ng/L	1
Perfluoro-n-dodecanoic acid (PFDoA)	307-55-1	PFAS by ID SOP	ND		3.7	0.93	ng/L	1
Perfluoro-n-heptanoic acid (PFHpA)	375-85-9	PFAS by ID SOP	3.6	J	3.7	0.93	ng/L	1
Perfluoro-n-hexadecanoic acid (PFHxDA)	67905-19-5	PFAS by ID SOP	ND		7.4	19	ng/L	1
Perfluoro-n-hexanoic acid (PFHxA)	307-24-4	PFAS by ID SOP	7.3		3.7	0.93	ng/L	1
Perfluoro-n-nonanoic acid (PENA)	375-95-1	PEAS by ID SOP	ND		3.7	0.93	na/L	1
Perfluoro-n-octadecanoic acid (PFODA)	16517-11-6	PEAS by ID SOP	ND		7.4	1.9	ng/L	1
Perfluoro-n-octanoic acid (PFOA)	335-67-1	PFAS by ID SOP	8.1		3.7	0.93	ng/L	1
Perfluoro-n-pentanoic acid (PFPeA)	2706-90-3	PFAS by ID SOP	7.6		3.7	0.93	ng/L	1
Perfluoro-n-tetradecanoic acid (PFTeDA)	376-06-7	PFAS by ID SOP	ND		3.7	0.93	ng/L	1
Perfluoro-n-tridecanoic acid (PFTrDA)	72629-94-8	PFAS by ID SOP	ND		3.7	0.93	na/L	1
Perfluoro-n-undecanoic acid (PEUdA)	2058-94-8	PEAS by ID SOP	ND		3.7	0.93	na/L	1
Perfluorooctanesulfonic acid (PFOS)	1763-23-1	PFAS by ID SOP	140		3.7	0.93	ng/L	1
	Run 1 Accer	otance					-	
Surrogate Q % F	Recovery Lir	nits						
13C2_4:2FTS	117 25	-150						
302_6:2+15	101 25	-150						
3C2_8:2F1S	104 25	-150						
3C2_PFDoA	95 25	-150						
3C2_PFHxDA	100 25	-150						
3C2_PFTeDA	96 25	-150						

Laboratory ID: VJ29068-006 Matrix: Aqueous

Client: Pace Analytical Services, LLC	
Description: 103-0	
Date Sampled:10/27/2020 1340	Project Name: LACROSSE WELL #23 & 24
Date Received: 10/29/2020	Project Number: 40217323

Surrogate	Run 1 A	
13C3 DERS		25-150
	74	20-100
T3C3_PFHxS	94	25-150
13C3-HFPO-DA	119	25-150
13C4_PFBA	97	25-150
13C4_PFHpA	101	25-150
13C5_PFHxA	106	25-150
13C5_PFPeA	97	25-150
13C6_PFDA	99	25-150
13C7_PFUdA	99	25-150
13C8_PFOA	100	25-150
13C8_PFOS	88	25-150
13C8 PFOSA	108	10-150
13C9 PFNA	103	25-150
d-EtFOSA	88	10-150
d5-EtFOSAA	98	25-150
d9-EtFOSE	97	10-150
d-MeEOSA	91	10-150
d3-MeEOSAA	96	25-150
d7-MeEOSE	99	10-150

LOQ = Limit of Quantitation	B = Detected in the method blank	E = Quantitation of compound exceeded the calibration range	DL = Detection Limit
ND = Not detected at or above the DL	N = Recovery is out of criteria	P = The RPD between two GC columns exceeds 40%	J = Estimated result < LOQ and $\ge$ DL
H = Out of holding time	W = Reported on wet weight basis		

# BOTTLED WATER ACKNOWLEDGEMENT 2606 FANTA REED ROAD, LA CROSSE, WI 54603

If you desire to accept the bottled water delivery, please complete and sign this form and return it to The OS Group at <u>PFAS@TheOSqrp.com</u> or mail to 444 21<sup>st</sup> St. S, La Crosse, WI 54601. You may also complete this form electronically on line at <u>www.cityoflacrosse.org/bottledwater</u>. Call 608-668-2718 with any question you may have.

As pre-caution for the protection of human health, the City of La Crosse (The City) will provide, on a temporary basis, bottled water for drinking, cooking and toothbrushing purposes at the above referenced address. The water will be delivered to your home or business by a commercial water delivery service. At the City's cost, a dispenser / cooler and regular deliveries of 5-gallon containers of water will be provided. The City reserves the right to dictate the conditions of delivery, such as minimum and maximum number of containers per delivery, frequency and timing of deliveries. The City reserves the right to periodically review whether The City should continue to provide bottled water, considering factors such as State and Federal standards and guidance, evolving knowledge and understanding of the sources, cause and responsibility for the contamination, new or reinterpreted test results, and the availability of more permanent or cost-effective sources of water for the above purposes. The City of La Crosse makes no warranty or representation regarding the suitability of the bottled water beyond those made by the commercial water delivery service.

All reusable or returnable equipment and supplies, such as the containers and cooler/dispenser, are the property of the commercial water delivery service or the City of La Crosse. By signing below, the Occupant of the above referenced property acknowledges that all reusable or returnable equipment and supplies shall be returned to the commercial water delivery service or the City of La Crosse upon request. The Occupant agrees to provide reasonable access for delivery of bottled water and pick up of reusable or returnable equipment and supplies. Occupant(s) acknowledges that they may be required to sign an agreement with the commercial water delivery service as a condition of receiving bottled water.

Signed:	Dated:

Printed Name: \_\_\_\_\_\_

Check ownership:

Owner-Occupant
Cccupant Occupant

# BOTTLED WATER ACKNOWLEDGEMENT 2606 FANTA REED ROAD, LA CROSSE, WI 54603

If you desire to accept the bottled water delivery, please complete and sign this form and return it to The OS Group at <u>PFAS@TheOSqrp.com</u> or mail to 444 21<sup>st</sup> St. S, La Crosse, WI 54601. You may also complete this form electronically on line at <u>www.cityoflacrosse.org/bottledwater</u>. Call 608-668-2718 with any question you may have.

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Signed:	Dated:

Printed Name: \_\_\_\_\_\_

Check ownership:

Owner-Occupant
Cccupant Occupant



444 21<sup>st</sup> Street South · La Crosse, Wisconsin · 54601

November 17, 2020

2608 Fanta Reed Road La Crosse, WI 54603

Subject: Private Well Sampling Results 2608 Fanta Reed Road, La Crosse, WI 54603 Tax Parcel # 4-104-0 Sample ID # 104-0

#### Dear

We have received and reviewed the test results for the sample collected on October 27, 2020 at the above address. Some PFAS compounds were found, but the levels found were **below** the Department of Health Services (DHS) levels recommended for protecting health. These levels are called the "Recommended Public Health Standard" in the table below. The levels found in *your* well are called the "Sample Result" in the table below.

#### Sample Results

Compound	Sample Result (unit) Recommended Public Health Standard (unit <sup>e</sup> )		
N-Ethyl Perfluorooctane sulfonamide (NEtFOSA) CAS # 4151-50-2	Not Detected	20 ppt <sup>a,b</sup>	) ppt unds I 6
N-Ethyl perfluorooctane sulfonamidoacetic acid (NEtFOSAA) CAS # 2991-50-6	Not Detected	20 ppt <sup>a,b</sup>	it is 2C ompo <i>il</i> of al
N-Ethyl perfluorooctane sulfonamidoethanol (NEtFOSE) CAS # 1691-99-2	Not Detected	20 ppt <sup>a,b</sup>	ed lim ese 6 c ed toto
Perfluorooctane sulfonamide (FOSA) CAS # 754-91-6	Not Detected	20 ppt <sup>a,b</sup>	mend of the ombine
Perfluorooctanoic acid (PFOA) CAS # 335-67-1	Not Detected	20 ppt <sup>a,b</sup>	recom ny <i>one</i> the <i>c</i> c
Perfluorooctanesulfonic acid (PFOS) CAS # 1763-23-1	12 ppt	20 ppt <sup>a,b</sup>	The for a or

Private Well Sampling Results for 2608 Fanta Reed Road, La Crosse, WI 54603 Tax Parcel # 4-104-0 Sample ID # 104-0

Compound	Sample Result (unit)	Recommended Public Health Standard (unit <sup>e</sup> )
Hexafluoropropylene oxide dimer acid (HPFO-DA; GenX) CAS # 13252-13-6	Not Detected	300 ppt <sup>a</sup>
Perfluorobutanesulfonic acid (PFBS) CAS # 375-73-5	1.7 ppt	450,000 ppt <sup>a</sup>
Perfluorohexanesulfonic acid (PFHxS) CAS # 355-46-4	31 ppt	40 ppt <sup>a</sup>
Perfluorobutanoic acid (PFBA) CAS # 375-22-4	10 ppt	10,000 ppt <sup>a</sup>
Perfluorodecanoic acid (PFDA) CAS # 335-76-2	Not Detected	300 ppt <sup>a</sup>
Perfluorododecanoic acid (PFDoA) CAS # 307-55-1	Not Detected	500 ppt <sup>a</sup>
Perfluorohexanoic acid (PFHxA) CAS # 307-24-4	Not Detected	150,000 ppt <sup>a</sup>
Perfluorononanoic acid (PFNA) CAS # 375-95-1	Not Detected	30 ppt <sup>a</sup>
Perfluorotetradecanoic acid (PFTeA) CAS # 376-06-7	Not Detected	10,000 ppt <sup>a</sup>
Perfluoroundecanoic acid (PFUnA) CAS # 2058-94-8	Not Detected	3,000 ppt <sup>a</sup>
4,8-Dioxa-3H-perfluorononanoic acid (DONA) CAS # 919005-14-4	Not Detected	3,000 ppt <sup>a</sup>
Perfluorooctadecanoic acid (PFODA) CAS # 16517-11-6	Not Detected	400,000 ppt <sup>a</sup>
Perfluoro-1-pentanesulfonic acid CAS # 2706-91-4	2.6 ppt	None Established <sup>c</sup>

<sup>a</sup> Public health enforcement standard (ES) recommended by DHS.

<sup>b</sup> DHS recommends a combined enforcement standard of 20 ng/L and combined preventive action limit of 2 ng/L for FOSA, NEt-FOSA, NetFOSAA, PFOS, and PFOA.

<sup>c</sup> A current standard is not available; the compound is currently under review by DHS for potential public health standard recommendation.

<sup>d</sup> Public health enforcement standard (ES) in NR 140, Wisconsin Administrative Code.

<sup>e</sup> Units: Parts per trillion (ppt) = nanograms of substance per liter of water (ng/L)

<sup>BL</sup> Detected in the method blank. Possible lab contaminant.

As required by law, we will be submitting these results to the Department of Natural Resources (DNR). The DNR may consult with the Department of Health Services (DHS) about these test results. DHS may review all PFAS tests and follow-up with you directly if any actions are recommended to protect your health.

Private Well Sampling Results for 2608 Fanta Reed Road, La Crosse, WI 54603 Tax Parcel # 4-104-0 Sample ID # 104-0

Thank you for your patience and assistance with our investigation. We will provide updates on the project at <u>https://www.cityoflacrosse.org/wells</u> as our work continues. If you have any questions, please call The OS Group at (608) 668-2718 or email them at <u>PFAS@theOSgrp.com</u>.

You can also contact the DNR and DHS with questions about PFAS or the water sample results at the numbers provided below.

<b>Questions about</b>		<u>Contact</u>	<b>Phone</b>	<u>E-mail Address</u>
Soil & Water Testing	DNR	David Rozeboom	715-215-2078	David.Rozeboom@wisconsin.gov
Health Concerns	DHS	Curtis Hedman	608-266-6677	Curtis.Hedman@dhs.wisconsin.gov

On behalf of The City of La Crosse The OS Group, LLC

Attachment: Lab report for your well

	PFAS	by LC/MS/MS	5				
Client: Pace Analytical Services, LLC	2608 Fanta Ree Tax Parcel # 4-1	d Road, La Crosse, WI 546 04-0	03	Laboratory I	D: VJ29068-(	800	
Description: 104-0				Matri	ix: Aqueous		
Date Sampled:10/27/2020 1400	Project Nam	e: LACROSSE WELL	#23 & 24				
Date Received: 10/29/2020	Project Numbe	er: 40217323					
RunPrep MethodAnalytical Method2SOP SPEPFAS by ID SO	Dilution A	nalysis Date Analyst /12/2020 1210 MMM	Prep [ 11/10/20	Date Batch 020 1623 72960			
	CAS	S Analytical					
Parameter	Numbe	r Method	Result	Q LOQ	DL	Units	Run
9-chlorohexadecafluoro-3-oxanone-1-sulfonic acid (9CI-PF30	DNS) 756426-58-	1 PFAS by ID SOP	ND	7.2	1.8	ng/L	2
11-chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11CI-F	PF3) 763051-92-	9 PFAS by ID SOP	ND	7.2	1.8	ng/L	2
1H, 1H, 2H, 2H-perfluorodecane sulfonic acid (8:2 FTS)	39108-34-	4 PFAS by ID SOP	ND	7.2	1.8	ng/L	2
1H, 1H, 2H, 2H-perfluorooctane sulfonic acid (6:2 FTS)	27619-97-	2 PFAS by ID SOP	ND	7.2	1.8	ng/L	2
1H,1H,2H,2H-perfluorododecane sulfonic acid (10:2 FTS)	120226-60-	0 PFAS by ID SOP	ND	7.2	1.8	ng/L	2
1H,1H,2H,2H-perfluorohexane sulfonic acid (4:2 FTS)	757124-72-	4 PFAS by ID SOP	ND	7.2	1.8	ng/L	2
Hexafluoropropylene oxide dimer acid (GenX)	13252-13-	6 PFAS by ID SOP	ND	7.2	1.8	ng/L	2
4,8-dioxa-3H-perfluorononanoic acid (ADONA)	919005-14-	4 PFAS by ID SOP	ND	7.2	1.8	ng/L	2
N-ethylperfluoro-1-octanesulfonamide (EtFOSA)	4151-50-	2 PFAS by ID SOP	ND	7.2	1.8	ng/L	2
N-ethylperfluoro-1-octanesulfonamidoacetic acid (EtFOSAA)	2991-50-	6 PFAS by ID SOP	ND	7.2	1.8	ng/L	2
2-N-ethylperfluoro-1-octanesulfonamido-ethanol (EtFOSE)	1691-99-	2 PFAS by ID SOP	ND	7.2	1.8	ng/L	2
N-methylperfluoro-1-octanesulfonamide (MeFOSA)	31506-32-	8 PFAS by ID SOP	ND	14	3.6	ng/L	2
N-methylperfluoro-1-octanesulfonamidoacetic acid (MeFOSA	A) 2355-31-	9 PFAS by ID SOP	ND	7.2	1.8	ng/L	2
2-N-methylperfluoro-1-octanesulfonamido-ethanol (MeFOSE	) 24448-09-	7 PFAS by ID SOP	ND	7.2	1.8	ng/L	2
Perfluoro-1-butanesulfonic acid (PFBS)	375-73-	5 PFAS by ID SOP	1.7	J 3.6	0.90	ng/L	2
Perfluoro-1-decanesulfonic acid (PFDS)	335-77-	3 PFAS by ID SOP	ND	3.6	0.90	ng/L	2
Perfluoro-1-heptanesulfonic acid (PFHpS)	375-92-	8 PFAS by ID SOP	ND	3.6	0.90	ng/L	2
Perfluoro-1-nonanesulfonic acid (PFNS)	68259-12-	1 PFAS by ID SOP	ND	3.6	0.90	ng/L	2
Perfluoro-1-octanesulfonamide (PFOSA)	754-91-	6 PFAS by ID SOP	ND	3.6	0.90	ng/L	2
Perfluoro-1-pentanesulfonic acid (PFPeS)	2706-91-	4 PFAS by ID SOP	2.6	J 3.6	0.90	ng/L	2
Perfluorododecanesulfonic acid (PFDOS)	79780-39-	5 PFAS by ID SOP	ND	7.2	1.8	ng/L	2
Perfluorohexanesulfonic acid (PFHxS)	355-46-	4 PFAS by ID SOP	31	3.6	0.90	ng/L	2
Perfluoro-n-butanoic acid (PFBA)	375-22-	4 PFAS by ID SOP	1.0	J 3.6	0.90	ng/L	2
Perfluoro-n-decanoic acid (PFDA)	335-76-	2 PFAS by ID SOP	ND	3.6	0.90	ng/L	2
Perfluoro-n-dodecanoic acid (PFDoA)	307-55-	1 PFAS by ID SOP	ND	3.6	0.90	ng/L	2
Perfluoro-n-heptanoic acid (PFHpA)	375-85-	9 PFAS by ID SOP	ND	3.6	0.90	ng/L	2
Perfluoro-n-hexadecanoic acid (PFHxDA)	67905-19-	5 PFAS by ID SOP	ND	7.2	1.8	ng/L	2
Perfluoro-n-hexanoic acid (PFHxA)	307-24-	4 PFAS by ID SOP	ND	3.6	0.90	ng/L	2
Perfluoro-n-nonanoic acid (PFNA)	375-95-	1 PFAS by ID SOP	ND	3.6	0.90	ng/L	2
Perfluoro-n-octadecanoic acid (PFODA)	16517-11-	6 PFAS by ID SOP	ND	7.2	1.8	ng/L	2
Perfluoro-n-octanoic acid (PFOA)	335-67-	1 PFAS by ID SOP	ND	3.6	0.90	ng/L	2
Perfluoro-n-pentanoic acid (PFPeA)	2706-90-	3 PFAS by ID SOP	ND	3.6	0.90	ng/L	2
Perfluoro-n-tetradecanoic acid (PFTeDA)	376-06-	7 PFAS by ID SOP	ND	3.6	0.90	ng/L	2
Perfluoro-n-tridecanoic acid (PFTrDA)	/2629-94-	8 PFAS by ID SOP	ND	3.6	0.90	ng/L	2
Perfluoro-n-undecanoic acid (PFUdA)	2058-94-	8 PFAS by ID SOP	ND	3.6	0.90	ng/L	2
Perfluorooctanesulfonic acid (PFOS)	1763-23-	1 PFAS by ID SOP	12	3.6	0.90	ng/L	2
Surrogate Q G	Run 2 Acc % Recovery I	eptance _imits					
13C2_4:2FTS	104	25-150					
13C2_6:2FTS	101	25-150					
13C2_8:2FTS	87	25-150					
13C2_PFDoA	87	25-150					
13C2_PFHxDA	89	25-150					
13C2_PFTeDA	85	25-150					
LOQ = Limit of Quantitation B = Detected in the method b	lank E = Quantitatio	on of compound exceeded the	calibration ra	nge DL = Detection Li	mit		
ND = Not detected at or above the DL $N$ = Recovery is out of criteria	P = The RPD	petween two GC columns exce	eds 40%	J = Estimated res	ult < LOQ and $\geq$ [	DL	
H = Out of holding time W = Reported on wet weight	basis						

Client: Pace Analytical Services, LLC		Laboratory ID: VJ29068-008
Description: 104-0		Matrix: Aqueous
Date Sampled:10/27/2020 1400	Project Name: LACROSSE WELL #23 & 24	
Date Received: 10/29/2020	Project Number: 40217323	

Surrogate	Q % Recovery	Limits
13C3_PFBS	90	25-150
13C3_PFHxS	87	25-150
13C3-HFPO-DA	90	25-150
13C4_PFBA	94	25-150
13C4_PFHpA	94	25-150
13C5_PFHxA	92	25-150
13C5_PFPeA	99	25-150
13C6_PFDA	95	25-150
13C7_PFUdA	95	25-150
13C8_PFOA	102	25-150
13C8_PFOS	93	25-150
13C8_PFOSA	96	10-150
13C9_PFNA	97	25-150
d-EtFOSA	78	10-150
d5-EtFOSAA	95	25-150
d9-EtFOSE	86	10-150
d-MeFOSA	93	10-150
d3-MeFOSAA	88	25-150
d7-MeFOSE	79	10-150

LOQ = Limit of QuantitationB = Detected in the method blankE = Quantitation of compound exceeded the calibration rangeDL = Detection LimitND = Not detected at or above the DLN = Recovery is out of criteriaP = The RPD between two GC columns exceeds 40%J = Estimated result < LOQ and ≥ DL</td>H = Out of holding timeW = Reported on wet weight basis



444 21<sup>st</sup> Street South  $\cdot$  La Crosse, Wisconsin  $\cdot$  54601

November 18, 2020

2552 Bainbridge Street La Crosse, WI 54603

Subject: Private Well Sampling Results 2552 Bainbridge Street, La Crosse, WI 54603 Tax Parcel #4-110-1 Sample ID # 110-1

#### Dear :

We have received and reviewed the test results for the sample collected on October 27, 2020 at the above address. Some PFAS compounds were found at levels <u>above</u> the Department of Health Services (DHS) levels recommended for protecting health. These levels are called the "Recommended Public Health Standard" in the table below. The levels found in your well are called the "Sample Result" in the table below.

Because some of the levels are above the recommended Public Health Standard, the City is offering to provide bottled water delivered to your home for drinking, cooking, and brushing your teeth. There will be no cost to you for the bottled water. Please complete the attached form and mail it to The OS Group to make arrangements for having a water dispenser and bottles delivered to your home or business. Call 608-668-2718 or email <u>PFAS@theOSgrp.com</u>. You may also complete this form on line at <u>www.cityoflacrosse.org/bottledwater</u>

The following table summarizes the test results from the sample. **Bolded results** are above a current recommended level intended to protect your health according to the Department of Health Services (DHS).

Private Well Sampling Results for 2552 Bainbridge Street, La Crosse, WI 54603 Tax Parcel # 4-110-1 Sample ID # 110-1 November 18, 2020

## Sample Results

Compound	Sample Result (unit)	Recomm Public H Standard	ended Iealth (unit <sup>e</sup> )
N-Ethyl Perfluorooctane sulfonamide (NEtFOSA) CAS # 4151-50-2	Not Detected	20 ppt <sup>a,b</sup>	) ppt unds I 6
N-Ethyl perfluorooctane sulfonamidoacetic acid (NEtFOSAA) CAS # 2991-50-6	Not Detected	20 ppt <sup>a,b</sup>	it is 2C compo <i>il</i> of al
N-Ethyl perfluorooctane sulfonamidoethanol (NEtFOSE) CAS # 1691-99-2	Not Detected	20 ppt <sup>a,b</sup>	ed lim ese 6 c ed toto
Perfluorooctane sulfonamide (FOSA) CAS # 754-91-6	1.3 ppt	20 ppt <sup>a,b</sup>	mend of the
Perfluorooctanoic acid (PFOA) CAS # 335-67-1	3.8 ppt	20 ppt <sup>a,b</sup>	recom ny <i>one</i> the <i>c</i> c
Perfluorooctanesulfonic acid (PFOS) CAS # 1763-23-1	39 ppt	20 ppt <sup>a,b</sup>	The for a or
Hexafluoropropylene oxide dimer acid (HPFO-DA; GenX) CAS # 13252-13-6	Not Detected		300 ppt <sup>a</sup>
Perfluorobutanesulfonic acid (PFBS) CAS # 375-73-5	12 ppt	450	0,000 ppt <sup>a</sup>
Perfluorohexanesulfonic acid (PFHxS) CAS # 355-46-4	70 ppt		40 ppt <sup>a</sup>
Perfluorobutanoic acid (PFBA) CAS # 375-22-4	40 ppt	10	0,000 ppt <sup>a</sup>
Perfluorodecanoic acid (PFDA) CAS # 335-76-2	Not Detected		300 ppt <sup>a</sup>
Perfluorododecanoic acid (PFDoA) CAS # 307-55-1	Not Detected		500 ppt <sup>a</sup>
Perfluorohexanoic acid (PFHxA) CAS # 307-24-4	1.7 ppt	150	0,000 ppt <sup>a</sup>
Perfluorononanoic acid (PFNA) CAS # 375-95-1	Not Detected		30 ppt <sup>a</sup>
Perfluorotetradecanoic acid (PFTeA) CAS # 376-06-7	Not Detected	10	0,000 ppt <sup>a</sup>
Perfluoroundecanoic acid (PFUnA) CAS # 2058-94-8	Not Detected	3	3,000 ppt <sup>a</sup>

Private Well Sampling Results for 2552 Bainbridge Street, La Crosse, WI 54603 Tax Parcel # 4-110-1 Sample ID # 110-1 November 18, 2020

Compound	Sample Result (unit)	Recommended Public Health Standard (unit <sup>e</sup> )
4,8-Dioxa-3H-perfluorononanoic acid (DONA) CAS # 919005-14-4	Not Detected	3,000 ppt <sup>a</sup>
Perfluorooctadecanoic acid (PFODA) CAS # 16517-11-6	Not Detected	400,000 ppt <sup>a</sup>
Perfluoro-1-hetanesulfonic acid (PFHpS) CAS # 375-92-8	2.4 ppt	None Established <sup>c</sup>
Perfluoro-1-pentanesulfonic acid (PFPeS) CAS # 2706-91-4	11 ppt	None Established <sup>c</sup>
Perfluoro-n-pentanoic acid (PFPeA) CAS #2706-90-3	0.92 ppt	None Established <sup>c</sup>
<sup>a</sup> Public health enforcement standard (ES) recommended by DHS.		

<sup>b</sup> DHS recommends a combined enforcement standard of 20 ng/L and combined preventive action limit of 2 ng/L for FOSA, NEt-FOSA, NetFOSAA, PFOS, and PFOA.

<sup>c</sup> A current standard is not available; the compound is currently under review by DHS for potential public health standard recommendation.

<sup>d</sup> Public health enforcement standard (ES) in NR 140, Wisconsin Administrative Code.

<sup>e</sup> Units: Parts per trillion (ppt) = nanograms of substance per liter of water (ng/L)

<sup>BL</sup> Detected in the method blank. Possible lab contaminant.

As required by law, we will be submitting these results to the Department of Natural Resources (DNR). The DNR may consult with the Department of Health Services (DHS) about these test results. DHS may review all PFAS tests and follow-up with you directly if any actions are recommended to protect your health.

Thank you for your patience and assistance with our investigation. We will provide updates on the project at <u>https://www.cityoflacrosse.org/wells</u> as our work continues. If you have any questions, please call The OS Group at (608) 668-2718 or email them at <u>PFAS@theOSgrp.com</u>.

You can also contact the DNR and DHS with questions about PFAS or the water sample results at the numbers provided below.

Private Well Sampling Results for 2552 Bainbridge Street, La Crosse, WI 54603 Tax Parcel # 4-110-1 Sample ID # 110-1 November 18, 2020

Questions about		<u>Contact</u>	<u>Phone</u>	E-mail Address
Soil & Groundwater Testing, Clean Up	DNR	David Rozeboom	715-215-2078	David.Rozeboom@wisconsin.gov
Drinking Water or Private Wells	DNR	Kyle Burton	920-360-2112	kyle.burton@wisconsin.gov
Health Concerns	DHS	Curtis Hedman	608-266-6677	Curtis.Hedman@dhs.wisconsin.gov

On behalf of The City of La Crosse *The OS Group, LLC* (608) 668-2718 <u>PFAS@theOSgrp.com</u>

Attachment: Lab report for your well Bottled Water Acknowledgement

Client: Pace Analytical Services, LLC					Laboratory I	D: VJ29090-0	12	
Description: 110-1					Matrix	k: Aqueous		
Date Sampled:10/27/2020 1240	Project Name	e: LACROSSE WELL #	<sup>£</sup> 23 & 24					
Date Received: 10/29/2020	piect Numbe	er: 40217319						
				<u> </u>				
RunPrep MethodAnalytical MethodL1SOP SPEPFAS by ID SOP	1 11	nalysis Date Analyst /07/2020 0125 KMM2	Prep 11/05/2	Date 2020 10	Batch 030 72351			
Parameter	CAS Numbe	S Analytical r Method	Result	Q	LOQ	DL	Units	Run
9-chlorohexadecafluoro-3-oxanone-1-sulfonic acid (9CI-PF3ONS)	756426-58-	1 PFAS by ID SOP	ND		7.4	1.8	ng/L	1
11-chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11CI-PF3)	763051-92-	9 PFAS by ID SOP	ND		7.4	1.8	ng/L	1
1H, 1H, 2H, 2H-perfluorodecane sulfonic acid (8:2 FTS)	39108-34-	4 PFAS by ID SOP	ND		7.4	1.8	ng/L	1
1H, 1H, 2H, 2H-perfluorooctane sulfonic acid (6:2 FTS)	27619-97-	2 PFAS by ID SOP	ND		7.4	1.8	ng/L	1
1H,1H,2H,2H-perfluorododecane sulfonic acid (10:2 FTS)	120226-60-	0 PFAS by ID SOP	ND		7.4	1.8	ng/L	1
1H,1H,2H,2H-perfluorohexane sulfonic acid (4:2 FTS)	757124-72-	4 PFAS by ID SOP	ND		7.4	1.8	ng/L	1
Hexafluoropropylene oxide dimer acid (GenX)	13252-13-	6 PFAS by ID SOP	ND		7.4	1.8	ng/L	1
4,8-dioxa-3H-perfluorononanoic acid (ADONA)	919005-14-	4 PFAS by ID SOP	ND		7.4	1.8	ng/L	1
N-ethylperfluoro-1-octanesulfonamide (EtFOSA)	4151-50-	2 PFAS by ID SOP	ND		7.4	1.8	ng/L	1
N-ethylperfluoro-1-octanesulfonamidoacetic acid (EtFOSAA)	2991-50-	6 PFAS by ID SOP	ND		7.4	1.8	ng/L	1
2-N-ethylperfluoro-1-octanesulfonamido-ethanol (EtFOSE)	1691-99-	2 PFAS by ID SOP	ND		7.4	1.8	ng/L	1
N-methylperfluoro-1-octanesulfonamide (MeFOSA)	31506-32-	8 PFAS by ID SOP	ND		15	3.7	ng/L	1
N-methylperfluoro-1-octanesulfonamidoacetic acid (MeFOSAA)	2355-31-	9 PFAS by ID SOP	ND		7.4	1.8	ng/L	1
2-N-methylperfluoro-1-octanesulfonamido-ethanol (MeFOSE)	24448-09-	7 PFAS by ID SOP	ND		7.4	1.8	ng/L	1
Perfluoro-1-butanesulfonic acid (PFBS)	375-73-	5 PFAS by ID SOP	12		3.7	0.92	ng/L	1
Perfluoro-1-decanesulfonic acid (PFDS)	335-77-	3 PFAS by ID SOP	ND		3.7	0.92	ng/L	1
Perfluoro-1-heptanesulfonic acid (PFHpS)	375-92-	8 PFAS by ID SOP	2.4	J	3.7	0.92	ng/L	1
Perfluoro-1-nonanesulfonic acid (PFNS)	68259-12-	1 PFAS by ID SOP	ND		3.7	0.92	ng/L	1
Perfluoro-1-octanesulfonamide (PFOSA)	754-91-	6 PFAS by ID SOP	1.3	J	3.7	0.92	ng/L	1
Perfluoro-1-pentanesulfonic acid (PFPeS)	2706-91-	4 PFAS by ID SOP	11		3.7	0.92	ng/L	1
Perfluorododecanesulfonic acid (PFDOS)	79780-39-	5 PFAS by ID SOP	ND		7.4	1.8	ng/L	1
Perfluorohexanesulfonic acid (PFHxS)	355-46-	4 PFAS by ID SOP	70		3.7	0.92	ng/L	1
Perfluoro-n-butanoic acid (PFBA)	375-22-	4 PFAS by ID SOP	40		3.7	0.92	ng/L	1
Perfluoro-n-decanoic acid (PFDA)	335-76-	2 PFAS by ID SOP	ND		3.7	0.92	ng/L	1
Perfluoro-n-dodecanoic acid (PFDoA)	307-55-	1 PFAS by ID SOP	ND		3.7	0.92	ng/L	1
Perfluoro-n-heptanoic acid (PFHpA)	375-85-	9 PFAS by ID SOP	ND		3.7	0.92	ng/L	1
Perfluoro-n-hexadecanoic acid (PFHxDA)	67905-19-	5 PFAS by ID SOP	ND		7.4	1.8	ng/L	1
Perfluoro-n-hexanoic acid (PFHxA)	307-24-	4 PFAS by ID SOP	1.7	J	3.7	0.92	ng/L	1
Perfluoro-n-nonanoic acid (PFNA)	375-95-	1 PFAS by ID SOP	ND		3.7	0.92	ng/L	1
Perfluoro-n-octadecanoic acid (PFODA)	16517-11-	6 PFAS by ID SOP	ND		7.4	1.8	ng/L	1
Perfluoro-n-octanoic acid (PFOA)	335-67-	1 PFAS by ID SOP	3.8		3.7	0.92	ng/L	1
Perfluoro-n-pentanoic acid (PFPeA)	2706-90-	3 PFAS by ID SOP	0.92	J	3.7	0.92	ng/L	1
Perfluoro-n-tetradecanoic acid (PFTeDA)	376-06-	7 PFAS by ID SOP	ND		3.7	0.92	ng/L	1
Perfluoro-n-tridecanoic acid (PFTrDA)	72629-94-	8 PFAS by ID SOP	ND		3.7	0.92	ng/L	1
Perfluoro-n-undecanoic acid (PFUdA)	2058-94-	8 PFAS by ID SOP	ND		3.7	0.92	ng/L	1
Perfluorooctanesulfonic acid (PFOS)	1763-23-	1 PFAS by ID SOP	39		3.7	0.92	ng/L	1
R Surrogate Q % Re	un 1 Acc covery l	ceptance Limits						
13C2_4:2FTS	94	25-150						
13C2_6:2FTS	86	25-150						
13C2_8:2FTS	89	25-150						
13C2_PFDoA	66	25-150						
13C2_PFHxDA	79	25-150						
13C2_PFTeDA	75	25-150						
LOQ = Limit of Quantitation B = Detected in the method blank	E = Quantitatio	on of compound exceeded the o	calibration r	ange D	DL = Detection Lim = Estimated recurs	hit It < LOO and s D	I	
H = Out of holding time W = Reported on wet weight basis							<u> </u>	

Client: Pace Analytical Services, LLC	
Description: 110-1	
Date Sampled:10/27/2020 1240	Project Name: LACROSSE WELL #23 & 24
Date Received: 10/29/2020	Project Number: 40217319

d7-MeFOSE

Laboratory ID: VJ29090-012

Matrix: Aqueous

	Run 1 A	
Surrogate	Q % Recovery	Limits
13C3_PFBS	78	25-150
13C3_PFHxS	81	25-150
13C3-HFPO-DA	90	25-150
13C4_PFBA	87	25-150
13C4_PFHpA	87	25-150
13C5_PFHxA	85	25-150
13C5_PFPeA	85	25-150
13C6_PFDA	82	25-150
13C7_PFUdA	72	25-150
13C8_PFOA	84	25-150
13C8_PFOS	69	25-150
13C8_PFOSA	88	10-150
13C9_PFNA	86	25-150
d-EtFOSA	56	10-150
d5-EtFOSAA	81	25-150
d9-EtFOSE	71	10-150
d-MeFOSA	73	10-150
d3-MeFOSAA	73	25-150

10-150

80

 LOQ = Limit of Quantilation
 B = Detected in the method blank
 E = Quantilation of compound exceeded the calibration range
 DL = Detection Limit

 ND = Not detected at or above the DL
 N = Recovery is out of criteria
 P = The RPD between two GC columns exceeds 40%
 J = Estimated result < LOQ and ≥ DL</td>

 H = Out of holding time
 W = Reported on wet weight basis
 H = Out of holding time
 L = Detection Limit

# BOTTLED WATER ACKNOWLEDGEMENT 2552 Bainbridge Street, LA CROSSE, WI 54603

If you desire to accept the bottled water delivery, please complete and sign this form and return it to The OS Group at <u>PFAS@TheOSgrp.com</u> or mail to 444 21<sup>st</sup> St. S, La Crosse, WI 54601. You may also complete this form electronically on line at <u>www.cityoflacrosse.org/bottledwater</u>. Call 608-668-2718 with any question you may have.

As pre-caution for the protection of human health, the City of La Crosse (The City) will provide, on a temporary basis, bottled water for drinking, cooking and toothbrushing purposes at the above referenced address. The water will be delivered to your home or business by a commercial water delivery service. At the City's cost, a dispenser / cooler and regular deliveries of 5-gallon containers of water will be provided. The City reserves the right to dictate the conditions of delivery, such as minimum and maximum number of containers per delivery, frequency and timing of deliveries. The City reserves the right to periodically review whether The City should continue to provide bottled water, considering factors such as State and Federal standards and guidance, evolving knowledge and understanding of the sources, cause and responsibility for the contamination, new or reinterpreted test results, and the availability of more permanent or cost-effective sources of water for the above purposes. The City of La Crosse makes no warranty or representation regarding the suitability of the bottled water beyond those made by the commercial water delivery service.

Check ownership: \_\_\_\_\_ Owner-Occupant \_\_\_\_\_ Occupant Only

Number of Occupants: \_\_\_\_\_

All reusable or returnable equipment and supplies, such as the containers and cooler/dispenser, are the property of the commercial water delivery service or the City of La Crosse. By signing below, the Occupant of the above referenced property acknowledges that all reusable or returnable equipment and supplies shall be returned to the commercial water delivery service or the City of La Crosse upon request. The Occupant agrees to provide reasonable access for delivery of bottled water and pick up of reusable or returnable equipment and supplies. Occupant(s) acknowledges that they may be required to sign an agreement with the commercial water delivery service as a condition of receiving bottled water.

Signed:	Dated:

Printed Name: \_\_\_\_\_

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Signed:	Dated:

Printed Name: \_\_\_\_\_



444 21<sup>st</sup> Street South  $\cdot$  La Crosse, Wisconsin  $\cdot$  54601

November 18, 2020

2556 Bainbridge Street La Crosse, WI 54603

Subject: Private Well Sampling Results 2556 Bainbridge Street, La Crosse, WI 54603 Tax Parcel #4-110-2 Sample ID # 110-2

#### Dear :

We have received and reviewed the test results for the sample collected on October 27, 2020 at the above address. Some PFAS compounds were found at levels <u>above</u> the Department of Health Services (DHS) levels recommended for protecting health. These levels are called the "Recommended Public Health Standard" in the table below. The levels found in your well are called the "Sample Result" in the table below.

Because some of the levels are above the recommended Public Health Standard, the City is offering to provide bottled water delivered to your home for drinking, cooking, and brushing your teeth. There will be no cost to you for the bottled water. Please complete the attached form and mail it to The OS Group to make arrangements for having a water dispenser and bottles delivered to your home or business. Call 608-668-2718 or email <u>PFAS@theOSgrp.com</u>. You may also complete this form on line at <u>www.cityoflacrosse.org/bottledwater</u>

The following table summarizes the test results from the sample. **Bolded results** are above a current recommended level intended to protect your health according to the Department of Health Services (DHS).

Private Well Sampling Results for 2556 Bainbridge Street, La Crosse, WI 54603 Tax Parcel # 4-110-2 Sample ID # 110-2 November 18, 2020

### Sample Results

Compound	Sample Result (unit)	Recomm Public H Standard	ended Iealth (unit <sup>e</sup> )	
N-Ethyl Perfluorooctane sulfonamide (NEtFOSA) CAS # 4151-50-2	Not Detected	20 ppt <sup>a,b</sup>	) ppt unds I 6	
N-Ethyl perfluorooctane sulfonamidoacetic acid (NEtFOSAA) CAS # 2991-50-6	Not Detected	20 ppt <sup>a,b</sup>	it is 20 compo <i>il</i> of all	
N-Ethyl perfluorooctane sulfonamidoethanol (NEtFOSE) CAS # 1691-99-2	Not Detected	20 ppt <sup>a,b</sup>		
Perfluorooctane sulfonamide (FOSA) CAS # 754-91-6	Not Detected 20 ppt <sup>a,b</sup>			
Perfluorooctanoic acid (PFOA) CAS # 335-67-1	3.2 ppt	20 ppt <sup>a,b</sup>	recom ny <i>one</i> the <i>c</i> c	
Perfluorooctanesulfonic acid (PFOS) CAS # 1763-23-1	160 ppt	20 ppt <sup>a,b</sup>	The for a or	
Hexafluoropropylene oxide dimer acid (HPFO-DA; GenX) CAS # 13252-13-6	Not Detected		300 ppt <sup>a</sup>	
Perfluorobutanesulfonic acid (PFBS) CAS # 375-73-5	5.5 ppt	450	),000 ppt <sup>a</sup>	
Perfluorohexanesulfonic acid (PFHxS) CAS # 355-46-4	64 ppt		40 ppt <sup>a</sup>	
Perfluorobutanoic acid (PFBA) CAS # 375-22-4	6.7 ppt	10	),000 ppt <sup>a</sup>	
Perfluorodecanoic acid (PFDA) CAS # 335-76-2	Not Detected		300 ppt <sup>a</sup>	
Perfluorododecanoic acid (PFDoA) CAS # 307-55-1	Not Detected		500 ppt <sup>a</sup>	
Perfluorohexanoic acid (PFHxA) CAS # 307-24-4	4.9 ppt	150	),000 ppt <sup>a</sup>	
Perfluorononanoic acid (PFNA) CAS # 375-95-1	Not Detected 30		30 ppt <sup>a</sup>	
Perfluorotetradecanoic acid (PFTeA) CAS # 376-06-7	Not Detected 10,000		),000 ppt <sup>a</sup>	
Perfluoroundecanoic acid (PFUnA) CAS # 2058-94-8	Not Detected	3	3,000 ppt <sup>a</sup>	
4,8-Dioxa-3H-perfluorononanoic acid (DONA) CAS # 919005-14-4	Not Detected	3	3,000 ppt <sup>a</sup>	

Private Well Sampling Results for 2556 Bainbridge Street, La Crosse, WI 54603 Tax Parcel # 4-110-2 Sample ID # 110-2 November 18, 2020

Perfluorooctadecanoic acid (PFODA) CAS # 16517-11-6	Not Detected	400,000 ppt <sup>a</sup>
Perfluoro-1-hetanesulfonic acid (PFHpS) CAS # 375-92-8	5.3 ppt	None Established <sup>c</sup>
Perfluoro-1-pentanesulfonic acid (PFPeS) CAS # 2706-91-4	4.0 ppt	None Established <sup>c</sup>
Perfluoro-n-heptanoic acid (PFHpA) CAS # 375-85-9	2.0 ppt	None Established <sup>c</sup>
Perfluoro-n-pentanoic acid (PFPeA) CAS #2706-90-3	6.2 ppt	None Established <sup>c</sup>

<sup>a</sup> Public health enforcement standard (ES) recommended by DHS.

<sup>b</sup> DHS recommends a combined enforcement standard of 20 ng/L and combined preventive action limit of 2 ng/L for FOSA, NEt-FOSA, NetFOSAA, PFOS, and PFOA.

<sup>c</sup> A current standard is not available; the compound is currently under review by DHS for potential public health standard recommendation.

<sup>d</sup> Public health enforcement standard (ES) in NR 140, Wisconsin Administrative Code.

<sup>e</sup> Units: Parts per trillion (ppt) = nanograms of substance per liter of water (ng/L)

<sup>BL</sup> Detected in the method blank. Possible lab contaminant.

As required by law, we will be submitting these results to the Department of Natural Resources (DNR). The DNR may consult with the Department of Health Services (DHS) about these test results. DHS may review all PFAS tests and follow-up with you directly if any actions are recommended to protect your health.

Thank you for your patience and assistance with our investigation. We will provide updates on the project at <u>https://www.cityoflacrosse.org/wells</u> as our work continues. If you have any questions, please call The OS Group at (608) 668-2718 or email them at PFAS@theOSgrp.com.

You can also contact the DNR and DHS with questions about PFAS or the water sample results at the numbers provided below.

Questions about		<u>Contact</u>	<u>Phone</u>	E-mail Address
Soil & Groundwater Testing, Clean Up	DNR	David Rozeboom	715-215-2078	David.Rozeboom@wisconsin.gov
Drinking Water or Private Wells	DNR	Kyle Burton	920-360-2112	kyle.burton@wisconsin.gov
Health Concerns	DHS	Curtis Hedman	608-266-6677	Curtis.Hedman@dhs.wisconsin.gov

On behalf of The City of La Crosse

#### The OS Group, LLC

Attachment: Lab report for your well Bottled Water Acknowledgement

Client: Pace Analytical Services, LLC				Laboratory I	D: VJ29090-0	)11	
Description: 110-2				Matrix	: Aqueous		
Date Sampled:10/27/2020 1240	Project Nam	e: LACROSSE WELL #	<sup>±</sup> 23 & 24		-		
Date Received: 10/29/2020 Pr	oject Numbe	er: 40217319					
Run Prep Method Analytical Method	Zilution A	nalysis Date Analyst	Pren Date	Batch			
1 SOP SPE PFAS by ID SOP	1 11	1/07/2020 0114 KMM2	11/05/2020 1	030 72351			
Parameter	CA Numbe	S Analytical er Method	Result Q	LOQ	DL	Units	Run
9-chlorohexadecafluoro-3-oxanone-1-sulfonic acid (9CI-PF3ONS)	756426-58	-1 PFAS by ID SOP	ND	7.2	1.8	ng/L	1
11-chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11CI-PF3	) 763051-92	-9 PFAS by ID SOP	ND	7.2	1.8	ng/L	1
1H, 1H, 2H, 2H-perfluorodecane sulfonic acid (8:2 FTS)	39108-34	-4 PFAS by ID SOP	ND	7.2	1.8	ng/L	1
1H, 1H, 2H, 2H-perfluorooctane sulfonic acid (6:2 FTS)	27619-97	-2 PFAS by ID SOP	ND	7.2	1.8	ng/L	1
1H,1H,2H,2H-perfluorododecane sulfonic acid (10:2 FTS)	120226-60	-0 PFAS by ID SOP	ND	7.2	1.8	ng/L	1
1H,1H,2H,2H-perfluorohexane sulfonic acid (4:2 FTS)	757124-72	-4 PFAS by ID SOP	ND	7.2	1.8	ng/L	1
Hexafluoropropylene oxide dimer acid (GenX)	13252-13	-6 PFAS by ID SOP	ND	7.2	1.8	ng/L	1
4,8-dioxa-3H-perfluorononanoic acid (ADONA)	919005-14	-4 PFAS by ID SOP	ND	7.2	1.8	ng/L	1
N-ethylperfluoro-1-octanesulfonamide (EtFOSA)	4151-50	-2 PFAS by ID SOP	ND	7.2	1.8	ng/L	1
N-ethylperfluoro-1-octanesulfonamidoacetic acid (EtFOSAA)	2991-50	-6 PFAS by ID SOP	ND	7.2	1.8	ng/L	1
2-N-ethylperfluoro-1-octanesulfonamido-ethanol (EtFOSE)	1691-99	-2 PFAS by ID SOP	ND	7.2	1.8	ng/L	1
N-methylperfluoro-1-octanesulfonamide (MeFOSA)	31506-32	-8 PFAS by ID SOP	ND	14	3.6	ng/L	1
N-methylperfluoro-1-octanesulfonamidoacetic acid (MeFOSAA)	2355-31	-9 PFAS by ID SOP	ND	7.2	1.8	ng/L	1
2-N-methylperfluoro-1-octanesulfonamido-ethanol (MeFOSE)	24448-09	-7 PFAS by ID SOP	ND	7.2	1.8	ng/L	1
Perfluoro-1-butanesulfonic acid (PFBS)	375-73	-5 PFAS by ID SOP	5.5	3.6	0.90	ng/L	1
Perfluoro-1-decanesulfonic acid (PFDS)	335-77	-3 PFAS by ID SOP	ND	3.6	0.90	ng/L	1
Perfluoro-1-heptanesulfonic acid (PFHpS)	375-92	-8 PFAS by ID SOP	5.3	3.6	0.90	ng/L	1
Perfluoro-1-nonanesulfonic acid (PFNS)	68259-12	-1 PFAS by ID SOP	ND	3.6	0.90	ng/L	1
Perfluoro-1-octanesulfonamide (PFOSA)	754-91	-6 PFAS by ID SOP	ND	3.6	0.90	ng/L	1
Perfluoro-1-pentanesulfonic acid (PFPeS)	2706-91	-4 PFAS by ID SOP	4.0	3.6	0.90	ng/L	1
Perfluorododecanesulfonic acid (PFDOS)	79780-39	-5 PFAS by ID SOP	ND	7.2	1.8	ng/L	1
Perfluorohexanesulfonic acid (PFHxS)	355-46	-4 PFAS by ID SOP	64	3.6	0.90	ng/L	1
Perfluoro-n-butanoic acid (PFBA)	375-22	-4 PFAS by ID SOP	6.7	3.6	0.90	ng/L	1
Perfluoro-n-decanoic acid (PFDA)	335-76	-2 PEAS by ID SOP	ND	3.6	0.90	ng/L	1
Perfluoro-n-dodecanoic acid (PFDoA)	307-55	-1 PEAS by ID SOP	ND	3.6	0.90	ng/L	1
Perfluoro-n-heptanoic acid (PFHpA)	375-85	-9 PFAS by ID SOP	2.0 J	3.6	0.90	ng/L	1
Perfluoro-n-hexadecanoic acid (PFHxDA)	67905-19	-5 PFAS by ID SOP	ND	7.2	1.8	ng/L	1
Perfluoro-n-hexanoic acid (PFHXA)	307-24	-4 PEAS by ID SOP	4.9	3.6	0.90	ng/L	1
Perfluoro-n-nonanoic acid (PFNA)	375-95	-1 PFAS by ID SOP	ND	3.6	0.90	ng/L	1
Perfluoro-n-octadecanoic acid (PFODA)	16517-11	-6 PFAS by ID SOP	ND 2.2	7.2	1.8	ng/L	1
Periluoro-n-octanoic acid (PEOA)	330-07	2 DEAS by ID SOP	3.2 J	3.0	0.90	ng/L	1
	2700-90		0.2	3.0	0.90	ng/L	1
Periluoro-n-tell'adecanoic acid (PFTEDA)	370-00		ND	3.0	0.90	ng/L	1
	2059-94		ND	3.0	0.90	ng/L	1
	2058-94		ND	3.0	0.90	ng/L	1
Perhuorooctanesuironic acid (PFOS)	1703-23	-1 PFAS DYID SOP	160	3.0	0.90	ng/L	I
Surrogate Q % Re	un 1 Aco ecovery	ceptance Limits					
13C2_4:2FTS	98	25-150					
13C2_6:2FTS	100	25-150					
13C2_8:2FTS	91	25-150					
13C2_PFDoA	79	25-150					
13C2_PFHxDA	80	25-150					
13C2_PFTeDA	79	25-150					
LOQ = Limit of Quantitation B = Detected in the method blank	E = Quantitati	on of compound exceeded the c	calibration range	DL = Detection Lim	hit		
ND = Not detected at or above the DL $N$ = Recovery is out of criteria	P = The RPD	between two GC columns excee	eds 40%	J = Estimated resu	It < LOQ and $\geq$ D	L	
H = Out of holding time W = Reported on wet weight basis							

Client: Pace Analytical Services, LLC	
Description: 110-2	
Date Sampled:10/27/2020 1240	Project Name: LACROSSE WELL #23 & 24
Date Received: 10/29/2020	Project Number: 40217319

d7-MeFOSE

Laboratory ID: VJ29090-011

Matrix: Aqueous

Surrogate	Run 1 Q % Recoverv	Acceptance Limits
13C3_PFBS	83	25-150
13C3_PFHxS	85	25-150
13C3-HFPO-DA	95	25-150
13C4_PFBA	90	25-150
13C4_PFHpA	93	25-150
13C5_PFHxA	90	25-150
13C5_PFPeA	89	25-150
13C6_PFDA	89	25-150
13C7_PFUdA	79	25-150
13C8_PFOA	88	25-150
13C8_PFOS	78	25-150
13C8_PFOSA	91	10-150
13C9_PFNA	88	25-150
d-EtFOSA	68	10-150
d5-EtFOSAA	84	25-150
d9-EtFOSE	80	10-150
d-MeFOSA	78	10-150
d3-MeFOSAA	78	25-150

10-150

80

LOQ = Limit of Quantitation	B = Detected in the method blank	E = Quantitation of compound exceeded the calibration range	DL = Detection Limit
ND = Not detected at or above the DL	N = Recovery is out of criteria	P = The RPD between two GC columns exceeds 40%	J = Estimated result < LOQ and $\ge$ DL
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Signed:	Dated:

Printed Name: \_\_\_\_\_

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Signed:	Dated:

Printed Name: \_\_\_\_\_



444 $21^{st}$  Street South  $\cdot$  La Crosse, Wisconsin  $\cdot$  54601

November 17, 2020

### 2425 BAINBRIDGE ST La Crosse, WI 54603

Subject: Private Well Sampling Results 2425 BAINBRIDGE ST, La Crosse, WI 54603 Tax Parcel Number 4-115-0 Sample Number 115-0

Dear

We have received and reviewed the test results for the sample collected on October 27, 2020 at the above address. Some PFAS compounds were found, but the levels found were **below** the Department of Health Services (DHS) levels recommended for protecting health. These levels are called the "Recommended Public Health Standard" in the table below. The levels found in *your* well are called the "Sample Result" in the table below.

:

#### Sample Results

Compound	Sample Result (unit)	Recommended Public Health Standard (unit <sup>e</sup> )		
Perfluorooctanesulfonic acid (PFOS)	2.6 mmt	20 ppt <sup>a,b</sup>	λu	
CAS # 1763-23-1	3.6 ppt		or al פר	
Perfluorooctanoic acid (PFOA)	2.7	<b>20 mmt</b> ab	ot fo or th	
CAS # 335-67-1	2.7 ppt	20 ppt 4,5	ed limit is 20 p <sub>1</sub> 6 compounds c <i>ed total</i> of all 6	
Perfluorooctane sulfonamide (FOSA)	N	20tab		
CAS # 754-91-6	Not detected	20 ppt 4,5		
N-Ethyl perfluorooctane sulfonamidoethanol (NEtFOSE)	N I I	20 mmt ab		
CAS # 1691-99-2	Not detected	20 ppt <sup>a,5</sup>	ende ese bine	
N-Ethyl Perfluorooctane sulfonamide (NEtFOSA)		<b>22</b>	nme f the	
CAS # 4151-50-2	Not detected	20 ppt <sup>a,b</sup>	0.0 <i>a</i> (	
N-Ethyl perfluorooctane sulfonamidoacetic acid (NEtFOSAA)	Net detected	aa tah	e re or	
CAS # 2991-50-6	Not detected	20 ppt %	ЧЦ	

#### November 17, 2020 BRIAN L LIETHEN, LINDA K LIETHEN Private Well Sampling Results for 2425 BAINBRIDGE ST, La Crosse, WI 54603

Compound	Sample Result (unit)	Recommended Public Health Standard (unit <sup>e</sup> )
Hexafluoropropylene oxide dimer acid (HPFO-DA; GenX) CAS # 13252-13-6	Not detected	300 ppt <sup>a</sup>
Perfluorobutanoic acid (PFBA) CAS # 375-22-4	3.7 ppt	10,000 ppt <sup>a</sup>
Perfluorobutanesulfonic acid (PFBS) CAS # 375-73-5	2.0 ppt	450,000 ppt <sup>a</sup>
Perfluorododecanoic acid (PFDoA) CAS # 307-55-1	Not detected	500 ppt <sup>a</sup>
Perfluorohexanoic acid (PFHxA) CAS # 307-24-4	2.2 ppt	150,000 ppt <sup>a</sup>
Perfluorotetradecanoic acid (PFTeA) CAS # 376-06-7	Not detected	10,000 ppt <sup>a</sup>
Perfluoroundecanoic acid (PFUnA) CAS # 2058-94-8	Not detected	3,000 ppt <sup>a</sup>
4,8-Dioxa-3H-perfluorononanoic acid (DONA) CAS # 919005-14-4	Not detected	3,000 ppt <sup>a</sup>
Perfluorooctadecanoic acid (PFODA) CAS # 16517-11-6	Not detected	400,000 ppt <sup>a</sup>
Perfluorohexanesulfonic acid (PFHxS) CAS # 355-46-4	3.2 ppt	40 ppt <sup>a</sup>
Perfluorononanoic acid (PFNA) CAS # 375-95-1	Not detected	30 ppt <sup>a</sup>
Perfluorodecanoic acid (PFDA) CAS # 335-76-2	Not detected	300 ppt <sup>a</sup>
Perfluoro-n-heptanoic acid (PFHpA) CAS # 375-85-9	1.1 ppt	None Established <sup>c</sup>
Perfluoro-n-pentanoic acid (PFPeA) CAS # 2706-90-3	1.8 ppt	None Established <sup>c</sup>

<sup>a</sup> Public health enforcement standard (ES) recommended by DHS.

<sup>b</sup> DHS recommends a combined enforcement standard of 20 ng/L and combined preventive action limit of 2 ng/L for FOSA, NEt-FOSA, NetFOSAA, PFOS, and PFOA.

<sup>c</sup> A current standard is not available; the compound is currently under review by DHS for potential public health standard recommendation.

<sup>d</sup> Public health enforcement standard (ES) in NR 140, Wisconsin Administrative Code.

<sup>e</sup> Units: Parts per trillion (ppt) = nanograms of substance per liter of water (ng/L)

November 17, 2020 BRIAN L LIETHEN, LINDA K LIETHEN Private Well Sampling Results for 2425 BAINBRIDGE ST, La Crosse, WI 54603

As required by law, we will be submitting these results to the Department of Natural Resources (DNR). The DNR may consult with the Department of Health Services (DHS) about these test results. DHS may review all PFAS tests and follow-up with you directly if any actions are recommended to protect your health.

Thank you for your patience and assistance with our investigation. We will provide updates on the project at <u>https://www.cityoflacrosse.org/wells</u> as our work continues. If you have any questions, please call The OS Group at (608) 668-2718 or email them at <u>PFAS@theOSgrp.com</u>.

You can also contact the DNR and DHS with questions about PFAS or the water sample results at the numbers provided below.

Questions about		<u>Contact</u>	<u>Phone</u>	<u>E-mail Address</u>
Soil & Water Testing	DNR	David Rozeboom	715-215-2078	David.Rozeboom@wisconsin.gov
Health Concerns	DHS	Curtis Hedman	608-266-6677	Curtis.Hedman@dhs.wisconsin.gov
On bobalf of The City o	fla Cro			

The OS Group, LLC

Attachment: Lab report for your well

Client: Pace Analytical Services, LLC	BRIAN L LIETH	- HEN, LINDA K LIETH	IEN	Laborato	ory ID: VJ29068-	003	
Description: 115-0	2425 BAINBRIDGE ST			Matrix: Aqueous			
Date Sampled:10/27/2020 1330	Project Name		#23 & 24				
Date Received: 10/20/2020	Project Number:	40217222	20 4 2 1				
Jale Received. 10/29/2020	roject Number.	40217323					
RunPrep MethodAnalytical Method1SOP SPEPFAS by ID SOP	Dilution Ana 1 11/0	Ilysis Date Analyst 7/2020 2041 MMM	Prep 11/03/2	Date Batc 2020 1007 7205	h 3		
Parameter	CAS Number	Analytical Method	Result	Q LOQ	DL	Units	Ru
9-chlorohexadecafluoro-3-oxanone-1-sulfonic acid (9CI-PF3ONS	5) 756426-58-1	PFAS by ID SOP	ND	7.4	1.8	ng/L	1
11-chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11CI-PF3	) 763051-92-9	PFAS by ID SOP	ND	7.4	1.8	ng/L	1
1H, 1H, 2H, 2H-perfluorodecane sulfonic acid (8:2 FTS)	39108-34-4	PFAS by ID SOP	ND	7.4	1.8	ng/L	1
1H, 1H, 2H, 2H-perfluorooctane sulfonic acid (6:2 FTS)	2/619-9/-2	PFAS by ID SOP	ND	7.4	1.8	ng/L	1
1H, 1H, 2H, 2H - perfluence outer a sulfania a sid (10:2 FTS)	120226-60-0	PFAS by ID SOP	ND	7.4	1.8	ng/L	1
IH, IH, 2H, 2H-perfluoronexane sulfonic acid (4:2 F IS)	/5/124-/2-4	PFAS by ID SOP	ND	7.4	1.8	ng/L	1
A diava 20 partiverage and a stick (ADONA)	13252-13-6	PFAS by ID SOP	ND	7.4	1.8	ng/L	1
4,8-dioxa-3H-perilluorononanoic acid (ADONA)	919005-14-4	PFAS by ID SOP	ND	7.4	1.8	ng/L	1
N-eurypernuoro-r-octanesullonamide (EFUSA)	4151-50-2	PEAS BY ID SOP		7.4	1.8	ng/L	1
N-ethylperiluoro-1-octanesullonamidoacelic acid (EFOSAA)	2991-50-6	PFAS by ID SOP		7.4	1.8	ng/L	1
2-N-ethylperiluoro-1-octanesultonamido-ethanoi (EtFOSE)	1091-99-2	PFAS by ID SOP		7.4	1.8	ng/L	1
N-methylperfluoro-1-octanesulfonamideacetic acid (MoEOSA)	31500-32-8	PFAS by ID SOP		15	3.7	ng/L	1
2 N. methylperfluere 1 actenesulfonamide ethanel (MeEOSAA)	2300-31-9	PFAS by ID SOP		7.4	1.0	ng/L	1
Perfluoro-1-butanesulfonic acid (PEBS)	24440-09-7	PFAS by ID SOP	2.0	1 37	0.02	ng/L	1
Perfluoro-1-decanesulfonic acid (PEDS)	335-77-3	PEAS by ID SOP		3 3.7	0.92	ng/L	1
Perfluoro-1-hentanesulfonic acid (PEHnS)	375-92-8	PEAS by ID SOP		3.7	0.92	ng/L	1
Perfluoro-1-nonanesulfonic acid (PENS)	68259-12-1	PEAS by ID SOP		3.7	0.92	ng/L	1
Perfluoro-1-octanesulfonamide (PEOSA)	754-91-6	PEAS by ID SOP		3.7	0.92	ng/L	1
Perfluoro-1-pentanesulfonic acid (PEPeS)	2706-91-4	PEAS by ID SOP	ND	3.7	0.92	ng/L	1
Perfluorododecanesulfonic acid (PEDOS)	79780-39-5	PEAS by ID SOP	ND	7.4	1.9	ng/L	1
Perfluorobevanesulfonic acid (PEHyS)	355-46-4	PEAS by ID SOP	3.2	1 37	0.02	ng/L	1
Perfluoro-n-butanoic acid (PFBA)	375-22-4	PFAS by ID SOP	3.7	3.7	0.92	ng/L	1
Perfluoro-n-decanoic acid (PFDA)	335-76-2	PFAS by ID SOP	ND	3.7	0.92	ng/L	1
Perfluoro-n-dodecanoic acid (PFDoA)	307-55-1	PFAS by ID SOP	ND	3.7	0.92	ng/L	1
Perfluoro-n-heptanoic acid (PFHpA)	375-85-9	PFAS by ID SOP	1.1	J 3.7	0.92	ng/L	1
Perfluoro-n-hexadecanoic acid (PFHxDA)	67905-19-5	PFAS by ID SOP	ND	7.4	1.8	ng/L	1
Perfluoro-n-hexanoic acid (PFHxA)	307-24-4	PFAS by ID SOP	2.2	J 3.7	0.92	ng/L	1
Perfluoro-n-nonanoic acid (PFNA)	375-95-1	PFAS by ID SOP	ND	3.7	0.92	ng/L	1
Perfluoro-n-octadecanoic acid (PFODA)	16517-11-6	PFAS by ID SOP	ND	7.4	1.8	ng/L	1
Perfluoro-n-octanoic acid (PFOA)	335-67-1	PFAS by ID SOP	2.7	J 3.7	0.92	ng/L	1
Perfluoro-n-pentanoic acid (PFPeA)	2706-90-3	PFAS by ID SOP	1.8	J 3.7	0.92	ng/L	1
Perfluoro-n-tetradecanoic acid (PFTeDA)	376-06-7	PFAS by ID SOP	ND	3.7	0.92	ng/L	1
Perfluoro-n-tridecanoic acid (PFTrDA)	72629-94-8	PFAS by ID SOP	ND	3.7	0.92	ng/L	1
Perfluoro-n-undecanoic acid (PFUdA)	2058-94-8	PFAS by ID SOP	ND	3.7	0.92	ng/L	1
Perfluorooctanesulfonic acid (PFOS)	1763-23-1	PFAS by ID SOP	3.6	J 3.7	0.92	ng/L	1
Surregete	Run 1 Accer	otance					
	110 DE	1111S 					
13C2_1.2FTS	118 25	-150					
13C2_8:2FTS	98 25	-150					
13C2_9EDoA	94 25	-150					
13C2_PEHXDA	94 25	-150					
13C2_PFTeDA	93 25	-150					
	,0 20						

H = Out of holding time W = Reported on wet weight basis

Client: Pace Analytical Services, LLC	
Description: 115-0	
Date Sampled:10/27/2020 1330	Project Name: LACROSSE WELL #23 & 24
Date Received: 10/29/2020	Project Number: 40217323

Laboratory ID: VJ29068-003

Matrix: Aqueous

Surrogate	Run 1 A	
		25 150
I3C3_PFBS	95	25-150
13C3_PFHxS	94	25-150
13C3-HFPO-DA	99	25-150
13C4_PFBA	102	25-150
13C4_PFHpA	111	25-150
13C5_PFHxA	95	25-150
13C5_PFPeA	100	25-150
13C6_PFDA	96	25-150
13C7_PFUdA	102	25-150
13C8 PFOA	106	25-150
13C8 PEOS	96	25-150
13C8 PEOSA	105	10-150
1300_FF 03A	09	25 150
	98	20-100
	91	10-150
d5-ETFUSAA	101	25-150
d9-EtFOSE	104	10-150
d-MeFOSA	96	10-150
d3-MeFOSAA	103	25-150
d7-MeFOSE	92	10-150

LOQ = Limit of Quantitation	B = Detected in the method blank	E = Quantitation of compound exceeded the calibration range	DL = Detection Limit
ND = Not detected at or above the DL	N = Recovery is out of criteria	P = The RPD between two GC columns exceeds 40%	J = Estimated result < LOQ and $\ge$ DL
H = Out of holding time	W = Reported on wet weight basis		



444 21st Street South · La Crosse, Wisconsin · 54601

November 17, 2020

2556 2<sup>nd</sup> Avenue East La Crosse, WI 54603

Subject: Private Well Sampling Results 2556 2<sup>nd</sup> Avenue East, La Crosse, WI 54603 Tax Parcel #4-179-0 Sample ID # 179-0

Dear

We have received and reviewed the test results for the sample collected on October 27, 2020 at the above address. Some PFAS compounds were found at levels <u>above</u> the Department of Health Services (DHS) levels recommended for protecting health. These levels are called the "Recommended Public Health Standard" in the table below. The levels found in your well are called the "Sample Result" in the table below.

Because some of the levels are above the recommended Public Health Standard, the City is offering to provide bottled water delivered to your home for drinking, cooking, and brushing your teeth. There will be no cost to you for the bottled water. Please complete the attached form and mail it to The OS Group to make arrangements for having a water dispenser and bottles delivered to your home or business. Call 608-668-2718 or email <u>PFAS@theOSgrp.com</u>. You may also complete this form on line at <u>www.cityoflacrosse.org/bottledwater</u>

Also, please note, we collected three samples from your home. One upstream of your granular activated carbon filter, one after the granular activated carbon filter (at your faucet in the kitchen), and a second "split" sample also after the granular activated carbon filter. The results from the two samples collected after the filter, were both below applicable standards. The results for these two samples are provided below in Tables 2 and 3. It should be noted that the "split" sample collected from the kitchen faucet was analyzed for a different EPA method and that method only analyzes for 18 compounds as compared to the 36 compounds analyze via the prior method. Thus, in Table 3 you will see some results listed as "Not Analyzed".

The following tables summarize the test results from the samples. **Bolded results** are above a current recommended level intended to protect your health according to the Department of Health Services (DHS).

Private Well Sampling Results for 2556 2nd Avenue East, La Crosse, WI 54603 Tax Parcel # 4-179-0 Sample ID # 179-0 Pre-Filter and 179-0 Post-Filter

Compound	Sample Result (unit)	Recommended Public Health Standard (unit <sup>e</sup> )		
N-Ethyl Perfluorooctane sulfonamide (NEtFOSA) CAS # 4151-50-2	Not detected	20 ppt <sup>a,b</sup>	) ppt unds I 6	
N-Ethyl perfluorooctane sulfonamidoacetic acid (NEtFOSAA) CAS # 2991-50-6	Not detected	20 ppt <sup>a,b</sup>	it is 20 ompo <i>il</i> of al	
N-Ethyl perfluorooctane sulfonamidoethanol (NEtFOSE) CAS # 1691-99-2	Not detected	20 ppt <sup>a,b</sup>		
Perfluorooctane sulfonamide (FOSA) CAS # 754-91-6	Not detected	20 ppt <sup>a,b</sup>	mend of the	
Perfluorooctanoic acid (PFOA) CAS # 335-67-1	22 ppt	20 ppt <sup>a,b</sup>	recom ny <i>one</i> the <i>c</i> c	
Perfluorooctanesulfonic acid (PFOS) CAS # 1763-23-1	7.5 ppt	20 ppt <sup>a,b</sup>	The for al or	
Hexafluoropropylene oxide dimer acid (HPFO-DA; GenX) CAS # 13252-13-6	Not detected		300 ppt <sup>a</sup>	
Perfluorobutanesulfonic acid (PFBS) CAS # 375-73-5	5.2 ppt	450	0,000 ppt <sup>a</sup>	
Perfluorohexanesulfonic acid (PFHxS) CAS # 355-46-4	7.3 ppt		40 ppt <sup>a</sup>	
Perfluorobutanoic acid (PFBA) CAS # 375-22-4	130 ppt	10	0,000 ppt <sup>a</sup>	
Perfluorodecanoic acid (PFDA) CAS # 335-76-2	Not detected		300 ppt <sup>a</sup>	
Perfluorododecanoic acid (PFDoA) CAS # 307-55-1	Not detected	500 ppt ª		
Perfluorohexanoic acid (PFHxA) CAS # 307-24-4	2.1 ppt	150	0,000 ppt <sup>a</sup>	
Perfluorononanoic acid (PFNA) CAS # 375-95-1	Not detected		30 ppt <sup>a</sup>	
Perfluorotetradecanoic acid (PFTeA) CAS # 376-06-7	Not detected	10	0,000 ppt <sup>a</sup>	
Perfluoroundecanoic acid (PFUnA) CAS # 2058-94-8	Not detected	:	3,000 ppt <sup>a</sup>	
4,8-Dioxa-3H-perfluorononanoic acid (DONA) CAS # 919005-14-4	Not detected	3,000 ppt		
Perfluorooctadecanoic acid (PFODA) CAS # 16517-11-6	Not detected	400	0,000 ppt <sup>a</sup>	

#### Table 1. Sample Results – 179-0 PRE-FILTER
Perfluoro-1-pentanesulfonic acid CAS # 2706-91-4	3.7 ppt	None Established <sup>c</sup>
Perfluoro-n-pentanoic acid CAS # 2706-90-3	8.0 ppt	None Established <sup>c</sup>

<sup>a</sup> Public health enforcement standard (ES) recommended by DHS.

<sup>b</sup> DHS recommends a combined enforcement standard of 20 ng/L and combined preventive action limit of 2 ng/L for FOSA, NEt-FOSA, NetFOSAA, PFOS, and PFOA.

<sup>c</sup> A current standard is not available; the compound is currently under review by DHS for potential public health standard recommendation.

<sup>d</sup> Public health enforcement standard (ES) in NR 140, Wisconsin Administrative Code.

<sup>e</sup> Units: Parts per trillion (ppt) = nanograms of substance per liter of water (ng/L)

<sup>BL</sup> Detected in the method blank. Possible lab contaminant.

### Table 2. Sample Results – 179-0 POST-FILTER

Compound	Sample Result (unit)	Recomm Public H Standard	ended ealth (unit <sup>e</sup> )
N-Ethyl Perfluorooctane sulfonamide (NEtFOSA) CAS # 4151-50-2	Not detected	20 ppt <sup>a,b</sup>	) ppt unds I 6
N-Ethyl perfluorooctane sulfonamidoacetic acid (NEtFOSAA) CAS # 2991-50-6	Not detected	20 ppt <sup>a,b</sup>	it is 2C ompo <i>il</i> of al
N-Ethyl perfluorooctane sulfonamidoethanol (NEtFOSE) CAS # 1691-99-2	Not detected	20 ppt <sup>a,b</sup>	ed lim ese 6 c ed toto
Perfluorooctane sulfonamide (FOSA) CAS # 754-91-6	Not detected	20 ppt <sup>a,b</sup>	mend of the mbine
Perfluorooctanoic acid (PFOA) CAS # 335-67-1	Not detected	20 ppt <sup>a,b</sup>	recom ny <i>one</i> the <i>cc</i>
Perfluorooctanesulfonic acid (PFOS) CAS # 1763-23-1	Not detected	20 ppt <sup>a,b</sup>	The for al or
Hexafluoropropylene oxide dimer acid (HPFO-DA; GenX) CAS # 13252-13-6	Not detected		300 ppt <sup>a</sup>
Perfluorobutanesulfonic acid (PFBS) CAS # 375-73-5	Not detected	450	),000 ppt <sup>a</sup>
Perfluorohexanesulfonic acid (PFHxS) CAS # 355-46-4	Not detected		40 ppt <sup>a</sup>
Perfluorobutanoic acid (PFBA) CAS # 375-22-4	23 ppt	10	),000 ppt <sup>a</sup>
Perfluorodecanoic acid (PFDA) CAS # 335-76-2	Not detected		300 ppt <sup>a</sup>
Perfluorododecanoic acid (PFDoA) CAS # 307-55-1	Not detected		500 ppt <sup>a</sup>

Perfluorohexanoic acid (PFHxA) CAS # 307-24-4	Not detected	150,000 ppt <sup>a</sup>
Perfluorononanoic acid (PFNA) CAS # 375-95-1	Not detected	30 ppt <sup>a</sup>
Perfluorotetradecanoic acid (PFTeA) CAS # 376-06-7	Not detected	10,000 ppt <sup>a</sup>
Perfluoroundecanoic acid (PFUnA) CAS # 2058-94-8	Not detected	3,000 ppt <sup>a</sup>
4,8-Dioxa-3H-perfluorononanoic acid (DONA) CAS # 919005-14-4	Not detected	3,000 ppt <sup>a</sup>
Perfluorooctadecanoic acid (PFODA) CAS # 16517-11-6	Not detected	400,000 ppt <sup>a</sup>

### Table 3. Sample Results – 179-0 POST-FILTER "Split"

Compound	Sample Result (unit)	t Recommended Public Health Standard (unit <sup>e</sup> )		
N-Ethyl Perfluorooctane sulfonamide (NEtFOSA) CAS # 4151-50-2	Not Analyzed	20 ppt <sup>a,b</sup>	ppt unds 6	
N-Ethyl perfluorooctane sulfonamidoacetic acid (NEtFOSAA) CAS # 2991-50-6	Not detected	20 ppt <sup>a,b</sup>	it is 20 ompo <i>il</i> of all	
N-Ethyl perfluorooctane sulfonamidoethanol (NEtFOSE) CAS # 1691-99-2	Not Analyzed	20 ppt <sup>a,b</sup>	ed lim ese 6 c ed totc	
Perfluorooctane sulfonamide (FOSA) CAS # 754-91-6	Not Analyzed	20 ppt <sup>a,b</sup>	mend of the mbine	
Perfluorooctanoic acid (PFOA) CAS # 335-67-1	0.95 ppt	20 ppt <sup>a,b</sup>	recom ny <i>one</i> the <i>c</i> c	
Perfluorooctanesulfonic acid (PFOS) CAS # 1763-23-1	Not detected	20 ppt <sup>a,b</sup>	The for al or	
Hexafluoropropylene oxide dimer acid (HPFO-DA; GenX) CAS # 13252-13-6	Not detected		300 ppt <sup>a</sup>	
Perfluorobutanesulfonic acid (PFBS) CAS # 375-73-5	Not detected	450	),000 ppt <sup>a</sup>	
Perfluorohexanesulfonic acid (PFHxS) CAS # 355-46-4	Not Analyzed		40 ppt <sup>a</sup>	
Perfluorobutanoic acid (PFBA) CAS # 375-22-4	Not Analyzed	10	),000 ppt ª	
Perfluorodecanoic acid (PFDA) CAS # 335-76-2	Not detected		300 ppt <sup>a</sup>	

Perfluorododecanoic acid (PFDoA) CAS # 307-55-1	Not detected	500 ppt <sup>a</sup>
Perfluorohexanoic acid (PFHxA) CAS # 307-24-4	Not detected	150,000 ppt <sup>a</sup>
Perfluorononanoic acid (PFNA) CAS # 375-95-1	Not detected	30 ppt <sup>a</sup>
Perfluorotetradecanoic acid (PFTeA) CAS # 376-06-7	Not detected	10,000 ppt <sup>a</sup>
Perfluoroundecanoic acid (PFUnA) CAS # 2058-94-8	Not detected	3,000 ppt <sup>a</sup>
4,8-Dioxa-3H-perfluorononanoic acid (DONA) CAS # 919005-14-4	Not detected	3,000 ppt <sup>a</sup>
Perfluorooctadecanoic acid (PFODA) CAS # 16517-11-6	Not Analyzed	400,000 ppt <sup>a</sup>

As required by law, we will be submitting these results to the Department of Natural Resources (DNR). The DNR may consult with the Department of Health Services (DHS) about these test results. DHS may review all PFAS tests and follow-up with you directly if any actions are recommended to protect your health.

Thank you for your patience and assistance with our investigation. We will provide updates on the project at <u>https://www.cityoflacrosse.org/wells</u> as our work continues. If you have any questions, please call The OS Group at (608) 668-2718 or email them at <u>PFAS@theOSgrp.com</u>.

You can also contact the DNR and DHS with questions about PFAS or the water sample results at the numbers provided below.

<b>Questions about</b>		<u>Contact</u>	<b>Phone</b>	<u>E-mail Address</u>
Soil & Water Testing	DNR	David Rozeboom	715-215-2078	David.Rozeboom@wisconsin.gov
Health Concerns	DHS	Curtis Hedman	608-266-6677	Curtis.Hedman@dhs.wisconsin.gov

On behalf of The City of La Crosse The OS Group, LLC

Attachment: Lab report for your well Bottled Water Acknowledgement

	PFASI	by LC/MS/MS					
Client: Pace Analytical Services, LLC	2556 2 <sup>nd</sup>	<sup>d</sup> Avenue East		Laboratory ID	): VJ29068-00	)4	
Description: 179-0 PRE-FILTER	Tax Parc	cel #4-179-0		Matrix: Aqueous			
Date Sampled 10/27/2020 1345	Project Name:	LACROSSE WELL #	#23 & 24				
Date Received: 10/29/2020	roject Number:	40217323					
		+0217525					
Run     Prep Method     Analytical Method       1     SOP SPE     PFAS by ID SOP	Dilution Ana 1 11/0	Ilysis Date Analyst 5/2020 1203 MMM	Prep Date 11/03/2020	Batch 1007 72053			
	CAS	Analytical	Desult O	1.00		1.1 14	Dura
Parameter	Number	Method	Result Q	LOQ	DL	Units	Run
9-chiloronicosafluoro.3-ovaundecane.1-sulfonic acid (9CI-PESONS)	) 763051-02-0	PFAS by ID SOP		7.5	1.9	ng/L	1
1H 1H 2H 2H-perfluorodecape sulfonic acid (8:2 ETS)	30108-34-4	PEAS by ID SOP	ND	7.5	1.9	ng/L	1
1H 1H 2H 2H-perfluorooctane sulfonic acid (6:2 FTS)	27619-97-2	PEAS by ID SOP	ND	7.5	1.9	ng/L	1
1H 1H 2H 2H-perfluorododecane sulfonic acid (0.2 FTS)	120226-60-0	PEAS by ID SOP	ND	7.5	1.9	ng/L	1
14 14 24 24 porfuorobovano sulfonic acid (4:2 ETS)	757124 72 4	PEAS by ID SOP		7.5	1.9	ng/L	1
Hevefluereprepulepe exide dimer acid (CopX)	12252 12 4	PFAS by ID SOP	ND	7.5	1.9	ng/L	1
	13252-13-0	PFAS by ID SOP	ND	7.5	1.9	ng/L	1
4,8-dioxa-3H-perildorononanoic acid (ADONA)	4151 50 2	PFAS by ID SOP	ND	7.5	1.9	ng/L	1
N-ethylperhuoro-1-octanesulforamide (EtFOSA)	4151-50-2		ND	7.5	1.9	ng/L	1
N-ethylperiluoro-1-octanesulionamidoacetic acid (ELFOSAA)	2991-50-6	PFAS by ID SOP	ND	7.5	1.9	ng/L	1
2-IN-ethylperfluoro-1-octanesulfonamido-ethanol (EfFOSE)	1691-99-2	PFAS by ID SOP	ND	7.5	1.9	ng/L	1
N-methylperfluoro-1-octanesulfonamide (MeFOSA)	31506-32-8	PFAS by ID SOP	ND	15	3.7	ng/L	1
N-methylperfluoro-1-octanesulfonamidoacetic acid (MeFOSAA)	2355-31-9	PFAS by ID SOP	ND	7.5	1.9	ng/L	1
2-N-methylperfluoro-1-octanesulfonamido-ethanol (MeFOSE)	24448-09-7	PFAS by ID SOP	ND	7.5	1.9	ng/L	1
Perfluoro-1-butanesulfonic acid (PFBS)	3/5-/3-5	PFAS by ID SOP	5.2	3.7	0.94	ng/L	1
Perfluoro-1-decanesulfonic acid (PFDS)	335-77-3	PFAS by ID SOP	ND	3.7	0.94	ng/L	1
Perfluoro-1-heptanesulfonic acid (PFHpS)	375-92-8	PFAS by ID SOP	ND	3.7	0.94	ng/L	1
Perfluoro-1-nonanesulfonic acid (PFNS)	68259-12-1	PFAS by ID SOP	ND	3.7	0.94	ng/L	1
Perfluoro-1-octanesulfonamide (PFOSA)	754-91-6	PEAS by ID SOP	ND	3.7	0.94	ng/L	1
Perfluoro-1-pentanesulfonic acid (PFPeS)	2706-91-4	PFAS by ID SOP	3.7	3.7	0.94	ng/L	1
Perfluorododecanesulfonic acid (PFDOS)	79780-39-5	PFAS by ID SOP	ND	7.5	1.9	ng/L	1
Perfluorohexanesulfonic acid (PFHxS)	355-46-4	PFAS by ID SOP	7.3	3.7	0.94	ng/L	1
Perfluoro-n-butanoic acid (PFBA)	375-22-4	PFAS by ID SOP	130	3.7	0.94	ng/L	1
Perfluoro-n-decanoic acid (PFDA)	335-76-2	PFAS by ID SOP	ND	3.7	0.94	ng/L	1
Perfluoro-n-dodecanoic acid (PFDoA)	307-55-1	PFAS by ID SOP	ND	3.7	0.94	ng/L	1
Perfluoro-n-heptanoic acid (PFHpA)	375-85-9	PFAS by ID SOP	ND	3.7	0.94	ng/L	1
Perfluoro-n-hexadecanoic acid (PFHxDA)	67905-19-5	PFAS by ID SOP	ND	7.5	1.9	ng/L	1
Perfluoro-n-hexanoic acid (PFHxA)	307-24-4	PFAS by ID SOP	2.1 J	3.7	0.94	ng/L	1
Perfluoro-n-nonanoic acid (PFNA)	375-95-1	PFAS by ID SOP	ND	3.7	0.94	ng/L	1
Perfluoro-n-octadecanoic acid (PFODA)	16517-11-6	PFAS by ID SOP	ND	7.5	1.9	ng/L	1
Perfluoro-n-octanoic acid (PFOA)	335-67-1	PFAS by ID SOP	22	3.7	0.94	ng/L	1
Perfluoro-n-pentanoic acid (PFPeA)	2706-90-3	PFAS by ID SOP	8.0	3.7	0.94	ng/L	1
Perfluoro-n-tetradecanoic acid (PFTeDA)	376-06-7	PFAS by ID SOP	ND	3.7	0.94	ng/L	1
Perfluoro-n-tridecanoic acid (PFTrDA)	72629-94-8	PFAS by ID SOP	ND	3.7	0.94	ng/L	1
Perfluoro-n-undecanoic acid (PFUdA)	2058-94-8	PFAS by ID SOP	ND	3.7	0.94	ng/L	1
Perfluorooctanesulfonic acid (PFOS)	1763-23-1	PFAS by ID SOP	7.5	3.7	0.94	ng/L	1
F Surrogate O % P	Run 1 Accep	otance					
13C2 4/2ETS	118 25	-150					
13C2_4.2FTS	104 25	-150					
13C2 8:2ETS	97 25	-150					
13C2_PEDoA	89 25	-150					
13C2 PEHxDA	70 25	-150					
13C2 PETEDA	,, 20 ຊາງ ກະ	-150					
	55 20						
LOQ = Limit of Quantitation B = Detected in the method blank	E = Quantitation (	of compound exceeded the	calibration range	DL = Detection Lim	it		
ND = Not detected at or above the DL N = Recovery is out of criteria	P = The RPD bet	ween two GC columns exce	eds 40%	J = Estimated resul	$t < LOQ and \ge DL$		
H = Out of holding time W = Reported on wet weight basis							

Project Number: 40217323

Laboratory ID: VJ29068-004 Matrix: Aqueous

Description: 179-0 PRE-FILTER

Client: Pace Analytical Services, LLC

Date Sampled:10/27/2020 1345 Date Received: 10/29/2020 Project Name: LACROSSE WELL #23 & 24

Run 1 A	
2 % Recovery	2E 1E0
86	25-150
84	25-150
97	25-150
98	25-150
101	25-150
102	25-150
89	25-150
92	25-150
92	25-150
95	25-150
79	25-150
98	10-150
94	25-150
79	10-150
91	25-150
89	10-150
80	10-150
04	25-150
94	10-150
-	Run 1 4 86 84 97 98 101 102 89 92 92 92 92 95 79 98 94 79 91 89 80 94 94 94

LOQ = Limit of QuantitationB = Detected in the method blankE = Quantitation of compound exceeded the calibration rangeDL = Detection LimitND = Not detected at or above the DLN = Recovery is out of criteriaP = The RPD between two GC columns exceeds 40%J = Estimated result < LOQ and ≥ DL</td>H = Out of holding timeW = Reported on wet weight basis

Client: Pace Analytical Services, LLC			l	_aboratory I	D: VJ29068-005	5	
Description: 179-0 POST-FILTER				Matrix	: Aqueous		
Date Sampled:10/27/2020 1350	Project Name	LACROSSE WELL #	#23 & 24				
Date Received: 10/29/2020	oiect Number	• 40217323					
Run Prep Method Analytical Method I 1 SOP SPE PEAS by ID SOP	Dilution An 1 11/(	alysis Date Analyst )5/2020 1214 MMM	Prep Date 11/03/2020 100	Batch 07 72053			
Deservator	CAS	Analytical	Describe O			Linito	Duna
Parameter 9. chlorobovadocafluoro 2. ovanono 1. sulfonio acid (OCL PE2ONS)	756426 59 1				DL	Units	Run
11 chloropicosafluoro 2 ovaundecano 1 sulfonic acid (11CL DE2	730420-30-1	PFAS by ID SOP		7.0 7.0	2.0	ng/L	1
11- 11, 21, 21, perflueredecape cultanic acid (9.2 ETS)	20109 24 4	PFAS by ID SOP	ND	7.0	2.0	ng/L	1
1H, 1H, 2H, 2H perfluorogetane cultonic acid (6.2 FTS)	39100-34-4	PFAS by ID SOP	ND	7.0	2.0	ng/L	1
1H 1H 2H 2H porfluorododocano sulfonic acid (10:2 FTS)	120226 60 0	PFAS by ID SOP		7.0 7.0	2.0	ng/L	1
1H 1H 2H 2H porfluorobovano sulfonic acid (4:2 ETS)	757124 72 4	PFAS by ID SOP		7.0 7.0	2.0	ng/L	1
Hevefluoropropulopa evide dimer acid (CapX)	12252 12 4	PFAS by ID SOP	ND	7.0	2.0	ng/L	1
A & diava 2H parfluoranananaia acid (ADONA)	010005 14 4	PFAS by ID SOP	ND	7.0	2.0	ng/L	1
4,o-dioxa-sn-perildorononarioic acid (ADONA)	4151 50 2	PFAS by ID SOP	ND	7.0	2.0	ng/L	1
N-ethylperfluoro-1-octanesulfonamide (ELFOSA)	4151-50-2	PFAS by ID SOP	ND	7.8	2.0	ng/L	1
	2991-50-6	PFAS by ID SOP	ND	7.8	2.0	ng/L	1
2-N-ethylperiluoro-1-octanesulfonamido-ethanol (EFOSE)	1691-99-2	PFAS by ID SOP	ND	7.8	2.0	ng/L	1
N-methylperilluoro-1-octanesulfonamide (MerOSA)	31506-32-8	PFAS by ID SOP	ND	10	3.9	ng/L	1
N-methylperilluoro-1-octanesulforamidoacetic acid (MeFOSAA)	2355-31-9	PFAS by ID SOP	ND	7.8	2.0	ng/L	1
2-N-methylperfluoro-I-octanesultonamido-ethanol (MeFOSE)	24448-09-7	PFAS by ID SOP	ND	7.8	2.0	ng/L	1
Periluoro 1 decenecultorio acid (PEDS)	375-73-5	PFAS by ID SOP	ND	3.9	0.98	ng/L	1
Periluoro-1-decallesulloriic acid (PFDS)	335-77-3	PFAS by ID SOP	ND	3.9	0.98	ng/L	1
Periluoro-1-neptanesulfonio acid (PENS)	375-92-8	PFAS by ID SOP	ND	3.9	0.98	ng/L	1
Perfuero 1 esteneguifonomida (DEOSA)	754.01.6	PFAS by ID SOP	ND	3.9	0.98	ng/L	1
Periluoro-1-octariesulionamide (PFOSA)	754-91-0	PFAS by ID SOP	ND	3.9	0.98	ng/L	1
Periluoro- I-pentanesullonic acid (PFPeS)	2706-91-4	PFAS by ID SOP	ND	3.9	0.98	ng/L	1
Periluorododecanesulionic acid (PFDOS)	79780-39-5	PFAS by ID SOP	ND	7.8	2.0	ng/L	1
Perfluoronexanesulionic acid (PERA)	355-46-4	PEAS BY ID SOP		3.9	0.98	ng/L	1
Perfluoro n decanoio acid (PEDA)	375-22-4	PFAS by ID SOP	23	3.9	0.98	ng/L	1
Perfluoro n dedecencia acid (PEDA)	207 EE 1	PFAS by ID SOP	ND	3.9	0.98	ng/L	1
Periluoro-n-dodecarioic acid (PEUnA)	307-55-1	PFAS by ID SOP	ND	3.9	0.98	ng/L	1
	375-85-9	PFAS by ID SOP	ND	3.9	0.98	ng/L	1
	0/905-19-5	PFAS by ID SOP	ND	7.8	2.0	ng/L	1
Periluoro-n-nexanoic acid (PEHXA)	307-24-4	PFAS by ID SOP	ND	3.9	0.98	ng/L	1
Perfluoro-n-nonanoic acid (PENA)	375-95-1	PFAS by ID SOP	ND	3.9	0.98	ng/L	1
Perfluoro-n-octadecanoic acid (PFODA)	16517-11-6	PFAS by ID SOP	ND	7.8	2.0	ng/L	1
Perfluoro n pontoncia acid (PEDaA)	2704 00 2	PFAS by ID SOP	ND	3.9	0.98	ng/L	1
Perfluere n tetradecaneia acid (PETEDA)	2700-90-3	PEAS by ID SOP	ND	2.0	0.98	ng/L	1
Perfluere n tridecanoic acid (PETrDA)	72620 04 9	PEAS by ID SOP	ND	2.0	0.98	ng/L	1
Perfluere n undecanoic acid (PELIdA)	2059 04 9	PEAS by ID SOP	ND	2.0	0.98	ng/L	1
	2000-94-0	PFAS by ID SOP	ND	3.9	0.98	ng/L	1
Periodiooctanesulionic acid (PFOS)	1703-23-1	PFAS DY ID SOP	ND	3.9	0.98	ng/L	I
R Surrogate	un 1 Acce	ptance					
	107 2	5-150					
13C2 6:2FTS	115 2	5-150					
13C2 8:2FTS	103 2	5-150					
13C2_PEDoA	99 2	5-150					
13C2_PFHxDA	109 2	5-150					
13C2 PFTeDA	99 2	5-150					
	. 2						
LOQ = Limit of Quantitation B = Detected in the method blank	E = Quantitation	of compound exceeded the	calibration range DL	= Detection Lim	hit		
ND = Not detected at or above the DL $N$ = Recovery is out of criteria	P = The RPD be	etween two GC columns exce	eds 40% J =	Estimated resu	It < LOQ and $\geq$ DL		
H = Out of holding time W = Reported on wet weight basis							

Project Number: 40217323

Laboratory ID: VJ29068-005

Matrix: Aqueous

Description: 179-0 POST-FILTER	
Description: 179-0 POST-FILTER	

Client: Pace Analytical Services, LLC

Date Sampled:10/27/2020 1350

Date Received: 10/29/2020

Project Name: LACROSSE WELL #23 & 24

	Run 1 Ac	cceptance
Surrogate	Q % Recovery	Limits
13C3_PFBS	102	25-150
13C3_PFHxS	101	25-150
13C3-HFPO-DA	117	25-150
13C4_PFBA	104	25-150
13C4_PFHpA	98	25-150
13C5_PFHxA	103	25-150
13C5_PFPeA	100	25-150
13C6_PFDA	102	25-150
13C7_PFUdA	102	25-150
13C8_PFOA	104	25-150
13C8_PFOS	100	25-150
13C8_PFOSA	111	10-150
13C9_PFNA	108	25-150
d-EtFOSA	86	10-150
d5-EtFOSAA	107	25-150
d9-EtFOSE	101	10-150
d-MeFOSA	96	10-150
d3-MeFOSAA	102	25-150
d7-MeFOSF	107	10-150

LOQ = Limit of QuantitationB = Detected in the method blankE = Quantitation of compound exceeded the calibration rangeDL = Detection LimitND = Not detected at or above the DLN = Recovery is out of criteriaP = The RPD between two GC columns exceeds 40%J = Estimated result < LOQ and ≥ DL</td>H = Out of holding timeW = Reported on wet weight basis



#### ANALYTICAL RESULTS

#### Project: LACROSSE WELL #23 & 24

Pace Project No.: 40217323

Sample: 179-0 POST-FILTER	Lab ID:	40217323005	Collecte	d: 10/27/20	) 13:50	) Received: 10/28/20 09:00 Matrix: Water			
Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
537.1 PFAS Compounds, Water	Analytical Pace Ana	Method: EPA 5	37.1 Prepa - Ormond I	aration Meth Beach	nod: EP	PA 537.1			
11CI-PF3OUdS	<0.0016	ug/L	0.0019	0.0016	1	11/03/20 09:49	11/05/20 23:34	763051-92-9	
9CI-PF3ONS	<0.0011	ug/L	0.0019	0.0011	1	11/03/20 09:49	11/05/20 23:34	756426-58-1	
ADONA	<0.00071	ug/L	0.0019	0.00071	1	11/03/20 09:49	11/05/20 23:34	919005-14-4	
HFPO-DA	<0.0016	ug/L	0.0019	0.0016	1	11/03/20 09:49	11/05/20 23:34	13252-13-6	
NEtFOSAA	<0.00091	ug/L	0.0019	0.00091	1	11/03/20 09:49	11/05/20 23:34	2991-50-6	
NMeFOSAA	<0.0015	ug/L	0.0019	0.0015	1	11/03/20 09:49	11/05/20 23:34	2355-31-9	
Perfluorobutanesulfonic acid	<0.00065	ug/L	0.0019	0.00065	1	11/03/20 09:49	11/05/20 23:34	375-73-5	
Perfluorodecanoic acid	<0.0019	ug/L	0.0019	0.0019	1	11/03/20 09:49	11/05/20 23:34	335-76-2	
Perfluorohexanoic acid	<0.0012	ug/L	0.0019	0.0012	1	11/03/20 09:49	11/05/20 23:34	307-24-4	
Perfluorododecanoic acid	<0.0014	ug/L	0.0019	0.0014	1	11/03/20 09:49	11/05/20 23:34	307-55-1	
Perfluoroheptanoic acid	<0.00099	ug/L	0.0019	0.00099	1	11/03/20 09:49	11/05/20 23:34	375-85-9	
Perfluorohexanesulfonic acid	<0.00072	ug/L	0.0019	0.00072	1	11/03/20 09:49	11/05/20 23:34	355-46-4	
Perfluorononanoic acid	<0.0019	ug/L	0.0019	0.0019	1	11/03/20 09:49	11/05/20 23:34	375-95-1	
Perfluorooctanesulfonic acid	<0.0012	ug/L	0.0019	0.0012	1	11/03/20 09:49	11/05/20 23:34	1763-23-1	
Perfluorooctanoic acid	0.00095J	ug/L	0.0019	0.00086	1	11/03/20 09:49	11/05/20 23:34	335-67-1	
Perfluorotetradecanoic acid	<0.0018	ug/L	0.0019	0.0018	1	11/03/20 09:49	11/05/20 23:34	376-06-7	
Perfluorotridecanoic acid	<0.0017	ug/L	0.0019	0.0017	1	11/03/20 09:49	11/05/20 23:34	72629-94-8	
Perfluoroundecanoic acid	<0.0019	ug/L	0.0019	0.0019	1	11/03/20 09:49	11/05/20 23:34	2058-94-8	
Surrogates									
13C2-PFDA (S)	101	%	70-130		1	11/03/20 09:49	11/05/20 23:34		
13C2-PFHxA (S)	101	%	70-130		1	11/03/20 09:49	11/05/20 23:34		
NEtFOSAA-d5 (S)	96	%	70-130		1	11/03/20 09:49	11/05/20 23:34		
HFPO-DAS (S)	93	%	70-130		1	11/03/20 09:49	11/05/20 23:34		

#### **REPORT OF LABORATORY ANALYSIS**

## BOTTLED WATER ACKNOWLEDGEMENT 2556 2nd Avenue East, LA CROSSE, WI 54603

If you desire to accept the bottled water delivery, please complete and sign this form and return it to The OS Group at <u>PFAS@TheOSqrp.com</u> or mail to 444 21<sup>st</sup> St. S, La Crosse, WI 54601. You may also complete this form electronically on line at <u>www.cityoflacrosse.org/bottledwater</u>. Call 608-668-2718 with any question you may have.

As pre-caution for the protection of human health, the City of La Crosse (The City) will provide, on a temporary basis, bottled water for drinking, cooking and toothbrushing purposes at the above referenced address. The water will be delivered to your home or business by a commercial water delivery service. At the City's cost, a dispenser / cooler and regular deliveries of 5-gallon containers of water will be provided. The City reserves the right to dictate the conditions of delivery, such as minimum and maximum number of containers per delivery, frequency and timing of deliveries. The City reserves the right to periodically review whether The City should continue to provide bottled water, considering factors such as State and Federal standards and guidance, evolving knowledge and understanding of the sources, cause and responsibility for the contamination, new or reinterpreted test results, and the availability of more permanent or cost-effective sources of water for the above purposes. The City of La Crosse makes no warranty or representation regarding the suitability of the bottled water beyond those made by the commercial water delivery service.

All reusable or returnable equipment and supplies, such as the containers and cooler/dispenser, are the property of the commercial water delivery service or the City of La Crosse. By signing below, the Occupant of the above referenced property acknowledges that all reusable or returnable equipment and supplies shall be returned to the commercial water delivery service or the City of La Crosse upon request. The Occupant agrees to provide reasonable access for delivery of bottled water and pick up of reusable or returnable equipment and supplies. Occupant(s) acknowledges that they may be required to sign an agreement with the commercial water delivery service as a condition of receiving bottled water.

Signed:	Dated:

Printed Name: \_\_\_\_\_\_

Check ownership:

Owner-Occupant
Cccupant Occupant



444 21st Street South · La Crosse, Wisconsin · 54601

November 17, 2020

202 FANTA REED RD La Crosse, WI 54603

Subject: Private Well Sampling Results 202 FANTA REED RD, La Crosse, WI 54603 Tax Parcel Number 4-192-0 Sample Number 192-0

## Dear

We have received and reviewed the test results for the sample collected on October 27, 2020 at the above address. Some PFAS compounds were found, but the levels found were **below** the Department of Health Services (DHS) levels recommended for protecting health. These levels are called the "Recommended Public Health Standard" in the table below. The levels found in *your* well are called the "Sample Result" in the table below.

While none of the levels are above the recommended Public Health Standard, to be cautious the City is offering to provide bottled water delivered to your home for drinking, cooking, and brushing your teeth. There will be no cost to you for the bottled water. Please complete the attached form and mail it to The OS Group to make arrangements for having a water dispenser and bottles delivered to your home or business. Call 608-668-2718 or email <u>PFAS@theOSgrp.com</u>. You may also complete this form on line at www.cityoflacrosse.org/bottledwater

The following table summarizes the test results from the sample.

## Sample Results

Compound	Sample Result (unit)	Recomr Public Standard	nended Health d (unit <sup>e</sup> )
Perfluorooctanesulfonic acid (PFOS) CAS # 1763-23-1	7.7 ppt	20 ppt <sup>a,b</sup>	) ppt unds I 6
Perfluorooctanoic acid (PFOA) CAS # 335-67-1	10 ppt	20 ppt <sup>a,b</sup>	it is 20 compo x/ of al
Perfluorooctane sulfonamide (FOSA) CAS # 754-91-6	Not detected	20 ppt <sup>a,b</sup>	ed lim ese 6 c <i>ed tot</i> c
N-Ethyl perfluorooctane sulfonamidoethanol (NEtFOSE) CAS # 1691-99-2	Not detected	20 ppt <sup>a,b</sup>	mend of the
N-Ethyl Perfluorooctane sulfonamide (NEtFOSA) CAS # 4151-50-2	Not detected	20 ppt <sup>a,b</sup>	recom ny <i>one</i> the <i>c</i> c
N-Ethyl perfluorooctane sulfonamidoacetic acid (NEtFOSAA) CAS # 2991-50-6	Not detected	20 ppt <sup>a,b</sup>	The for a or
Hexafluoropropylene oxide dimer acid (HPFO-DA; GenX) CAS # 13252-13-6	Not detected		300 ppt <sup>a</sup>
Perfluorobutanoic acid (PFBA) CAS # 375-22-4	83 ppt	1	0,000 ppt <sup>a</sup>
Perfluorobutanesulfonic acid (PFBS) CAS # 375-73-5	6.0 ppt	450,000 ppt <sup>a</sup>	
Perfluorododecanoic acid (PFDoA) CAS # 307-55-1	Not detected		500 ppt <sup>a</sup>
Perfluorohexanoic acid (PFHxA) CAS # 307-24-4	Not detected	150,000 ppt <sup>a</sup>	
Perfluorotetradecanoic acid (PFTeA) CAS # 376-06-7	Not detected	10,000 ppt <sup>a</sup>	
Perfluoroundecanoic acid (PFUnA) CAS # 2058-94-8	Not detected	3,000 ppt <sup>a</sup>	
4,8-Dioxa-3H-perfluorononanoic acid (DONA) CAS # 919005-14-4	Not detected		3,000 ppt <sup>a</sup>
Perfluorooctadecanoic acid (PFODA) CAS # 16517-11-6	Not detected	400,000 ppt <sup>a</sup>	
Perfluorohexanesulfonic acid (PFHxS) CAS # 355-46-4	7.4 ppt		40 ppt <sup>a</sup>
Perfluorononanoic acid (PFNA) CAS # 375-95-1	Not detected		30 ppt <sup>a</sup>
Perfluorodecanoic acid (PFDA) CAS # 335-76-2	Not detected		300 ppt <sup>a</sup>

Compound	Sample Result (unit)	Recommended Public Health Standard (unit <sup>e</sup> )
Perfluoro-1-pentanesulfonic acid (PFPeS) CAS # 2706-91-4	3.9 ppt	None Established <sup>c</sup>

<sup>a</sup> Public health enforcement standard (ES) recommended by DHS.

<sup>b</sup> DHS recommends a combined enforcement standard of 20 ng/L and combined preventive action limit of 2 ng/L for FOSA, NEt-FOSA, NetFOSAA, PFOS, and PFOA.

<sup>c</sup> A current standard is not available; the compound is currently under review by DHS for potential public health standard recommendation.

<sup>d</sup> Public health enforcement standard (ES) in NR 140, Wisconsin Administrative Code.

<sup>e</sup> Units: Parts per trillion (ppt) = nanograms of substance per liter of water (ng/L)

As required by law, we will be submitting these results to the Department of Natural Resources (DNR). The DNR may consult with the Department of Health Services (DHS) about these test results. DHS may review all PFAS tests and follow-up with you directly if any actions are recommended to protect your health.

Thank you for your patience and assistance with our investigation. We will provide updates on the project at <u>https://www.cityoflacrosse.org/wells</u> as our work continues. If you have any questions, please call The OS Group at (608) 668-2718 or email them at <u>PFAS@theOSgrp.com</u>.

You can also contact the DNR and DHS with questions about PFAS or the water sample results at the numbers provided below.

Questions about		<u>Contact</u>	<u>Phone</u>	E-mail Address
Soil & Water Testing	DNR	David Rozeboom	715-215-2078	David.Rozeboom@wisconsin.gov
Health Concerns	DHS	Curtis Hedman	608-266-6677	Curtis.Hedman@dhs.wisconsin.gov

On behalf of The City of La Crosse *The OS Group, LLC* 

Attachment: Lab report for your well Bottled Water Acknowledgement

	PFAS	by LC/MS/MS					
Client: Pace Analytical Services, LLC WIL Description: 192-0 202	LIAM S AMUNF FANTA REED R	RUD, BARBARA M A D	MUNRUD	Laboratory IE Matrix	D: VJ29068-0 <: Aqueous	01	
Date Sampled:10/27/2020 1300 Project Name: LACROSSE WELL #23 & 24							
Date Received: 10/29/2020	Project Number:	40217323					
Due Dree Mathed Architical Mathed	Dilution And		Dren Data	Datab			
1 SOP SPE PFAS by ID SOF	Dilution Ana P 1 11/0	5/2020 1131 MMM	Prep Date 11/03/2020	Batch 1007 72053			
Parameter	CAS Number	Analytical Method	Result Q	LOQ	DL	Units	Run
9-chlorohexadecafluoro-3-oxanone-1-sulfonic acid (9CI-PF3ON	S) 756426-58-1	PFAS by ID SOP	ND	7.3	1.8	ng/L	1
11-chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11CI-PF	3) 763051-92-9	PFAS by ID SOP	ND	7.3	1.8	ng/L	1
1H, 1H, 2H, 2H-perfluorodecane sulfonic acid (8:2 FTS)	39108-34-4	PFAS by ID SOP	ND	7.3	1.8	ng/L	1
1H, 1H, 2H, 2H-perfluorooctane sulfonic acid (6:2 FTS)	27619-97-2	PFAS by ID SOP	ND	7.3	1.8	ng/L	1
1H,1H,2H,2H-perfluorododecane sulfonic acid (10:2 FTS)	120226-60-0	PFAS by ID SOP	ND	7.3	1.8	ng/L	1
1H,1H,2H,2H-perfluorohexane sulfonic acid (4:2 FTS)	757124-72-4	PFAS by ID SOP	ND	7.3	1.8	ng/L	1
Hexafluoropropylene oxide dimer acid (GenX)	13252-13-6	PFAS by ID SOP	ND	7.3	1.8	ng/L	1
4,8-dioxa-3H-perfluorononanoic acid (ADONA)	919005-14-4	PFAS by ID SOP	ND	7.3	1.8	ng/L	1
N-ethylperfluoro-1-octanesulfonamide (EtFOSA)	4151-50-2	PFAS by ID SOP	ND	7.3	1.8	ng/L	1
N-ethylperfluoro-1-octanesulfonamidoacetic acid (EtFOSAA)	2991-50-6	PFAS by ID SOP	ND	7.3	1.8	ng/L	1
2-N-ethylperfluoro-1-octanesulfonamido-ethanol (EtFOSE)	1691-99-2	PFAS by ID SOP	ND	7.3	1.8	ng/L	1
N-methylperfluoro-1-octanesulfonamide (MeFOSA)	31506-32-8	PFAS by ID SOP	ND	15	3.6	ng/L	1
N-methylperfluoro-1-octanesulfonamidoacetic acid (MeFOSAA)	2355-31-9	PFAS by ID SOP	ND	7.3	1.8	ng/L	1
2-N-methylperfluoro-1-octanesulfonamido-ethanol (MeFOSE)	24448-09-7	PFAS by ID SOP	ND	7.3	1.8	ng/L	1
Perfluoro-1-butanesulfonic acid (PFBS)	375-73-5	PFAS by ID SOP	6.0	3.6	0.91	ng/L	1
Perfluoro-1-decanesulfonic acid (PFDS)	335-77-3	PFAS by ID SOP	ND	3.6	0.91	ng/L	1
Perfluoro-1-heptanesulfonic acid (PFHpS)	375-92-8	PFAS by ID SOP	ND	3.6	0.91	ng/L	1
Perfluoro-1-nonanesulfonic acid (PFNS)	68259-12-1	PFAS by ID SOP	ND	3.6	0.91	ng/L	1
Perfluoro-1-octanesulfonamide (PFOSA)	754-91-6	PFAS by ID SOP	ND	3.6	0.91	ng/L	1
Perfluoro-1-pentanesulfonic acid (PFPeS)	2706-91-4	PFAS by ID SOP	3.9	3.6	0.91	ng/L	1
Perfluorododecanesulfonic acid (PFDOS)	79780-39-5	PFAS by ID SOP	ND	7.3	1.8	ng/L	1
Perfluorohexanesulfonic acid (PFHxS)	355-46-4	PFAS by ID SOP	7.4	3.6	0.91	ng/L	1
Perfluoro-n-butanoic acid (PFBA)	375-22-4	PFAS by ID SOP	83	3.6	0.91	ng/L	1
Perfluoro-n-decanoic acid (PFDA)	335-76-2	PFAS by ID SOP	ND	3.6	0.91	ng/L	1
Perfluoro-n-dodecanoic acid (PFDoA)	307-55-1	PFAS by ID SOP	ND	3.6	0.91	ng/L	1
Perfluoro-n-heptanoic acid (PFHpA)	375-85-9	PFAS by ID SOP	ND	3.6	0.91	ng/L	1
Perfluoro-n-hexadecanoic acid (PFHxDA)	67905-19-5	PFAS by ID SOP	ND	7.3	1.8	ng/L	1
Perfluoro-n-hexanoic acid (PFHxA)	307-24-4	PFAS by ID SOP	ND	3.6	0.91	ng/L	1
Perfluoro-n-nonanoic acid (PFNA)	375-95-1	PFAS by ID SOP	ND	3.6	0.91	ng/L	1
Perfluoro-n-octadecanoic acid (PFODA)	16517-11-6	PFAS by ID SOP	ND	7.3	1.8	ng/L	1
Perfluoro-n-octanoic acid (PFOA)	335-67-1	PFAS by ID SOP	10	3.6	0.91	ng/L	1
Perfluoro-n-pentanoic acid (PFPeA)	2706-90-3	PFAS by ID SOP	ND	3.6	0.91	ng/L	1
Perfluoro-n-tetradecanoic acid (PFTeDA)	376-06-7	PFAS by ID SOP	ND	3.6	0.91	ng/L	1
Perfluoro-n-tridecanoic acid (PFTrDA)	72629-94-8	PFAS by ID SOP	ND	3.6	0.91	ng/L	1
Perfluoro-n-undecanoic acid (PFUdA)	2058-94-8	PFAS by ID SOP	ND	3.6	0.91	ng/L	1
Perfluorooctanesulfonic acid (PFOS)	1763-23-1	PFAS by ID SOP	7.7	3.6	0.91	ng/L	1
Surrogate Q %	Run 1 Accer Recovery Lir	otance mits					
13C2_4:2FTS	90 25	-150					
13C2_6:2FTS	87 25	-150					
13C2 8:2FTS	75 25	-150					

LOQ = Limit of Quantitation	B = Detected in the method blank	E = Quantitation of compound exceeded the calibration range	DL = Detection Limit
ND = Not detected at or above the DL	N = Recovery is out of criteria	P = The RPD between two GC columns exceeds 40%	J = Estimated result < LOQ and $\geq$ DL
H = Out of holding time	W = Reported on wet weight basis		

25-150

25-150

25-150

70

59

65

13C2\_PFDoA

13C2\_PFHxDA

13C2\_PFTeDA

Client: Pace Analytical Services, LLC	
Description: 192-0	
Date Sampled:10/27/2020 1300	Project Name: LACROSSE WELL #23 & 24
Date Received: 10/29/2020	Project Number: 40217323

Laboratory ID: VJ29068-001

Matrix: Aqueous

Surrogate	Run 1 A	cceptance
13C3 PFBS	69	25-150
- 13C3_PFHxS	68	25-150
13C3-HFPO-DA	87	25-150
13C4_PFBA	82	25-150
13C4_PFHpA	80	25-150
13C5_PFHxA	82	25-150
13C5_PFPeA	81	25-150
13C6_PFDA	69	25-150
13C7_PFUdA	72	25-150
13C8_PFOA	79	25-150
13C8_PFOS	61	25-150
13C8_PFOSA	82	10-150
13C9_PFNA	80	25-150
d-EtFOSA	75	10-150
d5-EtFOSAA	73	25-150
d9-EtFOSE	81	10-150
d-MeFOSA	78	10-150
d3-MeFOSAA	71	25-150
d7-MeFOSE	82	10-150

LOQ = Limit of Quantitation	B = Detected in the method blank	E = Quantitation of compound exceeded the calibration range	DL = Detection Limit
ND = Not detected at or above the DL	N = Recovery is out of criteria	P = The RPD between two GC columns exceeds 40%	J = Estimated result < LOQ and $\ge$ DL
H = Out of holding time	W = Reported on wet weight basis		

## BOTTLED WATER ACKNOWLEDGEMENT 202 FANTA REED ROAD, LA CROSSE, WI 54603

If you desire to accept the bottled water delivery, please complete and sign this form and return it to The OS Group at <u>PFAS@TheOSgrp.com</u> or mail to 444 21<sup>st</sup> St. S, La Crosse, WI 54601. You may also complete this form electronically on line at <u>www.cityoflacrosse.org/bottledwater</u>. Call 608-668-2718 with any question you may have.

As pre-caution for the protection of human health, the City of La Crosse (The City) will provide, on a temporary basis, bottled water for drinking, cooking and toothbrushing purposes at the above referenced address. The water will be delivered to your home or business by a commercial water delivery service. At the City's cost, a dispenser / cooler and regular deliveries of 5-gallon containers of water will be provided. The City reserves the right to dictate the conditions of delivery, such as minimum and maximum number of containers per delivery, frequency and timing of deliveries. The City reserves the right to periodically review whether The City should continue to provide bottled water, considering factors such as State and Federal standards and guidance, evolving knowledge and understanding of the sources, cause and responsibility for the contamination, new or reinterpreted test results, and the availability of more permanent or cost-effective sources of water for the above purposes. The City of La Crosse makes no warranty or representation regarding the suitability of the bottled water beyond those made by the commercial water delivery service.

All reusable or returnable equipment and supplies, such as the containers and cooler/dispenser, are the property of the commercial water delivery service or the City of La Crosse. By signing below, the Occupant of the above referenced property acknowledges that all reusable or returnable equipment and supplies shall be returned to the commercial water delivery service or the City of La Crosse upon request. The Occupant agrees to provide reasonable access for delivery of bottled water and pick up of reusable or returnable equipment and supplies. Occupant(s) acknowledges that they may be required to sign an agreement with the commercial water delivery service as a condition of receiving bottled water.

Signed:	Dated:

Printed Name:	

Check ownership:

\_\_\_\_\_ Owner-Occupant \_\_\_\_\_ Occupant Only

## BOTTLED WATER ACKNOWLEDGEMENT 202 FANTA REED ROAD, LA CROSSE, WI 54603

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Signed:	Dated:

Printed Name:	

Check ownership:

\_\_\_\_\_ Owner-Occupant \_\_\_\_\_ Occupant Only



444 21st Street South · La Crosse, Wisconsin · 54601

November 17, 2020

2560 1<sup>st</sup> Avenue East La Crosse, WI 54603

Subject: Private Well Sampling Results 2560 1<sup>st</sup> Avenue East, La Crosse, WI 54603 Tax Parcel # 4-193-0 Sample ID # 193-0

Dear

We have received and reviewed the test results for the sample collected on October 27, 2020 at the above address. Some PFAS compounds were found, but the levels found were **below** the Department of Health Services (DHS) levels recommended for protecting health. These levels are called the "Recommended Public Health Standard" in the table below. The levels found in *your* well are called the "Sample Result" in the table below.

#### Sample Results

Compound	Sample Result (unit)	Recommended Public Health Standard (unit <sup>e</sup> )		
N-Ethyl Perfluorooctane sulfonamide (NEtFOSA) CAS # 4151-50-2	Not Detected	20 ppt <sup>a,b</sup>	) ppt unds I 6	
N-Ethyl perfluorooctane sulfonamidoacetic acid (NEtFOSAA) CAS # 2991-50-6	Not Detected	20 ppt <sup>a,b</sup>	it is 20 ompo <i>il</i> of all	
N-Ethyl perfluorooctane sulfonamidoethanol (NEtFOSE) CAS # 1691-99-2	Not Detected	20 ppt <sup>a,b</sup>	ed lim ese 6 c ed toto	
Perfluorooctane sulfonamide (FOSA) CAS # 754-91-6	Not Detected	20 ppt <sup>a,b</sup>	mend of the ombine	
Perfluorooctanoic acid (PFOA) CAS # 335-67-1	1.8 ppt	20 ppt <sup>a,b</sup>	recom ny <i>one</i> the <i>cc</i>	
Perfluorooctanesulfonic acid (PFOS) CAS # 1763-23-1	8.2 ppt	20 ppt <sup>a,b</sup>	The for ai or	

Private Well Sampling Results for 2560 1st Avenue East, La Crosse, WI 54603 Tax Parcel # 4-193-0 Sample ID # 193-0

Sample Result (unit)	Recommended Public Health Standard (unit <sup>e</sup> )
Not Detected	300 ppt <sup>a</sup>
6.9 ppt	450,000 ppt <sup>a</sup>
9.7 ppt	40 ppt <sup>a</sup>
73 ppt	10,000 ppt <sup>a</sup>
Not Detected	300 ppt <sup>a</sup>
Not Detected	500 ppt <sup>a</sup>
Not Detected	150,000 ppt <sup>a</sup>
Not Detected	30 ppt <sup>a</sup>
Not Detected	10,000 ppt <sup>a</sup>
Not Detected	3,000 ppt <sup>a</sup>
Not Detected	3,000 ppt <sup>a</sup>
Not Detected	400,000 ppt <sup>a</sup>
4.5 ppt	None Established <sup>c</sup>
	Sample Result (unit) Not Detected 6.9 ppt 9.7 ppt 73 ppt Not Detected Not Detected Not Detected Not Detected Not Detected Not Detected Not Detected Not Detected Not Detected

<sup>a</sup> Public health enforcement standard (ES) recommended by DHS.

<sup>b</sup> DHS recommends a combined enforcement standard of 20 ng/L and combined preventive action limit of 2 ng/L for FOSA, NEt-FOSA, NetFOSAA, PFOS, and PFOA.

<sup>c</sup> A current standard is not available; the compound is currently under review by DHS for potential public health standard recommendation.

<sup>d</sup> Public health enforcement standard (ES) in NR 140, Wisconsin Administrative Code.

<sup>e</sup> Units: Parts per trillion (ppt) = nanograms of substance per liter of water (ng/L)

<sup>BL</sup> Detected in the method blank. Possible lab contaminant.

As required by law, we will be submitting these results to the Department of Natural Resources (DNR). The DNR may consult with the Department of Health Services (DHS) about these test results. DHS may review all PFAS tests and follow-up with you directly if any actions are recommended to protect your health.

Private Well Sampling Results for 2560 1st Avenue East, La Crosse, WI 54603 Tax Parcel # 4-193-0 Sample ID # 193-0

Thank you for your patience and assistance with our investigation. We will provide updates on the project at <u>https://www.cityoflacrosse.org/wells</u> as our work continues. If you have any questions, please call The OS Group at (608) 668-2718 or email them at <u>PFAS@theOSgrp.com</u>.

You can also contact the DNR and DHS with questions about PFAS or the water sample results at the numbers provided below.

<b>Questions about</b>		<u>Contact</u>	<u>Phone</u>	<u>E-mail Address</u>
Soil & Water Testing	DNR	David Rozeboom	715-215-2078	David.Rozeboom@wisconsin.gov
Health Concerns	DHS	Curtis Hedman	608-266-6677	Curtis.Hedman@dhs.wisconsin.gov

On behalf of The City of La Crosse The OS Group, LLC

Attachment: Lab report for your well

Client: Pace Analytical Services, LLC					l	Laboratory II	D: VJ29090-0	13	
Description: 193-0						Matrix	k: Aqueous		
Date Sampled:10/27/2020 1300	Project N	Jame:	LACROSSE WELL #	<sup>∉</sup> 23 & 24			1		
Date Received: 10/20/2020	Project Nu	mbor	40217210	20 0 2 1					
Date Received. 10/29/2020	Project Nu	mber.	40217319						
RunPrep MethodAnalytical Method1SOP SPEPFAS by ID S	nod Dilution SOP 1	Ana 11/0	lysis Date Analyst 7/2020 0135 KMM2	Prep 11/05/2	Date 2020 103	Batch 30 72351			
Parameter	Nur	CAS nber	Analytical Method	Result	Q	LOQ	DL	Units	Run
9-chlorohexadecafluoro-3-oxanone-1-sulfonic acid (9CI-PF	30NS) 75642	5-58-1	PFAS by ID SOP	ND	_	7.0	1.8	ng/L	1
11-chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11C	-PF3) 76305	1-92-9	PFAS by ID SOP	ND		7.0	1.8	ng/L	1
1H, 1H, 2H, 2H-perfluorodecane sulfonic acid (8:2 FTS)	3910	3-34-4	PFAS by ID SOP	ND		7.0	1.8	ng/L	1
1H, 1H, 2H, 2H-perfluorooctane sulfonic acid (6:2 FTS)	2761	9-97-2	PFAS by ID SOP	ND		7.0	1.8	ng/L	1
1H,1H,2H,2H-perfluorododecane sulfonic acid (10:2 FTS)	12022	6-60-0	PFAS by ID SOP	ND		7.0	1.8	ng/L	1
1H,1H,2H,2H-perfluorohexane sulfonic acid (4:2 FTS)	75712	4-72-4	PFAS by ID SOP	ND		7.0	1.8	ng/L	1
Hexafluoropropylene oxide dimer acid (GenX)	1325	2-13-6	PFAS by ID SOP	ND		7.0	1.8	ng/L	1
4,8-dioxa-3H-perfluorononanoic acid (ADONA)	91900	5-14-4	PFAS by ID SOP	ND		7.0	1.8	ng/L	1
N-ethylperfluoro-1-octanesulfonamide (EtFOSA)	4151	-50-2	PFAS by ID SOP	ND		7.0	1.8	ng/L	1
N-ethylperfluoro-1-octanesulfonamidoacetic acid (EtFOSA/	A) 299 <sup>2</sup>	-50-6	PFAS by ID SOP	ND		7.0	1.8	ng/L	1
2-N-ethylperfluoro-1-octanesulfonamido-ethanol (EtFOSE)	1691	-99-2	PFAS by ID SOP	ND		7.0	1.8	ng/L	1
N-methylperfluoro-1-octanesulfonamide (MeFOSA)	3150	5-32-8	PFAS by ID SOP	ND		14	3.5	ng/L	1
N-methylperfluoro-1-octanesulfonamidoacetic acid (MeFOS	AA) 2355	5-31-9	PFAS by ID SOP	ND		7.0	1.8	ng/L	1
2-N-methylperfluoro-1-octanesulfonamido-ethanol (MeFOS	E) 2444	8-09-7	PFAS by ID SOP	ND		7.0	1.8	ng/L	1
Perfluoro-1-butanesulfonic acid (PFBS)	375	5-73-5	PFAS by ID SOP	6.9		3.5	0.88	ng/L	1
Perfluoro-1-decanesulfonic acid (PFDS)	335	5-77-3	PFAS by ID SOP	ND		3.5	0.88	ng/L	1
Perfluoro-1-heptanesulfonic acid (PFHpS)	375	5-92-8	PFAS by ID SOP	ND		3.5	0.88	ng/L	1
Perfluoro-1-nonanesulfonic acid (PFNS)	6825	9-12-1	PFAS by ID SOP	ND		3.5	0.88	ng/L	1
Perfluoro-1-octanesulfonamide (PFOSA)	754	I-91-6	PFAS by ID SOP	ND		3.5	0.88	ng/L	1
Perfluoro-1-pentanesulfonic acid (PFPeS)	2706	5-91-4	PFAS by ID SOP	4.5		3.5	0.88	ng/L	1
Perfluorododecanesulfonic acid (PFDOS)	7978	0-39-5	PFAS by ID SOP	ND		7.0	1.8	ng/L	1
Perfluorohexanesulfonic acid (PFHxS)	355	5-46-4	PFAS by ID SOP	9.7		3.5	0.88	ng/L	1
Perfluoro-n-butanoic acid (PFBA)	375	5-22-4	PFAS by ID SOP	73		3.5	0.88	ng/L	1
Perfluoro-n-decanoic acid (PFDA)	335	5-76-2	PFAS by ID SOP	ND		3.5	0.88	ng/L	1
Perfluoro-n-dodecanoic acid (PFDoA)	307	7-55-1	PFAS by ID SOP	ND		3.5	0.88	ng/L	1
Perfluoro-n-heptanoic acid (PFHpA)	375	5-85-9	PFAS by ID SOP	ND		3.5	0.88	ng/L	1
Perfluoro-n-hexadecanoic acid (PFHxDA)	6790	5-19-5	PFAS by ID SOP	ND		7.0	1.8	ng/L	1
Perfluoro-n-hexanoic acid (PFHxA)	307	7-24-4	PFAS by ID SOP	ND		3.5	0.88	ng/L	1
Perfluoro-n-nonanoic acid (PFNA)	375	5-95-1	PFAS by ID SOP	ND		3.5	0.88	ng/L	1
Perfluoro-n-octadecanoic acid (PFODA)	1651	7-11-6	PFAS by ID SOP	ND		7.0	1.8	ng/L	1
Perfluoro-n-octanoic acid (PFOA)	335	5-67-1	PFAS by ID SOP	1.8	J	3.5	0.88	ng/L	1
Perfluoro-n-pentanoic acid (PFPeA)	2706	5-90-3	PFAS by ID SOP	ND		3.5	0.88	ng/L	1
Perfluoro-n-tetradecanoic acid (PFTeDA)	376	6-06-7	PFAS by ID SOP	ND		3.5	0.88	ng/L	1
Perfluoro-n-tridecanoic acid (PFTrDA)	7262	9-94-8	PFAS by ID SOP	ND		3.5	0.88	ng/L	1
Perfluoro-n-undecanoic acid (PFUdA)	2058	8-94-8	PFAS by ID SOP	ND		3.5	0.88	ng/L	1
Perfluorooctanesulfonic acid (PFOS)	1763	3-23-1	PFAS by ID SOP	8.2		3.5	0.88	ng/L	1
Surrogate Q	Run 1 % Recovery	Accep Lir	otance nits						
13C2_4:2FTS	106	25	-150						
13C2_6:2FTS	98	25	-150						
13C2_8:2FTS	98	25	-150						
13C2_PFDoA	78	25	-150						
13C2_PFHxDA	83	25	-150						
13C2_PFTeDA	79	25	-150						
LOQ = Limit of Quantitation     B = Detected in the method       ND = Not detected at or above the DL     N = Recovery is out of criter       H = Out of holding time     W = Reported on wet weight	blank E = Quar ria P = The it basis	ntitation of RPD bet	of compound exceeded the of ween two GC columns exceeded the of the other sectors and the other sectors and the other sectors are set of the other sectors and the other sectors are set of the other sectors are set of the other sectors are set of the other set of the other sectors are set of the other set of the	calibration r eds 40%	ange DL J =	<ul> <li>= Detection Lim</li> <li>= Estimated result</li> </ul>	hit It < LOQ and ≥ D	L	

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Client: Pace Analytical Services, LLC	
Description: 193-0	
Date Sampled:10/27/2020 1300	Project Name: LACROSS
Date Received: 10/29/2020	Project Number: 40217319

Matrix: Aqueous

Laboratory ID: VJ29090-013

roject Name: LACROSSE WELL #23 & 24

Surrogate	Run 1 A	
13C3 PEBS	2 70 Recovery	25-150
13C3_DEHvS	88	25,150
	00	20-100
	98	25-150
13C4_PFBA	95	25-150
13C4_PFHpA	95	25-150
13C5_PFHxA	90	25-150
13C5_PFPeA	92	25-150
13C6_PFDA	91	25-150
13C7_PFUdA	83	25-150
13C8_PFOA	90	25-150
13C8_PFOS	81	25-150
13C8_PFOSA	101	10-150
13C9_PFNA	91	25-150
d-EtFOSA	79	10-150
d5-EtFOSAA	90	25-150
d9-EtFOSE	78	10-150
d-MeFOSA	85	10-150
d3-MeFOSAA	81	25-150
d7-MeFOSE	75	10-150

H = Out of holding time	W = Reported on wet weight basis		
ND = Not detected at or above the DL	N = Recovery is out of criteria	P = The RPD between two GC columns exceeds 40%	J = Estimated result < LOQ and $\ge$ DL
LOQ = Limit of Quantitation	B = Detected in the method blank	E = Quantitation of compound exceeded the calibration range	DL = Detection Limit



444 21st Street South · La Crosse, Wisconsin · 54601

November 17, 2020

2512 1<sup>st</sup> Avenue East La Crosse, WI 54603

Subject: Private Well Sampling Results 2512 1<sup>st</sup> Avenue East, La Crosse, WI 54603 Tax Parcel # 4-205-0 Sample ID # 205-0

Dear

We have received and reviewed the test results for the sample collected on October 27, 2020 at the above address. Some PFAS compounds were found, but the levels found were **below** the Department of Health Services (DHS) levels recommended for protecting health. These levels are called the "Recommended Public Health Standard" in the table below. The levels found in *your* well are called the "Sample Result" in the table below.

#### Sample Results

Compound	Sample Result (unit)	Recommended Public Health Standard (unit <sup>e</sup> )		
N-Ethyl Perfluorooctane sulfonamide (NEtFOSA) CAS # 4151-50-2	Not Detected	20 ppt <sup>a,b</sup>	) ppt unds I 6	
N-Ethyl perfluorooctane sulfonamidoacetic acid (NEtFOSAA) CAS # 2991-50-6	Not Detected	20 ppt <sup>a,b</sup>	it is 20 ompo <i>il</i> of al	
N-Ethyl perfluorooctane sulfonamidoethanol (NEtFOSE) CAS # 1691-99-2	Not Detected	20 ppt <sup>a,b</sup>	ed lim ese 6 c ed totc	
Perfluorooctane sulfonamide (FOSA) CAS # 754-91-6	Not Detected	20 ppt <sup>a,b</sup>	mend of the ombine	
Perfluorooctanoic acid (PFOA) CAS # 335-67-1	Not Detected	20 ppt <sup>a,b</sup>	recom ny <i>one</i> the <i>cc</i>	
Perfluorooctanesulfonic acid (PFOS) CAS # 1763-23-1	4.5 ppt	20 ppt <sup>a,b</sup>	The for al or	

Private Well Sampling Results for 2512 1<sup>st</sup> Avenue East, La Crosse, WI 54603 Tax Parcel # 4-205-0 Sample ID # 205-0

Compound	Sample Result (unit)	Recommended Public Health Standard (unit <sup>e</sup> )
Hexafluoropropylene oxide dimer acid (HPFO-DA; GenX) CAS # 13252-13-6	Not Detected	300 ppt <sup>a</sup>
Perfluorobutanesulfonic acid (PFBS) CAS # 375-73-5	6.4 ppt	450,000 ppt <sup>a</sup>
Perfluorohexanesulfonic acid (PFHxS) CAS # 355-46-4	8.6 ppt	40 ppt <sup>a</sup>
Perfluorobutanoic acid (PFBA) CAS # 375-22-4	5.9 ppt	10,000 ppt <sup>a</sup>
Perfluorodecanoic acid (PFDA) CAS # 335-76-2	Not Detected	300 ppt <sup>a</sup>
Perfluorododecanoic acid (PFDoA) CAS # 307-55-1	Not Detected	500 ppt <sup>a</sup>
Perfluorohexanoic acid (PFHxA) CAS # 307-24-4	1.0 ppt	150,000 ppt <sup>a</sup>
Perfluorononanoic acid (PFNA) CAS # 375-95-1	Not Detected	30 ppt <sup>a</sup>
Perfluorotetradecanoic acid (PFTeA) CAS # 376-06-7	Not Detected	10,000 ppt <sup>a</sup>
Perfluoroundecanoic acid (PFUnA) CAS # 2058-94-8	Not Detected	3,000 ppt <sup>a</sup>
4,8-Dioxa-3H-perfluorononanoic acid (DONA) CAS # 919005-14-4	Not Detected	3,000 ppt <sup>a</sup>
Perfluorooctadecanoic acid (PFODA) CAS # 16517-11-6	Not Detected	400,000 ppt <sup>a</sup>
Perfluoro-1-pentanesulfonic acid CAS #2706-91-4	4.0 ppt	None Established <sup>c</sup>
Perfluoro-n-pentanoic acid CAS # 2706-90-3	1.0 ppt	None Established <sup>c</sup>

<sup>a</sup> Public health enforcement standard (ES) recommended by DHS.

<sup>b</sup> DHS recommends a combined enforcement standard of 20 ng/L and combined preventive action limit of 2 ng/L for FOSA, NEt-FOSE, NEt-FOSA, NetFOSAA, PFOS, and PFOA.

<sup>c</sup> A current standard is not available; the compound is currently under review by DHS for potential public health standard recommendation.

<sup>d</sup> Public health enforcement standard (ES) in NR 140, Wisconsin Administrative Code.

<sup>e</sup> Units: Parts per trillion (ppt) = nanograms of substance per liter of water (ng/L)

<sup>BL</sup> Detected in the method blank. Possible lab contaminant.

Private Well Sampling Results for 2512 1<sup>st</sup> Avenue East, La Crosse, WI 54603 Tax Parcel # 4-205-0 Sample ID # 205-0

As required by law, we will be submitting these results to the Department of Natural Resources (DNR). The DNR may consult with the Department of Health Services (DHS) about these test results. DHS may review all PFAS tests and follow-up with you directly if any actions are recommended to protect your health.

Thank you for your patience and assistance with our investigation. We will provide updates on the project at <u>https://www.cityoflacrosse.org/wells</u> as our work continues. If you have any questions, please call The OS Group at (608) 668-2718 or email them at <u>PFAS@theOSgrp.com</u>.

You can also contact the DNR and DHS with questions about PFAS or the water sample results at the numbers provided below.

<b>Questions about</b>		<u>Contact</u>	<u>Phone</u>	<u>E-mail Address</u>
Soil & Water Testing	DNR	David Rozeboom	715-215-2078	David.Rozeboom@wisconsin.gov
Health Concerns	DHS	Curtis Hedman	608-266-6677	Curtis.Hedman@dhs.wisconsin.gov

On behalf of The City of La Crosse *The OS Group, LLC* 

Attachment: Lab report for your well

	PFAS I	by LC/MS/MS					
Client: Pace Analytical Services, LLC	2512	1 <sub>st</sub> Avenue East		Laboratory	ID: VJ29090-0	07	
Description: 205-0	Tax Pa	arcel # 4-205-0		Matr	ix: Aqueous		
Date Sampled:10/27/2020 1150	Project Name:	LACROSSE WELL #	23 & 24				
Date Received: 10/29/2020 Pro	oject Number:	40217319					
Run Prep Method Analytical Method	)ilution Ana	Ivsis Date Analyst	Prep [	Date Batch			
1 SOP SPE PFAS by ID SOP	1 11/0	7/2020 0021 KMM2	11/05/20	020 1030 72351			
Parameter	CAS Number	Analytical Method	Result	Q LOQ	DL	Units	Run
9-chlorohexadecafluoro-3-oxanone-1-sulfonic acid (9CI-PF3ONS)	756426-58-1	PFAS by ID SOP	ND	7.6	1.9	ng/L	1
11-chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11CI-PF3)	763051-92-9	PFAS by ID SOP	ND	7.6	1.9	ng/L	1
1H, 1H, 2H, 2H-perfluorodecane sulfonic acid (8:2 FTS)	39108-34-4	PFAS by ID SOP	ND	7.6	1.9	ng/L	1
1H, 1H, 2H, 2H-perfluorooctane sulfonic acid (6:2 FTS)	27619-97-2	PFAS by ID SOP	ND	7.6	1.9	ng/L	1
1H,1H,2H,2H-perfluorododecane sulfonic acid (10:2 FTS)	120226-60-0	PFAS by ID SOP	ND	7.6	1.9	ng/L	1
1H,1H,2H,2H-perfluorohexane sulfonic acid (4:2 FTS)	757124-72-4	PFAS by ID SOP	ND	7.6	1.9	ng/L	1
Hexafluoropropylene oxide dimer acid (GenX)	13252-13-6	PFAS by ID SOP	ND	7.6	1.9	ng/L	1
4,8-dioxa-3H-perfluorononanoic acid (ADONA)	919005-14-4	PFAS by ID SOP	ND	7.6	1.9	ng/L	1
N-ethylperfluoro-1-octanesulfonamide (EtFOSA)	4151-50-2	PFAS by ID SOP	ND	7.6	1.9	ng/L	1
N-ethylperfluoro-1-octanesulfonamidoacetic acid (EtFOSAA)	2991-50-6	PFAS by ID SOP	ND	7.6	1.9	ng/L	1
2-N-ethylperfluoro-1-octanesulfonamido-ethanol (EtFOSE)	1691-99-2	PFAS by ID SOP	ND	7.6	1.9	ng/L	1
N-methylperfluoro-1-octanesulfonamide (MeFOSA)	31506-32-8	PFAS by ID SOP	ND	15	3.8	ng/L	1
N-methylperfluoro-1-octanesulfonamidoacetic acid (MeFOSAA)	2355-31-9	PFAS by ID SOP	ND	7.6	1.9	ng/L	1
2-N-methylperfluoro-1-octanesulfonamido-ethanol (MeFOSE)	24448-09-7	PFAS by ID SOP	ND	7.6	1.9	ng/L	1
Perfluoro-1-butanesulfonic acid (PFBS)	375-73-5	PFAS by ID SOP	6.4	3.8	0.95	ng/L	1
Perfluoro-1-decanesulfonic acid (PFDS)	335-77-3	PFAS by ID SOP	ND	3.8	0.95	ng/L	1
Perfluoro-1-heptanesulfonic acid (PFHpS)	375-92-8	PFAS by ID SOP	ND	3.8	0.95	ng/L	1
Perfluoro-1-nonanesulfonic acid (PFNS)	68259-12-1	PFAS by ID SOP	ND	3.8	0.95	ng/L	1
Perfluoro-1-octanesulfonamide (PFOSA)	754-91-6	PFAS by ID SOP	ND	3.8	0.95	ng/L	1
Perfluoro-1-pentanesulfonic acid (PFPeS)	2706-91-4	PFAS by ID SOP	4.0	3.8	0.95	ng/L	1
Perfluorododecanesulfonic acid (PFDOS)	79780-39-5	PFAS by ID SOP	ND	7.6	1.9	ng/L	1
Perfluorohexanesulfonic acid (PFHxS)	355-46-4	PFAS by ID SOP	8.6	3.8	0.95	ng/L	1
Perfluoro-n-butanoic acid (PFBA)	375-22-4	PFAS by ID SOP	5.9	3.8	0.95	ng/L	1
Perfluoro-n-decanoic acid (PFDA)	335-76-2	PFAS by ID SOP	ND	3.8	0.95	ng/L	1
Perfluoro-n-dodecanoic acid (PFDoA)	307-55-1	PFAS by ID SOP	ND	3.8	0.95	ng/L	1
Perfluoro-n-heptanoic acid (PFHpA)	375-85-9	PFAS by ID SOP	ND	3.8	0.95	ng/L	1
Perfluoro-n-hexadecanoic acid (PFHxDA)	67905-19-5	PFAS by ID SOP	ND	7.6	1.9	ng/L	1
Perfluoro-n-hexanoic acid (PFHxA)	307-24-4	PFAS by ID SOP	1.0	J 3.8	0.95	ng/L	1
Perfluoro-n-nonanoic acid (PFNA)	375-95-1	PFAS by ID SOP	ND	3.8	0.95	ng/L	1
Perfluoro-n-octadecanoic acid (PFODA)	16517-11-6	PFAS by ID SOP	ND	7.6	1.9	ng/L	1
Perfluoro-n-octanoic acid (PFOA)	335-67-1	PFAS by ID SOP	ND	3.8	0.95	ng/L	1
Perfluoro-n-pentanoic acid (PFPeA)	2706-90-3	PFAS by ID SOP	1.0	J 3.8	0.95	ng/L	1
Perfluoro-n-tetradecanoic acid (PFTeDA)	376-06-7	PFAS by ID SOP	ND	3.8	0.95	ng/L	1
Perfluoro-n-tridecanoic acid (PFTrDA)	72629-94-8	PFAS by ID SOP	ND	3.8	0.95	ng/L	1
Perfluoro-n-undecanoic acid (PFUdA)	2058-94-8	PFAS by ID SOP	ND	3.8	0.95	ng/L	1
Perfluorooctanesulfonic acid (PFOS)	1763-23-1	PFAS by ID SOP	4.5	3.8	0.95	ng/L	1
R Surrogate O % Po	un 1 Accep	otance					
	94 25	.150					
13C2_4.2FTS	99 25	-150					
13C2 8·2FTS	89 25	-150					
13C2_PEDoA	85 25	-150					
13C2_PEHxDA	91 25	-150					
	20 84 DE	-150					
	57 20						
LOQ = Limit of Quantitation B = Detected in the method blank	E = Quantitation of	of compound exceeded the o	calibration ra	nge DL = Detection L	imit		
ND = Not detected at or above the DL N = Recovery is out of criteria	P = The RPD bet	ween two GC columns exce	eds 40%	J = Estimated res	sult < LOQ and $\geq$ D	L	
H = Out of holding time W = Reported on wet weight basis							

Client: Pace Analytical Services, LLC	
Description: 205-0	
Date Sampled:10/27/2020 1150	Project Name: LACROSS
Date Received: 10/29/2020	Project Number: 40217319

Laboratory ID: VJ29090-007

Matrix: Aqueous

me: LACROSSE WELL #23 & 24

	Run 1 A	cceptance
Surrogate	Q % Recovery	Limits
13C3_PFBS	84	25-150
13C3_PFHxS	88	25-150
13C3-HFPO-DA	97	25-150
13C4_PFBA	97	25-150
13C4_PFHpA	96	25-150
13C5_PFHxA	89	25-150
13C5_PFPeA	94	25-150
13C6_PFDA	90	25-150
13C7_PFUdA	80	25-150
13C8_PFOA	92	25-150
13C8_PFOS	83	25-150
13C8_PFOSA	95	10-150
13C9_PFNA	91	25-150
d-EtFOSA	73	10-150
d5-EtFOSAA	88	25-150
d9-EtFOSE	79	10-150
d-MeFOSA	89	10-150
d3-MeFOSAA	85	25-150
d7-MeFOSE	81	10-150

H = Out of holding time	W = Reported on wet weight basis		
ND = Not detected at or above the DL	N = Recovery is out of criteria	P = The RPD between two GC columns exceeds 40%	J = Estimated result < LOQ and $\geq$ DL
LOQ = Limit of Quantitation	B = Detected in the method blank	E = Quantitation of compound exceeded the calibration range	DL = Detection Limit



444 21st Street South · La Crosse, Wisconsin · 54601

November 17, 2020

2504 1<sup>st</sup> Avenue East La Crosse, WI 54603

Subject: Private Well Sampling Results 2504 1<sup>st</sup> Avenue East, La Crosse, WI 54603 Tax Parcel # 4-207-0 Sample ID # 207-0

:

Dear

We have received and reviewed the test results for the sample collected on October 27, 2020 at the above address. Some PFAS compounds were found, but the levels found were **below** the Department of Health Services (DHS) levels recommended for protecting health. These levels are called the "Recommended Public Health Standard" in the table below. The levels found in *your* well are called the "Sample Result" in the table below.

### Sample Results

Compound	Sample Result (unit)	Recommended Public Health Standard (unit <sup>e</sup> )		
N-Ethyl Perfluorooctane sulfonamide (NEtFOSA) CAS # 4151-50-2	Not Detected	20 ppt <sup>a,b</sup>	) ppt unds I 6	
N-Ethyl perfluorooctane sulfonamidoacetic acid (NEtFOSAA) CAS # 2991-50-6	Not Detected	20 ppt <sup>a,b</sup>	it is 20 ompo // of all	
N-Ethyl perfluorooctane sulfonamidoethanol (NEtFOSE) CAS # 1691-99-2	Not Detected	20 ppt <sup>a,b</sup>	ed lim ese 6 c ed toto	
Perfluorooctane sulfonamide (FOSA) CAS # 754-91-6	2.2 ppt	20 ppt <sup>a,b</sup>	mend of the mbine	
Perfluorooctanoic acid (PFOA) CAS # 335-67-1	2.6 ppt	20 ppt <sup>a,b</sup>	recom ny <i>one</i> the <i>cc</i>	
Perfluorooctanesulfonic acid (PFOS) CAS # 1763-23-1	5.1 ppt	20 ppt <sup>a,b</sup>	The for ai or	

Private Well Sampling Results for 2504 1<sup>st</sup> Avenue East, La Crosse, WI 54603 Tax Parcel # 4-207-0 Sample ID # 207-0

Compound	Sample Result (unit)	Recommended Public Health Standard (unit <sup>e</sup> )
Hexafluoropropylene oxide dimer acid (HPFO-DA; GenX) CAS # 13252-13-6	Not Detected	300 ppt <sup>a</sup>
Perfluorobutanesulfonic acid (PFBS) CAS # 375-73-5	4.5 ppt	450,000 ppt <sup>a</sup>
Perfluorohexanesulfonic acid (PFHxS) CAS # 355-46-4	6.8 ppt	40 ppt <sup>a</sup>
Perfluorobutanoic acid (PFBA) CAS # 375-22-4	9.7 ppt	10,000 ppt <sup>a</sup>
Perfluorodecanoic acid (PFDA) CAS # 335-76-2	Not Detected	300 ppt <sup>a</sup>
Perfluorododecanoic acid (PFDoA) CAS # 307-55-1	Not Detected	500 ppt <sup>a</sup>
Perfluorohexanoic acid (PFHxA) CAS # 307-24-4	Not Detected	150,000 ppt <sup>a</sup>
Perfluorononanoic acid (PFNA) CAS # 375-95-1	Not Detected	30 ppt <sup>a</sup>
Perfluorotetradecanoic acid (PFTeA) CAS # 376-06-7	Not Detected	10,000 ppt <sup>a</sup>
Perfluoroundecanoic acid (PFUnA) CAS # 2058-94-8	Not Detected	3,000 ppt <sup>a</sup>
4,8-Dioxa-3H-perfluorononanoic acid (DONA) CAS # 919005-14-4	Not Detected	3,000 ppt <sup>a</sup>
Perfluorooctadecanoic acid (PFODA) CAS # 16517-11-6	Not Detected	400,000 ppt <sup>a</sup>
Perfluoro-1-pentanesulfonic acid CAS # 2706-91-4	2.3 ppt	None Established <sup>c</sup>
<sup>a</sup> Public health enforcement standard (ES) recommended by DHS		

<sup>a</sup> Public health enforcement standard (ES) recommended by DHS.

<sup>b</sup> DHS recommends a combined enforcement standard of 20 ng/L and combined preventive action limit of 2 ng/L for FOSA, NEt-FOSA, NetFOSAA, PFOS, and PFOA.

<sup>c</sup> A current standard is not available; the compound is currently under review by DHS for potential public health standard recommendation.

<sup>d</sup> Public health enforcement standard (ES) in NR 140, Wisconsin Administrative Code.

<sup>e</sup> Units: Parts per trillion (ppt) = nanograms of substance per liter of water (ng/L)

<sup>BL</sup> Detected in the method blank. Possible lab contaminant.

As required by law, we will be submitting these results to the Department of Natural Resources (DNR). The DNR may consult with the Department of Health Services (DHS) about these test results. DHS may review all PFAS tests and follow-up with you directly if any actions are recommended to protect your health.

Private Well Sampling Results for 2504 1<sup>st</sup> Avenue East, La Crosse, WI 54603 Tax Parcel # 4-207-0 Sample ID # 207-0

Thank you for your patience and assistance with our investigation. We will provide updates on the project at <u>https://www.cityoflacrosse.org/wells</u> as our work continues. If you have any questions, please call The OS Group at (608) 668-2718 or email them at <u>PFAS@theOSgrp.com</u>.

You can also contact the DNR and DHS with questions about PFAS or the water sample results at the numbers provided below.

<b>Questions about</b>		<u>Contact</u>	<b>Phone</b>	<u>E-mail Address</u>
Soil & Water Testing	DNR	David Rozeboom	715-215-2078	David.Rozeboom@wisconsin.gov
Health Concerns	DHS	Curtis Hedman	608-266-6677	Curtis.Hedman@dhs.wisconsin.gov

On behalf of The City of La Crosse *The OS Group, LLC* 

Attachment: Lab report for your well

Client: Pace Analytical Services, LLC				I	_aboratory II	D: VJ29090-0	04	
Description: 207-0					Matri	x: Aqueous		
Date Sampled:10/27/2020 1130	Project Nam	e: LACROSSE WELL #	<sup>£</sup> 23 & 24					
Date Received: 10/29/2020	piect Numbe	er: 40217319						
				<b>.</b> .				
RunPrep MethodAnalytical MethodD1SOP SPEPFAS by ID SOP	1 11	nalysis Date Analyst /06/2020 2349 KMM2	Prep 11/05/2	Date 2020 103	Batch 30 72351			
Parameter	CA: Numbe	S Analytical er Method	Result	Q	LOQ	DL	Units	Run
9-chlorohexadecafluoro-3-oxanone-1-sulfonic acid (9CI-PF3ONS)	756426-58	-1 PFAS by ID SOP	ND		7.0	1.8	ng/L	1
11-chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11CI-PF3)	763051-92	-9 PFAS by ID SOP	ND		7.0	1.8	ng/L	1
1H, 1H, 2H, 2H-perfluorodecane sulfonic acid (8:2 FTS)	39108-34	-4 PFAS by ID SOP	ND		7.0	1.8	ng/L	1
1H, 1H, 2H, 2H-perfluorooctane sulfonic acid (6:2 FTS)	27619-97	-2 PFAS by ID SOP	ND		7.0	1.8	ng/L	1
1H,1H,2H,2H-perfluorododecane sulfonic acid (10:2 FTS)	120226-60	-0 PFAS by ID SOP	ND		7.0	1.8	ng/L	1
1H,1H,2H,2H-perfluorohexane sulfonic acid (4:2 FTS)	757124-72	-4 PFAS by ID SOP	ND		7.0	1.8	ng/L	1
Hexafluoropropylene oxide dimer acid (GenX)	13252-13	-6 PFAS by ID SOP	ND		7.0	1.8	ng/L	1
4,8-dioxa-3H-perfluorononanoic acid (ADONA)	919005-14	-4 PFAS by ID SOP	ND		7.0	1.8	ng/L	1
N-ethylperfluoro-1-octanesulfonamide (EtFOSA)	4151-50-	2 PFAS by ID SOP	ND		7.0	1.8	ng/L	1
N-ethylperfluoro-1-octanesulfonamidoacetic acid (EtFOSAA)	2991-50-	-6 PFAS by ID SOP	ND		7.0	1.8	ng/L	1
2-N-ethylperfluoro-1-octanesulfonamido-ethanol (EtFOSE)	1691-99-	2 PFAS by ID SOP	ND		7.0	1.8	ng/L	1
N-methylperfluoro-1-octanesulfonamide (MeFOSA)	31506-32	-8 PFAS by ID SOP	ND		14	3.5	ng/L	1
N-methylperfluoro-1-octanesulfonamidoacetic acid (MeFOSAA)	2355-31-	-9 PFAS by ID SOP	ND		7.0	1.8	ng/L	1
2-N-methylperfluoro-1-octanesulfonamido-ethanol (MeFOSE)	24448-09	-7 PFAS by ID SOP	ND		7.0	1.8	ng/L	1
Perfluoro-1-butanesulfonic acid (PFBS)	375-73-	5 PFAS by ID SOP	4.5		3.5	0.88	ng/L	1
Perfluoro-1-decanesulfonic acid (PFDS)	335-77-	-3 PFAS by ID SOP	ND		3.5	0.88	ng/L	1
Perfluoro-1-heptanesulfonic acid (PFHpS)	375-92-	-8 PFAS by ID SOP	ND		3.5	0.88	ng/L	1
Perfluoro-1-nonanesulfonic acid (PFNS)	68259-12	-1 PFAS by ID SOP	ND		3.5	0.88	ng/L	1
Perfluoro-1-octanesulfonamide (PFOSA)	754-91-	6 PFAS by ID SOP	2.2	J	3.5	0.88	ng/L	1
Perfluoro-1-pentanesulfonic acid (PFPeS)	2706-91-	4 PFAS by ID SOP	2.3	J	3.5	0.88	ng/L	1
Perfluorododecanesulfonic acid (PFDOS)	79780-39	-5 PFAS by ID SOP	ND		7.0	1.8	ng/L	1
Perfluorohexanesulfonic acid (PFHxS)	355-46-	4 PFAS by ID SOP	6.8		3.5	0.88	ng/L	1
Perfluoro-n-butanoic acid (PFBA)	375-22-	4 PFAS by ID SOP	9.7		3.5	0.88	ng/L	1
Perfluoro-n-decanoic acid (PFDA)	335-76-	2 PFAS by ID SOP	ND		3.5	0.88	ng/L	1
Perfluoro-n-dodecanoic acid (PFDoA)	307-55-	1 PFAS by ID SOP	ND		3.5	0.88	ng/L	1
Perfluoro-n-heptanoic acid (PFHpA)	375-85-	-9 PFAS by ID SOP	ND		3.5	0.88	ng/L	1
Perfluoro-n-hexadecanoic acid (PFHxDA)	67905-19	-5 PFAS by ID SOP	ND		7.0	1.8	ng/L	1
Perfluoro-n-hexanoic acid (PFHxA)	307-24-	4 PFAS by ID SOP	ND		3.5	0.88	ng/L	1
Perfluoro-n-nonanoic acid (PFNA)	375-95-	1 PFAS by ID SOP	ND		3.5	0.88	ng/L	1
Perfluoro-n-octadecanoic acid (PFODA)	16517-11	-6 PFAS by ID SOP	ND		7.0	1.8	ng/L	1
Perfluoro-n-octanoic acid (PFOA)	335-67-	1 PFAS by ID SOP	2.6	J	3.5	0.88	ng/L	1
Perfluoro-n-pentanoic acid (PFPeA)	2706-90-	-3 PFAS by ID SOP	ND		3.5	0.88	ng/L	1
Perfluoro-n-tetradecanoic acid (PFTeDA)	376-06-	-7 PFAS by ID SOP	ND		3.5	0.88	ng/L	1
Perfluoro-n-tridecanoic acid (PFTrDA)	72629-94	-8 PFAS by ID SOP	ND		3.5	0.88	ng/L	1
Perfluoro-n-undecanoic acid (PFUdA)	2058-94-	-8 PFAS by ID SOP	ND		3.5	0.88	ng/L	1
Perfluorooctanesulfonic acid (PFOS)	1763-23-	1 PFAS by ID SOP	5.1		3.5	0.88	ng/L	1
Ru Surrogate Q % Re	un 1 Acc covery	ceptance Limits						
13C2_4:2FTS	94	25-150						
13C2_6:2FTS	95	25-150						
13C2_8:2FTS	90	25-150						
13C2_PFDoA	77	25-150						
13C2_PFHxDA	80	25-150						
13C2_PFTeDA	73	25-150						
LOQ = Limit of Quantilation B = Detected in the method blank ND = Not detected at or above the DL N = Recovery is out of criteria	E = Quantitati	on of compound exceeded the of	calibration ra	ange DL ı	= Detection Lin	hit It < I OO and > D	1	
H = Out of holding time W = Reported on wet weight basis	me tri D			J -				

Client: Pace Analytical Services, LLC	
Description: 207-0	
Date Sampled:10/27/2020 1130	Project Name: LACROSS
Date Received: 10/29/2020	Project Number: 40217319

Laboratory ID: VJ29090-004

Matrix: Aqueous

Name: LACROSSE WELL #23 & 24

Surrogate	Run 1 A	Acceptance
	78	25-150
13C3_PFHxS	78	25-150
13C3-HFPO-DA	92	25-150
13C4_PFBA	90	25-150
13C4_PFHpA	86	25-150
13C5_PFHxA	81	25-150
13C5_PFPeA	88	25-150
13C6_PFDA	89	25-150
13C7_PFUdA	83	25-150
13C8_PFOA	85	25-150
13C8_PFOS	70	25-150
13C8_PFOSA	89	10-150
13C9_PFNA	86	25-150
d-EtFOSA	65	10-150
d5-EtFOSAA	85	25-150
d9-EtFOSE	70	10-150
d-MeFOSA	68	10-150
d3-MeFOSAA	81	25-150
d7-MeFOSE	71	10-150

LOQ = Limit of Quantitation B = Detected in the method blank E = Quantitation of compound exceeded the calibration range DL = Detection Limit ND = Not detected at or above the DL N = Recovery is out of criteria P = The RPD between two GC columns exceeds 40% J = Estimated result < LOQ and  $\ge$  DL H = Out of holding time W = Reported on wet weight basis



444 21st Street South · La Crosse, Wisconsin · 54601

November 18, 2020



2537 2<sup>nd</sup> Avenue East La Crosse, WI 54603

Subject: Private Well Sampling Results 2537 2<sup>nd</sup> Avenue East, La Crosse, WI 54603 Tax Parcel # 4-221-0 Sample ID # 221-0

Dear

We have received and reviewed the test results for the sample collected on October 27, 2020 at the above address. Some PFAS compounds were found, but the levels found were **below** the Department of Health Services (DHS) levels recommended for protecting health. These levels are called the "Recommended Public Health Standard" in the table below. The levels found in *your* well are called the "Sample Result" in the table below.

### Sample Results

Compound	Sample Result (unit)	Recommended Public Health Standard (unit <sup>e</sup> )		
N-Ethyl Perfluorooctane sulfonamide (NEtFOSA) CAS # 4151-50-2	Not Detected	20 ppt <sup>a,b</sup>	) ppt unds I 6	
N-Ethyl perfluorooctane sulfonamidoacetic acid (NEtFOSAA) CAS # 2991-50-6	Not Detected	20 ppt <sup>a,b</sup>	it is 20 ompo <i>il</i> of all	
N-Ethyl perfluorooctane sulfonamidoethanol (NEtFOSE) CAS # 1691-99-2	Not Detected	20 ppt <sup>a,b</sup>	ed lim ese 6 c ed toto	
Perfluorooctane sulfonamide (FOSA) CAS # 754-91-6	Not Detected	20 ppt <sup>a,b</sup>	mend of the mbine	
Perfluorooctanoic acid (PFOA) CAS # 335-67-1	Not Detected	20 ppt <sup>a,b</sup>	recom ny <i>one</i> the <i>cc</i>	
Perfluorooctanesulfonic acid (PFOS) CAS # 1763-23-1	5.0 ppt	20 ppt <sup>a,b</sup>	The for al or	

Private Well Sampling Results for 2537 2<sup>nd</sup> Avenue East, La Crosse, WI 54603 Tax Parcel # 4-221-0 Sample ID # 221-0 November 18, 2020

Compound	Sample Result (unit)	Recommended Public Health Standard (unit <sup>e</sup> )
Hexafluoropropylene oxide dimer acid (HPFO-DA; GenX) CAS # 13252-13-6	Not Detected	300 ppt <sup>a</sup>
Perfluorobutanesulfonic acid (PFBS) CAS # 375-73-5	7.7 ppt	450,000 ppt <sup>a</sup>
Perfluorohexanesulfonic acid (PFHxS) CAS # 355-46-4	36 ppt	40 ppt <sup>a</sup>
Perfluorobutanoic acid (PFBA) CAS # 375-22-4	13 ppt	10,000 ppt <sup>a</sup>
Perfluorodecanoic acid (PFDA) CAS # 335-76-2	Not Detected	300 ppt <sup>a</sup>
Perfluorododecanoic acid (PFDoA) CAS # 307-55-1	Not Detected	500 ppt <sup>a</sup>
Perfluorohexanoic acid (PFHxA) CAS # 307-24-4	2.2 ppt	150,000 ppt <sup>a</sup>
Perfluorononanoic acid (PFNA) CAS # 375-95-1	Not Detected	30 ppt <sup>a</sup>
Perfluorotetradecanoic acid (PFTeA) CAS # 376-06-7	Not Detected	10,000 ppt <sup>a</sup>
Perfluoroundecanoic acid (PFUnA) CAS # 2058-94-8	Not Detected	3,000 ppt <sup>a</sup>
4,8-Dioxa-3H-perfluorononanoic acid (DONA) CAS # 919005-14-4	Not Detected	3,000 ppt <sup>a</sup>
Perfluorooctadecanoic acid (PFODA) CAS # 16517-11-6	Not Detected	400,000 ppt <sup>a</sup>
1H, 1H, 2H, 2H-perflurooctane sulfonic acid CAS # 27619-97-2	5.7 ppt <sup>BL</sup>	None Established <sup>c</sup>
Perfluoro-1-pentanesulfonic acid CAS # 2706-91-4	6.2 ppt	None Established <sup>c</sup>
Perfluoro-n-pentanoic acid CAS # 2706-90-3	1.9 ppt	None Established <sup>c</sup>

<sup>a</sup> Public health enforcement standard (ES) recommended by DHS.

<sup>b</sup> DHS recommends a combined enforcement standard of 20 ng/L and combined preventive action limit of 2 ng/L for FOSA, NEt-FOSA, NetFOSAA, PFOS, and PFOA.

<sup>c</sup> A current standard is not available; the compound is currently under review by DHS for potential public health standard recommendation.

<sup>d</sup> Public health enforcement standard (ES) in NR 140, Wisconsin Administrative Code.

<sup>e</sup> Units: Parts per trillion (ppt) = nanograms of substance per liter of water (ng/L)

<sup>BL</sup> Detected in the method blank. Possible lab contaminant.

Private Well Sampling Results for 2537 2<sup>nd</sup> Avenue East, La Crosse, WI 54603 Tax Parcel # 4-221-0 Sample ID # 221-0 November 18, 2020

As required by law, we will be submitting these results to the Department of Natural Resources (DNR). The DNR may consult with the Department of Health Services (DHS) about these test results. DHS may review all PFAS tests and follow-up with you directly if any actions are recommended to protect your health.

Thank you for your patience and assistance with our investigation. We will provide updates on the project at <u>https://www.cityoflacrosse.org/wells</u> as our work continues. If you have any questions, please call The OS Group at (608) 668-2718 or email them at <u>PFAS@theOSgrp.com</u>.

You can also contact the DNR and DHS with questions about PFAS, drinking water or the water sample results at the numbers provided below.

Questions about		<u>Contact</u>	<u>Phone</u>	E-mail Address	
Soil & Groundwater Testing, Clean Up	DNR	David Rozeboom	715-215-2078	David.Rozeboom@wisconsin.gov	
Drinking Water or Private wells	DNR	Kyle Burton	920-360-2112	kyle.burton@wisconsin.gov	
Health Concerns	DHS	Curtis Hedman	608-266-6677	Curtis.Hedman@dhs.wisconsin.gov	

On behalf of The City of La Crosse *The OS Group, LLC* 

Attachment: Lab report for your well

Client: Pace Analytical Services, LLC						Laboratory II	D: VJ29068-0	09	
Description: 221-0						Matrix	k: Aqueous		
Date Sampled:10/27/2020 1425	Project Na	me:	LACROSSE WELL #	23 & 24					
Date Received: 10/29/2020	niect Num	her	40217323						
		DCI.	10217323		_				
RunPrep MethodAnalytical MethodD2SOP SPEPFAS by ID SOP	0ilution 1	Ana 11/11	lysis Date Analyst I/2020 2050 MMM	Prep 11/10/2	Date 2020 16	Batch 523 72960			
Parameter	C Numl	AS ber	Analytical Method	Result	Q	LOQ	DL	Units	Run
9-chlorohexadecafluoro-3-oxanone-1-sulfonic acid (9CI-PF3ONS)	756426-5	58-1	PFAS by ID SOP	ND		7.2	1.8	ng/L	2
11-chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11CI-PF3)	763051-9	92-9	PFAS by ID SOP	ND		7.2	1.8	ng/L	2
1H, 1H, 2H, 2H-perfluorodecane sulfonic acid (8:2 FTS)	39108-3	34-4	PFAS by ID SOP	ND		7.2	1.8	ng/L	2
1H, 1H, 2H, 2H-perfluorooctane sulfonic acid (6:2 FTS)	27619-9	97-2	PFAS by ID SOP	5.7	BJ	7.2	1.8	ng/L	2
1H,1H,2H,2H-perfluorododecane sulfonic acid (10:2 FTS)	120226-6	60-0	PFAS by ID SOP	ND		7.2	1.8	ng/L	2
1H,1H,2H,2H-perfluorohexane sulfonic acid (4:2 FTS)	757124-7	72-4	PFAS by ID SOP	ND		7.2	1.8	ng/L	2
Hexafluoropropylene oxide dimer acid (GenX)	13252-7	13-6	PFAS by ID SOP	ND		7.2	1.8	ng/L	2
4,8-dioxa-3H-perfluorononanoic acid (ADONA)	919005-1	4-4	PFAS by ID SOP	ND		7.2	1.8	ng/L	2
N-ethylperfluoro-1-octanesulfonamide (EtFOSA)	4151-5	0-2	PFAS by ID SOP	ND		7.2	1.8	ng/L	2
N-ethylperfluoro-1-octanesulfonamidoacetic acid (EtFOSAA)	2991-5	0-6	PFAS by ID SOP	ND		7.2	1.8	ng/L	2
2-N-ethylperfluoro-1-octanesulfonamido-ethanol (EtFOSE)	1691-9	9-2	PFAS by ID SOP	ND		7.2	1.8	ng/L	2
N-methylperfluoro-1-octanesulfonamide (MeFOSA)	31506-3	32-8	PFAS by ID SOP	ND		14	3.6	ng/L	2
N-methylperfluoro-1-octanesulfonamidoacetic acid (MeFOSAA)	2355-3	1-9	PFAS by ID SOP	ND		7.2	1.8	ng/L	2
2-N-methylperfluoro-1-octanesulfonamido-ethanol (MeFOSE)	24448-0	)9-7	PFAS by ID SOP	ND		7.2	1.8	ng/L	2
Perfluoro-1-butanesulfonic acid (PFBS)	375-7	3-5	PFAS by ID SOP	7.7		3.6	0.90	ng/L	2
Perfluoro-1-decanesulfonic acid (PFDS)	335-7	7-3	PFAS by ID SOP	ND		3.6	0.90	ng/L	2
Perfluoro-1-heptanesulfonic acid (PFHpS)	375-9	2-8	PFAS by ID SOP	ND		3.6	0.90	ng/L	2
Perfluoro-1-nonanesulfonic acid (PFNS)	68259-1	2-1	PFAS by ID SOP	ND		3.6	0.90	ng/L	2
Perfluoro-1-octanesulfonamide (PFOSA)	754-9	1-6	PFAS by ID SOP	ND		3.6	0.90	ng/L	2
Perfluoro-1-pentanesulfonic acid (PFPeS)	2706-9	1-4	PFAS by ID SOP	6.2		3.6	0.90	ng/L	2
Perfluorododecanesulfonic acid (PFDOS)	79780-3	39-5	PFAS by ID SOP	ND		7.2	1.8	ng/L	2
Perfluorohexanesulfonic acid (PFHxS)	355-4	6-4	PFAS by ID SOP	36		3.6	0.90	ng/L	2
Perfluoro-n-butanoic acid (PFBA)	375-2	2-4	PFAS by ID SOP	13		3.6	0.90	ng/L	2
Perfluoro-n-decanoic acid (PFDA)	335-7	6-2	PFAS by ID SOP	ND		3.6	0.90	ng/L	2
Perfluoro-n-dodecanoic acid (PFDoA)	307-5	5-1	PFAS by ID SOP	ND		3.6	0.90	ng/L	2
Perfluoro-n-heptanoic acid (PFHpA)	375-8	15-9	PFAS by ID SOP	ND		3.6	0.90	ng/L	2
Perfluoro-n-hexadecanoic acid (PFHxDA)	6/905-	19-5	PFAS by ID SOP	ND		7.2	1.8	ng/L	2
Perfluoro-n-hexanoic acid (PFHxA)	307-2	4-4	PFAS by ID SOP	2.2	J	3.6	0.90	ng/L	2
Perfluoro-n-nonanoic acid (PFNA)	375-9	15-1 14 (	PFAS by ID SOP	ND		3.6	0.90	ng/L	2
Perfluoro-n-octadecanoic acid (PFODA)	16517-	11-0	PEAS by ID SOP			1.2	1.8	ng/L	2
Perfluoro a postanoic acid (PEDA)	2704 0	0.0.2	PFAS by ID SOP	1.0	1	3.0	0.90	ng/L	2
Perfluero e tetradecaneio acid (PETADA)	2700-5	10-3 14 7	PFAS by ID SOP	1.9 ND	J	3.0	0.90	ng/L	2
Perfluoro n tridecanoic acid (PETrDA)	370-0	0-7	PFAS by ID SOP			3.0	0.90	ng/L	2
Perfluere pupdeceppic acid (PELIdA)	2029-	74-0	PFAS by ID SOP			3.0	0.90	ng/L	2
Perfluoroactanosulfonic acid (PFOGA)	1762 2	4-0 2 1	PFAS by ID SOP	5.0		2.6	0.90	ng/L	2
Periodi doctanesui onic acid (PPOS)	1703-2	3-1	PFAS Dy ID SOP	5.0		3.0	0.90	Hg/L	2
Surrogate Q % Re	un 2 A covery	ccep Lin	otance nits						
13C2_4:2FTS	100	25	150						
13C2_6:2F1S	105	25-	150						
13C2_8:2F1S	101	25-	150						
	92	25-	150						
	8/	25	150						
I3UZ_PETEDA	41	25	-150						
LOQ = Limit of QuantitationB = Detected in the method blankND = Not detected at or above the DLN = Recovery is out of criteriaH = Out of holding timeW = Reported on wet weight basis	E = Quantit P = The RP	ation c	of compound exceeded the c ween two GC columns excee	calibration r eds 40%	ange D J	<ul><li>DL = Detection Lim</li><li>= Estimated resu</li></ul>	nit It < LOQ and ≥ D	L	

Laboratory ID: VJ29068-009 Matrix: Aqueous

Client: Pace Analytical Services, LLC	
Description: 221-0	
Date Sampled:10/27/2020 1425	Project Name: LACROSSE WELL #23 & 24
Date Received: 10/29/2020	Project Number: 40217323

		acantanaa
Surrogate	Q % Recovery	Limits
13C3_PFBS	95	25-150
13C3_PFHxS	99	25-150
13C3-HFPO-DA	87	25-150
13C4_PFBA	105	25-150
13C4_PFHpA	100	25-150
13C5_PFHxA	91	25-150
13C5_PFPeA	99	25-150
13C6_PFDA	101	25-150
13C7_PFUdA	97	25-150
13C8_PFOA	102	25-150
13C8_PFOS	87	25-150
13C8_PFOSA	93	10-150
13C9_PFNA	96	25-150
d-EtFOSA	76	10-150
d5-EtFOSAA	95	25-150
d9-EtFOSE	88	10-150
d-MeFOSA	87	10-150
d3-MeFOSAA	85	25-150
d7-MeFOSE	84	10-150

LOQ = Limit of QuantitationB = Detected in the method blankE = Quantitation of compound exceeded the calibration rangeDL = Detection LimitND = Not detected at or above the DLN = Recovery is out of criteriaP = The RPD between two GC columns exceeds 40%J = Estimated result < LOQ and ≥ DL</td>H = Out of holding timeW = Reported on wet weight basis


444 21st Street South · La Crosse, Wisconsin · 54601

November 18, 2020

2524 Bainbridge Street La Crosse, WI 54603

Subject: Private Well Sampling Results 2524 Bainbridge Street, La Crosse, WI 54603 Tax Parcel # 4-236-0 Sample ID # 236-0

Dear

We have received and reviewed the test results for the sample collected on October 27, 2020 at the above address. Some PFAS compounds were found, but the levels found were **below** the Department of Health Services (DHS) levels recommended for protecting health. These levels are called the "Recommended Public Health Standard" in the table below. The levels found in *your* well are called the "Sample Result" in the table below.

#### Sample Results

Compound	Sample Result (unit) Recommended Public Health Standard (unit <sup>e</sup> )			
N-Ethyl Perfluorooctane sulfonamide (NEtFOSA) CAS # 4151-50-2	Not Detected	20 ppt <sup>a,b</sup>	) ppt unds I 6	
N-Ethyl perfluorooctane sulfonamidoacetic acid (NEtFOSAA) CAS # 2991-50-6	Not Detected	20 ppt <sup>a,b</sup>	it is 20 ompo <i>il</i> of all	
N-Ethyl perfluorooctane sulfonamidoethanol (NEtFOSE) CAS # 1691-99-2	Not Detected	20 ppt <sup>a,b</sup>	ed lim ese 6 c ed toto	
Perfluorooctane sulfonamide (FOSA) CAS # 754-91-6	Not Detected	20 ppt <sup>a,b</sup>	mend of the mbine	
Perfluorooctanoic acid (PFOA) CAS # 335-67-1	4.4 ppt	20 ppt <sup>a,b</sup>	recom ny <i>one</i> the <i>cc</i>	
Perfluorooctanesulfonic acid (PFOS) CAS # 1763-23-1	7.1 ppt	20 ppt <sup>a,b</sup>	The for a	

Private Well Sampling Results for 2524 Bainbridge Street, La Crosse, WI 54603 Tax Parcel # 4-236-0 Sample ID # 236-0 November 18, 2020

Compound	Sample Result (unit)	Recommended Public Health Standard (unit <sup>e</sup> )
Hexafluoropropylene oxide dimer acid (HPFO-DA; GenX) CAS # 13252-13-6	Not Detected	300 ppt <sup>a</sup>
Perfluorobutanesulfonic acid (PFBS) CAS # 375-73-5	4.5 ppt	450,000 ppt <sup>a</sup>
Perfluorohexanesulfonic acid (PFHxS) CAS # 355-46-4	8.1 ppt	40 ppt <sup>a</sup>
Perfluorobutanoic acid (PFBA) CAS # 375-22-4	12 ppt	10,000 ppt <sup>a</sup>
Perfluorodecanoic acid (PFDA) CAS # 335-76-2	Not Detected	300 ppt <sup>a</sup>
Perfluorododecanoic acid (PFDoA) CAS # 307-55-1	Not Detected	500 ppt <sup>a</sup>
Perfluorohexanoic acid (PFHxA) CAS # 307-24-4	1.2 ppt	150,000 ppt <sup>a</sup>
Perfluorononanoic acid (PFNA) CAS # 375-95-1	Not Detected	30 ppt <sup>a</sup>
Perfluorotetradecanoic acid (PFTeA) CAS # 376-06-7	Not Detected	10,000 ppt <sup>a</sup>
Perfluoroundecanoic acid (PFUnA) CAS # 2058-94-8	Not Detected	3,000 ppt <sup>a</sup>
4,8-Dioxa-3H-perfluorononanoic acid (DONA) CAS # 919005-14-4	Not Detected	3,000 ppt <sup>a</sup>
Perfluorooctadecanoic acid (PFODA) CAS # 16517-11-6	Not Detected	400,000 ppt <sup>a</sup>
Perfluoro-1-pentanesulfonic acid CAS #2706-91-4	1.7 ppt	None Established <sup>c</sup>
Perfluoro-n-heptanoic acid CAS # 375-85-9	1.2 ppt	None Established <sup>c</sup>
Perfluoro-n-pentanoic acid CAS # 2706-90-3	1.2 ppt	None Established <sup>c</sup>

<sup>a</sup> Public health enforcement standard (ES) recommended by DHS.

<sup>b</sup> DHS recommends a combined enforcement standard of 20 ng/L and combined preventive action limit of 2 ng/L for FOSA, NEt-FOSA, NetFOSAA, PFOS, and PFOA.

<sup>c</sup> A current standard is not available; the compound is currently under review by DHS for potential public health standard recommendation.

<sup>d</sup> Public health enforcement standard (ES) in NR 140, Wisconsin Administrative Code.

<sup>e</sup> Units: Parts per trillion (ppt) = nanograms of substance per liter of water (ng/L)

<sup>BL</sup> Detected in the method blank. Possible lab contaminant.

Private Well Sampling Results for 2524 Bainbridge Street, La Crosse, WI 54603 Tax Parcel # 4-236-0 Sample ID # 236-0 November 18, 2020

As required by law, we will be submitting these results to the Department of Natural Resources (DNR). The DNR may consult with the Department of Health Services (DHS) about these test results. DHS may review all PFAS tests and follow-up with you directly if any actions are recommended to protect your health.

Thank you for your patience and assistance with our investigation. We will provide updates on the project at <u>https://www.cityoflacrosse.org/wells</u> as our work continues. If you have any questions, please call The OS Group at (608) 668-2718 or email them at <u>PFAS@theOSgrp.com</u>.

You can also contact the DNR and DHS with questions about PFAS or the water sample results at the numbers provided below.

Questions about		<u>Contact</u>	<u>Phone</u>	E-mail Address
Soil & Groundwater Testing, Clean Up	DNR	David Rozeboom	715-215-2078	David.Rozeboom@wisconsin.gov
Drinking Water or Private wells	DNR	Kyle Burton	920-360-2112	kyle.burton@wisconsin.gov
Health Concerns	DHS	Curtis Hedman	608-266-6677	Curtis.Hedman@dhs.wisconsin.gov

On behalf of The City of La Crosse *The OS Group, LLC* (608) 668-2718 <u>PFAS@theOSgrp.com</u>

Attachment: Lab report for your well

Client: Pace Analytical Services, LLC				Laboratory	ID: VJ29090-0	009	
Description: 236-0				Matr	ix: Aqueous		
Date Sampled:10/27/2020 1210	Project Name	e: LACROSSE WELL #	#23 & 24				
Date Received: 10/29/2020	oiect Numbe	r <sup>.</sup> 40217319					
RunPrep MethodAnalytical Method1SOP SPEPFAS by ID SOP	Dilution Ar 1 11	nalysis Date Analyst /07/2020 0042 KMM2	Prep L 11/05/20	Date Batch D20 1030 72351			
Parameter	CAS Number	S Analytical r Method	Result	Q LOQ	DL	Units	Run
9-chlorohexadecafluoro-3-oxanone-1-sulfonic acid (9CI-PF3ONS)	756426-58-	1 PFAS by ID SOP	ND	7.9	2.0	ng/L	1
11-chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11CI-PF3	.) 763051-92-	9 PFAS by ID SOP	ND	7.9	2.0	ng/L	1
1H, 1H, 2H, 2H-perfluorodecane sulfonic acid (8:2 FTS)	39108-34-	4 PFAS by ID SOP	ND	7.9	2.0	ng/L	1
1H, 1H, 2H, 2H-perfluorooctane sulfonic acid (6:2 FTS)	27619-97-	2 PFAS by ID SOP	ND	7.9	2.0	ng/L	1
1H,1H,2H,2H-perfluorododecane sulfonic acid (10:2 FTS)	120226-60-	0 PFAS by ID SOP	ND	7.9	2.0	ng/L	1
1H,1H,2H,2H-perfluorohexane sulfonic acid (4:2 FTS)	757124-72-	4 PFAS by ID SOP	ND	7.9	2.0	ng/L	1
Hexafluoropropylene oxide dimer acid (GenX)	13252-13-	6 PFAS by ID SOP	ND	7.9	2.0	ng/L	1
4,8-dioxa-3H-perfluorononanoic acid (ADONA)	919005-14-	4 PFAS by ID SOP	ND	7.9	2.0	ng/L	1
N-ethylperfluoro-1-octanesulfonamide (EtFOSA)	4151-50-2	2 PFAS by ID SOP	ND	7.9	2.0	ng/L	1
N-ethylperfluoro-1-octanesulfonamidoacetic acid (EtFOSAA)	2991-50-0	6 PFAS by ID SOP	ND	7.9	2.0	ng/L	1
2-N-ethylperfluoro-1-octanesulfonamido-ethanol (EtFOSE)	1691-99-2	2 PFAS by ID SOP	ND	7.9	2.0	ng/L	1
N-methylperfluoro-1-octanesulfonamide (MeFOSA)	31506-32-	8 PFAS by ID SOP	ND	16	3.9	ng/L	1
N-methylperfluoro-1-octanesulfonamidoacetic acid (MeFOSAA)	2355-31-9	9 PFAS by ID SOP	ND	7.9	2.0	ng/L	1
2-N-methylperfluoro-1-octanesulfonamido-ethanol (MeFOSE)	24448-09-	7 PFAS by ID SOP	ND	7.9	2.0	ng/L	1
Perfluoro-1-butanesulfonic acid (PFBS)	375-73-	5 PFAS by ID SOP	4.5	3.9	0.98	ng/L	1
Perfluoro-1-decanesulfonic acid (PFDS)	335-77-3	3 PFAS by ID SOP	ND	3.9	0.98	ng/L	1
Perfluoro-1-heptanesulfonic acid (PFHpS)	375-92-8	8 PFAS by ID SOP	ND	3.9	0.98	ng/L	1
Perfluoro-1-nonanesulfonic acid (PFNS)	68259-12-	1 PFAS by ID SOP	ND	3.9	0.98	ng/L	1
Perfluoro-1-octanesulfonamide (PFOSA)	754-91-0	6 PFAS by ID SOP	ND	3.9	0.98	ng/L	1
Perfluoro-1-pentanesulfonic acid (PFPeS)	2706-91-4	4 PFAS by ID SOP	1.7	J 3.9	0.98	ng/L	1
Perfluorododecanesulfonic acid (PFDOS)	79780-39-	5 PFAS by ID SOP	ND	7.9	2.0	ng/L	1
Perfluorohexanesulfonic acid (PFHxS)	355-46-4	4 PFAS by ID SOP	8.1	3.9	0.98	ng/L	1
Perfluoro-n-butanoic acid (PFBA)	375-22-4	4 PFAS by ID SOP	12	3.9	0.98	ng/L	1
Perfluoro-n-decanoic acid (PFDA)	335-76-2	2 PEAS by ID SOP	ND	3.9	0.98	ng/L	1
Perfluoro-n-dodecanoic acid (PFDoA)	307-55-1	1 PEAS by ID SOP	ND	3.9	0.98	ng/L	1
Perfluoro-n-heptanoic acid (PFHpA)	375-85-9	9 PEAS by ID SOP	1.2	J 3.9	0.98	ng/L	1
Perfluoro-n-hexadecanoic acid (PFHxDA)	67905-19-	5 PEAS by ID SOP	ND	7.9	2.0	ng/L	1
Perfluoro-n-hexanoic acid (PFHxA)	307-24-4	4 PFAS by ID SOP	1.2	J 3.9	0.98	ng/L	1
Perfluoro-n-nonanoic acid (PFNA)	375-95-1	1 PFAS by ID SOP	ND	3.9	0.98	ng/L	1
Perfluoro-n-octadecanoic acid (PFODA)	16517-11-	6 PEAS by ID SOP	ND	7.9	2.0	ng/L	1
Periluoro-n-octanoic acid (PEOA)	335-67-	PFAS by ID SOP	4.4	3.9	0.98	ng/L	1
Periluoro-n-perilanoic acid (PFPeA)	2700-90-	3 PFAS DY ID SOP	1.2	J 3.9	0.98	ng/L	1
	3/0-00-	PFAS by ID SOP		3.9	0.98	ng/L	1
	2059-94-			3.9	0.98	ng/L	1
	2058-94-6			3.9	0.98	ng/L	1
Periluorooctanesunonic acid (PFOS)	1/03-23-	I PFAS DY ID SOP	7.1	3.9	0.98	ng/L	I
Surrogate Q % Re	Run 1 Acc ecovery L	eptance ₋imits					
13C2_4:2FTS	103	25-150					
13C2_6:2FTS	96	25-150					
13C2_8:2FTS	86	25-150					
13C2_PFDoA	79	25-150					
13C2_PFHxDA	85	25-150					
13C2_PFTeDA	81 :	25-150					
LOQ = Limit of Quantitation B = Detected in the method blank	E = Quantitatio	on of compound exceeded the	calibration ra	nge DL = Detection Li	imit		
ND = Not detected at or above the DLN = Recovery is out of criteriaP = The RPD between two GC columns exceeds 40%J = Estimated result < LOQ and $\geq$ DLH = Out of holding timeW = Reported on wet weight basis							

Client: Pace Analytical Services, LLC	
Description: 236-0	
Date Sampled:10/27/2020 1210	Project Name: LACROSSE WELL #23 & 24
Date Received: 10/29/2020	Project Number: 40217319

d7-MeFOSE

Laboratory ID: VJ29090-009

Matrix: Aqueous

Surrogate	Run 1	Acceptance
13C3_PFB5	82	25-150
13C3_PFHxS	85	25-150
13C3-HFPO-DA	97	25-150
13C4_PFBA	89	25-150
13C4_PFHpA	92	25-150
13C5_PFHxA	89	25-150
13C5_PFPeA	87	25-150
13C6_PFDA	89	25-150
13C7_PFUdA	78	25-150
13C8 PFOA	86	25-150
13C8_PEOS	75	25-150
13C8 PEOSA	94	10-150
13C9 DENA	88	25-150
d-EtEOSA	71	10-150
	00	25-150
	70	20-100
	/1	10-150
d-MeFUSA	82	10-150
d3-MeFOSAA	79	25-150

10-150

77

LOQ = Limit of Quantitation	B = Detected in the method blank	E = Quantitation of compound exceeded the calibration range	DL = Detection Limit
ND = Not detected at or above the DL	N = Recovery is out of criteria	P = The RPD between two GC columns exceeds 40%	J = Estimated result < LOQ and $\ge$ DL
H = Out of holding time	W = Reported on wet weight basis		



444 21st Street South · La Crosse, Wisconsin · 54601

November 18, 2020

2514 Bainbridge Street La Crosse, WI 54603

Subject: Private Well Sampling Results 2514 Bainbridge Street, La Crosse, WI 54603 Tax Parcel # 4-238-0 Sample ID # 238-0

Dear

We have received and reviewed the test results for the sample collected on October 27, 2020 at the above address. Some PFAS compounds were found, but the levels found were **below** the Department of Health Services (DHS) levels recommended for protecting health. These levels are called the "Recommended Public Health Standard" in the table below. The levels found in *your* well are called the "Sample Result" in the table below.

#### Sample Results

Compound	Sample Result (unit)Recommended Public Health Standard (unit <sup>e</sup> )			
N-Ethyl Perfluorooctane sulfonamide (NEtFOSA) CAS # 4151-50-2	Not Detected	20 ppt <sup>a,b</sup>	) ppt unds I 6	
N-Ethyl perfluorooctane sulfonamidoacetic acid (NEtFOSAA) CAS # 2991-50-6	Not Detected	20 ppt <sup>a,b</sup>	it is 20 ompo <i>il</i> of al	
N-Ethyl perfluorooctane sulfonamidoethanol (NEtFOSE) CAS # 1691-99-2	Not Detected	20 ppt <sup>a,b</sup>	ed lim ese 6 c ed toto	
Perfluorooctane sulfonamide (FOSA) CAS # 754-91-6	0.96	20 ppt <sup>a,b</sup>	mend of the ombine	
Perfluorooctanoic acid (PFOA) CAS # 335-67-1	Not Detected	20 ppt <sup>a,b</sup>	recom ny <i>one</i> the <i>cc</i>	
Perfluorooctanesulfonic acid (PFOS) CAS # 1763-23-1	7.6 ppt	20 ppt <sup>a,b</sup>	The for ai or	

Private Well Sampling Results for 2514 Bainbridge Street, La Crosse, WI 54603 Tax Parcel # 4-238-0 Sample ID # 238-0 November 18, 2020

Compound	Sample Result (unit)	Recommended Public Health Standard (unit <sup>e</sup> )
Hexafluoropropylene oxide dimer acid (HPFO-DA; GenX) CAS # 13252-13-6	Not Detected	300 ppt <sup>a</sup>
Perfluorobutanesulfonic acid (PFBS) CAS # 375-73-5	9.6 ppt	450,000 ppt <sup>a</sup>
Perfluorohexanesulfonic acid (PFHxS) CAS # 355-46-4	12 ppt	40 ppt <sup>a</sup>
Perfluorobutanoic acid (PFBA) CAS # 375-22-4	9.6 ppt	10,000 ppt <sup>a</sup>
Perfluorodecanoic acid (PFDA) CAS # 335-76-2	Not Detected	300 ppt <sup>a</sup>
Perfluorododecanoic acid (PFDoA) CAS # 307-55-1	Not Detected	500 ppt <sup>a</sup>
Perfluorohexanoic acid (PFHxA) CAS # 307-24-4	Not Detected	150,000 ppt <sup>a</sup>
Perfluorononanoic acid (PFNA) CAS # 375-95-1	Not Detected	30 ppt <sup>a</sup>
Perfluorotetradecanoic acid (PFTeA) CAS # 376-06-7	Not Detected	10,000 ppt <sup>a</sup>
Perfluoroundecanoic acid (PFUnA) CAS # 2058-94-8	Not Detected	3,000 ppt <sup>a</sup>
4,8-Dioxa-3H-perfluorononanoic acid (DONA) CAS # 919005-14-4	Not Detected	3,000 ppt <sup>a</sup>
Perfluorooctadecanoic acid (PFODA) CAS # 16517-11-6	Not Detected	400,000 ppt <sup>a</sup>
Perfluoro-1-pentanesulfonic acid (PFPeS) CAS #2706-91-4	6.1 ppt	None Established <sup>c</sup>

<sup>a</sup> Public health enforcement standard (ES) recommended by DHS.

<sup>b</sup> DHS recommends a combined enforcement standard of 20 ng/L and combined preventive action limit of 2 ng/L for FOSA, NEt-FOSA, NetFOSAA, PFOS, and PFOA.

<sup>c</sup> A current standard is not available; the compound is currently under review by DHS for potential public health standard recommendation.

<sup>d</sup> Public health enforcement standard (ES) in NR 140, Wisconsin Administrative Code.

<sup>e</sup> Units: Parts per trillion (ppt) = nanograms of substance per liter of water (ng/L)

<sup>BL</sup> Detected in the method blank. Possible lab contaminant.

Private Well Sampling Results for 2514 Bainbridge Street, La Crosse, WI 54603 Tax Parcel # 4-238-0 Sample ID # 238-0 November 18, 2020

As required by law, we will be submitting these results to the Department of Natural Resources (DNR). The DNR may consult with the Department of Health Services (DHS) about these test results. DHS may review all PFAS tests and follow-up with you directly if any actions are recommended to protect your health.

Thank you for your patience and assistance with our investigation. We will provide updates on the project at <u>https://www.cityoflacrosse.org/wells</u> as our work continues. If you have any questions, please call The OS Group at (608) 668-2718 or email them at <u>PFAS@theOSgrp.com</u>.

You can also contact the DNR and DHS with questions about PFAS or the water sample results at the numbers provided below.

Questions about		<u>Contact</u>	<u>Phone</u>	E-mail Address
Soil & Groundwater Testing, Clean Up	DNR	David Rozeboom	715-215-2078	David.Rozeboom@wisconsin.gov
Drinking Water or Private wells	DNR	Kyle Burton	920-360-2112	kyle.burton@wisconsin.gov
Health Concerns	DHS	Curtis Hedman	608-266-6677	Curtis.Hedman@dhs.wisconsin.gov

On behalf of The City of La Crosse *The OS Group, LLC* (608) 668-2718 <u>PFAS@theOSgrp.com</u>

Attachment: Lab report for your well

Client: Pace Analytical Services, LLC				Laboratory II	D: VJ29090-0	80	
Description: 238-0				Matrix	: Aqueous		
Date Sampled:10/27/2020 1205	Project Name	: LACROSSE WELL #	¥23 & 24				
Date Received: 10/29/2020	oiect Number	r 40217319					
RunPrep MethodAnalytical Method1SOP SPEPFAS by ID SOP	Dilution Ar 1 11/	07/2020 0031 KMM2	Prep Date 11/05/2020	Batch 1030 72351			
Parameter	CAS Number	Analytical Method	Result Q	LOQ	DL	Units	Run
9-chlorohexadecafluoro-3-oxanone-1-sulfonic acid (9CI-PF3ONS)	756426-58-1	1 PFAS by ID SOP	ND	7.1	1.8	ng/L	1
11-chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11CI-PF3	) 763051-92-9	PFAS by ID SOP	ND	7.1	1.8	ng/L	1
1H, 1H, 2H, 2H-perfluorodecane sulfonic acid (8:2 FTS)	39108-34-4	4 PFAS by ID SOP	ND	7.1	1.8	ng/L	1
1H, 1H, 2H, 2H-perfluorooctane sulfonic acid (6:2 FTS)	27619-97-2	2 PFAS by ID SOP	ND	7.1	1.8	ng/L	1
1H,1H,2H,2H-perfluorododecane sulfonic acid (10:2 FTS)	120226-60-0	PFAS by ID SOP	ND	7.1	1.8	ng/L	1
1H,1H,2H,2H-perfluorohexane sulfonic acid (4:2 FTS)	757124-72-4	4 PFAS by ID SOP	ND	7.1	1.8	ng/L	1
Hexafluoropropylene oxide dimer acid (GenX)	13252-13-6	6 PFAS by ID SOP	ND	7.1	1.8	ng/L	1
4,8-dioxa-3H-perfluorononanoic acid (ADONA)	919005-14-4	4 PFAS by ID SOP	ND	7.1	1.8	ng/L	1
N-ethylperfluoro-1-octanesulfonamide (EtFOSA)	4151-50-2	PFAS by ID SOP	ND	7.1	1.8	ng/L	1
N-ethylperfluoro-1-octanesulfonamidoacetic acid (EtFOSAA)	2991-50-6	PFAS by ID SOP	ND	7.1	1.8	ng/L	1
2-N-ethylperfluoro-1-octanesulfonamido-ethanol (EtFOSE)	1691-99-2	PFAS by ID SOP	ND	7.1	1.8	ng/L	1
N-methylperfluoro-1-octanesulfonamide (MeFOSA)	31506-32-8	B PFAS by ID SOP	ND	14	3.5	ng/L	1
N-methylperfluoro-1-octanesulfonamidoacetic acid (MeFOSAA)	2355-31-9	PFAS by ID SOP	ND	7.1	1.8	ng/L	1
2-N-methylperfluoro-1-octanesulfonamido-ethanol (MeFOSE)	24448-09-7	7 PFAS by ID SOP	ND	7.1	1.8	ng/L	1
Perfluoro-1-butanesulfonic acid (PFBS)	375-73-5	5 PFAS by ID SOP	9.6	3.5	0.89	ng/L	1
Perfluoro-1-decanesulfonic acid (PFDS)	335-77-3	PFAS by ID SOP	ND	3.5	0.89	ng/L	1
Perfluoro-1-heptanesulfonic acid (PFHpS)	375-92-8	PFAS by ID SOP	ND	3.5	0.89	ng/L	1
Perfluoro-1-nonanesulfonic acid (PFNS)	68259-12-1	1 PFAS by ID SOP	ND	3.5	0.89	ng/L	1
Perfluoro-1-octanesulfonamide (PFOSA)	754-91-6	PFAS by ID SOP	0.96 J	3.5	0.89	ng/L	1
Perfluoro-1-pentanesulfonic acid (PFPeS)	2706-91-4	PFAS by ID SOP	6.1	3.5	0.89	ng/L	1
Perfluorododecanesulfonic acid (PFDOS)	79780-39-5	5 PFAS by ID SOP	ND	7.1	1.8	ng/L	1
Perfluorohexanesulfonic acid (PFHxS)	355-46-4	PFAS by ID SOP	12	3.5	0.89	ng/L	1
Perfluoro-n-butanoic acid (PFBA)	375-22-4	PFAS by ID SOP	9.6	3.5	0.89	ng/L	1
Perfluoro-n-decanoic acid (PFDA)	335-76-2	2 PEAS by ID SOP	ND	3.5	0.89	ng/L	1
Perfluoro-n-dodecanoic acid (PFDoA)	307-55-1	PFAS by ID SOP	ND	3.5	0.89	ng/L	1
Perfluoro-n-heptanoic acid (PFHpA)	375-85-9	PFAS by ID SOP	ND	3.5	0.89	ng/L	1
Perfluoro-n-hexadecanoic acid (PFHxDA)	67905-19-5	D PFAS by ID SOP	ND	7.1	1.8	ng/L	1
Perfluoro-n-hexanoic acid (PFHxA)	307-24-4	PFAS by ID SOP	ND	3.5	0.89	ng/L	1
Perfluoro-n-nonanoic acid (PFNA)	375-95-1	PFAS by ID SOP	ND	3.5	0.89	ng/L	1
Perfluoro-n-octadecanoic acid (PFODA)	16517-11-6	5 PFAS by ID SOP	ND	7.1	1.8	ng/L	1
Periluoro-n-octanoic acid (PFOA)	335-67-1	PFAS by ID SOP	ND	3.5	0.89	ng/L	1
Periluoro-n-perilanoic acid (PEPeA)	2706-90-3	PFAS by ID SOP	ND	3.5	0.89	ng/L	1
	370-00-7	PFAS by ID SOP	ND	3.5	0.89	ng/L	1
	72029-94-0	DEAS by ID SOP	ND	3.5	0.89	ng/L	1
	2058-94-8			3.5	0.89	ng/L	1
Period ooctanesulionic acid (PFOS)	1/03-23-1	PFAS by ID SOP	7.0	3.5	0.89	ng/L	I
Surrogate Q % Re	Run 1 Acce ecovery L	eptance .imits					
13C2_4:2FTS	103 2	25-150					
13C2_6:2FTS	96 2	25-150					
13C2_8:2FTS	94 2	25-150					
13C2_PFDoA	80 2	25-150					
13C2_PFHxDA	87 2	25-150					
13C2_PFTeDA	81 2	25-150					
LOQ = Limit of Quantitation B = Detected in the method blank	E = Quantitatio	n of compound exceeded the	calibration range	DL = Detection Lin	hit		
ND = Not detected at or above the DLN = Recovery is out of criteriaH = Out of holding timeW = Reported on wet weight basis	P = The RPD b	etween two GC columns exce	eds 40%	J = Estimated resu	It < LOQ and $\ge$ D	L	

Client: Pace Analytical Services, LLC	
Description: 238-0	
Date Sampled:10/27/2020 1205	Project Name: LACROSS
Date Received: 10/29/2020	Project Number: 40217319

Laboratory ID: VJ29090-008

Matrix: Aqueous

ACROSSE WELL #23 & 24

	Run 1 Ad	cceptance
Surrogate	Q % Recovery	Limits
13C3_PFBS	78	25-150
13C3_PFHxS	85	25-150
13C3-HFPO-DA	92	25-150
13C4_PFBA	93	25-150
13C4_PFHpA	92	25-150
13C5_PFHxA	89	25-150
13C5_PFPeA	93	25-150
13C6_PFDA	85	25-150
13C7_PFUdA	77	25-150
13C8_PFOA	89	25-150
13C8_PFOS	79	25-150
13C8_PFOSA	94	10-150
13C9_PFNA	89	25-150
d-EtFOSA	74	10-150
d5-EtFOSAA	87	25-150
d9-EtFOSE	78	10-150
d-MeFOSA	78	10-150
d3-MeFOSAA	84	25-150
d7-MeFOSE	78	10-150

H = Out of holding time	W = Reported on wet weight basis		
ND = Not detected at or above the DL	N = Recovery is out of criteria	P = The RPD between two GC columns exceeds 40%	J = Estimated result < LOQ and $\ge$ DL
LOQ = Limit of Quantitation	B = Detected in the method blank	E = Quantitation of compound exceeded the calibration range	DL = Detection Limit



444 21st Street South · La Crosse, Wisconsin · 54601

November 18, 2020



2508 Bainbridge Street La Crosse, WI 54603

Subject: Private Well Sampling Results 2508 Bainbridge, La Crosse, WI 54603 Tax Parcel # 4-240-0 Sample ID # 240-0

Dear

We have received and reviewed the test results for the sample collected on October 27, 2020 at the above address. Some PFAS compounds were found, but the levels found were **below** the Department of Health Services (DHS) levels recommended for protecting health. These levels are called the "Recommended Public Health Standard" in the table below. The levels found in *your* well are called the "Sample Result" in the table below.

#### Sample Results

Compound	Sample Result (unit)	Recomm Public H Standard	ended ealth (unit <sup>e</sup> )
N-Ethyl Perfluorooctane sulfonamide (NEtFOSA) CAS # 4151-50-2	Not Detected	20 ppt <sup>a,b</sup>	) ppt unds I 6
N-Ethyl perfluorooctane sulfonamidoacetic acid (NEtFOSAA) CAS # 2991-50-6	Not Detected	20 ppt <sup>a,b</sup>	it is 20 ompo // of all
N-Ethyl perfluorooctane sulfonamidoethanol (NEtFOSE) CAS # 1691-99-2	Not Detected	20 ppt <sup>a,b</sup>	ed lim ese 6 c ed toto
Perfluorooctane sulfonamide (FOSA) CAS # 754-91-6	Not Detected	20 ppt <sup>a,b</sup>	mend of the mbine
Perfluorooctanoic acid (PFOA) CAS # 335-67-1	4.7 ppt	20 ppt <sup>a,b</sup>	recom ny <i>one</i> the <i>cc</i>
Perfluorooctanesulfonic acid (PFOS) CAS # 1763-23-1	4.6 ppt	20 ppt <sup>a,b</sup>	The for ai or

Private Well Sampling Results for 2508 Bainbridge, La Crosse, WI 54603 Tax Parcel # 4-240-0 Sample ID # 240-0 November 18, 2020

Compound	Sample Result (unit)	Recommended Public Health Standard (unit <sup>e</sup> )
Hexafluoropropylene oxide dimer acid (HPFO-DA; GenX) CAS # 13252-13-6	Not Detected	300 ppt <sup>a</sup>
Perfluorobutanesulfonic acid (PFBS) CAS # 375-73-5	2.3 ppt	450,000 ppt <sup>a</sup>
Perfluorohexanesulfonic acid (PFHxS) CAS # 355-46-4	3.7 ppt	40 ppt <sup>a</sup>
Perfluorobutanoic acid (PFBA) CAS # 375-22-4	8.4 ppt	10,000 ppt <sup>a</sup>
Perfluorodecanoic acid (PFDA) CAS # 335-76-2	Not Detected	300 ppt <sup>a</sup>
Perfluorododecanoic acid (PFDoA) CAS # 307-55-1	Not Detected	500 ppt <sup>a</sup>
Perfluorohexanoic acid (PFHxA) CAS # 307-24-4	1.6 ppt	150,000 ppt <sup>a</sup>
Perfluorononanoic acid (PFNA) CAS # 375-95-1	Not Detected	30 ppt <sup>a</sup>
Perfluorotetradecanoic acid (PFTeA) CAS # 376-06-7	Not Detected	10,000 ppt <sup>a</sup>
Perfluoroundecanoic acid (PFUnA) CAS # 2058-94-8	Not Detected	3,000 ppt <sup>a</sup>
4,8-Dioxa-3H-perfluorononanoic acid (DONA) CAS # 919005-14-4	Not Detected	3,000 ppt <sup>a</sup>
Perfluorooctadecanoic acid (PFODA) CAS # 16517-11-6	Not Detected	400,000 ppt <sup>a</sup>
Perfluoro-n-heptanoic acid (PFHpA) CAS #375-85-9	1.6 ppt	None Established <sup>c</sup>
Perfluoro-n-pentanoic acid (PFPeA) CAS # 2706-90-3	2.5 ppt	None Established <sup>c</sup>

<sup>a</sup> Public health enforcement standard (ES) recommended by DHS.

<sup>b</sup> DHS recommends a combined enforcement standard of 20 ng/L and combined preventive action limit of 2 ng/L for FOSA, NEt-FOSA, NetFOSAA, PFOS, and PFOA.

<sup>c</sup> A current standard is not available; the compound is currently under review by DHS for potential public health standard recommendation.

<sup>d</sup> Public health enforcement standard (ES) in NR 140, Wisconsin Administrative Code.

<sup>e</sup> Units: Parts per trillion (ppt) = nanograms of substance per liter of water (ng/L)

<sup>BL</sup> Detected in the method blank. Possible lab contaminant.

Private Well Sampling Results for 2508 Bainbridge, La Crosse, WI 54603 Tax Parcel # 4-240-0 Sample ID # 240-0 November 18, 2020

As required by law, we will be submitting these results to the Department of Natural Resources (DNR). The DNR may consult with the Department of Health Services (DHS) about these test results. DHS may review all PFAS tests and follow-up with you directly if any actions are recommended to protect your health.

Thank you for your patience and assistance with our investigation. We will provide updates on the project at <u>https://www.cityoflacrosse.org/wells</u> as our work continues. If you have any questions, please call The OS Group at (608) 668-2718 or email them at <u>PFAS@theOSgrp.com</u>.

You can also contact the DNR and DHS with questions about PFAS or the water sample results at the numbers provided below.

Questions about		<u>Contact</u>	<u>Phone</u>	E-mail Address
Soil & Groundwater Testing, Clean Up	DNR	David Rozeboom	715-215-2078	David.Rozeboom@wisconsin.gov
Drinking Water or Private wells	DNR	Kyle Burton	920-360-2112	kyle.burton@wisconsin.gov
Health Concerns	DHS	Curtis Hedman	608-266-6677	Curtis.Hedman@dhs.wisconsin.gov

On behalf of The City of La Crosse *The OS Group, LLC* (608) 668-2718 <u>PFAS@theOSgrp.com</u>

Attachment: Lab report for your well

Client: Pace Analytical Services, LLC				Laboratory I	D: VJ29090-0	006	
Description: 240-0				Matrix	: Aqueous		
Date Sampled:10/27/2020 1150	Project Nam	ne: LACROSSE WELL #	#23 & 24				
Date Paceived: 10/20/2020	roject Numb	or: 10217310	20 4 2 1				
Date Received. 10/27/2020		61. 402 17 5 1 9					
RunPrep MethodAnalytical Method1SOP SPEPFAS by ID SOP	Dilution A 1 1 <sup>-</sup>	nalysis Date Analyst 1/07/2020 0010 KMM2	Prep Dat 11/05/2020	e Batch 1030 72351			
Parameter	CA Numbe	S Analytical er Method	Result Q	LOQ	DL	Units	Run
9-chlorohexadecafluoro-3-oxanone-1-sulfonic acid (9CI-PF3ONS)	756426-58	I-1 PFAS by ID SOP	ND	8.1	2.0	ng/L	1
11-chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11CI-PF3	.) 763051-92	P-9 PFAS by ID SOP	ND	8.1	2.0	ng/L	1
1H, 1H, 2H, 2H-perfluorodecane sulfonic acid (8:2 FTS)	39108-34	-4 PFAS by ID SOP	ND	8.1	2.0	ng/L	1
1H, 1H, 2H, 2H-perfluorooctane sulfonic acid (6:2 FTS)	27619-97	-2 PFAS by ID SOP	ND	8.1	2.0	ng/L	1
1H,1H,2H,2H-perfluorododecane sulfonic acid (10:2 FTS)	120226-60	0-0 PFAS by ID SOP	ND	8.1	2.0	ng/L	1
1H,1H,2H,2H-perfluorohexane sulfonic acid (4:2 FTS)	757124-72	-4 PFAS by ID SOP	ND	8.1	2.0	ng/L	1
Hexafluoropropylene oxide dimer acid (GenX)	13252-13	-6 PFAS by ID SOP	ND	8.1	2.0	ng/L	1
4,8-dioxa-3H-perfluorononanoic acid (ADONA)	919005-14	-4 PFAS by ID SOP	ND	8.1	2.0	ng/L	1
N-ethylperfluoro-1-octanesulfonamide (EtFOSA)	4151-50	-2 PFAS by ID SOP	ND	8.1	2.0	ng/L	1
N-ethylperfluoro-1-octanesulfonamidoacetic acid (EtFOSAA)	2991-50	-6 PFAS by ID SOP	ND	8.1	2.0	ng/L	1
2-N-ethylperfluoro-1-octanesulfonamido-ethanol (EtFOSE)	1691-99	-2 PFAS by ID SOP	ND	8.1	2.0	ng/L	1
N-methylperfluoro-1-octanesulfonamide (MeFOSA)	31506-32	-8 PFAS by ID SOP	ND	16	4.0	ng/L	1
N-methylperfluoro-1-octanesulfonamidoacetic acid (MeFOSAA)	2355-31	-9 PFAS by ID SOP	ND	8.1	2.0	ng/L	1
2-N-methylperfluoro-1-octanesulfonamido-ethanol (MeFOSE)	24448-09	P-7 PFAS by ID SOP	ND	8.1	2.0	ng/L	1
Perfluoro-1-butanesulfonic acid (PFBS)	375-73	-5 PFAS by ID SOP	2.3 J	4.0	1.0	ng/L	1
Perfluoro-1-decanesulfonic acid (PFDS)	335-77	-3 PFAS by ID SOP	ND	4.0	1.0	ng/L	1
Perfluoro-1-heptanesulfonic acid (PFHpS)	375-92	-8 PFAS by ID SOP	ND	4.0	1.0	ng/L	1
Perfluoro-1-nonanesulfonic acid (PFNS)	68259-12	P-1 PFAS by ID SOP	ND	4.0	1.0	ng/L	1
Perfluoro-1-octanesulfonamide (PFOSA)	754-91	-6 PFAS by ID SOP	ND	4.0	1.0	ng/L	1
Perfluoro-1-pentanesulfonic acid (PFPeS)	2706-91	-4 PFAS by ID SOP	ND	4.0	1.0	ng/L	1
Perfluorododecanesulfonic acid (PFDOS)	79780-39	P-5 PFAS by ID SOP	ND	8.1	2.0	ng/L	1
Perfluorohexanesulfonic acid (PFHxS)	355-46	-4 PFAS by ID SOP	3.7 J	4.0	1.0	ng/L	1
Periluoro-n-butanoic acid (PEBA)	3/5-22	-4 PFAS by ID SOP	8.4	4.0	1.0	ng/L	1
Periluoro-n-decanoic acid (PFDA)	335-76	1 DEAS by ID SOP	ND	4.0	1.0	ng/L	1
Periluoro-Il-dodecanoic acid (PEUpA)	307-33	-1 PFAS by ID SOP		4.0	1.0	ng/L	1
	3/3-83	-9 PFAS by ID SOP	I.O J	4.0	1.0	ng/L	1
Periluoro-n-nexadecanoic acid (PEHxA)	207-24	4 DEAS by ID SOP	ND 1.4 I	8.1	2.0	ng/L	1
	307-24	1 DEAS by ID SOP		4.0	1.0	ng/L	1
Periluoro-n-nonanoic acid (PENA)	3/3-93	A DEAS by ID SOP		4.0	1.0	ng/L	1
Perfluoro-n-octanoic acid ( $PFODA$ )	335-67	-0 PFAS by ID SOP	ND 4 7	8. I 4 0	2.0	ng/L	1
Perfluoro-n-pentanoic acid (PEPe $\Delta$ )	2706-90	-3 PEAS by ID SOP	25 1	4.0	1.0	ng/L	1
Perfluoro-n-tetradecanoic acid (PFTeDA)	376-06	-7 PEAS by ID SOP	2.3 J	4.0	1.0	ng/L	1
Perfluoro-n-tridecanoic acid (PETrDA)	72629-94	-8 PEAS by ID SOP	ND	4.0	1.0	ng/L	1
Perfluoro-n-undecanoic acid (PELIdA)	2058-94	-8 PEAS by ID SOP	ND	4.0	1.0	ng/L	1
Perfluorooctanesulfonic acid (PEOS)	1763-23	-1 PEAS by ID SOP	4.6	4 0	1.0	ng/L	1
· · · · · · · · · · · · · · · · · · ·		centance			1.0		·
Surrogate Q % R	ecovery	Limits					
1302_4.2F13 1302_6:2FTS	94 01	20-100 25-150					
13C2_0.2ETS	71 90	25-150					
13C2_0.2113	74	25-150					
13C2_FF_DA	82	25-150					
13C2_PFTeDA	74	25-150					
LOQ = Limit of QuantitationB = Detected in the method blankND = Not detected at or above the DLN = Recovery is out of criteriaH = Out of holding timeW = Reported on wet weight basis	E = Quantitat P = The RPD	ion of compound exceeded the between two GC columns exce	calibration range eds 40%	DL = Detection Lim J = Estimated resu	hit It < LOQ and $\ge$ E	DL	

Client: Pace Analytical Services, LLC	
Description: 240-0	
Date Sampled:10/27/2020 1150	Project Name: LACROSSE WELL #23 & 24
Date Received: 10/29/2020	Project Number: 40217319

Laboratory ID: VJ29090-006

Matrix: Aqueous

Surrogate	Run 1 A	
Surroyate	Q % Recovery	Limits
13C3_PFBS	75	25-150
13C3_PFHxS	77	25-150
13C3-HFPO-DA	89	25-150
13C4_PFBA	88	25-150
13C4_PFHpA	83	25-150
13C5_PFHxA	82	25-150
13C5_PFPeA	85	25-150
13C6_PFDA	82	25-150
13C7_PFUdA	75	25-150
13C8_PFOA	83	25-150
13C8_PFOS	72	25-150
13C8_PFOSA	87	10-150
13C9 PFNA	82	25-150
d-EtFOSA	71	10-150
d5-EtFOSAA	83	25-150
d9-EtFOSE	76	10-150
d-MeFOSA	67	10-150
d3-MeFOSAA	80	25-150
d7-MeFOSE	74	10-150

H = Out of holding time	W = Reported on wet weight basis		
ND = Not detected at or above the DL	N = Recovery is out of criteria	P = The RPD between two GC columns exceeds 40%	J = Estimated result < LOQ and $\ge$ DL
LOQ = Limit of Quantitation	B = Detected in the method blank	E = Quantitation of compound exceeded the calibration range	DL = Detection Limit



444 21st Street South · La Crosse, Wisconsin · 54601

November 18, 2020



La Crosse, WI 54603

Subject: Private Well Sampling Results 2505 1st Avenue East, La Crosse, WI 54603 Tax Parcel # 4-244-0 Sample ID # 244-0

Dear

We have received and reviewed the test results for the sample collected on October 27, 2020 at the above address. Some PFAS compounds were found, but the levels found were **below** the Department of Health Services (DHS) levels recommended for protecting health. These levels are called the "Recommended Public Health Standard" in the table below. The levels found in *your* well are called the "Sample Result" in the table below.

#### Sample Results

Compound	Sample Result (unit)Recommended Public Health Standard (unit e)		
N-Ethyl Perfluorooctane sulfonamide (NEtFOSA) CAS # 4151-50-2	Not Detected	20 ppt <sup>a,b</sup>	) ppt unds I 6
N-Ethyl perfluorooctane sulfonamidoacetic acid (NEtFOSAA) CAS # 2991-50-6	Not Detected	20 ppt <sup>a,b</sup>	it is 2C ompo <i>il</i> of al
N-Ethyl perfluorooctane sulfonamidoethanol (NEtFOSE) CAS # 1691-99-2	Not Detected	20 ppt <sup>a,b</sup>	ed lim ese 6 c ed toto
Perfluorooctane sulfonamide (FOSA) CAS # 754-91-6	Not Detected	20 ppt <sup>a,b</sup>	mend of the ombine
Perfluorooctanoic acid (PFOA) CAS # 335-67-1	Not Detected	20 ppt <sup>a,b</sup>	recom ny <i>one</i> the <i>cc</i>
Perfluorooctanesulfonic acid (PFOS) CAS # 1763-23-1	Not Detected	20 ppt <sup>a,b</sup>	The for ai or

Private Well Sampling Results for 2505 1st Avenue East, La Crosse, WI 54603 Tax Parcel # 4-244-0 Sample ID # 244-0 November 18., 2020

Compound	Sample Result (unit)	Recommended Public Health Standard (unit <sup>e</sup> )
Hexafluoropropylene oxide dimer acid (HPFO-DA; GenX) CAS # 13252-13-6	2.2 ppt <sup>BL</sup>	300 ppt <sup>a</sup>
Perfluorobutanesulfonic acid (PFBS) CAS # 375-73-5	6.4 ppt	450,000 ppt <sup>a</sup>
Perfluorohexanesulfonic acid (PFHxS) CAS # 355-46-4	13 ppt	40 ppt <sup>a</sup>
Perfluorobutanoic acid (PFBA) CAS # 375-22-4	17 ppt	10,000 ppt <sup>a</sup>
Perfluorodecanoic acid (PFDA) CAS # 335-76-2	Not Detected	300 ppt <sup>a</sup>
Perfluorododecanoic acid (PFDoA) CAS # 307-55-1	Not Detected	500 ppt <sup>a</sup>
Perfluorohexanoic acid (PFHxA) CAS # 307-24-4	1.1 ppt	150,000 ppt <sup>a</sup>
Perfluorononanoic acid (PFNA) CAS # 375-95-1	Not Detected	30 ppt <sup>a</sup>
Perfluorotetradecanoic acid (PFTeA) CAS # 376-06-7	Not Detected	10,000 ppt <sup>a</sup>
Perfluoroundecanoic acid (PFUnA) CAS # 2058-94-8	Not Detected	3,000 ppt <sup>a</sup>
4,8-Dioxa-3H-perfluorononanoic acid (DONA) CAS # 919005-14-4	Not Detected	3,000 ppt <sup>a</sup>
Perfluorooctadecanoic acid (PFODA) CAS # 16517-11-6	Not Detected	400,000 ppt <sup>a</sup>
Perfluoro-1-pentanesulfonic acid (PFPeS) CAS # 2706-91-4	4.3 ppt	None Established <sup>c</sup>

<sup>a</sup> Public health enforcement standard (ES) recommended by DHS.

<sup>b</sup> DHS recommends a combined enforcement standard of 20 ng/L and combined preventive action limit of 2 ng/L for FOSA, NEt-FOSA, NetFOSAA, PFOS, and PFOA.

<sup>c</sup> A current standard is not available; the compound is currently under review by DHS for potential public health standard recommendation.

<sup>d</sup> Public health enforcement standard (ES) in NR 140, Wisconsin Administrative Code.

<sup>e</sup> Units: Parts per trillion (ppt) = nanograms of substance per liter of water (ng/L)

<sup>BL</sup> Detected in the method blank. Possible lab contaminant.

Private Well Sampling Results for 2505 1st Avenue East, La Crosse, WI 54603 Tax Parcel # 4-244-0 Sample ID # 244-0 November 18., 2020

As required by law, we will be submitting these results to the Department of Natural Resources (DNR). The DNR may consult with the Department of Health Services (DHS) about these test results. DHS may review all PFAS tests and follow-up with you directly if any actions are recommended to protect your health.

Thank you for your patience and assistance with our investigation. We will provide updates on the project at <u>https://www.cityoflacrosse.org/wells</u> as our work continues. If you have any questions, please call The OS Group at (608) 668-2718 or email them at <u>PFAS@theOSgrp.com</u>.

You can also contact the DNR and DHS with questions about PFAS or the water sample results at the numbers provided below.

Questions about		<u>Contact</u>	<u>Phone</u>	E-mail Address
Soil & Groundwater Testing, Clean Up	DNR	David Rozeboom	715-215-2078	David.Rozeboom@wisconsin.gov
Drinking Water or Private wells	DNR	Kyle Burton	920-360-2112	kyle.burton@wisconsin.gov
Health Concerns	DHS	Curtis Hedman	608-266-6677	Curtis.Hedman@dhs.wisconsin.gov

On behalf of The City of La Crosse *The OS Group, LLC* (608) 668-2718 <u>PFAS@theOSgrp.com</u>

Attachment: Lab report for your well

Client: Pace Analytical Services, LLC					Laboratory II	D: VJ29068-0 <sup>-</sup>	11	
Description: 244-0					Matri	x: Aqueous		
Date Sampled:10/27/2020 1430	Project Nan	ne: LACROSSE WELL #	23 & 24					
Date Received: 10/29/2020 Pro	piect Numb	er: 40217323						
			_					
RunPrep MethodAnalytical MethodD1SOP SPEPFAS by ID SOP	$\begin{array}{c} \text{illution}  A \\ 1  1 \end{array}$	Analysis Date Analyst 1/05/2020 1329 MMM	Prep 11/03/2	Date 2020 10	Batch 07 72053			
Parameter	CA Numbe	S Analytical er Method	Result	Q	LOQ	DL	Units	Run
9-chlorohexadecafluoro-3-oxanone-1-sulfonic acid (9CI-PF3ONS)	756426-58	3-1 PFAS by ID SOP	ND		7.8	2.0	ng/L	1
11-chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3)	763051-92	2-9 PFAS by ID SOP	ND		7.8	2.0	ng/L	1
1H, 1H, 2H, 2H-perfluorodecane sulfonic acid (8:2 FTS)	39108-34	1-4 PFAS by ID SOP	ND		7.8	2.0	ng/L	1
1H, 1H, 2H, 2H-perfluorooctane sulfonic acid (6:2 FTS)	27619-97	7-2 PFAS by ID SOP	ND		7.8	2.0	ng/L	1
1H,1H,2H,2H-perfluorododecane sulfonic acid (10:2 FTS)	120226-60	0-0 PFAS by ID SOP	ND		7.8	2.0	ng/L	1
1H,1H,2H,2H-perfluorohexane sulfonic acid (4:2 FTS)	757124-72	2-4 PFAS by ID SOP	ND		7.8	2.0	ng/L	1
Hexafluoropropylene oxide dimer acid (GenX)	13252-13	3-6 PFAS by ID SOP	2.2	BJ	7.8	2.0	ng/L	1
4,8-dioxa-3H-perfluorononanoic acid (ADONA)	919005-14	1-4 PFAS by ID SOP	ND		7.8	2.0	ng/L	1
N-ethylperfluoro-1-octanesulfonamide (EtFOSA)	4151-50	-2 PFAS by ID SOP	ND		7.8	2.0	ng/L	1
N-ethylperfluoro-1-octanesulfonamidoacetic acid (EtFOSAA)	2991-50	-6 PFAS by ID SOP	ND		7.8	2.0	ng/L	1
2-N-ethylperfluoro-1-octanesulfonamido-ethanol (EtFOSE)	1691-99	P-2 PFAS by ID SOP	ND		7.8	2.0	ng/L	1
N-methylperfluoro-1-octanesulfonamide (MeFOSA)	31506-32	2-8 PFAS by ID SOP	ND		16	3.9	ng/L	1
N-methylperfluoro-1-octanesulfonamidoacetic acid (MeFOSAA)	2355-31	-9 PFAS by ID SOP	ND		7.8	2.0	ng/L	1
2-N-methylperfluoro-1-octanesulfonamido-ethanol (MeFOSE)	24448-09	9-7 PFAS by ID SOP	ND		7.8	2.0	ng/L	1
Perfluoro-1-butanesulfonic acid (PFBS)	375-73	-5 PFAS by ID SOP	6.4		3.9	0.98	ng/L	1
Perfluoro-1-decanesulfonic acid (PFDS)	335-77	-3 PFAS by ID SOP	ND		3.9	0.98	ng/L	1
Perfluoro-1-heptanesulfonic acid (PFHpS)	375-92	2-8 PFAS by ID SOP	ND		3.9	0.98	ng/L	1
Perfluoro-1-nonanesulfonic acid (PFNS)	68259-12	2-1 PFAS by ID SOP	ND		3.9	0.98	ng/L	1
Perfluoro-1-octanesulfonamide (PFOSA)	754-91	-6 PFAS by ID SOP	ND		3.9	0.98	ng/L	1
Perfluoro-1-pentanesulfonic acid (PFPeS)	2706-91	-4 PFAS by ID SOP	4.3		3.9	0.98	ng/L	1
Perfluorododecanesulfonic acid (PFDOS)	79780-39	9-5 PFAS by ID SOP	ND		7.8	2.0	ng/L	1
Perfluorohexanesulfonic acid (PFHxS)	355-46	-4 PFAS by ID SOP	13		3.9	0.98	ng/L	1
Perfluoro-n-butanoic acid (PFBA)	375-22	P-4 PFAS by ID SOP	17		3.9	0.98	ng/L	1
Perfluoro-n-decanoic acid (PFDA)	335-76	-2 PFAS by ID SOP	ND		3.9	0.98	ng/L	1
Perfluoro-n-dodecanoic acid (PFDoA)	307-55	-1 PFAS by ID SOP	ND		3.9	0.98	ng/L	1
Perfluoro-n-heptanoic acid (PFHpA)	375-85	-9 PFAS by ID SOP	ND		3.9	0.98	ng/L	1
Perfluoro-n-hexadecanoic acid (PFHxDA)	67905-19	9-5 PFAS by ID SOP	ND		7.8	2.0	ng/L	1
Perfluoro-n-hexanoic acid (PFHxA)	307-24	-4 PFAS by ID SOP	1.1	J	3.9	0.98	ng/L	1
Perfluoro-n-nonanoic acid (PFNA)	375-95	-1 PFAS by ID SOP	ND		3.9	0.98	ng/L	1
Perfluoro-n-octadecanoic acid (PFODA)	16517-11	I-6 PFAS by ID SOP	ND		7.8	2.0	ng/L	1
Perfluoro-n-octanoic acid (PFOA)	335-67	-1 PFAS by ID SOP	ND		3.9	0.98	ng/L	1
Perfluoro-n-pentanoic acid (PFPeA)	2706-90	-3 PFAS by ID SOP	ND		3.9	0.98	ng/L	1
Perfluoro-n-tetradecanoic acid (PFTeDA)	376-06	-7 PFAS by ID SOP	ND		3.9	0.98	ng/L	1
Perfluoro-n-tridecanoic acid (PFTrDA)	72629-94	1-8 PFAS by ID SOP	ND		3.9	0.98	ng/L	1
Perfluoro-n-undecanoic acid (PFUdA)	2058-94	-8 PFAS by ID SOP	ND		3.9	0.98	ng/L	1
Perfluorooctanesulfonic acid (PFOS)	1763-23	I-1 PFAS by ID SOP	ND		3.9	0.98	ng/L	1
Ru Surrogate Q % Re	un 1 Ac covery	ceptance Limits						
13C2_4:2FTS	108	25-150						
13C2_6:2FTS	110	25-150						
13C2_8:2FTS	110	25-150						
13C2_PFDoA	99	25-150						
13C2_PFHxDA	104	25-150						
13C2_PFTeDA	98	25-150						
LOO Limit of Quantitation D. D. S.	F 0	Non of company days to be	alibr-*	ong	Dot	alt		
ND = Not detected at or above the DL N = Recovery is out of criteria	E = Quantitat P = The RPD	ion or compound exceeded the c between two GC columns excee	anoration r eds 40%	ange D	L = Detection Lin = Estimated result	IIt < LOQ and > DI	_	
H = Out of holding time W = Reported on wet weight basis								

Client: Pace Analytical Services, LLC	
Description: 244-0	
Date Sampled:10/27/2020 1430	Project Name: LACROSSE WELL #23 & 24
Date Received: 10/29/2020	Project Number: 40217323

Laboratory ID: VJ29068-011

Matrix: Aqueous

LOQ = Limit of QuantitationB = Detected in the method blankE = Quantitation of compound exceeded the calibration rangeDL = Detection LimitND = Not detected at or above the DLN = Recovery is out of criteriaP = The RPD between two GC columns exceeds 40%J = Estimated result < LOQ and ≥ DL</td>H = Out of holding timeW = Reported on wet weight basis



444 21<sup>st</sup> Street South  $\cdot$  La Crosse, Wisconsin  $\cdot$  54601

November 18, 2020

2521 1<sup>st</sup> Avenue East La Crosse, WI 54603

Subject: Private Well Sampling Results 2521 1<sup>st</sup> Avenue East, La Crosse, WI 54603 Tax Parcel # 4-248-0 Sample ID # 248-0

Dear

We have received and reviewed the test results for the sample collected on October 27, 2020 at the above address. Some PFAS compounds were found, but the levels found were **below** the Department of Health Services (DHS) levels recommended for protecting health. These levels are called the "Recommended Public Health Standard" in the table below. The levels found in *your* well are called the "Sample Result" in the table below. **PLEASE NOTE:** At your residence we took a second "duplicate" sample for quality control / quality assurance purposes. The two samples' tests confirmed each other, and there were only minor differences. The results in the table below are based on the highest concentration of contaminants observed in either of the two samples.

#### **Sample Results**

Compound	Sample Result (unit)	Recomm Public H Standard	ended ealth (unit <sup>e</sup> )
N-Ethyl Perfluorooctane sulfonamide (NEtFOSA) CAS # 4151-50-2	Not Detected	20 ppt <sup>a,b</sup>	) ppt unds I 6
N-Ethyl perfluorooctane sulfonamidoacetic acid (NEtFOSAA) CAS # 2991-50-6	Not Detected	20 ppt <sup>a,b</sup>	it is 20 ompo // of all
N-Ethyl perfluorooctane sulfonamidoethanol (NEtFOSE) CAS # 1691-99-2	Not Detected	20 ppt <sup>a,b</sup>	ed lim ese 6 c ed toto
Perfluorooctane sulfonamide (FOSA) CAS # 754-91-6	Not Detected	20 ppt <sup>a,b</sup>	mende of the mbine
Perfluorooctanoic acid (PFOA) CAS # 335-67-1	Not Detected	20 ppt <sup>a,b</sup>	recom 1y <i>one</i> the <i>cc</i>
Perfluorooctanesulfonic acid (PFOS) CAS # 1763-23-1	2.1 ppt	20 ppt <sup>a,b</sup>	The for al or

Private Well Sampling Results for 2521 1st Avenue East, La Crosse, WI 54603 Tax Parcel # 4-248-0 Sample ID # 248-0 November 18, 2020

Compound	Sample Result (unit)	Recommended Public Health Standard (unit <sup>e</sup> )
Hexafluoropropylene oxide dimer acid (HPFO-DA; GenX) CAS # 13252-13-6	Not Detected	300 ppt <sup>a</sup>
Perfluorobutanesulfonic acid (PFBS) CAS # 375-73-5	2.4 ppt	450,000 ppt <sup>a</sup>
Perfluorohexanesulfonic acid (PFHxS) CAS # 355-46-4	7.7 ppt	40 ppt <sup>a</sup>
Perfluorobutanoic acid (PFBA) CAS # 375-22-4	7.4 ppt	10,000 ppt <sup>a</sup>
Perfluorodecanoic acid (PFDA) CAS # 335-76-2	Not Detected	300 ppt <sup>a</sup>
Perfluorododecanoic acid (PFDoA) CAS # 307-55-1	Not Detected	500 ppt <sup>a</sup>
Perfluorohexanoic acid (PFHxA) CAS # 307-24-4	Not Detected	150,000 ppt <sup>a</sup>
Perfluorononanoic acid (PFNA) CAS # 375-95-1	Not Detected	30 ppt <sup>a</sup>
Perfluorotetradecanoic acid (PFTeA) CAS # 376-06-7	Not Detected	10,000 ppt <sup>a</sup>
Perfluoroundecanoic acid (PFUnA) CAS # 2058-94-8	Not Detected	3,000 ppt <sup>a</sup>
4,8-Dioxa-3H-perfluorononanoic acid (DONA) CAS # 919005-14-4	Not Detected	3,000 ppt <sup>a</sup>
Perfluorooctadecanoic acid (PFODA) CAS # 16517-11-6	Not Detected	400,000 ppt <sup>a</sup>
Perfluoro-1-pentanesulfonic acid (PFPeS) CAS # 2706-91-4	1.4 ppt	None Established <sup>c</sup>

<sup>a</sup> Public health enforcement standard (ES) recommended by DHS.

<sup>b</sup> DHS recommends a combined enforcement standard of 20 ng/L and combined preventive action limit of 2 ng/L for FOSA, NEt-FOSA, NetFOSAA, PFOS, and PFOA.

<sup>c</sup> A current standard is not available; the compound is currently under review by DHS for potential public health standard recommendation.

<sup>d</sup> Public health enforcement standard (ES) in NR 140, Wisconsin Administrative Code.

<sup>e</sup> Units: Parts per trillion (ppt) = nanograms of substance per liter of water (ng/L)

<sup>BL</sup> Detected in the method blank. Possible lab contaminant.

Private Well Sampling Results for 2521 1st Avenue East, La Crosse, WI 54603 Tax Parcel # 4-248-0 Sample ID # 248-0 November 18, 2020

As required by law, we will be submitting these results to the Department of Natural Resources (DNR). The DNR may consult with the Department of Health Services (DHS) about these test results. DHS may review all PFAS tests and follow-up with you directly if any actions are recommended to protect your health.

Thank you for your patience and assistance with our investigation. We will provide updates on the project at <u>https://www.cityoflacrosse.org/wells</u> as our work continues. If you have any questions, please call The OS Group at (608) 668-2718 or email them at <u>PFAS@theOSgrp.com</u>.

You can also contact the DNR and DHS with questions about PFAS or the water sample results at the numbers provided below.

Questions about		<u>Contact</u>	<u>Phone</u>	E-mail Address
Soil & Groundwater Testing, Clean Up	DNR	David Rozeboom	715-215-2078	David.Rozeboom@wisconsin.gov
Drinking Water or Private wells	DNR	Kyle Burton	920-360-2112	kyle.burton@wisconsin.gov
Health Concerns	DHS	Curtis Hedman	608-266-6677	Curtis.Hedman@dhs.wisconsin.gov

On behalf of The City of La Crosse *The OS Group, LLC* (608) 668-2718 <u>PFAS@theOSgrp.com</u>

Attachment: Lab report for your well

Client: Pace Analytical Services, LLC					l	_aboratory II	D: VJ29068-0	10	
Description: 248-0						Matri	x: Aqueous		
Date Sampled:10/27/2020 1420	Project Nar	me: L	ACROSSE WELL #	23 & 24			·		
Date Received: 10/29/2020	, Diect Numł	her· 4(	0217323						
RunPrep MethodAnalytical MethodE1SOP SPEPFAS by ID SOP	1 1	Analy 11/05/	2020 1318 MMM	Prep 11/03/2	Date 2020 100	Batch 07 72053			
Parameter	CA Numb	AS ber	Analytical Method	Result	Q	LOQ	DL	Units	Run
9-chlorohexadecafluoro-3-oxanone-1-sulfonic acid (9CI-PF3ONS)	756426-5	8-1	PFAS by ID SOP	ND		7.5	1.9	ng/L	1
11-chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11CI-PF3)	763051-9	92-9	PFAS by ID SOP	ND		7.5	1.9	ng/L	1
1H, 1H, 2H, 2H-perfluorodecane sulfonic acid (8:2 FTS)	39108-3	34-4	PFAS by ID SOP	ND		7.5	1.9	ng/L	1
1H, 1H, 2H, 2H-perfluorooctane sulfonic acid (6:2 FTS)	27619-9	97-2	PFAS by ID SOP	ND		7.5	1.9	ng/L	1
1H,1H,2H,2H-perfluorododecane sulfonic acid (10:2 FTS)	120226-6	0-0	PFAS by ID SOP	ND		7.5	1.9	ng/L	1
1H,1H,2H,2H-perfluorohexane sulfonic acid (4:2 FTS)	757124-7	2-4	PFAS by ID SOP	ND		7.5	1.9	ng/L	1
Hexafluoropropylene oxide dimer acid (GenX)	13252-1	3-6	PFAS by ID SOP	ND		7.5	1.9	ng/L	1
4,8-dioxa-3H-perfluorononanoic acid (ADONA)	919005-1	4-4	PFAS by ID SOP	ND		7.5	1.9	ng/L	1
N-ethylperfluoro-1-octanesulfonamide (EtFOSA)	4151-50	0-2	PFAS by ID SOP	ND		7.5	1.9	ng/L	1
N-ethylperfluoro-1-octanesulfonamidoacetic acid (EtFOSAA)	2991-5	0-6	PFAS by ID SOP	ND		7.5	1.9	ng/L	1
2-N-ethylperfluoro-1-octanesulfonamido-ethanol (EtFOSE)	1691-9	9-2	PFAS by ID SOP	ND		7.5	1.9	ng/L	1
N-methylperfluoro-1-octanesulfonamide (MeFOSA)	31506-3	32-8	PFAS by ID SOP	ND		15	3.7	ng/L	1
N-methylperfluoro-1-octanesulfonamidoacetic acid (MeFOSAA)	2355-3	1-9	PFAS by ID SOP	ND		7.5	1.9	ng/L	1
2-N-methylperfluoro-1-octanesulfonamido-ethanol (MeFOSE)	24448-0	)9-7	PFAS by ID SOP	ND		7.5	1.9	ng/L	1
Perfluoro-1-butanesulfonic acid (PFBS)	375-7	3-5	PFAS by ID SOP	2.4	J	3.7	0.93	ng/L	1
Perfluoro-1-decanesulfonic acid (PFDS)	335-7	7-3	PFAS by ID SOP	ND		3.7	0.93	ng/L	1
Perfluoro-1-heptanesulfonic acid (PFHpS)	375-9	2-8	PFAS by ID SOP	ND		3.7	0.93	ng/L	1
Perfluoro-1-nonanesulfonic acid (PFNS)	68259-1	2-1	PFAS by ID SOP	ND		3.7	0.93	ng/L	1
Perfluoro-1-octanesulfonamide (PFOSA)	754-9	1-6	PFAS by ID SOP	ND		3.7	0.93	ng/L	1
Perfluoro-1-pentanesulfonic acid (PFPeS)	2706-9	1-4	PFAS by ID SOP	1.4	J	3.7	0.93	ng/L	1
Perfluorododecanesulfonic acid (PFDOS)	79780-3	39-5	PFAS by ID SOP	ND		7.5	1.9	ng/L	1
Perfluorohexanesulfonic acid (PFHxS)	355-4	6-4	PFAS by ID SOP	7.7		3.7	0.93	ng/L	1
Perfluoro-n-butanoic acid (PFBA)	375-2	2-4	PFAS by ID SOP	6.9		3.7	0.93	ng/L	1
Perfluoro-n-decanoic acid (PFDA)	335-7	6-2	PFAS by ID SOP	ND		3.7	0.93	ng/L	1
Perfluoro-n-dodecanoic acid (PFDoA)	307-5	5-1	PFAS by ID SOP	ND		3.7	0.93	ng/L	1
Perfluoro-n-heptanoic acid (PFHpA)	375-8	5-9	PFAS by ID SOP	ND		3.7	0.93	ng/L	1
Perfluoro-n-hexadecanoic acid (PFHxDA)	67905-1	9-5	PFAS by ID SOP	ND		7.5	1.9	ng/L	1
Perfluoro-n-hexanoic acid (PFHxA)	307-2	4-4	PFAS by ID SOP	ND		3.7	0.93	ng/L	1
Perfluoro-n-nonanoic acid (PFNA)	375-9	5-1	PFAS by ID SOP	ND		3.7	0.93	ng/L	1
Perfluoro-n-octadecanoic acid (PFODA)	16517-1	1-6	PFAS by ID SOP	ND		7.5	1.9	ng/L	1
Perfluoro-n-octanoic acid (PFOA)	335-6	7-1	PFAS by ID SOP	ND		3.7	0.93	ng/L	1
Perfluoro-n-pentanoic acid (PFPeA)	2706-9	0-3	PFAS by ID SOP	ND		3.7	0.93	ng/L	1
Perfluoro-n-tetradecanoic acid (PFTeDA)	376-0	6-7	PFAS by ID SOP	ND		3.7	0.93	ng/L	1
Perfluoro-n-tridecanoic acid (PFTrDA)	72629-9	94-8	PFAS by ID SOP	ND		3.7	0.93	ng/L	1
Perfluoro-n-undecanoic acid (PFUdA)	2058-9	4-8	PFAS by ID SOP	ND		3.7	0.93	ng/L	1
Perfluorooctanesulfonic acid (PFOS)	1763-2	3-1	PFAS by ID SOP	2.1	J	3.7	0.93	ng/L	1
Surrogate Q % Re	un 1 Ac covery	ccept Limi	ance its						
13C2_4:2FTS	115	25-1	50						
13C2_6:2FTS	100	25-1	50						
13C2_8:2FTS	98	25-1	50						
13C2_PFDoA	94	25-1	50						
13C2_PFHxDA	102	25-1	50						
13C2_PFTeDA	95	25-1	50						
LOQ = Limit of Quantitation B = Detected in the method blank	E = Quantita	ation of	compound exceeded the c	calibration r	ange DL	= Detection Lin	nit		
NUL = Not detected at or above the DL         N = Recovery is out of criteria           H = Out of holding time         W = Reported on wet weight basis	P = The RPI	D betwe	een two GC columns excee	eds 40%	J =	Estimated resu	$III < LOQ and \ge D$	L	

#23 & 24

Laboratory ID: VJ29068-010 Matrix: Aqueous

Client: Pace Analytical Services, LLC	
Description: 248-0	
Date Sampled:10/27/2020 1420	Project Name: LACROSSE WELL
Date Received: 10/29/2020	Project Number: 40217323

Surrogate	Run 1 Ac	ceptance
13C3_PFBS	94	25-150
13C3_PFHxS	96	25-150
13C3-HFPO-DA	112	25-150
13C4_PFBA	102	25-150
13C4_PFHpA	98	25-150
13C5_PFHxA	100	25-150
13C5_PFPeA	99	25-150
13C6_PFDA	96	25-150
13C7_PFUdA	97	25-150
13C8_PFOA	97	25-150
13C8_PFOS	98	25-150
13C8_PFOSA	106	10-150
13C9_PFNA	97	25-150
d-EtFOSA	87	10-150
d5-EtFOSAA	102	25-150
d9-EtFOSE	96	10-150
d-MeFOSA	92	10-150
d3-MeFOSAA	96	25-150
d7-MeFOSE	101	10-150

LOQ = Limit of QuantitationB = Detected in the method blankE = Quantitation of compound exceeded the calibration rangeDL = Detection LimitND = Not detected at or above the DLN = Recovery is out of criteriaP = The RPD between two GC columns exceeds 40%J = Estimated result < LOQ and ≥ DL</td>H = Out of holding timeW = Reported on wet weight basis

Client: Pace Analytical Services, LLC						Laboratory II	D: VJ29068-0	12	
Description: DUP#1						Matrix	: Aqueous		
Date Sampled:10/27/2020 1425	Project Na	me: I	ACROSSE WELL #	<sup>£</sup> 23 & 24					
Date Received: 10/29/2020	Project Num	ber: 4	10217323						
Dup Drop Mothed Apolytical Mothed	Dilution	Ana	vicio Data Apalvist	Drop	Data	Patch			
RunPrep MethodAnalytical Method1SOP SPEPFAS by ID SOP	1	Ana 11/05	2020 1340 MMM	Prep 11/03/2	020 10	07 72053			
Parameter	C Numl	AS oer	Analytical Method	Result	Q	LOQ	DL	Units	Run
9-chlorohexadecafluoro-3-oxanone-1-sulfonic acid (9CI-PF3ONS	) 756426-	58-1	PFAS by ID SOP	ND		7.2	1.8	ng/L	1
11-chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11CI-PF3.	) 763051-	92-9	PFAS by ID SOP	ND		7.2	1.8	ng/L	1
1H, 1H, 2H, 2H-perfluorodecane sulfonic acid (8:2 FTS)	39108-	34-4	PFAS by ID SOP	ND		7.2	1.8	ng/L	1
1H, 1H, 2H, 2H-perfluorooctane sulfonic acid (6:2 FTS)	27619-	97-2	PFAS by ID SOP	ND		7.2	1.8	ng/L	1
1H,1H,2H,2H-perfluorododecane sulfonic acid (10:2 FTS)	120226-	50-0	PFAS by ID SOP	ND		7.2	1.8	ng/L	1
1H,1H,2H,2H-perfluorohexane sulfonic acid (4:2 FTS)	757124-	72-4	PFAS by ID SOP	ND		7.2	1.8	ng/L	1
Hexafluoropropylene oxide dimer acid (GenX)	13252-	13-6	PFAS by ID SOP	ND		7.2	1.8	ng/L	1
4,8-dioxa-3H-perfluorononanoic acid (ADONA)	919005-	14-4	PFAS by ID SOP	ND		7.2	1.8	ng/L	1
N-ethylperfluoro-1-octanesulfonamide (EtFOSA)	4151-5	50-2	PFAS by ID SOP	ND		7.2	1.8	ng/L	1
N-ethylperfluoro-1-octanesulfonamidoacetic acid (EtFOSAA)	2991-5	50-6	PFAS by ID SOP	ND		7.2	1.8	ng/L	1
2-N-ethylperfluoro-1-octanesulfonamido-ethanol (EtFOSE)	1691-9	99-2	PFAS by ID SOP	ND		7.2	1.8	ng/L	1
N-methylperfluoro-1-octanesulfonamide (MeFOSA)	31506-	32-8	PFAS by ID SOP	ND		14	3.6	ng/L	1
N-methylperfluoro-1-octanesulfonamidoacetic acid (MeFOSAA)	2355-3	31-9	PFAS by ID SOP	ND		7.2	1.8	ng/L	1
2-N-methylperfluoro-1-octanesulfonamido-ethanol (MeFOSE)	24448-0	09-7	PFAS by ID SOP	ND		7.2	1.8	ng/L	1
Perfluoro-1-butanesulfonic acid (PFBS)	375-7	/3-5	PFAS by ID SOP	2.3	J	3.6	0.91	ng/L	1
Perfluoro-1-decanesulfonic acid (PFDS)	335-7	7-3	PFAS by ID SOP	ND		3.6	0.91	ng/L	1
Perfluoro-1-heptanesulfonic acid (PFHpS)	375-9	92-8	PFAS by ID SOP	ND		3.6	0.91	ng/L	1
Perfluoro-1-nonanesulfonic acid (PFNS)	68259-	12-1	PFAS by ID SOP	ND		3.6	0.91	ng/L	1
Perfluoro-1-octanesulfonamide (PFOSA)	754-9	91-6	PFAS by ID SOP	ND		3.6	0.91	ng/L	1
Perfluoro-1-pentanesulfonic acid (PFPeS)	2706-9	91-4	PFAS by ID SOP	1.1	J	3.6	0.91	ng/L	1
Perfluorododecanesulfonic acid (PFDOS)	79780-3	39-5	PFAS by ID SOP	ND		7.2	1.8	ng/L	1
Perfluorohexanesulfonic acid (PFHxS)	355-4	16-4	PFAS by ID SOP	6.6		3.6	0.91	ng/L	1
Perfluoro-n-butanoic acid (PFBA)	375-2	22-4	PFAS by ID SOP	7.4		3.6	0.91	ng/L	1
Perfluoro-n-decanoic acid (PFDA)	335-7	6-2	PFAS by ID SOP	ND		3.6	0.91	ng/L	1
Perfluoro-n-dodecanoic acid (PFDoA)	307-5	55-1	PFAS by ID SOP	ND		3.6	0.91	ng/L	1
Perfluoro-n-heptanoic acid (PFHpA)	375-8	35-9	PFAS by ID SOP	ND		3.6	0.91	ng/L	1
Perfluoro-n-hexadecanoic acid (PFHxDA)	67905-	19-5	PFAS by ID SOP	ND		7.2	1.8	ng/L	1
Perfluoro-n-hexanoic acid (PFHxA)	307-2	24-4	PFAS by ID SOP	ND		3.6	0.91	ng/L	1
Perfluoro-n-nonanoic acid (PFNA)	375-9	95-1	PFAS by ID SOP	ND		3.6	0.91	ng/L	1
Perfluoro-n-octadecanoic acid (PFODA)	16517-	11-6	PFAS by ID SOP	ND		7.2	1.8	ng/L	1
Perfluoro-n-octanoic acid (PFOA)	335-6	57-1	PFAS by ID SOP	ND		3.6	0.91	ng/L	1
Perfluoro-n-pentanoic acid (PFPeA)	2706-9	90-3	PFAS by ID SOP	ND		3.6	0.91	ng/L	1
Perfluoro-n-tetradecanoic acid (PFTeDA)	376-0	)6-7	PFAS by ID SOP	ND		3.6	0.91	ng/L	1
Perfluoro-n-tridecanoic acid (PFTrDA)	72629-	94-8	PFAS by ID SOP	ND		3.6	0.91	ng/L	1
Perfluoro-n-undecanoic acid (PFUdA)	2058-9	94-8	PFAS by ID SOP	ND		3.6	0.91	ng/L	1
Perfluorooctanesulfonic acid (PFOS)	1763-2	23-1	PFAS by ID SOP	1.9	J	3.6	0.91	ng/L	1
Surrogate Q % R	Run 1 A Recovery	ccep Lin	tance hits						
13C2_4:2FTS	105	25-	150						
13C2_6:2FTS	96	25-	150						
13C2_8:2FTS	93	25-	150						
13C2_PFDoA	96	25-	150						
13C2_PFHxDA	96	25-	150						
13C2_PFTeDA	93	25-	150						
LOQ = Limit of Quantitation B = Detected in the method blank	E = Quantit	ation c	f compound exceeded the o	calibration r	ange D	L = Detection Lim	hit		
$ID = Not detected at or above the DL N = Recovery is out of criteria P = The RPD between two GC columns exceeds 40% J = Estimated result < LOQ and \ge DLI = Out of holding time W = Reported on wet weight basis$									

Client: Pace Analytical Services, LLC		Laboratory ID: VJ29068-012
Description: DUP#1		Matrix: Aqueous
Date Sampled:10/27/2020 1425	Project Name: LACROSSE WELL #23 & 24	
Date Received: 10/29/2020	Project Number: 40217323	
	Dup 1 Accontanco	

Surrogate	Q % Recovery	Limits	
13C3_PFBS	91	25-150	
13C3_PFHxS	93	25-150	
13C3-HFPO-DA	93	25-150	
13C4_PFBA	95	25-150	
13C4_PFHpA	91	25-150	
13C5_PFHxA	98	25-150	
13C5_PFPeA	91	25-150	
13C6_PFDA	94	25-150	
13C7_PFUdA	89	25-150	
13C8_PFOA	94	25-150	
13C8_PFOS	90	25-150	
13C8_PFOSA	96	10-150	
13C9_PFNA	93	25-150	
d-EtFOSA	86	10-150	
d5-EtFOSAA	95	25-150	
d9-EtFOSE	89	10-150	
d-MeFOSA	86	10-150	
d3-MeFOSAA	91	25-150	
d7-MeFOSE	101	10-150	

LOQ = Limit of Quantitation	B = Detected in the method blank	E = Quantitation of compound exceeded the calibration range	DL = Detection Limit
ND = Not detected at or above the DL	N = Recovery is out of criteria	P = The RPD between two GC columns exceeds 40%	J = Estimated result < LOQ and $\ge$ DL
H = Out of holding time	W = Reported on wet weight basis		



444 21st Street South · La Crosse, Wisconsin · 54601

November 18, 2020

2553 1ST AVE E La Crosse, WI 54603

Subject: Private Well Sampling Results 2553 1ST AVE E, La Crosse, WI 54603 Tax Parcel Number 4-256-0 Sample Number 256-0

### Dear :

We have received and reviewed the test results for the sample collected on October 27, 2020 at the above address. Some PFAS compounds were found at levels <u>above</u> the Department of Health Services (DHS) levels recommended for protecting health. These levels are called the "Recommended Public Health Standard" in the table below. The levels found in your well are called the "Sample Result" in the table below.

Because some of the levels are above the recommended Public Health Standard, the City is offering to provide bottled water delivered to your home for drinking, cooking, and brushing your teeth. There will be no cost to you for the bottled water. Please complete the attached form and mail it to The OS Group to make arrangements for having a water dispenser and bottles delivered to your home or business. Call 608-668-2718 or email <u>PFAS@theOSgrp.com</u>. You may also complete this form on line at <u>www.cityoflacrosse.org/bottledwater</u>

The following table summarizes the test results from the sample. **Bolded results** are above a current recommended level intended to protect your health according to the Department of Health Services (DHS).

Private Well Sampling Results for 2553 1ST AVE E Tax Parcel Number 4-256-0 Sample Number 256-0 November 18, 2020

### Sample Results

Compound	Sample Result (unit)	Recomn Public Standard	Recommended Public Health Standard (unit <sup>e</sup> )		
Perfluorooctanesulfonic acid (PFOS) CAS # 1763-23-1	970 ppt	20 ppt <sup>a,b</sup>	) ppt unds I 6		
Perfluorooctanoic acid (PFOA) CAS # 335-67-1	19 ppt	20 ppt <sup>a,b</sup>	it is 20 compo x/ of al		
Perfluorooctane sulfonamide (FOSA) CAS # 754-91-6	Not detected	20 ppt <sup>a,b</sup>	ed lim ese 6 c <i>ed tot</i> c		
N-Ethyl perfluorooctane sulfonamidoethanol (NEtFOSE) CAS # 1691-99-2	Not detected	20 ppt <sup>a,b</sup>			
N-Ethyl Perfluorooctane sulfonamide (NEtFOSA) CAS # 4151-50-2	Not detected	20 ppt <sup>a,b</sup>	recom ny <i>one</i> the <i>c</i> c		
N-Ethyl perfluorooctane sulfonamidoacetic acid (NEtFOSAA) CAS # 2991-50-6	Not detected	20 ppt <sup>a,b</sup>	The for a or		
Hexafluoropropylene oxide dimer acid (HPFO-DA; GenX) CAS # 13252-13-6	Not detected		300 ppt <sup>a</sup>		
Perfluorobutanoic acid (PFBA) CAS # 375-22-4	16 ppt	1	0,000 ppt <sup>a</sup>		
Perfluorobutanesulfonic acid (PFBS) CAS # 375-73-5	19 ppt	45	0,000 ppt <sup>a</sup>		
Perfluorododecanoic acid (PFDoA) CAS # 307-55-1	Not detected		500 ppt <sup>a</sup>		
Perfluorohexanoic acid (PFHxA) CAS # 307-24-4	23 ppt	15	0,000 ppt <sup>a</sup>		
Perfluorotetradecanoic acid (PFTeA) CAS # 376-06-7	Not detected	1	0,000 ppt <sup>a</sup>		
Perfluoroundecanoic acid (PFUnA) CAS # 2058-94-8	Not detected		3,000 ppt <sup>a</sup>		
4,8-Dioxa-3H-perfluorononanoic acid (DONA) CAS # 919005-14-4	Not detected		3,000 ppt <sup>a</sup>		
Perfluorooctadecanoic acid (PFODA) CAS # 16517-11-6	Not detected	40	0,000 ppt <sup>a</sup>		
Perfluorohexanesulfonic acid (PFHxS) CAS # 355-46-4	600 ppt		40 ppt <sup>a</sup>		
Perfluorononanoic acid (PFNA) CAS # 375-95-1	Not Detected		30 ppt <sup>a</sup>		
Perfluorodecanoic acid (PFDA) CAS # 335-76-2	Not detected		300 ppt <sup>a</sup>		

Private Well Sampling Results for 2553 1ST AVE E Tax Parcel Number 4-256-0 Sample Number 256-0 November 18, 2020

Compound	Sample Result (unit)	Recommended Public Health Standard (unit <sup>e</sup> )
1H, 1H, 2H, 2H-perfluorooctane sulfonic acid (6:2 FTS) CAS # 27619-97-2	18 ppt <sup>BL</sup>	None Established <sup>c</sup>
Perfluoro-1-heptanesulfonic acid (PFHpS) CAS # 375-92-8	32 ppt	None Established <sup>c</sup>
Perfluoro-1-pentanesulfonic acid (PFPeS) CAS # 2706-91-4	35 ppt	None Established <sup>c</sup>
Perfluoro-n-heptanoic acid (PFHpA) CAS # 375-85-9	8.1 ppt	None Established <sup>c</sup>
Perfluoro-n-pentanoic acid (PFPeA) CAS # 2706-90-3	13 ppt	None Established <sup>c</sup>

<sup>a</sup> Public health enforcement standard (ES) recommended by DHS.

<sup>b</sup> DHS recommends a combined enforcement standard of 20 ng/L and combined preventive action limit of 2 ng/L for FOSA, NEt-FOSA, NetFOSAA, PFOS, and PFOA.

<sup>c</sup> A current standard is not available; the compound is currently under review by DHS for potential public health standard recommendation.

<sup>d</sup> Public health enforcement standard (ES) in NR 140, Wisconsin Administrative Code.

<sup>e</sup> Units: Parts per trillion (ppt) = nanograms of substance per liter of water (ng/L)

<sup>BL</sup> Detected in the method blank. Possible lab contaminant.

As required by law, we will be submitting these results to the Department of Natural Resources (DNR). The DNR may consult with the Department of Health Services (DHS) about these test results. DHS may review all PFAS tests and follow-up with you directly if any actions are recommended to protect your health.

Thank you for your patience and assistance with our investigation. We will provide updates on the project at <u>https://www.cityoflacrosse.org/wells</u> as our work continues. If you have any questions, please call The OS Group at (608) 668-2718 or email them at <u>PFAS@theOSgrp.com</u>.

You can also contact the DNR and DHS with questions about PFAS or the water sample results at the numbers provided below.

<b>Questions about</b>		<u>Contact</u>	<u>Phone</u>	E-mail Address
Soil & Water Testing	DNR	David Rozeboom	715-215-2078	David.Rozeboom@wisconsin.gov
Health Concerns	DHS	Curtis Hedman	608-266-6677	Curtis.Hedman@dhs.wisconsin.gov

On behalf of The City of La Crosse, *The OS Group, LLC* 

Attachment: Lab report for your well Bottled Water Acknowledgement

Client: Pace Analytical Services, LLC		ESSE R NOK	KEN	Laboratory ID: VJ29068-002					
Description: 256-0		2553 1ST AV	ΈE	Matrix: Aqueous					
Date Sampled:10/27/2020 13	Project Name: LACROSSE WELL #23 & 24								
Date Received: 10/29/2020	Pro	ject Number	40217323						
Run Prep Method	Analytical Method D	ilution Ana	alysis Date Analyst	Prep	Date Batch				
3 SOP SPE	PFAS by ID SOP	1 11/1	1/2020 2029 MMM	11/10/2	020 1623 72960				
4 SOP SPE	PFAS by ID SOP	5 11/1	2/2020 1159 MMM	11/10/2	2020 1623 72960				
Parameter		CAS Number	Analytical Method	Result	Q LOQ	DL	Units	Run	
9-chlorohexadecafluoro-3-oxanon	e-1-sulfonic acid (9CI-PF3ONS)	756426-58-1	PFAS by ID SOP	ND	7.1	1.8	ng/L	3	
11-chloroeicosafluoro-3-oxaundeo	cane-1-sulfonic acid (11CI-PF3)	763051-92-9	PFAS by ID SOP	ND	7.1	1.8	ng/L	3	
1H, 1H, 2H, 2H-perfluorodecane s	sulfonic acid (8:2 FTS)	39108-34-4	PFAS by ID SOP	ND	7.1	1.8	ng/L	3	
1H, 1H, 2H, 2H-perfluorooctane	sulfonic acid (6:2 FTS)	27619-97-2	PFAS by ID SOP	18	B 7.1	1.8	ng/L	3	
1H,1H,2H,2H-perfluorododecane	sulfonic acid (10:2 FTS)	120226-60-0	PFAS by ID SOP	ND	7.1	1.8	ng/L	3	
1H,1H,2H,2H-perfluorohexane su	lfonic acid (4:2 FTS)	757124-72-4	PFAS by ID SOP	ND	7.1	1.8	ng/L	3	
Hexafluoropropylene oxide dimer	acid (GenX)	13252-13-6	PFAS by ID SOP	ND	7.1	1.8	ng/L	3	
4,8-dioxa-3H-perfluorononanoic a	cid (ADONA)	919005-14-4	PFAS by ID SOP	ND	7.1	1.8	ng/L	3	
N-ethylperfluoro-1-octanesulfonar	nide (EtFOSA)	4151-50-2	PFAS by ID SOP	ND	7.1	1.8	ng/L	3	
N-ethylperfluoro-1-octanesulfonar	nidoacetic acid (EtFOSAA)	2991-50-6	PFAS by ID SOP	ND	7.1	1.8	ng/L	3	
2-N-ethylperfluoro-1-octanesulfon	amido-ethanol (EtFOSE)	1691-99-2	PFAS by ID SOP	ND	7.1	1.8	ng/L	3	
N-methylperfluoro-1-octanesulfon	amide (MeFOSA)	31506-32-8	PFAS by ID SOP	ND	14	3.5	ng/L	3	
N-methylperfluoro-1-octanesulfon	amidoacetic acid (MeFOSAA)	2355-31-9	PFAS by ID SOP	ND	7.1	1.8	ng/L	3	
2-N-methylperfluoro-1-octanesulto	onamido-ethanol (MeFOSE)	24448-09-7	PFAS by ID SOP	ND	7.1	1.8	ng/L	3	
Perfluoro-1-butanesulfonic acid	I (PFBS)	375-73-5	PEAS by ID SOP	19	3.5	0.89	ng/L	3	
Perfluoro-1-decanesulfonic acid (I	PFDS)	335-77-3	PFAS by ID SOP	ND	3.5	0.89	ng/L	3	
Perfluoro-1-heptanesulfonic aci	id (PFHpS)	375-92-8	PEAS by ID SOP	32	3.5	0.89	ng/L	3	
Perfluoro-1-nonanesulfonic acid (I	PFNS)	68259-12-1	PFAS by ID SOP	ND	3.5	0.89	ng/L	3	
Perfluoro-1-octanesulfonamide (P	FOSA)	754-91-6	PFAS by ID SOP	ND	3.5	0.89	ng/L	3	
Perfluoro-1-pentanesultonic aci	d (PFPeS)	2706-91-4	PEAS by ID SOP	35	3.5	0.89	ng/L	3	
Perfluorododecanesulfonic acid (F	PFDOS)	79780-39-5	PFAS by ID SOP	ND 600	7.1	1.8	ng/L	3	
Perhuoronexariesulionic acid (PEP	^FHX5)	300-40-4	PFAS by ID SOP	000	3.5	0.89	ng/L	3	
Perhuoro-n-butanoic acid (PFB.	A)	375-22-4	PFAS by ID SOP		3.5	0.89	ng/L	3	
Periluoro-n-decanoic acid (PFDA)		330-70-Z	PFAS by ID SOP		3.5	0.89	ng/L	3	
Periluoro-n-dodecanoic acid (PFL	JUA)	307-33-1	PFAS by ID SOP	ND	3.5	0.89	ng/L	3	
Perhuoro-n-neptanoic acid (PF		3/3-83-9	PFAS by ID SOP	8. I	3.5	0.89	ng/L	3	
Periluoro-n-nexadecanoic acid (P	FHXDA)	0/905-19-5	PFAS by ID SOP		7.1	1.8	ng/L	3	
Periluoro-n-nexanoic acid (PFH	XA)	307-24-4	PFAS by ID SOP	23	3.5	0.89	ng/L	3	
Periluoro-n-nonanoic acid (PFNA)		3/5-95-1	PFAS by ID SOP		3.5 7 1	0.89	ng/L	3	
Perfluoro ploctapoic acid (PF	(UDA)	225 67 1	PFAS by ID SOP	10	7.1	1.8	ng/L	ა ა	
Perfluoro-n-pentapoie acid (PEU	γ ΣοΛ)	2204 00 2	DEAS by ID SOP	17	ວ.ວ 2 F	0.89	ng/L	ა ა	
Perfluoro n tetradocanoio acid (PF		276 06 7	DEAS by ID SOP		ວ.ວ 2 F	0.89	ng/L	ა ა	
Perfluero e tridocensia coid (PI		3/0-00-/	PEAS by ID SOP		3.5	0.89	ng/L	ა ი	
Periluoro-n-inuecanoic acid (PEI)		12029-94-8	PEAS by ID SOP		3.5	0.89	ng/L	ა ი	
Perflueroectapecultaria acid (PFU		2058-94-8	PEAS by ID SOP		3.5	0.89	ng/L	ۍ ۸	
Pernuoroocianesuitonic acid (P	(FUS)	1/03-23-1	PEAS BY ID SUP	970	18	4.4	ng/L	4	
	D.		ntonoo Duu	1 10	aantanaa				

Surrogate	R Q % Re	un 3 Ac ecovery	ceptance Limits	Q	Run 4 Ac % Recovery	ceptance Limits	
13C2_4:2FTS		98	25-150		105	25-150	
13C2_6:2FTS		100	25-150		98	25-150	
13C2_8:2FTS		90	25-150		81	25-150	
13C2_PFDoA		97	25-150		85	25-150	
13C2_PFHxDA		86	25-150		96	25-150	
LOQ = Limit of Quantitation	B = Detected in the method blank	E = Quantita	tion of compou	nd exce	eded the calibration r	ange DL = Detection Limit	
ND = Not detected at or above the DL	N = Recovery is out of criteria	P = The RPI	D between two	GC colu	umns exceeds 40%	J = Estimated result < LOQ and $\ge$ DL	
H = Out of holding time	W = Reported on wet weight basis						

Project Number: 40217323

Client: Pace Analytical Services, LLC Description: 256-0 Date Sampled:10/27/2020 1315 Date Received: 10/29/2020

Project Name: LACROSSE WELL #23 & 24

Laboratory ID: VJ29068-002

Matrix: Aqueous

Surrogate	0	Run 3 A		$\cap$	Run 4 A	Acceptance
	Q	03 Necovery	25-150	Q	02 NRECOVELY	25-150
		75	25-150		72	25-150
13C3_PFBS		94	25-150		93	25-150
13C3_PFHxS		94	25-150		89	25-150
13C3-HFPO-DA		87	25-150		100	25-150
13C4_PFBA		102	25-150		92	25-150
13C4_PFHpA		93	25-150		93	25-150
13C5_PFHxA		97	25-150		89	25-150
13C5_PFPeA		89	25-150		94	25-150
13C6_PFDA		102	25-150		93	25-150
13C7_PFUdA		92	25-150		94	25-150
13C8_PFOA		94	25-150		95	25-150
13C8_PFOS		89	25-150		89	25-150
13C8_PFOSA		90	10-150		101	10-150
13C9_PFNA		90	25-150		86	25-150
d-EtFOSA		73	10-150		101	10-150
d5-EtFOSAA		94	25-150		99	25-150
d9-EtFOSE		80	10-150		97	10-150
d-MeFOSA		82	10-150		95	10-150
d3-MeFOSAA		84	25-150		95	25-150
d7-MeFOSE		79	10-150		94	10-150

LOQ = Limit of QuantitationB = Detected in the method blankE = Quantitation of compound exceeded the calibration rangeDL = Detection LimitND = Not detected at or above the DLN = Recovery is out of criteriaP = The RPD between two GC columns exceeds 40%J = Estimated result < LOQ and ≥ DL</td>H = Out of holding timeW = Reported on wet weight basis

## BOTTLED WATER ACKNOWLEDGEMENT 2553 1ST AVE E, LA CROSSE, WI 54603

If you desire to accept the bottled water delivery, please complete and sign this form and return it to The OS Group at <u>PFAS@TheOSgrp.com</u> or mail to 444 21<sup>st</sup> St. S, La Crosse, WI 54601. You may also complete this form electronically on line at <u>www.cityoflacrosse.org/bottledwater</u>. Call 608-668-2718 with any question you may have.

As pre-caution for the protection of human health, the City of La Crosse (The City) will provide, on a temporary basis, bottled water for drinking, cooking and toothbrushing purposes at the above referenced address. The water will be delivered to your home or business by a commercial water delivery service. At the City's cost, a dispenser / cooler and regular deliveries of 5-gallon containers of water will be provided. The City reserves the right to dictate the conditions of delivery, such as minimum and maximum number of containers per delivery, frequency and timing of deliveries. The City reserves the right to periodically review whether The City should continue to provide bottled water, considering factors such as State and Federal standards and guidance, evolving knowledge and understanding of the sources, cause and responsibility for the contamination, new or reinterpreted test results, and the availability of more permanent or cost-effective sources of water for the above purposes. The City of La Crosse makes no warranty or representation regarding the suitability of the bottled water beyond those made by the commercial water delivery service.

All reusable or returnable equipment and supplies, such as the containers and cooler/dispenser, are the property of the commercial water delivery service or the City of La Crosse. By signing below, the Occupant of the above referenced property acknowledges that all reusable or returnable equipment and supplies shall be returned to the commercial water delivery service or the City of La Crosse upon request. The Occupant agrees to provide reasonable access for delivery of bottled water and pick up of reusable or returnable equipment and supplies. Occupant(s) acknowledges that they may be required to sign an agreement with the commercial water delivery service as a condition of receiving bottled water.

**Check ownership:** 

Owner-Occupant
Cccupant Only

Number of Occupants: \_\_\_\_\_

Signed: \_\_\_\_\_ Dated: \_\_\_\_\_

Printed Name: \_\_\_\_\_

## BOTTLED WATER ACKNOWLEDGEMENT 2553 1ST AVE E, LA CROSSE, WI 54603

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Cccupant Only

Number of Occupants: \_\_\_\_\_

Signed: \_\_\_\_\_ Dated: \_\_\_\_\_

Printed Name: \_\_\_\_\_



444 21<sup>st</sup> Street South  $\cdot$  La Crosse, Wisconsin  $\cdot$  54601

November 18, 2020

2533 Bainbridge Street La Crosse, WI 54603

Subject: Private Well Sampling Results 2533 Bainbridge Street, La Crosse, WI 54603 Tax Parcel #4-330-0 Sample ID # 330-0

### Dear :

We have received and reviewed the test results for the sample collected on October 27, 2020 at the above address. Some PFAS compounds were found at levels <u>above</u> the Department of Health Services (DHS) levels recommended for protecting health. These levels are called the "Recommended Public Health Standard" in the table below. The levels found in your well are called the "Sample Result" in the table below.

Because some of the levels are above the recommended Public Health Standard, the City is offering to provide bottled water delivered to your home for drinking, cooking, and brushing your teeth. There will be no cost to you for the bottled water. Please complete the attached form and mail it to The OS Group to make arrangements for having a water dispenser and bottles delivered to your home or business. Call 608-668-2718 or email <u>PFAS@theOSgrp.com</u>. You may also complete this form on line at <u>www.cityoflacrosse.org/bottledwater</u>

The following table summarizes the test results from the sample. **Bolded results** are above a current recommended level intended to protect your health according to the Department of Health Services (DHS).

Private Well Sampling Results for 2533 Bainbridge Street, La Crosse, WI 54603 Tax Parcel # 4-330-0 Sample ID # 330-0 November 18, 2020

Compound	Sample Result (unit)	Recommended Public Health Standard (unit <sup>e</sup> )		
N-Ethyl Perfluorooctane sulfonamide (NEtFOSA) CAS # 4151-50-2	Not Detected	20 ppt <sup>a,b</sup>	ppt unds 6	
N-Ethyl perfluorooctane sulfonamidoacetic acid (NEtFOSAA) CAS # 2991-50-6	Not Detected	20 ppt <sup>a,b</sup>	it is 20 ompoi <i>il</i> of all	
N-Ethyl perfluorooctane sulfonamidoethanol (NEtFOSE) CAS # 1691-99-2	Not Detected	20 ppt <sup>a,b</sup>	ed lim ese 6 c ed totc	
Perfluorooctane sulfonamide (FOSA) CAS # 754-91-6	Not Detected	20 ppt <sup>a,b</sup>	mend of the of the ombine	
Perfluorooctanoic acid (PFOA) CAS # 335-67-1	9.5 ppt	20 ppt <sup>a,b</sup>	recom ny <i>one</i> the <i>c</i>	
Perfluorooctanesulfonic acid (PFOS) CAS # 1763-23-1	11 ppt	20 ppt <sup>a,b</sup>	The for a or	
Hexafluoropropylene oxide dimer acid (HPFO-DA; GenX) CAS # 13252-13-6	Not Detected		300 ppt <sup>a</sup>	
Perfluorobutanesulfonic acid (PFBS) CAS # 375-73-5	4.0 ppt	45	0,000 ppt <sup>a</sup>	
Perfluorohexanesulfonic acid (PFHxS) CAS # 355-46-4	9.7 ppt		40 ppt <sup>a</sup>	
Perfluorobutanoic acid (PFBA) CAS # 375-22-4	36 ppt	1	.0,000 ppt <sup>a</sup>	
Perfluorodecanoic acid (PFDA) CAS # 335-76-2	Not Detected		300 ppt <sup>a</sup>	
Perfluorododecanoic acid (PFDoA) CAS # 307-55-1	Not Detected		500 ppt <sup>a</sup>	
Perfluorohexanoic acid (PFHxA) CAS # 307-24-4	0.91 ppt	15	0,000 ppt <sup>a</sup>	
Perfluorononanoic acid (PFNA) CAS # 375-95-1	Not Detected		30 ppt <sup>a</sup>	
Perfluorotetradecanoic acid (PFTeA) CAS # 376-06-7	Not Detected	1	.0,000 ppt <sup>a</sup>	
Perfluoroundecanoic acid (PFUnA) CAS # 2058-94-8	Not Detected		3,000 ppt <sup>a</sup>	

### Sample Results
Private Well Sampling Results for 2533 Bainbridge Street, La Crosse, WI 54603 Tax Parcel # 4-330-0 Sample ID # 330-0 November 18, 2020

Compound	Sample Result (unit)	Recommended Public Health Standard (unit <sup>e</sup> )
4,8-Dioxa-3H-perfluorononanoic acid (DONA) CAS # 919005-14-4	Not Detected	3,000 ppt <sup>a</sup>
Perfluorooctadecanoic acid (PFODA) CAS # 16517-11-6	Not Detected	400,000 ppt <sup>a</sup>
Perfluoro-1-pentanesulfonic acid (PFPeS) CAS # 2706-91-4	2.4 ppt	None Established <sup>c</sup>

<sup>a</sup> Public health enforcement standard (ES) recommended by DHS.

<sup>b</sup> DHS recommends a combined enforcement standard of 20 ng/L and combined preventive action limit of 2 ng/L for FOSA, NEt-FOSE, NEt-FOSA, NetFOSAA, PFOS, and PFOA.

<sup>c</sup> A current standard is not available; the compound is currently under review by DHS for potential public health standard recommendation.

<sup>d</sup> Public health enforcement standard (ES) in NR 140, Wisconsin Administrative Code.

<sup>e</sup> Units: Parts per trillion (ppt) = nanograms of substance per liter of water (ng/L)

<sup>BL</sup> Detected in the method blank. Possible lab contaminant.

As required by law, we will be submitting these results to the Department of Natural Resources (DNR). The DNR may consult with the Department of Health Services (DHS) about these test results. DHS may review all PFAS tests and follow-up with you directly if any actions are recommended to protect your health.

Thank you for your patience and assistance with our investigation. We will provide updates on the project at <u>https://www.cityoflacrosse.org/wells</u> as our work continues. If you have any questions, please call The OS Group at (608) 668-2718 or email them at <u>PFAS@theOSgrp.com</u>.

You can also contact the DNR and DHS with questions about PFAS or the water sample results at the numbers provided below.

Questions about		<u>Contact</u>	<u>Phone</u>	E-mail Address		
Soil & Groundwater Testing, Clean Up	DNR	David Rozeboom	715-215-2078	David.Rozeboom@wisconsin.gov		
Drinking Water or Private wells	DNR	Kyle Burton	920-360-2112	kyle.burton@wisconsin.gov		
Health Concerns	DHS	Curtis Hedman	608-266-6677	Curtis.Hedman@dhs.wisconsin.gov		

On behalf of The City of La Crosse *The OS Group, LLC* 

Attachment: Lab report for your well Bottled water acknowledgement

Client: Pace Analytical Services, LLC				Laboratory	D: VJ29090-0	010	
Description: 330-0				Matr	ix: Aqueous		
Date Sampled:10/27/2020 1225	Project Nam	ne: LACROSSE WELL #	<b>≇23 &amp; 24</b>				
Date Received: 10/29/2020	roiect Numb	er: 40217319					
			Durin D	-t- D-t-h			
RunPrep MethodAnalytical Method1SOP SPEPFAS by ID SOP	1 1	1/07/2020 0053 KMM2	Prep D 11/05/202	ate Batch 20 1030 72351			
Parameter	CA Numbe	S Analytical er Method	Result (	D LOQ	DL	Units	Run
9-chlorohexadecafluoro-3-oxanone-1-sulfonic acid (9CI-PF3ONS)	756426-58	B-1 PFAS by ID SOP	ND	7.2	1.8	ng/L	1
11-chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11CI-PF3	.) 763051-92	2-9 PFAS by ID SOP	ND	7.2	1.8	ng/L	1
1H, 1H, 2H, 2H-perfluorodecane sulfonic acid (8:2 FTS)	39108-34	-4 PFAS by ID SOP	ND	7.2	1.8	ng/L	1
1H, 1H, 2H, 2H-perfluorooctane sulfonic acid (6:2 FTS)	27619-97	2-2 PFAS by ID SOP	ND	7.2	1.8	ng/L	1
1H,1H,2H,2H-perfluorododecane sulfonic acid (10:2 FTS)	120226-60	0-0 PFAS by ID SOP	ND	7.2	1.8	ng/L	1
1H,1H,2H,2H-perfluorohexane sulfonic acid (4:2 FTS)	757124-72	2-4 PFAS by ID SOP	ND	7.2	1.8	ng/L	1
Hexafluoropropylene oxide dimer acid (GenX)	13252-13	8-6 PFAS by ID SOP	ND	7.2	1.8	ng/L	1
4,8-dioxa-3H-perfluorononanoic acid (ADONA)	919005-14	-4 PFAS by ID SOP	ND	7.2	1.8	ng/L	1
N-ethylperfluoro-1-octanesulfonamide (EtFOSA)	4151-50	-2 PFAS by ID SOP	ND	7.2	1.8	ng/L	1
N-ethylperfluoro-1-octanesulfonamidoacetic acid (EtFOSAA)	2991-50	-6 PFAS by ID SOP	ND	7.2	1.8	ng/L	1
2-N-ethylperfluoro-1-octanesulfonamido-ethanol (EtFOSE)	1691-99	-2 PFAS by ID SOP	ND	7.2	1.8	ng/L	1
N-methylperfluoro-1-octanesulfonamide (MeFOSA)	31506-32	2-8 PFAS by ID SOP	ND	14	3.6	ng/L	1
N-methylperfluoro-1-octanesulfonamidoacetic acid (MeFOSAA)	2355-31	-9 PFAS by ID SOP	ND	7.2	1.8	ng/L	1
2-N-methylperfluoro-1-octanesulfonamido-ethanol (MeFOSE)	24448-09	P-7 PFAS by ID SOP	ND	7.2	1.8	ng/L	1
Perfluoro-1-butanesulfonic acid (PFBS)	375-73	-5 PFAS by ID SOP	4.0	3.6	0.90	ng/L	1
Perfluoro-1-decanesulfonic acid (PFDS)	335-77	-3 PFAS by ID SOP	ND	3.6	0.90	ng/L	1
Perfluoro-1-heptanesulfonic acid (PFHpS)	375-92	-8 PFAS by ID SOP	ND	3.6	0.90	ng/L	1
Perfluoro-1-nonanesulfonic acid (PFNS)	68259-12	2-1 PFAS by ID SOP	ND	3.6	0.90	ng/L	1
Perfluoro-1-octanesulfonamide (PFOSA)	754-91	-6 PFAS by ID SOP	ND	3.6	0.90	ng/L	1
Perfluoro-1-pentanesulfonic acid (PFPeS)	2706-91	-4 PFAS by ID SOP	2.4 J	3.6	0.90	ng/L	1
Perfluorododecanesulfonic acid (PFDOS)	79780-39	P-5 PFAS by ID SOP	ND	7.2	1.8	ng/L	1
Perfluorohexanesulfonic acid (PFHxS)	355-46	-4 PFAS by ID SOP	9.7	3.6	0.90	ng/L	1
Perfluoro-n-butanoic acid (PFBA)	375-22	-4 PFAS by ID SOP	36	3.6	0.90	ng/L	1
Perfluoro-n-decanoic acid (PFDA)	335-76	-2 PFAS by ID SOP	ND	3.6	0.90	ng/L	1
Perfluoro-n-dodecanoic acid (PFDoA)	307-55	-1 PFAS by ID SOP	ND	3.6	0.90	ng/L	1
Perfluoro-n-heptanoic acid (PFHpA)	375-85	-9 PFAS by ID SOP	ND	3.6	0.90	ng/L	1
Perfluoro-n-hexadecanoic acid (PFHxDA)	67905-19	P-5 PFAS by ID SOP	ND	7.2	1.8	ng/L	1
Perfluoro-n-hexanoic acid (PFHxA)	307-24	-4 PFAS by ID SOP	0.91 J	3.6	0.90	ng/L	1
Perfluoro-n-nonanoic acid (PFNA)	375-95	-1 PFAS by ID SOP	ND	3.6	0.90	ng/L	1
Perfluoro-n-octadecanoic acid (PFODA)	16517-11	-6 PFAS by ID SOP	ND	7.2	1.8	ng/L	1
Perfluoro-n-octanoic acid (PFOA)	335-67	-1 PEAS by ID SOP	9.5	3.6	0.90	ng/L	1
Perfluoro-n-pentanoic acid (PFPeA)	2706-90	-3 PFAS by ID SOP	ND	3.6	0.90	ng/L	1
Perfluoro-n-tetradecanoic acid (PFTeDA)	376-06	-/ PFAS by ID SOP	ND	3.6	0.90	ng/L	1
Perfluoro-n-tridecanoic acid (PF1rDA)	/2629-94	I-8 PEAS by ID SOP	ND	3.6	0.90	ng/L	1
Perfluoro-n-undecanoic acid (PFUdA)	2058-94	-8 PEAS by ID SOP	ND	3.6	0.90	ng/L	1
Perfluorooctanesulfonic acid (PFOS)	1763-23	-1 PFAS by ID SOP	11	3.6	0.90	ng/L	1
Surrogate Q % Re	Run 1 Ac ecovery	ceptance Limits					
13C2_4:2FTS	90	25-150					
13C2_6:2FTS	94	25-150					
13C2_8:2FTS	102	25-150					
13C2_PFDoA	74	25-150					
13C2_PFHxDA	79	25-150					
13C2_PFTeDA	78	25-150					
LOQ = Limit of Quantitation B = Detected in the method blank	E = Quantitat	ion of compound exceeded the	calibration ran	ae DL = Detection Li	mit		
ND = Not detected at or above the DL N = Recovery is out of criteria	P = The RPD	between two GC columns exce	eds 40%	J = Estimated res	ult < LOQ and <u>&gt;</u>	DL	
H = Out of holding time W = Reported on wet weight basis							

Client: Pace Analytical Services, LLC	
Description: 330-0	
Date Sampled:10/27/2020 1225	Project Name: LACROSSE WELL #23 & 24
Date Received: 10/29/2020	Project Number: 40217319

d7-MeFOSE

Laboratory ID: VJ29090-010

Matrix: Aqueous

Bate Received: Tore Neceo		
Surrogate	Run 1 Acceptance Q % Recovery Limits	
13C3_PFBS	80 25-150	
13C3_PFHxS	82 25-150	
13C3-HFPO-DA	92 25-150	
13C4_PFBA	88 25-150	
13C4_PFHpA	90 25-150	
13C5_PFHxA	83 25-150	
13C5_PFPeA	87 25-150	
13C6_PFDA	87 25-150	
13C7_PFUdA	78 25-150	
13C8_PFOA	85 25-150	
13C8_PFOS	68 25-150	
13C8_PFOSA	96 10-150	
13C9_PFNA	83 25-150	
d-EtFOSA	62 10-150	
d5-EtFOSAA	83 25-150	
d9-EtFOSE	76 10-150	
d-MeFOSA	72 10-150	
d3-MeFOSAA	83 25-150	

10-150

81

LOQ = Limit of Quantitation	B = Detected in the method blank	E = Quantitation of compound exceeded the calibration range	DL = Detection Limit
ND = Not detected at or above the DL	N = Recovery is out of criteria	P = The RPD between two GC columns exceeds 40%	J = Estimated result < LOQ and $\ge$ DL
H = Out of holding time	W = Reported on wet weight basis		

## BOTTLED WATER ACKNOWLEDGEMENT 2533 Bainbridge Street, LA CROSSE, WI 54603

If you desire to accept the bottled water delivery, please complete and sign this form and return it to The OS Group at <u>PFAS@TheOSqrp.com</u> or mail to 444 21<sup>st</sup> St. S, La Crosse, WI 54601. You may also complete this form electronically on line at <u>www.cityoflacrosse.org/bottledwater</u>. Call 608-668-2718 with any question you may have.

As pre-caution for the protection of human health, the City of La Crosse (The City) will provide, on a temporary basis, bottled water for drinking, cooking and toothbrushing purposes at the above referenced address. The water will be delivered to your home or business by a commercial water delivery service. At the City's cost, a dispenser / cooler and regular deliveries of 5-gallon containers of water will be provided. The City reserves the right to dictate the conditions of delivery, such as minimum and maximum number of containers per delivery, frequency and timing of deliveries. The City reserves the right to periodically review whether The City should continue to provide bottled water, considering factors such as State and Federal standards and guidance, evolving knowledge and understanding of the sources, cause and responsibility for the contamination, new or reinterpreted test results, and the availability of more permanent or cost-effective sources of water for the above purposes. The City of La Crosse makes no warranty or representation regarding the suitability of the bottled water beyond those made by the commercial water delivery service.

All reusable or returnable equipment and supplies, such as the containers and cooler/dispenser, are the property of the commercial water delivery service or the City of La Crosse. By signing below, the Occupant of the above referenced property acknowledges that all reusable or returnable equipment and supplies shall be returned to the commercial water delivery service or the City of La Crosse upon request. The Occupant agrees to provide reasonable access for delivery of bottled water and pick up of reusable or returnable equipment and supplies. Occupant(s) acknowledges that they may be required to sign an agreement with the commercial water delivery service as a condition of receiving bottled water.

Check ownership: \_\_\_\_\_ Owner-Occupant

\_\_\_\_\_ Occupant Only

Number of Occupants: \_\_\_\_\_

Cianadi	Datadi	
Signed.	Dateu.	

Printed Name: \_\_\_\_\_

## BOTTLED WATER ACKNOWLEDGEMENT 2533 Bainbridge Street, LA CROSSE, WI 54603

If you desire to accept the bottled water delivery, please complete and sign this form and return it to The OS Group at <u>PFAS@TheOSqrp.com</u> or mail to 444 21<sup>st</sup> St. S, La Crosse, WI 54601. You may also complete this form electronically on line at <u>www.cityoflacrosse.org/bottledwater</u>. Call 608-668-2718 with any question you may have.

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Check ownership: \_\_\_\_\_ Owner-Occupant

\_\_\_\_\_ Occupant Only

Number of Occupants: \_\_\_\_\_

Cianadi	Datadi	
Signed.	Dateu.	

Printed Name: \_\_\_\_\_



444 21st Street South · La Crosse, Wisconsin · 54601

November 17, 2020

2550 1<sup>st</sup> Avenue West La Crosse, WI 54603

Subject: Private Well Sampling Results 2550 1<sup>st</sup> Avenue West, La Crosse, WI 54603 Tax Parcel # 4-339-0 Sample ID # 339-0

Dear

We have received and reviewed the test results for the sample collected on October 27, 2020 at the above address. Some PFAS compounds were found, but the levels found were **below** the Department of Health Services (DHS) levels recommended for protecting health. These levels are called the "Recommended Public Health Standard" in the table below. The levels found in *your* well are called the "Sample Result" in the table below.

#### Sample Results

Compound	Sample Result (unit)	Recommended Public Health Standard (unit <sup>e</sup> )			
N-Ethyl Perfluorooctane sulfonamide (NEtFOSA) CAS # 4151-50-2	Not Detected	20 ppt <sup>a,b</sup>	ppt unds 6		
N-Ethyl perfluorooctane sulfonamidoacetic acid (NEtFOSAA) CAS # 2991-50-6	Not Detected	20 ppt <sup>a,b</sup>	t is 20 ompou / of all		
N-Ethyl perfluorooctane sulfonamidoethanol (NEtFOSE) CAS # 1691-99-2	Not Detected	20 ppt <sup>a,b</sup>	ed limi ese 6 c e <i>d tota</i>		
Perfluorooctane sulfonamide (FOSA) CAS # 754-91-6	Not Detected	20 ppt <sup>a,b</sup>	mend s of the mbine		
Perfluorooctanoic acid (PFOA) CAS # 335-67-1	2.9 ppt	20 ppt <sup>a,b</sup>	recom ny <i>one</i> the <i>c</i> c		
Perfluorooctanesulfonic acid (PFOS) CAS # 1763-23-1	4.4 ppt	20 ppt <sup>a,b</sup>	The for a or		

Private Well Sampling Results for 2550 1<sup>st</sup> Avenue West, La Crosse, WI 54603 Tax Parcel # 4-339-0 Sample ID # 339-0

Compound	Sample Result (unit)	Recommended Public Health Standard (unit <sup>e</sup> )
Hexafluoropropylene oxide dimer acid (HPFO-DA; GenX) CAS # 13252-13-6	2.2 ppt <sup>BL</sup>	300 ppt <sup>a</sup>
Perfluorobutanesulfonic acid (PFBS) CAS # 375-73-5	6.3 ppt	450,000 ppt <sup>a</sup>
Perfluorohexanesulfonic acid (PFHxS) CAS # 355-46-4	18 ppt	40 ppt ª
Perfluorobutanoic acid (PFBA) CAS # 375-22-4	48 ppt	10,000 ppt <sup>a</sup>
Perfluorodecanoic acid (PFDA) CAS # 335-76-2	Not Detected	300 ppt <sup>a</sup>
Perfluorododecanoic acid (PFDoA) CAS # 307-55-1	Not Detected	500 ppt <sup>a</sup>
Perfluorohexanoic acid (PFHxA) CAS # 307-24-4	3.2 ppt	150,000 ppt <sup>a</sup>
Perfluorononanoic acid (PFNA) CAS # 375-95-1	Not Detected	30 ppt <sup>a</sup>
Perfluorotetradecanoic acid (PFTeA) CAS # 376-06-7	Not Detected	10,000 ppt <sup>a</sup>
Perfluoroundecanoic acid (PFUnA) CAS # 2058-94-8	Not Detected	3,000 ppt <sup>a</sup>
4,8-Dioxa-3H-perfluorononanoic acid (DONA) CAS # 919005-14-4	Not Detected	3,000 ppt <sup>a</sup>
Perfluorooctadecanoic acid (PFODA) CAS # 16517-11-6	Not Detected	400,000 ppt <sup>a</sup>
Perfluoro-1-pentanesulfonic acid CAS # 2706-91-4	5.0 ppt	None Established <sup>c</sup>
Perfluoro-n-pentanoic acid CAS # 2706-90-3	3.5 ppt	None Established <sup>c</sup>

<sup>a</sup> Public health enforcement standard (ES) recommended by DHS.

<sup>b</sup> DHS recommends a combined enforcement standard of 20 ng/L and combined preventive action limit of 2 ng/L for FOSA, NEt-FOSA, NetFOSAA, PFOS, and PFOA.

<sup>c</sup> A current standard is not available; the compound is currently under review by DHS for potential public health standard recommendation.

<sup>d</sup> Public health enforcement standard (ES) in NR 140, Wisconsin Administrative Code.

<sup>e</sup> Units: Parts per trillion (ppt) = nanograms of substance per liter of water (ng/L)

<sup>BL</sup> Detected in the method blank. Possible lab contaminant.

Private Well Sampling Results for 2550 1<sup>st</sup> Avenue West, La Crosse, WI 54603 Tax Parcel # 4-339-0 Sample ID # 339-0

As required by law, we will be submitting these results to the Department of Natural Resources (DNR). The DNR may consult with the Department of Health Services (DHS) about these test results. DHS may review all PFAS tests and follow-up with you directly if any actions are recommended to protect your health.

Thank you for your patience and assistance with our investigation. We will provide updates on the project at <u>https://www.cityoflacrosse.org/wells</u> as our work continues. If you have any questions, please call The OS Group at (608) 668-2718 or email them at <u>PFAS@theOSgrp.com</u>.

You can also contact the DNR and DHS with questions about PFAS or the water sample results at the numbers provided below.

Questions about		<u>Contact</u>	<u>Phone</u>	<u>E-mail Address</u>
Soil & Water Testing	DNR	David Rozeboom	715-215-2078	David.Rozeboom@wisconsin.gov
Health Concerns	DHS	Curtis Hedman	608-266-6677	Curtis.Hedman@dhs.wisconsin.gov

On behalf of The City of La Crosse *The OS Group, LLC* 

Attachment: Lab report for your well

	PFAS	by LC/MS/MS						
Client: Pace Analytical Services, LLC	Wardwell, 2550	1 <sup>st</sup> Ave W		l	_aboratory II	D: VJ29068-0	07	
Description: 339-0	Tax Parcer#4-5	59-0			Matrix	k: Aqueous		
Date Sampled:10/27/2020 1400	Project Name:	LACROSSE WELL #	#23 & 24					
Date Received: 10/29/2020 P	roject Number:	40217323						
Run Prep Method Analytical Method	Dilution Ana	lysis Date Analyst	Prep	Date	Batch			
1 SOP SPE PFAS by ID SOP	1 11/0	5/2020 1235 MMM	11/03/2	2020 100	07 72053			
Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run
9-chlorohexadecafluoro-3-oxanone-1-sulfonic acid (9CI-PF3ONS	) 756426-58-1	PFAS by ID SOP	ND		7.4	1.9	ng/L	1
11-chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11CI-PF3.	) 763051-92-9	PFAS by ID SOP	ND		7.4	1.9	ng/L	1
1H, 1H, 2H, 2H-perfluorodecane sulfonic acid (8:2 FTS)	39108-34-4	PFAS by ID SOP	ND		7.4	1.9	ng/L	1
1H, 1H, 2H, 2H-perfluorooctane sulfonic acid (6:2 FTS)	27619-97-2	PFAS by ID SOP	ND		7.4	1.9	ng/L	1
1H,1H,2H,2H-perfluorododecane sulfonic acid (10:2 FTS)	120226-60-0	PFAS by ID SOP	ND		7.4	1.9	ng/L	1
1H,1H,2H,2H-perfluorohexane sulfonic acid (4:2 FTS)	757124-72-4	PFAS by ID SOP	ND		7.4	1.9	ng/L	1
Hexafluoropropylene oxide dimer acid (GenX)	13252-13-6	PFAS by ID SOP	2.2	BJ	7.4	1.9	ng/L	1
4,8-dioxa-3H-perfluorononanoic acid (ADONA)	919005-14-4	PFAS by ID SOP	ND		7.4	1.9	ng/L	1
N-ethylperfluoro-1-octanesulfonamide (EtFOSA)	4151-50-2	PFAS by ID SOP	ND		7.4	1.9	ng/L	1
N-ethylperfluoro-1-octanesulfonamidoacetic acid (EtFOSAA)	2991-50-6	PFAS by ID SOP	ND		7.4	1.9	na/L	1
2-N-ethylperfluoro-1-octanesulfonamido-ethanol (EtEOSE)	1691-99-2	PEAS by ID SOP	ND		7.4	1.9	na/L	1
N-methylperfluoro-1-octanesulfonamide (MeEOSA)	31506-32-8	PEAS by ID SOP	ND		15	3.7	na/L	1
N-methylperfluoro-1-octanesulfonamidoacetic acid (MeEOSAA)	2355-31-9	PEAS by ID SOP	ND		7.4	19	ng/l	1
2-N-methylperfluoro-1-octanesulfonamido-ethanol (MeEOSE)	24448-09-7	PEAS by ID SOP	ND		7.4	19	ng/L	1
Perfluoro-1-butanesulfonic acid (PEBS)	375-73-5	PEAS by ID SOP	6.3		3.7	0.93	ng/L	1
Perfluoro-1-decanesulfonic acid (PEDS)	335-77-3	PEAS by ID SOP			3.7	0.93	ng/l	1
Perfluoro_1-bentanesulfonic acid (PEHnS)	375-92-8	PEAS by ID SOP			3.7	0.75	ng/L	1
Perfluoro_1_nonanesulfonic acid (PENS)	68250-12-1	PEAS by ID SOP			3.7	0.73	ng/L	1
Porfluoro 1 octanosulfonamido (PEOSA)	754 01 6				27	0.93	ng/L	1
Perfluoro 1 poptaposulfonic acid (PEPoS)	2706.01.4	PEAS by ID SOP	5.0		27	0.93	ng/L	1
Perfluorododoconocultonic acid (PEDOS)	2700-91-4		5.0 ND		3.7 7 A	0.93	ng/L	1
	79760-39-3		10		7.4	1.9	ng/L	1
Perfluero p hutanoic acid (PERA)	300-40-4	PFAS by ID SOP	18		3.7	0.93	ng/L	1
Porfluoro n docanoic acid (PEDA)	225 76 2	DEAS by ID SOD			27	0.93	ng/L	1
Perfluoro n dedesanois asid (PEDA)	333-70-2 207 EE 1	PFAS by ID SOP			3.7 2 7	0.93	ng/L	1
Perfluoro n hontonois acid (PEUnA)	307-33-1	PFAS by ID SOP			3.7 2 7	0.93	ng/L	1
	3/5-85-9				3.7	0.93	ng/L	1
	67905-19-5	PFAS by ID SOP	ND		7.4	1.9	ng/L	1
Perfluoro-n-nexanoic acid (PFHXA)	307-24-4	PFAS by ID SOP	3.2	J	3.7	0.93	ng/L	1
Perfluoro-n-nonanoic acid (PFNA)	375-95-1	PFAS by ID SOP	ND		3.7	0.93	ng/L	1
Perfluoro-n-octadecanoic acid (PFODA)	16517-11-6	PEAS by ID SOP	ND		7.4	1.9	ng/L	1
	335-67-1	PFAS by ID SOP	2.9	J	3.7	0.93	ng/L	1
Perfluoro-n-pentanoic acid (PFPeA)	2706-90-3	PFAS by ID SOP	3.5	J	3.7	0.93	ng/L	1
Perfluoro-n-tetradecanoic acid (PFTeDA)	376-06-7	PFAS by ID SOP	ND		3.7	0.93	ng/L	1
Perfluoro-n-tridecanoic acid (PF1rDA)	72629-94-8	PFAS by ID SOP	ND		3.7	0.93	ng/L	1
Perfluoro-n-undecanoic acid (PFUdA)	2058-94-8	PFAS by ID SOP	ND		3.7	0.93	ng/L	1
Perfluorooctanesulfonic acid (PFOS)	1763-23-1	PFAS by ID SOP	4.4		3.7	0.93	ng/L	1
Surrogate Q % R	Run 1 Accer ecovery Lir	otance mits						
13C2_4:2FTS	110 25	-150						
13C2_6:2FTS	105 25	-150						
13C2_8:2FTS	105 25	-150						
13C2_PFDoA	101 25	-150						
13C2_PFHxDA	104 25	-150						
13C2_PFTeDA	103 25	-150						
LOQ = Limit of Quantitation B = Detected in the method blank	E = Quantitation	of compound exceeded the	calibration i	range DL	= Detection Lin	nit		
ND = Not detected at or above the DL N = Recovery is out of criteria	P = The RPD bet	ween two GC columns exce	eds 40%	J=	Estimated resu	It < LOQ and $\geq$ D	L	
H = Out of holding time W = Reported on wet weight basis	5							

Laboratory ID: VJ29068-007 Matrix: Aqueous

Client: Pace Analytical Services, LLC	
Description: 339-0	
Date Sampled:10/27/2020 1400	Project Name: LACROSSE WELL #23 & 24
Date Received: 10/29/2020	Project Number: 40217323

Surrogata	Run 1 A	cceptance
Surroyate	Q % Recovery	Limits
13C3_PFBS	97	25-150
13C3_PFHxS	101	25-150
13C3-HFPO-DA	112	25-150
13C4_PFBA	105	25-150
13C4_PFHpA	105	25-150
13C5_PFHxA	105	25-150
13C5_PFPeA	101	25-150
13C6_PFDA	99	25-150
13C7_PFUdA	105	25-150
13C8_PFOA	99	25-150
13C8_PFOS	97	25-150
13C8_PFOSA	105	10-150
13C9 PFNA	105	25-150
d-EtFOSA	92	10-150
d5-EtFOSAA	105	25-150
d9-EtFOSE	99	10-150
d-MeFOSA	99	10-150
d3-MeFOSAA	103	25-150
d7-MeFOSE	102	10-150

 LOQ = Limit of Quantitation
 B = Detected in the method blank
 E = Quantitation of compound exceeded the calibration range
 DL = Detection Limit

 ND = Not detected at or above the DL
 N = Recovery is out of criteria
 P = The RPD between two GC columns exceeds 40%
 J = Estimated result < LOQ and ≥ DL</td>

 H = Out of holding time
 W = Reported on wet weight basis
 H = Out of holding time
 L = Detection Limit



444 21st Street South · La Crosse, Wisconsin · 54601

November 18, 2020

2509 Bainbridge Street La Crosse, WI 54603

Subject: Private Well Sampling Results 2509 Bainbridge, La Crosse, WI 54603 Tax Parcel # 4-345-0 Sample ID # 345-0

Dear

We have received and reviewed the test results for the sample collected on October 27, 2020 at the above address. Some PFAS compounds were found, but the levels found were **below** the Department of Health Services (DHS) levels recommended for protecting health. These levels are called the "Recommended Public Health Standard" in the table below. The levels found in *your* well are called the "Sample Result" in the table below.

#### Sample Results

Compound	Sample Result (unit)	Recommended Public Health Standard (unit <sup>e</sup> )		
N-Ethyl Perfluorooctane sulfonamide (NEtFOSA) CAS # 4151-50-2	Not Detected	20 ppt <sup>a,b</sup>	) ppt unds I 6	
N-Ethyl perfluorooctane sulfonamidoacetic acid (NEtFOSAA) CAS # 2991-50-6	Not Detected	20 ppt <sup>a,b</sup>	it is 20 ompo <i>il</i> of al	
N-Ethyl perfluorooctane sulfonamidoethanol (NEtFOSE) CAS # 1691-99-2	Not Detected	20 ppt <sup>a,b</sup>	ed lim ese 6 c ed toto	
Perfluorooctane sulfonamide (FOSA) CAS # 754-91-6	0.88 ppt	20 ppt <sup>a,b</sup>	mend of the ombine	
Perfluorooctanoic acid (PFOA) CAS # 335-67-1	2.0 ppt	20 ppt <sup>a,b</sup>	recom ny <i>one</i> the <i>cc</i>	
Perfluorooctanesulfonic acid (PFOS) CAS # 1763-23-1	3.0 ppt	20 ppt <sup>a,b</sup>	The for a or	

Private Well Sampling Results for 2509 Bainbridge, La Crosse, WI 54603 Tax Parcel # 4-345-0 Sample ID # 345-0 November 18, 2020

Compound	Sample Result (unit)	Recommended Public Health Standard (unit <sup>e</sup> )
Hexafluoropropylene oxide dimer acid (HPFO-DA; GenX) CAS # 13252-13-6	Not Detected	300 ppt <sup>a</sup>
Perfluorobutanesulfonic acid (PFBS) CAS # 375-73-5	2.3 ppt	450,000 ppt <sup>a</sup>
Perfluorohexanesulfonic acid (PFHxS) CAS # 355-46-4	1.9 ppt	40 ppt <sup>a</sup>
Perfluorobutanoic acid (PFBA) CAS # 375-22-4	4.7 ppt	10,000 ppt <sup>a</sup>
Perfluorodecanoic acid (PFDA) CAS # 335-76-2	Not Detected	300 ppt <sup>a</sup>
Perfluorododecanoic acid (PFDoA) CAS # 307-55-1	Not Detected	500 ppt <sup>a</sup>
Perfluorohexanoic acid (PFHxA) CAS # 307-24-4	Not Detected	150,000 ppt <sup>a</sup>
Perfluorononanoic acid (PFNA) CAS # 375-95-1	Not Detected	30 ppt <sup>a</sup>
Perfluorotetradecanoic acid (PFTeA) CAS # 376-06-7	Not Detected	10,000 ppt <sup>a</sup>
Perfluoroundecanoic acid (PFUnA) CAS # 2058-94-8	Not Detected	3,000 ppt <sup>a</sup>
4,8-Dioxa-3H-perfluorononanoic acid (DONA) CAS # 919005-14-4	Not Detected	3,000 ppt <sup>a</sup>
Perfluorooctadecanoic acid (PFODA) CAS # 16517-11-6	Not Detected	400,000 ppt <sup>a</sup>
Perfluoro-1-pentanesulfonic acid (PFPeS) CAS # 2706-91-4	0.90 ppt	None Established <sup>c</sup>

<sup>a</sup> Public health enforcement standard (ES) recommended by DHS.

<sup>b</sup> DHS recommends a combined enforcement standard of 20 ng/L and combined preventive action limit of 2 ng/L for FOSA, NEt-FOSA, NetFOSAA, PFOS, and PFOA.

<sup>c</sup> A current standard is not available; the compound is currently under review by DHS for potential public health standard recommendation.

<sup>d</sup> Public health enforcement standard (ES) in NR 140, Wisconsin Administrative Code.

<sup>e</sup> Units: Parts per trillion (ppt) = nanograms of substance per liter of water (ng/L)

<sup>BL</sup> Detected in the method blank. Possible lab contaminant.

Private Well Sampling Results for 2509 Bainbridge, La Crosse, WI 54603 Tax Parcel # 4-345-0 Sample ID # 345-0 November 18, 2020

As required by law, we will be submitting these results to the Department of Natural Resources (DNR). The DNR may consult with the Department of Health Services (DHS) about these test results. DHS may review all PFAS tests and follow-up with you directly if any actions are recommended to protect your health.

Thank you for your patience and assistance with our investigation. We will provide updates on the project at <u>https://www.cityoflacrosse.org/wells</u> as our work continues. If you have any questions, please call The OS Group at (608) 668-2718 or email them at <u>PFAS@theOSgrp.com</u>.

You can also contact the DNR and DHS with questions about PFAS or the water sample results at the numbers provided below.

Questions about		<u>Contact</u>	<u>Phone</u>	E-mail Address		
Soil & Groundwater Testing, Clean Up	DNR	David Rozeboom	715-215-2078	David.Rozeboom@wisconsin.gov		
Drinking Water or Private wells	DNR	Kyle Burton	920-360-2112	kyle.burton@wisconsin.gov		
Health Concerns	DHS	Curtis Hedman	608-266-6677	Curtis.Hedman@dhs.wisconsin.gov		

On behalf of The City of La Crosse *The OS Group, LLC* (608) 668-2718 <u>PFAS@theOSgrp.com</u>

Attachment: Lab report for your well

Client: Pace Analytical Services, LLC				La	aboratory II	D: VJ29090-0	05	
Description: 345-0					Matri	x: Aqueous		
Date Sampled:10/27/2020 1150	Project Name	e: LACROSSE WELL #	#23 & 24			·		
Date Received: 10/29/2020 Pro	piect Numbe	r: 40217319						
		a husia Data Arashust	Durin	Data	Datak			
RunPrep MethodAnalytical MethodL1SOP SPEPFAS by ID SOP	1 11	/06/2020 2359 KMM2	Prep 11/05/2	Date 2020 1030	Batch 0 72351			
Parameter	CAS Number	S Analytical r Method	Result	Q	LOQ	DL	Units	Run
9-chlorohexadecafluoro-3-oxanone-1-sulfonic acid (9CI-PF3ONS)	756426-58-	1 PFAS by ID SOP	ND		6.9	1.7	ng/L	1
11-chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11CI-PF3)	763051-92-	9 PFAS by ID SOP	ND		6.9	1.7	ng/L	1
1H, 1H, 2H, 2H-perfluorodecane sulfonic acid (8:2 FTS)	39108-34-	4 PFAS by ID SOP	ND		6.9	1.7	ng/L	1
1H, 1H, 2H, 2H-perfluorooctane sulfonic acid (6:2 FTS)	27619-97-	2 PFAS by ID SOP	ND		6.9	1.7	ng/L	1
1H,1H,2H,2H-perfluorododecane sulfonic acid (10:2 FTS)	120226-60-	0 PFAS by ID SOP	ND		6.9	1.7	ng/L	1
1H,1H,2H,2H-perfluorohexane sulfonic acid (4:2 FTS)	757124-72-	4 PFAS by ID SOP	ND		6.9	1.7	ng/L	1
Hexafluoropropylene oxide dimer acid (GenX)	13252-13-	6 PFAS by ID SOP	ND		6.9	1.7	ng/L	1
4,8-dioxa-3H-perfluorononanoic acid (ADONA)	919005-14-	4 PFAS by ID SOP	ND		6.9	1.7	ng/L	1
N-ethylperfluoro-1-octanesulfonamide (EtFOSA)	4151-50-2	2 PFAS by ID SOP	ND		6.9	1.7	ng/L	1
N-ethylperfluoro-1-octanesulfonamidoacetic acid (EtFOSAA)	2991-50-0	6 PFAS by ID SOP	ND		6.9	1.7	ng/L	1
2-N-ethylperfluoro-1-octanesulfonamido-ethanol (EtFOSE)	1691-99-2	2 PFAS by ID SOP	ND		6.9	1.7	ng/L	1
N-methylperfluoro-1-octanesulfonamide (MeFOSA)	31506-32-	8 PFAS by ID SOP	ND		14	3.4	ng/L	1
N-methylperfluoro-1-octanesulfonamidoacetic acid (MeFOSAA)	2355-31-9	9 PFAS by ID SOP	ND		6.9	1.7	ng/L	1
2-N-methylperfluoro-1-octanesulfonamido-ethanol (MeFOSE)	24448-09-	7 PFAS by ID SOP	ND		6.9	1.7	ng/L	1
Perfluoro-1-butanesulfonic acid (PFBS)	375-73-	5 PFAS by ID SOP	2.3	J	3.4	0.86	ng/L	1
Perfluoro-1-decanesulfonic acid (PFDS)	335-77-3	3 PFAS by ID SOP	ND		3.4	0.86	ng/L	1
Perfluoro-1-heptanesulfonic acid (PFHpS)	375-92-8	8 PFAS by ID SOP	ND		3.4	0.86	ng/L	1
Perfluoro-1-nonanesulfonic acid (PFNS)	68259-12-	1 PFAS by ID SOP	ND		3.4	0.86	ng/L	1
Perfluoro-1-octanesulfonamide (PFOSA)	754-91-0	6 PFAS by ID SOP	0.88	J	3.4	0.86	ng/L	1
Perfluoro-1-pentanesulfonic acid (PFPeS)	2706-91-4	4 PFAS by ID SOP	0.90	J	3.4	0.86	ng/L	1
Perfluorododecanesulfonic acid (PFDOS)	79780-39-	5 PFAS by ID SOP	ND		6.9	1.7	ng/L	1
Perfluorohexanesulfonic acid (PFHxS)	355-46-4	4 PFAS by ID SOP	1.9	J	3.4	0.86	ng/L	1
Perfluoro-n-butanoic acid (PFBA)	375-22-4	4 PFAS by ID SOP	4.7		3.4	0.86	ng/L	1
Perfluoro-n-decanoic acid (PFDA)	335-76-2	2 PFAS by ID SOP	ND		3.4	0.86	ng/L	1
Perfluoro-n-dodecanoic acid (PFDoA)	307-55-1	1 PEAS by ID SOP	ND		3.4	0.86	ng/L	1
Perfluoro-n-heptanoic acid (PFHpA)	375-85-9	9 PEAS by ID SOP	ND		3.4	0.86	ng/L	1
Perfluoro-n-hexadecanoic acid (PFHxDA)	67905-19-	5 PEAS by ID SOP	ND		6.9	1.7	ng/L	1
Perfluoro-n-hexanoic acid (PFHxA)	307-24-4	4 PEAS by ID SOP	ND		3.4	0.86	ng/L	1
Perfluoro-n-nonanoic acid (PFNA)	375-95-1	1 PEAS by ID SOP	ND		3.4	0.86	ng/L	1
Perfluoro-n-octadecanoic acid (PFODA)	16517-11-	6 PEAS by ID SOP	ND 2.0		6.9	1.7	ng/L	1
Perluoro-n-ocianoic acid (PFOA)	335-67-	PFAS by ID SOP	2.0	J	3.4	0.86	ng/L	1
Perfluoro-n-pentanoic acid (PFPeA)	2700-90-	7 PEAS by ID SOP			3.4	0.86	ng/L	1
Perfluoro-n-tetradecanoic acid (PFTeDA)	3/0-00-	PFAS by ID SOP			3.4	0.86	ng/L	1
Periluoro-n-indecanoic acid (PETIDA)	2059-94-	8 PFAS by ID SOP			3.4	0.86	ng/L	1
Perfluoro-II-undecarioic acid (PFOdA)	2008-94-0		2.0		3.4	0.86	ng/L	1
Perhuorooctanesuronic acid (PPOS)	1/03-23-	I PFAS by ID SOP	3.0	J	3.4	0.86	ng/L	I
Surrogate Q % Re	un 1 Acc covery L	eptance ₋imits						
13C2_4:2FTS	99	25-150						
1302_0:2F15	70 77	∠ə-15U						
13C2_8:2F15	9/	25-150						
	/5	25-150						
	აკ : გე	25-150						
I3CZ_PFTEDA	11	29-150						
LOQ = Limit of QuantitationB = Detected in the method blankND = Not detected at or above the DLN = Recovery is out of criteriaH = Out of holding timeW = Reported on wet weight basis	E = Quantitatio P = The RPD b	on of compound exceeded the operative of columns exce	calibration ra eds 40%	ange DL = J = E	<ul> <li>Detection Lin</li> <li>Estimated result</li> </ul>	nit Ilt < LOQ and ≥ D	L	

Client: Pace Analytical Services, LLC	
Description: 345-0	
Date Sampled:10/27/2020 1150	Project Name: LACROS
Date Received: 10/29/2020	Project Number: 40217319

Laboratory ID: VJ29090-005

Matrix: Aqueous

Project Name: LACROSSE WELL #23 & 24 Project Number: 40217319

Surrogate	Run 1 Ao Q % Recovery	cceptance Limits
13C3_PFBS	84	25-150
13C3_PFHxS	81	25-150
13C3-HFPO-DA	94	25-150
13C4_PFBA	90	25-150
13C4_PFHpA	92	25-150
13C5_PFHxA	86	25-150
13C5_PFPeA	90	25-150
13C6_PFDA	86	25-150
13C7_PFUdA	76	25-150
13C8_PFOA	90	25-150
13C8_PFOS	79	25-150
13C8_PFOSA	94	10-150
13C9_PFNA	89	25-150
d-EtFOSA	64	10-150
d5-EtFOSAA	88	25-150
d9-EtFOSE	73	10-150
d-MeFOSA	74	10-150
d3-MeFOSAA	85	25-150
d7-MeFOSE	73	10-150

 LOQ = Limit of Quantilation
 B = Detected in the method blank
 E = Quantilation of compound exceeded the calibration range
 DL = Detection Limit

 ND = Not detected at or above the DL
 N = Recovery is out of criteria
 P = The RPD between two GC columns exceeds 40%
 J = Estimated result < LOQ and ≥ DL</td>

 H = Out of holding time
 W = Reported on wet weight basis
 W = Reported on wet weight basis
 H = Out of holding time



444 21st Street South · La Crosse, Wisconsin · 54601

November 18, 2020

#### 208 Callaway Blvd La Crosse, WI 54603

Subject: Private Well Sampling Results 208 Callaway Blvd, La Crosse, WI 54603 Tax Parcel #4-360-0 Sample ID # 360-0

#### Dear

We have received and reviewed the test results for the sample collected on October 27, 2020 at the above address. Some PFAS compounds were found at levels <u>above</u> the Department of Health Services (DHS) levels recommended for protecting health. These levels are called the "Recommended Public Health Standard" in the table below. The levels found in your well are called the "Sample Result" in the table below.

Because some of the levels are above the recommended Public Health Standard, the City is offering to provide bottled water delivered to your home for drinking, cooking, and brushing your teeth. There will be no cost to you for the bottled water. Please complete the attached form and mail it to The OS Group to make arrangements for having a water dispenser and bottles delivered to your home or business. Call 608-668-2718 or email <u>PFAS@theOSgrp.com</u>. You may also complete this form on line at <u>www.cityoflacrosse.org/bottledwater</u>

The following table summarizes the test results from the sample. **Bolded results** are above a current recommended level intended to protect your health according to the Department of Health Services (DHS).

Private Well Sampling Results for 208 Callaway Blvd, La Crosse, WI 54603 Tax Parcel # 4-360-0 Sample ID # 360-0 November 18, 2020

### Sample Results

Compound	Sample Result (unit)	Recommended Public Health Standard (unit <sup>e</sup> )		
N-Ethyl Perfluorooctane sulfonamide (NEtFOSA) CAS # 4151-50-2	Not Detected	20 ppt <sup>a,b</sup>	) ppt unds I 6	
N-Ethyl perfluorooctane sulfonamidoacetic acid (NEtFOSAA) CAS # 2991-50-6	Not Detected	20 ppt <sup>a,b</sup>	it is 20 compo <i>il</i> of all	
N-Ethyl perfluorooctane sulfonamidoethanol (NEtFOSE) CAS # 1691-99-2	Not Detected	20 ppt <sup>a,b</sup>	ed lim ese 6 c ed toto	
Perfluorooctane sulfonamide (FOSA) CAS # 754-91-6	Not Detected	20 ppt <sup>a,b</sup>	mend of the	
Perfluorooctanoic acid (PFOA) CAS # 335-67-1	26 ppt	20 ppt <sup>a,b</sup>	recom ny <i>one</i> the <i>c</i> c	
Perfluorooctanesulfonic acid (PFOS) CAS # 1763-23-1	11 ppt	20 ppt <sup>a,b</sup>	The for a or	
Hexafluoropropylene oxide dimer acid (HPFO-DA; GenX) CAS # 13252-13-6	2.2 ppt <sup>BL</sup>		300 ppt <sup>a</sup>	
Perfluorobutanesulfonic acid (PFBS) CAS # 375-73-5	7.9 ppt	450	),000 ppt <sup>a</sup>	
Perfluorohexanesulfonic acid (PFHxS) CAS # 355-46-4	15 ppt		40 ppt <sup>a</sup>	
Perfluorobutanoic acid (PFBA) CAS # 375-22-4	150 ppt	1(	),000 ppt <sup>a</sup>	
Perfluorodecanoic acid (PFDA) CAS # 335-76-2	Not Detected	300 ppt <sup>a</sup>		
Perfluorododecanoic acid (PFDoA) CAS # 307-55-1	Not Detected		500 ppt <sup>a</sup>	
Perfluorohexanoic acid (PFHxA) CAS # 307-24-4	1.8 ppt	150	),000 ppt <sup>a</sup>	
Perfluorononanoic acid (PFNA) CAS # 375-95-1	Not Detected		30 ppt <sup>a</sup>	
Perfluorotetradecanoic acid (PFTeA) CAS # 376-06-7	Not Detected	10	),000 ppt <sup>a</sup>	
Perfluoroundecanoic acid (PFUnA) CAS # 2058-94-8	Not Detected	3	3,000 ppt <sup>a</sup>	
4,8-Dioxa-3H-perfluorononanoic acid (DONA) CAS # 919005-14-4	Not Detected	3	3,000 ppt <sup>a</sup>	

Private Well Sampling Results for 208 Callaway Blvd, La Crosse, WI 54603 Tax Parcel # 4-360-0 Sample ID # 360-0 November 18, 2020

Compound	Sample Result (unit)	Recommended Public Health Standard (unit <sup>e</sup> )					
Perfluorooctadecanoic acid (PFODA) CAS # 16517-11-6	Not Detected	400,000 ppt <sup>a</sup>					
Perfluoro-1-pentanesulfonic acid CAS # 2706-91-4	5.9 ppt	None Established <sup>c</sup>					
<ul> <li><sup>a</sup> Public health enforcement standard (ES) recommended by DHS.</li> <li><sup>b</sup> DHS recommends a combined enforcement standard of 20 ng/L and combined preventive action limit of 2 ng/L for FOSA, NEt-FOSA, NetFOSAA, PFOS, and PFOA.</li> <li><sup>c</sup> A current standard is not available; the compound is currently under review by DHS for potential public health standard recommendation.</li> </ul>							

<sup>e</sup> Units: Parts per trillion (ppt) = nanograms of substance per liter of water (ng/L)

<sup>BL</sup> Detected in the method blank. Possible lab contaminant.

As required by law, we will be submitting these results to the Department of Natural Resources (DNR). The DNR may consult with the Department of Health Services (DHS) about these test results. DHS may review all PFAS tests and follow-up with you directly if any actions are recommended to protect your health.

Thank you for your patience and assistance with our investigation. We will provide updates on the project at <u>https://www.cityoflacrosse.org/wells</u> as our work continues. If you have any questions, please call The OS Group at (608) 668-2718 or email them at <u>PFAS@theOSgrp.com</u>.

You can also contact the DNR and DHS with questions about PFAS or the water sample results at the numbers provided below.

Questions about		<u>Contact</u>	<u>Phone</u>	E-mail Address
Soil & Groundwater Testing, Clean Up	DNR	David Rozeboom	715-215-2078	David.Rozeboom@wisconsin.gov
Drinking Water or Private wells	DNR	Kyle Burton	920-360-2112	kyle.burton@wisconsin.gov
Health Concerns	DHS	Curtis Hedman	608-266-6677	Curtis.Hedman@dhs.wisconsin.gov

On behalf of The City of La Crosse *The OS Group, LLC* Attachment: Lab report for your well Bottled Water Acknowledgement

Client: Pace Analytical Services, LLC					Laboratory II	D: VJ29090-00	03	
Description: 360-0					Matrix	k: Aqueous		
Date Sampled:10/27/2020 1120	Project Nam	ne: LACROSSE WELL #	#23 & 24					
Date Received: 10/20/2020	roject Numb	or: 10217310	20 4 2					
Date Received. 10/27/2020		61.40217519						
RunPrep MethodAnalytical Method1SOP SPEPFAS by ID SOP	Dilution A	analysis Date Analyst 1/05/2020 1422 MMM	Prep 11/03/2	Date 2020 10	Batch 07 72053			
Parameter	CA Numbe	S Analytical er Method	Result	Q	LOQ	DL	Units	Run
9-chlorohexadecafluoro-3-oxanone-1-sulfonic acid (9CI-PF3ONS	) 756426-58	8-1 PFAS by ID SOP	ND		7.6	1.9	ng/L	1
11-chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11CI-PF3.	) 763051-92	2-9 PFAS by ID SOP	ND		7.6	1.9	ng/L	1
1H, 1H, 2H, 2H-perfluorodecane sulfonic acid (8:2 FTS)	39108-34	I-4 PFAS by ID SOP	ND		7.6	1.9	ng/L	1
1H, 1H, 2H, 2H-perfluorooctane sulfonic acid (6:2 FTS)	27619-97	-2 PFAS by ID SOP	ND		7.6	1.9	ng/L	1
1H,1H,2H,2H-perfluorododecane sulfonic acid (10:2 FTS)	120226-60	0-0 PFAS by ID SOP	ND		7.6	1.9	ng/L	1
1H,1H,2H,2H-perfluorohexane sulfonic acid (4:2 FTS)	757124-72	2-4 PFAS by ID SOP	ND		7.6	1.9	ng/L	1
Hexafluoropropylene oxide dimer acid (GenX)	13252-13	8-6 PFAS by ID SOP	2.2	BJ	7.6	1.9	ng/L	1
4,8-dioxa-3H-perfluorononanoic acid (ADONA)	919005-14	-4 PFAS by ID SOP	ND		7.6	1.9	ng/L	1
N-ethylperfluoro-1-octanesulfonamide (EtFOSA)	4151-50	-2 PFAS by ID SOP	ND		7.6	1.9	ng/L	1
N-ethylperfluoro-1-octanesulfonamidoacetic acid (EtFOSAA)	2991-50	-6 PFAS by ID SOP	ND		7.6	1.9	ng/L	1
2-N-ethylperfluoro-1-octanesulfonamido-ethanol (EtFOSE)	1691-99	-2 PFAS by ID SOP	ND		7.6	1.9	ng/L	1
N-methylperfluoro-1-octanesulfonamide (MeFOSA)	31506-32	2-8 PFAS by ID SOP	ND		15	3.8	ng/L	1
N-methylperfluoro-1-octanesulfonamidoacetic acid (MeFOSAA)	2355-31	-9 PFAS by ID SOP	ND		7.6	1.9	ng/L	1
2-N-methylperfluoro-1-octanesulfonamido-ethanol (MeFOSE)	24448-09	P-7 PFAS by ID SOP	ND		7.6	1.9	ng/L	1
Perfluoro-1-butanesulfonic acid (PFBS)	375-73	-5 PFAS by ID SOP	7.9		3.8	0.95	ng/L	1
Perfluoro-1-decanesulfonic acid (PFDS)	335-77	-3 PFAS by ID SOP	ND		3.8	0.95	ng/L	1
Perfluoro-1-heptanesulfonic acid (PFHpS)	375-92	-8 PFAS by ID SOP	ND		3.8	0.95	ng/L	1
Perfluoro-1-nonanesulfonic acid (PFNS)	68259-12	2-1 PFAS by ID SOP	ND		3.8	0.95	ng/L	1
Perfluoro-1-octanesulfonamide (PFOSA)	754-91	-6 PFAS by ID SOP	ND		3.8	0.95	ng/L	1
Perfluoro-1-pentanesulfonic acid (PFPeS)	2706-91	-4 PFAS by ID SOP	5.9		3.8	0.95	ng/L	1
Perfluorododecanesulfonic acid (PFDOS)	79780-39	P-5 PFAS by ID SOP	ND		7.6	1.9	ng/L	1
Perfluorohexanesulfonic acid (PFHxS)	355-46	-4 PFAS by ID SOP	15		3.8	0.95	ng/L	1
Perfluoro-n-butanoic acid (PFBA)	375-22	-4 PFAS by ID SOP	150		3.8	0.95	ng/L	1
Perfluoro-n-decanoic acid (PFDA)	335-76	-2 PFAS by ID SOP	ND		3.8	0.95	ng/L	1
Perfluoro-n-dodecanoic acid (PFDoA)	307-55	-1 PFAS by ID SOP	ND		3.8	0.95	ng/L	1
Perfluoro-n-heptanoic acid (PFHpA)	375-85	-9 PFAS by ID SOP	ND		3.8	0.95	ng/L	1
Perfluoro-n-hexadecanoic acid (PFHxDA)	67905-19	P-5 PFAS by ID SOP	ND		7.6	1.9	ng/L	1
Perfluoro-n-hexanoic acid (PFHxA)	307-24	-4 PFAS by ID SOP	1.8	J	3.8	0.95	ng/L	1
Perfluoro-n-nonanoic acid (PFNA)	375-95	-1 PFAS by ID SOP	ND		3.8	0.95	ng/L	1
Perfluoro-n-octadecanoic acid (PFODA)	16517-11	-6 PFAS by ID SOP	ND		7.6	1.9	ng/L	1
Perfluoro-n-octanoic acid (PFOA)	335-67	-1 PFAS by ID SOP	26		3.8	0.95	ng/L	1
Perfluoro-n-pentanoic acid (PFPeA)	2706-90	-3 PFAS by ID SOP	ND		3.8	0.95	ng/L	1
Perfluoro-n-tetradecanoic acid (PFTeDA)	376-06	-7 PFAS by ID SOP	ND		3.8	0.95	ng/L	1
Perfluoro-n-tridecanoic acid (PFTrDA)	72629-94	I-8 PFAS by ID SOP	ND		3.8	0.95	ng/L	1
Perfluoro-n-undecanoic acid (PFUdA)	2058-94	-8 PFAS by ID SOP	ND		3.8	0.95	ng/L	1
Perfluorooctanesulfonic acid (PFOS)	1763-23	-1 PFAS by ID SOP	11		3.8	0.95	ng/L	1
Surrogate Q % R	Run 1 Ac ecovery	ceptance Limits						
13C2_4:2FTS	100	25-150						
13C2_6:2FTS	101	25-150						
13C2_8:2FTS	100	25-150						
13C2_PFDoA	95	25-150						
13C2_PFHxDA	101	25-150						
13C2_PFTeDA	93	25-150						
LOQ = Limit of Quantitation B = Detected in the method blank	E = Quantitat	ion of compound exceeded the	calibration	range D	L = Detection Lin	nit		
ND = Not detected at or above the DL N = Recovery is out of criteria H = Out of holding time W = Reported on wet weight basis	P = The RPD	between two GC columns exce	eds 40%	J	= Estimated resu	It < LOQ and $\geq$ DL	-	

Client: Pace Analytical Services, LLC	
Description: 360-0	
Date Sampled:10/27/2020 1120	Project Name: LACROSS
Date Received: 10/29/2020	Project Number: 40217319

d7-MeFOSE

ect Name: LACROSSE WELL #23 & 24

Laboratory ID: VJ29090-003

Matrix: Aqueous

Surrogate	Run 1 A	
	Q % Recovery	
13C3_PFBS	96	25-150
13C3_PFHxS	97	25-150
13C3-HFPO-DA	106	25-150
13C4_PFBA	97	25-150
13C4_PFHpA	99	25-150
13C5_PFHxA	95	25-150
13C5_PFPeA	95	25-150
13C6_PFDA	95	25-150
13C7_PFUdA	96	25-150
13C8_PFOA	99	25-150
13C8 PFOS	94	25-150
- 13C8 PEOSA	104	10-150
13C9 PENA	101	25-150
d-EtEOSA	78	10-150
	93 07	25-150
	97	20-150
	96	10-150
d-MeFUSA	82	10-150
d3-MeFOSAA	93	25-150

10-150

107

LOQ = Limit of Quantitation	B = Detected in the method blank	E = Quantitation of compound exceeded the calibration range	DL = Detection Limit
ND = Not detected at or above the DL	N = Recovery is out of criteria	P = The RPD between two GC columns exceeds 40%	J = Estimated result < LOQ and $\ge$ DL
H = Out of holding time	W = Reported on wet weight basis		

## BOTTLED WATER ACKNOWLEDGEMENT 208 Callaway Blvd, LA CROSSE, WI 54603

If you desire to accept the bottled water delivery, please complete and sign this form and return it to The OS Group at <u>PFAS@TheOSgrp.com</u> or mail to 444 21<sup>st</sup> St. S, La Crosse, WI 54601. You may also complete this form electronically on line at <u>www.cityoflacrosse.org/bottledwater</u>. Call 608-668-2718 with any question you may have.

As pre-caution for the protection of human health, the City of La Crosse (The City) will provide, on a temporary basis, bottled water for drinking, cooking and toothbrushing purposes at the above referenced address. The water will be delivered to your home or business by a commercial water delivery service. At the City's cost, a dispenser / cooler and regular deliveries of 5-gallon containers of water will be provided. The City reserves the right to dictate the conditions of delivery, such as minimum and maximum number of containers per delivery, frequency and timing of deliveries. The City reserves the right to periodically review whether The City should continue to provide bottled water, considering factors such as State and Federal standards and guidance, evolving knowledge and understanding of the sources, cause and responsibility for the contamination, new or reinterpreted test results, and the availability of more permanent or cost-effective sources of water for the above purposes. The City of La Crosse makes no warranty or representation regarding the suitability of the bottled water beyond those made by the commercial water delivery service.

All reusable or returnable equipment and supplies, such as the containers and cooler/dispenser, are the property of the commercial water delivery service or the City of La Crosse. By signing below, the Occupant of the above referenced property acknowledges that all reusable or returnable equipment and supplies shall be returned to the commercial water delivery service or the City of La Crosse upon request. The Occupant agrees to provide reasonable access for delivery of bottled water and pick up of reusable or returnable equipment and supplies. Occupant(s) acknowledges that they may be required to sign an agreement with the commercial water delivery service as a condition of receiving bottled water.

Signed:	Dated:

Printed Name: \_\_\_\_\_\_

Check ownership:

Owner-Occupant

## BOTTLED WATER ACKNOWLEDGEMENT 208 Callaway Blvd, LA CROSSE, WI 54603

If you desire to accept the bottled water delivery, please complete and sign this form and return it to The OS Group at <u>PFAS@TheOSgrp.com</u> or mail to 444 21<sup>st</sup> St. S, La Crosse, WI 54601. You may also complete this form electronically on line at <u>www.cityoflacrosse.org/bottledwater</u>. Call 608-668-2718 with any question you may have.

As pre-caution for the protection of human health, the City of La Crosse (The City) will provide, on a temporary basis, bottled water for drinking, cooking and toothbrushing purposes at the above referenced address. The water will be delivered to your home or business by a commercial water delivery service. At the City's cost, a dispenser / cooler and regular deliveries of 5-gallon containers of water will be provided. The City reserves the right to dictate the conditions of delivery, such as minimum and maximum number of containers per delivery, frequency and timing of deliveries. The City reserves the right to periodically review whether The City should continue to provide bottled water, considering factors such as State and Federal standards and guidance, evolving knowledge and understanding of the sources, cause and responsibility for the contamination, new or reinterpreted test results, and the availability of more permanent or cost-effective sources of water for the above purposes. The City of La Crosse makes no warranty or representation regarding the suitability of the bottled water beyond those made by the commercial water delivery service.

All reusable or returnable equipment and supplies, such as the containers and cooler/dispenser, are the property of the commercial water delivery service or the City of La Crosse. By signing below, the Occupant of the above referenced property acknowledges that all reusable or returnable equipment and supplies shall be returned to the commercial water delivery service or the City of La Crosse upon request. The Occupant agrees to provide reasonable access for delivery of bottled water and pick up of reusable or returnable equipment and supplies. Occupant(s) acknowledges that they may be required to sign an agreement with the commercial water delivery service as a condition of receiving bottled water.

Signed:	Dated:

Printed Name: \_\_\_\_\_\_

Check ownership:

Owner-Occupant



444 21st Street South · La Crosse, Wisconsin · 54601

November 18, 2020



LA CRESCENT, MN 55947

Subject: Private Well Sampling Results 208 Callaway Blvd, La Crosse, WI 54603 Tax Parcel #4-360-0 Sample ID # 360-0

Dear

We have received and reviewed the test results for the sample collected on October 27, 2020 at the above address. Some PFAS compounds were found at levels <u>above</u> the Department of Health Services (DHS) levels recommended for protecting health. These levels are called the "Recommended Public Health Standard" in the table below. The levels found in your well are called the "Sample Result" in the table below.

Because some of the levels are above the recommended Public Health Standard, the City is offering to provide bottled water delivered to your home for drinking, cooking, and brushing your teeth. There will be no cost to you for the bottled water. Please complete the attached form and mail it to The OS Group to make arrangements for having a water dispenser and bottles delivered to your home or business. Call 608-668-2718 or email <u>PFAS@theOSgrp.com</u>. You may also complete this form on line at <u>www.cityoflacrosse.org/bottledwater</u>

The following table summarizes the test results from the sample. **Bolded results** are above a current recommended level intended to protect your health according to the Department of Health Services (DHS).

Private Well Sampling Results for 208 Callaway Blvd, La Crosse, WI 54603 Tax Parcel # 4-360-0 Sample ID # 360-0 November 18, 2020

### Sample Results

Compound	Sample Result (unit)	Recomm Public H Standard	ended Iealth (unit <sup>e</sup> )
N-Ethyl Perfluorooctane sulfonamide (NEtFOSA) CAS # 4151-50-2	Not Detected	20 ppt <sup>a,b</sup>	) ppt unds I 6
N-Ethyl perfluorooctane sulfonamidoacetic acid (NEtFOSAA) CAS # 2991-50-6	Not Detected	20 ppt <sup>a,b</sup>	it is 20 compo <i>il</i> of all
N-Ethyl perfluorooctane sulfonamidoethanol (NEtFOSE) CAS # 1691-99-2	Not Detected	20 ppt <sup>a,b</sup>	ed lim ese 6 c ed toto
Perfluorooctane sulfonamide (FOSA) CAS # 754-91-6	Not Detected	20 ppt <sup>a,b</sup>	mend of the
Perfluorooctanoic acid (PFOA) CAS # 335-67-1	26 ppt	20 ppt <sup>a,b</sup>	recom ny <i>one</i> the <i>c</i> c
Perfluorooctanesulfonic acid (PFOS) CAS # 1763-23-1	11 ppt	20 ppt <sup>a,b</sup>	The for a or
Hexafluoropropylene oxide dimer acid (HPFO-DA; GenX) CAS # 13252-13-6	2.2 ppt <sup>BL</sup>		300 ppt <sup>a</sup>
Perfluorobutanesulfonic acid (PFBS) CAS # 375-73-5	7.9 ppt	450	),000 ppt <sup>a</sup>
Perfluorohexanesulfonic acid (PFHxS) CAS # 355-46-4	15 ppt		40 ppt <sup>a</sup>
Perfluorobutanoic acid (PFBA) CAS # 375-22-4	150 ppt	1(	),000 ppt <sup>a</sup>
Perfluorodecanoic acid (PFDA) CAS # 335-76-2	Not Detected		300 ppt <sup>a</sup>
Perfluorododecanoic acid (PFDoA) CAS # 307-55-1	Not Detected		500 ppt <sup>a</sup>
Perfluorohexanoic acid (PFHxA) CAS # 307-24-4	1.8 ppt	150	),000 ppt <sup>a</sup>
Perfluorononanoic acid (PFNA) CAS # 375-95-1	Not Detected		30 ppt <sup>a</sup>
Perfluorotetradecanoic acid (PFTeA) CAS # 376-06-7	Not Detected	10	),000 ppt <sup>a</sup>
Perfluoroundecanoic acid (PFUnA) CAS # 2058-94-8	Not Detected	3,000 pr	
4,8-Dioxa-3H-perfluorononanoic acid (DONA) CAS # 919005-14-4	Not Detected	3	3,000 ppt <sup>a</sup>

Private Well Sampling Results for 208 Callaway Blvd, La Crosse, WI 54603 Tax Parcel # 4-360-0 Sample ID # 360-0 November 18, 2020

Compound	Sample Result (unit)	Recommended Public Health Standard (unit <sup>e</sup> )		
Perfluorooctadecanoic acid (PFODA) CAS # 16517-11-6	Not Detected	400,000 ppt <sup>a</sup>		
Perfluoro-1-pentanesulfonic acid CAS # 2706-91-4	5.9 ppt	None Established <sup>c</sup>		
<ul> <li><sup>a</sup> Public health enforcement standard (ES) recommended by DHS.</li> <li><sup>b</sup> DHS recommends a combined enforcement standard of 20 ng/L and combined preventive action limit of 2 ng/L for FOSA, NEt-FOSA, NetFOSAA, PFOS, and PFOA.</li> <li><sup>c</sup> A current standard is not available; the compound is currently under review by DHS for potential public health standard recommendation.</li> <li><sup>c</sup> Dublic health enforcement standard (ES) is ND 140. Wisconsin Administrative Code</li> </ul>				

<sup>e</sup> Units: Parts per trillion (ppt) = nanograms of substance per liter of water (ng/L)

<sup>BL</sup> Detected in the method blank. Possible lab contaminant.

As required by law, we will be submitting these results to the Department of Natural Resources (DNR). The DNR may consult with the Department of Health Services (DHS) about these test results. DHS may review all PFAS tests and follow-up with you directly if any actions are recommended to protect your health.

Thank you for your patience and assistance with our investigation. We will provide updates on the project at <u>https://www.cityoflacrosse.org/wells</u> as our work continues. If you have any questions, please call The OS Group at (608) 668-2718 or email them at <u>PFAS@theOSgrp.com</u>.

You can also contact the DNR and DHS with questions about PFAS or the water sample results at the numbers provided below.

Questions about		<u>Contact</u>	<u>Phone</u>	E-mail Address
Soil & Groundwater Testing, Clean Up	DNR	David Rozeboom	715-215-2078	David.Rozeboom@wisconsin.gov
Drinking Water or Private wells	DNR	Kyle Burton	920-360-2112	kyle.burton@wisconsin.gov
Health Concerns	DHS	Curtis Hedman	608-266-6677	Curtis.Hedman@dhs.wisconsin.gov

On behalf of The City of La Crosse *The OS Group, LLC* Attachment: Lab report for your well Bottled Water Acknowledgement

Client: Pace Analytical Services, LLC					Laboratory II	D: VJ29090-00	03	
Description: 360-0					Matrix	k: Aqueous		
Date Sampled:10/27/2020 1120	Project Nam	ne: LACROSSE WELL #	#23 & 24					
Date Received: 10/20/2020	roject Numb	or: 10217310	20 4 2					
Date Received. 10/27/2020		61.40217519						
RunPrep MethodAnalytical Method1SOP SPEPFAS by ID SOP	Dilution A	analysis Date Analyst 1/05/2020 1422 MMM	Prep 11/03/2	Date 2020 10	Batch 07 72053			
Parameter	CA Numbe	S Analytical er Method	Result	Q	LOQ	DL	Units	Run
9-chlorohexadecafluoro-3-oxanone-1-sulfonic acid (9CI-PF3ONS	) 756426-58	8-1 PFAS by ID SOP	ND		7.6	1.9	ng/L	1
11-chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11CI-PF3.	) 763051-92	2-9 PFAS by ID SOP	ND		7.6	1.9	ng/L	1
1H, 1H, 2H, 2H-perfluorodecane sulfonic acid (8:2 FTS)	39108-34	I-4 PFAS by ID SOP	ND		7.6	1.9	ng/L	1
1H, 1H, 2H, 2H-perfluorooctane sulfonic acid (6:2 FTS)	27619-97	-2 PFAS by ID SOP	ND		7.6	1.9	ng/L	1
1H,1H,2H,2H-perfluorododecane sulfonic acid (10:2 FTS)	120226-60	0-0 PFAS by ID SOP	ND		7.6	1.9	ng/L	1
1H,1H,2H,2H-perfluorohexane sulfonic acid (4:2 FTS)	757124-72	2-4 PFAS by ID SOP	ND		7.6	1.9	ng/L	1
Hexafluoropropylene oxide dimer acid (GenX)	13252-13	8-6 PFAS by ID SOP	2.2	BJ	7.6	1.9	ng/L	1
4,8-dioxa-3H-perfluorononanoic acid (ADONA)	919005-14	-4 PFAS by ID SOP	ND		7.6	1.9	ng/L	1
N-ethylperfluoro-1-octanesulfonamide (EtFOSA)	4151-50	-2 PFAS by ID SOP	ND		7.6	1.9	ng/L	1
N-ethylperfluoro-1-octanesulfonamidoacetic acid (EtFOSAA)	2991-50	-6 PFAS by ID SOP	ND		7.6	1.9	ng/L	1
2-N-ethylperfluoro-1-octanesulfonamido-ethanol (EtFOSE)	1691-99	-2 PFAS by ID SOP	ND		7.6	1.9	ng/L	1
N-methylperfluoro-1-octanesulfonamide (MeFOSA)	31506-32	2-8 PFAS by ID SOP	ND		15	3.8	ng/L	1
N-methylperfluoro-1-octanesulfonamidoacetic acid (MeFOSAA)	2355-31	-9 PFAS by ID SOP	ND		7.6	1.9	ng/L	1
2-N-methylperfluoro-1-octanesulfonamido-ethanol (MeFOSE)	24448-09	P-7 PFAS by ID SOP	ND		7.6	1.9	ng/L	1
Perfluoro-1-butanesulfonic acid (PFBS)	375-73	-5 PFAS by ID SOP	7.9		3.8	0.95	ng/L	1
Perfluoro-1-decanesulfonic acid (PFDS)	335-77	-3 PFAS by ID SOP	ND		3.8	0.95	ng/L	1
Perfluoro-1-heptanesulfonic acid (PFHpS)	375-92	-8 PFAS by ID SOP	ND		3.8	0.95	ng/L	1
Perfluoro-1-nonanesulfonic acid (PFNS)	68259-12	2-1 PFAS by ID SOP	ND		3.8	0.95	ng/L	1
Perfluoro-1-octanesulfonamide (PFOSA)	754-91	-6 PFAS by ID SOP	ND		3.8	0.95	ng/L	1
Perfluoro-1-pentanesulfonic acid (PFPeS)	2706-91	-4 PFAS by ID SOP	5.9		3.8	0.95	ng/L	1
Perfluorododecanesulfonic acid (PFDOS)	79780-39	P-5 PFAS by ID SOP	ND		7.6	1.9	ng/L	1
Perfluorohexanesulfonic acid (PFHxS)	355-46	-4 PFAS by ID SOP	15		3.8	0.95	ng/L	1
Perfluoro-n-butanoic acid (PFBA)	375-22	-4 PFAS by ID SOP	150		3.8	0.95	ng/L	1
Perfluoro-n-decanoic acid (PFDA)	335-76	-2 PFAS by ID SOP	ND		3.8	0.95	ng/L	1
Perfluoro-n-dodecanoic acid (PFDoA)	307-55	-1 PFAS by ID SOP	ND		3.8	0.95	ng/L	1
Perfluoro-n-heptanoic acid (PFHpA)	375-85	-9 PFAS by ID SOP	ND		3.8	0.95	ng/L	1
Perfluoro-n-hexadecanoic acid (PFHxDA)	67905-19	P-5 PFAS by ID SOP	ND		7.6	1.9	ng/L	1
Perfluoro-n-hexanoic acid (PFHxA)	307-24	-4 PFAS by ID SOP	1.8	J	3.8	0.95	ng/L	1
Perfluoro-n-nonanoic acid (PFNA)	375-95	-1 PFAS by ID SOP	ND		3.8	0.95	ng/L	1
Perfluoro-n-octadecanoic acid (PFODA)	16517-11	-6 PFAS by ID SOP	ND		7.6	1.9	ng/L	1
Perfluoro-n-octanoic acid (PFOA)	335-67	-1 PFAS by ID SOP	26		3.8	0.95	ng/L	1
Perfluoro-n-pentanoic acid (PFPeA)	2706-90	-3 PFAS by ID SOP	ND		3.8	0.95	ng/L	1
Perfluoro-n-tetradecanoic acid (PFTeDA)	376-06	-7 PFAS by ID SOP	ND		3.8	0.95	ng/L	1
Perfluoro-n-tridecanoic acid (PFTrDA)	72629-94	I-8 PFAS by ID SOP	ND		3.8	0.95	ng/L	1
Perfluoro-n-undecanoic acid (PFUdA)	2058-94	-8 PFAS by ID SOP	ND		3.8	0.95	ng/L	1
Perfluorooctanesulfonic acid (PFOS)	1763-23	-1 PFAS by ID SOP	11		3.8	0.95	ng/L	1
Surrogate Q % R	Run 1 Ac ecovery	ceptance Limits						
13C2_4:2FTS	100	25-150						
13C2_6:2FTS	101	25-150						
13C2_8:2FTS	100	25-150						
13C2_PFDoA	95	25-150						
13C2_PFHxDA	101	25-150						
13C2_PFTeDA	93	25-150						
LOQ = Limit of Quantitation B = Detected in the method blank	E = Quantitat	ion of compound exceeded the	calibration	range D	L = Detection Lin	nit		
ND = Not detected at or above the DL N = Recovery is out of criteria H = Out of holding time W = Reported on wet weight basis	P = The RPD	between two GC columns exce	eds 40%	J	= Estimated resu	It < LOQ and $\geq$ DL	-	

Client: Pace Analytical Services, LLC	
Description: 360-0	
Date Sampled:10/27/2020 1120	Project Name: LACROSS
Date Received: 10/29/2020	Project Number: 40217319

d7-MeFOSE

ect Name: LACROSSE WELL #23 & 24

Laboratory ID: VJ29090-003

Matrix: Aqueous

Surrogate	Run 1 A	
	Q % Recovery	
13C3_PFBS	96	25-150
13C3_PFHxS	97	25-150
13C3-HFPO-DA	106	25-150
13C4_PFBA	97	25-150
13C4_PFHpA	99	25-150
13C5_PFHxA	95	25-150
13C5_PFPeA	95	25-150
13C6_PFDA	95	25-150
13C7_PFUdA	96	25-150
13C8_PFOA	99	25-150
13C8 PFOS	94	25-150
- 13C8 PEOSA	104	10-150
13C9 PENA	101	25-150
d-EtEOSA	78	10-150
	93 07	25-150
	97	20-150
	96	10-150
d-MeFUSA	82	10-150
d3-MeFOSAA	93	25-150

10-150

107

LOQ = Limit of Quantitation	B = Detected in the method blank	E = Quantitation of compound exceeded the calibration range	DL = Detection Limit
ND = Not detected at or above the DL	N = Recovery is out of criteria	P = The RPD between two GC columns exceeds 40%	J = Estimated result < LOQ and $\ge$ DL
H = Out of holding time	W = Reported on wet weight basis		

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Check ownership: \_\_\_\_\_ Owner-Occupant \_\_\_\_\_ Occupant Only

Number of Occupants: \_\_\_\_\_

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Signed:	Dated:

Printed Name: \_\_\_\_\_

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Signed:	Dated:

Printed Name: \_\_\_\_\_



444 21st Street South · La Crosse, Wisconsin · 54601

November 18, 2020

2511 1<sup>st</sup> Avenue West La Crosse, WI 54603

Subject: Private Well Sampling Results 2511 1<sup>st</sup> Avenue West, La Crosse, WI 54603 Tax Parcel # 4-369-0 Sample ID # 369-0

Dear

We have received and reviewed the test results for the sample collected on October 27, 2020 at the above address. Some PFAS compounds were found, but the levels found were **below** the Department of Health Services (DHS) levels recommended for protecting health. These levels are called the "Recommended Public Health Standard" in the table below. The levels found in *your* well are called the "Sample Result" in the table below.

#### Sample Results

Compound	Sample Result (unit)	Recommended Public Health Standard (unit <sup>e</sup> )	
N-Ethyl Perfluorooctane sulfonamide (NEtFOSA) CAS # 4151-50-2	Not Detected	20 ppt <sup>a,b</sup>	) ppt unds I 6
N-Ethyl perfluorooctane sulfonamidoacetic acid (NEtFOSAA) CAS # 2991-50-6	Not Detected	20 ppt <sup>a,b</sup>	it is 20 ompo <i>il</i> of al
N-Ethyl perfluorooctane sulfonamidoethanol (NEtFOSE) CAS # 1691-99-2	Not Detected	20 ppt <sup>a,b</sup>	ed lim ese 6 c ed toto
Perfluorooctane sulfonamide (FOSA) CAS # 754-91-6	Not Detected	20 ppt <sup>a,b</sup>	mend of the mbine
Perfluorooctanoic acid (PFOA) CAS # 335-67-1	Not Detected	20 ppt <sup>a,b</sup>	recom ny <i>one</i> the <i>cc</i>
Perfluorooctanesulfonic acid (PFOS) CAS # 1763-23-1	6.2 ppt	20 ppt <sup>a,b</sup>	The for ai or

Private Well Sampling Results for 2511 1<sup>st</sup> Avenue West, La Crosse, WI 54603 Tax Parcel # 4-369-0 Sample ID # 369-0 November 18, 2020

Compound	Sample Result (unit)	Recommended Public Health Standard (unit <sup>e</sup> )
Hexafluoropropylene oxide dimer acid (HPFO-DA; GenX) CAS # 13252-13-6	Not Detected	300 ppt <sup>a</sup>
Perfluorobutanesulfonic acid (PFBS) CAS # 375-73-5	5.7 ppt	450,000 ppt <sup>a</sup>
Perfluorohexanesulfonic acid (PFHxS) CAS # 355-46-4	10 ppt	40 ppt <sup>a</sup>
Perfluorobutanoic acid (PFBA) CAS # 375-22-4	46 ppt	10,000 ppt <sup>a</sup>
Perfluorodecanoic acid (PFDA) CAS # 335-76-2	Not Detected	300 ppt <sup>a</sup>
Perfluorododecanoic acid (PFDoA) CAS # 307-55-1	Not Detected	500 ppt <sup>a</sup>
Perfluorohexanoic acid (PFHxA) CAS # 307-24-4	Not Detected	150,000 ppt <sup>a</sup>
Perfluorononanoic acid (PFNA) CAS # 375-95-1	Not Detected	30 ppt <sup>a</sup>
Perfluorotetradecanoic acid (PFTeA) CAS # 376-06-7	Not Detected	10,000 ppt <sup>a</sup>
Perfluoroundecanoic acid (PFUnA) CAS # 2058-94-8	Not Detected	3,000 ppt <sup>a</sup>
4,8-Dioxa-3H-perfluorononanoic acid (DONA) CAS # 919005-14-4	Not Detected	3,000 ppt <sup>a</sup>
Perfluorooctadecanoic acid (PFODA) CAS # 16517-11-6	Not Detected	400,000 ppt <sup>a</sup>
Perfluoro-1-pentanesulfonic acid (PFPeS) CAS # 2706-91-4	4.3 ppt	None Established <sup>c</sup>

<sup>a</sup> Public health enforcement standard (ES) recommended by DHS.

<sup>b</sup> DHS recommends a combined enforcement standard of 20 ng/L and combined preventive action limit of 2 ng/L for FOSA, NEt-FOSA, NetFOSAA, PFOS, and PFOA.

<sup>c</sup> A current standard is not available; the compound is currently under review by DHS for potential public health standard recommendation.

<sup>d</sup> Public health enforcement standard (ES) in NR 140, Wisconsin Administrative Code.

<sup>e</sup> Units: Parts per trillion (ppt) = nanograms of substance per liter of water (ng/L)

<sup>BL</sup> Detected in the method blank. Possible lab contaminant.

Private Well Sampling Results for 2511 1<sup>st</sup> Avenue West, La Crosse, WI 54603 Tax Parcel # 4-369-0 Sample ID # 369-0 November 18, 2020

As required by law, we will be submitting these results to the Department of Natural Resources (DNR). The DNR may consult with the Department of Health Services (DHS) about these test results. DHS may review all PFAS tests and follow-up with you directly if any actions are recommended to protect your health.

Thank you for your patience and assistance with our investigation. We will provide updates on the project at <u>https://www.cityoflacrosse.org/wells</u> as our work continues. If you have any questions, please call The OS Group at (608) 668-2718 or email them at <u>PFAS@theOSgrp.com</u>.

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Questions about		<u>Contact</u>	<u>Phone</u>	E-mail Address
Soil & Groundwater Testing, Clean Up	DNR	David Rozeboom	715-215-2078	David.Rozeboom@wisconsin.gov
Drinking Water or Private wells	DNR	Kyle Burton	920-360-2112	kyle.burton@wisconsin.gov
Health Concerns	DHS	Curtis Hedman	608-266-6677	Curtis.Hedman@dhs.wisconsin.gov

On behalf of The City of La Crosse *The OS Group, LLC* 

Attachment: Lab report for your well

Client: Pace Analytical Services, LLC				Laboratory I	D: VJ29090-0	02	
Description: 369-0				Matrix	k: Aqueous		
Date Sampled:10/27/2020 1100	Project Nam	e: LACROSSE WELL #	#23 & 24		·		
Date Received: 10/29/2020	oiect Numbe	er: 40217319					
Dup Drap Method Apolytical Method		nalucia Data Analuct	Drop Data	Datab			
1 SOP SPE PFAS by ID SOP	1 11	/05/2020 1412 MMM	11/03/2020 1	007 72053			
Parameter	CA: Numbe	S Analytical r Method	Result Q	LOQ	DL	Units	Run
9-chlorohexadecafluoro-3-oxanone-1-sulfonic acid (9CI-PF3ONS)	756426-58	-1 PFAS by ID SOP	ND	7.0	1.8	ng/L	1
11-chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11CI-PF3	) 763051-92	-9 PFAS by ID SOP	ND	7.0	1.8	ng/L	1
1H, 1H, 2H, 2H-perfluorodecane sulfonic acid (8:2 FTS)	39108-34	-4 PFAS by ID SOP	ND	7.0	1.8	ng/L	1
1H, 1H, 2H, 2H-perfluorooctane sulfonic acid (6:2 FTS)	27619-97	-2 PFAS by ID SOP	ND	7.0	1.8	ng/L	1
1H,1H,2H,2H-perfluorododecane sulfonic acid (10:2 FTS)	120226-60	-0 PFAS by ID SOP	ND	7.0	1.8	ng/L	1
1H,1H,2H,2H-perfluorohexane sulfonic acid (4:2 FTS)	757124-72	-4 PFAS by ID SOP	ND	7.0	1.8	ng/L	1
Hexafluoropropylene oxide dimer acid (GenX)	13252-13	-6 PFAS by ID SOP	ND	7.0	1.8	ng/L	1
4,8-dioxa-3H-perfluorononanoic acid (ADONA)	919005-14	-4 PFAS by ID SOP	ND	7.0	1.8	ng/L	1
N-ethylperfluoro-1-octanesulfonamide (EtFOSA)	4151-50-	2 PFAS by ID SOP	ND	7.0	1.8	ng/L	1
N-ethylperfluoro-1-octanesulfonamidoacetic acid (EtFOSAA)	2991-50-	6 PFAS by ID SOP	ND	7.0	1.8	ng/L	1
2-N-ethylperfluoro-1-octanesulfonamido-ethanol (EtFOSE)	1691-99-	2 PFAS by ID SOP	ND	7.0	1.8	ng/L	1
N-methylperfluoro-1-octanesulfonamide (MeFOSA)	31506-32	-8 PFAS by ID SOP	ND	14	3.5	ng/L	1
N-methylperfluoro-1-octanesulfonamidoacetic acid (MeFOSAA)	2355-31-	9 PFAS by ID SOP	ND	7.0	1.8	ng/L	1
2-N-methylperfluoro-1-octanesulfonamido-ethanol (MeFOSE)	24448-09	-7 PFAS by ID SOP	ND	7.0	1.8	ng/L	1
Perfluoro-1-butanesulfonic acid (PFBS)	375-73-	5 PFAS by ID SOP	5.7	3.5	0.88	ng/L	1
Perfluoro-1-decanesulfonic acid (PFDS)	335-77-	3 PFAS by ID SOP	ND	3.5	0.88	ng/L	1
Perfluoro-1-heptanesulfonic acid (PFHpS)	375-92-	8 PFAS by ID SOP	ND	3.5	0.88	ng/L	1
Perfluoro-1-nonanesulfonic acid (PFNS)	68259-12	-1 PFAS by ID SOP	ND	3.5	0.88	ng/L	1
Perfluoro-1-octanesulfonamide (PFOSA)	754-91-	6 PFAS by ID SOP	ND	3.5	0.88	ng/L	1
Perfluoro-1-pentanesulfonic acid (PFPeS)	2706-91-	4 PFAS by ID SOP	4.3	3.5	0.88	ng/L	1
Perfluorododecanesulfonic acid (PFDOS)	79780-39	-5 PFAS by ID SOP	ND	7.0	1.8	ng/L	1
Perfluorohexanesulfonic acid (PFHxS)	355-46-	4 PFAS by ID SOP	10	3.5	0.88	ng/L	1
Perfluoro-n-butanoic acid (PFBA)	375-22-	4 PEAS by ID SOP	46	3.5	0.88	ng/L	1
Perfluoro-n-decanoic acid (PFDA)	335-76-	2 PFAS by ID SOP	ND	3.5	0.88	ng/L	1
Perfluoro-n-dodecanoic acid (PFDoA)	307-55-	PFAS by ID SOP	ND	3.5	0.88	ng/L	1
Perfluoro-n-heptanoic acid (PFHpA)	3/5-85-	9 PFAS by ID SOP	ND	3.5	0.88	ng/L	1
Perfluoro-n-hexadecanoic acid (PFHxDA)	6/905-19	-5 PFAS by ID SOP	ND	7.0	1.8	ng/L	1
Perfluoro-n-hexanoic acid (PFHXA)	307-24-	4 PFAS by ID SOP	ND	3.5	0.88	ng/L	1
Perfluoro-n-nonanoic acid (PFNA)	375-95-	PFAS by ID SOP	ND	3.5	0.88	ng/L	1
Perfluoro-n-octadecanoic acid (PFODA)	16517-11	-6 PFAS by ID SOP	ND	7.0 2.E	1.8	ng/L	1
Perfluero a pontencia acid (PECA)	2704 00	2 DEAS by ID SOP		3.0 2 E	0.88	ng/L	1
Perfluero n tetradocanais asid (PETADA)	2700-90-	7 DEAS by ID SOP		3.0 2 E	0.88	ng/L	1
Perfluero p trideconoic acid (PETrDA)	370-00-	PFAS by ID SOP		3.0 2 E	0.88	ng/L	1
Perfluoro n undocanoic acid (PETIDA)	2029-94	PFAS by ID SOP		2.5	0.88	ng/L	1
	2000-94-	1 DEAS by ID SOP	6.2	2.5	0.88	ng/L	1
Perhuorooctanesurionic acia (PPOS)	1703-23-	FAS Dy ID SOP	0.2	3.0	0.88	ng/L	I
Surrogate Q % Re	ecovery	ceptance Limits					
13C2_4:2FTS	107	25-150					
13C2_6:2FTS	103	25-150					
13C2_8:2FTS	107	25-150					
13C2_PFDoA	91	25-150					
13C2_PFHxDA	101	25-150					
T3C2_PFTeDA	100	25-150					
LOQ = Limit of Quantitation     B = Detected in the method blank       ND = Not detected at or above the DL     N = Recovery is out of criteria	E = Quantitati P = The RPD	on of compound exceeded the between two GC columns exce	calibration range	DL = Detection Lim J = Estimated resu	hit It < LOQ and ≥ DI	_	
H = Out of holding time W = Reported on wet weight basis							

Client: Pace Analytical Services, LLC	
Description: 369-0	
Date Sampled:10/27/2020 1100	Project Name: LACROSS
Date Received: 10/29/2020	Project Number: 40217319

Laboratory ID: VJ29090-002

Matrix: Aqueous

Project Name: LACROSSE WELL #23 & 24

Surrogate	Run 1 A	cceptance
13C3_PFBS	96	25-150
13C3_PFHxS	98	25-150
13C3-HFPO-DA	106	25-150
13C4_PFBA	103	25-150
13C4_PFHpA	95	25-150
13C5_PFHxA	101	25-150
13C5_PFPeA	94	25-150
13C6_PFDA	98	25-150
13C7_PFUdA	95	25-150
13C8_PFOA	99	25-150
13C8_PFOS	93	25-150
13C8_PFOSA	102	10-150
13C9_PFNA	104	25-150
d-EtFOSA	88	10-150
d5-EtFOSAA	105	25-150
d9-EtFOSE	98	10-150
d-MeFOSA	90	10-150
d3-MeFOSAA	101	25-150
d7-MeFOSE	107	10-150

LOQ = Limit of Quantitation B = Detected in the method blank E = Quantitation of compound exceeded the calibration range DL = Detection Limit ND = Not detected at or above the DL N = Recovery is out of criteria P = The RPD between two GC columns exceeds 40% J = Estimated result < LOQ and  $\ge$  DL H = Out of holding time W = Reported on wet weight basis



444 21st Street South · La Crosse, Wisconsin · 54601

November 18, 2020

### 2543 1<sup>st</sup> Avenue West La Crosse, WI 54603

Subject: Private Well Sampling Results 2543 1<sup>st</sup> Avenue West, La Crosse, WI 54603 Tax Parcel #4-386-0 Sample ID # 386-0

# Dear

We have received and reviewed the test results for the sample collected on October 27, 2020 at the above address. Some PFAS compounds were found at levels <u>above</u> the Department of Health Services (DHS) levels recommended for protecting health. These levels are called the "Recommended Public Health Standard" in the table below. The levels found in your well are called the "Sample Result" in the table below.

Because some of the levels are above the recommended Public Health Standard, the City is offering to provide bottled water delivered to your home for drinking, cooking, and brushing your teeth. There will be no cost to you for the bottled water. Please complete the attached form and mail it to The OS Group to make arrangements for having a water dispenser and bottles delivered to your home or business. Call 608-668-2718 or email <u>PFAS@theOSgrp.com</u>. You may also complete this form on line at <u>www.cityoflacrosse.org/bottledwater</u>

The following table summarizes the test results from the sample. **Bolded results** are above a current recommended level intended to protect your health according to the Department of Health Services (DHS).

Private Well Sampling Results for 2543 1<sup>st</sup> Avenue West, La Crosse, WI 54603 Tax Parcel # 4-386-0 Sample ID # 386-0 November 18, 2020

Compound	Sample Result (unit)	Recomm Public H Standard	ended lealth (unit <sup>e</sup> )	
N-Ethyl Perfluorooctane sulfonamide (NEtFOSA) CAS # 4151-50-2	Not Detected	20 ppt <sup>a,b</sup>	) ppt unds I 6	
N-Ethyl perfluorooctane sulfonamidoacetic acid (NEtFOSAA) CAS # 2991-50-6	Not Detected	20 ppt <sup>a,b</sup>	it is 20 ompo <i>il</i> of all	
N-Ethyl perfluorooctane sulfonamidoethanol (NEtFOSE) CAS # 1691-99-2	Not Detected	20 ppt <sup>a,b</sup>	ed lim ese 6 c ed toto	
Perfluorooctane sulfonamide (FOSA) CAS # 754-91-6	Not Detected	20 ppt <sup>a,b</sup> u of the		
Perfluorooctanoic acid (PFOA) CAS # 335-67-1	19 ppt	20 ppt <sup>a,b</sup>	recom אר <i>סחפ</i> the <i>ככ</i>	
Perfluorooctanesulfonic acid (PFOS) CAS # 1763-23-1	13 ppt	20 ppt <sup>a,b</sup>	The for al or	
Hexafluoropropylene oxide dimer acid (HPFO-DA; GenX) CAS # 13252-13-6	Not Detected		300 ppt <sup>a</sup>	
Perfluorobutanesulfonic acid (PFBS) CAS # 375-73-5	6.3 ppt	450,000 ppt <sup>a</sup>		
Perfluorohexanesulfonic acid (PFHxS) CAS # 355-46-4	8.9 ppt		40 ppt <sup>a</sup>	
Perfluorobutanoic acid (PFBA) CAS # 375-22-4	100 ppt	10,000 ppt <sup>a</sup>		
Perfluorodecanoic acid (PFDA) CAS # 335-76-2	Not Detected	300 ppt <sup>a</sup>		
Perfluorododecanoic acid (PFDoA) CAS # 307-55-1	Not Detected		500 ppt <sup>a</sup>	
Perfluorohexanoic acid (PFHxA) CAS # 307-24-4	Not Detected	150	),000 ppt <sup>a</sup>	
Perfluorononanoic acid (PFNA) CAS # 375-95-1	Not Detected	30 ppt <sup>a</sup>		
Perfluorotetradecanoic acid (PFTeA) CAS # 376-06-7	Not Detected	10	),000 ppt <sup>a</sup>	
Perfluoroundecanoic acid (PFUnA) CAS # 2058-94-8	Not Detected	3,000 ppt ª		
4,8-Dioxa-3H-perfluorononanoic acid (DONA) CAS # 919005-14-4	Not Detected	3	3,000 ppt <sup>a</sup>	

### Sample Results
Private Well Sampling Results for 2543 1<sup>st</sup> Avenue West, La Crosse, WI 54603 Tax Parcel # 4-386-0 Sample ID # 386-0 November 18, 2020

Compound	Sample Result (unit)	Recommended Public Health Standard (unit <sup>e</sup> )
Perfluorooctadecanoic acid (PFODA) CAS # 16517-11-6	Not Detected	400,000 ppt <sup>a</sup>
Perfluoro-1-pentanesulfonic acid (PFPeS) CAS # 2706-91-4	4.9 ppt	None Established <sup>c</sup>
Perfluoro-n-pentanoic acid (PFPeA) CAS # 2706-90-3	1.9 ppt	None Established <sup>c</sup>

<sup>a</sup> Public health enforcement standard (ES) recommended by DHS.

<sup>b</sup> DHS recommends a combined enforcement standard of 20 ng/L and combined preventive action limit of 2 ng/L for FOSA, NEt-FOSA, NetFOSAA, PFOS, and PFOA.

<sup>c</sup> A current standard is not available; the compound is currently under review by DHS for potential public health standard recommendation.

<sup>d</sup> Public health enforcement standard (ES) in NR 140, Wisconsin Administrative Code.

<sup>e</sup> Units: Parts per trillion (ppt) = nanograms of substance per liter of water (ng/L)

<sup>BL</sup> Detected in the method blank. Possible lab contaminant.

As required by law, we will be submitting these results to the Department of Natural Resources (DNR). The DNR may consult with the Department of Health Services (DHS) about these test results. DHS may review all PFAS tests and follow-up with you directly if any actions are recommended to protect your health.

Thank you for your patience and assistance with our investigation. We will provide updates on the project at <u>https://www.cityoflacrosse.org/wells</u> as our work continues. If you have any questions, please call The OS Group at (608) 668-2718 or email them at <u>PFAS@theOSgrp.com</u>.

You can also contact the DNR and DHS with questions about PFAS or the water sample results at the numbers provided below.

	<u>Contact</u>	<u>Phone</u>	E-mail Address
DNR	David Rozeboom	715-215-2078	David.Rozeboom@wisconsin.gov
DNR	Kyle Burton	920-360-2112	kyle.burton@wisconsin.gov
DHS	Curtis Hedman	608-266-6677	Curtis.Hedman@dhs.wisconsin.gov
	DNR DNR DHS	ContactDNRDavid RozeboomDNRKyle BurtonDHSCurtis Hedman	ContactPhoneDNRDavid Rozeboom715-215-2078DNRKyle Burton920-360-2112DHSCurtis Hedman608-266-6677

On behalf of The City of La Crosse *The OS Group, LLC* 

Attachment: Lab report for your well Bottled Water Acknowledgement

Client: Pace Analytical Services, LLC				Laboratory II	D: VJ29090-0	01	
Description: 386-0				Matrix	k: Aqueous		
Date Sampled:10/27/2020 1040	Project Name	: LACROSSE WELL #	¥23 & 24				
Date Received: 10/29/2020	Project Number	: 40217319					
Dur Dur Mathead Architect			Davis Data	Datab			
Run     Prep Method     Analytical Method       1     SOP SPE     PFAS by ID SOP	Dilution An 1 11/0	D5/2020 1401 MMM	Prep Date 11/03/2020 1	Batch 007 72053			
Parameter	CAS Number	Analytical Method	Result Q	LOQ	DL	Units	Run
9-chlorohexadecafluoro-3-oxanone-1-sulfonic acid (9CI-PF3ONS	) 756426-58-1	PFAS by ID SOP	ND	7.8	2.0	ng/L	1
11-chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11CI-PF3.	) 763051-92-9	PFAS by ID SOP	ND	7.8	2.0	ng/L	1
1H, 1H, 2H, 2H-perfluorodecane sulfonic acid (8:2 FTS)	39108-34-4	PFAS by ID SOP	ND	7.8	2.0	ng/L	1
1H, 1H, 2H, 2H-perfluorooctane sulfonic acid (6:2 FTS)	27619-97-2	PFAS by ID SOP	ND	7.8	2.0	ng/L	1
1H,1H,2H,2H-perfluorododecane sulfonic acid (10:2 FTS)	120226-60-0	PFAS by ID SOP	ND	7.8	2.0	ng/L	1
1H,1H,2H,2H-perfluorohexane sulfonic acid (4:2 FTS)	757124-72-4	PFAS by ID SOP	ND	7.8	2.0	ng/L	1
Hexafluoropropylene oxide dimer acid (GenX)	13252-13-6	PFAS by ID SOP	ND	7.8	2.0	ng/L	1
4,8-dioxa-3H-perfluorononanoic acid (ADONA)	919005-14-4	PFAS by ID SOP	ND	7.8	2.0	ng/L	1
N-ethylperfluoro-1-octanesulfonamide (EtFOSA)	4151-50-2	PFAS by ID SOP	ND	7.8	2.0	ng/L	1
N-ethylperfluoro-1-octanesulfonamidoacetic acid (EtFOSAA)	2991-50-6	PFAS by ID SOP	ND	7.8	2.0	ng/L	1
2-N-ethylperfluoro-1-octanesulfonamido-ethanol (EtFOSE)	1691-99-2	PFAS by ID SOP	ND	7.8	2.0	ng/L	1
N-methylperfluoro-1-octanesulfonamide (MeFOSA)	31506-32-8	PFAS by ID SOP	ND	16	3.9	ng/L	1
N-methylperfluoro-1-octanesulfonamidoacetic acid (MeFOSAA)	2355-31-9	PFAS by ID SOP	ND	7.8	2.0	ng/L	1
2-N-methylperfluoro-1-octanesulfonamido-ethanol (MeFOSE)	24448-09-7	PFAS by ID SOP	ND	7.8	2.0	ng/L	1
Perfluoro-1-butanesulfonic acid (PFBS)	375-73-5	PFAS by ID SOP	6.3	3.9	0.98	ng/L	1
Perfluoro-1-decanesulfonic acid (PFDS)	335-77-3	PFAS by ID SOP	ND	3.9	0.98	ng/L	1
Perfluoro-1-heptanesulfonic acid (PFHpS)	375-92-8	PFAS by ID SOP	ND	3.9	0.98	ng/L	1
Perfluoro-1-nonanesulfonic acid (PFNS)	68259-12-1	PFAS by ID SOP	ND	3.9	0.98	ng/L	1
Perfluoro-1-octanesulfonamide (PFOSA)	754-91-6	PFAS by ID SOP	ND	3.9	0.98	ng/L	1
Perfluoro-1-pentanesulfonic acid (PFPeS)	2706-91-4	PFAS by ID SOP	4.9	3.9	0.98	ng/L	1
Perfluorododecanesulfonic acid (PFDOS)	79780-39-5	PFAS by ID SOP	ND	7.8	2.0	ng/L	1
Perfluorohexanesulfonic acid (PFHxS)	355-46-4	PFAS by ID SOP	8.9	3.9	0.98	ng/L	1
Perfluoro-n-butanoic acid (PFBA)	375-22-4	PFAS by ID SOP	100	3.9	0.98	ng/L	1
Perfluoro-n-decanoic acid (PFDA)	335-76-2	PFAS by ID SOP	ND	3.9	0.98	ng/L	1
Perfluoro-n-dodecanoic acid (PFDoA)	307-55-1	PFAS by ID SOP	ND	3.9	0.98	ng/L	1
Perfluoro-n-heptanoic acid (PFHpA)	375-85-9	PFAS by ID SOP	ND	3.9	0.98	ng/L	1
Perfluoro-n-hexadecanoic acid (PFHxDA)	67905-19-5	PFAS by ID SOP	ND	7.8	2.0	ng/L	1
Perfluoro-n-hexanoic acid (PFHxA)	307-24-4	PFAS by ID SOP	ND	3.9	0.98	ng/L	1
Perfluoro-n-nonanoic acid (PFNA)	375-95-1	PFAS by ID SOP	ND	3.9	0.98	ng/L	1
Perfluoro-n-octadecanoic acid (PFODA)	16517-11-6	PFAS by ID SOP	ND	7.8	2.0	ng/L	1
Perfluoro-n-octanoic acid (PFOA)	335-67-1	PFAS by ID SOP	19	3.9	0.98	ng/L	1
Perfluoro-n-pentanoic acid (PFPeA)	2706-90-3	PFAS by ID SOP	1.9 J	3.9	0.98	ng/L	1
Perfluoro-n-tetradecanoic acid (PFTeDA)	3/6-06-7	PEAS by ID SOP	ND	3.9	0.98	ng/L	1
Perfluoro-n-tridecanoic acid (PFTrDA)	/2629-94-8	PFAS by ID SOP	ND	3.9	0.98	ng/L	1
Perfluoro-n-undecanoic acid (PFUdA)	2058-94-8	PEAS by ID SOP	ND	3.9	0.98	ng/L	1
Perfluorooctanesulfonic acid (PFOS)	1763-23-1	PEAS by ID SOP	13	3.9	0.98	ng/L	1
Surrogate Q % F	Run 1 Acce Recovery L	eptance imits					
13C2_4:2FTS	105 2	5-150					
13C2_6:2F1S	111 2	5-150					
13C2_8:2FTS	101 2	5-150					
13C2_PFDoA	97 2	5-150					
13C2_PFHxDA	101 2	5-150					
I3C2_PFTeDA	95 2	5-150					
LOQ = Limit of Quantitation     B = Detected in the method blank       ND = Not detected at or above the DL     N = Recovery is out of criteria       H = Out of holding time     W = Reported on wet weight basis	E = Quantitation P = The RPD be	n of compound exceeded the e	calibration range eds 40%	DL = Detection Lin J = Estimated resu	hit It < LOQ and $\ge$ D	L	

Client: Pace Analytical Services, LLC	
Description: 386-0	
Date Sampled:10/27/2020 1040	Project Name: LACROSSE WELL #23 & 24
Date Received: 10/29/2020	Project Number: 40217319

Laboratory ID: VJ29090-001

Matrix: Aqueous

Surrogate	Run 1 A	
12C2 DEDS	07	25 150
	97	25-150
13C3_PFHxS	98	25-150
13C3-HFPO-DA	109	25-150
13C4_PFBA	105	25-150
13C4_PFHpA	99	25-150
13C5_PFHxA	98	25-150
13C5_PFPeA	96	25-150
13C6_PFDA	96	25-150
13C7_PFUdA	96	25-150
13C8_PFOA	96	25-150
13C8_PFOS	98	25-150
13C8_PFOSA	105	10-150
13C9 PFNA	101	25-150
d-EtFOSA	84	10-150
d5-EtFOSAA	99	25-150
d9-EtFOSE	102	10-150
d-MeFOSA	88	10-150
d3-MeFOSAA	95	25-150
d7-MeFOSF	102	10-150

H = Out of holding time	W = Reported on wet weight basis		
ND = Not detected at or above the DL	N = Recovery is out of criteria	P = The RPD between two GC columns exceeds 40%	J = Estimated result < LOQ and $\ge$ DL
LOQ = Limit of Quantitation	B = Detected in the method blank	E = Quantitation of compound exceeded the calibration range	DL = Detection Limit

# BOTTLED WATER ACKNOWLEDGEMENT 2543 1<sup>st</sup> Avenue West, LA CROSSE, WI 54603

If you desire to accept the bottled water delivery, please complete and sign this form and return it to The OS Group at <u>PFAS@TheOSgrp.com</u> or mail to 444 21<sup>st</sup> St. S, La Crosse, WI 54601. You may also complete this form electronically on line at <u>www.cityoflacrosse.org/bottledwater</u>. Call 608-668-2718 with any question you may have.

As pre-caution for the protection of human health, the City of La Crosse (The City) will provide, on a temporary basis, bottled water for drinking, cooking and toothbrushing purposes at the above referenced address. The water will be delivered to your home or business by a commercial water delivery service. At the City's cost, a dispenser / cooler and regular deliveries of 5-gallon containers of water will be provided. The City reserves the right to dictate the conditions of delivery, such as minimum and maximum number of containers per delivery, frequency and timing of deliveries. The City reserves the right to periodically review whether The City should continue to provide bottled water, considering factors such as State and Federal standards and guidance, evolving knowledge and understanding of the sources, cause and responsibility for the contamination, new or reinterpreted test results, and the availability of more permanent or cost-effective sources of water for the above purposes. The City of La Crosse makes no warranty or representation regarding the suitability of the bottled water beyond those made by the commercial water delivery service.

All reusable or returnable equipment and supplies, such as the containers and cooler/dispenser, are the property of the commercial water delivery service or the City of La Crosse. By signing below, the Occupant of the above referenced property acknowledges that all reusable or returnable equipment and supplies shall be returned to the commercial water delivery service or the City of La Crosse upon request. The Occupant agrees to provide reasonable access for delivery of bottled water and pick up of reusable or returnable equipment and supplies. Occupant(s) acknowledges that they may be required to sign an agreement with the commercial water delivery service as a condition of receiving bottled water.

Check ownership:

Owner-Occupant

\_\_\_\_\_ Occupant Only

Number of Occupants: \_\_\_\_\_

Signed: \_\_\_\_\_ Dated: \_\_\_\_\_

Printed Name: \_\_\_\_\_

# BOTTLED WATER ACKNOWLEDGEMENT 2543 1<sup>st</sup> Avenue West, LA CROSSE, WI 54603

If you desire to accept the bottled water delivery, please complete and sign this form and return it to The OS Group at <u>PFAS@TheOSgrp.com</u> or mail to 444 21<sup>st</sup> St. S, La Crosse, WI 54601. You may also complete this form electronically on line at <u>www.cityoflacrosse.org/bottledwater</u>. Call 608-668-2718 with any question you may have.

As pre-caution for the protection of human health, the City of La Crosse (The City) will provide, on a temporary basis, bottled water for drinking, cooking and toothbrushing purposes at the above referenced address. The water will be delivered to your home or business by a commercial water delivery service. At the City's cost, a dispenser / cooler and regular deliveries of 5-gallon containers of water will be provided. The City reserves the right to dictate the conditions of delivery, such as minimum and maximum number of containers per delivery, frequency and timing of deliveries. The City reserves the right to periodically review whether The City should continue to provide bottled water, considering factors such as State and Federal standards and guidance, evolving knowledge and understanding of the sources, cause and responsibility for the contamination, new or reinterpreted test results, and the availability of more permanent or cost-effective sources of water for the above purposes. The City of La Crosse makes no warranty or representation regarding the suitability of the bottled water beyond those made by the commercial water delivery service.

All reusable or returnable equipment and supplies, such as the containers and cooler/dispenser, are the property of the commercial water delivery service or the City of La Crosse. By signing below, the Occupant of the above referenced property acknowledges that all reusable or returnable equipment and supplies shall be returned to the commercial water delivery service or the City of La Crosse upon request. The Occupant agrees to provide reasonable access for delivery of bottled water and pick up of reusable or returnable equipment and supplies. Occupant(s) acknowledges that they may be required to sign an agreement with the commercial water delivery service as a condition of receiving bottled water.

Check ownership:

Owner-Occupant

\_\_\_\_\_ Occupant Only

Number of Occupants: \_\_\_\_\_

Signed: \_\_\_\_\_ Dated: \_\_\_\_\_

Printed Name: \_\_\_\_\_



444 21st Street South  $\cdot$  La Crosse, Wisconsin  $\cdot$  54601

December 1, 2020

2548 2nd Avenue East La Crosse, WI 54603

Subject: Private Well Sampling Results 2548 2nd Avenue East, La Crosse, WI 54603 Tax parcel # 4-181-0 Sample ID # 181-0

Dear :

We have received and reviewed the test results for the sample collected on November 2, 2020 at the above address. Some PFAS compounds were found, but the levels found were **below** the Department of Health Services (DHS) levels recommended for protecting health. These levels are called the "Recommended Public Health Standard" in the table below. The levels found in *your* well are called the "Sample Result" in the table below.

#### Sample Results

Compound	Sample Result (unit)	Recomm Public H Standard	ended ealth (unit <sup>e</sup> )
N-Ethyl Perfluorooctane sulfonamide (NEtFOSA) CAS # 4151-50-2	Not Detected	20 ppt <sup>a,b</sup>	) ppt unds I 6
N-Ethyl perfluorooctane sulfonamidoacetic acid (NEtFOSAA) CAS # 2991-50-6	Not Detected	20 ppt <sup>a,b</sup>	it is 2C compo <i>il</i> of al
N-Ethyl perfluorooctane sulfonamidoethanol (NEtFOSE) CAS # 1691-99-2	Not Detected	20 ppt <sup>a,b</sup>	ed lim ese 6 c ed toto
Perfluorooctane sulfonamide (FOSA) CAS # 754-91-6	Not Detected	20 ppt <sup>a,b</sup>	mend of the ombine
Perfluorooctanoic acid (PFOA) CAS # 335-67-1	Not Detected	20 ppt <sup>a,b</sup>	recom ny <i>one</i> the <i>cc</i>
Perfluorooctanesulfonic acid (PFOS) CAS # 1763-23-1	4.5 ppt	20 ppt <sup>a,b</sup>	The for a or

Private Well Sampling Results for 2548 2nd Avenue East, La Crosse, WI 54603 Tax parcel # 4-181-0 Sample ID # 181-0 December 1, 2020

Compound	Sample Result (unit)	Recommended Public Health Standard (unit <sup>e</sup> )
Hexafluoropropylene oxide dimer acid (HPFO-DA; GenX) CAS # 13252-13-6	Not Detected	300 ppt ª
Perfluorobutanesulfonic acid (PFBS) CAS # 375-73-5	4.3 ppt	450,000 ppt <sup>a</sup>
Perfluorohexanesulfonic acid (PFHxS) CAS # 355-46-4	6.6 ppt	40 ppt <sup>a</sup>
Perfluorobutanoic acid (PFBA) CAS # 375-22-4	95 ppt	10,000 ppt <sup>a</sup>
Perfluorodecanoic acid (PFDA) CAS # 335-76-2	Not Detected	300 ppt <sup>a</sup>
Perfluorododecanoic acid (PFDoA) CAS # 307-55-1	Not Detected	500 ppt <sup>a</sup>
Perfluorohexanoic acid (PFHxA) CAS # 307-24-4	1.8 ppt	150,000 ppt <sup>a</sup>
Perfluorononanoic acid (PFNA) CAS # 375-95-1	Not Detected	30 ppt <sup>a</sup>
Perfluorotetradecanoic acid (PFTeA) CAS # 376-06-7	Not Detected	10,000 ppt <sup>a</sup>
Perfluoroundecanoic acid (PFUnA) CAS # 2058-94-8	Not Detected	3,000 ppt <sup>a</sup>
4,8-Dioxa-3H-perfluorononanoic acid (DONA) CAS # 919005-14-4	Not Detected	3,000 ppt <sup>a</sup>
Perfluorooctadecanoic acid (PFODA) CAS # 16517-11-6	Not Detected	400,000 ppt <sup>a</sup>
Perfluoro-1-pentanesulfonic acid (PFPeS) CAS #2706-91-4	3.3 ppt	None Established <sup>c</sup>
Perfluoro-n-heptanoic acid (PFHpA) CAS # 375-85-9	1.2 ppt	None Established <sup>c</sup>
Perfluoro-n-pentanoic acid (PFPeA) CAS # 2706-90-3	3.2 ppt	None Established <sup>c</sup>

<sup>a</sup> Public health enforcement standard (ES) recommended by DHS.

<sup>b</sup> DHS recommends a combined enforcement standard of 20 ng/L and combined preventive action limit of 2 ng/L for FOSA, NEt-FOSA, NetFOSAA, PFOS, and PFOA.

<sup>c</sup> A current standard is not available; the compound is currently under review by DHS for potential public health standard recommendation.

<sup>d</sup> Public health enforcement standard (ES) in NR 140, Wisconsin Administrative Code.

<sup>e</sup> Units: Parts per trillion (ppt) = nanograms of substance per liter of water (ng/L)

<sup>BL</sup> Detected in the method blank. Possible lab contaminant.

Private Well Sampling Results for 2548 2nd Avenue East, La Crosse, WI 54603 Tax parcel # 4-181-0 Sample ID # 181-0 December 1, 2020

As required by law, we will be submitting these results to the Department of Natural Resources (DNR). The DNR may consult with the Department of Health Services (DHS) about these test results. DHS may review all PFAS tests and follow-up with you directly if any actions are recommended to protect your health.

Thank you for your patience and assistance with our investigation. We will provide updates on the project at <u>https://www.cityoflacrosse.org/wells</u> as our work continues. If you have any questions, please call The OS Group at (608) 668-2718 or email them at <u>PFAS@theOSgrp.com</u>.

You can also contact the DNR and DHS with questions about PFAS or the water sample results at the numbers provided below.

Questions about		<u>Contact</u>	<u>Phone</u>	E-mail Address
Soil & Groundwater Testing, Clean Up	DNR	David Rozeboom	715-215-2078	David.Rozeboom@wisconsin.gov
Drinking Water or Private wells	DNR	Kyle Burton	920-360-2112	kyle.burton@wisconsin.gov
Health Concerns	DHS	Curtis Hedman	608-266-6677	Curtis.Hedman@dhs.wisconsin.gov

On behalf of The City of La Crosse *The OS Group, LLC* 

Attachment: Lab report for your well

Client: Pace Analytical Services, LLC				Laborato	ory ID: VK08043	-001	
Description: 181-0				Ν	/latrix: Aqueous	5	
Date Sampled:11/02/2020 1130 F	Project Name	e: LACROSSE WELL #	#23 & 24		-		
Date Received: 11/06/2020 Pro	oject Numbe	r: 40217713					
Pup Prop Mathed Apolytical Mathed	ilution Ar	alveis Data Analvet	Drop	Data Bata	'n		
1 SOP SPE PFAS by ID SOP	1 11/	17/2020 1605 MMM	11/16/2	020 1125 7361	9		
Parameter	CAS Number	6 Analytical Method	Result	Q LOQ	DL	Units	Run
9-chlorohexadecafluoro-3-oxanone-1-sulfonic acid (9CI-PF3ONS)	756426-58-	1 PFAS by ID SOP	ND	7.2	1.8	ng/L	1
11-chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11CI-PF3)	763051-92-	9 PFAS by ID SOP	ND	7.2	1.8	ng/L	1
1H, 1H, 2H, 2H-perfluorodecane sulfonic acid (8:2 FTS)	39108-34-	4 PFAS by ID SOP	ND	7.2	1.8	ng/L	1
1H, 1H, 2H, 2H-perfluorooctane sulfonic acid (6:2 FTS)	27619-97-	2 PFAS by ID SOP	ND	7.2	1.8	ng/L	1
1H,1H,2H,2H-perfluorododecane sulfonic acid (10:2 FTS)	120226-60-	0 PFAS by ID SOP	ND	7.2	1.8	ng/L	1
1H,1H,2H,2H-perfluorohexane sulfonic acid (4:2 FTS)	757124-72-	4 PFAS by ID SOP	ND	7.2	1.8	ng/L	1
Hexafluoropropylene oxide dimer acid (GenX)	13252-13-	6 PFAS by ID SOP	ND	7.2	1.8	ng/L	1
4,8-dioxa-3H-perfluorononanoic acid (ADONA)	919005-14-	4 PFAS by ID SOP	ND	7.2	1.8	ng/L	1
N-ethylperfluoro-1-octanesulfonamide (EtFOSA)	4151-50-2	2 PFAS by ID SOP	ND	7.2	1.8	ng/L	1
N-ethylperfluoro-1-octanesulfonamidoacetic acid (EtFOSAA)	2991-50-6	6 PFAS by ID SOP	ND	7.2	1.8	ng/L	1
2-N-ethylperfluoro-1-octanesulfonamido-ethanol (EtFOSE)	1691-99-2	2 PFAS by ID SOP	ND	7.2	1.8	ng/L	1
N-methylperfluoro-1-octanesulfonamide (MeFOSA)	31506-32-	8 PFAS by ID SOP	ND	14	3.6	ng/L	1
N-methylperfluoro-1-octanesulfonamidoacetic acid (MeFOSAA)	2355-31-9	PFAS by ID SOP	ND	7.2	1.8	ng/L	1
2-N-methylperfluoro-1-octanesulfonamido-ethanol (MeFOSE)	24448-09-	7 PFAS by ID SOP	ND	7.2	1.8	ng/L	1
Perfluoro-1-butanesulfonic acid (PFBS)	375-73-5	5 PFAS by ID SOP	4.3	3.6	0.90	ng/L	1
Perfluoro-1-decanesulfonic acid (PFDS)	335-77-3	8 PFAS by ID SOP	ND	3.6	0.90	ng/L	1
Perfluoro-1-heptanesulfonic acid (PFHpS)	375-92-8	B PFAS by ID SOP	ND	3.6	0.90	ng/L	1
Perfluoro-1-nonanesulfonic acid (PFNS)	68259-12-	1 PFAS by ID SOP	ND	3.6	0.90	ng/L	1
Perfluoro-1-octanesulfonamide (PFOSA)	754-91-6	6 PFAS by ID SOP	ND	3.6	0.90	ng/L	1
Perfluoro-1-pentanesulfonic acid (PFPeS)	2706-91-4	PFAS by ID SOP	3.3	J 3.6	0.90	ng/L	1
Perfluorododecanesulfonic acid (PFDOS)	79780-39-	5 PFAS by ID SOP	ND	7.2	1.8	ng/L	1
Perfluorohexanesulfonic acid (PFHxS)	355-46-4	PFAS by ID SOP	6.6	3.6	0.90	ng/L	1
Perfluoro-n-butanoic acid (PFBA)	375-22-4	PFAS by ID SOP	95	3.6	0.90	ng/L	1
Perfluoro-n-decanoic acid (PFDA)	335-76-2	2 PFAS by ID SOP	ND	3.6	0.90	ng/L	1
Perfluoro-n-dodecanoic acid (PFDoA)	307-55-1	I PFAS by ID SOP	ND	3.6	0.90	ng/L	1
Perfluoro-n-heptanoic acid (PFHpA)	375-85-9	PFAS by ID SOP	1.2	J 3.6	0.90	ng/L	1
Perfluoro-n-hexadecanoic acid (PFHxDA)	67905-19-	5 PFAS by ID SOP	ND	7.2	1.8	ng/L	1
Perfluoro-n-hexanoic acid (PFHxA)	307-24-4	PFAS by ID SOP	1.8	J 3.6	0.90	ng/L	1
Perfluoro-n-nonanoic acid (PFNA)	375-95-1	I PFAS by ID SOP	ND	3.6	0.90	ng/L	1
Perfluoro-n-octadecanoic acid (PFODA)	16517-11-	6 PFAS by ID SOP	ND	7.2	1.8	ng/L	1
Perfluoro-n-octanoic acid (PFOA)	335-67-1	I PEAS by ID SOP	ND	3.6	0.90	ng/L	1
Perfluoro-n-pentanoic acid (PFPeA)	2706-90-3	B PEAS by ID SOP	3.2	J 3.6	0.90	ng/L	1
Perfluoro-n-tetradecanoic acid (PF I eDA)	376-06-	PFAS by ID SOP	ND	3.6	0.90	ng/L	1
Perfluoro-n-tridecanoic acid (PFTrDA)	72629-94-	B PFAS by ID SOP	ND	3.6	0.90	ng/L	1
Perfluoro-n-undecanoic acid (PFUdA)	2058-94-8	3 PEAS by ID SOP	ND	3.6	0.90	ng/L	1
Perfluorooctanesulfonic acid (PFOS)	1763-23-7	I PEAS by ID SOP	4.5	3.6	0.90	ng/L	1
Surrogate Q % Re	un 1 Acc covery L	eptance .imits					
13C2_4:2FTS	88	25-150					
13C2_6:2FTS	87 2	25-150					
13C2_8:2FTS	76 2	25-150					
13C2_PFDoA	79 2	25-150					
13C2_PFHxDA	66 2	25-150					
13C2_PFTeDA	75 2	25-150					
A construction B = Detected in the method black	F = Quantitatio	n of compound exceeded the a	calibration ra	ange DI = Detectio	on Limit		
ND = Not detected at or above the DL     N = Recovery is out of criteria       H = Out of holding time     W = Reported on wet weight basis	P = The RPD b	etween two GC columns exce	eds 40%	J = Estimated	d result < LOQ and $\geq$	DL	
5							

Client: Pace Analytical Services, LLC		Laboratory ID: VK08043-001
Description: 181-0		Matrix: Aqueous
Date Sampled:11/02/2020 1130	Project Name: LACROSSE WELL #23 & 24	
Date Received: 11/06/2020	Project Number: 40217713	

Surrogate	Run 1 Ac Q % Recovery	ceptance Limits
13C3_PFBS	80	25-150
13C3_PFHxS	76	25-150
13C3-HFPO-DA	97	25-150
13C4_PFBA	83	25-150
13C4_PFHpA	84	25-150
13C5_PFHxA	91	25-150
13C5_PFPeA	81	25-150
13C6_PFDA	80	25-150
13C7_PFUdA	86	25-150
13C8_PFOA	87	25-150
13C8_PFOS	76	25-150
13C8_PFOSA	85	10-150
13C9_PFNA	84	25-150
d-EtFOSA	72	10-150
d5-EtFOSAA	80	25-150
d9-EtFOSE	81	10-150
d-MeFOSA	77	10-150
d3-MeFOSAA	86	25-150
d7-MeFOSE	82	10-150

LOQ = Limit of Quantitation B = Detected in the method blank E = Quantitation of compound exceeded the calibration range DL = Detection Limit ND = Not detected at or above the DL N = Recovery is out of criteria P = The RPD between two GC columns exceeds 40% J = Estimated result < LOQ and  $\ge$  DL H = Out of holding time W = Reported on wet weight basis



#### 444 21st Street South $\cdot$ La Crosse, Wisconsin $\cdot$ 54601

December 1, 2020

E7104 Traastad Rd. Viroqua, WI 54665

Subject: Private Well Sampling Results 2532 Second Avenue East, La Crosse, WI 54603 Tax parcel # 4-184-0 Sample ID # 184-0

Dear :

We have received and reviewed the test results for the sample collected on November 2, 2020 at the above address. Some PFAS compounds were found at levels <u>above</u> the Department of Health Services (DHS) levels recommended for protecting health. These levels are called the "Recommended Public Health Standard" in the table below. The levels found in your well are called the "Sample Result" in the table below.

Because some of the levels are above the recommended Public Health Standard, the City is offering to provide bottled water delivered to your home for drinking, cooking, and brushing your teeth. There will be no cost to you for the bottled water. Please complete the attached form and mail it to The OS Group to make arrangements for having a water dispenser and bottles delivered to your home. Call 608-668-2718 or email <u>PFAS@theOSgrp.com</u>. You may also complete this form on line at <u>www.cityoflacrosse.org/bottledwater</u>

The following table summarizes the test results from the sample. **Bolded results** are above a current recommended level intended to protect your health according to the Department of Health Services (DHS).

Private Well Sampling Results for 2532 Second Avenue East, Tax Parcel # 4-184-0 December 1, 2020

### Sample Results

Compound	Sample Result (unit)	Recomm Public H Standard	ended lealth (unit <sup>e</sup> )
N-Ethyl Perfluorooctane sulfonamide (NEtFOSA) CAS # 4151-50-2	Not Detected	20 ppt <sup>a,b</sup> td g	
N-Ethyl perfluorooctane sulfonamidoacetic acid (NEtFOSAA) CAS # 2991-50-6	Not Detected	20 ppt <sup>a,b</sup>	it is 20 compo <i>il</i> of al
N-Ethyl perfluorooctane sulfonamidoethanol (NEtFOSE) CAS # 1691-99-2	Not Detected	20 ppt <sup>a,b</sup>	ed lim ese 6 c ed toto
Perfluorooctane sulfonamide (FOSA) CAS # 754-91-6	0.91 ppt	20 ppt <sup>a,b</sup>	mend of the mbine
Perfluorooctanoic acid (PFOA) CAS # 335-67-1	Not Detected	20 ppt <sup>a,b</sup>	recom 1y <i>one</i> the <i>cc</i>
Perfluorooctanesulfonic acid (PFOS) CAS # 1763-23-1	4.5 ppt	20 ppt <sup>a,b</sup>	The I for an
Hexafluoropropylene oxide dimer acid (HPFO-DA; GenX) CAS # 13252-13-6	Not Detected	300 ppt <sup>a</sup>	
Perfluorobutanesulfonic acid (PFBS) CAS # 375-73-5	9.1 ppt	450,000 ppt <sup>a</sup>	
Perfluorohexanesulfonic acid (PFHxS) CAS # 355-46-4	70 ppt	40 ppt <sup>a</sup>	
Perfluorobutanoic acid (PFBA) CAS # 375-22-4	30 ppt	10,000 ppt <sup>a</sup>	
Perfluorodecanoic acid (PFDA) CAS # 335-76-2	Not Detected		300 ppt <sup>a</sup>
Perfluorododecanoic acid (PFDoA) CAS # 307-55-1	Not Detected		500 ppt <sup>a</sup>
Perfluorohexanoic acid (PFHxA) CAS # 307-24-4	3.8 ppt	150	),000 ppt <sup>a</sup>
Perfluorononanoic acid (PFNA) CAS # 375-95-1	Not Detected	30 ppt <sup>a</sup>	
Perfluorotetradecanoic acid (PFTeA) CAS # 376-06-7	Not Detected	10,000 ppt <sup>a</sup>	
Perfluoroundecanoic acid (PFUnA) CAS # 2058-94-8	Not Detected	3,000 ppt <sup>a</sup>	
4,8-Dioxa-3H-perfluorononanoic acid (DONA) CAS # 919005-14-4	Not Detected	3	8,000 ppt <sup>a</sup>
Perfluorooctadecanoic acid (PFODA) CAS # 16517-11-6	Not Detected	400	),000 ppt <sup>a</sup>

Private Well Sampling Results for 2532 Second Avenue East, Tax Parcel # 4-184-0 December 1, 2020

Perfluoro-1-heptanesulfonic acid (PFHpS) CAS # 375-92-8	1.7 ppt	None Established <sup>c</sup>				
Perfluoro-1-pentanesulfonic acid (PFPeS) CAS # 2706-91-4	8.0 ppt	None Established <sup>c</sup>				
Perfluoro-n-pentanoic acid (PFPeA) CAS #2706-90-3	2.7 ppt	None Established <sup>c</sup>				
<sup>a</sup> Public health enforcement standard (ES) recommended by DHS. <sup>b</sup> DHS recommends a combined enforcement standard of 20 ng/L and combined preventive action limit of 2 ng/L for FOSA, NEt-FOSE, NEt-FOSA, NetFOSAA, PFOS, and PFOA. <sup>c</sup> A current standard is not available; the compound is currently under review by DHS for potential public health standard recommendation. <sup>d</sup> Public health enforcement standard (ES) in NR 140. Wisconsin Administrative Code						

<sup>e</sup> Units: Parts per trillion (ppt) = nanograms of substance per liter of water (ng/L)

<sup>BL</sup> Detected in the method blank. Possible lab contaminant.

As required by law, we will be submitting these results to the Department of Natural Resources (DNR). The DNR may consult with the Department of Health Services (DHS) about these test results. DHS may review all PFAS tests and follow-up with you directly if any actions are recommended to protect your health.

Thank you for your patience and assistance with our investigation. We will provide updates on the project at <u>https://www.cityoflacrosse.org/wells</u> as our work continues. If you have any questions, please call The OS Group at (608) 668-2718 or email them at <u>PFAS@theOSgrp.com</u>.

You can also contact the DNR and DHS with questions about PFAS or the water sample results at the numbers provided below.

Questions about	uestions about <u>Contact</u> <u>Phone</u>		<u>E-mail Address</u>	
Soil & Groundwate Testing, Clean Up	r DNR	David Rozeboom	715-215-2078	David.Rozeboom@wisconsin.gov
Drinking Water or Private wells	DNR	Kyle Burton	920-360-2112	kyle.burton@wisconsin.gov
Health Concerns	DHS	Curtis Hedman	608-266-6677	Curtis.Hedman@dhs.wisconsin.gov

On behalf of The City of La Crosse *The OS Group, LLC* 

Attachment: Lab report for your well Bottled Water Acknowledgement

Client: Pace Analytical Services, LLC				Laboratory	/ ID: VK08043-	003	
Description: 184-0				Ма	trix: Aqueous		
Date Sampled:11/02/2020 1200	Project Name	: LACROSSE WELL #	#23 & 24				
Date Received: 11/06/2020	niect Number	·· 10217713					
		. 40217713					
RunPrep MethodAnalytical MethodD1SOP SPEPFAS by ID SOP	0ilution Ar 1 11/	alysis Date Analyst 17/2020 1637 MMM	Prep [ 11/16/20	Date Batch 020 1125 73619			
Parameter	CAS Number	Analytical Method	Result	Q LOQ	DL	Units	Run
9-chlorohexadecafluoro-3-oxanone-1-sulfonic acid (9CI-PF3ONS)	756426-58-7	I PFAS by ID SOP	ND	7.0	1.8	ng/L	1
11-chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11CI-PF3)	763051-92-9	PFAS by ID SOP	ND	7.0	1.8	ng/L	1
1H, 1H, 2H, 2H-perfluorodecane sulfonic acid (8:2 FTS)	39108-34-4	PFAS by ID SOP	ND	7.0	1.8	ng/L	1
1H, 1H, 2H, 2H-perfluorooctane sulfonic acid (6:2 FTS)	27619-97-2	2 PFAS by ID SOP	ND	7.0	1.8	ng/L	1
1H,1H,2H,2H-perfluorododecane sulfonic acid (10:2 FTS)	120226-60-0	) PFAS by ID SOP	ND	7.0	1.8	ng/L	1
1H,1H,2H,2H-perfluorohexane sulfonic acid (4:2 FTS)	757124-72-4	4 PFAS by ID SOP	ND	7.0	1.8	ng/L	1
Hexafluoropropylene oxide dimer acid (GenX)	13252-13-6	5 PFAS by ID SOP	ND	7.0	1.8	ng/L	1
4,8-dioxa-3H-perfluorononanoic acid (ADONA)	919005-14-4	4 PFAS by ID SOP	ND	7.0	1.8	ng/L	1
N-ethylperfluoro-1-octanesulfonamide (EtFOSA)	4151-50-2	PFAS by ID SOP	ND	7.0	1.8	ng/L	1
N-ethylperfluoro-1-octanesulfonamidoacetic acid (EtFOSAA)	2991-50-6	PFAS by ID SOP	ND	7.0	1.8	ng/L	1
2-N-ethylperfluoro-1-octanesulfonamido-ethanol (EtFOSE)	1691-99-2	PFAS by ID SOP	ND	7.0	1.8	ng/L	1
N-methylperfluoro-1-octanesulfonamide (MeFOSA)	31506-32-8	B PFAS by ID SOP	ND	14	3.5	ng/L	1
N-methylperfluoro-1-octanesulfonamidoacetic acid (MeFOSAA)	2355-31-9	PFAS by ID SOP	ND	7.0	1.8	ng/L	1
2-N-methylperfluoro-1-octanesulfonamido-ethanol (MeFOSE)	24448-09-7	7 PFAS by ID SOP	ND	7.0	1.8	ng/L	1
Perfluoro-1-butanesulfonic acid (PFBS)	375-73-5	PFAS by ID SOP	9.1	3.5	0.88	ng/L	1
Perfluoro-1-decanesulfonic acid (PFDS)	335-77-3	PFAS by ID SOP	ND	3.5	0.88	ng/L	1
Perfluoro-1-heptanesulfonic acid (PFHpS)	375-92-8	PFAS by ID SOP	1.7	J 3.5	0.88	ng/L	1
Perfluoro-1-nonanesulfonic acid (PFNS)	68259-12-1	I PFAS by ID SOP	ND	3.5	0.88	ng/L	1
Perfluoro-1-octanesulfonamide (PFOSA)	754-91-6	PFAS by ID SOP	0.91	J 3.5	0.88	ng/L	1
Perfluoro-1-pentanesulfonic acid (PFPeS)	2706-91-4	PFAS by ID SOP	8.0	3.5	0.88	ng/L	1
Perfluorododecanesulfonic acid (PFDOS)	79780-39-5	5 PFAS by ID SOP	ND	7.0	1.8	ng/L	1
Perfluorohexanesulfonic acid (PFHxS)	355-46-4	PFAS by ID SOP	70	3.5	0.88	ng/L	1
Perfluoro-n-butanoic acid (PFBA)	375-22-4	PFAS by ID SOP	30	3.5	0.88	ng/L	1
Perfluoro-n-decanoic acid (PFDA)	335-76-2	PFAS by ID SOP	ND	3.5	0.88	ng/L	1
Perfluoro-n-dodecanoic acid (PFDoA)	307-55-1	PFAS by ID SOP	ND	3.5	0.88	ng/L	1
Perfluoro-n-heptanoic acid (PFHpA)	375-85-9	PFAS by ID SOP	ND	3.5	0.88	ng/L	1
Perfluoro-n-hexadecanoic acid (PFHxDA)	67905-19-5	5 PFAS by ID SOP	ND	7.0	1.8	ng/L	1
Perfluoro-n-hexanoic acid (PFHxA)	307-24-4	PFAS by ID SOP	3.8	3.5	0.88	ng/L	1
Perfluoro-n-nonanoic acid (PFNA)	375-95-1	PFAS by ID SOP	ND	3.5	0.88	ng/L	1
Perfluoro-n-octadecanoic acid (PFODA)	16517-11-6	5 PFAS by ID SOP	ND	7.0	1.8	ng/L	1
Perfluoro-n-octanoic acid (PFOA)	335-67-1	PFAS by ID SOP	ND	3.5	0.88	ng/L	1
Perfluoro-n-pentanoic acid (PFPeA)	2706-90-3	PFAS by ID SOP	2.7	J 3.5	0.88	ng/L	1
Perfluoro-n-tetradecanoic acid (PFTeDA)	376-06-7	PFAS by ID SOP	ND	3.5	0.88	ng/L	1
Perfluoro-n-tridecanoic acid (PFTrDA)	72629-94-8	3 PFAS by ID SOP	ND	3.5	0.88	ng/L	1
Perfluoro-n-undecanoic acid (PFUdA)	2058-94-8	PFAS by ID SOP	ND	3.5	0.88	ng/L	1
Perfluorooctanesulfonic acid (PFOS)	1763-23-1	PFAS by ID SOP	4.5	3.5	0.88	ng/L	1
Surrogate Q % Re	un 1 Acce covery L	eptance imits					
13C2_4:2FTS	91 2	25-150					
13C2_6:2FTS	86 2	25-150					
13C2_8:2FTS	74 2	25-150					
13C2_PFDoA	88 2	25-150					
13C2_PFHxDA	93 2	25-150					
13C2_PFTeDA	84 2	25-150					
LOQ = Limit of QuantitationB = Detected in the method blankND = Not detected at or above the DLN = Recovery is out of criteriaH = Out of holding timeW = Reported on wet weight basis	E = Quantitation P = The RPD b	n of compound exceeded the o etween two GC columns exce	calibration ra eds 40%	nge DL = Detection J = Estimated re	Limit esult < LOQ and $\geq$ [	DL	

ID: VK08043-003

Client: Pace Analytical Services, LLC		Laboratory ID: VK08043-
Description: 184-0		Matrix: Aqueous
Date Sampled:11/02/2020 1200	Project Name: LACROSSE WELL #23 & 24	
Date Received: 11/06/2020	Project Number: 40217713	

Surrogate	Run 1 Acc Q % Recovery	ceptance Limits
13C3_PFBS	82	25-150
13C3_PFHxS	86	25-150
13C3-HFPO-DA	112	25-150
13C4_PFBA	92	25-150
13C4_PFHpA	100	25-150
13C5_PFHxA	95	25-150
13C5_PFPeA	91	25-150
13C6_PFDA	85	25-150
13C7_PFUdA	85	25-150
13C8_PFOA	91	25-150
13C8_PFOS	82	25-150
13C8_PFOSA	91	10-150
13C9_PFNA	89	25-150
d-EtFOSA	72	10-150
d5-EtFOSAA	84	25-150
d9-EtFOSE	87	10-150
d-MeFOSA	78	10-150
d3-MeFOSAA	92	25-150
d7-MeFOSE	88	10-150

LOQ = Limit of Quantitation	B = Detected in the method blank	E = Quantitation of compound exceeded the calibration range	DL = Detection Limit
ND = Not detected at or above the DL	N = Recovery is out of criteria	P = The RPD between two GC columns exceeds 40%	J = Estimated result < LOQ and $\ge$ DL
H = Out of holding time	W = Reported on wet weight basis		

## BOTTLED WATER ACKNOWLEDGEMENT

2532 Second Avenue East,

If you desire to accept the bottled water delivery, please complete and sign this form and return it to The OS Group at <u>PFAS@TheOSgrp.com</u> or mail to 444 21<sup>st</sup> St. S, La Crosse, WI 54601. You may also complete this form electronically on line at <u>www.cityoflacrosse.org/bottledwater</u>. Call 608-668-2718 with any question you may have.

As pre-caution for the protection of human health, the City of La Crosse (The City) will provide, on a temporary basis, bottled water for drinking, cooking and toothbrushing purposes at the above referenced address. The water will be delivered to your home or business by a commercial water delivery service. At the City's cost, a dispenser / cooler and regular deliveries of 5-gallon containers of water will be provided. The City reserves the right to dictate the conditions of delivery, such as minimum and maximum number of containers per delivery, frequency and timing of deliveries. The City reserves the right to periodically review whether The City should continue to provide bottled water, considering factors such as State and Federal standards and guidance, evolving knowledge and understanding of the sources, cause and responsibility for the contamination, new or reinterpreted test results, and the availability of more permanent or costeffective sources of water for the above purposes. The City of La Crosse makes no warranty or representation regarding the suitability of the bottled water beyond those made by the commercial water delivery service.

All reusable or returnable equipment and supplies, such as the containers and cooler/dispenser, are the property of the commercial water delivery service or the City of La Crosse. By signing below, the Occupant of the above referenced property acknowledges that all reusable or returnable equipment and supplies shall be returned to the commercial water delivery service or the City of La Crosse upon request. The Occupant agrees to provide reasonable access for delivery of bottled water and pick up of reusable or returnable equipment and supplies. Occupant(s) acknowledges that they may be required to sign an agreement with the commercial water delivery service as a condition of receiving bottled water.

Check ownership:

\_\_\_\_\_ Owner-Occupant Occupant Only

Number of Occupants: \_\_\_\_\_

Signed:	 Dated:	
-		

Printed Name: \_\_\_\_\_



444 21st Street South  $\cdot$  La Crosse, Wisconsin  $\cdot$  54601

December 1, 2020

2532 Second Avenue East La Crosse, WI 54603

Subject: Private Well Sampling Results 2532 Second Avenue East, La Crosse, WI 54603 Tax parcel # 4-184-0 Sample ID # 184-0

### Dear

We have received and reviewed the test results for the sample collected on November 2, 2020 at the above address. Some PFAS compounds were found at levels <u>above</u> the Department of Health Services (DHS) levels recommended for protecting health. These levels are called the "Recommended Public Health Standard" in the table below. The levels found in your well are called the "Sample Result" in the table below.

Because some of the levels are above the recommended Public Health Standard, the City is offering to provide bottled water delivered to your home for drinking, cooking, and brushing your teeth. There will be no cost to you for the bottled water. Please complete the attached form and mail it to The OS Group to make arrangements for having a water dispenser and bottles delivered to your home. Call 608-668-2718 or email <u>PFAS@theOSgrp.com</u>. You may also complete this form on line at <u>www.cityoflacrosse.org/bottledwater</u>

The following table summarizes the test results from the sample. **Bolded results** are above a current recommended level intended to protect your health according to the Department of Health Services (DHS).

Private Well Sampling Results for 2532 Second Avenue East, La Crosse, WI 54603 Tax Parcel # 4-184-0 December 1, 2020

Compound	Sample Result (unit)	Recomm Public H Standard	ended lealth (unit <sup>e</sup> )
N-Ethyl Perfluorooctane sulfonamide (NEtFOSA) CAS # 4151-50-2	Not Detected	20 ppt <sup>a,b</sup>	) ppt unds I 6
N-Ethyl perfluorooctane sulfonamidoacetic acid (NEtFOSAA) CAS # 2991-50-6	Not Detected	20 ppt <sup>a,b</sup>	
N-Ethyl perfluorooctane sulfonamidoethanol (NEtFOSE) CAS # 1691-99-2	Not Detected	20 ppt <sup>a,b</sup>	ed lim ese 6 c ed toto
Perfluorooctane sulfonamide (FOSA) CAS # 754-91-6	0.91 ppt	20 ppt <sup>a,b</sup>	mend of the
Perfluorooctanoic acid (PFOA) CAS # 335-67-1	Not Detected	20 ppt <sup>a,b</sup>	recom ny <i>one</i> the <i>c</i> c
Perfluorooctanesulfonic acid (PFOS) CAS # 1763-23-1	4.5 ppt	20 ppt <sup>a,b</sup>	The for a or
Hexafluoropropylene oxide dimer acid (HPFO-DA; GenX) CAS # 13252-13-6	Not Detected	300 ppt <sup>a</sup>	
Perfluorobutanesulfonic acid (PFBS) CAS # 375-73-5	9.1 ppt	450,000 ppt <sup>a</sup>	
Perfluorohexanesulfonic acid (PFHxS) CAS # 355-46-4	70 ppt	40 ppt <sup>a</sup>	
Perfluorobutanoic acid (PFBA) CAS # 375-22-4	30 ppt	10,000 ppt <sup>a</sup>	
Perfluorodecanoic acid (PFDA) CAS # 335-76-2	Not Detected	300 ppt ª	
Perfluorododecanoic acid (PFDoA) CAS # 307-55-1	Not Detected	500 ppt <sup>a</sup>	
Perfluorohexanoic acid (PFHxA) CAS # 307-24-4	3.8 ppt	150,000 ppt <sup>a</sup>	
Perfluorononanoic acid (PFNA) CAS # 375-95-1	Not Detected	30 ppt <sup>a</sup>	
Perfluorotetradecanoic acid (PFTeA) CAS # 376-06-7	Not Detected	10,000 ppt <sup>a</sup>	
Perfluoroundecanoic acid (PFUnA) CAS # 2058-94-8	Not Detected	3,000 ppt <sup>a</sup>	
4,8-Dioxa-3H-perfluorononanoic acid (DONA) CAS # 919005-14-4	Not Detected	3	3,000 ppt <sup>a</sup>
Perfluorooctadecanoic acid (PFODA) CAS # 16517-11-6	Not Detected	400	0,000 ppt <sup>a</sup>

### Sample Results

Perfluoro-1-heptanesulfonic acid (PFHpS) CAS # 375-92-8	1.7 ppt	None Established <sup>c</sup>				
Perfluoro-1-pentanesulfonic acid (PFPeS) CAS # 2706-91-4	8.0 ppt	None Established <sup>c</sup>				
Perfluoro-n-pentanoic acid (PFPeA) CAS #2706-90-3	2.7 ppt	None Established <sup>c</sup>				
<sup>4</sup> Public health enforcement standard (ES) recommended by DHS. <sup>5</sup> DHS recommends a combined enforcement standard of 20 ng/L and combined preventive action limit of 2 ng/L for <sup>5</sup> FOSA, NEt-FOSE, NEt-FOSA, NetFOSAA, PFOS, and PFOA. <sup>2</sup> A current standard is not available; the compound is currently under review by DHS for potential public health						

standard recommendation. <sup>d</sup> Public health enforcement standard (ES) in NR 140, Wisconsin Administrative Code.

<sup>e</sup> Units: Parts per trillion (ppt) = nanograms of substance per liter of water (ng/L)

<sup>BL</sup> Detected in the method blank. Possible lab contaminant.

As required by law, we will be submitting these results to the Department of Natural Resources (DNR). The DNR may consult with the Department of Health Services (DHS) about these test results. *DHS may review all PFAS tests and follow-up with you directly if any actions are recommended to protect your health.* 

Thank you for your patience and assistance with our investigation. We will provide updates on the project at <u>https://www.cityoflacrosse.org/wells</u> as our work continues. If you have any questions, please call The OS Group at (608) 668-2718 or email them at <u>PFAS@theOSgrp.com</u>.

You can also contact the DNR and DHS with questions about PFAS or the water sample results at the numbers provided below.

Questions about		<u>Contact</u>	<u>Phone</u>	E-mail Address
Soil & Groundwater Testing, Clean Up	DNR	David Rozeboom	715-215-2078	David.Rozeboom@wisconsin.gov
Drinking Water or Private wells	DNR	Kyle Burton	920-360-2112	kyle.burton@wisconsin.gov
Health Concerns	DHS	Curtis Hedman	608-266-6677	Curtis.Hedman@dhs.wisconsin.gov

On behalf of The City of La Crosse *The OS Group, LLC* 

Attachment: Lab report for your well Bottled Water Acknowledgement

Client: Pace Analytical Services, LLC				Laboratory	/ ID: VK08043-	003	
Description: 184-0				Ма	trix: Aqueous		
Date Sampled:11/02/2020 1200	Project Name	: LACROSSE WELL #	#23 & 24				
Date Received: 11/06/2020	niect Number	·· 10217713					
		. 40217713					
RunPrep MethodAnalytical MethodD1SOP SPEPFAS by ID SOP	0ilution Ar 1 11/	alysis Date Analyst 17/2020 1637 MMM	Prep [ 11/16/20	Date Batch 020 1125 73619			
Parameter	CAS Number	Analytical Method	Result	Q LOQ	DL	Units	Run
9-chlorohexadecafluoro-3-oxanone-1-sulfonic acid (9CI-PF3ONS)	756426-58-7	I PFAS by ID SOP	ND	7.0	1.8	ng/L	1
11-chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11CI-PF3)	763051-92-9	PFAS by ID SOP	ND	7.0	1.8	ng/L	1
1H, 1H, 2H, 2H-perfluorodecane sulfonic acid (8:2 FTS)	39108-34-4	PFAS by ID SOP	ND	7.0	1.8	ng/L	1
1H, 1H, 2H, 2H-perfluorooctane sulfonic acid (6:2 FTS)	27619-97-2	2 PFAS by ID SOP	ND	7.0	1.8	ng/L	1
1H,1H,2H,2H-perfluorododecane sulfonic acid (10:2 FTS)	120226-60-0	) PFAS by ID SOP	ND	7.0	1.8	ng/L	1
1H,1H,2H,2H-perfluorohexane sulfonic acid (4:2 FTS)	757124-72-4	4 PFAS by ID SOP	ND	7.0	1.8	ng/L	1
Hexafluoropropylene oxide dimer acid (GenX)	13252-13-6	5 PFAS by ID SOP	ND	7.0	1.8	ng/L	1
4,8-dioxa-3H-perfluorononanoic acid (ADONA)	919005-14-4	4 PFAS by ID SOP	ND	7.0	1.8	ng/L	1
N-ethylperfluoro-1-octanesulfonamide (EtFOSA)	4151-50-2	PFAS by ID SOP	ND	7.0	1.8	ng/L	1
N-ethylperfluoro-1-octanesulfonamidoacetic acid (EtFOSAA)	2991-50-6	PFAS by ID SOP	ND	7.0	1.8	ng/L	1
2-N-ethylperfluoro-1-octanesulfonamido-ethanol (EtFOSE)	1691-99-2	PFAS by ID SOP	ND	7.0	1.8	ng/L	1
N-methylperfluoro-1-octanesulfonamide (MeFOSA)	31506-32-8	B PFAS by ID SOP	ND	14	3.5	ng/L	1
N-methylperfluoro-1-octanesulfonamidoacetic acid (MeFOSAA)	2355-31-9	PFAS by ID SOP	ND	7.0	1.8	ng/L	1
2-N-methylperfluoro-1-octanesulfonamido-ethanol (MeFOSE)	24448-09-7	7 PFAS by ID SOP	ND	7.0	1.8	ng/L	1
Perfluoro-1-butanesulfonic acid (PFBS)	375-73-5	PFAS by ID SOP	9.1	3.5	0.88	ng/L	1
Perfluoro-1-decanesulfonic acid (PFDS)	335-77-3	PFAS by ID SOP	ND	3.5	0.88	ng/L	1
Perfluoro-1-heptanesulfonic acid (PFHpS)	375-92-8	PFAS by ID SOP	1.7	J 3.5	0.88	ng/L	1
Perfluoro-1-nonanesulfonic acid (PFNS)	68259-12-1	I PFAS by ID SOP	ND	3.5	0.88	ng/L	1
Perfluoro-1-octanesulfonamide (PFOSA)	754-91-6	PFAS by ID SOP	0.91	J 3.5	0.88	ng/L	1
Perfluoro-1-pentanesulfonic acid (PFPeS)	2706-91-4	PFAS by ID SOP	8.0	3.5	0.88	ng/L	1
Perfluorododecanesulfonic acid (PFDOS)	79780-39-5	5 PFAS by ID SOP	ND	7.0	1.8	ng/L	1
Perfluorohexanesulfonic acid (PFHxS)	355-46-4	PFAS by ID SOP	70	3.5	0.88	ng/L	1
Perfluoro-n-butanoic acid (PFBA)	375-22-4	PFAS by ID SOP	30	3.5	0.88	ng/L	1
Perfluoro-n-decanoic acid (PFDA)	335-76-2	PFAS by ID SOP	ND	3.5	0.88	ng/L	1
Perfluoro-n-dodecanoic acid (PFDoA)	307-55-1	PFAS by ID SOP	ND	3.5	0.88	ng/L	1
Perfluoro-n-heptanoic acid (PFHpA)	375-85-9	PFAS by ID SOP	ND	3.5	0.88	ng/L	1
Perfluoro-n-hexadecanoic acid (PFHxDA)	67905-19-5	5 PFAS by ID SOP	ND	7.0	1.8	ng/L	1
Perfluoro-n-hexanoic acid (PFHxA)	307-24-4	PFAS by ID SOP	3.8	3.5	0.88	ng/L	1
Perfluoro-n-nonanoic acid (PFNA)	375-95-1	PFAS by ID SOP	ND	3.5	0.88	ng/L	1
Perfluoro-n-octadecanoic acid (PFODA)	16517-11-6	5 PFAS by ID SOP	ND	7.0	1.8	ng/L	1
Perfluoro-n-octanoic acid (PFOA)	335-67-1	PFAS by ID SOP	ND	3.5	0.88	ng/L	1
Perfluoro-n-pentanoic acid (PFPeA)	2706-90-3	PFAS by ID SOP	2.7	J 3.5	0.88	ng/L	1
Perfluoro-n-tetradecanoic acid (PFTeDA)	376-06-7	PFAS by ID SOP	ND	3.5	0.88	ng/L	1
Perfluoro-n-tridecanoic acid (PFTrDA)	72629-94-8	3 PFAS by ID SOP	ND	3.5	0.88	ng/L	1
Perfluoro-n-undecanoic acid (PFUdA)	2058-94-8	PFAS by ID SOP	ND	3.5	0.88	ng/L	1
Perfluorooctanesulfonic acid (PFOS)	1763-23-1	PFAS by ID SOP	4.5	3.5	0.88	ng/L	1
Surrogate Q % Re	un 1 Acce covery L	eptance imits					
13C2_4:2FTS	91 2	25-150					
13C2_6:2FTS	86 2	25-150					
13C2_8:2FTS	74 2	25-150					
13C2_PFDoA	88 2	25-150					
13C2_PFHxDA	93 2	25-150					
13C2_PFTeDA	84 2	25-150					
LOQ = Limit of QuantitationB = Detected in the method blankND = Not detected at or above the DLN = Recovery is out of criteriaH = Out of holding timeW = Reported on wet weight basis	E = Quantitation P = The RPD b	n of compound exceeded the o etween two GC columns exce	calibration ra eds 40%	nge DL = Detection J = Estimated re	Limit esult < LOQ and $\geq$ [	DL	

ID: VK08043-003

Client: Pace Analytical Services, LLC		Laboratory ID: VK08043-
Description: 184-0		Matrix: Aqueous
Date Sampled:11/02/2020 1200	Project Name: LACROSSE WELL #23 & 24	
Date Received: 11/06/2020	Project Number: 40217713	

Surrogate	Run 1 Acc Q % Recovery	ceptance Limits
13C3_PFBS	82	25-150
13C3_PFHxS	86	25-150
13C3-HFPO-DA	112	25-150
13C4_PFBA	92	25-150
13C4_PFHpA	100	25-150
13C5_PFHxA	95	25-150
13C5_PFPeA	91	25-150
13C6_PFDA	85	25-150
13C7_PFUdA	85	25-150
13C8_PFOA	91	25-150
13C8_PFOS	82	25-150
13C8_PFOSA	91	10-150
13C9_PFNA	89	25-150
d-EtFOSA	72	10-150
d5-EtFOSAA	84	25-150
d9-EtFOSE	87	10-150
d-MeFOSA	78	10-150
d3-MeFOSAA	92	25-150
d7-MeFOSE	88	10-150

LOQ = Limit of Quantitation	B = Detected in the method blank	E = Quantitation of compound exceeded the calibration range	DL = Detection Limit
ND = Not detected at or above the DL	N = Recovery is out of criteria	P = The RPD between two GC columns exceeds 40%	J = Estimated result < LOQ and $\ge$ DL
H = Out of holding time	W = Reported on wet weight basis		

# BOTTLED WATER ACKNOWLEDGEMENT

2532 Second Avenue East, La Crosse, WI 54603

If you desire to accept the bottled water delivery, please complete and sign this form and return it to The OS Group at <u>PFAS@TheOSgrp.com</u> or mail to 444 21<sup>st</sup> St. S, La Crosse, WI 54601. You may also complete this form electronically on line at <u>www.cityoflacrosse.org/bottledwater</u>. Call 608-668-2718 with any question you may have.

As pre-caution for the protection of human health, the City of La Crosse (The City) will provide, on a temporary basis, bottled water for drinking, cooking and toothbrushing purposes at the above referenced address. The water will be delivered to your home or business by a commercial water delivery service. At the City's cost, a dispenser / cooler and regular deliveries of 5-gallon containers of water will be provided. The City reserves the right to dictate the conditions of delivery, such as minimum and maximum number of containers per delivery, frequency and timing of deliveries. The City reserves the right to periodically review whether The City should continue to provide bottled water, considering factors such as State and Federal standards and guidance, evolving knowledge and understanding of the sources, cause and responsibility for the contamination, new or reinterpreted test results, and the availability of more permanent or costeffective sources of water for the above purposes. The City of La Crosse makes no warranty or representation regarding the suitability of the bottled water beyond those made by the commercial water delivery service.

All reusable or returnable equipment and supplies, such as the containers and cooler/dispenser, are the property of the commercial water delivery service or the City of La Crosse. By signing below, the Occupant of the above referenced property acknowledges that all reusable or returnable equipment and supplies shall be returned to the commercial water delivery service or the City of La Crosse upon request. The Occupant agrees to provide reasonable access for delivery of bottled water and pick up of reusable or returnable equipment and supplies. Occupant(s) acknowledges that they may be required to sign an agreement with the commercial water delivery service as a condition of receiving bottled water.

Check ownership:

\_\_\_\_\_ Owner-Occupant Occupant Only

Number of Occupants: \_\_\_\_\_

Signed: I	Dated:
-----------	--------

Printed Name: \_\_\_\_\_



444 21st Street South  $\cdot$  La Crosse, Wisconsin  $\cdot$  54601

December 1, 2020

### 2556 1st Avenue East La Crosse, WI 54603

Subject: Private Well Sampling Results 2556 1st Avenue East, La Crosse, WI 54603 Tax parcel # 4-194-0 Sample ID # 194-0

Dear

We have received and reviewed the test results for the sample collected on November 2, 2020 at the above address. Some PFAS compounds were found, but the levels found were **below** the Department of Health Services (DHS) levels recommended for protecting health. These levels are called the "Recommended Public Health Standard" in the table below. The levels found in *your* well are called the "Sample Result" in the table below.

#### Sample Results

Compound	Sample Result (unit)	Recommended Public Health Standard (unit <sup>e</sup> )		
N-Ethyl Perfluorooctane sulfonamide (NEtFOSA) CAS # 4151-50-2	Not Detected	20 ppt <sup>a,b</sup>	) ppt unds I 6	
N-Ethyl perfluorooctane sulfonamidoacetic acid (NEtFOSAA) CAS # 2991-50-6	Not Detected	20 ppt <sup>a,b</sup>	it is 2C compo <i>il</i> of al	
N-Ethyl perfluorooctane sulfonamidoethanol (NEtFOSE) CAS # 1691-99-2	Not Detected	20 ppt <sup>a,b</sup>	ed lim ese 6 c ed toto	
Perfluorooctane sulfonamide (FOSA) CAS # 754-91-6	Not Detected	20 ppt <sup>a,b</sup>	mend of the ombine	
Perfluorooctanoic acid (PFOA) CAS # 335-67-1	Not Detected	20 ppt <sup>a,b</sup>	recom ny <i>one</i> the <i>c</i> c	
Perfluorooctanesulfonic acid (PFOS) CAS # 1763-23-1	8.3 ppt	20 ppt <sup>a,b</sup>	The for a or	

Private Well Sampling Results for 2556 1st Avenue East, La Crosse, WI 54603 Tax parcel # 4-194-0 Sample ID # 194-0 December 1, 2020

Compound	Sample Result (unit)	Recommended Public Health Standard (unit <sup>e</sup> )
Hexafluoropropylene oxide dimer acid (HPFO-DA; GenX) CAS # 13252-13-6	Not Detected	300 ppt ª
Perfluorobutanesulfonic acid (PFBS) CAS # 375-73-5	8.4 ppt	450,000 ppt <sup>a</sup>
Perfluorohexanesulfonic acid (PFHxS) CAS # 355-46-4	12 ppt	40 ppt <sup>a</sup>
Perfluorobutanoic acid (PFBA) CAS # 375-22-4	73 ppt	10,000 ppt <sup>a</sup>
Perfluorodecanoic acid (PFDA) CAS # 335-76-2	Not Detected	300 ppt <sup>a</sup>
Perfluorododecanoic acid (PFDoA) CAS # 307-55-1	Not Detected	500 ppt <sup>a</sup>
Perfluorohexanoic acid (PFHxA) CAS # 307-24-4	Not Detected	150,000 ppt <sup>a</sup>
Perfluorononanoic acid (PFNA) CAS # 375-95-1	Not Detected	30 ppt <sup>a</sup>
Perfluorotetradecanoic acid (PFTeA) CAS # 376-06-7	Not Detected	10,000 ppt <sup>a</sup>
Perfluoroundecanoic acid (PFUnA) CAS # 2058-94-8	Not Detected	3,000 ppt <sup>a</sup>
4,8-Dioxa-3H-perfluorononanoic acid (DONA) CAS # 919005-14-4	Not Detected	3,000 ppt <sup>a</sup>
Perfluorooctadecanoic acid (PFODA) CAS # 16517-11-6	Not Detected	400,000 ppt <sup>a</sup>
Perfluoro-1-pentanesulfonic acid (PFPeS) CAS #2706-91-4	6.4 ppt	None Established <sup>c</sup>

<sup>a</sup> Public health enforcement standard (ES) recommended by DHS.

<sup>b</sup> DHS recommends a combined enforcement standard of 20 ng/L and combined preventive action limit of 2 ng/L for FOSA, NEt-FOSA, NetFOSAA, PFOS, and PFOA.

<sup>c</sup> A current standard is not available; the compound is currently under review by DHS for potential public health standard recommendation.

<sup>d</sup> Public health enforcement standard (ES) in NR 140, Wisconsin Administrative Code.

<sup>e</sup> Units: Parts per trillion (ppt) = nanograms of substance per liter of water (ng/L)

<sup>BL</sup> Detected in the method blank. Possible lab contaminant.

Private Well Sampling Results for 2556 1st Avenue East, La Crosse, WI 54603 Tax parcel # 4-194-0 Sample ID # 194-0 December 1, 2020

As required by law, we will be submitting these results to the Department of Natural Resources (DNR). The DNR may consult with the Department of Health Services (DHS) about these test results. DHS may review all PFAS tests and follow-up with you directly if any actions are recommended to protect your health.

Thank you for your patience and assistance with our investigation. We will provide updates on the project at <u>https://www.cityoflacrosse.org/wells</u> as our work continues. If you have any questions, please call The OS Group at (608) 668-2718 or email them at <u>PFAS@theOSgrp.com</u>.

You can also contact the DNR and DHS with questions about PFAS or the water sample results at the numbers provided below.

Questions about		<u>Contact</u>	<u>Phone</u>	E-mail Address
Soil & Groundwater Testing, Clean Up	DNR	David Rozeboom	715-215-2078	David.Rozeboom@wisconsin.gov
Drinking Water or Private wells	DNR	Kyle Burton	920-360-2112	kyle.burton@wisconsin.gov
Health Concerns	DHS	Curtis Hedman	608-266-6677	Curtis.Hedman@dhs.wisconsin.gov

On behalf of The City of La Crosse *The OS Group, LLC* 

Attachment: Lab report for your well

Client: Pace Analytical Services, LLC						Laboratory II	D: VK08043-0	800	
Description: 194-0						Matrix	k: Aqueous		
Date Sampled:11/02/2020 1325	Project Na	me:	LACROSSE WELL #	#23 & 24					
Date Received: 11/06/2020	roiect Num	ber:	40217713						
	j				<b>D</b> .	<b>D</b>			
RunPrep MethodAnalytical Method1SOP SPEPFAS by ID SOP	Dilution 1	Ana 11/18	Iysis Date Analyst 3/2020 1302 MMM	Prep 11/16/2	Date 2020 11	Batch 25 73619			
Parameter	C Num	AS oer	Analytical Method	Result	Q	LOQ	DL	Units	Run
9-chlorohexadecafluoro-3-oxanone-1-sulfonic acid (9CI-PF3ONS	) 756426-	58-1	PFAS by ID SOP	ND		7.2	1.8	ng/L	1
11-chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11CI-PF3.	) 763051-	92-9	PFAS by ID SOP	ND		7.2	1.8	ng/L	1
1H, 1H, 2H, 2H-perfluorodecane sulfonic acid (8:2 FTS)	39108-	34-4	PFAS by ID SOP	ND		7.2	1.8	ng/L	1
1H, 1H, 2H, 2H-perfluorooctane sulfonic acid (6:2 FTS)	27619-	97-2	PFAS by ID SOP	ND		7.2	1.8	ng/L	1
1H,1H,2H,2H-perfluorododecane sulfonic acid (10:2 FTS)	120226-	60-0	PFAS by ID SOP	ND		7.2	1.8	ng/L	1
1H,1H,2H,2H-perfluorohexane sulfonic acid (4:2 FTS)	757124-	72-4	PFAS by ID SOP	ND		7.2	1.8	ng/L	1
Hexafluoropropylene oxide dimer acid (GenX)	13252-	13-6	PFAS by ID SOP	ND		7.2	1.8	ng/L	1
4,8-dioxa-3H-perfluorononanoic acid (ADONA)	919005-	14-4	PFAS by ID SOP	ND		7.2	1.8	ng/L	1
N-ethylperfluoro-1-octanesulfonamide (EtFOSA)	4151-5	50-2	PFAS by ID SOP	ND		7.2	1.8	ng/L	1
N-ethylperfluoro-1-octanesulfonamidoacetic acid (EtFOSAA)	2991-5	50-6	PFAS by ID SOP	ND		7.2	1.8	ng/L	1
2-N-ethylperfluoro-1-octanesulfonamido-ethanol (EtFOSE)	1691-9	9-2	PFAS by ID SOP	ND		7.2	1.8	ng/L	1
N-methylperfluoro-1-octanesulfonamide (MeFOSA)	31506-	32-8	PFAS by ID SOP	ND		14	3.6	ng/L	1
N-methylperfluoro-1-octanesulfonamidoacetic acid (MeFOSAA)	2355-3	31-9	PFAS by ID SOP	ND		7.2	1.8	ng/L	1
2-N-methylperfluoro-1-octanesulfonamido-ethanol (MeFOSE)	24448-	09-7	PFAS by ID SOP	ND		7.2	1.8	ng/L	1
Perfluoro-1-butanesulfonic acid (PFBS)	375-3	/3-5	PFAS by ID SOP	8.4		3.6	0.90	ng/L	1
Perfluoro-1-decanesulfonic acid (PFDS)	335-	7-3	PFAS by ID SOP	ND		3.6	0.90	ng/L	1
Perfluoro-1-heptanesulfonic acid (PFHpS)	375-9	92-8	PFAS by ID SOP	ND		3.6	0.90	ng/L	1
Perfluoro-1-nonanesulfonic acid (PFNS)	68259-	12-1	PFAS by ID SOP	ND		3.6	0.90	ng/L	1
Perfluoro-1-octanesulfonamide (PFOSA)	754-9	91-6	PFAS by ID SOP	ND		3.6	0.90	ng/L	1
Perfluoro-1-pentanesulfonic acid (PFPeS)	2706-9	91-4	PFAS by ID SOP	6.4		3.6	0.90	ng/L	1
Perfluorododecanesulfonic acid (PFDOS)	79780-	39-5	PFAS by ID SOP	ND		7.2	1.8	ng/L	1
Perfluorohexanesulfonic acid (PFHxS)	355-4	16-4	PFAS by ID SOP	12		3.6	0.90	ng/L	1
Perfluoro-n-butanoic acid (PFBA)	375-2	22-4	PFAS by ID SOP	73		3.6	0.90	ng/L	1
Perfluoro-n-decanoic acid (PFDA)	335-	6-2	PFAS by ID SOP	ND		3.6	0.90	ng/L	1
Perfluoro-n-dodecanoic acid (PFDoA)	307-5	5-1	PFAS by ID SOP	ND		3.6	0.90	ng/L	1
Perfluoro-n-heptanoic acid (PFHpA)	375-8	35-9	PFAS by ID SOP	ND		3.6	0.90	ng/L	1
Perfluoro-n-hexadecanoic acid (PFHxDA)	67905-	19-5	PFAS by ID SOP	ND		7.2	1.8	ng/L	1
Perfluoro-n-hexanoic acid (PFHxA)	307-2	24-4	PFAS by ID SOP	ND		3.6	0.90	ng/L	1
Perfluoro-n-nonanoic acid (PFNA)	375-9	95-1	PFAS by ID SOP	ND		3.6	0.90	ng/L	1
Perfluoro-n-octadecanoic acid (PFODA)	16517-	11-6	PFAS by ID SOP	ND		7.2	1.8	ng/L	1
Perfluoro-n-octanoic acid (PFOA)	335-6	57-1	PFAS by ID SOP	ND		3.6	0.90	ng/L	1
Perfluoro-n-pentanoic acid (PFPeA)	2706-9	90-3	PFAS by ID SOP	ND		3.6	0.90	ng/L	1
Perfluoro-n-tetradecanoic acid (PFTeDA)	376-0	)6-7	PFAS by ID SOP	ND		3.6	0.90	ng/L	1
Perfluoro-n-tridecanoic acid (PFTrDA)	72629-	94-8	PFAS by ID SOP	ND		3.6	0.90	ng/L	1
Perfluoro-n-undecanoic acid (PFUdA)	2058-9	94-8	PFAS by ID SOP	ND		3.6	0.90	ng/L	1
Perfluorooctanesulfonic acid (PFOS)	1763-2	23-1	PFAS by ID SOP	8.3		3.6	0.90	ng/L	1
Surrogate Q % R	Run 1 A ecovery	ccep Lin	otance nits						
13C2_4:2FTS	86	25	-150						
13C2_6:2FTS	92	25	-150						
13C2_8:2FTS	78	25	-150						
13C2_PFDoA	83	25	-150						
13C2_PFHxDA	78	25	-150						
13C2_PFTeDA	77	25	-150						
LOQ = Limit of Quantitation B = Detected in the method blank	E = Quanti	ation o	of compound exceeded the	calibration r	ange D	L = Detection Lin	nit		
ND = Not detected at or above the DL         N = Recovery is out of criteria           H = Out of holding time         W = Reported on wet weight basis	P = The RF	D betv	ween two GC columns exce	eds 40%	J	= Estimated resu	lt < LOQ and ≥ D	L	

Laboratory ID: VK08043-008 Matrix: Aqueous

Client: Pace Analytical Services, LLC	
Description: 194-0	
Date Sampled:11/02/2020 1325	Project Name: LACROSSE WELL #23 & 24
Date Received: 11/06/2020	Project Number: 40217713

73

d7-MeFOSE

Run 1 Acceptance Surrogate Q % Recovery Limits 13C3\_PFBS 78 25-150 13C3\_PFHxS 81 25-150 13C3-HFPO-DA 88 25-150 13C4\_PFBA 88 25-150 13C4\_PFHpA 80 25-150 13C5\_PFHxA 84 25-150 13C5\_PFPeA 93 25-150 79 13C6\_PFDA 25-150 13C7\_PFUdA 83 25-150 13C8\_PFOA 89 25-150 13C8\_PFOS 75 25-150 13C8\_PFOSA 89 10-150 13C9\_PFNA 81 25-150 d-EtFOSA 68 10-150 d5-EtFOSAA 82 25-150 d9-EtFOSE 81 10-150 d-MeFOSA 73 10-150 d3-MeFOSAA 81 25-150

10-150

LOQ = Limit of Quantitation	B = Detected in the method blank	E = Quantitation of compound exceeded the calibration range	DL = Detection Limit
ND = Not detected at or above the DL	N = Recovery is out of criteria	P = The RPD between two GC columns exceeds 40%	J = Estimated result < LOQ and $\ge$ DL
H = Out of holding time	W = Reported on wet weight basis		



444 21st Street South  $\cdot$  La Crosse, Wisconsin  $\cdot$  54601

December 1, 2020

2524 1st Avenue East La Crosse, WI 54603

Subject: Private Well Sampling Results 2524 1st Avenue East, La Crosse, WI 54603 Tax parcel # 4-202-0 Sample ID # 202-0

## Dear

We have received and reviewed the test results for the sample collected on November 2, 2020 at the above address. Some PFAS compounds were found at levels <u>above</u> the Department of Health Services (DHS) levels recommended for protecting health. These levels are called the "Recommended Public Health Standard" in the table below. The levels found in your well are called the "Sample Result" in the table below.

Because some of the levels are above the recommended Public Health Standard, the City is offering to provide bottled water delivered to your home for drinking, cooking, and brushing your teeth. There will be no cost to you for the bottled water. Please complete the attached form and mail it to The OS Group to make arrangements for having a water dispenser and bottles delivered to your home. Call 608-668-2718 or email <u>PFAS@theOSgrp.com</u>. You may also complete this form on line at <u>www.cityoflacrosse.org/bottledwater</u>

The following table summarizes the test results from the sample. **Bolded results** are above a current recommended level intended to protect your health according to the Department of Health Services (DHS).

Private Well Sampling Results for 2524 1st Avenue East, La Crosse, WI 54603 Tax Parcel # 4-202-0 December 1, 2020

Sample	e Resul	ts

Compound	Sample Result (unit)	Recomm Public H Standard	ended Iealth (unit <sup>e</sup> )	
N-Ethyl Perfluorooctane sulfonamide (NEtFOSA) CAS # 4151-50-2	Not Detected	20 ppt <sup>a,b</sup>	) ppt unds I 6	
N-Ethyl perfluorooctane sulfonamidoacetic acid (NEtFOSAA) CAS # 2991-50-6	Not Detected	20 ppt <sup>a,b</sup>	it is 2C compo <i>il</i> of al	
N-Ethyl perfluorooctane sulfonamidoethanol (NEtFOSE) CAS # 1691-99-2	Not Detected	20 ppt <sup>a,b</sup>	ed lim ese 6 c ed totc	
Perfluorooctane sulfonamide (FOSA) CAS # 754-91-6	Not Detected	20 ppt <sup>a,b</sup>	mend of the	
Perfluorooctanoic acid (PFOA) CAS # 335-67-1	68 ppt	20 ppt <sup>a,b</sup>	recom ny <i>one</i> the <i>c</i> c	
Perfluorooctanesulfonic acid (PFOS) CAS # 1763-23-1	680 ppt	20 ppt <sup>a,b</sup>	The for a or	
Hexafluoropropylene oxide dimer acid (HPFO-DA; GenX) CAS # 13252-13-6	Not Detected		300 ppt <sup>a</sup>	
Perfluorobutanesulfonic acid (PFBS) CAS # 375-73-5	130 ppt	450,000 ppt		
Perfluorohexanesulfonic acid (PFHxS) CAS # 355-46-4	1700 ppt	40 ppt		
Perfluorobutanoic acid (PFBA) CAS # 375-22-4	18 ppt	10,000 ppt <sup>a</sup>		
Perfluorodecanoic acid (PFDA) CAS # 335-76-2	Not Detected	300 ppt ª		
Perfluorododecanoic acid (PFDoA) CAS # 307-55-1	Not Detected	500 ppt <sup>a</sup>		
Perfluorohexanoic acid (PFHxA) CAS # 307-24-4	51 ppt	150	0,000 ppt <sup>a</sup>	
Perfluorononanoic acid (PFNA) CAS # 375-95-1	Not Detected	30 ppt <sup>a</sup>		
Perfluorotetradecanoic acid (PFTeA) CAS # 376-06-7	Not Detected	10,000 ppt <sup>a</sup>		
Perfluoroundecanoic acid (PFUnA) CAS # 2058-94-8	Not Detected	3,000 ppt <sup>a</sup>		
4,8-Dioxa-3H-perfluorononanoic acid (DONA) CAS # 919005-14-4	Not Detected	3	3,000 ppt <sup>a</sup>	
Perfluorooctadecanoic acid (PFODA) CAS # 16517-11-6	Not Detected	400,000 ppt <sup>c</sup>		

Private Well Sampling Results for 2524 1st Avenue East, La Crosse, WI 54603 Tax Parcel # 4-202-0 December 1, 2020

Perfluoro-1-heptanesulfonic acid (PFHpS) CAS # 375-92-8	64 ppt	None Established <sup>c</sup>				
Perfluoro-1-pentanesulfonic acid (PFPeS) CAS # 2706-91-4	220 ppt	None Established <sup>c</sup>				
Perfluoro-n-heptanoic acid (PFHpA) CAS # 375-85-9	9.7 ppt	None Established <sup>c</sup>				
Perfluoro-n-pentanoic acid (PFPeA) CAS #2706-90-3	13 ppt None Established					
<ul> <li><sup>a</sup> Public health enforcement standard (ES) recommended by DHS.</li> <li><sup>b</sup> DHS recommends a combined enforcement standard of 20 ng/L and combined preventive action limit of 2 ng/L for FOSA, NEt-FOSE, NEt-FOSA, NetFOSAA, PFOS, and PFOA.</li> <li><sup>c</sup> A current standard is not available; the compound is currently under review by DHS for potential public health standard recommendation.</li> <li><sup>d</sup> Public health enforcement standard (ES) in NR 140, Wisconsin Administrative Code.</li> </ul>						

<sup>e</sup> Units: Parts per trillion (ppt) = nanograms of substance per liter of water (ng/L)  $^{BL}$  Detected in the method blank. Possible lab contaminant.

As required by law, we will be submitting these results to the Department of Natural Resources (DNR). The DNR may consult with the Department of Health Services (DHS) about these test results. DHS may review all PFAS tests and follow-up with you directly if any actions are recommended to protect your health.

Thank you for your patience and assistance with our investigation. We will provide updates on the project at <u>https://www.cityoflacrosse.org/wells</u> as our work continues. If you have any questions, please call The OS Group at (608) 668-2718 or email them at <u>PFAS@theOSgrp.com</u>.

You can also contact the DNR and DHS with questions about PFAS or the water sample results at the numbers provided below.

Questions about		<u>Contact</u>	<u>Phone</u>	<u>E-mail Address</u>
Soil & Groundwater Testing, Clean Up	DNR	David Rozeboom	715-215-2078	David.Rozeboom@wisconsin.gov
Drinking Water or Private wells	DNR	Kyle Burton	920-360-2112	kyle.burton@wisconsin.gov
Health Concerns	DHS	Curtis Hedman	608-266-6677	Curtis.Hedman@dhs.wisconsin.gov

On behalf of The City of La Crosse *The OS Group, LLC* 

Attachment: Lab report for your well Bottled Water Acknowledgement

Client: Pace Analytical Services, LLC				Laboratory ID	D: VK08043-	007	
Description: 202-0				Matrix	: Aqueous		
Date Sampled:11/02/2020 1310	Project Nam	e: LACROSSE WELL #	<sup>‡</sup> 23 & 24				
Date Received: 11/06/2020 P	, Proiect Numbe	er 40217713					
Run     Prep Method     Analytical Method       1     SOP SPE     PEAS by ID SOP	Dilution A	nalysis Date Analyst	Prep Date	Batch			
2 SOP SPE PEAS by ID SOP	5 11	/18/2020 1750 MMM	11/16/2020	1125 73619			
	5 11	10/2020 1231 10/0/01	11/10/2020	1123 73017			
Parameter	CAS Numbe	S Analytical r Method	Result Q	LOQ	DL	Units	Run
9-chlorohexadecafluoro-3-oxanone-1-sulfonic acid (9CI-PF3ONS	) 756426-58	-1 PFAS by ID SOP	ND	7.1	1.8	ng/L	1
11-chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11CI-PF3.	) 763051-92	-9 PFAS by ID SOP	ND	7.1	1.8	ng/L	1
1H, 1H, 2H, 2H-perfluorodecane sulfonic acid (8:2 FTS)	39108-34	-4 PFAS by ID SOP	ND	7.1	1.8	ng/L	1
1H, 1H, 2H, 2H-perfluorooctane sulfonic acid (6:2 FTS)	27619-97	-2 PFAS by ID SOP	ND	7.1	1.8	ng/L	1
1H,1H,2H,2H-perfluorododecane sulfonic acid (10:2 FTS)	120226-60	-0 PFAS by ID SOP	ND	7.1	1.8	ng/L	1
1H,1H,2H,2H-perfluorohexane sulfonic acid (4:2 FTS)	757124-72	-4 PFAS by ID SOP	ND	7.1	1.8	ng/L	1
Hexafluoropropylene oxide dimer acid (GenX)	13252-13	-6 PFAS by ID SOP	ND	7.1	1.8	ng/L	1
4,8-dioxa-3H-perfluorononanoic acid (ADONA)	919005-14	-4 PFAS by ID SOP	ND	7.1	1.8	ng/L	1
N-ethylperfluoro-1-octanesulfonamide (EtFOSA)	4151-50-	2 PFAS by ID SOP	ND	7.1	1.8	ng/L	1
N-ethylperfluoro-1-octanesulfonamidoacetic acid (EtFOSAA)	2991-50-	6 PFAS by ID SOP	ND	7.1	1.8	ng/L	1
2-N-ethylperfluoro-1-octanesulfonamido-ethanol (EtFOSE)	1691-99-	2 PFAS by ID SOP	ND	7.1	1.8	ng/L	1
N-methylperfluoro-1-octanesulfonamide (MeFOSA)	31506-32	-8 PFAS by ID SOP	ND	14	3.5	ng/L	1
N-methylperfluoro-1-octanesulfonamidoacetic acid (MeFOSAA)	2355-31-	9 PFAS by ID SOP	ND	7.1	1.8	ng/L	1
2-N-methylperfluoro-1-octanesulfonamido-ethanol (MeFOSE)	24448-09	-7 PFAS by ID SOP	ND	7.1	1.8	ng/L	1
Perfluoro-1-butanesulfonic acid (PFBS)	375-73-	5 PFAS by ID SOP	130	3.5	0.89	ng/L	1
Perfluoro-1-decanesulfonic acid (PFDS)	335-77-	3 PFAS by ID SOP	ND	3.5	0.89	ng/L	1
Perfluoro-1-heptanesulfonic acid (PFHpS)	375-92-	8 PFAS by ID SOP	64	3.5	0.89	ng/L	1
Perfluoro-1-nonanesulfonic acid (PFNS)	68259-12	-1 PFAS by ID SOP	ND	3.5	0.89	ng/L	1
Perfluoro-1-octanesulfonamide (PFOSA)	754-91-	6 PFAS by ID SOP	ND	3.5	0.89	ng/L	1
Perfluoro-1-pentanesulfonic acid (PFPeS)	2706-91-	4 PFAS by ID SOP	220	3.5	0.89	ng/L	1
Perfluorododecanesulfonic acid (PFDOS)	79780-39	-5 PFAS by ID SOP	ND	7.1	1.8	ng/L	1
Perfluorohexanesulfonic acid (PFHxS)	355-46-	4 PFAS by ID SOP	1700	18	4.4	ng/L	2
Perfluoro-n-butanoic acid (PFBA)	375-22-	4 PFAS by ID SOP	18	3.5	0.89	ng/L	1
Perfluoro-n-decanoic acid (PFDA)	335-76-	2 PFAS by ID SOP	ND	3.5	0.89	ng/L	1
Perfluoro-n-dodecanoic acid (PFDoA)	307-55-	1 PFAS by ID SOP	ND	3.5	0.89	ng/L	1
Perfluoro-n-heptanoic acid (PFHpA)	375-85-	9 PFAS by ID SOP	9.7	3.5	0.89	ng/L	1
Perfluoro-n-hexadecanoic acid (PFHxDA)	67905-19	-5 PFAS by ID SOP	ND	7.1	1.8	ng/L	1
Perfluoro-n-hexanoic acid (PFHxA)	307-24-	4 PFAS by ID SOP	51	3.5	0.89	ng/L	1
Perfluoro-n-nonanoic acid (PFNA)	375-95-	1 PFAS by ID SOP	ND	3.5	0.89	ng/L	1
Perfluoro-n-octadecanoic acid (PFODA)	16517-11	-6 PFAS by ID SOP	ND	7.1	1.8	ng/L	1
Perfluoro-n-octanoic acid (PFOA)	335-67-	1 PFAS by ID SOP	68	3.5	0.89	ng/L	1
Pertluoro-n-pentanoic acid (PFPeA)	2706-90-	3 PFAS by ID SOP	13	3.5	0.89	ng/L	1
Perfluoro-n-tetradecanoic acid (PFTeDA)	376-06-	7 PFAS by ID SOP	ND	3.5	0.89	ng/L	1
Perfluoro-n-tridecanoic acid (PFTrDA)	72629-94	-8 PFAS by ID SOP	ND	3.5	0.89	ng/L	1
Perfluoro-n-undecanoic acid (PFUdA)	2058-94-	8 PFAS by ID SOP	ND	3.5	0.89	ng/L	1
Perfluorooctanesulfonic acid (PFOS)	1763-23-	1 PFAS by ID SOP	680	3.5	0.89	ng/L	1
	Run 1 Acc	ceptance Rur	n 2 Accepta	ance			
Surrogate Q % R	lecovery	Limits Q % Rec	overy Lim	its			
13C2_4:2FTS	97	25-150 10	03 25-1	150			

13C2_4:2F15		97	25-150	103	25-150
13C2_6:2FTS		93	25-150	111	25-150
13C2_8:2FTS		78	25-150	91	25-150
13C2_PFDoA		85	25-150	97	25-150
13C2_PFHxDA		96	25-150	98	25-150
LOQ = Limit of Quantitation	B = Detected in the method blank	E = Quantitat	ion of compound exceeded th	he calibration ra	nge DL = Detection Limit
ND = Not detected at or above the DL H = Out of holding time	N = Recovery is out of criteria W = Reported on wet weight basis	P = The RPD	between two GC columns ex	xceeds 40%	$J$ = Estimated result < LOQ and $\geq DL$

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Project Number: 40217713

Client: Pace Analytical Services, LLC Description: 202-0 Date Sampled:11/02/2020 1310 Date Received: 11/06/2020

Project Name: LACROSSE WELL #23 & 24

Laboratory ID: VK08043-007

Matrix: Aqueous

Surrogate	0	Run 1 A % Recovery	cceptance	0	Run 2 A % Recovery	Acceptance
13C2_PFTeDA	~	84	25-150	~	91	25-150
13C3_PFBS		86	25-150		90	25-150
13C3_PFHxS		75	25-150		92	25-150
13C3-HFPO-DA		99	25-150		105	25-150
13C4_PFBA		88	25-150		96	25-150
13C4_PFHpA		86	25-150		92	25-150
13C5_PFHxA		91	25-150		95	25-150
13C5_PFPeA		88	25-150		100	25-150
13C6_PFDA		83	25-150		89	25-150
13C7_PFUdA		86	25-150		96	25-150
13C8_PFOA		86	25-150		92	25-150
13C8_PFOS		79	25-150		88	25-150
13C8_PFOSA		90	10-150		105	10-150
13C9_PFNA		89	25-150		91	25-150
d-EtFOSA		80	10-150		100	10-150
d5-EtFOSAA		84	25-150		98	25-150
d9-EtFOSE		89	10-150		97	10-150
d-MeFOSA		80	10-150		99	10-150
d3-MeFOSAA		88	25-150		97	25-150
d7-MeFOSE		89	10-150		99	10-150

LOQ = Limit of QuantitationB = Detected in the method blankE = Quantitation of compound exceeded the calibration rangeDL = Detection LimitND = Not detected at or above the DLN = Recovery is out of criteriaP = The RPD between two GC columns exceeds 40%J = Estimated result < LOQ and ≥ DL</td>H = Out of holding timeW = Reported on wet weight basis

# BOTTLED WATER ACKNOWLEDGEMENT

2524 1st Avenue East, La Crosse, WI 54603

If you desire to accept the bottled water delivery, please complete and sign this form and return it to The OS Group at <u>PFAS@TheOSgrp.com</u> or mail to 444 21<sup>st</sup> St. S, La Crosse, WI 54601. You may also complete this form electronically on line at <u>www.cityoflacrosse.org/bottledwater</u>. Call 608-668-2718 with any question you may have.

As pre-caution for the protection of human health, the City of La Crosse (The City) will provide, on a temporary basis, bottled water for drinking, cooking and toothbrushing purposes at the above referenced address. The water will be delivered to your home or business by a commercial water delivery service. At the City's cost, a dispenser / cooler and regular deliveries of 5-gallon containers of water will be provided. The City reserves the right to dictate the conditions of delivery, such as minimum and maximum number of containers per delivery, frequency and timing of deliveries. The City reserves the right to periodically review whether The City should continue to provide bottled water, considering factors such as State and Federal standards and guidance, evolving knowledge and understanding of the sources, cause and responsibility for the contamination, new or reinterpreted test results, and the availability of more permanent or costeffective sources of water for the above purposes. The City of La Crosse makes no warranty or representation regarding the suitability of the bottled water beyond those made by the commercial water delivery service.

All reusable or returnable equipment and supplies, such as the containers and cooler/dispenser, are the property of the commercial water delivery service or the City of La Crosse. By signing below, the Occupant of the above referenced property acknowledges that all reusable or returnable equipment and supplies shall be returned to the commercial water delivery service or the City of La Crosse upon request. The Occupant agrees to provide reasonable access for delivery of bottled water and pick up of reusable or returnable equipment and supplies. Occupant(s) acknowledges that they may be required to sign an agreement with the commercial water delivery service as a condition of receiving bottled water.

Check ownership:

\_\_\_\_\_ Owner-Occupant Occupant Only

Number of Occupants: \_\_\_\_\_

Printed Name: \_\_\_\_\_



444 21st Street South  $\cdot$  La Crosse, Wisconsin  $\cdot$  54601

December 1, 2020

2500 1st Avenue East La Crosse, WI 54603

Subject: Private Well Sampling Results 2500 1st Avenue East, La Crosse, WI 54603 Tax parcel # 4-209-0 Sample ID # 209-0

Dear :

We have received and reviewed the test results for the sample collected on November 2, 2020 at the above address. Some PFAS compounds were found, but the levels found were **below** the Department of Health Services (DHS) levels recommended for protecting health. These levels are called the "Recommended Public Health Standard" in the table below. The levels found in *your* well are called the "Sample Result" in the table below.

#### Sample Results

Compound	Sample Result (unit)	Recommended Public Health Standard (unit <sup>e</sup> )		
N-Ethyl Perfluorooctane sulfonamide (NEtFOSA) CAS # 4151-50-2	Not Detected	20 ppt <sup>a,b</sup>	) ppt unds I 6	
N-Ethyl perfluorooctane sulfonamidoacetic acid (NEtFOSAA) CAS # 2991-50-6	Not Detected	20 ppt <sup>a,b</sup>	it is 2C compo <i>il</i> of al	
N-Ethyl perfluorooctane sulfonamidoethanol (NEtFOSE) CAS # 1691-99-2	Not Detected	20 ppt <sup>a,b</sup>	ed lim ese 6 c ed toto	
Perfluorooctane sulfonamide (FOSA) CAS # 754-91-6	Not Detected	20 ppt <sup>a,b</sup>	mend of the mbine	
Perfluorooctanoic acid (PFOA) CAS # 335-67-1	Not Detected	20 ppt <sup>a,b</sup>	recom ny <i>one</i> the <i>cc</i>	
Perfluorooctanesulfonic acid (PFOS) CAS # 1763-23-1	3.0 ppt	20 ppt <sup>a,b</sup>	The for a or	

Private Well Sampling Results for 2500 1st Avenue East, La Crosse, WI 54603 Tax parcel # 4-209-0 Sample ID # 209-0 December 1, 2020

Compound	Sample Result (unit)	Recommended Public Health Standard (unit <sup>e</sup> )
Hexafluoropropylene oxide dimer acid (HPFO-DA; GenX) CAS # 13252-13-6	Not Detected	300 ppt <sup>a</sup>
Perfluorobutanesulfonic acid (PFBS) CAS # 375-73-5	4.3 ppt	450,000 ppt <sup>a</sup>
Perfluorohexanesulfonic acid (PFHxS) CAS # 355-46-4	4.5 ppt	40 ppt <sup>a</sup>
Perfluorobutanoic acid (PFBA) CAS # 375-22-4	1.9 ppt	10,000 ppt <sup>a</sup>
Perfluorodecanoic acid (PFDA) CAS # 335-76-2	Not Detected	300 ppt <sup>a</sup>
Perfluorododecanoic acid (PFDoA) CAS # 307-55-1	Not Detected	500 ppt <sup>a</sup>
Perfluorohexanoic acid (PFHxA) CAS # 307-24-4	Not Detected	150,000 ppt <sup>a</sup>
Perfluorononanoic acid (PFNA) CAS # 375-95-1	Not Detected	30 ppt <sup>a</sup>
Perfluorotetradecanoic acid (PFTeA) CAS # 376-06-7	Not Detected	10,000 ppt <sup>a</sup>
Perfluoroundecanoic acid (PFUnA) CAS # 2058-94-8	Not Detected	3,000 ppt <sup>a</sup>
4,8-Dioxa-3H-perfluorononanoic acid (DONA) CAS # 919005-14-4	Not Detected	3,000 ppt <sup>a</sup>
Perfluorooctadecanoic acid (PFODA) CAS # 16517-11-6	Not Detected	400,000 ppt <sup>a</sup>
Perfluoro-1-pentanesulfonic acid (PFPeS) CAS #2706-91-4	3.2 ppt	None Established <sup>c</sup>

<sup>a</sup> Public health enforcement standard (ES) recommended by DHS.

<sup>b</sup> DHS recommends a combined enforcement standard of 20 ng/L and combined preventive action limit of 2 ng/L for FOSA, NEt-FOSA, NetFOSAA, PFOS, and PFOA.

<sup>c</sup> A current standard is not available; the compound is currently under review by DHS for potential public health standard recommendation.

<sup>d</sup> Public health enforcement standard (ES) in NR 140, Wisconsin Administrative Code.

<sup>e</sup> Units: Parts per trillion (ppt) = nanograms of substance per liter of water (ng/L)

<sup>BL</sup> Detected in the method blank. Possible lab contaminant.

Private Well Sampling Results for 2500 1st Avenue East, La Crosse, WI 54603 Tax parcel # 4-209-0 Sample ID # 209-0 December 1, 2020

As required by law, we will be submitting these results to the Department of Natural Resources (DNR). The DNR may consult with the Department of Health Services (DHS) about these test results. DHS may review all PFAS tests and follow-up with you directly if any actions are recommended to protect your health.

Thank you for your patience and assistance with our investigation. We will provide updates on the project at <u>https://www.cityoflacrosse.org/wells</u> as our work continues. If you have any questions, please call The OS Group at (608) 668-2718 or email them at <u>PFAS@theOSgrp.com</u>.

You can also contact the DNR and DHS with questions about PFAS or the water sample results at the numbers provided below.

Questions about		<u>Contact</u>	<u>Phone</u>	E-mail Address
Soil & Groundwater Testing, Clean Up	DNR	David Rozeboom	715-215-2078	David.Rozeboom@wisconsin.gov
Drinking Water or Private wells	DNR	Kyle Burton	920-360-2112	kyle.burton@wisconsin.gov
Health Concerns	DHS	Curtis Hedman	608-266-6677	Curtis.Hedman@dhs.wisconsin.gov

On behalf of The City of La Crosse *The OS Group, LLC* 

Attachment: Lab report for your well
Client: Pace Analytical Services, LLC				Laboratory II	D: VK08043-0	006	
Description: 209-0				Matrix	: Aqueous		
Date Sampled:11/02/2020 1255	Project Name	e: LACROSSE WELL #	#23 & 24				
Date Received: 11/06/2020 Pr	oject Number	r: 40217713					
Run Prep Method Analytical Method	)ilution Ar	alvsis Date Analyst	Pren Date	Batch			
1 SOP SPE PFAS by ID SOP	1 11/	17/2020 1709 MMM	11/16/2020 1	125 73619			
Parameter	CAS Number	Analytical Method	Result O	LOO	DL	Units	Run
9-chlorohexadecafluoro-3-oxanone-1-sulfonic acid (9CI-PF3ONS)	756426-58-1	1 PFAS by ID SOP	ND	6.8	1.7	ng/L	1
11-chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11CI-PF3	) 763051-92-9	9 PFAS by ID SOP	ND	6.8	1.7	ng/L	1
1H, 1H, 2H, 2H-perfluorodecane sulfonic acid (8:2 FTS)	39108-34-4	4 PFAS by ID SOP	ND	6.8	1.7	ng/L	1
1H, 1H, 2H, 2H-perfluorooctane sulfonic acid (6:2 FTS)	27619-97-2	2 PFAS by ID SOP	ND	6.8	1.7	ng/L	1
1H,1H,2H,2H-perfluorododecane sulfonic acid (10:2 FTS)	120226-60-0	) PFAS by ID SOP	ND	6.8	1.7	ng/L	1
1H,1H,2H,2H-perfluorohexane sulfonic acid (4:2 FTS)	757124-72-4	4 PFAS by ID SOP	ND	6.8	1.7	ng/L	1
Hexafluoropropylene oxide dimer acid (GenX)	13252-13-6	6 PFAS by ID SOP	ND	6.8	1.7	ng/L	1
4,8-dioxa-3H-perfluorononanoic acid (ADONA)	919005-14-4	4 PFAS by ID SOP	ND	6.8	1.7	ng/L	1
N-ethylperfluoro-1-octanesulfonamide (EtFOSA)	4151-50-2	PFAS by ID SOP	ND	6.8	1.7	ng/L	1
N-ethylperfluoro-1-octanesulfonamidoacetic acid (EtFOSAA)	2991-50-6	PFAS by ID SOP	ND	6.8	1.7	ng/L	1
2-N-ethylperfluoro-1-octanesulfonamido-ethanol (EtFOSE)	1691-99-2	PFAS by ID SOP	ND	6.8	1.7	ng/L	1
N-methylperfluoro-1-octanesulfonamide (MeFOSA)	31506-32-8	B PFAS by ID SOP	ND	14	3.4	ng/L	1
N-methylperfluoro-1-octanesulfonamidoacetic acid (MeFOSAA)	2355-31-9	PFAS by ID SOP	ND	6.8	1.7	ng/L	1
2-N-methylperfluoro-1-octanesulfonamido-ethanol (MeFOSE)	24448-09-7	7 PFAS by ID SOP	ND	6.8	1.7	ng/L	1
Perfluoro-1-butanesulfonic acid (PFBS)	375-73-5	5 PFAS by ID SOP	4.3	3.4	0.85	ng/L	1
Perfluoro-1-decanesulfonic acid (PFDS)	335-77-3	PFAS by ID SOP	ND	3.4	0.85	ng/L	1
Perfluoro-1-heptanesulfonic acid (PFHpS)	375-92-8	PFAS by ID SOP	ND	3.4	0.85	ng/L	1
Perfluoro-1-nonanesulfonic acid (PFNS)	68259-12-1	1 PFAS by ID SOP	ND	3.4	0.85	ng/L	1
Perfluoro-1-octanesulfonamide (PFOSA)	754-91-6	PFAS by ID SOP	ND	3.4	0.85	ng/L	1
Perfluoro-1-pentanesulfonic acid (PFPeS)	2706-91-4	PFAS by ID SOP	3.2 J	3.4	0.85	ng/L	1
Perfluorododecanesulfonic acid (PFDOS)	79780-39-5	5 PFAS by ID SOP	ND	6.8	1.7	ng/L	1
Perfluorohexanesulfonic acid (PFHxS)	355-46-4	PFAS by ID SOP	4.5	3.4	0.85	ng/L	1
Perfluoro-n-butanoic acid (PFBA)	375-22-4	PFAS by ID SOP	1.9 J	3.4	0.85	ng/L	1
Perfluoro-n-decanoic acid (PFDA)	335-76-2	2 PFAS by ID SOP	ND	3.4	0.85	ng/L	1
Perfluoro-n-dodecanoic acid (PFDoA)	307-55-1	PFAS by ID SOP	ND	3.4	0.85	ng/L	1
Perfluoro-n-heptanoic acid (PFHpA)	375-85-9	PFAS by ID SOP	ND	3.4	0.85	ng/L	1
Perfluoro-n-hexadecanoic acid (PFHxDA)	67905-19-5	5 PFAS by ID SOP	ND	6.8	1.7	ng/L	1
Perfluoro-n-hexanoic acid (PFHxA)	307-24-4	PFAS by ID SOP	ND	3.4	0.85	ng/L	1
Perfluoro-n-nonanoic acid (PFNA)	375-95-1	PFAS by ID SOP	ND	3.4	0.85	ng/L	1
Perfluoro-n-octadecanoic acid (PFODA)	16517-11-6	5 PFAS by ID SOP	ND	6.8	1.7	ng/L	1
Perfluoro-n-octanoic acid (PEOA)	335-67-1	PFAS by ID SOP	ND	3.4	0.85	ng/L	1
Perfluoro-n-pentanoic acid (PFPeA)	2706-90-3	PFAS by ID SOP	ND	3.4	0.85	ng/L	1
Perfluoro-n-tetradecanoic acid (PFTeDA)	3/6-06-/	PFAS by ID SOP	ND	3.4	0.85	ng/L	1
Perfluoro-n-tridecanoic acid (PETrDA)	72629-94-8	B PFAS by ID SOP	ND	3.4	0.85	ng/L	1
Perfluoro-n-undecanoic acid (PFUdA)	2058-94-8	PFAS by ID SOP	ND	3.4	0.85	ng/L	1
Perhuorooctanesulionic acid (PFOS)	1/03-23-1	PFAS by ID SOP	3.0 J	3.4	0.85	ng/L	I
R Surrogate	un 1 Acce	eptance					
13C2 4:2FTS	92 2	25-150					
13C2 6:2FTS	87 2	25-150					
13C2_8:2FTS	79 2	25-150					
13C2_PFDoA	86 2	25-150					
13C2_PFHxDA	92 2	25-150					
13C2_PFTeDA	85 2	25-150					
LOQ = Limit of Quantitation B = Detected in the method blank	E = Quantitation	n of compound exceeded the	calibration range	DL = Detection Lin	hit		
ND = Not detected at or above the DL         N = Recovery is out of criteria           H = Out of holding time         W = Reported on wet weight basis	P = The RPD b	erween two GC columns exce	eds 40%	J = Estimated resu	$II < LOQ and \ge D$	IL.	

Laboratory ID: VK08043-006 Matrix: Aqueous

Client: Pace Analytical Services, LLC	
Description: 209-0	
Date Sampled:11/02/2020 1255	Project Name: LACROSSE WELL #23 & 24
Date Received: 11/06/2020	Project Number: 40217713

d7-MeFOSE

Run 1 Acceptance Surrogate Q % Recovery Limits 13C3\_PFBS 88 25-150 13C3\_PFHxS 82 25-150 13C3-HFPO-DA 107 25-150 13C4\_PFBA 90 25-150 13C4\_PFHpA 88 25-150 95 13C5\_PFHxA 25-150 13C5\_PFPeA 89 25-150 13C6\_PFDA 83 25-150 13C7\_PFUdA 88 25-150 13C8\_PFOA 89 25-150 13C8\_PFOS 81 25-150 13C8\_PFOSA 91 10-150 13C9\_PFNA 87 25-150 80 d-EtFOSA 10-150 d5-EtFOSAA 85 25-150 d9-EtFOSE 84 10-150 d-MeFOSA 81 10-150 d3-MeFOSAA 89 25-150

10-150

83

LOQ = Limit of Quantitation	B = Detected in the method blank	E = Quantitation of compound exceeded the calibration range	DL = Detection Limit
ND = Not detected at or above the DL	N = Recovery is out of criteria	P = The RPD between two GC columns exceeds 40%	J = Estimated result < LOQ and $\geq$ DL
H = Out of holding time	W = Reported on wet weight basis		



444 21st Street South  $\cdot$  La Crosse, Wisconsin  $\cdot$  54601

December 1, 2020

2501 2nd Avenue East La Crosse, WI 54603

Subject: Private Well Sampling Results 2501 2nd Avenue East, La Crosse, WI 54603 Tax parcel # 4-210-0 Sample ID # 210-0

:

Dear

We have received and reviewed the test results for the sample collected on November 3, 2020 at the above address. Some PFAS compounds were found, but the levels found were **below** the Department of Health Services (DHS) levels recommended for protecting health. These levels are called the "Recommended Public Health Standard" in the table below. The levels found in *your* well are called the "Sample Result" in the table below.

#### Sample Results

Compound	Sample Result (unit)	Recomm Public H Standard	ended ealth (unit <sup>e</sup> )
N-Ethyl Perfluorooctane sulfonamide (NEtFOSA) CAS # 4151-50-2	Not Detected	20 ppt <sup>a,b</sup>	) ppt unds I 6
N-Ethyl perfluorooctane sulfonamidoacetic acid (NEtFOSAA) CAS # 2991-50-6	Not Detected	20 ppt <sup>a,b</sup>	it is 20 ompo <i>il</i> of al
N-Ethyl perfluorooctane sulfonamidoethanol (NEtFOSE) CAS # 1691-99-2	Not Detected	20 ppt <sup>a,b</sup>	ed lim ese 6 c ed toto
Perfluorooctane sulfonamide (FOSA) CAS # 754-91-6	Not Detected	20 ppt <sup>a,b</sup>	mend of the mbine
Perfluorooctanoic acid (PFOA) CAS # 335-67-1	1.4 ppt	20 ppt <sup>a,b</sup>	recom ny <i>one</i> the <i>cc</i>
Perfluorooctanesulfonic acid (PFOS) CAS # 1763-23-1	1.9 ppt	20 ppt <sup>a,b</sup>	The for ai or

Private Well Sampling Results for 2501 2nd Avenue East, La Crosse, WI 54603 Tax parcel # 4-210-0 Sample ID # 210-0 December 1, 2020

Compound	Sample Result (unit)	Recommended Public Health Standard (unit <sup>e</sup> )
Hexafluoropropylene oxide dimer acid (HPFO-DA; GenX) CAS # 13252-13-6	Not Detected	300 ppt <sup>a</sup>
Perfluorobutanesulfonic acid (PFBS) CAS # 375-73-5	2.2 ppt	450,000 ppt <sup>a</sup>
Perfluorohexanesulfonic acid (PFHxS) CAS # 355-46-4	3.0 ppt	40 ppt ª
Perfluorobutanoic acid (PFBA) CAS # 375-22-4	3.3 ppt	10,000 ppt <sup>a</sup>
Perfluorodecanoic acid (PFDA) CAS # 335-76-2	Not Detected	300 ppt <sup>a</sup>
Perfluorododecanoic acid (PFDoA) CAS # 307-55-1	Not Detected	500 ppt <sup>a</sup>
Perfluorohexanoic acid (PFHxA) CAS # 307-24-4	1.1 ppt	150,000 ppt <sup>a</sup>
Perfluorononanoic acid (PFNA) CAS # 375-95-1	Not Detected	30 ppt <sup>a</sup>
Perfluorotetradecanoic acid (PFTeA) CAS # 376-06-7	Not Detected	10,000 ppt <sup>a</sup>
Perfluoroundecanoic acid (PFUnA) CAS # 2058-94-8	Not Detected	3,000 ppt <sup>a</sup>
4,8-Dioxa-3H-perfluorononanoic acid (DONA) CAS # 919005-14-4	Not Detected	3,000 ppt <sup>a</sup>
Perfluorooctadecanoic acid (PFODA) CAS # 16517-11-6	Not Detected	400,000 ppt <sup>a</sup>
Perfluoro-n-pentanoic acid (PFPeA) CAS # 2706-90-3	1.0 ppt	None Established <sup>c</sup>

<sup>a</sup> Public health enforcement standard (ES) recommended by DHS.

<sup>b</sup> DHS recommends a combined enforcement standard of 20 ng/L and combined preventive action limit of 2 ng/L for FOSA, NEt-FOSA, NetFOSAA, PFOS, and PFOA.

<sup>c</sup> A current standard is not available; the compound is currently under review by DHS for potential public health standard recommendation.

<sup>d</sup> Public health enforcement standard (ES) in NR 140, Wisconsin Administrative Code.

<sup>e</sup> Units: Parts per trillion (ppt) = nanograms of substance per liter of water (ng/L)

<sup>BL</sup> Detected in the method blank. Possible lab contaminant.

Private Well Sampling Results for 2501 2nd Avenue East, La Crosse, WI 54603 Tax parcel # 4-210-0 Sample ID # 210-0 December 1, 2020

As required by law, we will be submitting these results to the Department of Natural Resources (DNR). The DNR may consult with the Department of Health Services (DHS) about these test results. DHS may review all PFAS tests and follow-up with you directly if any actions are recommended to protect your health.

Thank you for your patience and assistance with our investigation. We will provide updates on the project at <u>https://www.cityoflacrosse.org/wells</u> as our work continues. If you have any questions, please call The OS Group at (608) 668-2718 or email them at <u>PFAS@theOSgrp.com</u>.

You can also contact the DNR and DHS with questions about PFAS or the water sample results at the numbers provided below.

Questions about		<u>Contact</u>	<u>Phone</u>	E-mail Address
Soil & Groundwater Testing, Clean Up	DNR	David Rozeboom	715-215-2078	David.Rozeboom@wisconsin.gov
Drinking Water or Private wells	DNR	Kyle Burton	920-360-2112	kyle.burton@wisconsin.gov
Health Concerns	DHS	Curtis Hedman	608-266-6677	Curtis.Hedman@dhs.wisconsin.gov

On behalf of The City of La Crosse *The OS Group, LLC* 

Attachment: Lab report for your well

Client: Pace Analytical Services, LLC				Laboratory	ID: VK08043-	011	
Description: 210-0				Mat	rix: Aqueous		
Date Sampled:11/03/2020 0915	Project Name	: LACROSSE WELL #	#23 & 24		-		
Date Received: 11/06/2020 Pr	oject Number	: 40217713					
Run Pren Method Analytical Method	Jilution An	alvsis Date Analyst	Pren [	Date Batch			
1 SOP SPE PFAS by ID SOP	1 11/	17/2020 1824 MMM	11/16/20	D20 1125 73619			
Parameter	CAS Number	Method	Result	Q LOQ	DL	Units	Run
9-chlorohexadecafluoro-3-oxanone-1-sulfonic acid (9CI-PF3ONS)	756426-58-1	PFAS by ID SOP	ND	7.1	1.8	ng/L	1
11-chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11CI-PF3	) 763051-92-9	PFAS by ID SOP	ND	7.1	1.8	ng/L	1
1H, 1H, 2H, 2H-perfluorodecane sulfonic acid (8:2 FTS)	39108-34-4	PFAS by ID SOP	ND	7.1	1.8	ng/L	1
1H, 1H, 2H, 2H-perfluorooctane sulfonic acid (6:2 FTS)	27619-97-2	PFAS by ID SOP	ND	7.1	1.8	ng/L	1
1H,1H,2H,2H-perfluorododecane sulfonic acid (10:2 FTS)	120226-60-0	PFAS by ID SOP	ND	7.1	1.8	ng/L	1
1H,1H,2H,2H-perfluorohexane sulfonic acid (4:2 FTS)	757124-72-4	PFAS by ID SOP	ND	7.1	1.8	ng/L	1
Hexafluoropropylene oxide dimer acid (GenX)	13252-13-6	PFAS by ID SOP	ND	7.1	1.8	ng/L	1
4,8-dioxa-3H-perfluorononanoic acid (ADONA)	919005-14-4	PFAS by ID SOP	ND	7.1	1.8	ng/L	1
N-ethylperfluoro-1-octanesulfonamide (EtFOSA)	4151-50-2	PFAS by ID SOP	ND	7.1	1.8	ng/L	1
N-ethylperfluoro-1-octanesulfonamidoacetic acid (EtFOSAA)	2991-50-6	PFAS by ID SOP	ND	7.1	1.8	ng/L	1
2-N-ethylperfluoro-1-octanesulfonamido-ethanol (EtFOSE)	1691-99-2	PFAS by ID SOP	ND	7.1	1.8	ng/L	1
N-methylperfluoro-1-octanesulfonamide (MeFOSA)	31506-32-8	PFAS by ID SOP	ND	14	3.6	ng/L	1
N-methylperfluoro-1-octanesulfonamidoacetic acid (MeFOSAA)	2355-31-9	PFAS by ID SOP	ND	7.1	1.8	ng/L	1
2-N-methylperfluoro-1-octanesulfonamido-ethanol (MeFOSE)	24448-09-7	PFAS by ID SOP	ND	7.1	1.8	ng/L	1
Perfluoro-1-butanesulfonic acid (PFBS)	375-73-5	PFAS by ID SOP	2.2	J 3.6	0.89	ng/L	1
Perfluoro-1-decanesulfonic acid (PFDS)	335-77-3	PFAS by ID SOP	ND	3.6	0.89	ng/L	1
Perfluoro-1-heptanesulfonic acid (PFHpS)	375-92-8	PFAS by ID SOP	ND	3.6	0.89	ng/L	1
Perfluoro-1-nonanesulfonic acid (PFNS)	68259-12-1	PFAS by ID SOP	ND	3.6	0.89	ng/L	1
Perfluoro-1-octanesulfonamide (PFOSA)	754-91-6	PFAS by ID SOP	ND	3.6	0.89	ng/L	1
Perfluoro-1-pentanesulfonic acid (PFPeS)	2706-91-4	PFAS by ID SOP	ND	3.6	0.89	ng/L	1
Perfluorododecanesulfonic acid (PFDOS)	79780-39-5	PFAS by ID SOP	ND	7.1	1.8	ng/L	1
Perfluorohexanesulfonic acid (PFHxS)	355-46-4	PFAS by ID SOP	3.0	J 3.6	0.89	ng/L	1
Perfluoro-n-butanoic acid (PFBA)	375-22-4	PFAS by ID SOP	3.3	J 3.6	0.89	ng/L	1
Perfluoro-n-decanoic acid (PFDA)	335-76-2	PFAS by ID SOP	ND	3.6	0.89	ng/L	1
Perfluoro-n-dodecanoic acid (PFDoA)	307-55-1	PFAS by ID SOP	ND	3.6	0.89	ng/L	1
Perfluoro-n-heptanoic acid (PFHpA)	375-85-9	PFAS by ID SOP	ND	3.6	0.89	ng/L	1
Perfluoro-n-hexadecanoic acid (PFHxDA)	67905-19-5	PFAS by ID SOP	ND	7.1	1.8	ng/L	1
Perfluoro-n-hexanoic acid (PFHxA)	307-24-4	PFAS by ID SOP	1.1	J 3.6	0.89	ng/L	1
Perfluoro-n-nonanoic acid (PFNA)	375-95-1	PFAS by ID SOP	ND	3.6	0.89	ng/L	1
Perfluoro-n-octadecanoic acid (PFODA)	16517-11-6	PFAS by ID SOP	ND	7.1	1.8	ng/L	1
Perfluoro-n-octanoic acid (PFOA)	335-67-1	PFAS by ID SOP	1.4	J 3.6	0.89	ng/L	1
Perfluoro-n-pentanoic acid (PFPeA)	2706-90-3	PFAS by ID SOP	1.0	J 3.6	0.89	ng/L	1
Perfluoro-n-tetradecanoic acid (PFTeDA)	376-06-7	PFAS by ID SOP	ND	3.6	0.89	ng/L	1
Perfluoro-n-tridecanoic acid (PFTrDA)	72629-94-8	PFAS by ID SOP	ND	3.6	0.89	ng/L	1
Perfluoro-n-undecanoic acid (PFUdA)	2058-94-8	PFAS by ID SOP	ND	3.6	0.89	ng/L	1
Perfluorooctanesulfonic acid (PFOS)	1763-23-1	PFAS by ID SOP	1.9	J 3.6	0.89	ng/L	1
R	un 1 Acce	eptance					
Surrogate Q % Re	ecovery L	imits					
13C2_4.2F15	102 2	5-150 5-150					
13C2_8-2FTS	,5 2 88 7	5-150					
13C2_DEDoΔ	90 2	5-150					
13C2 PEHxDA	70 Z 96 7	5-150					
13C2_PETeDA	85 2	5-150					
1002_1110DA	55 Z	0.00					
LOQ = Limit of Quantitation B = Detected in the method blank	E = Quantitation	of compound exceeded the	calibration ra	nge DL = Detection l	_imit		
ND = Not detected at or above the DL N = Recovery is out of criteria	P = The RPD be	etween two GC columns exce	eds 40%	J = Estimated re	sult < LOQ and $\geq$ [	DL	
H = Out of holding time W = Reported on wet weight basis							

Client: Pace Analytical Services, LLC		Laboratory ID: VK08043-011
Description: 210-0		Matrix: Aqueous
Date Sampled:11/03/2020 0915	Project Name: LACROSSE WELL #23 & 24	
Date Received: 11/06/2020	Project Number: 40217713	

Surrogate	Run 1 A Q % Recovery	Acceptance Limits
13C3_PFBS	87	25-150
13C3_PFHxS	86	25-150
13C3-HFPO-DA	102	25-150
13C4_PFBA	93	25-150
13C4_PFHpA	102	25-150
13C5_PFHxA	100	25-150
13C5_PFPeA	93	25-150
13C6_PFDA	89	25-150
13C7_PFUdA	92	25-150
13C8_PFOA	94	25-150
13C8_PFOS	84	25-150
13C8_PFOSA	95	10-150
13C9_PFNA	95	25-150
d-EtFOSA	79	10-150
d5-EtFOSAA	90	25-150
d9-EtFOSE	93	10-150
d-MeFOSA	86	10-150
d3-MeFOSAA	93	25-150
d7-MeFOSE	88	10-150

LOQ = Limit of Quantitation	B = Detected in the method blank	E = Quantitation of compound exceeded the calibration range	DL = Detection Limit
ND = Not detected at or above the DL	N = Recovery is out of criteria	P = The RPD between two GC columns exceeds 40%	J = Estimated result < LOQ and $\ge$ DL
H = Out of holding time	W = Reported on wet weight basis		



444 21st Street South  $\cdot$  La Crosse, Wisconsin  $\cdot$  54601

December 1, 2020

### 424 Russel Drive S Holmen, WI 54636

Subject: Private Well Sampling Results 2501 2nd Avenue East, La Crosse, WI 54603 Tax parcel # 4-210-0 Sample ID # 210-0

#### Dear

We have received and reviewed the test results for the sample collected on November 3, 2020 at the above address. Some PFAS compounds were found, but the levels found were **below** the Department of Health Services (DHS) levels recommended for protecting health. These levels are called the "Recommended Public Health Standard" in the table below. The levels found in *your* well are called the "Sample Result" in the table below.

#### Sample Results

Compound	Sample Result (unit)	Recommended Public Health Standard (unit <sup>e</sup> )	
N-Ethyl Perfluorooctane sulfonamide (NEtFOSA) CAS # 4151-50-2	Not Detected	20 ppt <sup>a,b</sup>	) ppt unds I 6
N-Ethyl perfluorooctane sulfonamidoacetic acid (NEtFOSAA) CAS # 2991-50-6	Not Detected	20 ppt <sup>a,b</sup>	it is 20 ompo // of al
N-Ethyl perfluorooctane sulfonamidoethanol (NEtFOSE) CAS # 1691-99-2	Not Detected	20 ppt <sup>a,b</sup>	ed lim ese 6 c ed totc
Perfluorooctane sulfonamide (FOSA) CAS # 754-91-6	Not Detected	20 ppt <sup>a,b</sup>	mend of the ombine
Perfluorooctanoic acid (PFOA) CAS # 335-67-1	1.4 ppt	20 ppt <sup>a,b</sup>	recom ny <i>one</i> the <i>c</i> c
Perfluorooctanesulfonic acid (PFOS) CAS # 1763-23-1	1.9 ppt	20 ppt <sup>a,b</sup>	The for an or

Private Well Sampling Results for 2501 2nd Avenue East, La Crosse, WI 54603 Tax parcel # 4-210-0 Sample ID # 210-0 December 1, 2020

Compound	Sample Result (unit)	Recommended Public Health Standard (unit <sup>e</sup> )
Hexafluoropropylene oxide dimer acid (HPFO-DA; GenX) CAS # 13252-13-6	Not Detected	300 ppt <sup>a</sup>
Perfluorobutanesulfonic acid (PFBS) CAS # 375-73-5	2.2 ppt	450,000 ppt <sup>a</sup>
Perfluorohexanesulfonic acid (PFHxS) CAS # 355-46-4	3.0 ppt	40 ppt ª
Perfluorobutanoic acid (PFBA) CAS # 375-22-4	3.3 ppt	10,000 ppt <sup>a</sup>
Perfluorodecanoic acid (PFDA) CAS # 335-76-2	Not Detected	300 ppt <sup>a</sup>
Perfluorododecanoic acid (PFDoA) CAS # 307-55-1	Not Detected	500 ppt <sup>a</sup>
Perfluorohexanoic acid (PFHxA) CAS # 307-24-4	1.1 ppt	150,000 ppt <sup>a</sup>
Perfluorononanoic acid (PFNA) CAS # 375-95-1	Not Detected	30 ppt <sup>a</sup>
Perfluorotetradecanoic acid (PFTeA) CAS # 376-06-7	Not Detected	10,000 ppt <sup>a</sup>
Perfluoroundecanoic acid (PFUnA) CAS # 2058-94-8	Not Detected	3,000 ppt <sup>a</sup>
4,8-Dioxa-3H-perfluorononanoic acid (DONA) CAS # 919005-14-4	Not Detected	3,000 ppt <sup>a</sup>
Perfluorooctadecanoic acid (PFODA) CAS # 16517-11-6	Not Detected	400,000 ppt <sup>a</sup>
Perfluoro-n-pentanoic acid (PFPeA) CAS # 2706-90-3	1.0 ppt	None Established <sup>c</sup>

<sup>a</sup> Public health enforcement standard (ES) recommended by DHS.

<sup>b</sup> DHS recommends a combined enforcement standard of 20 ng/L and combined preventive action limit of 2 ng/L for FOSA, NEt-FOSA, NetFOSAA, PFOS, and PFOA.

<sup>c</sup> A current standard is not available; the compound is currently under review by DHS for potential public health standard recommendation.

<sup>d</sup> Public health enforcement standard (ES) in NR 140, Wisconsin Administrative Code.

<sup>e</sup> Units: Parts per trillion (ppt) = nanograms of substance per liter of water (ng/L)

<sup>BL</sup> Detected in the method blank. Possible lab contaminant.

Private Well Sampling Results for 2501 2nd Avenue East, La Crosse, WI 54603 Tax parcel # 4-210-0 Sample ID # 210-0 December 1, 2020

As required by law, we will be submitting these results to the Department of Natural Resources (DNR). The DNR may consult with the Department of Health Services (DHS) about these test results. DHS may review all PFAS tests and follow-up with you directly if any actions are recommended to protect your health.

Thank you for your patience and assistance with our investigation. We will provide updates on the project at <u>https://www.cityoflacrosse.org/wells</u> as our work continues. If you have any questions, please call The OS Group at (608) 668-2718 or email them at <u>PFAS@theOSgrp.com</u>.

You can also contact the DNR and DHS with questions about PFAS or the water sample results at the numbers provided below.

Questions about		<u>Contact</u>	<u>Phone</u>	E-mail Address
Soil & Groundwater Testing, Clean Up	DNR	David Rozeboom	715-215-2078	David.Rozeboom@wisconsin.gov
Drinking Water or Private wells	DNR	Kyle Burton	920-360-2112	kyle.burton@wisconsin.gov
Health Concerns	DHS	Curtis Hedman	608-266-6677	Curtis.Hedman@dhs.wisconsin.gov

On behalf of The City of La Crosse *The OS Group, LLC* 

Attachment: Lab report for your well

Client: Pace Analytical Services, LLC				Laboratory	ID: VK08043-	011	
Description: 210-0				Mat	rix: Aqueous		
Date Sampled:11/03/2020 0915	Project Name	: LACROSSE WELL #	#23 & 24		-		
Date Received: 11/06/2020 Pr	oject Number	: 40217713					
Run Pren Method Analytical Method	Jilution An	alvsis Date Analyst	Pren [	Date Batch			
1 SOP SPE PFAS by ID SOP	1 11/	17/2020 1824 MMM	11/16/20	D20 1125 73619			
Parameter	CAS Number	Method	Result	Q LOQ	DL	Units	Run
9-chlorohexadecafluoro-3-oxanone-1-sulfonic acid (9CI-PF3ONS)	756426-58-1	PFAS by ID SOP	ND	7.1	1.8	ng/L	1
11-chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11CI-PF3	) 763051-92-9	PFAS by ID SOP	ND	7.1	1.8	ng/L	1
1H, 1H, 2H, 2H-perfluorodecane sulfonic acid (8:2 FTS)	39108-34-4	PFAS by ID SOP	ND	7.1	1.8	ng/L	1
1H, 1H, 2H, 2H-perfluorooctane sulfonic acid (6:2 FTS)	27619-97-2	PFAS by ID SOP	ND	7.1	1.8	ng/L	1
1H,1H,2H,2H-perfluorododecane sulfonic acid (10:2 FTS)	120226-60-0	PFAS by ID SOP	ND	7.1	1.8	ng/L	1
1H,1H,2H,2H-perfluorohexane sulfonic acid (4:2 FTS)	757124-72-4	PFAS by ID SOP	ND	7.1	1.8	ng/L	1
Hexafluoropropylene oxide dimer acid (GenX)	13252-13-6	PFAS by ID SOP	ND	7.1	1.8	ng/L	1
4,8-dioxa-3H-perfluorononanoic acid (ADONA)	919005-14-4	PFAS by ID SOP	ND	7.1	1.8	ng/L	1
N-ethylperfluoro-1-octanesulfonamide (EtFOSA)	4151-50-2	PFAS by ID SOP	ND	7.1	1.8	ng/L	1
N-ethylperfluoro-1-octanesulfonamidoacetic acid (EtFOSAA)	2991-50-6	PFAS by ID SOP	ND	7.1	1.8	ng/L	1
2-N-ethylperfluoro-1-octanesulfonamido-ethanol (EtFOSE)	1691-99-2	PFAS by ID SOP	ND	7.1	1.8	ng/L	1
N-methylperfluoro-1-octanesulfonamide (MeFOSA)	31506-32-8	PFAS by ID SOP	ND	14	3.6	ng/L	1
N-methylperfluoro-1-octanesulfonamidoacetic acid (MeFOSAA)	2355-31-9	PFAS by ID SOP	ND	7.1	1.8	ng/L	1
2-N-methylperfluoro-1-octanesulfonamido-ethanol (MeFOSE)	24448-09-7	PFAS by ID SOP	ND	7.1	1.8	ng/L	1
Perfluoro-1-butanesulfonic acid (PFBS)	375-73-5	PFAS by ID SOP	2.2	J 3.6	0.89	ng/L	1
Perfluoro-1-decanesulfonic acid (PFDS)	335-77-3	PFAS by ID SOP	ND	3.6	0.89	ng/L	1
Perfluoro-1-heptanesulfonic acid (PFHpS)	375-92-8	PFAS by ID SOP	ND	3.6	0.89	ng/L	1
Perfluoro-1-nonanesulfonic acid (PFNS)	68259-12-1	PFAS by ID SOP	ND	3.6	0.89	ng/L	1
Perfluoro-1-octanesulfonamide (PFOSA)	754-91-6	PFAS by ID SOP	ND	3.6	0.89	ng/L	1
Perfluoro-1-pentanesulfonic acid (PFPeS)	2706-91-4	PFAS by ID SOP	ND	3.6	0.89	ng/L	1
Perfluorododecanesulfonic acid (PFDOS)	79780-39-5	PFAS by ID SOP	ND	7.1	1.8	ng/L	1
Perfluorohexanesulfonic acid (PFHxS)	355-46-4	PFAS by ID SOP	3.0	J 3.6	0.89	ng/L	1
Perfluoro-n-butanoic acid (PFBA)	375-22-4	PFAS by ID SOP	3.3	J 3.6	0.89	ng/L	1
Perfluoro-n-decanoic acid (PFDA)	335-76-2	PFAS by ID SOP	ND	3.6	0.89	ng/L	1
Perfluoro-n-dodecanoic acid (PFDoA)	307-55-1	PFAS by ID SOP	ND	3.6	0.89	ng/L	1
Perfluoro-n-heptanoic acid (PFHpA)	375-85-9	PFAS by ID SOP	ND	3.6	0.89	ng/L	1
Perfluoro-n-hexadecanoic acid (PFHxDA)	67905-19-5	PFAS by ID SOP	ND	7.1	1.8	ng/L	1
Perfluoro-n-hexanoic acid (PFHxA)	307-24-4	PFAS by ID SOP	1.1	J 3.6	0.89	ng/L	1
Perfluoro-n-nonanoic acid (PFNA)	375-95-1	PFAS by ID SOP	ND	3.6	0.89	ng/L	1
Perfluoro-n-octadecanoic acid (PFODA)	16517-11-6	PFAS by ID SOP	ND	7.1	1.8	ng/L	1
Perfluoro-n-octanoic acid (PFOA)	335-67-1	PFAS by ID SOP	1.4	J 3.6	0.89	ng/L	1
Perfluoro-n-pentanoic acid (PFPeA)	2706-90-3	PFAS by ID SOP	1.0	J 3.6	0.89	ng/L	1
Perfluoro-n-tetradecanoic acid (PFTeDA)	376-06-7	PFAS by ID SOP	ND	3.6	0.89	ng/L	1
Perfluoro-n-tridecanoic acid (PFTrDA)	72629-94-8	PFAS by ID SOP	ND	3.6	0.89	ng/L	1
Perfluoro-n-undecanoic acid (PFUdA)	2058-94-8	PFAS by ID SOP	ND	3.6	0.89	ng/L	1
Perfluorooctanesulfonic acid (PFOS)	1763-23-1	PFAS by ID SOP	1.9	J 3.6	0.89	ng/L	1
R	un 1 Acce	eptance					
Surrogate Q % Re	ecovery L	imits					
13C2_4.2F15	102 2	5-150 5-150					
13C2_8-2FTS	,5 2 88 7	5-150					
13C2_DEDoΔ	90 2	5-150					
13C2 PEHxDA	70 Z 96 7	5-150					
13C2_PETeDA	85 2	5-150					
1002_1110DA	55 Z	0.00					
LOQ = Limit of Quantitation B = Detected in the method blank	E = Quantitation	of compound exceeded the	calibration ra	nge DL = Detection l	_imit		
ND = Not detected at or above the DL N = Recovery is out of criteria	P = The RPD be	etween two GC columns exce	eds 40%	J = Estimated re	sult < LOQ and $\geq$ [	DL	
H = Out of holding time W = Reported on wet weight basis							

Client: Pace Analytical Services, LLC		Laboratory ID: VK08043-011
Description: 210-0		Matrix: Aqueous
Date Sampled:11/03/2020 0915	Project Name: LACROSSE WELL #23 & 24	
Date Received: 11/06/2020	Project Number: 40217713	

Surrogate	Run 1 A Q % Recovery	Acceptance Limits
13C3_PFBS	87	25-150
13C3_PFHxS	86	25-150
13C3-HFPO-DA	102	25-150
13C4_PFBA	93	25-150
13C4_PFHpA	102	25-150
13C5_PFHxA	100	25-150
13C5_PFPeA	93	25-150
13C6_PFDA	89	25-150
13C7_PFUdA	92	25-150
13C8_PFOA	94	25-150
13C8_PFOS	84	25-150
13C8_PFOSA	95	10-150
13C9_PFNA	95	25-150
d-EtFOSA	79	10-150
d5-EtFOSAA	90	25-150
d9-EtFOSE	93	10-150
d-MeFOSA	86	10-150
d3-MeFOSAA	93	25-150
d7-MeFOSE	88	10-150

LOQ = Limit of Quantitation	B = Detected in the method blank	E = Quantitation of compound exceeded the calibration range	DL = Detection Limit
ND = Not detected at or above the DL	N = Recovery is out of criteria	P = The RPD between two GC columns exceeds 40%	J = Estimated result < LOQ and $\ge$ DL
H = Out of holding time	W = Reported on wet weight basis		



444 21st Street South  $\cdot$  La Crosse, Wisconsin  $\cdot$  54601

December 1, 2020

2521 2nd Avenue East La Crosse, WI 54603

Subject: Private Well Sampling Results 2521 2nd Avenue East, La Crosse, WI 54603 Tax parcel # 4-215-0 Sample ID # 215-0

#### Dear

We have received and reviewed the test results for the sample collected on November 3, 2020 at the above address. Some PFAS compounds were found at levels <u>above</u> the Department of Health Services (DHS) levels recommended for protecting health. These levels are called the "Recommended Public Health Standard" in the table below. The levels found in your well are called the "Sample Result" in the table below.

Because some of the levels are above the recommended Public Health Standard, the City is offering to provide bottled water delivered to your home for drinking, cooking, and brushing your teeth. There will be no cost to you for the bottled water. Please complete the attached form and mail it to The OS Group to make arrangements for having a water dispenser and bottles delivered to your home. Call 608-668-2718 or email <u>PFAS@theOSgrp.com</u>. You may also complete this form on line at <u>www.cityoflacrosse.org/bottledwater</u>

The following table summarizes the test results from the sample. **Bolded results** are above a current recommended level intended to protect your health according to the Department of Health Services (DHS).

Private Well Sampling Results for 2521 2nd Avenue East, La Crosse, WI 54603 Tax Parcel # 4-215-0 December 1, 2020

Sample	Results
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Compound	Sample Result (unit)	Recomm Public H Standard	ended lealth (unit <sup>e</sup> )
N-Ethyl Perfluorooctane sulfonamide (NEtFOSA) CAS # 4151-50-2	Not Detected	20 ppt <sup>a,b</sup>	) ppt unds I 6
N-Ethyl perfluorooctane sulfonamidoacetic acid (NEtFOSAA) CAS # 2991-50-6	Not Detected	20 ppt <sup>a,b</sup>	it is 2C compo <i>il</i> of al
N-Ethyl perfluorooctane sulfonamidoethanol (NEtFOSE) CAS # 1691-99-2	Not Detected	20 ppt <sup>a,b</sup>	ed lim ese 6 c ed toto
Perfluorooctane sulfonamide (FOSA) CAS # 754-91-6	Not Detected	20 ppt <sup>a,b</sup>	mend of the
Perfluorooctanoic acid (PFOA) CAS # 335-67-1	110 ppt	20 ppt <sup>a,b</sup>	recom ny <i>on</i> e the <i>c</i> c
Perfluorooctanesulfonic acid (PFOS) CAS # 1763-23-1	210 ppt	20 ppt <sup>a,b</sup>	The for a or
Hexafluoropropylene oxide dimer acid (HPFO-DA; GenX) CAS # 13252-13-6	Not Detected		300 ppt <sup>a</sup>
Perfluorobutanesulfonic acid (PFBS) CAS # 375-73-5	120 ppt	450	0,000 ppt ª
Perfluorohexanesulfonic acid (PFHxS) CAS # 355-46-4	2800 ppt		40 ppt <sup>a</sup>
Perfluorobutanoic acid (PFBA) CAS # 375-22-4	21 ppt	10	0,000 ppt <sup>a</sup>
Perfluorodecanoic acid (PFDA) CAS # 335-76-2	Not Detected		300 ppt <sup>a</sup>
Perfluorododecanoic acid (PFDoA) CAS # 307-55-1	Not Detected		500 ppt <sup>a</sup>
Perfluorohexanoic acid (PFHxA) CAS # 307-24-4	86 ppt	150	0,000 ppt <sup>a</sup>
Perfluorononanoic acid (PFNA) CAS # 375-95-1	Not Detected		30 ppt <sup>a</sup>
Perfluorotetradecanoic acid (PFTeA) CAS # 376-06-7	Not Detected	10	0,000 ppt <sup>a</sup>
Perfluoroundecanoic acid (PFUnA) CAS # 2058-94-8	Not Detected	3	3,000 ppt <sup>a</sup>
4,8-Dioxa-3H-perfluorononanoic acid (DONA) CAS # 919005-14-4	Not Detected	:	3,000 ppt <sup>a</sup>
Perfluorooctadecanoic acid (PFODA) CAS # 16517-11-6	Not Detected	400	),000 ppt <sup>a</sup>

Perfluoro-1-heptanesulfonic acid (PFHpS) CAS # 375-92-8	69 ppt	None Established <sup>c</sup>
Perfluoro-1-pentanesulfonic acid (PFPeS) CAS # 2706-91-4	270 ppt	None Established <sup>c</sup>
Perfluoro-n-heptanoic acid (PFHpA) CAS # 375-85-9	17 ppt	None Established <sup>c</sup>
Perfluoro-n-pentanoic acid (PFPeA) CAS #2706-90-3	18 ppt	None Established <sup>c</sup>
<ul> <li><sup>a</sup> Public health enforcement standard (ES) recommended by DHS.</li> <li><sup>b</sup> DHS recommends a combined enforcement standard of 20 ng/L and FOSA, NEt-FOSE, NEt-FOSA, NetFOSAA, PFOS, and PFOA.</li> <li><sup>c</sup> A current standard is not available; the compound is currently under standard recommendation.</li> <li><sup>d</sup> Public health enforcement standard (ES) in NR 140, Wisconsin Admin</li> </ul>	combined preventive review by DHS for po istrative Code.	action limit of 2 ng/L for tential public health

<sup>e</sup> Units: Parts per trillion (ppt) = nanograms of substance per liter of water (ng/L)

<sup>BL</sup> Detected in the method blank. Possible lab contaminant.

As required by law, we will be submitting these results to the Department of Natural Resources (DNR). The DNR may consult with the Department of Health Services (DHS) about these test results. DHS may review all PFAS tests and follow-up with you directly if any actions are recommended to protect your health.

Thank you for your patience and assistance with our investigation. We will provide updates on the project at <u>https://www.cityoflacrosse.org/wells</u> as our work continues. If you have any questions, please call The OS Group at (608) 668-2718 or email them at <u>PFAS@theOSgrp.com</u>.

You can also contact the DNR and DHS with questions about PFAS or the water sample results at the numbers provided below.

Questions about		<u>Contact</u>	<u>Phone</u>	<u>E-mail Address</u>
Soil & Groundwater Testing, Clean Up	DNR	David Rozeboom	715-215-2078	David.Rozeboom@wisconsin.gov
Drinking Water or Private wells	DNR	Kyle Burton	920-360-2112	kyle.burton@wisconsin.gov
Health Concerns	DHS	Curtis Hedman	608-266-6677	Curtis.Hedman@dhs.wisconsin.gov

On behalf of The City of La Crosse *The OS Group, LLC* 

Attachment: Lab report for your well Bottled Water Acknowledgement

Client: Pace Analytical Services, LLC			l	_aboratory II	D: VK08043-0	012	
Description: 215-0				Matrix	x: Aqueous		
Date Sampled:11/03/2020 0935	Project Name	: LACROSSE WELL #	<sup>∉</sup> 23 & 24		1		
Date Received: 11/06/2020	Project Number	·· 10217713					
		. 40217713					
Run Prep Method Analytical Method	Dilution Ar	alysis Date Analyst	Prep Date	Batch			
I SUP SPE PEAS by ID SUP	I II/	18/2020 1355 MIMIN	11/17/2020 103	34 /3/28			
2 SOP SPE PEAS by ID SOP	5 11/	19/2020 1348 IVIIVIIVI	11/1//2020 103	34 /3/28			
Parameter	CAS Number	Analytical Method	Result Q	LOQ	DL	Units	Run
9-chlorohexadecafluoro-3-oxanone-1-sulfonic acid (9CI-PF3ONS	) 756426-58-1	PFAS by ID SOP	ND	7.2	1.8	ng/L	1
11-chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11CI-PF3.	) 763051-92-9	PFAS by ID SOP	ND	7.2	1.8	ng/L	1
1H, 1H, 2H, 2H-perfluorodecane sulfonic acid (8:2 FTS)	39108-34-4	PFAS by ID SOP	ND	7.2	1.8	ng/L	1
1H, 1H, 2H, 2H-perfluorooctane sulfonic acid (6:2 FTS)	27619-97-2	2 PFAS by ID SOP	ND	7.2	1.8	ng/L	1
1H,1H,2H,2H-perfluorododecane sulfonic acid (10:2 FTS)	120226-60-0	) PFAS by ID SOP	ND	7.2	1.8	ng/L	1
1H,1H,2H,2H-perfluorohexane sulfonic acid (4:2 FTS)	757124-72-4	PFAS by ID SOP	ND	7.2	1.8	ng/L	1
Hexafluoropropylene oxide dimer acid (GenX)	13252-13-6	6 PFAS by ID SOP	ND	7.2	1.8	ng/L	1
4,8-dioxa-3H-perfluorononanoic acid (ADONA)	919005-14-4	PFAS by ID SOP	ND	7.2	1.8	ng/L	1
N-ethylperfluoro-1-octanesulfonamide (EtFOSA)	4151-50-2	PFAS by ID SOP	ND	7.2	1.8	ng/L	1
N-ethylperfluoro-1-octanesulfonamidoacetic acid (EtFOSAA)	2991-50-6	PFAS by ID SOP	ND	7.2	1.8	ng/L	1
2-N-ethylperfluoro-1-octanesulfonamido-ethanol (EtFOSE)	1691-99-2	PFAS by ID SOP	ND	7.2	1.8	ng/L	1
N-methylperfluoro-1-octanesulfonamide (MeFOSA)	31506-32-8	B PFAS by ID SOP	ND	14	3.6	ng/L	1
N-methylperfluoro-1-octanesulfonamidoacetic acid (MeFOSAA)	2355-31-9	PFAS by ID SOP	ND	7.2	1.8	ng/L	1
2-N-methylperfluoro-1-octanesulfonamido-ethanol (MeFOSE)	24448-09-7	7 PFAS by ID SOP	ND	7.2	1.8	ng/L	1
Perfluoro-1-butanesulfonic acid (PFBS)	375-73-5	PFAS by ID SOP	120	3.6	0.90	ng/L	1
Perfluoro-1-decanesulfonic acid (PFDS)	335-77-3	PFAS by ID SOP	ND	3.6	0.90	ng/L	1
Perfluoro-1-heptanesulfonic acid (PFHpS)	375-92-8	PFAS by ID SOP	69	3.6	0.90	ng/L	1
Perfluoro-1-nonanesulfonic acid (PFNS)	68259-12-1	PFAS by ID SOP	ND	3.6	0.90	ng/L	1
Perfluoro-1-octanesulfonamide (PFOSA)	754-91-6	PFAS by ID SOP	ND	3.6	0.90	ng/L	1
Perfluoro-1-pentanesulfonic acid (PFPeS)	2706-91-4	PFAS by ID SOP	270	3.6	0.90	ng/L	1
Perfluorododecanesulfonic acid (PFDOS)	79780-39-5	5 PFAS by ID SOP	ND	7.2	1.8	ng/L	1
Perfluorohexanesulfonic acid (PFHxS)	355-46-4	PFAS by ID SOP	2800	18	4.5	ng/L	2
Perfluoro-n-butanoic acid (PFBA)	375-22-4	PFAS by ID SOP	21	3.6	0.90	ng/L	1
Perfluoro-n-decanoic acid (PFDA)	335-76-2	PFAS by ID SOP	ND	3.6	0.90	ng/L	1
Perfluoro-n-dodecanoic acid (PFDoA)	307-55-1	PFAS by ID SOP	ND	3.6	0.90	ng/L	1
Perfluoro-n-heptanoic acid (PFHpA)	375-85-9	PFAS by ID SOP	17	3.6	0.90	ng/L	1
Perfluoro-n-hexadecanoic acid (PFHxDA)	67905-19-5	5 PFAS by ID SOP	ND	7.2	1.8	ng/L	1
Perfluoro-n-hexanoic acid (PFHxA)	307-24-4	PFAS by ID SOP	86	3.6	0.90	ng/L	1
Perfluoro-n-nonanoic acid (PFNA)	375-95-1	PFAS by ID SOP	ND	3.6	0.90	ng/L	1
Perfluoro-n-octadecanoic acid (PFODA)	16517-11-6	PFAS by ID SOP	ND	7.2	1.8	ng/L	1
Perfluoro-n-octanoic acid (PFOA)	335-67-1	PFAS by ID SOP	110	3.6	0.90	ng/L	1
Perfluoro-n-pentanoic acid (PFPeA)	2706-90-3	PFAS by ID SOP	18	3.6	0.90	ng/L	1
Perfluoro-n-tetradecanoic acid (PFTeDA)	376-06-7	PFAS by ID SOP	ND	3.6	0.90	ng/L	1
Perfluoro-n-tridecanoic acid (PFTrDA)	72629-94-8	B PFAS by ID SOP	ND	3.6	0.90	ng/L	1
Perfluoro-n-undecanoic acid (PFUdA)	2058-94-8	PFAS by ID SOP	ND	3.6	0.90	ng/L	1
Perfluorooctanesulfonic acid (PFOS)	1763-23-1	PFAS by ID SOP	210	3.6	0.90	ng/L	1
						-	
Surrogate O % R	RUN I ACCE Recoverv I	epiance Rur imits 0 % Rec	12 Acceptant	ce			
13C2 4·2ETS	103 2	5-150 9	5 25-150				

5	<b>a</b> /0/10	,,			Ennito
13C2_4:2FTS		103	25-150	95	25-150
13C2_6:2FTS		104	25-150	100	25-150
13C2_8:2FTS		90	25-150	102	25-150
13C2_PFDoA		90	25-150	88	25-150
13C2_PFHxDA		87	25-150	98	25-150
LOQ = Limit of Quantitation	B = Detected in the method blank	E = Quantita	ation of compound	exceeded the calibration	range DL = Detection Limit
ND = Not detected at or above the DL	N = Recovery is out of criteria	P = The RP	D between two GC	columns exceeds 40%	$J = Estimated result < LOQ \text{ and } \geq DL$
H = Out of holding time	vv = Reported on wet weight basis				

Project Number: 40217713

Client: Pace Analytical Services, LLC Description: 215-0 Date Sampled:11/03/2020 0935 Date Received: 11/06/2020

Project Name: LACROSSE WELL #23 & 24

Laboratory ID: VK08043-012

Matrix: Aqueous

Surrogato	0	Run 1 A	Acceptance	0	Run 2 A	cceptance
	Q	% Recovery	Limits	Q	% Recovery	Limits
13C2_PFTeDA		86	25-150		91	25-150
13C3_PFBS		91	25-150		90	25-150
13C3_PFHxS		77	25-150		86	25-150
13C3-HFPO-DA		99	25-150		94	25-150
13C4_PFBA		93	25-150		96	25-150
13C4_PFHpA		85	25-150		91	25-150
13C5_PFHxA		91	25-150		88	25-150
13C5_PFPeA		101	25-150		91	25-150
13C6_PFDA		84	25-150		85	25-150
13C7_PFUdA		85	25-150		94	25-150
13C8_PFOA		97	25-150		93	25-150
13C8_PFOS		84	25-150		87	25-150
13C8_PFOSA		98	10-150		101	10-150
13C9_PFNA		95	25-150		99	25-150
d-EtFOSA		84	10-150		94	10-150
d5-EtFOSAA		92	25-150		89	25-150
d9-EtFOSE		91	10-150		98	10-150
d-MeFOSA		81	10-150		90	10-150
d3-MeFOSAA		89	25-150		95	25-150
d7-MeFOSE		85	10-150		93	10-150

LOQ = Limit of QuantitationB = Detected in the method blankE = Quantitation of compound exceeded the calibration rangeDL = Detection LimitND = Not detected at or above the DLN = Recovery is out of criteriaP = The RPD between two GC columns exceeds 40%J = Estimated result < LOQ and ≥ DL</td>H = Out of holding timeW = Reported on wet weight basis

# BOTTLED WATER ACKNOWLEDGEMENT

2521 2nd Avenue East, La Crosse, WI 54603

If you desire to accept the bottled water delivery, please complete and sign this form and return it to The OS Group at <u>PFAS@TheOSgrp.com</u> or mail to 444 21<sup>st</sup> St. S, La Crosse, WI 54601. You may also complete this form electronically on line at <u>www.cityoflacrosse.org/bottledwater</u>. Call 608-668-2718 with any question you may have.

As pre-caution for the protection of human health, the City of La Crosse (The City) will provide, on a temporary basis, bottled water for drinking, cooking and toothbrushing purposes at the above referenced address. The water will be delivered to your home or business by a commercial water delivery service. At the City's cost, a dispenser / cooler and regular deliveries of 5-gallon containers of water will be provided. The City reserves the right to dictate the conditions of delivery, such as minimum and maximum number of containers per delivery, frequency and timing of deliveries. The City reserves the right to periodically review whether The City should continue to provide bottled water, considering factors such as State and Federal standards and guidance, evolving knowledge and understanding of the sources, cause and responsibility for the contamination, new or reinterpreted test results, and the availability of more permanent or costeffective sources of water for the above purposes. The City of La Crosse makes no warranty or representation regarding the suitability of the bottled water beyond those made by the commercial water delivery service.

All reusable or returnable equipment and supplies, such as the containers and cooler/dispenser, are the property of the commercial water delivery service or the City of La Crosse. By signing below, the Occupant of the above referenced property acknowledges that all reusable or returnable equipment and supplies shall be returned to the commercial water delivery service or the City of La Crosse upon request. The Occupant agrees to provide reasonable access for delivery of bottled water and pick up of reusable or returnable equipment and supplies. Occupant(s) acknowledges that they may be required to sign an agreement with the commercial water delivery service as a condition of receiving bottled water.

Check ownership:

\_\_\_\_\_ Owner-Occupant Occupant Only

Number of Occupants: \_\_\_\_\_

Signed:	 Dated:	
-		

Printed Name: \_\_\_\_\_



444 21<sup>st</sup> Street South  $\cdot$  La Crosse, Wisconsin  $\cdot$  54601

December 1, 2020

2525 2nd Avenue East La Crosse, WI 54603

Subject: Private Well Sampling Results 2525 2nd Avenue East, La Crosse, WI 54603 Tax parcel # 4-218-0 Sample ID # 218-0

#### Dear

We have received and reviewed the test results for the sample collected on November 2, 2020 at the above address. Some PFAS compounds were found at levels <u>above</u> the Department of Health Services (DHS) levels recommended for protecting health. These levels are called the "Recommended Public Health Standard" in the table below. The levels found in your well are called the "Sample Result" in the table below.

Because some of the levels are above the recommended Public Health Standard, the City is offering to provide bottled water delivered to your home for drinking, cooking, and brushing your teeth. There will be no cost to you for the bottled water. Please complete the attached form and mail it to The OS Group to make arrangements for having a water dispenser and bottles delivered to your home. Call 608-668-2718 or email <u>PFAS@theOSgrp.com</u>. You may also complete this form on line at <u>www.cityoflacrosse.org/bottledwater</u>

The following table summarizes the test results from the sample. **Bolded results** are above a current recommended level intended to protect your health according to the Department of Health Services (DHS).

Private Well Sampling Results for 2525 2nd Avenue East, La Crosse, WI 54603 Tax Parcel # 4-218-0 December 1, 2020

#### Sample Results

Compound	Sample Result (unit)	Recomm Public H Standard	ended lealth (unit <sup>e</sup> )
N-Ethyl Perfluorooctane sulfonamide (NEtFOSA) CAS # 4151-50-2	Not Detected	20 ppt <sup>a,b</sup>	) ppt unds I 6
N-Ethyl perfluorooctane sulfonamidoacetic acid (NEtFOSAA) CAS # 2991-50-6	Not Detected	20 ppt <sup>a,b</sup>	it is 20 compo <i>il</i> of al
N-Ethyl perfluorooctane sulfonamidoethanol (NEtFOSE) CAS # 1691-99-2	Not Detected	20 ppt <sup>a,b</sup>	ed lim ese 6 c ed totc
Perfluorooctane sulfonamide (FOSA) CAS # 754-91-6	Not Detected	20 ppt <sup>a,b</sup>	mend of the
Perfluorooctanoic acid (PFOA) CAS # 335-67-1	67 ppt	20 ppt <sup>a,b</sup>	recom ny <i>on</i> e the <i>c</i> c
Perfluorooctanesulfonic acid (PFOS) CAS # 1763-23-1	580 ppt	20 ppt <sup>a,b</sup>	The for a or
Hexafluoropropylene oxide dimer acid (HPFO-DA; GenX) CAS # 13252-13-6	Not Detected		300 ppt <sup>a</sup>
Perfluorobutanesulfonic acid (PFBS) CAS # 375-73-5	82 ppt	450	),000 ppt <sup>a</sup>
Perfluorohexanesulfonic acid (PFHxS) CAS # 355-46-4	1800 ppt		40 ppt <sup>a</sup>
Perfluorobutanoic acid (PFBA) CAS # 375-22-4	17 ppt	10	),000 ppt <sup>a</sup>
Perfluorodecanoic acid (PFDA) CAS # 335-76-2	Not Detected		300 ppt <sup>a</sup>
Perfluorododecanoic acid (PFDoA) CAS # 307-55-1	Not Detected		500 ppt <sup>a</sup>
Perfluorohexanoic acid (PFHxA) CAS # 307-24-4	45 ppt	150	),000 ppt <sup>a</sup>
Perfluorononanoic acid (PFNA) CAS # 375-95-1	Not Detected		30 ppt <sup>a</sup>
Perfluorotetradecanoic acid (PFTeA) CAS # 376-06-7	Not Detected	10	),000 ppt <sup>a</sup>
Perfluoroundecanoic acid (PFUnA) CAS # 2058-94-8	Not Detected	3	3,000 ppt <sup>a</sup>
4,8-Dioxa-3H-perfluorononanoic acid (DONA) CAS # 919005-14-4	Not Detected	3	3,000 ppt <sup>a</sup>
Perfluorooctadecanoic acid (PFODA) CAS # 16517-11-6	Not Detected	400	),000 ppt <sup>a</sup>

Private Well Sampling Results for 2525 2nd Avenue East, La Crosse, WI 54603 Tax Parcel # 4-218-0 December 1, 2020

Perfluoro-1-heptanesulfonic acid (PFHpS) CAS # 375-92-8	80 ppt	None Established <sup>c</sup>				
Perfluoro-1-pentanesulfonic acid (PFPeS) CAS # 2706-91-4	150 ppt	None Established <sup>c</sup>				
Perfluoro-n-heptanoic acid (PFHpA) CAS # 375-85-9	8.9 ppt	None Established <sup>c</sup>				
Perfluoro-n-pentanoic acid (PFPeA) CAS #2706-90-3	13 ppt	None Established <sup>c</sup>				
<sup>a</sup> Public health enforcement standard (ES) recommended by DHS. <sup>b</sup> DHS recommends a combined enforcement standard of 20 ng/L and combined preventive action limit of 2 ng/L for FOSA, NEt-FOSE, NEt-FOSA, NetFOSAA, PFOS, and PFOA. <sup>c</sup> A current standard is not available; the compound is currently under review by DHS for potential public health standard recommendation. <sup>d</sup> Public health enforcement standard (ES) in NR 140. Wisconsin Administrative Code.						

<sup>e</sup> Units: Parts per trillion (ppt) = nanograms of substance per liter of water (ng/L)

<sup>BL</sup> Detected in the method blank. Possible lab contaminant.

As required by law, we will be submitting these results to the Department of Natural Resources (DNR). The DNR may consult with the Department of Health Services (DHS) about these test results. DHS may review all PFAS tests and follow-up with you directly if any actions are recommended to protect your health.

Thank you for your patience and assistance with our investigation. We will provide updates on the project at <u>https://www.cityoflacrosse.org/wells</u> as our work continues. If you have any questions, please call The OS Group at (608) 668-2718 or email them at <u>PFAS@theOSgrp.com</u>.

You can also contact the DNR and DHS with questions about PFAS or the water sample results at the numbers provided below.

Questions about		<u>Contact</u>	<u>Phone</u>	E-mail Address
Soil & Groundwater Testing, Clean Up	DNR	David Rozeboom	715-215-2078	David.Rozeboom@wisconsin.gov
Drinking Water or Private wells	DNR	Kyle Burton	920-360-2112	kyle.burton@wisconsin.gov
Health Concerns	DHS	Curtis Hedman	608-266-6677	Curtis.Hedman@dhs.wisconsin.gov

On behalf of The City of La Crosse *The OS Group, LLC* 

Attachment: Lab report for your well Bottled Water Acknowledgement

Client: Pace Analytical Services, LLC				Laboratory I	D: VK08043-0	004	
Description: 218-0				Matrix	k: Aqueous		
Date Sampled:11/02/2020 1220	Project Name	: LACROSSE WELL #	#23 & 24				
Date Received: 11/06/2020	oiect Number	: 40217713					
Run Prep Method Analytical Method E	Dilution An	alysis Date Analyst	Prep Date	Batch			
1 SOP SPE PEAS by ID SOP	5 11/	19/2020 1047 IVIIVIIVI 19/2020 1220 MMMM	11/16/2020 11	25 73019			
	5 11/		11/10/2020 1	25 7 50 1 9			
Parameter	CAS Number	Analytical Method	Result Q	LOQ	DL	Units	Run
9-chlorohexadecafluoro-3-oxanone-1-sulfonic acid (9CI-PF3ONS)	756426-58-1	PFAS by ID SOP	ND	7.6	1.9	ng/L	1
11-chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3)	763051-92-9	PFAS by ID SOP	ND	7.6	1.9	ng/L	1
1H, 1H, 2H, 2H-perfluorodecane sulfonic acid (8:2 FTS)	39108-34-4	PFAS by ID SOP	ND	7.6	1.9	ng/L	1
1H, 1H, 2H, 2H-perfluorooctane sulfonic acid (6:2 FTS)	27619-97-2	PFAS by ID SOP	ND	7.6	1.9	ng/L	1
1H,1H,2H,2H-perfluorododecane sulfonic acid (10:2 FTS)	120226-60-0	PFAS by ID SOP	ND	7.6	1.9	ng/L	1
1H,1H,2H,2H-perfluorohexane sulfonic acid (4:2 FTS)	757124-72-4	PFAS by ID SOP	ND	7.6	1.9	ng/L	1
Hexafluoropropylene oxide dimer acid (GenX)	13252-13-6	PFAS by ID SOP	ND	7.6	1.9	ng/L	1
4,8-dioxa-3H-perfluorononanoic acid (ADONA)	919005-14-4	PFAS by ID SOP	ND	7.6	1.9	ng/L	1
N-ethylperfluoro-1-octanesulfonamide (EtFOSA)	4151-50-2	PFAS by ID SOP	ND	7.6	1.9	ng/L	1
N-ethylperfluoro-1-octanesulfonamidoacetic acid (EtFOSAA)	2991-50-6	PFAS by ID SOP	ND	7.6	1.9	ng/L	1
2-N-ethylperfluoro-1-octanesulfonamido-ethanol (EtFOSE)	1691-99-2	PFAS by ID SOP	ND	7.6	1.9	ng/L	1
N-methylperfluoro-1-octanesulfonamide (MeFOSA)	31506-32-8	PFAS by ID SOP	ND	15	3.8	ng/L	1
N-methylperfluoro-1-octanesulfonamidoacetic acid (MeFOSAA)	2355-31-9	PFAS by ID SOP	ND	7.6	1.9	ng/L	1
2-N-methylperfluoro-1-octanesulfonamido-ethanol (MeFOSE)	24448-09-7	PFAS by ID SOP	ND	7.6	1.9	ng/L	1
Perfluoro-1-butanesulfonic acid (PFBS)	375-73-5	PFAS by ID SOP	82	3.8	0.95	ng/L	1
Perfluoro-1-decanesulfonic acid (PFDS)	335-77-3	PFAS by ID SOP	ND	3.8	0.95	ng/L	1
Perfluoro-1-heptanesulfonic acid (PFHpS)	375-92-8	PFAS by ID SOP	80	3.8	0.95	ng/L	1
Perfluoro-1-nonanesulfonic acid (PFNS)	68259-12-1	PFAS by ID SOP	ND	3.8	0.95	ng/L	1
Perfluoro-1-octanesulfonamide (PFOSA)	754-91-6	PFAS by ID SOP	ND	3.8	0.95	ng/L	1
Perfluoro-1-pentanesulfonic acid (PFPeS)	2706-91-4	PFAS by ID SOP	150	3.8	0.95	ng/L	1
Perfluorododecanesulfonic acid (PFDOS)	79780-39-5	PFAS by ID SOP	ND	7.6	1.9	ng/L	1
Perfluorohexanesulfonic acid (PFHxS)	355-46-4	PFAS by ID SOP	1800	19	4.7	ng/L	2
Perfluoro-n-butanoic acid (PFBA)	375-22-4	PFAS by ID SOP	17	3.8	0.95	ng/L	1
Perfluoro-n-decanoic acid (PFDA)	335-76-2	PFAS by ID SOP	ND	3.8	0.95	ng/L	1
Perfluoro-n-dodecanoic acid (PFDoA)	307-55-1	PFAS by ID SOP	ND	3.8	0.95	ng/L	1
Perfluoro-n-heptanoic acid (PFHpA)	375-85-9	PFAS by ID SOP	8.9	3.8	0.95	ng/L	1
Perfluoro-n-hexadecanoic acid (PFHxDA)	67905-19-5	PFAS by ID SOP	ND	7.6	1.9	ng/L	1
Perfluoro-n-hexanoic acid (PFHxA)	307-24-4	PFAS by ID SOP	45	3.8	0.95	ng/L	1
Perfluoro-n-nonanoic acid (PFNA)	375-95-1	PFAS by ID SOP	ND	3.8	0.95	ng/L	1
Perfluoro-n-octadecanoic acid (PFODA)	16517-11-6	PFAS by ID SOP	ND	7.6	1.9	ng/L	1
Perfluoro-n-octanoic acid (PFOA)	335-67-1	PFAS by ID SOP	67	3.8	0.95	ng/L	1
Perfluoro-n-pentanoic acid (PFPeA)	2706-90-3	PFAS by ID SOP	13	3.8	0.95	ng/L	1
Perfluoro-n-tetradecanoic acid (PFTeDA)	376-06-7	PFAS by ID SOP	ND	3.8	0.95	ng/L	1
Perfluoro-n-tridecanoic acid (PFTrDA)	72629-94-8	PFAS by ID SOP	ND	3.8	0.95	ng/L	1
Perfluoro-n-undecanoic acid (PFUdA)	2058-94-8	PFAS by ID SOP	ND	3.8	0.95	ng/L	1
Perfluorooctanesulfonic acid (PFOS)	1763-23-1	PFAS by ID SOP	580	3.8	0.95	ng/L	1
R	un 1 Acce	eptance Rur	12 Acceptar	nce			
Surrogate Q % Re	covery L	imits Q % Rec	overy Limits	S			
13C2_4:2FTS	91 2	5-150 1	11 25-15	0			

1002_1.2110		<i>,</i> 1	20 100		20 100
13C2_6:2FTS		89	25-150	113	25-150
13C2_8:2FTS		77	25-150	95	25-150
13C2_PFDoA		83	25-150	95	25-150
13C2_PFHxDA		99	25-150	94	25-150
LOQ = Limit of Quantitation	B = Detected in the method blank	E = Quantitati	on of compound exceeded th	ne calibration rai	nge DL = Detection Limit
ND = Not detected at or above the DL	N = Recovery is out of criteria	P = The RPD	between two GC columns ex	ceeds 40%	J = Estimated result < LOQ and $\geq$ DL
H = Out of holding time	W = Reported on wet weight basis				

Project Number: 40217713

Client: Pace Analytical Services, LLC Description: 218-0 Date Sampled:11/02/2020 1220 Date Received: 11/06/2020

Project Name: LACROSSE WELL #23 & 24

Laboratory ID: VK08043-004

Matrix: Aqueous

		_				
Surrogate	0	Run 1 A % Recovery	cceptance	0	Run 2 Ac % Recovery	cceptance
13C2_PFTeDA	~	85	25-150	~	90	25-150
13C3_PFBS		93	25-150		88	25-150
13C3_PFHxS		78	25-150		89	25-150
13C3-HFPO-DA		109	25-150		101	25-150
13C4_PFBA		97	25-150		98	25-150
13C4_PFHpA		97	25-150		93	25-150
13C5_PFHxA		97	25-150		100	25-150
13C5_PFPeA		96	25-150		98	25-150
13C6_PFDA		82	25-150		96	25-150
13C7_PFUdA		88	25-150		93	25-150
13C8_PFOA		96	25-150		96	25-150
13C8_PFOS		82	25-150		84	25-150
13C8_PFOSA		91	10-150		106	10-150
13C9_PFNA		98	25-150		94	25-150
d-EtFOSA		81	10-150		103	10-150
d5-EtFOSAA		82	25-150		101	25-150
d9-EtFOSE		82	10-150		101	10-150
d-MeFOSA		82	10-150		94	10-150
d3-MeFOSAA		91	25-150		95	25-150
d7-MeFOSE		90	10-150		98	10-150

LOQ = Limit of QuantitationB = Detected in the method blankE = Quantitation of compound exceeded the calibration rangeDL = Detection LimitND = Not detected at or above the DLN = Recovery is out of criteriaP = The RPD between two GC columns exceeds 40%J = Estimated result < LOQ and ≥ DL</td>H = Out of holding timeW = Reported on wet weight basis

# BOTTLED WATER ACKNOWLEDGEMENT

2525 2nd Avenue East, La Crosse, WI 54603

If you desire to accept the bottled water delivery, please complete and sign this form and return it to The OS Group at <u>PFAS@TheOSgrp.com</u> or mail to 444 21<sup>st</sup> St. S, La Crosse, WI 54601. You may also complete this form electronically on line at <u>www.cityoflacrosse.org/bottledwater</u>. Call 608-668-2718 with any question you may have.

As pre-caution for the protection of human health, the City of La Crosse (The City) will provide, on a temporary basis, bottled water for drinking, cooking and toothbrushing purposes at the above referenced address. The water will be delivered to your home or business by a commercial water delivery service. At the City's cost, a dispenser / cooler and regular deliveries of 5-gallon containers of water will be provided. The City reserves the right to dictate the conditions of delivery, such as minimum and maximum number of containers per delivery, frequency and timing of deliveries. The City reserves the right to periodically review whether The City should continue to provide bottled water, considering factors such as State and Federal standards and guidance, evolving knowledge and understanding of the sources, cause and responsibility for the contamination, new or reinterpreted test results, and the availability of more permanent or costeffective sources of water for the above purposes. The City of La Crosse makes no warranty or representation regarding the suitability of the bottled water beyond those made by the commercial water delivery service.

All reusable or returnable equipment and supplies, such as the containers and cooler/dispenser, are the property of the commercial water delivery service or the City of La Crosse. By signing below, the Occupant of the above referenced property acknowledges that all reusable or returnable equipment and supplies shall be returned to the commercial water delivery service or the City of La Crosse upon request. The Occupant agrees to provide reasonable access for delivery of bottled water and pick up of reusable or returnable equipment and supplies. Occupant(s) acknowledges that they may be required to sign an agreement with the commercial water delivery service as a condition of receiving bottled water.

Check ownership:

\_\_\_\_\_ Owner-Occupant Occupant Only

Number of Occupants: \_\_\_\_\_

Signed:	 Dated:	
-		

Printed Name: \_\_\_\_\_



444 21st Street South  $\cdot$  La Crosse, Wisconsin  $\cdot$  54601

December 1, 2020

2529 2nd Avenue East La Crosse, WI 54603

Subject: Private Well Sampling Results 2529 2nd Avenue East, La Crosse, WI 54603 Tax parcel # 4-219-0 Sample ID # 219-0

#### Dear :

We have received and reviewed the test results for the sample collected on November 3, 2020 at the above address. Some PFAS compounds were found at levels <u>above</u> the Department of Health Services (DHS) levels recommended for protecting health. These levels are called the "Recommended Public Health Standard" in the table below. The levels found in your well are called the "Sample Result" in the table below.

Because some of the levels are above the recommended Public Health Standard, the City is offering to provide bottled water delivered to your home for drinking, cooking, and brushing your teeth. There will be no cost to you for the bottled water. Please complete the attached form and mail it to The OS Group to make arrangements for having a water dispenser and bottles delivered to your home. Call 608-668-2718 or email <u>PFAS@theOSgrp.com</u>. You may also complete this form on line at <u>www.cityoflacrosse.org/bottledwater</u>

The following table summarizes the test results from the sample. **Bolded results** are above a current recommended level intended to protect your health according to the Department of Health Services (DHS).

Private Well Sampling Results for 2529 2nd Avenue East, La Crosse, WI 54603 Tax Parcel # 4-219-0 December 1, 2020

#### Sample Results

Compound	Sample Result (unit)	Recomm Public H Standard	ended lealth (unit <sup>e</sup> )
N-Ethyl Perfluorooctane sulfonamide (NEtFOSA) CAS # 4151-50-2	Not Detected	20 ppt <sup>a,b</sup>	) ppt unds I 6
N-Ethyl perfluorooctane sulfonamidoacetic acid (NEtFOSAA) CAS # 2991-50-6	Not Detected	20 ppt <sup>a,b</sup>	it is 20 compo <i>il</i> of al
N-Ethyl perfluorooctane sulfonamidoethanol (NEtFOSE) CAS # 1691-99-2	Not Detected	20 ppt <sup>a,b</sup>	ed lim ese 6 c ed totc
Perfluorooctane sulfonamide (FOSA) CAS # 754-91-6	Not Detected	20 ppt <sup>a,b</sup>	mend of the mbine
Perfluorooctanoic acid (PFOA) CAS # 335-67-1	12 ppt	20 ppt <sup>a,b</sup>	recom 1y <i>one</i> the <i>cc</i>
Perfluorooctanesulfonic acid (PFOS) CAS # 1763-23-1	58 ppt	20 ppt <sup>a,b</sup>	The for al
Hexafluoropropylene oxide dimer acid (HPFO-DA; GenX) CAS # 13252-13-6	Not Detected		300 ppt <sup>a</sup>
Perfluorobutanesulfonic acid (PFBS) CAS # 375-73-5	21 ppt	450	),000 ppt <sup>a</sup>
Perfluorohexanesulfonic acid (PFHxS) CAS # 355-46-4	360 ppt		40 ppt <sup>a</sup>
Perfluorobutanoic acid (PFBA) CAS # 375-22-4	18 ppt	10	),000 ppt <sup>a</sup>
Perfluorodecanoic acid (PFDA) CAS # 335-76-2	Not Detected		300 ppt <sup>a</sup>
Perfluorododecanoic acid (PFDoA) CAS # 307-55-1	Not Detected		500 ppt <sup>a</sup>
Perfluorohexanoic acid (PFHxA) CAS # 307-24-4	8.9 ppt	150	),000 ppt <sup>a</sup>
Perfluorononanoic acid (PFNA) CAS # 375-95-1	Not Detected		30 ppt <sup>a</sup>
Perfluorotetradecanoic acid (PFTeA) CAS # 376-06-7	Not Detected	10	),000 ppt <sup>a</sup>
Perfluoroundecanoic acid (PFUnA) CAS # 2058-94-8	Not Detected	3	3,000 ppt <sup>a</sup>
4,8-Dioxa-3H-perfluorononanoic acid (DONA) CAS # 919005-14-4	Not Detected	3	3,000 ppt <sup>a</sup>
Perfluorooctadecanoic acid (PFODA) CAS # 16517-11-6	Not Detected	400	),000 ppt <sup>a</sup>

Private Well Sampling Results for 2529 2nd Avenue East, La Crosse, WI 54603 Tax Parcel # 4-219-0 December 1, 2020

Perfluoro-1-heptanesulfonic acid (PFHpS) CAS # 375-92-8	6.8 ppt	None Established <sup>c</sup>
Perfluoro-1-pentanesulfonic acid (PFPeS) CAS # 2706-91-4	37 ppt	None Established <sup>c</sup>
Perfluoro-n-heptanoic acid (PFHpA) CAS # 375-85-9	3.6 ppt	None Established <sup>c</sup>
Perfluoro-n-pentanoic acid (PFPeA) CAS #2706-90-3	5.0 ppt	None Established <sup>c</sup>
<sup>a</sup> Public health enforcement standard (ES) recommended by DHS.	·	
<sup>b</sup> DHS recommends a combined enforcement standard of 20 ng/L and	combined preventive	action limit of 2 ng/L for
FOSA, NEt-FOSE, NEt-FOSA, NetFOSAA, PFOS, and PFOA.		
<sup>c</sup> A current standard is not available; the compound is currently under standard recommendation.	review by DHS for po	tential public health
<sup>d</sup> Public health enforcement standard (ES) in NR 140. Wisconsin Admin	istrative Code.	

<sup>e</sup> Public health enforcement standard (ES) in NR 140, Wisconsin Administrative Code

<sup>e</sup> Units: Parts per trillion (ppt) = nanograms of substance per liter of water (ng/L)

<sup>BL</sup> Detected in the method blank. Possible lab contaminant.

As required by law, we will be submitting these results to the Department of Natural Resources (DNR). The DNR may consult with the Department of Health Services (DHS) about these test results. DHS may review all PFAS tests and follow-up with you directly if any actions are recommended to protect your health.

Thank you for your patience and assistance with our investigation. We will provide updates on the project at <u>https://www.cityoflacrosse.org/wells</u> as our work continues. If you have any questions, please call The OS Group at (608) 668-2718 or email them at <u>PFAS@theOSgrp.com</u>.

You can also contact the DNR and DHS with questions about PFAS or the water sample results at the numbers provided below.

Questions about		<u>Contact</u>	<u>Phone</u>	E-mail Address
Soil & Groundwater Testing, Clean Up	DNR	David Rozeboom	715-215-2078	David.Rozeboom@wisconsin.gov
Drinking Water or Private wells	DNR	Kyle Burton	920-360-2112	kyle.burton@wisconsin.gov
Health Concerns	DHS	Curtis Hedman	608-266-6677	Curtis.Hedman@dhs.wisconsin.gov

On behalf of The City of La Crosse *The OS Group, LLC* 

Attachment: Lab report for your well Bottled Water Acknowledgement

Client: Pace Analytical Services, LLC				Laboratory ID	D: VK08043-0	)13	
Description: 219-0		Matrix	: Aqueous				
Date Sampled:11/03/2020 0950	Project Nar	me: LACROSSE WELL #	23 & 24		·		
Date Received: 11/06/2020	niect Numł	ner <sup>.</sup> 40217713					
	Jeer Name	0217713					
RunPrep MethodAnalytical MethodD1SOP SPEPFAS by ID SOP	ilution 1 1 1	Analysis Date Analyst 11/19/2020 1359 MMM	Prep Date 11/17/2020 10	Batch 34 73728			
Parameter	C/ Numb	AS Analytical Der Method	Result Q	LOQ	DL	Units	Run
9-chlorohexadecafluoro-3-oxanone-1-sulfonic acid (9CI-PF3ONS)	756426-5	8-1 PFAS by ID SOP	ND	7.0	1.7	ng/L	1
11-chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11CI-PF3)	763051-9	2-9 PFAS by ID SOP	ND	7.0	1.7	ng/L	1
1H, 1H, 2H, 2H-perfluorodecane sulfonic acid (8:2 FTS)	39108-3	4-4 PFAS by ID SOP	ND	7.0	1.7	ng/L	1
1H, 1H, 2H, 2H-perfluorooctane sulfonic acid (6:2 FTS)	27619-9	7-2 PFAS by ID SOP	ND	7.0	1.7	ng/L	1
1H,1H,2H,2H-perfluorododecane sulfonic acid (10:2 FTS)	120226-6	0-0 PFAS by ID SOP	ND	7.0	1.7	ng/L	1
1H,1H,2H,2H-perfluorohexane sulfonic acid (4:2 FTS)	757124-7	2-4 PFAS by ID SOP	ND	7.0	1.7	ng/L	1
Hexafluoropropylene oxide dimer acid (GenX)	13252-1	3-6 PFAS by ID SOP	ND	7.0	1.7	ng/L	1
4,8-dioxa-3H-perfluorononanoic acid (ADONA)	919005-1	4-4 PFAS by ID SOP	ND	7.0	1.7	ng/L	1
N-ethylperfluoro-1-octanesulfonamide (EtFOSA)	4151-50	0-2 PFAS by ID SOP	ND	7.0	1.7	ng/L	1
N-ethylperfluoro-1-octanesulfonamidoacetic acid (EtFOSAA)	2991-50	0-6 PFAS by ID SOP	ND	7.0	1.7	ng/L	1
2-N-ethylperfluoro-1-octanesulfonamido-ethanol (EtFOSE)	1691-99	9-2 PFAS by ID SOP	ND	7.0	1.7	ng/L	1
N-methylperfluoro-1-octanesulfonamide (MeFOSA)	31506-3	2-8 PFAS by ID SOP	ND	14	3.5	ng/L	1
N-methylperfluoro-1-octanesulfonamidoacetic acid (MeFOSAA)	2355-3	1-9 PFAS by ID SOP	ND	7.0	1.7	ng/L	1
2-N-methylperfluoro-1-octanesulfonamido-ethanol (MeFOSE)	24448-0	9-7 PFAS by ID SOP	ND	7.0	1.7	ng/L	1
Perfluoro-1-butanesulfonic acid (PFBS)	375-73	3-5 PFAS by ID SOP	21	3.5	0.87	ng/L	1
Perfluoro-1-decanesulfonic acid (PFDS)	335-7	7-3 PFAS by ID SOP	ND	3.5	0.87	ng/L	1
Perfluoro-1-heptanesulfonic acid (PFHpS)	375-92	2-8 PFAS by ID SOP	6.8	3.5	0.87	ng/L	1
Perfluoro-1-nonanesulfonic acid (PFNS)	68259-1	2-1 PFAS by ID SOP	ND	3.5	0.87	ng/L	1
Perfluoro-1-octanesulfonamide (PFOSA)	754-9	1-6 PFAS by ID SOP	ND	3.5	0.87	ng/L	1
Perfluoro-1-pentanesulfonic acid (PFPeS)	2706-9	1-4 PFAS by ID SOP	37	3.5	0.87	ng/L	1
Perfluorododecanesulfonic acid (PFDOS)	79780-3	9-5 PFAS by ID SOP	ND	7.0	1.7	ng/L	1
Perfluorohexanesulfonic acid (PFHxS)	355-40	6-4 PFAS by ID SOP	360	3.5	0.87	ng/L	1
Perfluoro-n-butanoic acid (PFBA)	375-22	2-4 PFAS by ID SOP	18	3.5	0.87	ng/L	1
Perfluoro-n-decanoic acid (PFDA)	335-70	6-2 PFAS by ID SOP	ND	3.5	0.87	ng/L	1
Perfluoro-n-dodecanoic acid (PFDoA)	307-5	5-1 PFAS by ID SOP	ND	3.5	0.87	ng/L	1
Perfluoro-n-heptanoic acid (PFHpA)	375-8	5-9 PFAS by ID SOP	3.6	3.5	0.87	ng/L	1
Perfluoro-n-hexadecanoic acid (PFHxDA)	67905-1	9-5 PFAS by ID SOP	ND	7.0	1.7	ng/L	1
Perfluoro-n-hexanoic acid (PFHxA)	307-24	4-4 PFAS by ID SOP	8.9	3.5	0.87	ng/L	1
Perfluoro-n-nonanoic acid (PFNA)	375-9	5-1 PFAS by ID SOP	ND	3.5	0.87	ng/L	1
Perfluoro-n-octadecanoic acid (PFODA)	16517-1	1-6 PEAS by ID SOP	ND 12	7.0	1.7	ng/L	1
Periluoro-n-ocianoic acid (PFOA)	335-0	7-1 PFAS by ID SOP	12	3.5	0.87	ng/L	1
Periluoro-n-pentanoic acid (PEPeA)	2706-90	0-3 PFAS by ID SOP	5.0	3.5	0.87	ng/L	1
Perliuoro-n-tetradecanoic acid (PFTeDA)	3/6-00	6-7 PFAS by ID SOP	ND	3.5	0.87	ng/L	1
Perfluero pupdecanoic acid (PETIDA)	2059.0	4-8 PFAS by ID SOP	ND	3.5	0.87	ng/L	1
Perfluoroactanosulfonic acid (PFOGA)	1742 2	2.1 DEAS by ID SOP	ND EQ	3.0	0.87	ng/L	1
Periodiooctanesuitonic acid (PFOS)	1/03-2	3-1 PFAS DY ID SOP	28	3.5	0.87	ng/L	I
Surrogate Q % Re	un 1 Ac covery	cceptance Limits					
13C2_4:2FTS	93	25-150					
13C2_6:2FTS	94	25-150					
13C2_8:2FTS	92	25-150					
13C2_PFDoA	82	25-150					
13C2_PFHxDA	88	25-150					
13C2_PFTeDA	87	25-150					
LOO Limit of Outpatitation D. Detected in the method block	E Ouent't	tion of compound avaarded the	alibration range	Dotostion L'	.:+		
ND = Not detected at or above the DL N = Recovery is out of criteria	P = The RPI	D between two GC columns exceed	anoranon range D eds 40% I	= Detection LIM	nt It < LOQ and > □	L	
H = Out of holding time W = Reported on wet weight basis					·		

Client: Pace Analytical Services, LLC		Laboratory ID: VK08043-013
Description: 219-0		Matrix: Aqueous
Date Sampled:11/03/2020 0950	Project Name: LACROSSE WELL #23 & 24	
Date Received: 11/06/2020	Project Number: 40217713	

Surrogate	Run 1 Ac Q % Recovery	cceptance Limits
13C3_PFBS	87	25-150
13C3_PFHxS	89	25-150
13C3-HFPO-DA	93	25-150
13C4_PFBA	95	25-150
13C4_PFHpA	91	25-150
13C5_PFHxA	97	25-150
13C5_PFPeA	91	25-150
13C6_PFDA	85	25-150
13C7_PFUdA	92	25-150
13C8_PFOA	96	25-150
13C8_PFOS	83	25-150
13C8_PFOSA	96	10-150
13C9_PFNA	97	25-150
d-EtFOSA	83	10-150
d5-EtFOSAA	85	25-150
d9-EtFOSE	92	10-150
d-MeFOSA	81	10-150
d3-MeFOSAA	89	25-150
d7-MeFOSE	83	10-150

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H = Out of holding time	W = Reported on wet weight basis		
ND = Not detected at or above the DL	N = Recovery is out of criteria	P = The RPD between two GC columns exceeds 40%	J = Estimated result < LOQ and $\geq$ DL
LOQ = Limit of Quantitation	B = Detected in the method blank	E = Quantitation of compound exceeded the calibration range	DL = Detection Limit

# BOTTLED WATER ACKNOWLEDGEMENT

2529 2nd Avenue East, La Crosse, WI 54603

If you desire to accept the bottled water delivery, please complete and sign this form and return it to The OS Group at <u>PFAS@TheOSgrp.com</u> or mail to 444 21<sup>st</sup> St. S, La Crosse, WI 54601. You may also complete this form electronically on line at <u>www.cityoflacrosse.org/bottledwater</u>. Call 608-668-2718 with any question you may have.

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All reusable or returnable equipment and supplies, such as the containers and cooler/dispenser, are the property of the commercial water delivery service or the City of La Crosse. By signing below, the Occupant of the above referenced property acknowledges that all reusable or returnable equipment and supplies shall be returned to the commercial water delivery service or the City of La Crosse upon request. The Occupant agrees to provide reasonable access for delivery of bottled water and pick up of reusable or returnable equipment and supplies. Occupant(s) acknowledges that they may be required to sign an agreement with the commercial water delivery service as a condition of receiving bottled water.

Check ownership:

\_\_\_\_\_ Owner-Occupant Occupant Only

Number of Occupants: \_\_\_\_\_

Signed:	Dated:
---------	--------

Printed Name: \_\_\_\_\_



444 21st Street South  $\cdot$  La Crosse, Wisconsin  $\cdot$  54601

December 1, 2020

2531 Second Avenue East La Crosse, WI 54603

Subject: Private Well Sampling Results 2531 Second Avenue East, La Crosse, WI 54603 Tax parcel # 4-220-0 Sample ID # 220-0

Dear :

We have received and reviewed the test results for the sample collected on November 2, 2020 at the above address. Some PFAS compounds were found at levels <u>above</u> the Department of Health Services (DHS) levels recommended for protecting health. These levels are called the "Recommended Public Health Standard" in the table below. The levels found in your well are called the "Sample Result" in the table below.

Because some of the levels are above the recommended Public Health Standard, the City is offering to provide bottled water delivered to your home for drinking, cooking, and brushing your teeth. There will be no cost to you for the bottled water. Please complete the attached form and mail it to The OS Group to make arrangements for having a water dispenser and bottles delivered to your home. Call 608-668-2718 or email <u>PFAS@theOSgrp.com</u>. You may also complete this form on line at <u>www.cityoflacrosse.org/bottledwater</u>

The following table summarizes the test results from the sample. **Bolded results** are above a current recommended level intended to protect your health according to the Department of Health Services (DHS).

Private Well Sampling Results for 2531 Second Avenue East, La Crosse, WI 54603 Tax Parcel # 4-220-0 December 1, 2020

#### Recommended Sample Result Public Health Compound (unit) Standard (unit <sup>e</sup>) N-Ethyl Perfluorooctane sulfonamide (NEtFOSA) for any one of these 6 compounds 20 ppt <sup>a,b</sup> The recommended limit is 20 ppt Not Detected CAS # 4151-50-2 9 all N-Ethyl perfluorooctane sulfonamidoacetic acid (NEtFOSAA) 20 ppt <sup>a,b</sup> of Not Detected CAS # 2991-50-6 the combined total N-Ethyl perfluorooctane sulfonamidoethanol (NEtFOSE) 20 ppt <sup>a,b</sup> Not Detected CAS # 1691-99-2 Perfluorooctane sulfonamide (FOSA) 20 ppt <sup>a,b</sup> Not Detected CAS # 754-91-6 Perfluorooctanoic acid (PFOA) 20 ppt <sup>a,b</sup> 15 ppt CAS # 335-67-1 P Perfluorooctanesulfonic acid (PFOS) 20 ppt <sup>a,b</sup> 100 ppt CAS # 1763-23-1 Hexafluoropropylene oxide dimer acid (HPFO-DA; GenX) Not Detected 300 ppt <sup>a</sup> CAS # 13252-13-6 Perfluorobutanesulfonic acid (PFBS) 450,000 ppt <sup>a</sup> 16 ppt CAS # 375-73-5 Perfluorohexanesulfonic acid (PFHxS) 40 ppt <sup>a</sup> 420 ppt CAS # 355-46-4 Perfluorobutanoic acid (PFBA) 10,000 ppt <sup>a</sup> 17 ppt CAS # 375-22-4 Perfluorodecanoic acid (PFDA) Not Detected 300 ppt <sup>a</sup> CAS # 335-76-2 Perfluorododecanoic acid (PFDoA) 500 ppt <sup>a</sup> Not Detected CAS # 307-55-1 Perfluorohexanoic acid (PFHxA) 150,000 ppt <sup>a</sup> 11 ppt CAS # 307-24-4 Perfluorononanoic acid (PFNA) 30 ppt <sup>a</sup> Not Detected CAS # 375-95-1 Perfluorotetradecanoic acid (PFTeA) Not Detected 10,000 ppt <sup>a</sup> CAS # 376-06-7 Perfluoroundecanoic acid (PFUnA) 3,000 ppt <sup>a</sup> Not Detected CAS # 2058-94-8 4,8-Dioxa-3H-perfluorononanoic acid (DONA) Not Detected 3,000 ppt <sup>a</sup> CAS # 919005-14-4 Perfluorooctadecanoic acid (PFODA) 400,000 ppt <sup>a</sup> Not Detected CAS # 16517-11-6

#### Sample Results

Perfluoro-1-heptanesulfonic acid (PFHpS) CAS # 375-92-8	11 ppt	None Established <sup>c</sup>		
Perfluoro-1-pentanesulfonic acid (PFPeS) CAS # 2706-91-4	30 ppt	None Established <sup>c</sup>		
Perfluoro-n-heptanoic acid (PFHpA) CAS # 375-85-9	5.8 ppt	None Established <sup>c</sup>		
Perfluoro-n-pentanoic acid (PFPeA) CAS #2706-90-3	8.7 ppt	None Established <sup>c</sup>		
<ul> <li><sup>a</sup> Public health enforcement standard (ES) recommended by DHS.</li> <li><sup>b</sup> DHS recommends a combined enforcement standard of 20 ng/L and combined preventive action limit of 2 ng/L for FOSA, NEt-FOSE, NEt-FOSA, NetFOSAA, PFOS, and PFOA.</li> <li><sup>c</sup> A current standard is not available; the compound is currently under review by DHS for potential public health standard recommendation.</li> </ul>				
" Public health enforcement standard (FS) in NR 14(). Wisconsin Administrative Code				

<sup>e</sup> Units: Parts per trillion (ppt) = nanograms of substance per liter of water (ng/L)

<sup>BL</sup> Detected in the method blank. Possible lab contaminant.

As required by law, we will be submitting these results to the Department of Natural Resources (DNR). The DNR may consult with the Department of Health Services (DHS) about these test results. DHS may review all PFAS tests and follow-up with you directly if any actions are recommended to protect your health.

Thank you for your patience and assistance with our investigation. We will provide updates on the project at <u>https://www.cityoflacrosse.org/wells</u> as our work continues. If you have any questions, please call The OS Group at (608) 668-2718 or email them at <u>PFAS@theOSgrp.com</u>.

You can also contact the DNR and DHS with questions about PFAS or the water sample results at the numbers provided below.

Questions about		<u>Contact</u> <u>Phone</u>		<u>E-mail Address</u>		
Soil & Groundwater Testing, Clean Up	DNR	David Rozeboom	715-215-2078	David.Rozeboom@wisconsin.gov		
Drinking Water or Private wells	DNR	Kyle Burton	920-360-2112	kyle.burton@wisconsin.gov		
Health Concerns	DHS	Curtis Hedman	608-266-6677	Curtis.Hedman@dhs.wisconsin.gov		

On behalf of The City of La Crosse *The OS Group, LLC* 

Attachment: Lab report for your well Bottled Water Acknowledgement

Client: Pace Analytical Services, LLC					L	aboratory I	D: VK08043-0	002	
Description: 220-0						Matri	x: Aqueous		
Date Sampled:11/02/2020 1145	Project Na	ame:	LACROSSE WELL #	#23 & 24			·		
Date Received: 11/06/2020	Project Nun	her.	40217713						
	Toject Null	iber.	40217713						
RunPrep MethodAnalytical Method1SOP SPEPFAS by ID SOP	Dilution 1	Ana 11/1	lysis Date Analyst 7/2020 1615 MMM	Prep 11/16/2	Date 020 112	Batch 25 73619			
Parameter	( Num	CAS Iber	Analytical Method	Result	Q	LOQ	DL	Units	Run
9-chlorohexadecafluoro-3-oxanone-1-sulfonic acid (9CI-PF3ONS	5) 756426·	58-1	PFAS by ID SOP	ND		7.4	1.9	ng/L	1
11-chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11CI-PF3.	) 763051-	92-9	PFAS by ID SOP	ND		7.4	1.9	ng/L	1
1H, 1H, 2H, 2H-perfluorodecane sulfonic acid (8:2 FTS)	39108-	34-4	PFAS by ID SOP	ND		7.4	1.9	ng/L	1
1H, 1H, 2H, 2H-perfluorooctane sulfonic acid (6:2 FTS)	27619	97-2	PFAS by ID SOP	ND		7.4	1.9	ng/L	1
1H,1H,2H,2H-perfluorododecane sulfonic acid (10:2 FTS)	120226	60-0	PFAS by ID SOP	ND		7.4	1.9	ng/L	1
1H,1H,2H,2H-perfluorohexane sulfonic acid (4:2 FTS)	757124	72-4	PFAS by ID SOP	ND		7.4	1.9	ng/L	1
Hexafluoropropylene oxide dimer acid (GenX)	13252	13-6	PFAS by ID SOP	ND		7.4	1.9	ng/L	1
4,8-dioxa-3H-perfluorononanoic acid (ADONA)	919005	14-4	PFAS by ID SOP	ND		7.4	1.9	ng/L	1
N-ethylperfluoro-1-octanesulfonamide (EtFOSA)	4151-	50-2	PFAS by ID SOP	ND		7.4	1.9	ng/L	1
N-ethylperfluoro-1-octanesulfonamidoacetic acid (EtFOSAA)	2991-	50-6	PFAS by ID SOP	ND		7.4	1.9	ng/L	1
2-N-ethylperfluoro-1-octanesulfonamido-ethanol (EtFOSE)	1691-	99-2	PFAS by ID SOP	ND		7.4	1.9	ng/L	1
N-methylperfluoro-1-octanesulfonamide (MeFOSA)	31506	32-8	PFAS by ID SOP	ND		15	3.7	ng/L	1
N-methylperfluoro-1-octanesulfonamidoacetic acid (MeFOSAA)	2355-	31-9	PFAS by ID SOP	ND		7.4	1.9	ng/L	1
2-N-methylperfluoro-1-octanesulfonamido-ethanol (MeFOSE)	24448-	09-7	PFAS by ID SOP	ND		7.4	1.9	ng/L	1
Perfluoro-1-butanesulfonic acid (PFBS)	375-	73-5	PFAS by ID SOP	16		3.7	0.93	ng/L	1
Perfluoro-1-decanesulfonic acid (PFDS)	335-	77-3	PFAS by ID SOP	ND		3.7	0.93	ng/L	1
Perfluoro-1-heptanesulfonic acid (PFHpS)	375-	92-8	PFAS by ID SOP	11		3.7	0.93	ng/L	1
Perfluoro-1-nonanesulfonic acid (PFNS)	68259	12-1	PFAS by ID SOP	ND		3.7	0.93	ng/L	1
Perfluoro-1-octanesulfonamide (PFOSA)	754-	91-6	PFAS by ID SOP	ND		3.7	0.93	ng/L	1
Perfluoro-1-pentanesulfonic acid (PFPeS)	2706-	91-4	PFAS by ID SOP	30		3.7	0.93	ng/L	1
Perfluorododecanesulfonic acid (PFDOS)	79780	39-5	PFAS by ID SOP	ND		7.4	1.9	ng/L	1
Perfluorohexanesulfonic acid (PFHxS)	355-	46-4	PFAS by ID SOP	420		3.7	0.93	ng/L	1
Perfluoro-n-butanoic acid (PFBA)	375-	22-4	PFAS by ID SOP	17		3.7	0.93	ng/L	1
Perfluoro-n-decanoic acid (PFDA)	335-	76-2	PFAS by ID SOP	ND		3.7	0.93	ng/L	1
Perfluoro-n-dodecanoic acid (PFDoA)	307-	55-1	PFAS by ID SOP	ND		3.7	0.93	ng/L	1
Perfluoro-n-heptanoic acid (PFHpA)	375-	85-9	PFAS by ID SOP	5.8		3.7	0.93	ng/L	1
Perfluoro-n-hexadecanoic acid (PFHxDA)	67905	19-5	PFAS by ID SOP	ND		7.4	1.9	ng/L	1
Perfluoro-n-hexanoic acid (PFHxA)	307-	24-4	PFAS by ID SOP	11		3.7	0.93	ng/L	1
Perfluoro-n-nonanoic acid (PFNA)	375-	95-1	PFAS by ID SOP	ND		3.7	0.93	ng/L	1
Perfluoro-n-octadecanoic acid (PFODA)	16517	11-6	PFAS by ID SOP	ND		7.4	1.9	ng/L	1
Perfluoro-n-octanoic acid (PFOA)	335-	67-1	PFAS by ID SOP	15		3.7	0.93	ng/L	1
Perfluoro-n-pentanoic acid (PFPeA)	2706-	90-3	PFAS by ID SOP	8.7		3.7	0.93	ng/L	1
Perfluoro-n-tetradecanoic acid (PFTeDA)	376-	06-7	PFAS by ID SOP	ND		3.7	0.93	ng/L	1
Perfluoro-n-tridecanoic acid (PFTrDA)	72629	94-8	PFAS by ID SOP	ND		3.7	0.93	ng/L	1
Perfluoro-n-undecanoic acid (PFUdA)	2058-	94-8	PFAS by ID SOP	ND		3.7	0.93	ng/L	1
Perfluorooctanesulfonic acid (PFOS)	1763-	23-1	PFAS by ID SOP	100		3.7	0.93	ng/L	1
Surrogate Q % F	Run 1 A Recovery	Accep Lir	otance mits						
13C2_4:2FTS	93	25	-150						
13C2_6:2FTS	89	25	-150						
13C2_8:2FTS	70	25	-150						
13C2_PFDoA	79	25	-150						
13C2_PFHxDA	82	25	-150						
13C2_PFTeDA	75	25	-150						
LOQ = Limit of Quantitation     B = Detected in the method blank       ND = Not detected at or above the DL     N = Recovery is out of criteria       H = Out of holding time     W = Reported on wet weight basis	E = Quant P = The R	itation o PD bet	of compound exceeded the of ween two GC columns exceeded the of the other sectors and the other sectors and the other sectors are set of the other sectors and the other sectors are set of the other sectors are set of the other sectors are set of the other set of the other sectors are set of the other set of the	calibration r eds 40%	ange DL J =	<ul> <li>Detection Lin</li> <li>Estimated result</li> </ul>	nit Ilt < LOQ and ≥ D	L	

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Client: Pace Analytical Services, LLC		Laboratory ID: VK08043-002
Description: 220-0		Matrix: Aqueous
Date Sampled:11/02/2020 1145	Project Name: LACROSSE WELL #23 & 24	
Date Received: 11/06/2020	Project Number: 40217713	

Surrogate	Run 1 A Q % Recovery	cceptance Limits		
13C3_PFBS	82	25-150		
13C3_PFHxS	77	25-150		
13C3-HFPO-DA	104	25-150		
13C4_PFBA	85	25-150		
13C4_PFHpA	86	25-150		
13C5_PFHxA	91	25-150		
13C5_PFPeA	86	25-150		
13C6_PFDA	77	25-150		
13C7_PFUdA	83	25-150		
13C8_PFOA	87	25-150		
13C8_PFOS	78	25-150		
13C8_PFOSA	82	10-150		
13C9_PFNA	90	25-150		
d-EtFOSA	73	10-150		
d5-EtFOSAA	78	25-150		
d9-EtFOSE	76	10-150		
d-MeFOSA	75	10-150		
d3-MeFOSAA	82	25-150		
d7-MeFOSE	78	10-150		

 LOQ = Limit of Quantitation
 B = Detected in the method blank
 E = Quantitation of compound exceeded the calibration range
 DL = Detection Limit

 ND = Not detected at or above the DL
 N = Recovery is out of criteria
 P = The RPD between two GC columns exceeds 40%
 J = Estimated result < LOQ and ≥ DL</td>

 H = Out of holding time
 W = Reported on wet weight basis
 W = Reported on wet weight basis
 H = Out of holding time
 H = Out of holding time

# BOTTLED WATER ACKNOWLEDGEMENT

2531 Second Avenue East, La Crosse, WI 54603

If you desire to accept the bottled water delivery, please complete and sign this form and return it to The OS Group at <u>PFAS@TheOSgrp.com</u> or mail to 444 21<sup>st</sup> St. S, La Crosse, WI 54601. You may also complete this form electronically on line at <u>www.cityoflacrosse.org/bottledwater</u>. Call 608-668-2718 with any question you may have.

As pre-caution for the protection of human health, the City of La Crosse (The City) will provide, on a temporary basis, bottled water for drinking, cooking and toothbrushing purposes at the above referenced address. The water will be delivered to your home or business by a commercial water delivery service. At the City's cost, a dispenser / cooler and regular deliveries of 5-gallon containers of water will be provided. The City reserves the right to dictate the conditions of delivery, such as minimum and maximum number of containers per delivery, frequency and timing of deliveries. The City reserves the right to periodically review whether The City should continue to provide bottled water, considering factors such as State and Federal standards and guidance, evolving knowledge and understanding of the sources, cause and responsibility for the contamination, new or reinterpreted test results, and the availability of more permanent or costeffective sources of water for the above purposes. The City of La Crosse makes no warranty or representation regarding the suitability of the bottled water beyond those made by the commercial water delivery service.

All reusable or returnable equipment and supplies, such as the containers and cooler/dispenser, are the property of the commercial water delivery service or the City of La Crosse. By signing below, the Occupant of the above referenced property acknowledges that all reusable or returnable equipment and supplies shall be returned to the commercial water delivery service or the City of La Crosse upon request. The Occupant agrees to provide reasonable access for delivery of bottled water and pick up of reusable or returnable equipment and supplies. Occupant(s) acknowledges that they may be required to sign an agreement with the commercial water delivery service as a condition of receiving bottled water.

Check ownership:

\_\_\_\_\_ Owner-Occupant Occupant Only

Number of Occupants: \_\_\_\_\_

Signed:	Dated:
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Printed Name: \_\_\_\_\_


444 21st Street South  $\cdot$  La Crosse, Wisconsin  $\cdot$  54601

December 1, 2020

2544 Bainbridge Street La Crosse, WI 54603

Subject: Private Well Sampling Results 2544 Bainbridge Street, La Crosse, WI 54603 Tax parcel # 4-229-0 Sample ID # 229-0

Dear

We have received and reviewed the test results for the sample collected on November 3, 2020 at the above address. Some PFAS compounds were found at levels <u>above</u> the Department of Health Services (DHS) levels recommended for protecting health. These levels are called the "Recommended Public Health Standard" in the table below. The levels found in your well are called the "Sample Result" in the table below.

Because some of the levels are above the recommended Public Health Standard, the City is offering to provide bottled water delivered to your home for drinking, cooking, and brushing your teeth. There will be no cost to you for the bottled water. Please complete the attached form and mail it to The OS Group to make arrangements for having a water dispenser and bottles delivered to your home. Call 608-668-2718 or email <u>PFAS@theOSgrp.com</u>. You may also complete this form on line at <u>www.cityoflacrosse.org/bottledwater</u>

The following table summarizes the test results from the sample. **Bolded results** are above a current recommended level intended to protect your health according to the Department of Health Services (DHS).

Private Well Sampling Results for 2544 Bainbridge Street, La Crosse, WI 54603 Tax Parcel # 4-229-0 December 1, 2020

Sampl	е	Resu	lts
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Compound	Sample Result (unit)	Recomm Public H Standard	ended lealth (unit <sup>e</sup> )
N-Ethyl Perfluorooctane sulfonamide (NEtFOSA) CAS # 4151-50-2	Not Detected	20 ppt <sup>a,b</sup>	) ppt unds I 6
N-Ethyl perfluorooctane sulfonamidoacetic acid (NEtFOSAA) CAS # 2991-50-6	Not Detected	20 ppt <sup>a,b</sup>	it is 20 compo <i>il</i> of al
N-Ethyl perfluorooctane sulfonamidoethanol (NEtFOSE) CAS # 1691-99-2	Not Detected	20 ppt <sup>a,b</sup>	ed lim ese 6 c ed totc
Perfluorooctane sulfonamide (FOSA) CAS # 754-91-6	Not Detected	20 ppt <sup>a,b</sup>	mend of the
Perfluorooctanoic acid (PFOA) CAS # 335-67-1	26 ppt	20 ppt <sup>a,b</sup>	recom ny <i>one</i> the <i>c</i> c
Perfluorooctanesulfonic acid (PFOS) CAS # 1763-23-1	2100 ppt	20 ppt <sup>a,b</sup>	The for al
Hexafluoropropylene oxide dimer acid (HPFO-DA; GenX) CAS # 13252-13-6	Not Detected		300 ppt <sup>a</sup>
Perfluorobutanesulfonic acid (PFBS) CAS # 375-73-5	34 ppt	450	),000 ppt <sup>a</sup>
Perfluorohexanesulfonic acid (PFHxS) CAS # 355-46-4	900 ppt		40 ppt <sup>a</sup>
Perfluorobutanoic acid (PFBA) CAS # 375-22-4	46 ppt	10	),000 ppt <sup>a</sup>
Perfluorodecanoic acid (PFDA) CAS # 335-76-2	Not Detected		300 ppt <sup>a</sup>
Perfluorododecanoic acid (PFDoA) CAS # 307-55-1	Not Detected		500 ppt <sup>a</sup>
Perfluorohexanoic acid (PFHxA) CAS # 307-24-4	39 ppt	150	),000 ppt <sup>a</sup>
Perfluorononanoic acid (PFNA) CAS # 375-95-1	Not Detected		30 ppt <sup>a</sup>
Perfluorotetradecanoic acid (PFTeA) CAS # 376-06-7	Not Detected	10	),000 ppt <sup>a</sup>
Perfluoroundecanoic acid (PFUnA) CAS # 2058-94-8	Not Detected	3	3,000 ppt <sup>a</sup>
4,8-Dioxa-3H-perfluorononanoic acid (DONA) CAS # 919005-14-4	Not Detected	3	3,000 ppt <sup>a</sup>
Perfluorooctadecanoic acid (PFODA) CAS # 16517-11-6	Not Detected	400	),000 ppt <sup>a</sup>

Private Well Sampling Results for 2544 Bainbridge Street, La Crosse, WI 54603 Tax Parcel # 4-229-0 December 1, 2020

Perfluoro-1-heptanesulfonic acid (PFHpS) CAS # 375-92-8	51 ppt	None Established <sup>c</sup>					
Perfluoro-1-pentanesulfonic acid (PFPeS) CAS # 2706-91-4	86 ppt	None Established <sup>c</sup>					
Perfluoro-n-heptanoic acid (PFHpA) CAS # 375-85-9	3.7 ppt	None Established <sup>c</sup>					
Perfluoro-n-pentanoic acid (PFPeA) CAS #2706-90-3	9.0 ppt	None Established <sup>c</sup>					
<ul> <li><sup>a</sup> Public health enforcement standard (ES) recommended by DHS.</li> <li><sup>b</sup> DHS recommends a combined enforcement standard of 20 ng/L and combined preventive action limit of 2 ng/L for FOSA, NEt-FOSE, NEt-FOSA, NetFOSAA, PFOS, and PFOA.</li> <li><sup>c</sup> A current standard is not available; the compound is currently under review by DHS for potential public health standard recommendation.</li> </ul>							
Public health enforcement standard (FS) in NR 140. Wisconsin Administrative Code.							

<sup>a</sup> Public health enforcement standard (ES) in NR 140, Wisconsin Administrative Code

<sup>e</sup> Units: Parts per trillion (ppt) = nanograms of substance per liter of water (ng/L)

<sup>BL</sup> Detected in the method blank. Possible lab contaminant.

As required by law, we will be submitting these results to the Department of Natural Resources (DNR). The DNR may consult with the Department of Health Services (DHS) about these test results. DHS may review all PFAS tests and follow-up with you directly if any actions are recommended to protect your health.

Thank you for your patience and assistance with our investigation. We will provide updates on the project at <u>https://www.cityoflacrosse.org/wells</u> as our work continues. If you have any questions, please call The OS Group at (608) 668-2718 or email them at <u>PFAS@theOSgrp.com</u>.

You can also contact the DNR and DHS with questions about PFAS or the water sample results at the numbers provided below.

Questions about Cor		<u>Contact</u>	<u>Phone</u>	<u>E-mail Address</u>		
Soil & Groundwater Testing, Clean Up	DNR	David Rozeboom	715-215-2078	David.Rozeboom@wisconsin.gov		
Drinking Water or Private wells	DNR	Kyle Burton	920-360-2112	kyle.burton@wisconsin.gov		
Health Concerns	DHS	Curtis Hedman	608-266-6677	Curtis.Hedman@dhs.wisconsin.gov		

On behalf of The City of La Crosse *The OS Group, LLC* 

Attachment: Lab report for your well Bottled Water Acknowledgement

Client: Pace Analytical Services, LLC				Laboratory IE	): VK08043-(	014	
Description: 229-0				Matrix	: Aqueous		
Date Sampled:11/03/2020 1005	Proiect Name:	LACROSSE WELL #	<sup>≇</sup> 23 & 24		•		
Date Received: 11/06/2020	oiect Number	10217713					
	oject Number.	40217713					
Run         Prep Method         Analytical Method	Dilution Ana	lysis Date Analyst	Prep Date	Batch			
1 SOP SPE PEAS by ID SOP	1 11/1	8/2020 1416 MIMIM	11/1//2020 10	34 /3/28			
2 SOP SPE PEAS by ID SOP	5 11/1	9/2020 1409 MIMINI	11/1//2020 10	34 /3/28			
Parameter	CAS Number	Analytical Method	Result Q	LOQ	DL	Units	Run
9-chlorohexadecafluoro-3-oxanone-1-sulfonic acid (9CI-PF3ONS)	756426-58-1	PFAS by ID SOP	ND	7.2	1.8	ng/L	1
11-chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11CI-PF3	) 763051-92-9	PFAS by ID SOP	ND	7.2	1.8	ng/L	1
1H, 1H, 2H, 2H-perfluorodecane sulfonic acid (8:2 FTS)	39108-34-4	PFAS by ID SOP	ND	7.2	1.8	ng/L	1
1H, 1H, 2H, 2H-perfluorooctane sulfonic acid (6:2 FTS)	27619-97-2	PFAS by ID SOP	ND	7.2	1.8	ng/L	1
1H,1H,2H,2H-perfluorododecane sulfonic acid (10:2 FTS)	120226-60-0	PFAS by ID SOP	ND	7.2	1.8	ng/L	1
1H,1H,2H,2H-perfluorohexane sulfonic acid (4:2 FTS)	757124-72-4	PFAS by ID SOP	ND	7.2	1.8	ng/L	1
Hexafluoropropylene oxide dimer acid (GenX)	13252-13-6	PFAS by ID SOP	ND	7.2	1.8	ng/L	1
4,8-dioxa-3H-perfluorononanoic acid (ADONA)	919005-14-4	PFAS by ID SOP	ND	7.2	1.8	ng/L	1
N-ethylperfluoro-1-octanesulfonamide (EtFOSA)	4151-50-2	PFAS by ID SOP	ND	7.2	1.8	ng/L	1
N-ethylperfluoro-1-octanesulfonamidoacetic acid (EtFOSAA)	2991-50-6	PFAS by ID SOP	ND	7.2	1.8	ng/L	1
2-N-ethylperfluoro-1-octanesulfonamido-ethanol (EtFOSE)	1691-99-2	PFAS by ID SOP	ND	7.2	1.8	ng/L	1
N-methylperfluoro-1-octanesulfonamide (MeFOSA)	31506-32-8	PFAS by ID SOP	ND	14	3.6	ng/L	1
N-methylperfluoro-1-octanesulfonamidoacetic acid (MeFOSAA)	2355-31-9	PFAS by ID SOP	ND	7.2	1.8	ng/L	1
2-N-methylperfluoro-1-octanesulfonamido-ethanol (MeFOSE)	24448-09-7	PFAS by ID SOP	ND	7.2	1.8	ng/L	1
Perfluoro-1-butanesulfonic acid (PFBS)	375-73-5	PFAS by ID SOP	34	3.6	0.90	ng/L	1
Perfluoro-1-decanesulfonic acid (PFDS)	335-77-3	PFAS by ID SOP	ND	3.6	0.90	ng/L	1
Perfluoro-1-heptanesulfonic acid (PFHpS)	375-92-8	PFAS by ID SOP	51	3.6	0.90	ng/L	1
Perfluoro-1-nonanesulfonic acid (PFNS)	68259-12-1	PFAS by ID SOP	ND	3.6	0.90	ng/L	1
Perfluoro-1-octanesulfonamide (PFOSA)	754-91-6	PFAS by ID SOP	ND	3.6	0.90	ng/L	1
Perfluoro-1-pentanesulfonic acid (PFPeS)	2706-91-4	PFAS by ID SOP	86	3.6	0.90	ng/L	1
Perfluorododecanesulfonic acid (PFDOS)	79780-39-5	PFAS by ID SOP	ND	7.2	1.8	ng/L	1
Perfluorohexanesulfonic acid (PFHxS)	355-46-4	PFAS by ID SOP	900	18	4.5	ng/L	2
Perfluoro-n-butanoic acid (PFBA)	375-22-4	PFAS by ID SOP	46	3.6	0.90	ng/L	1
Perfluoro-n-decanoic acid (PFDA)	335-76-2	PFAS by ID SOP	ND	3.6	0.90	ng/L	1
Perfluoro-n-dodecanoic acid (PFDoA)	307-55-1	PFAS by ID SOP	ND	3.6	0.90	ng/L	1
Perfluoro-n-heptanoic acid (PFHpA)	375-85-9	PFAS by ID SOP	3.7	3.6	0.90	ng/L	1
Perfluoro-n-hexadecanoic acid (PFHxDA)	67905-19-5	PFAS by ID SOP	ND	7.2	1.8	ng/L	1
Perfluoro-n-hexanoic acid (PFHxA)	307-24-4	PFAS by ID SOP	39	3.6	0.90	ng/L	1
Perfluoro-n-nonanoic acid (PFNA)	375-95-1	PFAS by ID SOP	ND	3.6	0.90	ng/L	1
Perfluoro-n-octadecanoic acid (PFODA)	16517-11-6	PFAS by ID SOP	ND	7.2	1.8	ng/L	1
Perfluoro-n-octanoic acid (PFOA)	335-67-1	PFAS by ID SOP	26	3.6	0.90	ng/L	1
Perfluoro-n-pentanoic acid (PFPeA)	2706-90-3	PFAS by ID SOP	9.0	3.6	0.90	ng/L	1
Perfluoro-n-tetradecanoic acid (PFTeDA)	376-06-7	PFAS by ID SOP	ND	3.6	0.90	ng/L	1
Perfluoro-n-tridecanoic acid (PFTrDA)	72629-94-8	PFAS by ID SOP	ND	3.6	0.90	ng/L	1
Perfluoro-n-undecanoic acid (PFUdA)	2058-94-8	PFAS by ID SOP	ND	3.6	0.90	ng/L	1
Perfluorooctanesulfonic acid (PFOS)	1763-23-1	PFAS by ID SOP	2100	18	4.5	ng/L	2
Я	Run 1 Accer	otance Rur	n 2 Acceptan	се			
Surrogate Q % Re	ecovery Lir	nits Q % Rec	overy Limits				

Surrogate	Q % F	Recovery	Limits	Q	% Recovery	Limits	
13C2_4:2FTS		95	25-150		98	25-150	
13C2_6:2FTS		96	25-150		94	25-150	)
13C2_8:2FTS		91	25-150		98	25-150	)
13C2_PFDoA		91	25-150		86	25-150	)
13C2_PFHxDA		88	25-150		97	25-150	)
LOQ = Limit of Quantitation	B = Detected in the method blank	E = Quantita	ation of compo	und exc	eeded the calibration i	ange D	= Detection Limit
ND = Not detected at or above the DL	N = Recovery is out of criteria	P = The RP	D between two	GC col	umns exceeds 40%	J	= Estimated result < LOQ and $\geq$ DL
H = Out of holding time	W = Reported on wet weight basis	S					

Pace Analytical Services, LLC (formerly Shealy Environmental Services, Inc.) 106 Vantage Point Drive West Columbia, SC 29172 (803) 791-9700 Fax (803) 791-9111 www.pacelabs.com

Project Name: LACROSSE WELL #23 & 24

Project Number: 40217713

Client: Pace Analytical Services, LLC Description: 229-0 Date Sampled:11/03/2020 1005 Date Received: 11/06/2020 Laboratory ID: VK08043-014

Matrix: Aqueous

Surrogate	0	Run 1 A % Recoverv	cceptance Limits	0	Run 2 A % Recoverv	cceptance Limits
13C2_PFTeDA	_	85	25-150	-	88	25-150
13C3_PFBS		89	25-150		91	25-150
13C3_PFHxS		85	25-150		89	25-150
13C3-HFPO-DA		97	25-150		90	25-150
13C4_PFBA		98	25-150		95	25-150
13C4_PFHpA		83	25-150		96	25-150
13C5_PFHxA		94	25-150		93	25-150
13C5_PFPeA		98	25-150		97	25-150
13C6_PFDA		89	25-150		92	25-150
13C7_PFUdA		92	25-150		92	25-150
13C8_PFOA		97	25-150		95	25-150
13C8_PFOS		80	25-150		83	25-150
13C8_PFOSA		95	10-150		98	10-150
13C9_PFNA		86	25-150		99	25-150
d-EtFOSA		83	10-150		91	10-150
d5-EtFOSAA		87	25-150		93	25-150
d9-EtFOSE		85	10-150		97	10-150
d-MeFOSA		78	10-150		89	10-150
d3-MeFOSAA		91	25-150		93	25-150
d7-MeFOSE		86	10-150		96	10-150

LOQ = Limit of QuantitationB = Detected in the method blankE = Quantitation of compound exceeded the calibration rangeDL = Detection LimitND = Not detected at or above the DLN = Recovery is out of criteriaP = The RPD between two GC columns exceeds 40%J = Estimated result < LOQ and ≥ DL</td>H = Out of holding timeW = Reported on wet weight basis

Pace Analytical Services, LLC (formerly Shealy Environmental Services, Inc.)106 Vantage Point DriveWest Columbia, SC 29172 (803) 791-9700 Fax (803) 791-9111 www.pacelabs.com

# BOTTLED WATER ACKNOWLEDGEMENT

2544 Bainbridge Street, La Crosse, WI 54603

If you desire to accept the bottled water delivery, please complete and sign this form and return it to The OS Group at <u>PFAS@TheOSgrp.com</u> or mail to 444 21<sup>st</sup> St. S, La Crosse, WI 54601. You may also complete this form electronically on line at <u>www.cityoflacrosse.org/bottledwater</u>. Call 608-668-2718 with any question you may have.

As pre-caution for the protection of human health, the City of La Crosse (The City) will provide, on a temporary basis, bottled water for drinking, cooking and toothbrushing purposes at the above referenced address. The water will be delivered to your home or business by a commercial water delivery service. At the City's cost, a dispenser / cooler and regular deliveries of 5-gallon containers of water will be provided. The City reserves the right to dictate the conditions of delivery, such as minimum and maximum number of containers per delivery, frequency and timing of deliveries. The City reserves the right to periodically review whether The City should continue to provide bottled water, considering factors such as State and Federal standards and guidance, evolving knowledge and understanding of the sources, cause and responsibility for the contamination, new or reinterpreted test results, and the availability of more permanent or costeffective sources of water for the above purposes. The City of La Crosse makes no warranty or representation regarding the suitability of the bottled water beyond those made by the commercial water delivery service.

All reusable or returnable equipment and supplies, such as the containers and cooler/dispenser, are the property of the commercial water delivery service or the City of La Crosse. By signing below, the Occupant of the above referenced property acknowledges that all reusable or returnable equipment and supplies shall be returned to the commercial water delivery service or the City of La Crosse upon request. The Occupant agrees to provide reasonable access for delivery of bottled water and pick up of reusable or returnable equipment and supplies. Occupant(s) acknowledges that they may be required to sign an agreement with the commercial water delivery service as a condition of receiving bottled water.

Check ownership:

\_\_\_\_\_ Owner-Occupant Occupant Only

Number of Occupants: \_\_\_\_\_

Signed:	 Dated:	
-		

Printed Name: \_\_\_\_\_



444 21st Street South  $\cdot$  La Crosse, Wisconsin  $\cdot$  54601

December 1, 2020

2534 Bainbridge Street La Crosse, WI 54603

Subject: Private Well Sampling Results 2534 Bainbridge Street, La Crosse, WI 54603 Tax parcel # 4-233-0 Sample ID # 233-0

:

Dear

We have received and reviewed the test results for the sample collected on November 3, 2020 at the above address. Some PFAS compounds were found, but the levels found were **below** the Department of Health Services (DHS) levels recommended for protecting health. These levels are called the "Recommended Public Health Standard" in the table below. The levels found in *your* well are called the "Sample Result" in the table below.

#### Sample Results

Compound	Sample Result (unit)	Recommended Public Health Standard (unit <sup>e</sup> )		
N-Ethyl Perfluorooctane sulfonamide (NEtFOSA) CAS # 4151-50-2	Not Detected	20 ppt <sup>a,b</sup>	) ppt unds I 6	
N-Ethyl perfluorooctane sulfonamidoacetic acid (NEtFOSAA) CAS # 2991-50-6	Not Detected	20 ppt <sup>a,b</sup>	it is 20 compo <i>il</i> of al	
N-Ethyl perfluorooctane sulfonamidoethanol (NEtFOSE) CAS # 1691-99-2	Not Detected	20 ppt <sup>a,b</sup>	ed lim ese 6 c ed toto	
Perfluorooctane sulfonamide (FOSA) CAS # 754-91-6	Not Detected	20 ppt <sup>a,b</sup>	mend of the mbine	
Perfluorooctanoic acid (PFOA) CAS # 335-67-1	Not Detected	20 ppt <sup>a,b</sup>	recom ny <i>one</i> the <i>cc</i>	
Perfluorooctanesulfonic acid (PFOS) CAS # 1763-23-1	6.5 ppt	20 ppt <sup>a,b</sup>	The for ai or	

Private Well Sampling Results for 2534 Bainbridge Street, La Crosse, WI 54603 Tax parcel # 4-233-0 Sample ID # 233-0 December 1, 2020

Compound	Sample Result (unit)	Recommended Public Health Standard (unit <sup>e</sup> )
Hexafluoropropylene oxide dimer acid (HPFO-DA; GenX) CAS # 13252-13-6	Not Detected	300 ppt <sup>a</sup>
Perfluorobutanesulfonic acid (PFBS) CAS # 375-73-5	6.6 ppt	450,000 ppt <sup>a</sup>
Perfluorohexanesulfonic acid (PFHxS) CAS # 355-46-4	20 ppt	40 ppt <sup>a</sup>
Perfluorobutanoic acid (PFBA) CAS # 375-22-4	11 ppt	10,000 ppt <sup>a</sup>
Perfluorodecanoic acid (PFDA) CAS # 335-76-2	Not Detected	300 ppt <sup>a</sup>
Perfluorododecanoic acid (PFDoA) CAS # 307-55-1	Not Detected	500 ppt <sup>a</sup>
Perfluorohexanoic acid (PFHxA) CAS # 307-24-4	2.2 ppt	150,000 ppt <sup>a</sup>
Perfluorononanoic acid (PFNA) CAS # 375-95-1	Not Detected	30 ppt <sup>a</sup>
Perfluorotetradecanoic acid (PFTeA) CAS # 376-06-7	Not Detected	10,000 ppt <sup>a</sup>
Perfluoroundecanoic acid (PFUnA) CAS # 2058-94-8	Not Detected	3,000 ppt <sup>a</sup>
4,8-Dioxa-3H-perfluorononanoic acid (DONA) CAS # 919005-14-4	Not Detected	3,000 ppt <sup>a</sup>
Perfluorooctadecanoic acid (PFODA) CAS # 16517-11-6	Not Detected	400,000 ppt <sup>a</sup>
Perfluoro-1-heptanesulfonic acid (PFHpS) CAS # 375-92-8	0.97 ppt	None Established <sup>c</sup>
Perfluoro-1-pentanesulfonic acid (PFPeS) CAS #2706-91-4	6.1 ppt	None Established <sup>c</sup>
Perfluoro-n-pentanoic acid (PFPeA) CAS # 2706-90-3	1.2	None Established <sup>c</sup>

<sup>a</sup> Public health enforcement standard (ES) recommended by DHS.

<sup>b</sup> DHS recommends a combined enforcement standard of 20 ng/L and combined preventive action limit of 2 ng/L for FOSA, NEt-FOSA, NetFOSAA, PFOS, and PFOA.

<sup>c</sup> A current standard is not available; the compound is currently under review by DHS for potential public health standard recommendation.

<sup>d</sup> Public health enforcement standard (ES) in NR 140, Wisconsin Administrative Code.

<sup>e</sup> Units: Parts per trillion (ppt) = nanograms of substance per liter of water (ng/L)

<sup>BL</sup> Detected in the method blank. Possible lab contaminant.

Private Well Sampling Results for 2534 Bainbridge Street, La Crosse, WI 54603 Tax parcel # 4-233-0 Sample ID # 233-0 December 1, 2020

As required by law, we will be submitting these results to the Department of Natural Resources (DNR). The DNR may consult with the Department of Health Services (DHS) about these test results. DHS may review all PFAS tests and follow-up with you directly if any actions are recommended to protect your health.

Thank you for your patience and assistance with our investigation. We will provide updates on the project at <u>https://www.cityoflacrosse.org/wells</u> as our work continues. If you have any questions, please call The OS Group at (608) 668-2718 or email them at <u>PFAS@theOSgrp.com</u>.

You can also contact the DNR and DHS with questions about PFAS or the water sample results at the numbers provided below.

Questions about Conta		<u>Contact</u>	<u>Phone</u>	E-mail Address			
Soil & Groundwater Testing, Clean Up	DNR	David Rozeboom	715-215-2078	David.Rozeboom@wisconsin.gov			
Drinking Water or Private wells	DNR	Kyle Burton	920-360-2112	kyle.burton@wisconsin.gov			
Health Concerns	DHS	Curtis Hedman	608-266-6677	Curtis.Hedman@dhs.wisconsin.gov			

On behalf of The City of La Crosse *The OS Group, LLC* 

Attachment: Lab report for your well

Client: Pace Analytical Services	s, LLC				Lal	boratory II	D: VK08043-015		
Description: 233-0						Matrix	x: Aqueous		
Date Sampled:11/03/2020 1020	Proi	ect Name:	LACROSSE WELL #	<sup>≠</sup> 23 & 24					
Date Received: 11/06/2020	Proiec	t Number	40217713						
RunPrep MethodAnal1SOP SPEPF	ytical Method Dilu FAS by ID SOP 1	tion Ana I 11/19	lysis Date Analyst 9/2020 1420 MMM	Prep 11/17/2	Date 2020 1034	Batch 73728			
Parameter		CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run
9-chlorohexadecafluoro-3-oxanone-1-sulfonic a	acid (9CI-PF3ONS) 7	56426-58-1	PFAS by ID SOP	ND		7.2	1.8	ng/L	1
11-chloroeicosafluoro-3-oxaundecane-1-sulfon	ic acid (11CI-PF3) 7	63051-92-9	PFAS by ID SOP	ND		7.2	1.8	ng/L	1
1H, 1H, 2H, 2H-perfluorodecane sulfonic acid (	(8:2 FTS)	39108-34-4	PFAS by ID SOP	ND		7.2	1.8	ng/L	1
1H, 1H, 2H, 2H-perfluorooctane sulfonic acid (	6:2 FTS)	27619-97-2	PFAS by ID SOP	ND		7.2	1.8	ng/L	1
1H,1H,2H,2H-perfluorododecane sulfonic acid	(10:2 FTS) 1	20226-60-0	PFAS by ID SOP	ND		7.2	1.8	ng/L	1
1H,1H,2H,2H-perfluorohexane sulfonic acid (4:	2 FTS) 7	57124-72-4	PFAS by ID SOP	ND		7.2	1.8	ng/L	1
Hexafluoropropylene oxide dimer acid (GenX)		13252-13-6	PFAS by ID SOP	ND		7.2	1.8	ng/L	1
4,8-dioxa-3H-perfluorononanoic acid (ADONA)	9	19005-14-4	PFAS by ID SOP	ND		7.2	1.8	ng/L	1
N-ethylperfluoro-1-octanesulfonamide (EtFOSA	4)	4151-50-2	PFAS by ID SOP	ND		7.2	1.8	ng/L	1
N-ethylperfluoro-1-octanesulfonamidoacetic ac	id (EtFOSAA)	2991-50-6	PFAS by ID SOP	ND		7.2	1.8	ng/L	1
2-N-ethylperfluoro-1-octanesulfonamido-ethano	ol (EtFOSE)	1691-99-2	PFAS by ID SOP	ND		7.2	1.8	ng/L	1
N-methylperfluoro-1-octanesulfonamide (MeFC	DSA)	31506-32-8	PFAS by ID SOP	ND		14	3.6	ng/L	1
N-methylperfluoro-1-octanesulfonamidoacetic a	acid (MeFOSAA)	2355-31-9	PFAS by ID SOP	ND		7.2	1.8	ng/L	1
2-N-methylperfluoro-1-octanesulfonamido-etha	nol (MeFOSE)	24448-09-7	PFAS by ID SOP	ND		7.2	1.8	ng/L	1
Perfluoro-1-butanesulfonic acid (PFBS)		375-73-5	PFAS by ID SOP	6.6		3.6	0.90	ng/L	1
Perfluoro-1-decanesulfonic acid (PFDS)		335-77-3	PFAS by ID SOP	ND		3.6	0.90	ng/L	1
Perfluoro-1-heptanesulfonic acid (PFHpS)		375-92-8	PFAS by ID SOP	0.97	J	3.6	0.90	ng/L	1
Perfluoro-1-nonanesulfonic acid (PFNS)		68259-12-1	PFAS by ID SOP	ND		3.6	0.90	ng/L	1
Perfluoro-1-octanesulfonamide (PFOSA)		754-91-6	PFAS by ID SOP	ND		3.6	0.90	ng/L	1
Perfluoro-1-pentanesulfonic acid (PFPeS)		2706-91-4	PFAS by ID SOP	6.1		3.6	0.90	ng/L	1
Perfluorododecanesulfonic acid (PFDOS)		79780-39-5	PFAS by ID SOP	ND		7.2	1.8	ng/L	1
Perfluorohexanesulfonic acid (PFHxS)		355-46-4	PFAS by ID SOP	20		3.6	0.90	ng/L	1
Perfluoro-n-butanoic acid (PFBA)		375-22-4	PFAS by ID SOP	11		3.6	0.90	ng/L	1
Perfluoro-n-decanoic acid (PFDA)		335-76-2	PFAS by ID SOP	ND		3.6	0.90	ng/L	1
Perfluoro-n-dodecanoic acid (PFDoA)		307-55-1	PFAS by ID SOP	ND		3.6	0.90	ng/L	1
Perfluoro-n-heptanoic acid (PFHpA)		375-85-9	PFAS by ID SOP	ND		3.6	0.90	ng/L	1
Perfluoro-n-hexadecanoic acid (PFHxDA)		67905-19-5	PFAS by ID SOP	ND		7.2	1.8	ng/L	1
Perfluoro-n-hexanoic acid (PFHxA)		307-24-4	PFAS by ID SOP	2.2	J	3.6	0.90	ng/L	1
Perfluoro-n-nonanoic acid (PFNA)		375-95-1	PFAS by ID SOP	ND		3.6	0.90	ng/L	1
Perfluoro-n-octadecanoic acid (PFODA)		16517-11-6	PFAS by ID SOP	ND		7.2	1.8	ng/L	1
Perfluoro-n-octanoic acid (PFOA)		335-67-1	PFAS by ID SOP	ND		3.6	0.90	ng/L	1
Perfluoro-n-pentanoic acid (PFPeA)		2706-90-3	PFAS by ID SOP	1.2	J	3.6	0.90	ng/L	1
Perfluoro-n-tetradecanoic acid (PFTeDA)		376-06-7	PFAS by ID SOP	ND		3.6	0.90	ng/L	1
Perfluoro-n-tridecanoic acid (PFTrDA)		72629-94-8	PFAS by ID SOP	ND		3.6	0.90	ng/L	1
Perfluoro-n-undecanoic acid (PFUdA)		2058-94-8	PFAS by ID SOP	ND		3.6	0.90	ng/L	1
Perfluorooctanesulfonic acid (PFOS)		1763-23-1	PFAS by ID SOP	6.5		3.6	0.90	ng/L	1
Surrogate	Run Q % Recov	1 Accep very Lin	otance nits						
13C2_4:2FTS	93	25-	150						
13C2_6:2FTS	89	25-	150						
13C2_8:2FTS	102	25-	150						
13C2_PFDoA	86	25-	150						
13C2_PFHxDA	95	25-	150						
13C2_PFTeDA	90	25-	150						
00 limit of Quantilation 5.5.5.	lin the method by the	0.00-111-11	formative to the	a a like +!		Data -ti-	- i+		
ND = Not detected at or above the DL N = Recover	y is out of criteria P =	<ul> <li>Quantitation c</li> <li>The RPD bety</li> </ul>	ween two GC columns exce	eds 40%	ange DL = J = Es	Detection Lin	III < LOQ and > DL		
H = Out of holding time W = Reporte	d on wet weight basis								

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Pace Analytical Services, LLC (formerly Shealy Environmental Services, Inc.) 106 Vantage Point Drive West Columbia, SC 29172 (803) 791-9700 Fax (803) 791-9111 www.pacelabs.com

Laboratory ID: VK08043-015 Matrix: Aqueous

Client: Pace Analytical Services, LLC	
Description: 233-0	
Date Sampled:11/03/2020 1020	Project Name: LACROSSE WELL #23 & 24
Date Received: 11/06/2020	Project Number: 40217713

d7-MeFOSE

Run 1 Acceptance Surrogate % Recovery Q Limits 13C3\_PFBS 84 25-150 13C3\_PFHxS 85 25-150 13C3-HFPO-DA 101 25-150 13C4\_PFBA 96 25-150 13C4\_PFHpA 92 25-150 13C5\_PFHxA 98 25-150 13C5\_PFPeA 100 25-150 13C6\_PFDA 88 25-150 13C7\_PFUdA 89 25-150 13C8\_PFOA 98 25-150 13C8\_PFOS 84 25-150 13C8\_PFOSA 98 10-150 13C9 PFNA 102 25-150 d-EtFOSA 87 10-150 d5-EtFOSAA 91 25-150 d9-EtFOSE 97 10-150 d-MeFOSA 79 10-150 d3-MeFOSAA 92 25-150

10-150

91

 LOQ = Limit of Quantitation
 B = Detected in the method blank
 E = Quantitation of compound exceeded the calibration range
 DL = Detection Limit

 ND = Not detected at or above the DL
 N = Recovery is out of criteria
 P = The RPD between two GC columns exceeds 40%
 J = Estimated result < LOQ and ≥ DL</td>

 H = Out of holding time
 W = Reported on wet weight basis
 W = Reported on wet weight basis
 H = Out of holding time

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 106 Vantage Point Drive
 West Columbia, SC 29172 (803) 791-9700 Fax (803) 791-9111 www.pacelabs.com



444 21st Street South · La Crosse, Wisconsin · 54601

December 1, 2020

2512 Bainbridge Street La Crosse, WI 54603

Subject: Private Well Sampling Results 2512 Bainbridge Street, La Crosse, WI 54603 Tax parcel # 4-239-0 Sample ID # 239-0

Dear Gregory



We have received and reviewed the test results for the sample collected on November 3, 2020 at the above address. Some PFAS compounds were found, but the levels found were **below** the Department of Health Services (DHS) levels recommended for protecting health. These levels are called the "Recommended Public Health Standard" in the table below. The levels found in *your* well are called the "Sample Result" in the table below.

#### Sample Results

Compound	Sample Result (unit)	Recomm Public H Standard	ended ealth (unit <sup>e</sup> )
N-Ethyl Perfluorooctane sulfonamide (NEtFOSA) CAS # 4151-50-2	Not Detected	20 ppt <sup>a,b</sup>	) ppt unds I 6
N-Ethyl perfluorooctane sulfonamidoacetic acid (NEtFOSAA) CAS # 2991-50-6	Not Detected	20 ppt <sup>a,b</sup>	it is 2C compo <i>il</i> of al
N-Ethyl perfluorooctane sulfonamidoethanol (NEtFOSE) CAS # 1691-99-2	Not Detected	20 ppt <sup>a,b</sup>	ed lim ese 6 c ed toto
Perfluorooctane sulfonamide (FOSA) CAS # 754-91-6	1.1 ppt	20 ppt <sup>a,b</sup>	mend of the mbine
Perfluorooctanoic acid (PFOA) CAS # 335-67-1	Not Detected	20 ppt <sup>a,b</sup>	recom ny <i>one</i> the <i>c</i> c
Perfluorooctanesulfonic acid (PFOS) CAS # 1763-23-1	8.3 ppt	20 ppt <sup>a,b</sup>	The for a or

Private Well Sampling Results for 2512 Bainbridge Street, La Crosse, WI 54603 Tax parcel # 4-239-0 Sample ID # 239-0 December 1, 2020

Compound	Sample Result (unit)	Recommended Public Health Standard (unit <sup>e</sup> )
Hexafluoropropylene oxide dimer acid (HPFO-DA; GenX) CAS # 13252-13-6	Not Detected	300 ppt <sup>a</sup>
Perfluorobutanesulfonic acid (PFBS) CAS # 375-73-5	5.6 ppt	450,000 ppt <sup>a</sup>
Perfluorohexanesulfonic acid (PFHxS) CAS # 355-46-4	14 ppt	40 ppt <sup>a</sup>
Perfluorobutanoic acid (PFBA) CAS # 375-22-4	28 ppt	10,000 ppt <sup>a</sup>
Perfluorodecanoic acid (PFDA) CAS # 335-76-2	Not Detected	300 ppt <sup>a</sup>
Perfluorododecanoic acid (PFDoA) CAS # 307-55-1	Not Detected	500 ppt <sup>a</sup>
Perfluorohexanoic acid (PFHxA) CAS # 307-24-4	1.9 ppt	150,000 ppt <sup>a</sup>
Perfluorononanoic acid (PFNA) CAS # 375-95-1	Not Detected	30 ppt <sup>a</sup>
Perfluorotetradecanoic acid (PFTeA) CAS # 376-06-7	Not Detected	10,000 ppt <sup>a</sup>
Perfluoroundecanoic acid (PFUnA) CAS # 2058-94-8	Not Detected	3,000 ppt <sup>a</sup>
4,8-Dioxa-3H-perfluorononanoic acid (DONA) CAS # 919005-14-4	Not Detected	3,000 ppt <sup>a</sup>
Perfluorooctadecanoic acid (PFODA) CAS # 16517-11-6	Not Detected	400,000 ppt <sup>a</sup>
Perfluoro-1-pentanesulfonic acid (PFPeS) CAS #2706-91-4	3.8 ppt	None Established <sup>c</sup>
Perfluoro-n-heptanoic acid (PFHpA) CAS # 375-85-9	1.2 ppt	None Established <sup>c</sup>
Perfluoro-n-pentanoic acid (PFPeA) CAS # 2706-90-3	1.8 ppt	None Established <sup>c</sup>

<sup>a</sup> Public health enforcement standard (ES) recommended by DHS.

<sup>b</sup> DHS recommends a combined enforcement standard of 20 ng/L and combined preventive action limit of 2 ng/L for FOSA, NEt-FOSA, NetFOSAA, PFOS, and PFOA.

<sup>c</sup> A current standard is not available; the compound is currently under review by DHS for potential public health standard recommendation.

<sup>d</sup> Public health enforcement standard (ES) in NR 140, Wisconsin Administrative Code.

<sup>e</sup> Units: Parts per trillion (ppt) = nanograms of substance per liter of water (ng/L)

<sup>BL</sup> Detected in the method blank. Possible lab contaminant.

Private Well Sampling Results for 2512 Bainbridge Street, La Crosse, WI 54603 Tax parcel # 4-239-0 Sample ID # 239-0 December 1, 2020

As required by law, we will be submitting these results to the Department of Natural Resources (DNR). The DNR may consult with the Department of Health Services (DHS) about these test results. DHS may review all PFAS tests and follow-up with you directly if any actions are recommended to protect your health.

Thank you for your patience and assistance with our investigation. We will provide updates on the project at <u>https://www.cityoflacrosse.org/wells</u> as our work continues. If you have any questions, please call The OS Group at (608) 668-2718 or email them at <u>PFAS@theOSgrp.com</u>.

You can also contact the DNR and DHS with questions about PFAS or the water sample results at the numbers provided below.

Questions about		<u>Contact</u>	<u>Phone</u>	E-mail Address		
Soil & Groundwater Testing, Clean Up	DNR	David Rozeboom	715-215-2078	David.Rozeboom@wisconsin.gov		
Drinking Water or Private wells	DNR	Kyle Burton	920-360-2112	kyle.burton@wisconsin.gov		
Health Concerns	DHS	Curtis Hedman	608-266-6677	Curtis.Hedman@dhs.wisconsin.gov		

On behalf of The City of La Crosse *The OS Group, LLC* 

Attachment: Lab report for your well

Client: Pace Analytical Services, LLC				Laborator	y ID: VK08043-	016	
Description: 239-0				Ma	trix: Aqueous		
Date Sampled:11/03/2020 1030	Project Name	e: LACROSSE WELL #	<sup>#</sup> 23 & 24				
Date Received: 11/06/2020	oiect Numbe	er: 40217713					
Due Dree Method Architical Method 5		achusis Data Arachust	Draw	Data Datab			
Run Prep MethodAnalytical Method1SOP SPEPFAS by ID SOP	1 11	/18/2020 1438 MMM	11/17/2	020 1034 73728			
Parameter	CAS Numbe	6 Analytical r Method	Result	Q LOQ	DL	Units	Run
9-chlorohexadecafluoro-3-oxanone-1-sulfonic acid (9CI-PF3ONS)	756426-58-	1 PFAS by ID SOP	ND	7.2	1.8	ng/L	1
11-chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3)	) 763051-92-	9 PFAS by ID SOP	ND	7.2	1.8	ng/L	1
1H, 1H, 2H, 2H-perfluorodecane sulfonic acid (8:2 FTS)	39108-34-	4 PFAS by ID SOP	ND	7.2	1.8	ng/L	1
1H, 1H, 2H, 2H-perfluorooctane sulfonic acid (6:2 FTS)	27619-97-	2 PFAS by ID SOP	ND	7.2	1.8	ng/L	1
1H,1H,2H,2H-perfluorododecane sulfonic acid (10:2 FTS)	120226-60-	0 PFAS by ID SOP	ND	7.2	1.8	ng/L	1
1H,1H,2H,2H-perfluorohexane sulfonic acid (4:2 FTS)	757124-72-	4 PFAS by ID SOP	ND	7.2	1.8	ng/L	1
Hexafluoropropylene oxide dimer acid (GenX)	13252-13-	6 PFAS by ID SOP	ND	7.2	1.8	ng/L	1
4,8-dioxa-3H-perfluorononanoic acid (ADONA)	919005-14-	4 PFAS by ID SOP	ND	7.2	1.8	ng/L	1
N-ethylperfluoro-1-octanesulfonamide (EtFOSA)	4151-50-2	2 PFAS by ID SOP	ND	7.2	1.8	ng/L	1
N-ethylperfluoro-1-octanesulfonamidoacetic acid (EtFOSAA)	2991-50-	6 PFAS by ID SOP	ND	7.2	1.8	ng/L	1
2-N-ethylperfluoro-1-octanesulfonamido-ethanol (EtFOSE)	1691-99-2	2 PFAS by ID SOP	ND	7.2	1.8	ng/L	1
N-methylperfluoro-1-octanesulfonamide (MeFOSA)	31506-32-	8 PFAS by ID SOP	ND	14	3.6	ng/L	1
N-methylperfluoro-1-octanesulfonamidoacetic acid (MeFOSAA)	2355-31-	9 PFAS by ID SOP	ND	7.2	1.8	ng/L	1
2-N-methylperfluoro-1-octanesulfonamido-ethanol (MeFOSE)	24448-09-	7 PFAS by ID SOP	ND	7.2	1.8	ng/L	1
Perfluoro-1-butanesulfonic acid (PFBS)	375-73-	5 PFAS by ID SOP	5.6	3.6	0.91	ng/L	1
Perfluoro-1-decanesulfonic acid (PFDS)	335-77-	3 PFAS by ID SOP	ND	3.6	0.91	ng/L	1
Perfluoro-1-heptanesulfonic acid (PFHpS)	375-92-	8 PFAS by ID SOP	ND	3.6	0.91	ng/L	1
Perfluoro-1-nonanesulfonic acid (PFNS)	68259-12-	1 PFAS by ID SOP	ND	3.6	0.91	ng/L	1
Perfluoro-1-octanesulfonamide (PFOSA)	754-91-	6 PFAS by ID SOP	1.1	J 3.6	0.91	ng/L	1
Perfluoro-1-pentanesulfonic acid (PFPeS)	2706-91-	4 PFAS by ID SOP	3.8	3.6	0.91	ng/L	1
Perfluorododecanesulfonic acid (PFDOS)	79780-39-	5 PFAS by ID SOP	ND	7.2	1.8	ng/L	1
Perfluorohexanesulfonic acid (PFHxS)	355-46-	4 PFAS by ID SOP	14	3.6	0.91	ng/L	1
Perfluoro-n-butanoic acid (PFBA)	375-22-	4 PFAS by ID SOP	28	3.6	0.91	ng/L	1
Perfluoro-n-decanoic acid (PFDA)	335-76-2	2 PFAS by ID SOP	ND	3.6	0.91	ng/L	1
Perfluoro-n-dodecanoic acid (PFDoA)	307-55-	1 PFAS by ID SOP	ND	3.6	0.91	ng/L	1
Perfluoro-n-heptanoic acid (PFHpA)	375-85-	9 PFAS by ID SOP	1.2	J 3.6	0.91	ng/L	1
Perfluoro-n-hexadecanoic acid (PFHxDA)	67905-19-	5 PEAS by ID SOP	ND	7.2	1.8	ng/L	1
Perfluoro-n-hexanoic acid (PFHxA)	307-24-	4 PFAS by ID SOP	1.9	J 3.6	0.91	ng/L	1
Perfluoro-n-nonanoic acid (PFNA)	375-95-	1 PEAS by ID SOP	ND	3.6	0.91	ng/L	1
Perfluoro-n-octadecanoic acid (PFODA)	16517-11-	6 PEAS by ID SOP	ND	7.2	1.8	ng/L	1
Periluoro-n-octanoic acid (PFOA)	335-07-		1.0	3.0	0.91	ng/L	1
Periluoro-n-perilanoic acid (PFPeA)	2700-90-	3 PFAS by ID SOP	1.8	J 3.0	0.91	ng/L	1
Periluoro-n-tell'adecanoic acid (PFTeDA)	370-00-	PFAS by ID SOP		3.0	0.91	ng/L	1
Perfluere p undecanoic acid (PETIDA)	2059-94-			3.0	0.91	ng/L	1
Perfluoro-n-undecanoc acid (PFOGA)	2008-94-0			3.0	0.91	ng/L	1
Perhuorooctanesuironic acid (PFOS)	1703-23-		8.3	3.0	0.91	ng/L	I
Surrogate Q % Re	un i Acc covery l	eptance _imits					
13C2_4:2FTS	113	25-150					
1302_6:2F15	101	25-150					
13C2_8:2F1S	86	25-150					
	88	25-150					
	8/	25-150					
I3C2_PFTeDA	84	25-150					
LOQ = Limit of QuantitationB = Detected in the method blankND = Not detected at or above the DLN = Recovery is out of criteriaH = Out of holding timeW = Reported on wet weight basis	E = Quantitation P = The RPD b	on of compound exceeded the operative of compound exceeded the operative of the columns exceeded the columns exce	calibration ra eds 40%	nge DL = Detection J = Estimated r	Limit esult < LOQ and ≥ I	DL	

Pace Analytical Services, LLC (formerly Shealy Environmental Services, Inc.) 106 Vantage Point Drive West Columbia, SC 29172 (803) 791-9700 Fax (803) 791-9111 www.pacelabs.com

Client: Pace Analytical Services, LLC		Laboratory ID: VK08043-016
Description: 239-0		Matrix: Aqueous
Date Sampled:11/03/2020 1030	Project Name: LACROSSE WELL #23 & 24	
Date Received: 11/06/2020	Project Number: 40217713	

Surrogate	Run 1 Acc Q % Recovery L	eptance _imits
13C3_PFBS	87 2	25-150
13C3_PFHxS	89 2	25-150
13C3-HFPO-DA	93 2	25-150
13C4_PFBA	99 2	25-150
13C4_PFHpA	88 2	25-150
13C5_PFHxA	96 2	25-150
13C5_PFPeA	97 2	25-150
13C6_PFDA	92 2	25-150
13C7_PFUdA	84 2	25-150
13C8_PFOA	98 2	25-150
13C8_PFOS	82 2	25-150
13C8_PFOSA	98	10-150
13C9_PFNA	92 2	25-150
d-EtFOSA	79	10-150
d5-EtFOSAA	90 2	25-150
d9-EtFOSE	96	10-150
d-MeFOSA	92	10-150
d3-MeFOSAA	91 2	25-150
d7-MeFOSE	86	10-150

 LOQ = Limit of Quantitation
 B = Detected in the method blank
 E = Quantitation of compound exceeded the calibration range
 DL = Detection Limit

 ND = Not detected at or above the DL
 N = Recovery is out of criteria
 P = The RPD between two GC columns exceeds 40%
 J = Estimated result < LOQ and ≥ DL</td>

 H = Out of holding time
 W = Reported on wet weight basis
 W = Not detected at or above the calibration range
 N = Not detected at or above the calibration range
 N = Estimated result < LOQ and ≥ DL</td>

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444 21st Street South  $\cdot$  La Crosse, Wisconsin  $\cdot$  54601

December 1, 2020

2517 1st Avenue East La Crosse, WI 54603

Subject: Private Well Sampling Results 2517 1st Avenue East, La Crosse, WI 54603 Tax parcel # 4-247-0 Sample ID # 247-0

Dear

We have received and reviewed the test results for the sample collected on November 3, 2020 at the above address. Some PFAS compounds were found, but the levels found were **below** the Department of Health Services (DHS) levels recommended for protecting health. These levels are called the "Recommended Public Health Standard" in the table below. The levels found in *your* well are called the "Sample Result" in the table below.

#### Sample Results

Compound	Sample Result (unit)	Recomm Public H Standard	ended ealth (unit <sup>e</sup> )
N-Ethyl Perfluorooctane sulfonamide (NEtFOSA) CAS # 4151-50-2	Not Detected	20 ppt <sup>a,b</sup>	) ppt unds I 6
N-Ethyl perfluorooctane sulfonamidoacetic acid (NEtFOSAA) CAS # 2991-50-6	Not Detected	20 ppt <sup>a,b</sup>	it is 20 compo <i>il</i> of al
N-Ethyl perfluorooctane sulfonamidoethanol (NEtFOSE) CAS # 1691-99-2	Not Detected	20 ppt <sup>a,b</sup>	ed lim ese 6 c ed totc
Perfluorooctane sulfonamide (FOSA) CAS # 754-91-6	Not Detected	20 ppt <sup>a,b</sup>	mend of the mbine
Perfluorooctanoic acid (PFOA) CAS # 335-67-1	Not Detected	20 ppt <sup>a,b</sup>	recom ny <i>one</i> the <i>cc</i>
Perfluorooctanesulfonic acid (PFOS) CAS # 1763-23-1	4.7 ppt	20 ppt <sup>a,b</sup>	The for ai or

Private Well Sampling Results for 2517 1st Avenue East, La Crosse, WI 54603 Tax parcel # 4-247-0 Sample ID # 247-0 December 1, 2020

Compound	Sample Result (unit)	Recommended Public Health Standard (unit <sup>e</sup> )
Hexafluoropropylene oxide dimer acid (HPFO-DA; GenX) CAS # 13252-13-6	Not Detected	300 ppt <sup>a</sup>
Perfluorobutanesulfonic acid (PFBS) CAS # 375-73-5	3.9 ppt	450,000 ppt <sup>a</sup>
Perfluorohexanesulfonic acid (PFHxS) CAS # 355-46-4	17 ppt	40 ppt ª
Perfluorobutanoic acid (PFBA) CAS # 375-22-4	18 ppt	10,000 ppt <sup>a</sup>
Perfluorodecanoic acid (PFDA) CAS # 335-76-2	Not Detected	300 ppt <sup>a</sup>
Perfluorododecanoic acid (PFDoA) CAS # 307-55-1	Not Detected	500 ppt <sup>a</sup>
Perfluorohexanoic acid (PFHxA) CAS # 307-24-4	Not Detected	150,000 ppt <sup>a</sup>
Perfluorononanoic acid (PFNA) CAS # 375-95-1	Not Detected	30 ppt <sup>a</sup>
Perfluorotetradecanoic acid (PFTeA) CAS # 376-06-7	Not Detected	10,000 ppt <sup>a</sup>
Perfluoroundecanoic acid (PFUnA) CAS # 2058-94-8	Not Detected	3,000 ppt <sup>a</sup>
4,8-Dioxa-3H-perfluorononanoic acid (DONA) CAS # 919005-14-4	Not Detected	3,000 ppt <sup>a</sup>
Perfluorooctadecanoic acid (PFODA) CAS # 16517-11-6	Not Detected	400,000 ppt <sup>a</sup>
Perfluoro-1-pentanesulfonic acid (PFPeS) CAS #2706-91-4	2.3 ppt	None Established <sup>c</sup>

<sup>a</sup> Public health enforcement standard (ES) recommended by DHS.

<sup>b</sup> DHS recommends a combined enforcement standard of 20 ng/L and combined preventive action limit of 2 ng/L for FOSA, NEt-FOSA, NetFOSAA, PFOS, and PFOA.

<sup>c</sup> A current standard is not available; the compound is currently under review by DHS for potential public health standard recommendation.

<sup>d</sup> Public health enforcement standard (ES) in NR 140, Wisconsin Administrative Code.

<sup>e</sup> Units: Parts per trillion (ppt) = nanograms of substance per liter of water (ng/L)

<sup>BL</sup> Detected in the method blank. Possible lab contaminant.

Private Well Sampling Results for 2517 1st Avenue East, La Crosse, WI 54603 Tax parcel # 4-247-0 Sample ID # 247-0 December 1, 2020

As required by law, we will be submitting these results to the Department of Natural Resources (DNR). The DNR may consult with the Department of Health Services (DHS) about these test results. DHS may review all PFAS tests and follow-up with you directly if any actions are recommended to protect your health.

Thank you for your patience and assistance with our investigation. We will provide updates on the project at <u>https://www.cityoflacrosse.org/wells</u> as our work continues. If you have any questions, please call The OS Group at (608) 668-2718 or email them at <u>PFAS@theOSgrp.com</u>.

You can also contact the DNR and DHS with questions about PFAS or the water sample results at the numbers provided below.

Questions about		<u>Contact</u>	<u>Phone</u>	E-mail Address		
Soil & Groundwater Testing, Clean Up	DNR	David Rozeboom	715-215-2078	David.Rozeboom@wisconsin.gov		
Drinking Water or Private wells	DNR	Kyle Burton	920-360-2112	kyle.burton@wisconsin.gov		
Health Concerns	DHS	Curtis Hedman	608-266-6677	Curtis.Hedman@dhs.wisconsin.gov		

On behalf of The City of La Crosse *The OS Group, LLC* 

Attachment: Lab report for your well

Client: Pace Analytical Services, LLC				Laboratory II	D: VK08043-0	017	
Description: 247-0				Matrix	: Aqueous		
Date Sampled:11/03/2020 1055 F	Project Nam	e: LACROSSE WELL #	<sup>‡</sup> 23 & 24				
Date Received: 11/06/2020 Pro	piect Numbe	er: 40217713					
		a altra la Data Arrahast	Davis Data	Datab			
RunPrep MethodAnalytical MethodL1SOP SPEPFAS by ID SOP	1 11	/18/2020 1448 MMM	Prep Date 11/17/2020	Batch 1034 73728			
Parameter	CAS Numbe	S Analytical r Method	Result Q	LOQ	DL	Units	Run
9-chlorohexadecafluoro-3-oxanone-1-sulfonic acid (9CI-PF3ONS)	756426-58-	1 PFAS by ID SOP	ND	7.0	1.8	ng/L	1
11-chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11CI-PF3)	763051-92-	9 PFAS by ID SOP	ND	7.0	1.8	ng/L	1
1H, 1H, 2H, 2H-perfluorodecane sulfonic acid (8:2 FTS)	39108-34-	4 PFAS by ID SOP	ND	7.0	1.8	ng/L	1
1H, 1H, 2H, 2H-perfluorooctane sulfonic acid (6:2 FTS)	27619-97-	2 PFAS by ID SOP	ND	7.0	1.8	ng/L	1
1H,1H,2H,2H-perfluorododecane sulfonic acid (10:2 FTS)	120226-60-	0 PFAS by ID SOP	ND	7.0	1.8	ng/L	1
1H,1H,2H,2H-perfluorohexane sulfonic acid (4:2 FTS)	757124-72-	4 PFAS by ID SOP	ND	7.0	1.8	ng/L	1
Hexafluoropropylene oxide dimer acid (GenX)	13252-13-	6 PFAS by ID SOP	ND	7.0	1.8	ng/L	1
4,8-dioxa-3H-perfluorononanoic acid (ADONA)	919005-14-	4 PFAS by ID SOP	ND	7.0	1.8	ng/L	1
N-ethylperfluoro-1-octanesulfonamide (EtFOSA)	4151-50-	2 PFAS by ID SOP	ND	7.0	1.8	ng/L	1
N-ethylperfluoro-1-octanesulfonamidoacetic acid (EtFOSAA)	2991-50-	6 PFAS by ID SOP	ND	7.0	1.8	ng/L	1
2-N-ethylperfluoro-1-octanesulfonamido-ethanol (EtFOSE)	1691-99-	2 PFAS by ID SOP	ND	7.0	1.8	ng/L	1
N-methylperfluoro-1-octanesulfonamide (MeFOSA)	31506-32-	8 PFAS by ID SOP	ND	14	3.5	ng/L	1
N-methylperfluoro-1-octanesulfonamidoacetic acid (MeFOSAA)	2355-31-	9 PFAS by ID SOP	ND	7.0	1.8	ng/L	1
2-N-methylperfluoro-1-octanesulfonamido-ethanol (MeFOSE)	24448-09-	7 PFAS by ID SOP	ND	7.0	1.8	ng/L	1
Perfluoro-1-butanesulfonic acid (PFBS)	375-73-	5 PFAS by ID SOP	3.9	3.5	0.88	ng/L	1
Perfluoro-1-decanesulfonic acid (PFDS)	335-77-	3 PFAS by ID SOP	ND	3.5	0.88	ng/L	1
Perfluoro-1-heptanesulfonic acid (PFHpS)	375-92-	8 PFAS by ID SOP	ND	3.5	0.88	ng/L	1
Perfluoro-1-nonanesulfonic acid (PFNS)	68259-12-	1 PFAS by ID SOP	ND	3.5	0.88	ng/L	1
Perfluoro-1-octanesulfonamide (PFOSA)	754-91-	6 PFAS by ID SOP	ND	3.5	0.88	ng/L	1
Perfluoro-1-pentanesulfonic acid (PFPeS)	2706-91-	4 PFAS by ID SOP	2.3 J	3.5	0.88	ng/L	1
Perfluorododecanesulfonic acid (PFDOS)	79780-39-	-5 PFAS by ID SOP	ND	7.0	1.8	ng/L	1
Perfluorohexanesulfonic acid (PFHxS)	355-46-	4 PFAS by ID SOP	17	3.5	0.88	ng/L	1
Perfluoro-n-butanoic acid (PFBA)	375-22-	4 PFAS by ID SOP	18	3.5	0.88	ng/L	1
Periluoro-n-decanoic acid (PFDA)	335-76-	2 PFAS by ID SOP	ND	3.5	0.88	ng/L	1
Periluoro-n-dodecanoic acid (PEDDA)	307-55-	DEAS by ID SOP	ND	3.5	0.88	ng/L	1
Periluoro-n-neptanoic acid (PEHypA)	3/3-83- 4700E 10	F DEAS by ID SOP		3.5	0.88	ng/L	1
Perfluero p boyaneis acid (PEHyA)	207-24	A DEAS by ID SOP	ND	7.0	1.8	ng/L	1
Perfluoro n poponois acid (PENA)	275 05	1 DEAS by ID SOP	ND	3.0	0.88	ng/L	1
Perfluero n ostadosonois acid (PENA)	373-93-	A DEAS by ID SOP	ND	3.5	0.88	ng/L	1
Perfluoro-n-octanoic acid ( $PFODA$ )	335-67-	1 PEAS by ID SOP		7.0	0.00	ng/L	1
Perfluoro-n-pentanoic acid (PEPeA)	2706-90-	3 PEAS by ID SOP	ND	3.5	0.00	ng/L	1
Perfluoro-n-tetradecanoic acid (PETeDA)	376-06-	7 PEAS by ID SOP	ND	3.5	0.00	ng/l	1
Perfluoro-n-tridecanoic acid (PETrDA)	72629-94-	-8 PEAS by ID SOP	ND	3.5	0.00	ng/l	1
Perfluoro-n-undecanoic acid (PFUdA)	2058-94-	8 PFAS by ID SOP	ND	3.5	0.88	ng/L	1
Perfluorooctanesulfonic acid (PFOS)	1763-23-	1 PFAS by ID SOP	4.7	3.5	0.88	na/L	1
RI	un 1 Acc	ceptance			0.00		
Surrogate Q % Re	covery I	Limits					
13C2_4:2FTS	103	25-150					
13C2_6:2F1S	92	25-150					
13C2_8:2FTS	81	25-150					
	90	25-150					
	89	25-150					
I3CZ_PFTEDA	84	25-150					
LOQ = Limit of Quantitation B = Detected in the method blank	E = Quantitatio	on of compound exceeded the o	calibration range	DL = Detection Lin	nit		
ND = Not detected at or above the DL     N = Recovery is out of criteria       H = Out of holding time     W = Reported on wet weight basis	P = The RPD	between two GC columns exce	eds 40%	J = Estimated resu	It < LOQ and <u>&gt;</u> D	DL	

Pace Analytical Services, LLC (formerly Shealy Environmental Services, Inc.) 106 Vantage Point Drive West Columbia, SC 29172 (803) 791-9700 Fax (803) 791-9111 www.pacelabs.com

Laboratory ID: VK08043-017 Matrix: Aqueous

Client: Pace Analytical Services, LLC	
Description: 247-0	
Date Sampled:11/03/2020 1055	Project Name: LACROSSE WELL #23 & 24
Date Received: 11/06/2020	Project Number: 40217713

Run 1 Acceptance Surrogate Q % Recovery Limits 13C3\_PFBS 87 25-150 13C3\_PFHxS 89 25-150 13C3-HFPO-DA 98 25-150 13C4\_PFBA 95 25-150 13C4\_PFHpA 86 25-150 13C5\_PFHxA 92 25-150 13C5\_PFPeA 94 25-150 13C6\_PFDA 85 25-150 13C7\_PFUdA 84 25-150 93 13C8\_PFOA 25-150 13C8\_PFOS 82 25-150 13C8\_PFOSA 96 10-150 13C9\_PFNA 87 25-150 82 d-EtFOSA 10-150 d5-EtFOSAA 91 25-150 d9-EtFOSE 91 10-150 d-MeFOSA 88 10-150 d3-MeFOSAA 86 25-150 d7-MeFOSE 88 10-150

H = Out of holding time	W = Reported on wet weight basis				
ND = Not detected at or above the DL	N = Recovery is out of criteria	P = The RPD between two GC columns exceeds 40%	J = Estimated result < LOQ and $\ge$ DL		
LOQ = Limit of Quantitation	B = Detected in the method blank	E = Quantitation of compound exceeded the calibration range	DL = Detection Limit		

 Pace Analytical Services, LLC (formerly Shealy Environmental Services, Inc.)

 106 Vantage Point Drive
 West Columbia, SC 29172 (803) 791-9700 Fax (803) 791-9111 www.pacelabs.com



444 21st Street South  $\cdot$  La Crosse, Wisconsin  $\cdot$  54601

December 1, 2020

2537 1st Avenue East La Crosse, WI 54603

Subject: Private Well Sampling Results 2537 1st Avenue East, La Crosse, WI 54603 Tax parcel # 4-252-0 Sample ID # 252-0

:

### Dear

We have received and reviewed the test results for the sample collected on November 3, 2020 at the above address. Some PFAS compounds were found at levels <u>above</u> the Department of Health Services (DHS) levels recommended for protecting health. These levels are called the "Recommended Public Health Standard" in the table below. The levels found in your well are called the "Sample Result" in the table below.

Because some of the levels are above the recommended Public Health Standard, the City is offering to provide bottled water delivered to your home for drinking, cooking, and brushing your teeth. There will be no cost to you for the bottled water. Please complete the attached form and mail it to The OS Group to make arrangements for having a water dispenser and bottles delivered to your home. Call 608-668-2718 or email <u>PFAS@theOSgrp.com</u>. You may also complete this form on line at <u>www.cityoflacrosse.org/bottledwater</u>

The following table summarizes the test results from the sample. **Bolded results** are above a current recommended level intended to protect your health according to the Department of Health Services (DHS).

Private Well Sampling Results for 2537 1st Avenue East, La Crosse, WI 54603 Tax Parcel # 4-252-0 December 1, 2020

Sample Resu	lts
-------------	-----

Compound	Sample Result (unit)	Recomm Public H Standard	ended lealth (unit <sup>e</sup> )
N-Ethyl Perfluorooctane sulfonamide (NEtFOSA) CAS # 4151-50-2	Not Detected	20 ppt <sup>a,b</sup>	) ppt unds I 6
N-Ethyl perfluorooctane sulfonamidoacetic acid (NEtFOSAA) CAS # 2991-50-6	Not Detected	20 ppt <sup>a,b</sup>	it is 20 ompo // of all
N-Ethyl perfluorooctane sulfonamidoethanol (NEtFOSE) CAS # 1691-99-2	Not Detected	20 ppt <sup>a,b</sup>	ed lim ese 6 c ed tota
Perfluorooctane sulfonamide (FOSA) CAS # 754-91-6	Not Detected	20 ppt <sup>a,b</sup>	mend of the
Perfluorooctanoic acid (PFOA) CAS # 335-67-1	38 ppt	20 ppt <sup>a,b</sup>	recom ny <i>one</i> the <i>c</i> c
Perfluorooctanesulfonic acid (PFOS) CAS # 1763-23-1	310 ppt	20 ppt <sup>a,b</sup>	The for a or
Hexafluoropropylene oxide dimer acid (HPFO-DA; GenX) CAS # 13252-13-6	Not Detected		300 ppt <sup>a</sup>
Perfluorobutanesulfonic acid (PFBS) CAS # 375-73-5	35 ppt	450	),000 ppt <sup>a</sup>
Perfluorohexanesulfonic acid (PFHxS) CAS # 355-46-4	950 ppt		40 ppt <sup>a</sup>
Perfluorobutanoic acid (PFBA) CAS # 375-22-4	15 ppt	10	),000 ppt <sup>a</sup>
Perfluorodecanoic acid (PFDA) CAS # 335-76-2	Not Detected		300 ppt <sup>a</sup>
Perfluorododecanoic acid (PFDoA) CAS # 307-55-1	Not Detected		500 ppt <sup>a</sup>
Perfluorohexanoic acid (PFHxA) CAS # 307-24-4	24 ppt	150	),000 ppt <sup>a</sup>
Perfluorononanoic acid (PFNA) CAS # 375-95-1	Not Detected		30 ppt <sup>a</sup>
Perfluorotetradecanoic acid (PFTeA) CAS # 376-06-7	Not Detected	10	),000 ppt <sup>a</sup>
Perfluoroundecanoic acid (PFUnA) CAS # 2058-94-8	Not Detected	3	3,000 ppt <sup>a</sup>
4,8-Dioxa-3H-perfluorononanoic acid (DONA) CAS # 919005-14-4	Not Detected	3	3,000 ppt <sup>a</sup>
Perfluorooctadecanoic acid (PFODA) CAS # 16517-11-6	Not Detected	400	),000 ppt <sup>a</sup>

Perfluoro-1-heptanesulfonic acid (PFHpS) CAS # 375-92-8	38 ppt	None Established <sup>c</sup>		
Perfluoro-1-pentanesulfonic acid (PFPeS) CAS # 2706-91-4	77 ppt	None Established <sup>c</sup>		
Perfluoro-n-heptanoic acid (PFHpA) CAS # 375-85-9	5.7 ppt	None Established <sup>c</sup>		
Perfluoro-n-pentanoic acid (PFPeA) CAS #2706-90-3	6.1 ppt	None Established <sup>c</sup>		
<ul> <li><sup>a</sup> Public health enforcement standard (ES) recommended by DHS.</li> <li><sup>b</sup> DHS recommends a combined enforcement standard of 20 ng/L and combined preventive action limit of 2 ng/L for FOSA, NEt-FOSE, NEt-FOSA, NetFOSAA, PFOS, and PFOA.</li> <li><sup>c</sup> A current standard is not available; the compound is currently under review by DHS for potential public health standard recommendation.</li> </ul>				

<sup>d</sup> Public health enforcement standard (ES) in NR 140, Wisconsin Administrative Code.

<sup>e</sup> Units: Parts per trillion (ppt) = nanograms of substance per liter of water (ng/L)

<sup>BL</sup> Detected in the method blank. Possible lab contaminant.

As required by law, we will be submitting these results to the Department of Natural Resources (DNR). The DNR may consult with the Department of Health Services (DHS) about these test results. DHS may review all PFAS tests and follow-up with you directly if any actions are recommended to protect your health.

Thank you for your patience and assistance with our investigation. We will provide updates on the project at <u>https://www.cityoflacrosse.org/wells</u> as our work continues. If you have any questions, please call The OS Group at (608) 668-2718 or email them at <u>PFAS@theOSgrp.com</u>.

You can also contact the DNR and DHS with questions about PFAS or the water sample results at the numbers provided below.

Questions about		<u>Contact</u>	<u>Phone</u>	E-mail Address
Soil & Groundwater Testing, Clean Up	DNR	David Rozeboom	715-215-2078	David.Rozeboom@wisconsin.gov
Drinking Water or Private wells	DNR	Kyle Burton	920-360-2112	kyle.burton@wisconsin.gov
Health Concerns	DHS	Curtis Hedman	608-266-6677	Curtis.Hedman@dhs.wisconsin.gov

On behalf of The City of La Crosse *The OS Group, LLC* 

Attachment: Lab report for your well Bottled Water Acknowledgement

Client: Pace Analytical S	Services, LLC				Laboratory IE	D: VK08043-0	018			
Description: 252-0		Matrix: Aqueous								
Date Sampled:11/03/2020 1110	Р	roiect Name	e: LACROSSE WELL #	#23 & 24		1				
Date Received: 11/06/2020	Dro	liact Numbe	r. 10217712							
Date Received. 11/00/2020	110	ject Numbe	1.40217713							
Run Prep Method	Analytical Method D	ilution A	nalysis Date Analyst	Prep Date	Batch					
1 SOP SPE	PFAS by ID SOP	1 11	/18/2020 1459 MMM	11/1//2020 10	034 73728					
2 SOP SPE	PFAS by ID SOP	5 11	/19/2020 1431 WIWIWI	11/1//2020 10	)34 /3/28					
Parameter		CAS	6 Analytical r Method	Result 0	100	DI	Units	Run		
9-chlorohexadecafluoro-3-oxanone-1-	-sulfonic acid (9CI-PF3ONS)	756426-58-	1 PFAS by ID SOP	ND	7.1	1.8	na/L	1		
11-chloroeicosafluoro-3-oxaundecane	e-1-sulfonic acid (11CI-PF3)	763051-92-	9 PFAS by ID SOP	ND	7.1	1.8	ng/L	1		
1H, 1H, 2H, 2H-perfluorodecane sulfo	onic acid (8:2 FTS)	39108-34-	4 PFAS by ID SOP	ND	7.1	1.8	ng/L	1		
1H, 1H, 2H, 2H-perfluorooctane sulfo	nic acid (6:2 FTS)	27619-97-	2 PFAS by ID SOP	ND	7.1	1.8	ng/L	1		
1H,1H,2H,2H-perfluorododecane sulf	onic acid (10:2 FTS)	120226-60-	0 PFAS by ID SOP	ND	7.1	1.8	ng/L	1		
1H,1H,2H,2H-perfluorohexane sulfoni	ic acid (4:2 FTS)	757124-72-	4 PFAS by ID SOP	ND	7.1	1.8	ng/L	1		
Hexafluoropropylene oxide dimer acid	d (GenX)	13252-13-	6 PFAS by ID SOP	ND	7.1	1.8	na/L	1		
4,8-dioxa-3H-perfluorononanoic acid	(ADONA)	919005-14-	4 PFAS by ID SOP	ND	7.1	1.8	ng/L	1		
N-ethylperfluoro-1-octanesulfonamide	e (EtFOSA)	4151-50-	2 PFAS by ID SOP	ND	7.1	1.8	ng/L	1		
N-ethylperfluoro-1-octanesulfonamido	pacetic acid (EtFOSAA)	2991-50-	6 PFAS by ID SOP	ND	7.1	1.8	ng/L	1		
2-N-ethylperfluoro-1-octanesulfonami	do-ethanol (EtFOSE)	1691-99-	2 PFAS by ID SOP	ND	7.1	1.8	ng/L	1		
N-methylperfluoro-1-octanesulfonami	de (MeFOSA)	31506-32-	8 PFAS by ID SOP	ND	14	3.6	ng/L	1		
N-methylperfluoro-1-octanesulfonami	doacetic acid (MeFOSAA)	2355-31-	9 PFAS by ID SOP	ND	7.1	1.8	na/L	1		
2-N-methylperfluoro-1-octanesulfonar	mido-ethanol (MeFOSE)	24448-09-	7 PFAS by ID SOP	ND	7.1	1.8	ng/L	1		
Perfluoro-1-butanesulfonic acid (Pf	FBS)	375-73-	5 PFAS by ID SOP	35	3.6	0.89	ng/L	1		
Perfluoro-1-decanesulfonic acid (PFD	S)	335-77-	3 PFAS by ID SOP	ND	3.6	0.89	ng/L	1		
Perfluoro-1-heptanesulfonic acid (F	PFHpS)	375-92-	8 PFAS by ID SOP	38	3.6	0.89	ng/L	1		
Perfluoro-1-nonanesulfonic acid (PFN	IS)	68259-12-	1 PFAS by ID SOP	ND	3.6	0.89	ng/L	1		
Perfluoro-1-octanesulfonamide (PFOS	SA)	754-91-	6 PFAS by ID SOP	ND	3.6	0.89	ng/L	1		
Perfluoro-1-pentanesulfonic acid (F	PFPeS)	2706-91-	4 PFAS by ID SOP	77	3.6	0.89	ng/L	1		
Perfluorododecanesulfonic acid (PFD	OS)	79780-39-	5 PFAS by ID SOP	ND	7.1	1.8	ng/L	1		
Perfluorohexanesulfonic acid (PFH	xS)	355-46-	4 PFAS by ID SOP	950	18	4.5	ng/L	2		
Perfluoro-n-butanoic acid (PFBA)		375-22-	4 PFAS by ID SOP	15	3.6	0.89	ng/L	1		
Perfluoro-n-decanoic acid (PFDA)		335-76-	2 PFAS by ID SOP	ND	3.6	0.89	ng/L	1		
Perfluoro-n-dodecanoic acid (PFDoA)	)	307-55-	1 PFAS by ID SOP	ND	3.6	0.89	ng/L	1		
Perfluoro-n-heptanoic acid (PFHpA	.)	375-85-	9 PFAS by ID SOP	5.7	3.6	0.89	ng/L	1		
Perfluoro-n-hexadecanoic acid (PFHx	(DA)	67905-19-	5 PFAS by ID SOP	ND	7.1	1.8	ng/L	1		
Perfluoro-n-hexanoic acid (PFHxA)		307-24-	4 PFAS by ID SOP	24	3.6	0.89	ng/L	1		
Perfluoro-n-nonanoic acid (PFNA)		375-95-	1 PFAS by ID SOP	ND	3.6	0.89	ng/L	1		
Perfluoro-n-octadecanoic acid (PFOD	A)	16517-11-	6 PFAS by ID SOP	ND	7.1	1.8	ng/L	1		
Perfluoro-n-octanoic acid (PFOA)		335-67-	1 PFAS by ID SOP	38	3.6	0.89	ng/L	1		
Perfluoro-n-pentanoic acid (PFPeA	)	2706-90-	3 PFAS by ID SOP	6.1	3.6	0.89	ng/L	1		
Perfluoro-n-tetradecanoic acid (PFTel	DA)	376-06-	7 PFAS by ID SOP	ND	3.6	0.89	ng/L	1		
Perfluoro-n-tridecanoic acid (PFTrDA)	)	72629-94-	8 PFAS by ID SOP	ND	3.6	0.89	ng/L	1		
Perfluoro-n-undecanoic acid (PFUdA)	)	2058-94-	8 PFAS by ID SOP	ND	3.6	0.89	ng/L	1		
Perfluorooctanesulfonic acid (PFO	S)	1763-23-	1 PFAS by ID SOP	310	3.6	0.89	ng/L	1		
	<b>.</b>		ontanco Dur							
Surrogate	Q % Red	covery l	_imits Q % Rec	overy Limits	S					
1202 4-2575		<u>,</u>	25 150 0	F 0F1F	0					

Surrogate	Q % F	Recovery	Limits	Q	% Recovery	Limits	6
13C2_4:2FTS		94	25-150		95	25-15	0
13C2_6:2FTS		99	25-150		94	25-15	0
13C2_8:2FTS		86	25-150		93	25-15	0
13C2_PFDoA		87	25-150		86	25-15	0
13C2_PFHxDA		92	25-150		95	25-15	0
LOQ = Limit of Quantitation	B = Detected in the method blank	E = Quantita	ation of compo	und exc	eeded the calibration	range D	L = Detection Limit
ND = Not detected at or above the DL	N = Recovery is out of criteria	P = The RP	D between two	GC co	umns exceeds 40%	J	= Estimated result < LOQ and ≥ DL
H = Out of holding time	W = Reported on wet weight basis	S					

Pace Analytical Services, LLC (formerly Shealy Environmental Services, Inc.) 106 Vantage Point Drive West Columbia, SC 29172 (803) 791-9700 Fax (803) 791-9111 www.pacelabs.com

Project Number: 40217713

Client: Pace Analytical Services, LLC Description: 252-0 Date Sampled:11/03/2020 1110 Date Received: 11/06/2020

Project Name: LACROSSE WELL #23 & 24

Laboratory ID: VK08043-018

Matrix: Aqueous

Surrogate	0	Run 1 A		$\cap$	Run 2 A	
	Q	88	25-150	Q	88	25-150
		05	25 150		07	25 150
I3C3_PFBS		85	25-150		87	25-150
13C3_PFHxS		86	25-150		84	25-150
13C3-HFPO-DA		95	25-150		90	25-150
13C4_PFBA		101	25-150		92	25-150
13C4_PFHpA		82	25-150		90	25-150
13C5_PFHxA		91	25-150		92	25-150
13C5_PFPeA		96	25-150		89	25-150
13C6_PFDA		86	25-150		83	25-150
13C7_PFUdA		89	25-150		90	25-150
13C8_PFOA		94	25-150		96	25-150
13C8_PFOS		80	25-150		86	25-150
13C8_PFOSA		97	10-150		92	10-150
13C9_PFNA		93	25-150		93	25-150
d-EtFOSA		94	10-150		89	10-150
d5-EtFOSAA		94	25-150		90	25-150
d9-EtFOSE		92	10-150		99	10-150
d-MeFOSA		90	10-150		84	10-150
d3-MeFOSAA		93	25-150		88	25-150
d7-MeFOSE		85	10-150		89	10-150

LOQ = Limit of QuantitationB = Detected in the method blankE = Quantitation of compound exceeded the calibration rangeDL = Detection LimitND = Not detected at or above the DLN = Recovery is out of criteriaP = The RPD between two GC columns exceeds 40%J = Estimated result < LOQ and ≥ DL</td>H = Out of holding timeW = Reported on wet weight basis

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 West Columbia, SC 29172 (803) 791-9700 Fax (803) 791-9111 www.pacelabs.com

# BOTTLED WATER ACKNOWLEDGEMENT

2537 1st Avenue East, La Crosse, WI 54603

If you desire to accept the bottled water delivery, please complete and sign this form and return it to The OS Group at <u>PFAS@TheOSgrp.com</u> or mail to 444 21<sup>st</sup> St. S, La Crosse, WI 54601. You may also complete this form electronically on line at <u>www.cityoflacrosse.org/bottledwater</u>. Call 608-668-2718 with any question you may have.

As pre-caution for the protection of human health, the City of La Crosse (The City) will provide, on a temporary basis, bottled water for drinking, cooking and toothbrushing purposes at the above referenced address. The water will be delivered to your home or business by a commercial water delivery service. At the City's cost, a dispenser / cooler and regular deliveries of 5-gallon containers of water will be provided. The City reserves the right to dictate the conditions of delivery, such as minimum and maximum number of containers per delivery, frequency and timing of deliveries. The City reserves the right to periodically review whether The City should continue to provide bottled water, considering factors such as State and Federal standards and guidance, evolving knowledge and understanding of the sources, cause and responsibility for the contamination, new or reinterpreted test results, and the availability of more permanent or costeffective sources of water for the above purposes. The City of La Crosse makes no warranty or representation regarding the suitability of the bottled water beyond those made by the commercial water delivery service.

All reusable or returnable equipment and supplies, such as the containers and cooler/dispenser, are the property of the commercial water delivery service or the City of La Crosse. By signing below, the Occupant of the above referenced property acknowledges that all reusable or returnable equipment and supplies shall be returned to the commercial water delivery service or the City of La Crosse upon request. The Occupant agrees to provide reasonable access for delivery of bottled water and pick up of reusable or returnable equipment and supplies. Occupant(s) acknowledges that they may be required to sign an agreement with the commercial water delivery service as a condition of receiving bottled water.

Check ownership:

\_\_\_\_\_ Owner-Occupant Occupant Only

Number of Occupants: \_\_\_\_\_

Signed:	 Dated:	
-		

Printed Name: \_\_\_\_\_



444 21st Street South  $\cdot$  La Crosse, Wisconsin  $\cdot$  54601

December 1, 2020

N5881 Lakeview Court E Onalaska, WI 54650

Subject: Private Well Sampling Results 2537 1st Avenue East, La Crosse, WI 54603 Tax parcel # 4-252-0 Sample ID # 252-0

#### Dear :

We have received and reviewed the test results for the sample collected on November 3, 2020 at the above address. Some PFAS compounds were found at levels <u>above</u> the Department of Health Services (DHS) levels recommended for protecting health. These levels are called the "Recommended Public Health Standard" in the table below. The levels found in your well are called the "Sample Result" in the table below.

Because some of the levels are above the recommended Public Health Standard, the City is offering to provide bottled water delivered to your home for drinking, cooking, and brushing your teeth. There will be no cost to you for the bottled water. Please complete the attached form and mail it to The OS Group to make arrangements for having a water dispenser and bottles delivered to your home. Call 608-668-2718 or email <u>PFAS@theOSgrp.com</u>. You may also complete this form on line at www.cityoflacrosse.org/bottledwater

The following table summarizes the test results from the sample. **Bolded results** are above a current recommended level intended to protect your health according to the Department of Health Services (DHS).

Private Well Sampling Results for 2537 1st Avenue East, La Crosse, WI 54603 Tax Parcel # 4-252-0 December 1, 2020

Sampl	e Res	ults

Compound	Sample Result (unit)	Recomm Public H Standard	ended lealth (unit <sup>e</sup> )
N-Ethyl Perfluorooctane sulfonamide (NEtFOSA) CAS # 4151-50-2	Not Detected	20 ppt <sup>a,b</sup>	) ppt unds I 6
N-Ethyl perfluorooctane sulfonamidoacetic acid (NEtFOSAA) CAS # 2991-50-6	Not Detected	20 ppt <sup>a,b</sup>	it is 2C ompo <i>I</i> of al
N-Ethyl perfluorooctane sulfonamidoethanol (NEtFOSE) CAS # 1691-99-2	Not Detected	20 ppt <sup>a,b</sup>	ed lim ese 6 c ed totc
Perfluorooctane sulfonamide (FOSA) CAS # 754-91-6	Not Detected	20 ppt <sup>a,b</sup>	mend of the
Perfluorooctanoic acid (PFOA) CAS # 335-67-1	38 ppt	20 ppt <sup>a,b</sup>	recom ny <i>one</i> the <i>c</i> c
Perfluorooctanesulfonic acid (PFOS) CAS # 1763-23-1	310 ppt	20 ppt <sup>a,b</sup>	The for a or
Hexafluoropropylene oxide dimer acid (HPFO-DA; GenX) CAS # 13252-13-6	Not Detected		300 ppt <sup>a</sup>
Perfluorobutanesulfonic acid (PFBS) CAS # 375-73-5	35 ppt	450	0,000 ppt <sup>a</sup>
Perfluorohexanesulfonic acid (PFHxS) CAS # 355-46-4	950 ppt		40 ppt <sup>a</sup>
Perfluorobutanoic acid (PFBA) CAS # 375-22-4	15 ppt	10	0,000 ppt <sup>a</sup>
Perfluorodecanoic acid (PFDA) CAS # 335-76-2	Not Detected		300 ppt <sup>a</sup>
Perfluorododecanoic acid (PFDoA) CAS # 307-55-1	Not Detected		500 ppt <sup>a</sup>
Perfluorohexanoic acid (PFHxA) CAS # 307-24-4	24 ppt	150	0,000 ppt <sup>a</sup>
Perfluorononanoic acid (PFNA) CAS # 375-95-1	Not Detected		30 ppt <sup>a</sup>
Perfluorotetradecanoic acid (PFTeA) CAS # 376-06-7	Not Detected	10	0,000 ppt <sup>a</sup>
Perfluoroundecanoic acid (PFUnA) CAS # 2058-94-8	Not Detected	3	3,000 ppt <sup>a</sup>
4,8-Dioxa-3H-perfluorononanoic acid (DONA) CAS # 919005-14-4	Not Detected	:	3,000 ppt <sup>a</sup>
Perfluorooctadecanoic acid (PFODA) CAS # 16517-11-6	Not Detected	400	0,000 ppt <sup>a</sup>

Perfluoro-1-heptanesulfonic acid (PFHpS) CAS # 375-92-8	38 ppt	None Established <sup>c</sup>		
Perfluoro-1-pentanesulfonic acid (PFPeS) CAS # 2706-91-4	77 ppt	None Established <sup>c</sup>		
Perfluoro-n-heptanoic acid (PFHpA) CAS # 375-85-9	5.7 ppt	None Established <sup>c</sup>		
Perfluoro-n-pentanoic acid (PFPeA) CAS #2706-90-3	6.1 ppt	None Established <sup>c</sup>		
<ul> <li><sup>a</sup> Public health enforcement standard (ES) recommended by DHS.</li> <li><sup>b</sup> DHS recommends a combined enforcement standard of 20 ng/L and combined preventive action limit of 2 ng/L for FOSA, NEt-FOSE, NEt-FOSA, NetFOSAA, PFOS, and PFOA.</li> <li><sup>c</sup> A current standard is not available; the compound is currently under review by DHS for potential public health standard recommendation.</li> </ul>				

<sup>d</sup> Public health enforcement standard (ES) in NR 140, Wisconsin Administrative Code.

<sup>e</sup> Units: Parts per trillion (ppt) = nanograms of substance per liter of water (ng/L)

<sup>BL</sup> Detected in the method blank. Possible lab contaminant.

As required by law, we will be submitting these results to the Department of Natural Resources (DNR). The DNR may consult with the Department of Health Services (DHS) about these test results. DHS may review all PFAS tests and follow-up with you directly if any actions are recommended to protect your health.

Thank you for your patience and assistance with our investigation. We will provide updates on the project at <u>https://www.cityoflacrosse.org/wells</u> as our work continues. If you have any questions, please call The OS Group at (608) 668-2718 or email them at <u>PFAS@theOSgrp.com</u>.

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Drinking Water or Private wells	DNR	Kyle Burton	920-360-2112	kyle.burton@wisconsin.gov
Health Concerns	DHS	Curtis Hedman	608-266-6677	Curtis.Hedman@dhs.wisconsin.gov

On behalf of The City of La Crosse *The OS Group, LLC* 

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Client: Pace Analytical S	Services, LLC				Laboratory IE	D: VK08043-0	018	
Description: 252-0					Matrix	: Aqueous		
Date Sampled:11/03/2020 1110	Р	roiect Name	e: LACROSSE WELL #	≇23 & 24		1		
Date Received: 11/06/2020	Dro	liact Numbe	r. 10217713					
Date Received. 11/00/2020	110	ject Numbe	1.40217713					
Run Prep Method	Analytical Method D	ilution A	halysis Date Analyst	Prep Date	Batch			
1 SOP SPE	PFAS by ID SOP	1 11	/18/2020 1459 MMM	11/1//2020 10	034 73728			
2 SOP SPE	PFAS by ID SOP	5 11	/19/2020 1431 WIWIWI	11/1//2020 10	)34 /3/28			
Parameter		CAS	6 Analytical Method	Result O	1.00	וח	Units	Run
9-chlorohexadecafluoro-3-oxanone-1-	-sulfonic acid (9CI-PF3ONS)	756426-58-	1 PFAS by ID SOP	ND	7.1	1.8	na/L	1
11-chloroeicosafluoro-3-oxaundecane	e-1-sulfonic acid (11CI-PF3)	763051-92-	9 PFAS by ID SOP	ND	7.1	1.8	ng/L	1
1H, 1H, 2H, 2H-perfluorodecane sulfo	onic acid (8:2 FTS)	39108-34-	4 PFAS by ID SOP	ND	7.1	1.8	ng/L	1
1H, 1H, 2H, 2H-perfluorooctane sulfo	nic acid (6:2 FTS)	27619-97-	2 PFAS by ID SOP	ND	7.1	1.8	ng/L	1
1H,1H,2H,2H-perfluorododecane sulf	onic acid (10:2 FTS)	120226-60-	0 PFAS by ID SOP	ND	7.1	1.8	ng/L	1
1H,1H,2H,2H-perfluorohexane sulfoni	ic acid (4:2 FTS)	757124-72-	4 PFAS by ID SOP	ND	7.1	1.8	ng/L	1
Hexafluoropropylene oxide dimer acid	d (GenX)	13252-13-	6 PFAS by ID SOP	ND	7.1	1.8	na/L	1
4,8-dioxa-3H-perfluorononanoic acid	(ADONA)	919005-14-	4 PFAS by ID SOP	ND	7.1	1.8	ng/L	1
N-ethylperfluoro-1-octanesulfonamide	e (EtFOSA)	4151-50-	2 PFAS by ID SOP	ND	7.1	1.8	ng/L	1
N-ethylperfluoro-1-octanesulfonamido	pacetic acid (EtFOSAA)	2991-50-	6 PFAS by ID SOP	ND	7.1	1.8	ng/L	1
2-N-ethylperfluoro-1-octanesulfonami	do-ethanol (EtFOSE)	1691-99-	2 PFAS by ID SOP	ND	7.1	1.8	ng/L	1
N-methylperfluoro-1-octanesulfonami	de (MeFOSA)	31506-32-	8 PFAS by ID SOP	ND	14	3.6	ng/L	1
N-methylperfluoro-1-octanesulfonami	doacetic acid (MeFOSAA)	2355-31-	9 PFAS by ID SOP	ND	7.1	1.8	na/L	1
2-N-methylperfluoro-1-octanesulfonar	mido-ethanol (MeFOSE)	24448-09-	7 PFAS by ID SOP	ND	7.1	1.8	ng/L	1
Perfluoro-1-butanesulfonic acid (Pf	FBS)	375-73-	5 PFAS by ID SOP	35	3.6	0.89	ng/L	1
Perfluoro-1-decanesulfonic acid (PFD	S)	335-77-	3 PFAS by ID SOP	ND	3.6	0.89	ng/L	1
Perfluoro-1-heptanesulfonic acid (F	PFHpS)	375-92-	8 PFAS by ID SOP	38	3.6	0.89	ng/L	1
Perfluoro-1-nonanesulfonic acid (PFN	IS)	68259-12-	1 PFAS by ID SOP	ND	3.6	0.89	ng/L	1
Perfluoro-1-octanesulfonamide (PFOS	SA)	754-91-	6 PFAS by ID SOP	ND	3.6	0.89	ng/L	1
Perfluoro-1-pentanesulfonic acid (F	PFPeS)	2706-91-	4 PFAS by ID SOP	77	3.6	0.89	ng/L	1
Perfluorododecanesulfonic acid (PFD	OS)	79780-39-	5 PFAS by ID SOP	ND	7.1	1.8	ng/L	1
Perfluorohexanesulfonic acid (PFH	xS)	355-46-	4 PFAS by ID SOP	950	18	4.5	ng/L	2
Perfluoro-n-butanoic acid (PFBA)		375-22-	4 PFAS by ID SOP	15	3.6	0.89	ng/L	1
Perfluoro-n-decanoic acid (PFDA)		335-76-	2 PFAS by ID SOP	ND	3.6	0.89	ng/L	1
Perfluoro-n-dodecanoic acid (PFDoA)	)	307-55-	1 PFAS by ID SOP	ND	3.6	0.89	ng/L	1
Perfluoro-n-heptanoic acid (PFHpA	.)	375-85-	9 PFAS by ID SOP	5.7	3.6	0.89	ng/L	1
Perfluoro-n-hexadecanoic acid (PFHx	(DA)	67905-19-	5 PFAS by ID SOP	ND	7.1	1.8	ng/L	1
Perfluoro-n-hexanoic acid (PFHxA)		307-24-	4 PFAS by ID SOP	24	3.6	0.89	ng/L	1
Perfluoro-n-nonanoic acid (PFNA)		375-95-	1 PFAS by ID SOP	ND	3.6	0.89	ng/L	1
Perfluoro-n-octadecanoic acid (PFOD	A)	16517-11-	6 PFAS by ID SOP	ND	7.1	1.8	ng/L	1
Perfluoro-n-octanoic acid (PFOA)		335-67-	1 PFAS by ID SOP	38	3.6	0.89	ng/L	1
Perfluoro-n-pentanoic acid (PFPeA	)	2706-90-	3 PFAS by ID SOP	6.1	3.6	0.89	ng/L	1
Perfluoro-n-tetradecanoic acid (PFTel	DA)	376-06-	7 PFAS by ID SOP	ND	3.6	0.89	ng/L	1
Perfluoro-n-tridecanoic acid (PFTrDA)	)	72629-94-	8 PFAS by ID SOP	ND	3.6	0.89	ng/L	1
Perfluoro-n-undecanoic acid (PFUdA)	1	2058-94-	8 PFAS by ID SOP	ND	3.6	0.89	ng/L	1
Perfluorooctanesulfonic acid (PFO	S)	1763-23-	1 PFAS by ID SOP	310	3.6	0.89	ng/L	1
	<b>.</b>		ontanco Dur					
Surrogate	Q % Red	covery l	Limits Q % Rec	overy Limits	S			
1202 4.2555		<u>,</u>	2E 1E0 0	F 1515	0			

Surrogate	Q % F	Recovery	Limits	Q	% Recovery	Limits	6
13C2_4:2FTS		94	25-150		95	25-15	0
13C2_6:2FTS		99	25-150		94	25-15	0
13C2_8:2FTS		86	25-150		93	25-15	0
13C2_PFDoA		87	25-150		86	25-15	0
13C2_PFHxDA		92	25-150		95	25-15	0
LOQ = Limit of Quantitation	B = Detected in the method blank	E = Quantita	ation of compo	und exc	eeded the calibration	range D	L = Detection Limit
ND = Not detected at or above the DL	N = Recovery is out of criteria	P = The RP	D between two	GC co	umns exceeds 40%	J	= Estimated result < LOQ and ≥ DL
H = Out of holding time	W = Reported on wet weight basis	S					

Pace Analytical Services, LLC (formerly Shealy Environmental Services, Inc.) 106 Vantage Point Drive West Columbia, SC 29172 (803) 791-9700 Fax (803) 791-9111 www.pacelabs.com

Project Number: 40217713

Client: Pace Analytical Services, LLC Description: 252-0 Date Sampled:11/03/2020 1110 Date Received: 11/06/2020

Project Name: LACROSSE WELL #23 & 24

Laboratory ID: VK08043-018

Matrix: Aqueous

Surrogate	0	Run 1 A		$\cap$	Run 2 A	
	Q	88	25-150	Q	88	25-150
		05	25 150		00	25 150
I3C3_PFBS		85	25-150		87	25-150
13C3_PFHxS		86	25-150		84	25-150
13C3-HFPO-DA		95	25-150		90	25-150
13C4_PFBA		101	25-150		92	25-150
13C4_PFHpA		82	25-150		90	25-150
13C5_PFHxA		91	25-150		92	25-150
13C5_PFPeA		96	25-150		89	25-150
13C6_PFDA		86	25-150		83	25-150
13C7_PFUdA		89	25-150		90	25-150
13C8_PFOA		94	25-150		96	25-150
13C8_PFOS		80	25-150		86	25-150
13C8_PFOSA		97	10-150		92	10-150
13C9_PFNA		93	25-150		93	25-150
d-EtFOSA		94	10-150		89	10-150
d5-EtFOSAA		94	25-150		90	25-150
d9-EtFOSE		92	10-150		99	10-150
d-MeFOSA		90	10-150		84	10-150
d3-MeFOSAA		93	25-150		88	25-150
d7-MeFOSE		85	10-150		89	10-150

LOQ = Limit of QuantitationB = Detected in the method blankE = Quantitation of compound exceeded the calibration rangeDL = Detection LimitND = Not detected at or above the DLN = Recovery is out of criteriaP = The RPD between two GC columns exceeds 40%J = Estimated result < LOQ and ≥ DL</td>H = Out of holding timeW = Reported on wet weight basis

 Pace Analytical Services, LLC (formerly Shealy Environmental Services, Inc.)

 106 Vantage Point Drive
 West Columbia, SC 29172 (803) 791-9700 Fax (803) 791-9111 www.pacelabs.com

# BOTTLED WATER ACKNOWLEDGEMENT

2537 1st Avenue East, La Crosse, WI 54603

If you desire to accept the bottled water delivery, please complete and sign this form and return it to The OS Group at <u>PFAS@TheOSgrp.com</u> or mail to 444 21<sup>st</sup> St. S, La Crosse, WI 54601. You may also complete this form electronically on line at <u>www.cityoflacrosse.org/bottledwater</u>. Call 608-668-2718 with any question you may have.

As pre-caution for the protection of human health, the City of La Crosse (The City) will provide, on a temporary basis, bottled water for drinking, cooking and toothbrushing purposes at the above referenced address. The water will be delivered to your home or business by a commercial water delivery service. At the City's cost, a dispenser / cooler and regular deliveries of 5-gallon containers of water will be provided. The City reserves the right to dictate the conditions of delivery, such as minimum and maximum number of containers per delivery, frequency and timing of deliveries. The City reserves the right to periodically review whether The City should continue to provide bottled water, considering factors such as State and Federal standards and guidance, evolving knowledge and understanding of the sources, cause and responsibility for the contamination, new or reinterpreted test results, and the availability of more permanent or costeffective sources of water for the above purposes. The City of La Crosse makes no warranty or representation regarding the suitability of the bottled water beyond those made by the commercial water delivery service.

All reusable or returnable equipment and supplies, such as the containers and cooler/dispenser, are the property of the commercial water delivery service or the City of La Crosse. By signing below, the Occupant of the above referenced property acknowledges that all reusable or returnable equipment and supplies shall be returned to the commercial water delivery service or the City of La Crosse upon request. The Occupant agrees to provide reasonable access for delivery of bottled water and pick up of reusable or returnable equipment and supplies. Occupant(s) acknowledges that they may be required to sign an agreement with the commercial water delivery service as a condition of receiving bottled water.

Check ownership:

\_\_\_\_\_ Owner-Occupant Occupant Only

Number of Occupants: \_\_\_\_\_

Printed Name: \_\_\_\_\_



444 21st Street South  $\cdot$  La Crosse, Wisconsin  $\cdot$  54601

December 1, 2020

2530 1st Avenue West La Crosse, WI 54603

Subject: Private Well Sampling Results 2530 1st Avenue West, La Crosse, WI 54603 Tax parcel # 4-328-0 Sample ID # 328-0

### Dear

We have received and reviewed the test results for the sample collected on November 3, 2020 at the above address. Some PFAS compounds were found at levels <u>above</u> the Department of Health Services (DHS) levels recommended for protecting health. These levels are called the "Recommended Public Health Standard" in the table below. The levels found in your well are called the "Sample Result" in the table below.

Because some of the levels are above the recommended Public Health Standard, the City is offering to provide bottled water delivered to your home for drinking, cooking, and brushing your teeth. There will be no cost to you for the bottled water. Please complete the attached form and mail it to The OS Group to make arrangements for having a water dispenser and bottles delivered to your home. Call 608-668-2718 or email <u>PFAS@theOSgrp.com</u>. You may also complete this form on line at <u>www.cityoflacrosse.org/bottledwater</u>

The following table summarizes the test results from the sample. **Bolded results** are above a current recommended level intended to protect your health according to the Department of Health Services (DHS).

Private Well Sampling Results for 2530 1st Avenue West, La Crosse, WI 54603 Tax Parcel # 4-328-0 December 1, 2020

Compound	Sample Result (unit)	Recomm Public H Standard	ended ealth (unit <sup>e</sup> )	
N-Ethyl Perfluorooctane sulfonamide (NEtFOSA) CAS # 4151-50-2	Not Detected	20 ppt <sup>a,b</sup>	ppt unds 6	
N-Ethyl perfluorooctane sulfonamidoacetic acid (NEtFOSAA) CAS # 2991-50-6	Not Detected	it is 20 of al of al		
N-Ethyl perfluorooctane sulfonamidoethanol (NEtFOSE) CAS # 1691-99-2	Not Detected	ee e c lim esse 6 c tot		
Perfluorooctane sulfonamide (FOSA) CAS # 754-91-6	Not Detected	20 ppt <sup>a,b</sup>		
Perfluorooctanoic acid (PFOA) CAS # 335-67-1	13 ppt	20 ppt <sup>a,b</sup>	recom 1y <i>one</i> the <i>cc</i>	
Perfluorooctanesulfonic acid (PFOS) CAS # 1763-23-1	12 ppt	20 ppt <sup>a,b</sup>	The for al or	
Hexafluoropropylene oxide dimer acid (HPFO-DA; GenX) CAS # 13252-13-6	Not Detected 300 ppt a			
Perfluorobutanesulfonic acid (PFBS) CAS # 375-73-5	8.5 ppt	450,000 ppt <sup>a</sup>		
Perfluorohexanesulfonic acid (PFHxS) CAS # 355-46-4	12 ppt	40 ppt <sup>a</sup>		
Perfluorobutanoic acid (PFBA) CAS # 375-22-4	64 ppt	10,000 ppt <sup>a</sup>		
Perfluorodecanoic acid (PFDA) CAS # 335-76-2	Not Detected	300 ppt <sup>a</sup>		
Perfluorododecanoic acid (PFDoA) CAS # 307-55-1	Not Detected	500 ppt ª		
Perfluorohexanoic acid (PFHxA) CAS # 307-24-4	1.3 ppt	150,000 ppt ª		
Perfluorononanoic acid (PFNA) CAS # 375-95-1	Not Detected	30 ppt <sup>a</sup>		
Perfluorotetradecanoic acid (PFTeA) CAS # 376-06-7	Not Detected	10,000 ppt <sup>a</sup>		
Perfluoroundecanoic acid (PFUnA) CAS # 2058-94-8	Not Detected	etected 3,000 pp		
4,8-Dioxa-3H-perfluorononanoic acid (DONA) CAS # 919005-14-4	Not Detected 3,000 ppt			

#### Sample Results

Perfluorooctadecanoic acid (PFODA) CAS # 16517-11-6	Not Detected	400,000 ppt <sup>a</sup>				
Perfluoro-1-pentanesulfonic acid (PFPeS) CAS # 2706-91-4	5.7 ppt	None Established <sup>c</sup>				
<ul> <li><sup>a</sup> Public health enforcement standard (ES) recommended by DHS.</li> <li><sup>b</sup> DHS recommends a combined enforcement standard of 20 ng/L and combined preventive action limit of 2 ng/L for FOSA, NEt-FOSA, NetFOSAA, PFOS, and PFOA.</li> <li><sup>c</sup> A current standard is not available; the compound is currently under review by DHS for potential public health standard recommendation.</li> <li><sup>d</sup> Public health enforcement standard (ES) in NR 140, Wisconsin Administrative Code.</li> <li><sup>e</sup> Units: Parts per trillion (ppt) = nanograms of substance per liter of water (ng/L)</li> </ul>						

As required by law, we will be submitting these results to the Department of Natural Resources (DNR). The DNR may consult with the Department of Health Services (DHS) about these test results. DHS may review all PFAS tests and follow-up with you directly if any actions are recommended to protect your health.

Thank you for your patience and assistance with our investigation. We will provide updates on the project at <u>https://www.cityoflacrosse.org/wells</u> as our work continues. If you have any questions, please call The OS Group at (608) 668-2718 or email them at <u>PFAS@theOSgrp.com</u>.

You can also contact the DNR and DHS with questions about PFAS or the water sample results at the numbers provided below.

Questions about		<u>Contact</u>	<u>Phone</u>	E-mail Address
Soil & Groundwater Testing, Clean Up	DNR	David Rozeboom	715-215-2078	David.Rozeboom@wisconsin.gov
Drinking Water or Private wells	DNR	Kyle Burton	920-360-2112	kyle.burton@wisconsin.gov
Health Concerns	DHS	Curtis Hedman	608-266-6677	Curtis.Hedman@dhs.wisconsin.gov

On behalf of The City of La Crosse *The OS Group, LLC* 

Attachment: Lab report for your well Bottled Water Acknowledgement
Client: Pace Analytical Services, LLC				Laboratory I	D: VK08043-0	019	
Description: 328-0				Matrix	: Aqueous		
Date Sampled:11/03/2020 1120	Project Name	: LACROSSE WELL #	#23 & 24				
Date Received: 11/06/2020 P	roject Number	: 40217713					
Dup Drop Method Apolytical Method	Dilution An		Drap Data	Batab			
Run     Prep Method     Analytical Method       1     SOP SPE     PFAS by ID SOP	1 11/	19/2020 1441 MMM	11/17/2020 10	Balch 034 73728			
Parameter	CAS Number	Analytical Method	Result Q	LOQ	DL	Units	Run
9-chlorohexadecafluoro-3-oxanone-1-sulfonic acid (9CI-PF3ONS)	756426-58-1	PFAS by ID SOP	ND	7.7	1.9	ng/L	1
11-chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11CI-PF3	.) 763051-92-9	PFAS by ID SOP	ND	7.7	1.9	ng/L	1
1H, 1H, 2H, 2H-perfluorodecane sulfonic acid (8:2 FTS)	39108-34-4	PFAS by ID SOP	ND	7.7	1.9	ng/L	1
1H, 1H, 2H, 2H-perfluorooctane sulfonic acid (6:2 FTS)	27619-97-2	2 PFAS by ID SOP	ND	7.7	1.9	ng/L	1
1H,1H,2H,2H-perfluorododecane sulfonic acid (10:2 FTS)	120226-60-0	PFAS by ID SOP	ND	7.7	1.9	ng/L	1
1H,1H,2H,2H-perfluorohexane sulfonic acid (4:2 FTS)	757124-72-4	PFAS by ID SOP	ND	7.7	1.9	ng/L	1
Hexafluoropropylene oxide dimer acid (GenX)	13252-13-6	6 PFAS by ID SOP	ND	7.7	1.9	ng/L	1
4,8-dioxa-3H-perfluorononanoic acid (ADONA)	919005-14-4	PFAS by ID SOP	ND	7.7	1.9	ng/L	1
N-ethylperfluoro-1-octanesulfonamide (EtFOSA)	4151-50-2	PFAS by ID SOP	ND	7.7	1.9	ng/L	1
N-ethylperfluoro-1-octanesulfonamidoacetic acid (EtFOSAA)	2991-50-6	PFAS by ID SOP	ND	7.7	1.9	ng/L	1
2-N-ethylperfluoro-1-octanesulfonamido-ethanol (EtFOSE)	1691-99-2	PFAS by ID SOP	ND	7.7	1.9	ng/L	1
N-methylperfluoro-1-octanesulfonamide (MeFOSA)	31506-32-8	B PFAS by ID SOP	ND	15	3.9	ng/L	1
N-methylperfluoro-1-octanesulfonamidoacetic acid (MeFOSAA)	2355-31-9	PFAS by ID SOP	ND	7.7	1.9	ng/L	1
2-N-methylperfluoro-1-octanesulfonamido-ethanol (MeFOSE)	24448-09-7	PFAS by ID SOP	ND	7.7	1.9	ng/L	1
Perfluoro-1-butanesulfonic acid (PFBS)	375-73-5	PFAS by ID SOP	8.5	3.9	0.97	ng/L	1
Perfluoro-1-decanesulfonic acid (PFDS)	335-77-3	PFAS by ID SOP	ND	3.9	0.97	ng/L	1
Perfluoro-1-heptanesulfonic acid (PFHpS)	375-92-8	PFAS by ID SOP	ND	3.9	0.97	ng/L	1
Perfluoro-1-nonanesulfonic acid (PFNS)	68259-12-1	PFAS by ID SOP	ND	3.9	0.97	ng/L	1
Perfluoro-1-octanesulfonamide (PFOSA)	754-91-6	PFAS by ID SOP	ND	3.9	0.97	ng/L	1
Perfluoro-1-pentanesulfonic acid (PFPeS)	2706-91-4	PFAS by ID SOP	5.7	3.9	0.97	ng/L	1
Perfluorododecanesulfonic acid (PFDOS)	79780-39-5	5 PFAS by ID SOP	ND	7.7	1.9	ng/L	1
Perfluorohexanesulfonic acid (PFHxS)	355-46-4	PFAS by ID SOP	12	3.9	0.97	ng/L	1
Perfluoro-n-butanoic acid (PFBA)	375-22-4	PFAS by ID SOP	64	3.9	0.97	ng/L	1
Perfluoro-n-decanoic acid (PFDA)	335-76-2	PFAS by ID SOP	ND	3.9	0.97	ng/L	1
Perfluoro-n-dodecanoic acid (PFDoA)	307-55-1	PFAS by ID SOP	ND	3.9	0.97	ng/L	1
Perfluoro-n-neptanoic acid (PFHpA)	3/5-85-9	PFAS by ID SOP	ND	3.9	0.97	ng/L	1
Perfluoro-n-hexadecanoic acid (PFHxDA)	6/905-19-5	PFAS by ID SOP	ND	1.1	1.9	ng/L	1
Perfluoro-n-nexanoic acid (PFHXA)	307-24-4	PFAS by ID SOP	1.3 J	3.9	0.97	ng/L	1
Perfluoro-n-nonanoic acid (PENA)	3/5-95-1	PFAS by ID SOP	ND	3.9	0.97	ng/L	1
Perfluoro-n-octadecanoic acid (PFODA)	225 67 1		ND 12	7.7	1.9	ng/L	1
	2706.00.2			3.7	0.97	ng/L	1
Porfluoro n totradocanoic acid (PEToDA)	2700-90-3		ND	3.7	0.97	ng/L	1
Perfluoro-n-tridecanoic acid (PETrDA)	72620-04-9	PEAS by ID SOP	ND	3.7	0.97	ng/L	1
	2058-04-9	PEAS by ID SOP	ND	3.7	0.97	ng/L	1
Perfluorooctanesulfonic acid (PEOS)	1763-23-1	PEAS by ID SOP	12	3.7	0.97	ng/L	1
	1705-25-1		12	5.7	0.97	ng/L	
Surrogate Q % R	ecovery L	eptance imits					
1302_4:2ETS	96 2 00 7	25-150 NE 150					
1302_0.2F13	YY     2       100     2	10-10U					
1302_8:2F13	100 2	20-10U					
	۵۶ 2 102 C	20-10U					
13C2_FTEDA	93 2	25-150					
LOQ = Limit of Quantitation B = Detected in the method blank	E = Quantitatio	n of compound exceeded the	calibration range	DL = Detection Lim	nit		
ND = Not detected at or above the DL N = Recovery is out of criteria	P = The RPD b	etween two GC columns exce	eds 40% J	= Estimated resu	It < LOQ and $\geq$ D	DL	
H = Out of notating time W = Reported on wet weight basis							

Client: Pace Analytical Services, LLC	
Description: 328-0	
Date Sampled:11/03/2020 1120	Project Name: LACROSSE WELL #23 & 24
Date Received: 11/06/2020	Project Number: 40217713

Laboratory ID: VK08043-019

Matrix: Aqueous

Surrogate	Run 1 A	Acceptance
13C3 PEBS	93	25-150
13C3 PEHxS	90	25-150
13C3-HEPO-DA	104	25-150
1204 DEPA	104	25-150
1304_FFDA	101	20-150
	101	25-150
	97	25-150
13C5_PFPeA	93	25-150
13C6_PFDA	96	25-150
13C7_PFUdA	91	25-150
13C8_PFOA	105	25-150
13C8_PFOS	85	25-150
13C8_PFOSA	103	10-150
13C9_PFNA	105	25-150
d-EtFOSA	93	10-150
d5-EtFOSAA	94	25-150
d9-EtFOSE	103	10-150
d-MeFOSA	89	10-150
d3-MeFOSAA	97	25-150
d7-MeFOSE	97	10-150

 LOQ = Limit of Quantilation
 B = Detected in the method blank
 E = Quantilation of compound exceeded the calibration range
 DL = Detection Limit

 ND = Not detected at or above the DL
 N = Recovery is out of criteria
 P = The RPD between two GC columns exceeds 40%
 J = Estimated result < LOQ and ≥ DL</td>

 H = Out of holding time
 W = Reported on wet weight basis
 W = Reported on wet weight basis
 H = Out of holding time

# BOTTLED WATER ACKNOWLEDGEMENT

2530 1st Avenue West, La Crosse, WI 54603

If you desire to accept the bottled water delivery, please complete and sign this form and return it to The OS Group at <u>PFAS@TheOSgrp.com</u> or mail to 444 21<sup>st</sup> St. S, La Crosse, WI 54601. You may also complete this form electronically on line at <u>www.cityoflacrosse.org/bottledwater</u>. Call 608-668-2718 with any question you may have.

As pre-caution for the protection of human health, the City of La Crosse (The City) will provide, on a temporary basis, bottled water for drinking, cooking and toothbrushing purposes at the above referenced address. The water will be delivered to your home or business by a commercial water delivery service. At the City's cost, a dispenser / cooler and regular deliveries of 5-gallon containers of water will be provided. The City reserves the right to dictate the conditions of delivery, such as minimum and maximum number of containers per delivery, frequency and timing of deliveries. The City reserves the right to periodically review whether The City should continue to provide bottled water, considering factors such as State and Federal standards and guidance, evolving knowledge and understanding of the sources, cause and responsibility for the contamination, new or reinterpreted test results, and the availability of more permanent or costeffective sources of water for the above purposes. The City of La Crosse makes no warranty or representation regarding the suitability of the bottled water beyond those made by the commercial water delivery service.

All reusable or returnable equipment and supplies, such as the containers and cooler/dispenser, are the property of the commercial water delivery service or the City of La Crosse. By signing below, the Occupant of the above referenced property acknowledges that all reusable or returnable equipment and supplies shall be returned to the commercial water delivery service or the City of La Crosse upon request. The Occupant agrees to provide reasonable access for delivery of bottled water and pick up of reusable or returnable equipment and supplies. Occupant(s) acknowledges that they may be required to sign an agreement with the commercial water delivery service as a condition of receiving bottled water.

Check ownership:

\_\_\_\_\_ Owner-Occupant Occupant Only

Number of Occupants: \_\_\_\_\_

Signed:	 Dated:	
-		

Printed Name: \_\_\_\_\_



444 21st Street South · La Crosse, Wisconsin · 54601

December 1, 2020

2537 Bainbridge Street La Crosse, WI 54603

Subject: Private Well Sampling Results 2537 Bainbridge Street, La Crosse, WI 54603 Tax parcel # 4-333-0 Sample ID # 333-0

Dear

We have received and reviewed the test results for the sample collected on November 3, 2020 at the above address. Some PFAS compounds were found, but the levels found were **below** the Department of Health Services (DHS) levels recommended for protecting health. These levels are called the "Recommended Public Health Standard" in the table below. The levels found in *your* well are called the "Sample Result" in the table below. **PLEASE NOTE: At your residence we took a second "duplicate" sample for quality control / quality assurance purposes. The two samples' tests confirmed each other, and there were only minor differences. The results in the table below are based on the highest levels observed in either of the two samples.** 

#### Sample Results

Compound	Sample Result (unit)	Recomm Public H Standard	ended lealth (unit <sup>e</sup> )
N-Ethyl Perfluorooctane sulfonamide (NEtFOSA) CAS # 4151-50-2	Not Detected	20 ppt <sup>a,b</sup>	) ppt unds I 6
N-Ethyl perfluorooctane sulfonamidoacetic acid (NEtFOSAA) CAS # 2991-50-6	Not Detected	20 ppt <sup>a,b</sup>	it is 20 ompo <i>il</i> of al
N-Ethyl perfluorooctane sulfonamidoethanol (NEtFOSE) CAS # 1691-99-2	Not Detected	20 ppt <sup>a,b</sup>	ed lim ese 6 c ed toto
Perfluorooctane sulfonamide (FOSA) CAS # 754-91-6	Not Detected	20 ppt <sup>a,b</sup>	mend of the ombine
Perfluorooctanoic acid (PFOA) CAS # 335-67-1	Not Detected	20 ppt <sup>a,b</sup>	recom ny <i>one</i> the <i>c</i> c
Perfluorooctanesulfonic acid (PFOS) CAS # 1763-23-1	4.8 ppt	20 ppt <sup>a,b</sup>	The for a or

Compound	Sample Result (unit)	Recommended Public Health Standard (unit <sup>e</sup> )
Hexafluoropropylene oxide dimer acid (HPFO-DA; GenX) CAS # 13252-13-6	Not Detected	300 ppt ª
Perfluorobutanesulfonic acid (PFBS) CAS # 375-73-5	6.0 ppt	450,000 ppt <sup>a</sup>
Perfluorohexanesulfonic acid (PFHxS) CAS # 355-46-4	21 ppt	40 ppt <sup>a</sup>
Perfluorobutanoic acid (PFBA) CAS # 375-22-4	18 ppt	10,000 ppt <sup>a</sup>
Perfluorodecanoic acid (PFDA) CAS # 335-76-2	Not Detected	300 ppt <sup>a</sup>
Perfluorododecanoic acid (PFDoA) CAS # 307-55-1	Not Detected	500 ppt <sup>a</sup>
Perfluorohexanoic acid (PFHxA) CAS # 307-24-4	1.3 ppt	150,000 ppt <sup>a</sup>
Perfluorononanoic acid (PFNA) CAS # 375-95-1	Not Detected	30 ppt <sup>a</sup>
Perfluorotetradecanoic acid (PFTeA) CAS # 376-06-7	Not Detected	10,000 ppt <sup>a</sup>
Perfluoroundecanoic acid (PFUnA) CAS # 2058-94-8	Not Detected	3,000 ppt <sup>a</sup>
4,8-Dioxa-3H-perfluorononanoic acid (DONA) CAS # 919005-14-4	Not Detected	3,000 ppt <sup>a</sup>
Perfluorooctadecanoic acid (PFODA) CAS # 16517-11-6	Not Detected	400,000 ppt <sup>a</sup>
Perfluoro-1-pentanesulfonic acid (PFPeS) CAS #2706-91-4	6.0 ppt	None Established <sup>c</sup>
Perfluoro-n-pentanoic acid (PFPeA) CAS # 2706-90-3	1.4 ppt	None Established <sup>c</sup>

<sup>a</sup> Public health enforcement standard (ES) recommended by DHS.

<sup>b</sup> DHS recommends a combined enforcement standard of 20 ng/L and combined preventive action limit of 2 ng/L for FOSA, NEt-FOSA, NetFOSAA, PFOS, and PFOA.

A current standard is not available; the compound is currently under review by DHS for potential public health standard recommendation.

<sup>d</sup> Public health enforcement standard (ES) in NR 140, Wisconsin Administrative Code.

<sup>2</sup> Units: Parts per trillion (ppt) = nanograms of substance per liter of water (ng/L)

<sup>BL</sup> Detected in the method blank. Possible lab contaminant.

As required by law, we will be submitting these results to the Department of Natural Resources (DNR). The DNR may consult with the Department of Health Services (DHS) about these test results. DHS may review all PFAS tests and follow-up with you directly if any actions are recommended to protect your health.

Thank you for your patience and assistance with our investigation. We will provide updates on the project at <a href="https://www.cityoflacrosse.org/wells">https://www.cityoflacrosse.org/wells</a> as our work continues. If you have any questions, please call The OS Group at (608) 668-2718 or email them at <a href="https://www.pFAS@theOSgrp.com">PFAS@theOSgrp.com</a>.

You can also contact the DNR and DHS with questions about PFAS or the water sample results at the numbers provided below.

Questions about		<u>Contact</u>	<u>Phone</u>	<u>E-mail Address</u>
Soil & Groundwater Testing, Clean Up	DNR	David Rozeboom	715-215-2078	David.Rozeboom@wisconsin.gov
Drinking Water or Private wells	DNR	Kyle Burton	920-360-2112	kyle.burton@wisconsin.gov
Health Concerns	DHS	Curtis Hedman	608-266-6677	Curtis.Hedman@dhs.wisconsin.gov

On behalf of The City of La Crosse *The OS Group, LLC* 

Attachment: Lab report for your well

Client: Pace Analytical Se	rvices, LLC				Laborator	y ID: VK08043-	020	
Description: 333-0					Ma	atrix: Aqueous		
Date Sampled:11/03/2020 1135	Р	roiect Nam	e: LACROSSE WELL #	<sup>‡</sup> 23 & 24				
Date Received: 11/06/2020	Pro	iect Numbe	pr: 10217713					
	110		1. 40217713					
Run Prep Method 1 SOP SPE	Analytical Method Di PFAS by ID SOP	ilution A 1 11	nalysis Date Analyst /18/2020 1531 MMM	Prep I 11/17/2	Date Batch 020 1034 73728	1 }		
Parameter		CAS Numbe	S Analytical er Method	Result	Q LOQ	DL	Units	Run
9-chlorohexadecafluoro-3-oxanone-1-su	Ilfonic acid (9CI-PF3ONS)	756426-58	-1 PFAS by ID SOP	ND	7.4	1.8	ng/L	1
11-chloroeicosafluoro-3-oxaundecane-1	-sulfonic acid (11CI-PF3)	763051-92-	-9 PFAS by ID SOP	ND	7.4	1.8	ng/L	1
1H, 1H, 2H, 2H-perfluorodecane sulfonio	c acid (8:2 FTS)	39108-34-	-4 PFAS by ID SOP	ND	7.4	1.8	ng/L	1
1H, 1H, 2H, 2H-perfluorooctane sulfonic	acid (6:2 FTS)	27619-97-	-2 PFAS by ID SOP	ND	7.4	1.8	ng/L	1
1H,1H,2H,2H-perfluorododecane sulfon	ic acid (10:2 FTS)	120226-60-	-0 PFAS by ID SOP	ND	7.4	1.8	ng/L	1
1H,1H,2H,2H-perfluorohexane sulfonic a	acid (4:2 FTS)	757124-72-	-4 PFAS by ID SOP	ND	7.4	1.8	ng/L	1
Hexafluoropropylene oxide dimer acid (	GenX)	13252-13-	-6 PFAS by ID SOP	ND	7.4	1.8	ng/L	1
4,8-dioxa-3H-perfluorononanoic acid (Al	DONA)	919005-14	-4 PFAS by ID SOP	ND	7.4	1.8	ng/L	1
N-ethylperfluoro-1-octanesulfonamide (E	EtFOSA)	4151-50-	2 PFAS by ID SOP	ND	7.4	1.8	ng/L	1
N-ethylperfluoro-1-octanesulfonamidoac	cetic acid (EtFOSAA)	2991-50-	6 PFAS by ID SOP	ND	7.4	1.8	ng/L	1
2-N-ethylperfluoro-1-octanesulfonamido	-ethanol (EtFOSE)	1691-99-	2 PFAS by ID SOP	ND	7.4	1.8	ng/L	1
N-methylperfluoro-1-octanesulfonamide	(MeFOSA)	31506-32-	-8 PFAS by ID SOP	ND	15	3.7	ng/L	1
N-methylperfluoro-1-octanesulfonamido	acetic acid (MeFOSAA)	2355-31-	9 PFAS by ID SOP	ND	7.4	1.8	ng/L	1
2-N-methylperfluoro-1-octanesulfonamic	do-ethanol (MeFOSE)	24448-09-	-7 PFAS by ID SOP	ND	7.4	1.8	ng/L	1
Perfluoro-1-butanesulfonic acid (PFB	S)	375-73-	5 PFAS by ID SOP	5.6	3.7	0.92	ng/L	1
Perfluoro-1-decanesulfonic acid (PFDS)		335-77-	3 PFAS by ID SOP	ND	3.7	0.92	ng/L	1
Perfluoro-1-heptanesulfonic acid (PFHp	S)	375-92-	8 PFAS by ID SOP	ND	3.7	0.92	ng/L	1
Perfluoro-1-nonanesulfonic acid (PFNS)	1	68259-12-	-1 PFAS by ID SOP	ND	3.7	0.92	ng/L	1
Perfluoro-1-octanesulfonamide (PFOSA	)	754-91-	6 PFAS by ID SOP	ND	3.7	0.92	ng/L	1
Perfluoro-1-pentanesulfonic acid (PFI	PeS)	2706-91-	4 PFAS by ID SOP	6.0	3.7	0.92	ng/L	1
Perfluorododecanesulfonic acid (PFDOS	5)	79780-39-	-5 PFAS by ID SOP	ND	7.4	1.8	ng/L	1
Perfluorohexanesulfonic acid (PFHxS	5)	355-46-	4 PFAS by ID SOP	21	3.7	0.92	ng/L	1
Perfluoro-n-butanoic acid (PFBA)		375-22-	4 PFAS by ID SOP	18	3.7	0.92	ng/L	1
Perfluoro-n-decanoic acid (PFDA)		335-76-	2 PFAS by ID SOP	ND	3.7	0.92	ng/L	1
Perfluoro-n-dodecanoic acid (PFDoA)		307-55-	1 PFAS by ID SOP	ND	3.7	0.92	ng/L	1
Perfluoro-n-heptanoic acid (PFHpA)		375-85-	9 PFAS by ID SOP	ND	3.7	0.92	ng/L	1
Perfluoro-n-hexadecanoic acid (PFHxDA	4)	67905-19-	-5 PFAS by ID SOP	ND	7.4	1.8	ng/L	1
Perfluoro-n-hexanoic acid (PFHxA)		307-24-	4 PFAS by ID SOP	1.3	J 3.7	0.92	ng/L	1
Perfluoro-n-nonanoic acid (PFNA)		375-95-	1 PFAS by ID SOP	ND	3.7	0.92	ng/L	1
Perfluoro-n-octadecanoic acid (PFODA)		16517-11	-6 PFAS by ID SOP	ND	7.4	1.8	ng/L	1
Perfluoro-n-octanoic acid (PFOA)		335-67-	1 PFAS by ID SOP	ND	3.7	0.92	ng/L	1
Perfluoro-n-pentanoic acid (PFPeA)		2706-90-	-3 PFAS by ID SOP	1.4	J 3.7	0.92	ng/L	1
Perfluoro-n-tetradecanoic acid (PFTeDA	A)	376-06-	7 PFAS by ID SOP	ND	3.7	0.92	ng/L	1
Perfluoro-n-tridecanoic acid (PFTrDA)		72629-94	-8 PFAS by ID SOP	ND	3.7	0.92	ng/L	1
Perfluoro-n-undecanoic acid (PFUdA)		2058-94-	8 PEAS by ID SOP	ND	3.7	0.92	ng/L	1
Perfluorooctanesulfonic acid (PFOS)		1763-23-	1 PEAS by ID SOP	4.1	3.7	0.92	ng/L	1
Surrogate	Ru Q % Rec	in 1 Acc covery l	ceptance Limits					
13C2_4:2FTS	1	00	25-150					
13C2_6:2FTS	1	07	25-150					
13C2_8:2FTS	:	87	25-150					
13C2_PFDoA	:	89	25-150					
13C2_PFHxDA		92	25-150					
13C2_PFTeDA	1	87	25-150					
00 Limit of Quantitation D. 5	Notootod in the mathematical bland	E 000000	on of compound d- d-1	oolibrot!		a Linait		
ND = Not detected at or above the DL N = F	Detected in the method blank Recovery is out of criteria	E = Quantitation	on or compound exceeded the o between two GC columns excee	eds 40%	Inge DL = Detection J = Estimated	ι Limit result < LOQ and > Γ	DL	
H = Out of holding time W =	Reported on wet weight basis					_		

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Client: Pace Analytical Services, LLC		Laboratory ID: VK08043-020
Description: 333-0		Matrix: Aqueous
Date Sampled:11/03/2020 1135	Project Name: LACROSSE WELL #23 & 24	
Date Received: 11/06/2020	Project Number: 40217713	

		oontonee
Surrogate	Q % Recovery	Limits
13C3_PFBS	91	25-150
13C3_PFHxS	90	25-150
13C3-HFPO-DA	100	25-150
13C4_PFBA	97	25-150
13C4_PFHpA	91	25-150
13C5_PFHxA	93	25-150
13C5_PFPeA	96	25-150
13C6_PFDA	83	25-150
13C7_PFUdA	89	25-150
13C8_PFOA	95	25-150
13C8_PFOS	81	25-150
13C8_PFOSA	100	10-150
13C9_PFNA	94	25-150
d-EtFOSA	88	10-150
d5-EtFOSAA	88	25-150
d9-EtFOSE	90	10-150
d-MeFOSA	81	10-150
d3-MeFOSAA	87	25-150
d7-MeFOSE	79	10-150

LOQ = Limit of Quantitation B = Detected in the method blank E = Quantitation of compound exceeded the calibration range DL = Detection Limit ND = Not detected at or above the DL N = Recovery is out of criteria P = The RPD between two GC columns exceeds 40% J = Estimated result < LOQ and  $\ge$  DL H = Out of holding time W = Reported on wet weight basis

Client: Pace Analytical Services, LLC				Laboratory II	D: VK08043-0	021	
Description: DUP-3				Matrix	x: Aqueous		
Date Sampled:11/03/2020 1140	Project Name	e: LACROSSE WELL #	#23 & 24				
Date Received: 11/06/2020 P	roject Numbe	er: 40217713					
RunPrep MethodAnalytical Method1SOP SPEPFAS by ID SOP	Dilution A 1 11	nalysis Date Analyst /18/2020 1552 MMM	Prep Date 11/17/2020	e Batch 1034 73728			
Parameter	CAS Numbe	S Analytical r Method	Result O	1.00	DI	Units	Run
9-chlorohexadecafluoro-3-oxanone-1-sulfonic acid (9CI-PF3ONS	) 756426-58-	1 PFAS by ID SOP	ND	7.4	1.8	ng/L	1
11-chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11CI-PF3.	) 763051-92-	9 PFAS by ID SOP	ND	7.4	1.8	ng/L	1
1H, 1H, 2H, 2H-perfluorodecane sulfonic acid (8:2 FTS)	39108-34-	4 PFAS by ID SOP	ND	7.4	1.8	ng/L	1
1H, 1H, 2H, 2H-perfluorooctane sulfonic acid (6:2 FTS)	27619-97-	2 PFAS by ID SOP	ND	7.4	1.8	ng/L	1
1H,1H,2H,2H-perfluorododecane sulfonic acid (10:2 FTS)	120226-60-	0 PFAS by ID SOP	ND	7.4	1.8	ng/L	1
1H,1H,2H,2H-perfluorohexane sulfonic acid (4:2 FTS)	757124-72-	4 PFAS by ID SOP	ND	7.4	1.8	ng/L	1
Hexafluoropropylene oxide dimer acid (GenX)	13252-13-	6 PFAS by ID SOP	ND	7.4	1.8	ng/L	1
4,8-dioxa-3H-perfluorononanoic acid (ADONA)	919005-14-	4 PFAS by ID SOP	ND	7.4	1.8	ng/L	1
N-ethylperfluoro-1-octanesulfonamide (EtFOSA)	4151-50-	2 PFAS by ID SOP	ND	7.4	1.8	ng/L	1
N-ethylperfluoro-1-octanesulfonamidoacetic acid (EtFOSAA)	2991-50-	6 PFAS by ID SOP	ND	7.4	1.8	ng/L	1
2-N-ethylperfluoro-1-octanesulfonamido-ethanol (EtFOSE)	1691-99-	2 PFAS by ID SOP	ND	7.4	1.8	ng/L	1
N-methylperfluoro-1-octanesulfonamide (MeFOSA)	31506-32-	8 PFAS by ID SOP	ND	15	3.7	ng/L	1
N-methylperfluoro-1-octanesulfonamidoacetic acid (MeFOSAA)	2355-31-	9 PFAS by ID SOP	ND	7.4	1.8	ng/L	1
2-N-methylperfluoro-1-octanesulfonamido-ethanol (MeFOSE)	24448-09-	7 PFAS by ID SOP	ND	7.4	1.8	ng/L	1
Perfluoro-1-butanesulfonic acid (PFBS)	375-73-	5 PFAS by ID SOP	6.0	3.7	0.92	ng/L	1
Perfluoro-1-decanesulfonic acid (PFDS)	335-77-	3 PFAS by ID SOP	ND	3.7	0.92	ng/L	1
Perfluoro-1-heptanesulfonic acid (PFHpS)	375-92-	8 PFAS by ID SOP	ND	3.7	0.92	ng/L	1
Perfluoro-1-nonanesulfonic acid (PFNS)	68259-12-	1 PFAS by ID SOP	ND	3.7	0.92	ng/L	1
Perfluoro-1-octanesulfonamide (PFOSA)	754-91-	6 PFAS by ID SOP	ND	3.7	0.92	ng/L	1
Perfluoro-1-pentanesulfonic acid (PFPeS)	2706-91-	4 PFAS by ID SOP	6.0	3.7	0.92	ng/L	1
Perfluorododecanesulfonic acid (PFDOS)	79780-39-	5 PFAS by ID SOP	ND	7.4	1.8	ng/L	1
Perfluorohexanesulfonic acid (PFHxS)	355-46-	4 PFAS by ID SOP	21	3.7	0.92	ng/L	1
Perfluoro-n-butanoic acid (PFBA)	375-22-	4 PFAS by ID SOP	17	3.7	0.92	ng/L	1
Perfluoro-n-decanoic acid (PFDA)	335-76-	2 PEAS by ID SOP	ND	3.7	0.92	ng/L	1
Perfluoro-n-dodecanoic acid (PFDoA)	307-55-		ND	3.7	0.92	ng/L	1
	3/5-85-	9 PFAS by ID SOP	ND	3.7	0.92	ng/L	1
Perfluoro-n-nexadecanoic acid (PFHxDA)	6/905-19-			7.4	1.8	ng/L	1
Perliuoro-n-nexanoic acid (PEHXA)	307-24-	4 PFAS by ID SOP	1.3 J	3.7	0.92	ng/L	1
Periluoro-n-nonanoic acid (PFNA)	3/3-93-	A DEAS by ID SOP		3.7	0.92	ng/L	1
Perfluoro-n-octanoic acid (PFODA)	335-67-	1 DEAS by ID SOP		7.4	1.8	ng/L	1
Perfluoro-n-pentanoic acid (PEPeA)	2706-90-	3 PEAS by ID SOP	14	3.7	0.92	ng/L	1
Perfluoro-n-tetradecanoic acid (PETeDA)	376-06-	7 PEAS by ID SOP	ND	3.7	0.92	ng/L	1
Perfluoro-n-tridecanoic acid (PETrDA)	72629-94.	8 PEAS by ID SOP		3.7	0.92	ng/L	1
Perfluoro-n-undecanoic acid (PELIdA)	2058-94-	8 PEAS by ID SOP		3.7	0.92	ng/L	1
Perfluorooctanesulfonic acid (PEOS)	1763-23-	1 PEAS by ID SOP	4.8	3.7	0.92	ng/L	1
			1.0	0.7	0.92	119/12	·
Surrogate Q % R	ecovery l						
13C2_4:2FTS	106	25-150					
1302_0.2F13	00	25-150					
1302_0.2F13	00	25-150					
1302_F1'DUA	70 05	25-150					
13C2_PFTeDA	90 90	25-150					
LOQ = Limit of Quantitation         B = Detected in the method blank           ND = Not detected at or above the DL         N = Recovery is out of criteria           H = Out of holding time         W = Reported on wet weight basis	E = Quantitatio P = The RPD	on of compound exceeded the obstruction between two GC columns exce	calibration range eds 40%	DL = Detection Lin J = Estimated resu	hit It < LOQ and $\geq$ D	DL	

Laboratory ID: VK08043-021 Matrix: Aqueous

Client: Pace Analytical Services, LLC	
Description: DUP-3	
Date Sampled:11/03/2020 1140	Project Name: LACROSSE WELL #23 & 24
Date Received: 11/06/2020	Project Number: 40217713

d7-MeFOSE

Run 1 Acceptance Surrogate % Recovery Q Limits 13C3\_PFBS 92 25-150 96 13C3\_PFHxS 25-150 13C3-HFPO-DA 95 25-150 13C4\_PFBA 102 25-150 13C4\_PFHpA 94 25-150 13C5\_PFHxA 99 25-150 13C5\_PFPeA 100 25-150 13C6\_PFDA 89 25-150 13C7\_PFUdA 93 25-150 13C8\_PFOA 103 25-150 13C8\_PFOS 89 25-150 13C8\_PFOSA 103 10-150 13C9 PFNA 104 25-150 d-EtFOSA 88 10-150 d5-EtFOSAA 95 25-150 d9-EtFOSE 90 10-150 d-MeFOSA 83 10-150 d3-MeFOSAA 95 25-150

10-150

85

 LOQ = Limit of Quantilation
 B = Detected in the method blank
 E = Quantilation of compound exceeded the calibration range
 DL = Detection Limit

 ND = Not detected at or above the DL
 N = Recovery is out of criteria
 P = The RPD between two GC columns exceeds 40%
 J = Estimated result < LOQ and ≥ DL</td>

 H = Out of holding time
 W = Reported on wet weight basis
 H = Out of holding time
 L = Detection Limit



444 21st Street South · La Crosse, Wisconsin · 54601

December 1, 2020

### 424 Russell Drive S Holmen, WI 54636

Subject: Private Well Sampling Results 2537 Bainbridge Street, La Crosse, WI 54603 Tax parcel # 4-333-0 Sample ID # 333-0

Dear

We have received and reviewed the test results for the sample collected on November 3, 2020 at the above address. Some PFAS compounds were found, but the levels found were **below** the Department of Health Services (DHS) levels recommended for protecting health. These levels are called the "Recommended Public Health Standard" in the table below. The levels found in *your* well are called the "Sample Result" in the table below. **PLEASE NOTE:** At your residence we took a second "duplicate" sample for quality control / quality assurance purposes. The two samples' tests confirmed each other, and there were only minor differences. The results in the table below are based on the highest levels observed in either of the two samples.

#### Sample Results

Compound	Sample Result (unit)	Recommended Public Health Standard (unit <sup>e</sup> )	
N-Ethyl Perfluorooctane sulfonamide (NEtFOSA) CAS # 4151-50-2	Not Detected	20 ppt <sup>a,b</sup>	) ppt unds I 6
N-Ethyl perfluorooctane sulfonamidoacetic acid (NEtFOSAA) CAS # 2991-50-6	Not Detected	20 ppt <sup>a,b</sup>	it is 2C ompo <i>il</i> of al
N-Ethyl perfluorooctane sulfonamidoethanol (NEtFOSE) CAS # 1691-99-2	Not Detected	20 ppt <sup>a,b</sup>	ed lim ese 6 c ed toto
Perfluorooctane sulfonamide (FOSA) CAS # 754-91-6	Not Detected	20 ppt <sup>a,b</sup>	mend of the mbine
Perfluorooctanoic acid (PFOA) CAS # 335-67-1	Not Detected	20 ppt <sup>a,b</sup>	recom ny <i>one</i> the <i>cc</i>
Perfluorooctanesulfonic acid (PFOS) CAS # 1763-23-1	4.8 ppt	20 ppt <sup>a,b</sup>	The for ai or

Compound	Sample Result (unit)	Recommended Public Health Standard (unit <sup>e</sup> )
Hexafluoropropylene oxide dimer acid (HPFO-DA; GenX) CAS # 13252-13-6	Not Detected	300 ppt <sup>a</sup>
Perfluorobutanesulfonic acid (PFBS) CAS # 375-73-5	6.0 ppt	450,000 ppt <sup>a</sup>
Perfluorohexanesulfonic acid (PFHxS) CAS # 355-46-4	21 ppt	40 ppt <sup>a</sup>
Perfluorobutanoic acid (PFBA) CAS # 375-22-4	18 ppt	10,000 ppt <sup>a</sup>
Perfluorodecanoic acid (PFDA) CAS # 335-76-2	Not Detected	300 ppt <sup>a</sup>
Perfluorododecanoic acid (PFDoA) CAS # 307-55-1	Not Detected	500 ppt <sup>a</sup>
Perfluorohexanoic acid (PFHxA) CAS # 307-24-4	1.3 ppt	150,000 ppt <sup>a</sup>
Perfluorononanoic acid (PFNA) CAS # 375-95-1	Not Detected	30 ppt <sup>a</sup>
Perfluorotetradecanoic acid (PFTeA) CAS # 376-06-7	Not Detected	10,000 ppt <sup>a</sup>
Perfluoroundecanoic acid (PFUnA) CAS # 2058-94-8	Not Detected	3,000 ppt <sup>a</sup>
4,8-Dioxa-3H-perfluorononanoic acid (DONA) CAS # 919005-14-4	Not Detected	3,000 ppt <sup>a</sup>
Perfluorooctadecanoic acid (PFODA) CAS # 16517-11-6	Not Detected	400,000 ppt <sup>a</sup>
Perfluoro-1-pentanesulfonic acid (PFPeS) CAS #2706-91-4	6.0 ppt	None Established <sup>c</sup>
Perfluoro-n-pentanoic acid (PFPeA) CAS # 2706-90-3	1.4 ppt	None Established <sup>c</sup>

<sup>a</sup> Public health enforcement standard (ES) recommended by DHS.

<sup>b</sup> DHS recommends a combined enforcement standard of 20 ng/L and combined preventive action limit of 2 ng/L for FOSA, NEt-FOSA, NetFOSAA, PFOS, and PFOA.

A current standard is not available; the compound is currently under review by DHS for potential public health standard recommendation.

<sup>4</sup> Public health enforcement standard (ES) in NR 140, Wisconsin Administrative Code.

Units: Parts per trillion (ppt) = nanograms of substance per liter of water (ng/L)

<sup>BL</sup> Detected in the method blank. Possible lab contaminant.

As required by law, we will be submitting these results to the Department of Natural Resources (DNR). The DNR may consult with the Department of Health Services (DHS) about these test results. DHS may review all PFAS tests and follow-up with you directly if any actions are recommended to protect your health.

Thank you for your patience and assistance with our investigation. We will provide updates on the project at <u>https://www.cityoflacrosse.org/wells</u> as our work continues. If you have any questions, please call The OS Group at (608) 668-2718 or email them at <u>PFAS@theOSgrp.com</u>.

You can also contact the DNR and DHS with questions about PFAS or the water sample results at the numbers provided below.

Questions about		<u>Contact</u>	<u>Phone</u>	E-mail Address
Soil & Groundwater Testing, Clean Up	DNR	David Rozeboom	715-215-2078	David.Rozeboom@wisconsin.gov
Drinking Water or Private wells	DNR	Kyle Burton	920-360-2112	kyle.burton@wisconsin.gov
Health Concerns	DHS	Curtis Hedman	608-266-6677	Curtis.Hedman@dhs.wisconsin.gov

On behalf of The City of La Crosse *The OS Group, LLC* 

Attachment: Lab report for your well

Client: Pace Analytical Se	rvices, LLC				Laborator	y ID: VK08043-	020	
Description: 333-0					Ma	atrix: Aqueous		
Date Sampled:11/03/2020 1135	Р	roiect Nam	e: LACROSSE WELL #	<sup>‡</sup> 23 & 24				
Date Received: 11/06/2020	Pro	iect Numbe	pr: 10217713					
	110		1. 40217713					
Run Prep Method 1 SOP SPE	Analytical Method Di PFAS by ID SOP	ilution A 1 11	nalysis Date Analyst /18/2020 1531 MMM	Prep I 11/17/2	Date Batch 020 1034 73728	1 }		
Parameter		CAS Numbe	S Analytical er Method	Result	Q LOQ	DL	Units	Run
9-chlorohexadecafluoro-3-oxanone-1-su	Ilfonic acid (9CI-PF3ONS)	756426-58	-1 PFAS by ID SOP	ND	7.4	1.8	ng/L	1
11-chloroeicosafluoro-3-oxaundecane-1	-sulfonic acid (11CI-PF3)	763051-92-	-9 PFAS by ID SOP	ND	7.4	1.8	ng/L	1
1H, 1H, 2H, 2H-perfluorodecane sulfonio	c acid (8:2 FTS)	39108-34-	-4 PFAS by ID SOP	ND	7.4	1.8	ng/L	1
1H, 1H, 2H, 2H-perfluorooctane sulfonic	acid (6:2 FTS)	27619-97-	-2 PFAS by ID SOP	ND	7.4	1.8	ng/L	1
1H,1H,2H,2H-perfluorododecane sulfon	ic acid (10:2 FTS)	120226-60-	-0 PFAS by ID SOP	ND	7.4	1.8	ng/L	1
1H,1H,2H,2H-perfluorohexane sulfonic a	acid (4:2 FTS)	757124-72-	-4 PFAS by ID SOP	ND	7.4	1.8	ng/L	1
Hexafluoropropylene oxide dimer acid (	GenX)	13252-13-	-6 PFAS by ID SOP	ND	7.4	1.8	ng/L	1
4,8-dioxa-3H-perfluorononanoic acid (Al	DONA)	919005-14	-4 PFAS by ID SOP	ND	7.4	1.8	ng/L	1
N-ethylperfluoro-1-octanesulfonamide (E	EtFOSA)	4151-50-	2 PFAS by ID SOP	ND	7.4	1.8	ng/L	1
N-ethylperfluoro-1-octanesulfonamidoac	cetic acid (EtFOSAA)	2991-50-	6 PFAS by ID SOP	ND	7.4	1.8	ng/L	1
2-N-ethylperfluoro-1-octanesulfonamido	-ethanol (EtFOSE)	1691-99-	2 PFAS by ID SOP	ND	7.4	1.8	ng/L	1
N-methylperfluoro-1-octanesulfonamide	(MeFOSA)	31506-32-	-8 PFAS by ID SOP	ND	15	3.7	ng/L	1
N-methylperfluoro-1-octanesulfonamido	acetic acid (MeFOSAA)	2355-31-	9 PFAS by ID SOP	ND	7.4	1.8	ng/L	1
2-N-methylperfluoro-1-octanesulfonamic	do-ethanol (MeFOSE)	24448-09-	-7 PFAS by ID SOP	ND	7.4	1.8	ng/L	1
Perfluoro-1-butanesulfonic acid (PFB	S)	375-73-	5 PFAS by ID SOP	5.6	3.7	0.92	ng/L	1
Perfluoro-1-decanesulfonic acid (PFDS)		335-77-	3 PFAS by ID SOP	ND	3.7	0.92	ng/L	1
Perfluoro-1-heptanesulfonic acid (PFHp	S)	375-92-	8 PFAS by ID SOP	ND	3.7	0.92	ng/L	1
Perfluoro-1-nonanesulfonic acid (PFNS)	1	68259-12-	-1 PFAS by ID SOP	ND	3.7	0.92	ng/L	1
Perfluoro-1-octanesulfonamide (PFOSA	)	754-91-	6 PFAS by ID SOP	ND	3.7	0.92	ng/L	1
Perfluoro-1-pentanesulfonic acid (PFI	PeS)	2706-91-	4 PFAS by ID SOP	6.0	3.7	0.92	ng/L	1
Perfluorododecanesulfonic acid (PFDOS	5)	79780-39-	-5 PFAS by ID SOP	ND	7.4	1.8	ng/L	1
Perfluorohexanesulfonic acid (PFHxS	5)	355-46-	4 PFAS by ID SOP	21	3.7	0.92	ng/L	1
Perfluoro-n-butanoic acid (PFBA)		375-22-	4 PFAS by ID SOP	18	3.7	0.92	ng/L	1
Perfluoro-n-decanoic acid (PFDA)		335-76-	2 PFAS by ID SOP	ND	3.7	0.92	ng/L	1
Perfluoro-n-dodecanoic acid (PFDoA)		307-55-	1 PFAS by ID SOP	ND	3.7	0.92	ng/L	1
Perfluoro-n-heptanoic acid (PFHpA)		375-85-	9 PFAS by ID SOP	ND	3.7	0.92	ng/L	1
Perfluoro-n-hexadecanoic acid (PFHxDA	4)	67905-19-	-5 PFAS by ID SOP	ND	7.4	1.8	ng/L	1
Perfluoro-n-hexanoic acid (PFHxA)		307-24-	4 PFAS by ID SOP	1.3	J 3.7	0.92	ng/L	1
Perfluoro-n-nonanoic acid (PFNA)		375-95-	1 PFAS by ID SOP	ND	3.7	0.92	ng/L	1
Perfluoro-n-octadecanoic acid (PFODA)		16517-11	-6 PFAS by ID SOP	ND	7.4	1.8	ng/L	1
Perfluoro-n-octanoic acid (PFOA)		335-67-	1 PFAS by ID SOP	ND	3.7	0.92	ng/L	1
Perfluoro-n-pentanoic acid (PFPeA)		2706-90-	-3 PFAS by ID SOP	1.4	J 3.7	0.92	ng/L	1
Perfluoro-n-tetradecanoic acid (PFTeDA	A)	376-06-	7 PFAS by ID SOP	ND	3.7	0.92	ng/L	1
Perfluoro-n-tridecanoic acid (PFTrDA)		72629-94	-8 PFAS by ID SOP	ND	3.7	0.92	ng/L	1
Perfluoro-n-undecanoic acid (PFUdA)		2058-94-	8 PEAS by ID SOP	ND	3.7	0.92	ng/L	1
Perfluorooctanesulfonic acid (PFOS)		1763-23-	1 PEAS by ID SOP	4.1	3.7	0.92	ng/L	1
Surrogate	Ru Q % Rec	in 1 Acc covery I	ceptance Limits					
13C2_4:2FTS	1	00	25-150					
13C2_6:2FTS	1	07	25-150					
13C2_8:2FTS	:	87	25-150					
13C2_PFDoA	:	89	25-150					
13C2_PFHxDA		92	25-150					
13C2_PFTeDA	1	87	25-150					
00 Limit of Quantitation D. 5	Notootod in the mathematical bland	E 000000	on of compound d- d-1	oolibrot!		a Linait		
ND = Not detected at or above the DL N = F	Detected in the method blank Recovery is out of criteria	E = Quantitation	on or compound exceeded the o between two GC columns excee	eds 40%	Inge DL = Detection J = Estimated	ι Limit result < LOQ and > Γ	DL	
H = Out of holding time W =	Reported on wet weight basis					_		

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Client: Pace Analytical Services, LLC		Laboratory ID: VK08043-020
Description: 333-0		Matrix: Aqueous
Date Sampled:11/03/2020 1135	Project Name: LACROSSE WELL #23 & 24	
Date Received: 11/06/2020	Project Number: 40217713	

		oontonee
Surrogate	Q % Recovery	Limits
13C3_PFBS	91	25-150
13C3_PFHxS	90	25-150
13C3-HFPO-DA	100	25-150
13C4_PFBA	97	25-150
13C4_PFHpA	91	25-150
13C5_PFHxA	93	25-150
13C5_PFPeA	96	25-150
13C6_PFDA	83	25-150
13C7_PFUdA	89	25-150
13C8_PFOA	95	25-150
13C8_PFOS	81	25-150
13C8_PFOSA	100	10-150
13C9_PFNA	94	25-150
d-EtFOSA	88	10-150
d5-EtFOSAA	88	25-150
d9-EtFOSE	90	10-150
d-MeFOSA	81	10-150
d3-MeFOSAA	87	25-150
d7-MeFOSE	79	10-150

LOQ = Limit of Quantitation B = Detected in the method blank E = Quantitation of compound exceeded the calibration range DL = Detection Limit ND = Not detected at or above the DL N = Recovery is out of criteria P = The RPD between two GC columns exceeds 40% J = Estimated result < LOQ and  $\ge$  DL H = Out of holding time W = Reported on wet weight basis

Client: Pace Analytical Services, LLC				Laboratory II	D: VK08043-0	021	
Description: DUP-3				Matrix	x: Aqueous		
Date Sampled:11/03/2020 1140	Project Name	e: LACROSSE WELL #	#23 & 24				
Date Received: 11/06/2020 P	roject Numbe	er: 40217713					
RunPrep MethodAnalytical Method1SOP SPEPFAS by ID SOP	Dilution A 1 11	nalysis Date Analyst /18/2020 1552 MMM	Prep Date 11/17/2020	e Batch 1034 73728			
Parameter	CAS Numbe	S Analytical r Method	Result O	1.00	DI	Units	Run
9-chlorohexadecafluoro-3-oxanone-1-sulfonic acid (9CI-PF3ONS	) 756426-58-	1 PFAS by ID SOP	ND	7.4	1.8	ng/L	1
11-chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11CI-PF3.	) 763051-92-	9 PFAS by ID SOP	ND	7.4	1.8	ng/L	1
1H, 1H, 2H, 2H-perfluorodecane sulfonic acid (8:2 FTS)	39108-34-	4 PFAS by ID SOP	ND	7.4	1.8	ng/L	1
1H, 1H, 2H, 2H-perfluorooctane sulfonic acid (6:2 FTS)	27619-97-	2 PFAS by ID SOP	ND	7.4	1.8	ng/L	1
1H,1H,2H,2H-perfluorododecane sulfonic acid (10:2 FTS)	120226-60-	0 PFAS by ID SOP	ND	7.4	1.8	ng/L	1
1H,1H,2H,2H-perfluorohexane sulfonic acid (4:2 FTS)	757124-72-	4 PFAS by ID SOP	ND	7.4	1.8	ng/L	1
Hexafluoropropylene oxide dimer acid (GenX)	13252-13-	6 PFAS by ID SOP	ND	7.4	1.8	ng/L	1
4,8-dioxa-3H-perfluorononanoic acid (ADONA)	919005-14-	4 PFAS by ID SOP	ND	7.4	1.8	ng/L	1
N-ethylperfluoro-1-octanesulfonamide (EtFOSA)	4151-50-	2 PFAS by ID SOP	ND	7.4	1.8	ng/L	1
N-ethylperfluoro-1-octanesulfonamidoacetic acid (EtFOSAA)	2991-50-	6 PFAS by ID SOP	ND	7.4	1.8	ng/L	1
2-N-ethylperfluoro-1-octanesulfonamido-ethanol (EtFOSE)	1691-99-	2 PFAS by ID SOP	ND	7.4	1.8	ng/L	1
N-methylperfluoro-1-octanesulfonamide (MeFOSA)	31506-32-	8 PFAS by ID SOP	ND	15	3.7	ng/L	1
N-methylperfluoro-1-octanesulfonamidoacetic acid (MeFOSAA)	2355-31-	9 PFAS by ID SOP	ND	7.4	1.8	ng/L	1
2-N-methylperfluoro-1-octanesulfonamido-ethanol (MeFOSE)	24448-09-	7 PFAS by ID SOP	ND	7.4	1.8	ng/L	1
Perfluoro-1-butanesulfonic acid (PFBS)	375-73-	5 PFAS by ID SOP	6.0	3.7	0.92	ng/L	1
Perfluoro-1-decanesulfonic acid (PFDS)	335-77-	3 PFAS by ID SOP	ND	3.7	0.92	ng/L	1
Perfluoro-1-heptanesulfonic acid (PFHpS)	375-92-	8 PFAS by ID SOP	ND	3.7	0.92	ng/L	1
Perfluoro-1-nonanesulfonic acid (PFNS)	68259-12-	1 PFAS by ID SOP	ND	3.7	0.92	ng/L	1
Perfluoro-1-octanesulfonamide (PFOSA)	754-91-	6 PFAS by ID SOP	ND	3.7	0.92	ng/L	1
Perfluoro-1-pentanesulfonic acid (PFPeS)	2706-91-	4 PFAS by ID SOP	6.0	3.7	0.92	ng/L	1
Perfluorododecanesulfonic acid (PFDOS)	79780-39-	5 PFAS by ID SOP	ND	7.4	1.8	ng/L	1
Perfluorohexanesulfonic acid (PFHxS)	355-46-	4 PFAS by ID SOP	21	3.7	0.92	ng/L	1
Perfluoro-n-butanoic acid (PFBA)	375-22-	4 PFAS by ID SOP	17	3.7	0.92	ng/L	1
Perfluoro-n-decanoic acid (PFDA)	335-76-	2 PEAS by ID SOP	ND	3.7	0.92	ng/L	1
Perfluoro-n-dodecanoic acid (PFDoA)	307-55-		ND	3.7	0.92	ng/L	1
	3/5-85-	9 PFAS by ID SOP	ND	3.7	0.92	ng/L	1
Perfluoro-n-nexadecanoic acid (PFHxDA)	6/905-19-			7.4	1.8	ng/L	1
Perliuoro-n-nexanoic acid (PEHXA)	307-24-	4 PFAS by ID SOP	1.3 J	3.7	0.92	ng/L	1
	3/3-93-	A DEAS by ID SOP		3.7	0.92	ng/L	1
Perfluoro-n-octanoic acid (PFODA)	335-67-	1 DEAS by ID SOP		7.4	1.8	ng/L	1
Perfluoro-n-pentanoic acid (PEPeA)	2706-90-	3 PEAS by ID SOP	14	3.7	0.92	ng/L	1
Perfluoro-n-tetradecanoic acid (PETeDA)	376-06-	7 PEAS by ID SOP	ND	3.7	0.92	ng/L	1
Perfluoro-n-tridecanoic acid (PETrDA)	72629-94.	8 PEAS by ID SOP		3.7	0.92	ng/L	1
Perfluoro-n-undecanoic acid (PELIdA)	2058-94-	8 PEAS by ID SOP		3.7	0.92	ng/L	1
Perfluorooctanesulfonic acid (PEOS)	1763-23-	1 PEAS by ID SOP	4.8	3.7	0.92	ng/L	1
			1.0	0.7	0.92	119/12	·
Surrogate Q % R	ecovery l						
13C2_4:2FTS	106	25-150					
1302_0.2F13	00	25-150					
1302_0.2F13	00	25-150					
1302_F1'DUA	70 05	25-150					
13C2_PFTeDA	90 90	25-150					
LOQ = Limit of Quantitation         B = Detected in the method blank           ND = Not detected at or above the DL         N = Recovery is out of criteria           H = Out of holding time         W = Reported on wet weight basis	E = Quantitatio P = The RPD	on of compound exceeded the obstruction between two GC columns exce	calibration range eds 40%	DL = Detection Lin J = Estimated resu	hit It < LOQ and $\geq$ D	DL	

Laboratory ID: VK08043-021 Matrix: Aqueous

Client: Pace Analytical Services, LLC	
Description: DUP-3	
Date Sampled:11/03/2020 1140	Project Name: LACROSSE WELL #23 & 24
Date Received: 11/06/2020	Project Number: 40217713

d7-MeFOSE

Run 1 Acceptance Surrogate % Recovery Q Limits 13C3\_PFBS 92 25-150 96 13C3\_PFHxS 25-150 13C3-HFPO-DA 95 25-150 13C4\_PFBA 102 25-150 13C4\_PFHpA 94 25-150 13C5\_PFHxA 99 25-150 13C5\_PFPeA 100 25-150 13C6\_PFDA 89 25-150 13C7\_PFUdA 93 25-150 13C8\_PFOA 103 25-150 13C8\_PFOS 89 25-150 13C8\_PFOSA 103 10-150 13C9 PFNA 104 25-150 d-EtFOSA 88 10-150 d5-EtFOSAA 95 25-150 d9-EtFOSE 90 10-150 d-MeFOSA 83 10-150 d3-MeFOSAA 95 25-150

10-150

85

 LOQ = Limit of Quantilation
 B = Detected in the method blank
 E = Quantilation of compound exceeded the calibration range
 DL = Detection Limit

 ND = Not detected at or above the DL
 N = Recovery is out of criteria
 P = The RPD between two GC columns exceeds 40%
 J = Estimated result < LOQ and ≥ DL</td>

 H = Out of holding time
 W = Reported on wet weight basis
 H = Out of holding time
 L = Detection Limit



444 21st Street South · La Crosse, Wisconsin · 54601

December 1, 2020

2541 Bainbridge Street La Crosse, WI 54603

Subject: Private Well Sampling Results 2541 Bainbridge Street, La Crosse, WI 54603 Tax parcel # 4-334-0 Sample ID # 334-0

Dear

We have received and reviewed the test results for the sample collected on November 3, 2020 at the above address. Some PFAS compounds were found, but the levels found were **below** the Department of Health Services (DHS) levels recommended for protecting health. These levels are called the "Recommended Public Health Standard" in the table below. The levels found in *your* well are called the "Sample Result" in the table below.

Also, please note, we collected two samples from your house for quality assurance / quality control purposes. The second sample is considered a "split" sample and was sent to a different laboratory for analysis. The "split" sample was analyzed by a different EPA method. That method analyzes for 18 compounds as compared to the 36 compounds under the other method. Thus, in the second table for the "Split" sample provided below, you will see some results listed as "Not Analyzed".

### Sample Results

Compound	Sample Result (unit)	Recomm Public H Standard	Recommended Public Health Standard (unit <sup>e</sup> )	
N-Ethyl Perfluorooctane sulfonamide (NEtFOSA) CAS # 4151-50-2	Not Detected	20 ppt <sup>a,b</sup>	) ppt unds I 6	
N-Ethyl perfluorooctane sulfonamidoacetic acid (NEtFOSAA) CAS # 2991-50-6	Not Detected	20 ppt <sup>a,b</sup>	it is 2C compo <i>il</i> of al	
N-Ethyl perfluorooctane sulfonamidoethanol (NEtFOSE) CAS # 1691-99-2	Not Detected	20 ppt <sup>a,b</sup>	ed lim ese 6 c ed totc	
Perfluorooctane sulfonamide (FOSA) CAS # 754-91-6	Not Detected	20 ppt <sup>a,b</sup>	mend of the ombine	
Perfluorooctanoic acid (PFOA) CAS # 335-67-1	Not Detected	20 ppt <sup>a,b</sup>	recom ny <i>on€</i> the <i>cc</i>	
Perfluorooctanesulfonic acid (PFOS) CAS # 1763-23-1	5.8 ppt	20 ppt <sup>a,b</sup>	The for al or	
Hexafluoropropylene oxide dimer acid (HPFO-DA; GenX) CAS # 13252-13-6	Not Detected		300 ppt <sup>a</sup>	
Perfluorobutanesulfonic acid (PFBS) CAS # 375-73-5	9.4 ppt	450	),000 ppt <sup>a</sup>	
Perfluorohexanesulfonic acid (PFHxS) CAS # 355-46-4	27 ppt		40 ppt <sup>a</sup>	
Perfluorobutanoic acid (PFBA) CAS # 375-22-4	36 ppt	10	),000 ppt <sup>a</sup>	
Perfluorodecanoic acid (PFDA) CAS # 335-76-2	Not Detected	300 ppt <sup>a</sup>		
Perfluorododecanoic acid (PFDoA) CAS # 307-55-1	Not Detected		500 ppt <sup>a</sup>	
Perfluorohexanoic acid (PFHxA) CAS # 307-24-4	3.4 ppt	150	),000 ppt <sup>a</sup>	
Perfluorononanoic acid (PFNA) CAS # 375-95-1	Not Detected		30 ppt <sup>a</sup>	
Perfluorotetradecanoic acid (PFTeA) CAS # 376-06-7	Not Detected	10,000 ppt <sup>a</sup>		
Perfluoroundecanoic acid (PFUnA) CAS # 2058-94-8	Not Detected	3	3,000 ppt <sup>a</sup>	
4,8-Dioxa-3H-perfluorononanoic acid (DONA) CAS # 919005-14-4	Not Detected	3	3,000 ppt <sup>a</sup>	

Compound	Sample Result (unit)	Recommended Public Health Standard (unit <sup>e</sup> )
Perfluorooctadecanoic acid (PFODA) CAS # 16517-11-6	Not Detected	400,000 ppt <sup>a</sup>
Perfluoro-1-pentanesulfonic acid (PFPeS) CAS #2706-91-4	8.8 ppt	None Established <sup>c</sup>
Perfluoro-n-pentanoic acid (PFPeA) CAS # 2706-90-3	2.0 ppt	None Established <sup>c</sup>
<sup>a</sup> Public health enforcement standard (ES) recommended by DHS.		

<sup>b</sup> DHS recommends a combined enforcement standard of 20 ng/L and combined preventive action limit of 2 ng/L for FOSA, NEt-FOSA, NetFOSAA, PFOS, and PFOA.

<sup>2</sup> A current standard is not available; the compound is currently under review by DHS for potential public health standard recommendation.

<sup>d</sup> Public health enforcement standard (ES) in NR 140, Wisconsin Administrative Code.

<sup>e</sup> Units: Parts per trillion (ppt) = nanograms of substance per liter of water (ng/L)

<sup>BL</sup> Detected in the method blank. Possible lab contaminant.

Compound	Sample Result (unit)	Recommended Public Health Standard (unit <sup>e</sup> )	
N-Ethyl Perfluorooctane sulfonamide (NEtFOSA) CAS # 4151-50-2	Not Analyzed	20 ppt <sup>a,b</sup>	) ppt unds I 6
N-Ethyl perfluorooctane sulfonamidoacetic acid (NEtFOSAA) CAS # 2991-50-6	Not Detected	20 ppt <sup>a,b</sup>	it is 20 compo <i>il</i> of al
N-Ethyl perfluorooctane sulfonamidoethanol (NEtFOSE) CAS # 1691-99-2	Not Analyzed	20 ppt <sup>a,b</sup>	ed lim ese 6 c ed totc
Perfluorooctane sulfonamide (FOSA) CAS # 754-91-6	Not Analyzed	20 ppt <sup>a,b</sup>	mend of the mbine
Perfluorooctanoic acid (PFOA) CAS # 335-67-1	1.7 ppt	20 ppt <sup>a,b</sup>	recom ny <i>one</i> the <i>cc</i>
Perfluorooctanesulfonic acid (PFOS) CAS # 1763-23-1	Not Detected	20 ppt <sup>a,b</sup>	The for a or
Hexafluoropropylene oxide dimer acid (HPFO-DA; GenX) CAS # 13252-13-6	Not Detected		300 ppt <sup>a</sup>
Perfluorobutanesulfonic acid (PFBS) CAS # 375-73-5	6.9 ppt	450	0,000 ppt ª

#### "SPLIT" Sample Results

Compound	Sample Result (unit)	Recommended Public Health Standard (unit <sup>e</sup> )
Perfluorohexanesulfonic acid (PFHxS) CAS # 355-46-4	26 ppt	40 ppt <sup>a</sup>
Perfluorobutanoic acid (PFBA) CAS # 375-22-4	Not Analyzed	10,000 ppt <sup>a</sup>
Perfluorodecanoic acid (PFDA) CAS # 335-76-2	Not Detected	300 ppt <sup>a</sup>
Perfluorododecanoic acid (PFDoA) CAS # 307-55-1	Not Detected	500 ppt <sup>a</sup>
Perfluorohexanoic acid (PFHxA) CAS # 307-24-4	2.3 ppt	150,000 ppt <sup>a</sup>
Perfluorononanoic acid (PFNA) CAS # 375-95-1	Not Detected	30 ppt <sup>a</sup>
Perfluorotetradecanoic acid (PFTeA) CAS # 376-06-7	Not Detected	10,000 ppt <sup>a</sup>
Perfluoroundecanoic acid (PFUnA) CAS # 2058-94-8	Not Detected	3,000 ppt <sup>a</sup>
4,8-Dioxa-3H-perfluorononanoic acid (DONA) CAS # 919005-14-4	Not Detected	3,000 ppt <sup>a</sup>
Perfluorooctadecanoic acid (PFODA) CAS # 16517-11-6	Not Analyzed	400,000 ppt ª
Perfluoro-1-pentanesulfonic acid (PFPeS) CAS #2706-91-4	Not Analyzed	None Established <sup>c</sup>
Perfluoro-n-pentanoic acid (PFPeA) CAS # 2706-90-3	Not Analyzed	None Established <sup>c</sup>

<sup>a</sup> Public health enforcement standard (ES) recommended by DHS.

<sup>b</sup> DHS recommends a combined enforcement standard of 20 ng/L and combined preventive action limit of 2 ng/L for FOSA, NEt-FOSA, NetFOSAA, PFOS, and PFOA.

A current standard is not available; the compound is currently under review by DHS for potential public health standard recommendation.

Public health enforcement standard (ES) in NR 140, Wisconsin Administrative Code.

Units: Parts per trillion (ppt) = nanograms of substance per liter of water (ng/L)

<sup>BL</sup> Detected in the method blank. Possible lab contaminant.

Description: 334-0         Maltic: Aqueous           Date Samplet 1103/2020 105         Project Number: 40217713         Project Number: 40217713           Run Frog Method 1         Sop Srie         Analytical Method Distribution         Project Number: 40217713         Project Number: 40217713           Parameter         Number: 40217713         Project Number: 40217713         Project Number: 40217713         Project Number: 40217713           Parameter         Number: 40217713         Project Number: 40217713         Project Number: 40217713           Parameter         Number: 40217713         Project Number: 40217713         Project Number: 40217713           Parameter         Number: 40217713         Project Number: 40217713         Project Number: 40217713           Parameter         Number: 40217713         Project Number: 40217713         Project Number: 40217713           Parameter         Number: 40217713         Project Number: 40217713         Project Number: 40217713           Parameter         Number: 40217713         Project Number: 40217713         Project Number: 40217713           Parameter         Number: 40217713         Project Number: 40217713         Project Number: 40217713           Parameter         Number: 401771713         Project Number: 402170         Project Number: 402170         Project Number: 402171           Projecon Number: 4016	Client: Pace Analytical Services, LLC				Laboratory I	D: VK08043-0	022		
Date Resolved: 11/06/2002         Project Number: 40217713         Prop Date         Batch           Num Proj Multhod 1         Analytical Mumber: 40217713         Prop Date         Batch           Parameter         Analytical Mumber: 40217713         Prop Date         Batch           Parameter         Number: 40217713         Prop Date         Batch           Parameter         Number: 40217713         Result: 0         LOC         DL         Units         Run Proj Muther: 40217713           Parameter         Number: 40217713         Result: 0         LOC         DL         Units         Run Proj Muther: 402177           Parameter         CAS         Analytical Muther: 402177         Number: 402177         Num	Description: 334-0				Matrix	: Aqueous			
Date Reserved: 1180/2020         Project Number: 42:17713           Prop Method 1         Analytical Method PrAS by ID SOP         Prop Method 1         Prop Date Number         Batch Number           Paramotor         Analytical Method PrAS by ID SOP         Number         Monitor         Nomitor         Batch Number           Paramotor         Analytical Multiparticity         Analytical Multiparticity         No         Batch 1:1         Run Vectorebraidedataborb-3ounone-1-subtonic acid VCI-PT SUN Prass by ID SOP         ND         6.8         1.2         right         N           11         No         Analytical Multiparticity         ND         6.8         1.2         right         N           11         No         Analytical Multiparticity         ND         6.8         1.2         right         1           11         ND         Analytical Multiparticity         ND         6.8         1.2         right         1           11         ND         Analytical Multiparticity         ND         6.8         1.7         right         1           11         ND         Analytical Multiparticity         ND         6.8         1.7         right         1           11         ND         Analytical Multipartity         ND         6.8	Date Sampled:11/03/2020 1305	Project Name	e: LACROSSE WELL #	<sup>‡</sup> 23 & 24		·			
Prior Network         Program Network         Program Network         Program Network         Program Network         Program Network         Program Network         Network           1         SOP SPE         Analytical Method PFAS by ID SOP         11/17/2020 103 MMM         11/17/2020 103 / 7728           2         Analytical Method PFAS by ID SOP         Analytical Method Method         Analytical Method Method         Result 0         LOO         DL         Units         Result 0           11         11         Analytical Method Method         Analytical Method Method         Result 0         LOO         DL         Units         Result 0         LOO         DL         LOO         LOO         LOO         LOO         LOO         LOO		niect Numbe	r· 4∩217713						
Run Prop Method 1         Analysis Date Analysis         Prop Date Parameter         Batch           Personal Composition of Comparison	Date Received. 11/00/2020 Troject Number. 40217715								
CAS         Anulylical         Result Q         LOQ         DL         Units         Run           9 driamesadine.add acamon 1-autonic add (QCI PTADNS)         Ask2a Bit         PrAs byti SSOP         ND         6.8         1,7         ngit         1           11.1. driamesadinational acaudicase add (22 FTS)         39168.34.4         PFAS byti SSOP         ND         6.8         1,7         ngit         1           11.1. H1, H2, H2, Hap affaoradesame sufficie add (22 FTS)         39168.34.4         PFAS byti SSOP         ND         6.8         1,7         ngit         1           11.1. H1, H2, H2, Hap flacoradesame sufficie add (24 FTS)         79714-72.4         PFAS byti SSOP         ND         6.8         1,7         ngit         1           11.1. H1, H2, H2, Hap flacoradesame sufficie add (24 FTS)         777124-72.4         PFAS byti SSOP         ND         6.8         1,7         ngit         1           11.1. H1, H2, H2, Hap flacoradesame sufficie add (GNO)         113522163         PFAS byti SSOP         ND         6.8         1,7         ngit         1           11.1. H1, H2, H2, Hap flacoradesame sufficie add (FSOA)         2941-55 byti SSOP         ND         6.8         1,7         ngit         1           12.4. edg/statistatistati add (FFOA)         2355.11         PFAS byti S	RunPrep MethodAnalytical Method1SOP SPEPFAS by ID SOP	Dilution Ar 1 11	nalysis Date Analyst /18/2020 1603 MMM	Prep Date 11/17/2020 10	Batch 034 73728				
Understandschuter 3 canone - sudore activity (CLFF3, 2)         Ask24-817         PFAS by ID SOP         ND         6.8         1,7         ngL         1           11 - H1 242, 24-perfuscodecame sufferic acti (82 FTS)         30188-344         PFAS by ID SOP         ND         6.8         1,7         ngL         1           11 H1, 112, 21, 21, 21, 21, 21, 21, 21, 21,	Parameter	CAS Numbe	6 Analytical r Method	Result Q	LOQ	DL	Units	Run	
11 - Interpretation 3: accurate and - 1-sufficient acid (1:1 - 191-3)       7420 + 192 + 974 by ID SOP       ND       6.8       1,7       ngL       1         11 - Hi, H2, H2, H2 perfusored care sufficient acid (0: 2 FTS)       7761 9 477       PFAS by ID SOP       ND       6.8       1,7       ngL       1         11 + H1, H2, H2, Perfusored care sufficient acid (0: 2 FTS)       12022-640       FFAS by ID SOP       ND       6.8       1,7       ngL       1         11 + H1, H2, H2, Perfusored care sufficient acid (2 FTS)       12022-640       FFAS by ID SOP       ND       6.8       1,7       ngL       1         11 + H1, H2, H2, Perfusored care sufficient acid (2 FTS)       12022-640       FFAS by ID SOP       ND       6.8       1,7       ngL       1         4-selation-H2 monomedia: acid (4 CPSA)       12022-640       FFAS by ID SOP       ND       6.8       1,7       ngL       1         4-selation-H2 monomedia: acid (4 CPSA)       1319-52       FFAS by ID SOP       ND       6.8       1,7       ngL       1         11 - Nethyperfusor-1-catenesufficamitios ethand (MeFOSA)       3255-13       FFAS by ID SOP       ND       6.8       1,7       ngL       1         2-Niethyperfusor-1-catenesufficamitios ethand (MeFOSA)       325-724       FFAS by ID SOP       ND	9-chlorohexadecafluoro-3-oxanone-1-sulfonic acid (9CI-PF3ONS)	756426-58-	1 PFAS by ID SOP	ND	6.8	1.7	ng/L	1	
ILI       Dist       Dist       ND       AB       1,7       np1       1,1         ILI       1H,11,2H,2H perfluordocane subficit acid (0,2 FTS)       120226-600       PFAS by ID SOP       ND       6.8       1,7       ngL       1         ILI       1H,11,2H,2H perfluordocane subficit acid (10,2 FTS)       120226-600       PFAS by ID SOP       ND       6.8       1,7       ngL       1         ILI       1H,2H,2H perfluordocane subficit acid (2 FTS)       1757124-72       PFAS by ID SOP       ND       6.8       1,7       ngL       1         ILI       1H,2H,2H perfluordocane subficit acid (2 FTS)       1757124-72       PFAS by ID SOP       ND       6.8       1,7       ngL       1         ILI       1H,3H,2H perfluordocanesubficit acid (2 FTS)       175124-72       PFAS by ID SOP       ND       6.8       1,7       ngL       1         ILI       Nethylperfluoro-1-octanesubficit acid (FFOSA)       1891-99.2       PFAS by ID SOP       ND       6.8       1,7       ngL       1         Nethylperfluoro-1-octanesubficit acid (FFOSA)       3150-52.8       PFAS by ID SOP       ND       6.8       1,7       ngL       1         Nethylperfluoro-1-octanesubficit acid (FFOSA)       3150-52.8       PFAS by ID SOP       ND	11-chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11CI-PF3	.) 763051-92-	9 PFAS by ID SOP	ND	6.8	1.7	ng/L	1	
H1, H2, H2, H2, H2, H2, H2, H2, H2, H2, H2	1H, 1H, 2H, 2H-perfluorodecane sulfonic acid (8:2 FTS)	39108-34-	4 PFAS by ID SOP	ND	6.8	1.7	ng/L	1	
H.H.H.2.H.2-Perfunctionase subtinic add (10:2 FTS)       12022-04-00       PFAS by ID SOP       ND       6.8       1.7       ng/L       1         H.H.H.2.H.2-Perfunctionase subtinic add (2 FTS)       757124-724       PFAS by ID SOP       ND       6.8       1.7       ng/L       1         4.8-dioas-3H-perfluctionanics add (ADOKN)       13252-13.6       PFAS by ID SOP       ND       6.8       1.7       ng/L       1         4.8-dioas-3H-perfluctionanics add (ADOKN)       191065-14.4       PFAS by ID SOP       ND       6.8       1.7       ng/L       1         N ethylperflucto 1-octanesufformatiosettar add (EFOSA)       3991-50.4       PFAS by ID SOP       ND       6.8       1.7       ng/L       1         N methylperflucto 1-octanesufformatiosethard (EFOSA)       3991-50.4       PFAS by ID SOP       ND       6.8       1.7       ng/L       1         N-methylperflucto 1-octanesufformatiosethard (MeFOSA)       2375-73.5       PFAS by ID SOP       ND       6.8       1.7       ng/L       1         Perflucto-1-octanesufformatiosethard (MeFOSA)       2375-73.5       PFAS by ID SOP       ND       3.4       0.86       ng/L       1         Perflucto-1-octanesufformatios add (PFOS)       3375-73.5       PFAS by ID SOP       ND       3.4       0.86	1H, 1H, 2H, 2H-perfluorooctane sulfonic acid (6:2 FTS)	27619-97-	2 PFAS by ID SOP	ND	6.8	1.7	ng/L	1	
H-H-H-2-H-perfluore-backed sime acid (CaPCT)       75712+72-4       PEAS by ID SOP       ND       6.8       1.7       ngL       1         HasaBluarsprippier oxide dimer acid (CGaVC)       13252-134       PEAS by ID SOP       ND       6.8       1.7       ngL       1         Al dows 311 perfluore-on-actine acid (ADONA)       19100S 144       PEAS by ID SOP       ND       6.8       1.7       ngL       1         Nethyperfluor-1-octinesulfonamide (EFOSA)       191016-04       PEAS by ID SOP       ND       6.8       1.7       ngL       1         Nethyperfluor-1-octinesulfonamide (MeTOSA)       31506-328       PEAS by ID SOP       ND       6.8       1.7       ngL       1         Nethyperfluor-1-octinesulfonamide (MeTOSA)       31506-328       PEAS by ID SOP       ND       6.8       1.7       ngL       1         Perfluor-1-boctinesulfonamide (MeTOSA)       3357-73       PEAS by ID SOP       ND       6.8       1.7       ngL       1         Perfluor-1-boctinesulfonamide (PENS)       3357-73       PEAS by ID SOP       ND       3.4       0.86       ngL       1         Perfluoro-1-boctinesulfonamide (PENS)       3357-73       PEAS by ID SOP       ND       3.4       0.86       ngL       1         Perfluoro-1-	1H,1H,2H,2H-perfluorododecane sulfonic acid (10:2 FTS)	120226-60-	0 PFAS by ID SOP	ND	6.8	1.7	ng/L	1	
Horafluroprojegine existe dimer acid (GENX)         1262-13.6         PFAS by ID SOP         ND         6.8         1.7         ngtl         1           4.8 ditox 314 perfuronononcia cid (QENOX)         919005 14.4         PFAS by ID SOP         ND         6.8         1.7         ngtl         1           Nethyperfuron-1-octanesuftonamidocettaria (EFOSA)         2991 50.6         PFAS by ID SOP         ND         6.8         1.7         ngtl         1           Nethyperfuron-1-octanesuftonamidocettaria (GEFOSA)         2991 50.6         PFAS by ID SOP         ND         6.8         1.7         ngtl         1           Nethyperfuron-1-octanesuftonamidocettaria (GEFOSA)         2991 50.6         PFAS by ID SOP         ND         6.8         1.7         ngtl         1           2 M methyperfuron-1-octanesuftonamido ethanol (METOSF)         24480 097         PFAS by ID SOP         ND         6.8         1.7         ngtl         1           Perfuron-1-octanesuftonamido ethanol (METOSF)         375.73         PFAS by ID SOP         ND         3.4         0.80         ngtl         1           Perfuron-1-bustonesuftonic acid (PFNS)         682.57.73         PFAS by ID SOP         ND         3.4         0.80         ngtl         1           Perfuron-1-bustonesuftonic acid (PFNS)         682	1H,1H,2H,2H-perfluorohexane sulfonic acid (4:2 FTS)	757124-72-	4 PFAS by ID SOP	ND	6.8	1.7	ng/L	1	
4.8 dioxa 3H-perflucaron-notic acid (ADDNA)       910005-14.4       PFAS by ID SOP       ND       6.8       1.7       ng/L       1         N-ethylperflucaro-1-octanesuffonamido (EIFOSA)       1315-02       PFAS by ID SOP       ND       6.8       1.7       ng/L       1         2-N-ethylperflucaro-1-octanesuffonamido (EIFOSA)       1360-24.8       PFAS by ID SOP       ND       6.8       1.7       ng/L       1         N-methylperflucaro-1-octanesuffonamido (MeFOSA)       3156-32.8       PFAS by ID SOP       ND       6.8       1.7       ng/L       1         N-methylperflucaro-1-octanesuffonamido (MeFOSA)       2355-31.9       PFAS by ID SOP       ND       6.8       1.7       ng/L       1         Perflucaro-1-octanesuffonamido eithenol (MeFOSF)       24448.09.7       PFAS by ID SOP       ND       3.4       0.86       ng/L       1         Perflucaro-1-octanesuffonamido eithenol (MeFOSF)       335-7.3       PFAS by ID SOP       ND       3.4       0.86       ng/L       1         Perflucaro-1-octanesuffonamido eithenol (MeFOSF)       335-7.4       PFAS by ID SOP       ND       3.4       0.86       ng/L       1         Perflucaro-1-octanesuffonamido eithenol (MeFOSF)       2706-14-PFAS by ID SOP       ND       3.4       0.86       ng/L       <	Hexafluoropropylene oxide dimer acid (GenX)	13252-13-	6 PFAS by ID SOP	ND	6.8	1.7	ng/L	1	
N=Hydgerfluoro-1-actanesulforaunidaceils aud (EFOSA)         4151-60-2         PFAS by ID SOP         ND         6.8         1.7         ng/L         1           N=Hydgerfluoro-1-actanesulforaunidaceils aud (EFOSA)         2901-50-4         PFAS by ID SOP         ND         6.8         1.7         ng/L         1           N=Hydgerfluoro-1-actanesulforamidoceils aud (EFOSA)         31506-32.8         PFAS by ID SOP         ND         6.8         1.7         ng/L         1           N=Hydgerfluoro-1-actanesulforamidoceil aud (EFOSA)         31506-32.8         PFAS by ID SOP         ND         6.8         1.7         ng/L         1           2-Ai-mothydgerfluoro-1-actanesulforamido ethanol (MeFOSA)         3255-19         PFAS by ID SOP         ND         6.8         1.7         ng/L         1           Perfluoro-1-bacesulfona aud (PFDS)         375-73         PFAS by ID SOP         ND         3.4         0.86         ng/L         1           Perfluoro-1-actanesulfona aud (PFDS)         62591-12         PFAS by ID SOP         ND         3.4         0.86         ng/L         1           Perfluoro-1-actanesulfona aud (PFDS)         726-914         PFAS by ID SOP         ND         3.4         0.86         ng/L         1           Perfluoro-1-actanesulfona aud (PFDS)         726-91	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	919005-14-	4 PFAS by ID SOP	ND	6.8	1.7	ng/L	1	
N=http://perfusor-1-octanesulfonamids.edit.add (EFCSAN)         2991-50-b         PFAS by ID SOP         ND         6.8         1.7         ng/L         1           2.Al-ethylperfluoro-1-octanesulfonamids ethanol (MeFOSA)         1691-99-2         PFAS by ID SOP         ND         6.8         1.7         ng/L         1           Nmethylperfluoro-1-octanesulfonamida (MeFOSA)         2355-21-9         PFAS by ID SOP         ND         6.8         1.7         ng/L         1           2-M-methylperfluoro-1-octanesulfonamida (MeFOSA)         2355-21-9         PFAS by ID SOP         ND         6.8         1.7         ng/L         1           2-M-methylperfluoro-1-octanesulfonamida (MeFOSA)         2355-21-9         PFAS by ID SOP         ND         3.4         0.86         ng/L         1           Perfluoro-1-otanesulfonic acid (PFBS)         335-73-9         PFAS by ID SOP         ND         3.4         0.86         ng/L         1           Perfluoro-1-otanesulfonic acid (PFPAS)         754-91-9         PFAS by ID SOP         ND         3.4         0.86         ng/L         1           Perfluoro-1-otanesulfonic acid (PFPAS)         255-46-4         PFAS by ID SOP         ND         3.4         0.86         ng/L         1           Perfluoro-n-decanoic acid (PFBA)         335-75-1	N-ethylperfluoro-1-octanesulfonamide (EtFOSA)	4151-50-2	2 PFAS by ID SOP	ND	6.8	1.7	ng/L	1	
2. Nethylperfluoro 1-octanesulfonamido emito EIFOSE)       169199-2       PFAS by ID SOP       ND       6.8       1.7       ngfL       1         N-methylperfluoro 1-octanesulfonamidosculfa cal (MeFOSA)       31506-32.8       PFAS by ID SOP       ND       6.8       1.7       ngfL       1         2-N-methylperfluoro 1-octanesulfonamidosculfa cal (MeFOSA)       31506-32.8       PFAS by ID SOP       ND       6.8       1.7       ngfL       1         2-N-methylperfluoro 1-octanesulfonamidosculfa cal (MeFOSE)       24448-09.7       PFAS by ID SOP       ND       6.8       1.7       ngfL       1         Perfluoro 1-octanesulfonic acid (PFES)       375-73       PFAS by ID SOP       ND       3.4       0.86       ngfL       1         Perfluoro 1-octanesulfonic acid (PFPS)       375-73       PFAS by ID SOP       ND       3.4       0.86       ngfL       1         Perfluoro 1-octanesulfonic acid (PFPS)       375-73       PFAS by ID SOP       ND       3.4       0.86       ngfL       1         Perfluoro 1-octanesulfonic acid (PFPS)       375-74       PFAS by ID SOP       ND       3.4       0.86       ngfL       1         Perfluoro 1-octanesulfonic acid (PFDA)       375-74       PFAS by ID SOP       ND       3.4       0.86       ngfL <t< td=""><td>N-ethylperfluoro-1-octanesulfonamidoacetic acid (EtFOSAA)</td><td>2991-50-</td><td>6 PFAS by ID SOP</td><td>ND</td><td>6.8</td><td>1.7</td><td>ng/L</td><td>1</td></t<>	N-ethylperfluoro-1-octanesulfonamidoacetic acid (EtFOSAA)	2991-50-	6 PFAS by ID SOP	ND	6.8	1.7	ng/L	1	
N-methylperfluoro-1-octanesulfonamide (MeFOSA)         31506-22.8         PFAS by ID SOP         ND         14         3.4         ng/L         1           N-methylperfluoro-1-octanesulfonamido-ethenic (MeFOSA)         2355-31-9         PFAS by ID SOP         ND         6.8         1.7         ng/L         1           Perfluoro-1-butanesulfonic acid (PFDS)         335-77-3         PFAS by ID SOP         ND         3.4         0.86         ng/L         1           Perfluoro-1-butanesulfonic acid (PFDS)         335-77-3         PFAS by ID SOP         ND         3.4         0.86         ng/L         1           Perfluoro-1-butanesulfonic acid (PFDS)         335-77-3         PFAS by ID SOP         ND         3.4         0.86         ng/L         1           Perfluoro-1-butanesulfonic acid (PFDS)         68259-12-1         PFAS by ID SOP         ND         3.4         0.86         ng/L         1           Perfluoro-1-butanesulfonic acid (PFDS)         70789-394-5         PFAS by ID SOP         ND         4.8         0.86         ng/L         1           Perfluoro-1-butanesulfonic acid (PFDS)         70789-394-5         PFAS by ID SOP         ND         4.8         0.86         ng/L         1           Perfluoro-1-butanesulfonic acid (PFDA)         335-64-4         PFAS by ID SO	2-N-ethylperfluoro-1-octanesulfonamido-ethanol (EtFOSE)	1691-99-2	2 PFAS by ID SOP	ND	6.8	1.7	ng/L	1	
N-methylperfluoron-1-octanesulfonamida.extendi (MeFOSA)         225-31-9         PFAS by ID SOP         ND         6.8         1.7         ngL         1           2-N-methylperfluoro-1-octanesulfonic acid (PFDS)         24446-09-7         PFAS by ID SOP         ND         6.8         1.7         ngL         1           Perfluoro-1-butanesulfonic acid (PFDS)         375-73         PFAS by ID SOP         ND         3.4         0.86         ng/L         1           Perfluoro-1-butanesulfonic acid (PFNS)         375-73         PFAS by ID SOP         ND         3.4         0.86         ng/L         1           Perfluoro-1-otanesulfonic acid (PFNS)         375-73         PFAS by ID SOP         ND         3.4         0.86         ng/L         1           Perfluoro-1-otanesulfonic acid (PFNS)         2706-91-4         PFAS by ID SOP         ND         3.4         0.86         ng/L         1           Perfluoro-1-petitionic acid (PFNS)         2706-91-4         PFAS by ID SOP         ND         3.4         0.86         ng/L         1           Perfluoro-1-octanesulfonic acid (PFNS)         355-44         PFAS by ID SOP         ND         3.4         0.86         ng/L         1           Perfluoro-n-doctanoic acid (PFNA)         375-52         PFAS by ID SOP         ND	N-methylperfluoro-1-octanesulfonamide (MeFOSA)	31506-32-	8 PFAS by ID SOP	ND	14	3.4	ng/L	1	
2-A-methylgendlucer-1-octanesulfonic acid (PFDS)         244430-7         PFAS by ID SOP         ND         6.8         1.7         ngl.         1           Perfluoro-1-butanesulfonic acid (PFDS)         375-73-         PFAS by ID SOP         ND         3.4         0.86         ngl.         1           Perfluoro-1-decanesulfonic acid (PFDS)         335-77-3         PFAS by ID SOP         ND         3.4         0.86         ngl.         1           Perfluoro-1-otacenesulfonic acid (PFNS)         68259121         PFAS by ID SOP         ND         3.4         0.86         ngl.         1           Perfluoro-1-octanesulfonic acid (PFNS)         68259121         PFAS by ID SOP         ND         3.4         0.86         ngl.         1           Perfluoro-1-octanesulfonic acid (PFNS)         754-916         PFAS by ID SOP         ND         4.8         0.86         ngl.         1           Perfluoro-tokanesulfonic acid (PFNOS)         79780-39-         PFAS by ID SOP         ND         4.4         0.86         ngl.         1           Perfluoro-tokanesulfonic acid (PFNA)         375-22         PFAS by ID SOP         ND         3.4         0.86         ngl.         1           Perfluoro-tokanesulfonic acid (PFNA)         375-24         PFAS by ID SOP         ND	N-methylperfluoro-1-octanesulfonamidoacetic acid (MeFOSAA)	2355-31-	9 PFAS by ID SOP	ND	6.8	1.7	ng/L	1	
Perfluoro-1-butanesulfonic acid (PEBS)         375-73-5         PFAS by ID SOP         9.4         3.4         0.86         ng/L         1           Perfluoro-1-decassulfonic acid (PFDS)         335-77.3         PFAS by ID SOP         ND         3.4         0.86         ng/L         1           Perfluoro-1-heptanesulfonic acid (PFDS)         375-72.8         PFAS by ID SOP         ND         3.4         0.86         ng/L         1           Perfluoro-1-opentanesulfonic acid (PFDS)         68259-12-1         PFAS by ID SOP         ND         3.4         0.86         ng/L         1           Perfluoro-1-pentanesulfonic acid (PFDS)         2766-914         PFAS by ID SOP         ND         3.4         0.86         ng/L         1           Perfluoro-1-bentanesulfonic acid (PFDS)         2766-914         PFAS by ID SOP         ND         6.8         1.7         ng/L         1           Perfluoro-1-butanesulfonic acid (PFDA)         335-75-2         PFAS by ID SOP         ND         3.4         0.86         ng/L         1           Perfluoro-n-butanesulfonic acid (PFDA)         337-75-2         PFAS by ID SOP         ND         3.4         0.86         ng/L         1           Perfluoro-n-butanesulfonic acid (PFDA)         375-75-1         PFAS by ID SOP         ND	2-N-methylperfluoro-1-octanesulfonamido-ethanol (MeFOSE)	24448-09-	7 PFAS by ID SOP	ND	6.8	1.7	ng/L	1	
Perfluoro-1-decanesuffonic acid (PFEpS)         335-77-3         PFAS by ID SOP         ND         3.4         0.86         ng/L         1           Perfluoro-1-heptanesuffonic acid (PFEpS)         375-92-8         PFAS by ID SOP         ND         3.4         0.86         ng/L         1           Perfluoro-1-nenaesuffonic acid (PFENS)         68259-121         PFAS by ID SOP         ND         3.4         0.86         ng/L         1           Perfluoro-1-pertanesuffonic acid (PFENS)         2766-914         PFAS by ID SOP         ND         3.4         0.86         ng/L         1           Perfluoro-1-pertanesuffonic acid (PFENS)         2766-914         PFAS by ID SOP         ND         3.4         0.86         ng/L         1           Perfluoro-notacanesuffonic acid (PFENS)         375-524         PFAS by ID SOP         ND         3.4         0.86         ng/L         1           Perfluoro-notacanesuffonic acid (PFEA)         375-524         PFAS by ID SOP         ND         3.4         0.86         ng/L         1           Perfluoro-notacanesuffonic acid (PFEA)         375-554         PFAS by ID SOP         ND         3.4         0.86         ng/L         1           Perfluoro-notacacid (PFEA)         375-551         PFAS by ID SOP         ND	Perfluoro-1-butanesulfonic acid (PFBS)	375-73-	5 PFAS by ID SOP	9.4	3.4	0.86	ng/L	1	
Perfluoro-1-neptanesulfonic acid (PFNpS)         375-92.8         PAS by ID SOP         ND         3.4         0.86         ng/L         1           Perfluoro-1-nonanesulfonic acid (PFNS)         68259-12.1         PFAS by ID SOP         ND         3.4         0.86         ng/L         1           Perfluoro-1-nentanesulfonic acid (PFNS)         775-91.4         PFAS by ID SOP         ND         3.4         0.86         ng/L         1           Perfluoro-1-pentanesulfonic acid (PFNS)         775-91.4         PFAS by ID SOP         ND         6.8         1.7         ng/L         1           Perfluoro-n-butancic acid (PFNA)         335-76-2         PFAS by ID SOP         ND         3.4         0.86         ng/L         1           Perfluoro-n-butancic acid (PFDA)         335-76-2         PFAS by ID SOP         ND         3.4         0.86         ng/L         1           Perfluoro-n-butancic acid (PFDA)         337-52-2         PFAS by ID SOP         ND         3.4         0.86         ng/L         1           Perfluoro-n-heptancic acid (PFIAA)         375-95-1         PFAS by ID SOP         ND         3.4         0.86         ng/L         1           Perfluoro-n-texancic acid (PFIAA)         375-95-1         PFAS by ID SOP         ND         3.4	Perfluoro-1-decanesulfonic acid (PFDS)	335-77-	3 PFAS by ID SOP	ND	3.4	0.86	ng/L	1	
Perfluoro-1-nonanesulfonic add (PFNS)         68259-12.1         PFAS by ID SOP         ND         3.4         0.86         ng/L         1           Perfluoro-1-octanesulfonamide (PFOSA)         754-91.6         PFAS by ID SOP         ND         3.4         0.86         ng/L         1           Perfluoro-1-octanesulfonic acid (PFDOS)         2706-91.4         PFAS by ID SOP         ND         6.8         1.7         ng/L         1           Perfluoro-notanesulfonic acid (PFDA)         335-76.2         PFAS by ID SOP         ND         3.4         0.86         ng/L         1           Perfluoro-notacancia caid (PFDA)         335-76.2         PFAS by ID SOP         ND         3.4         0.86         ng/L         1           Perfluoro-notacancia caid (PFDA)         335-76.2         PFAS by ID SOP         ND         3.4         0.86         ng/L         1           Perfluoro-notacacancia caid (PFDA)         375-85-9         PFAS by ID SOP         ND         6.8         1.7         ng/L         1           Perfluoro-notacacacid (PFHA)         375-85-9         PFAS by ID SOP         ND         6.8         1.7         ng/L         1           Perfluoro-notacacacid (PFNA)         375-85-1         PFAS by ID SOP         ND         6.8         1.7	Perfluoro-1-heptanesulfonic acid (PFHpS)	375-92-	8 PFAS by ID SOP	ND	3.4	0.86	ng/L	1	
Perfluoro-1-octanesulfonia acid (PFPoS)         754-91-6         PFAS by ID SOP         ND         3.4         0.86         ng/L         1           Perfluoro1-pertanesulfonic acid (PFPoS)         2706-91-4         PFAS by ID SOP         ND         6.8         1.7         ng/L         1           Perfluoron-bexanesulfonic acid (PFDA)         335-76-2         PFAS by ID SOP         ND         6.8         1.7         ng/L         1           Perfluoron-butanoic acid (PFDA)         335-76-2         PFAS by ID SOP         ND         3.4         0.86         ng/L         1           Perfluoron-butanoic acid (PFDA)         335-76-2         PFAS by ID SOP         ND         3.4         0.86         ng/L         1           Perfluoro-n-decanoic acid (PFDA)         335-76-2         PFAS by ID SOP         ND         3.4         0.86         ng/L         1           Perfluoro-n-hexanoic acid (PFHAA)         375-85-9         PFAS by ID SOP         ND         3.4         0.86         ng/L         1           Perfluoro-n-nonanoic acid (PFHAA)         307-24-4         PFAS by ID SOP         ND         3.4         0.86         ng/L         1           Perfluoro-n-ctadecanoic acid (PFNA)         375-95-1         PFAS by ID SOP         ND         3.4         0.86<	Perfluoro-1-nonanesulfonic acid (PFNS)	68259-12-	1 PFAS by ID SOP	ND	3.4	0.86	ng/L	1	
Perfluoro-1-pentanesulfonic acid (PFPeS)         2706-91-4         PFAS by ID SOP         8.8         3.4         0.86         ng/L         1           Perfluorobaceanesulfonic acid (PFPAS)         355-44-4         PFAS by ID SOP         ND         6.8         1.7         ng/L         1           Perfluorobaceanesulfonic acid (PFBA)         375-22-4         PFAS by ID SOP         36         3.4         0.86         ng/L         1           Perfluorobaceanoic acid (PFDA)         335-76-2         PFAS by ID SOP         ND         3.4         0.86         ng/L         1           Perfluoro-n-decanoic acid (PFHA)         375-55-9         PFAS by ID SOP         ND         3.4         0.86         ng/L         1           Perfluoro-n-hextancic acid (PFHAA)         375-55-9         PFAS by ID SOP         ND         3.4         0.86         ng/L         1           Perfluoro-n-hextancic acid (PFHAA)         307-55-1         PFAS by ID SOP         ND         3.4         0.86         ng/L         1           Perfluoro-n-nobancic acid (PFHAA)         307-54-1         PFAS by ID SOP         ND         3.4         0.86         ng/L         1           Perfluoro-n-nobancic acid (PFHAA)         375-67-1         PFAS by ID SOP         ND         3.4         0.86	Perfluoro-1-octanesulfonamide (PFOSA)	754-91-	6 PFAS by ID SOP	ND	3.4	0.86	ng/L	1	
Perfluorododecanesulfonic acid (PFDOS)         79780-39-5         PFA S by ID SOP         ND         6.8         1.7         ng/L         1           Perfluoro-hexanesulfonic acid (PFLAS)         355-46-4         PFAS by ID SOP         27         3.4         0.86         ng/L         1           Perfluoro-n-butanoic acid (PFDA)         335-76-2         PFAS by ID SOP         ND         3.4         0.86         ng/L         1           Perfluoro-n-decanoic acid (PFDA)         335-76-2         PFAS by ID SOP         ND         3.4         0.86         ng/L         1           Perfluoro-n-decanoic acid (PFDA)         337-58-9         PFAS by ID SOP         ND         3.4         0.86         ng/L         1           Perfluoro-n-hexalecanoic acid (PFHAA)         307-24-4         PFAS by ID SOP         ND         6.8         1.7         ng/L         1           Perfluoro-n-nexalecanoic acid (PFHAA)         307-24-4         PFAS by ID SOP         ND         6.8         1.7         ng/L         1           Perfluoro-n-nexalecanoic acid (PFHAA)         307-24-4         PFAS by ID SOP         ND         6.8         1.7         ng/L         1           Perfluoro-n-calanoic acid (PFHAA)         307-24-4         PFAS by ID SOP         ND         6.4	Perfluoro-1-pentanesulfonic acid (PFPeS)	2706-91-	4 PFAS by ID SOP	8.8	3.4	0.86	ng/L	1	
Perfluoroh-xanesulfonic acid (PFHxS)         355-46-4         PFAS by ID SOP         27         3.4         0.86         ng/L         1           Perfluoron-decanoic acid (PFBA)         375-22.4         PFAS by ID SOP         ND         3.4         0.86         ng/L         1           Perfluoron-decanoic acid (PFDA)         337-52.2         PFAS by ID SOP         ND         3.4         0.86         ng/L         1           Perfluoron-decanoic acid (PFDA)         307-55.1         PFAS by ID SOP         ND         3.4         0.86         ng/L         1           Perfluoron-heptanoic acid (PFHxDA)         67905-19-5         PFAS by ID SOP         ND         3.4         0.86         ng/L         1           Perfluoron-hexanoic acid (PFHxDA)         307-24-4         PFAS by ID SOP         ND         6.8         1.7         ng/L         1           Perfluoron-nonanoic acid (PFNA)         307-24-4         PFAS by ID SOP         ND         6.8         n.7         ng/L         1           Perfluoron-notanoic acid (PFNA)         375-65-1         PFAS by ID SOP         ND         6.8         n.7         ng/L         1           Perfluoron-notanoic acid (PFOA)         10517-11-6         PFAS by ID SOP         ND         3.4         0.86         ng	Perfluorododecanesulfonic acid (PFDOS)	79780-39-	5 PFAS by ID SOP	ND	6.8	1.7	ng/L	1	
Perfluoro-n-butanoic acid (PFDA)         375-22-4         PFAS by ID SOP         ND         3.4         0.86         ng/L         1           Perfluoro-n-decanoic acid (PFDA)         335-76-2         PFAS by ID SOP         ND         3.4         0.86         ng/L         1           Perfluoro-n-decanoic acid (PFDA)         307-55.1         PFAS by ID SOP         ND         3.4         0.86         ng/L         1           Perfluoro-n-heptanoic acid (PFHpA)         375-85.9         PFAS by ID SOP         ND         3.4         0.86         ng/L         1           Perfluoro-n-heptanoic acid (PFHpA)         375-85.9         PFAS by ID SOP         ND         6.8         1.7         ng/L         1           Perfluoro-n-heptanoic acid (PFNA)         307-34-4         PFAS by ID SOP         ND         3.4         0.86         ng/L         1           Perfluoro-n-octadecanoic acid (PFNA)         375-95.1         PFAS by ID SOP         ND         3.4         0.86         ng/L         1           Perfluoro-n-octadecanoic acid (PFOA)         375-95.1         PFAS by ID SOP         ND         3.4         0.86         ng/L         1           Perfluoro-n-tetradecanoic acid (PFTOA)         726-90-3         PFAS by ID SOP         ND         3.4         0.86 <td>Perfluorohexanesulfonic acid (PFHxS)</td> <td>355-46-</td> <td>4 PFAS by ID SOP</td> <td>27</td> <td>3.4</td> <td>0.86</td> <td>ng/L</td> <td>1</td>	Perfluorohexanesulfonic acid (PFHxS)	355-46-	4 PFAS by ID SOP	27	3.4	0.86	ng/L	1	
Perfluoro-n-decanoic acid (PEDA)         335-76-2         PFAS by ID SOP         ND         3.4         0.86         ng/L         1           Perfluoro-n-dedecanoic acid (PEDA)         307-55-1         PFAS by ID SOP         ND         3.4         0.86         ng/L         1           Perfluoro-n-hexadecanoic acid (PFHpA)         375-85-9         PFAS by ID SOP         ND         6.8         1.7         ng/L         1           Perfluoro-n-hexadecanoic acid (PFHxA)         67905-19-5         PFAS by ID SOP         ND         6.8         1.7         ng/L         1           Perfluoro-n-nexanoic acid (PFHxA)         307-24-4         PFAS by ID SOP         ND         3.4         0.86         ng/L         1           Perfluoro-n-octanoic acid (PFNA)         375-95-1         PFAS by ID SOP         ND         3.4         0.86         ng/L         1           Perfluoro-n-octanoic acid (PFOA)         16517-11-6         PFAS by ID SOP         ND         3.4         0.86         ng/L         1           Perfluoro-n-pentanoic acid (PFPOA)         2706-90-3         PFAS by ID SOP         ND         3.4         0.86         ng/L         1           Perfluoro-n-teiradecanoic acid (PFTeDA)         376-06-7         PFAS by ID SOP         ND         3.4         0	Perfluoro-n-butanoic acid (PFBA)	375-22-	4 PFAS by ID SOP	36	3.4	0.86	ng/L	1	
Perfluoro-n-dodecanoic acid (PFDoA)         307-55-1         PFAS by ID SOP         ND         3.4         0.86         ng/L         1           Perfluoro-n-heptanoic acid (PFHAA)         375-85-9         PFAS by ID SOP         ND         3.4         0.86         ng/L         1           Perfluoro-n-heptanoic acid (PFHXDA)         67905-19-5         PFAS by ID SOP         ND         6.8         1.7         ng/L         1           Perfluoro-n-nexanoic acid (PFHXDA)         307-24-4         PFAS by ID SOP         ND         3.4         0.86         ng/L         1           Perfluoro-n-nexanoic acid (PFNA)         307-24-4         PFAS by ID SOP         ND         3.4         0.86         ng/L         1           Perfluoro-n-octanecanoic acid (PFOA)         16517-11-6         PFAS by ID SOP         ND         3.4         0.86         ng/L         1           Perfluoro-n-octanoic acid (PFOA)         335-67-1         PFAS by ID SOP         ND         3.4         0.86         ng/L         1           Perfluoro-n-pentanoic acid (PFOA)         376-06-7         PFAS by ID SOP         ND         3.4         0.86         ng/L         1           Perfluoro-n-undecanoic acid (PFTDA)         72629-94-8         PFAS by ID SOP         ND         3.4         0.8	Perfluoro-n-decanoic acid (PFDA)	335-76-	2 PFAS by ID SOP	ND	3.4	0.86	ng/L	1	
Perfluoro-n-heptanoic acid (PFHpA)         375-85-9         PFAS by ID SOP         ND         3.4         0.86         ng/L         1           Perfluoro-n-hexadecanoic acid (PFHxDA)         67905-19-5         PFAS by ID SOP         ND         6.8         1,7         ng/L         1           Perfluoro-n-hexanoic acid (PFHxDA)         307-24-4         PFAS by ID SOP         ND         3.4         0.86         ng/L         1           Perfluoro-n-nonanoic acid (PFNA)         307-34-4         PFAS by ID SOP         ND         3.4         0.86         ng/L         1           Perfluoro-n-nonanoic acid (PFNA)         305-95-1         PFAS by ID SOP         ND         3.4         0.86         ng/L         1           Perfluoro-n-octadecanoic acid (PFOA)         16517-11-6         PFAS by ID SOP         ND         3.4         0.86         ng/L         1           Perfluoro-n-tetradecanoic acid (PFPA)         2706-90-3         PFAS by ID SOP         ND         3.4         0.86         ng/L         1           Perfluoro-n-tetradecanoic acid (PFTeDA)         376-06-7         PFAS by ID SOP         ND         3.4         0.86         ng/L         1           Perfluoro-n-tetradecanoic acid (PFTeDA)         2265-94-8         PFAS by ID SOP         ND         3.4	Perfluoro-n-dodecanoic acid (PFDoA)	307-55-	1 PFAS by ID SOP	ND	3.4	0.86	ng/L	1	
Perfluoro-n-hexanoic acid (PFHxDA)         67905-19-5         PFAS by ID SOP         ND         6.8         1.7         ng/L         1           Perfluoro-n-hexanoic acid (PFHxA)         307-24-4         PFAS by ID SOP         3.4         3.4         0.86         ng/L         1           Perfluoro-n-nexanoic acid (PFNA)         375-95-1         PFAS by ID SOP         ND         6.8         1.7         ng/L         1           Perfluoro-n-nexanoic acid (PFOA)         16517-11-6         PFAS by ID SOP         ND         6.8         1.7         ng/L         1           Perfluoro-n-octanoic acid (PFOA)         16517-11-6         PFAS by ID SOP         ND         3.4         0.86         ng/L         1           Perfluoro-n-pentanoic acid (PFOA)         2706-90-3         PFAS by ID SOP         ND         3.4         0.86         ng/L         1           Perfluoro-n-tetradecanoic acid (PFTeDA)         376-06-7         PFAS by ID SOP         ND         3.4         0.86         ng/L         1           Perfluoro-n-undecanoic acid (PFTDA)         72629-94-8         PFAS by ID SOP         ND         3.4         0.86         ng/L         1           Perfluoro-n-undecanoic acid (PFOS)         1763-23-1         PFAS by ID SOP         ND         3.4         0.	Perfluoro-n-heptanoic acid (PFHpA)	375-85-	9 PFAS by ID SOP	ND	3.4	0.86	ng/L	1	
Perfluoro-n-hexanoic acid (PFNA)         307-24-4         PFAS by ID SOP         3.4         3.4         0.86         ng/L         1           Perfluoro-n-nonanoic acid (PFNA)         375-95-1         PFAS by ID SOP         ND         3.4         0.86         ng/L         1           Perfluoro-n-octadecanoic acid (PFOA)         16517-11-6         PFAS by ID SOP         ND         6.8         1.7         ng/L         1           Perfluoro-n-octanoic acid (PFOA)         335-67-1         PFAS by ID SOP         ND         6.8         1.7         ng/L         1           Perfluoro-n-pentanoic acid (PFDA)         2706-90-3         PFAS by ID SOP         ND         3.4         0.86         ng/L         1           Perfluoro-n-tertadecanoic acid (PFTeDA)         376-06-7         PFAS by ID SOP         ND         3.4         0.86         ng/L         1           Perfluoro-n-undecanoic acid (PFTDA)         72629-94-8         PFAS by ID SOP         ND         3.4         0.86         ng/L         1           Perfluoro-n-undecanoic acid (PFUdA)         2058-94-8         PFAS by ID SOP         ND         3.4         0.86         ng/L         1           Perfluoro-n-undecanoic acid (PFUdA)         2058-94-8         PFAS by ID SOP         ND         3.4 <td< td=""><td>Perfluoro-n-hexadecanoic acid (PFHxDA)</td><td>67905-19-</td><td>5 PFAS by ID SOP</td><td>ND</td><td>6.8</td><td>1.7</td><td>ng/L</td><td>1</td></td<>	Perfluoro-n-hexadecanoic acid (PFHxDA)	67905-19-	5 PFAS by ID SOP	ND	6.8	1.7	ng/L	1	
Perfluoro-n-nonanoic acid (PFNA)         375-95-1         PFAS by ID SOP         ND         3.4         0.86         ng/L         1           Perfluoro-n-octadecanoic acid (PFODA)         16517-11-6         PFAS by ID SOP         ND         6.8         1.7         ng/L         1           Perfluoro-n-octadecanoic acid (PFOA)         335-67-1         PFAS by ID SOP         ND         3.4         0.86         ng/L         1           Perfluoro-n-octadecanoic acid (PFPA)         2706-90-3         PFAS by ID SOP         ND         3.4         0.86         ng/L         1           Perfluoro-n-tetradecanoic acid (PFTDA)         376-06-7         PFAS by ID SOP         ND         3.4         0.86         ng/L         1           Perfluoro-n-tridecanoic acid (PFTDA)         72629-94-8         PFAS by ID SOP         ND         3.4         0.86         ng/L         1           Perfluoro-n-undecanoic acid (PFUdA)         2058-94-8         PFAS by ID SOP         ND         3.4         0.86         ng/L         1           Perfluoro-n-undecanoic acid (PFUdA)         2058-94-8         PFAS by ID SOP         5.8         3.4         0.86         ng/L         1           Surrogate         Q         % Recovery         Limits         1         1         1 </td <td>Perfluoro-n-hexanoic acid (PFHxA)</td> <td>307-24-</td> <td>4 PFAS by ID SOP</td> <td>3.4</td> <td>3.4</td> <td>0.86</td> <td>ng/L</td> <td>1</td>	Perfluoro-n-hexanoic acid (PFHxA)	307-24-	4 PFAS by ID SOP	3.4	3.4	0.86	ng/L	1	
Perfluoro-n-octadecanoic acid (PFODA)       16517-11-6       PFAS by ID SOP       ND       6.8       1.7       ng/L       1         Perfluoro-n-octanoic acid (PFOA)       335-67-1       PFAS by ID SOP       ND       3.4       0.86       ng/L       1         Perfluoro-n-entanoic acid (PFPA)       2706-90-3       PFAS by ID SOP       ND       3.4       0.86       ng/L       1         Perfluoro-n-tetradecanoic acid (PFTeDA)       376-06-7       PFAS by ID SOP       ND       3.4       0.86       ng/L       1         Perfluoro-n-tidecanoic acid (PFTeDA)       72629-94-8       PFAS by ID SOP       ND       3.4       0.86       ng/L       1         Perfluoro-n-undecanoic acid (PFTDA)       72629-94-8       PFAS by ID SOP       ND       3.4       0.86       ng/L       1         Perfluoro-n-undecanoic acid (PFUdA)       2058-94-8       PFAS by ID SOP       ND       3.4       0.86       ng/L       1         Perfluoro-n-ctanesulfonic acid (PFOS)       1763-23-1       PFAS by ID SOP       ND       3.4       0.86       ng/L       1         Surrogate       Q       % Recovery       Limits       1       1       1       1       1       1       1       1       1       1	Perfluoro-n-nonanoic acid (PFNA)	375-95-	1 PFAS by ID SOP	ND	3.4	0.86	ng/L	1	
Perfluoro-n-octanoic acid (PFOA) $335-67-1$ PFAS by ID SOPND $3.4$ $0.86$ $ng/L$ $1$ Perfluoro-n-pentanoic acid (PFTeDA) $2706-90-3$ PFAS by ID SOP $2.0$ J $3.4$ $0.86$ $ng/L$ $1$ Perfluoro-n-tetradecanoic acid (PFTeDA) $376-06-7$ PFAS by ID SOPND $3.4$ $0.86$ $ng/L$ $1$ Perfluoro-n-tetradecanoic acid (PFTeDA) $72629-94.8$ PFAS by ID SOPND $3.4$ $0.86$ $ng/L$ $1$ Perfluoro-n-undecanoic acid (PFTOA) $72629-94.8$ PFAS by ID SOPND $3.4$ $0.86$ $ng/L$ $1$ Perfluoro-n-undecanoic acid (PFOS) $1763-23.1$ PFAS by ID SOPND $3.4$ $0.86$ $ng/L$ $1$ Perfluoro-octanesulfonic acid (PFOS) $1763-23.1$ PFAS by ID SOPND $3.4$ $0.86$ $ng/L$ $1$ SurrogateQ $\frac{Run 1}{8}$ Acceptance $Acceptance$ $V$ $V$ $V$ $V$ $V$ $13C2_4:2FTS$ 90 $25-150$ $312C_2_6:2FTS$ $81$ $25-150$ $312C_2_PFDAA$ $86$ $25-150$ $312C_2_PFTeDA$ $81$ $25-150$ $13C2_2PFLAAA$ $81$ $25-150$ $32$ $25-150$ $32$ $40$ $40$ $40$ $10C_2=PFTeDA$ $8$ $25-150$ $32$ $25-150$ $32$ $40$ $40$ $40$ $10C_2=PFTeDA$ $8$ $25-150$ $32$ $25-150$ $32$ $40$ $40$ $40$ $10C_2=PFTeDA$ $8$ $25-150$ $32$	Perfluoro-n-octadecanoic acid (PFODA)	16517-11-	6 PFAS by ID SOP	ND	6.8	1.7	ng/L	1	
Perfluoro-n-pentanoic acid (PFPeA)2706-90-3PFAS by ID SOP2.0J3.40.86ng/L1Perfluoro-n-tetradecanoic acid (PFTeDA)376-06-7PFAS by ID SOPND3.40.86ng/L1Perfluoro-n-undecanoic acid (PFTrDA)72629-94.8PFAS by ID SOPND3.40.86ng/L1Perfluoro-n-undecanoic acid (PFUdA)2058-94.8PFAS by ID SOPND3.40.86ng/L1Perfluoro-n-undecanoic acid (PFUdA)2058-94.8PFAS by ID SOPND3.40.86ng/L1Perfluoro-octanesulfonic acid (PFOS)1763-23-1PFAS by ID SOPND3.40.86ng/L1SurrogateQRecoveryLimits113C2_4:2FTS9025-15013C2_6:2FTS9625-15013C2_8:2FTS8125-15013C2_PFDoA8625-15013C2_PFDoA8125-15013C2_PFTeDA8125-15013C2_PFTeDA8225-15013C2_PFTeDA8225-15013C2_PFTeDA8225-15025-15013C2_PFTeDA12-Detection LimitND = Not detected at or above the DLN = Recovery is out of criteriaP = The RPD between two GC columns exceeds 40%D = Detection Limit	Perfluoro-n-octanoic acid (PFOA)	335-67-	1 PFAS by ID SOP	ND	3.4	0.86	ng/L	1	
Perfluoro-n-tetradecanoic acid (PFTeDA) $376-06-7$ PFAS by ID SOPND $3.4$ $0.86$ $ng/L$ 1Perfluoro-n-tridecanoic acid (PFTrDA) $72629-94-8$ PFAS by ID SOPND $3.4$ $0.86$ $ng/L$ 1Perfluoro-n-undecanoic acid (PFUdA) $2058-94-8$ PFAS by ID SOPND $3.4$ $0.86$ $ng/L$ 1Perfluoro-n-undecanoic acid (PFOS) $1763-23-1$ PFAS by ID SOPND $3.4$ $0.86$ $ng/L$ 1SurrogateQ $\%$ RecoveryLimits $1163-23-1$ PFAS by ID SOP $5.8$ $3.4$ $0.86$ $ng/L$ 113C2_4:2FTS90 $25-150$ $3122_5-150$ $3122_5-150$ $3122_5-150$ $3122_2-9FDoA$ $86$ $25-150$ $3122_2-9FDoA$ $86$ $25-150$ 13C2_PFTeDA81 $25-150$ $812_5-150$ $25-150$ $3122_2PFTeDA$ $81_2$ $25-150$ LOQ = Limit of QuantitationB = Detected in the method blankE = Quantitation of compound exceeded the calibration rangeDL = Detection LimitND = Not detected at or above the DLN = Recovery is out of criteriaP = The RPD between two GC columns exceeds $40\%$ J = Estimated result < LOQ and $_2$ DL	Perfluoro-n-pentanoic acid (PFPeA)	2706-90-3	3 PFAS by ID SOP	2.0 J	3.4	0.86	ng/L	1	
Perfluoro-n-tridecanoic acid (PFTrDA)72629-94-8PFAS by ID SOPND3.40.86ng/L1Perfluoro-n-undecanoic acid (PFUdA)2058-94-8PFAS by ID SOPND3.40.86ng/L1Perfluoroctanesulfonic acid (PFOS)1763-23-1PFAS by ID SOP5.83.40.86ng/L1SurrogateQ% RecoveryLimits13C2_4:2FTS9025-15013C2_6:2FTS9625-15013C2_PFDoA8625-15013C2_PFTeDA8125-15013C2_PFTeDA8225-150LOQ = Limit of QuantilationB = Detected in the method blankE = Quantilation of compound exceeded the calibration rangeDL = Detection LimitND = Not detected at or above the DLN = Recovery is out of criteriaP = The RPD between two GC columns exceeds 40%J = Estimated result < LOQ and $\ge DL$	Perfluoro-n-tetradecanoic acid (PFTeDA)	376-06-	7 PFAS by ID SOP	ND	3.4	0.86	ng/L	1	
Perfluoro-n-undecanoic acid (PFUdA)2058-94-8PFAS by ID SOPND3.40.86ng/L1Perfluorooctanesulfonic acid (PFOS)1763-23-1PFAS by ID SOP5.83.40.86ng/L1SurrogateQ% RecoveryLimitsVimitsVimitsVimitsVimitsVimits13C2_4:2FTS9025-1503C2_6:2FTS9625-150ViewViewViewViewViewViewViewViewViewViewViewViewViewViewViewViewViewViewViewViewViewViewViewViewViewViewViewViewViewViewViewViewViewViewViewViewViewViewViewViewViewViewViewViewViewViewViewViewViewViewViewViewViewViewViewViewViewViewViewViewViewViewViewViewViewViewViewViewViewViewViewViewViewViewViewViewViewViewViewViewViewViewViewViewViewViewViewViewViewViewViewViewViewViewViewViewViewViewViewViewViewViewViewViewViewViewViewViewViewViewViewViewViewViewVie	Perfluoro-n-tridecanoic acid (PFTrDA)	72629-94-	8 PFAS by ID SOP	ND	3.4	0.86	ng/L	1	
Perfluorooctanesulfonic acid (PFOS)       1763-23-1       PFAS by ID SOP       5.8       3.4       0.86       ng/L       1         Surrogate       Q       % Recovery       Limits       25-150         13C2_4:2FTS       90       25-150       32-25-150       32-25-150       32-25-150       32-25-150       32-25-150       32-25-150       32-25-150       32-25-150       32-25-150       32-25-150       32-25-150       32-25-150       32-25-150       32-25-150       32-25-150       32-25-150       32-25-150       32-25-150       32-25-150       32-25-150       32-25-150       32-25-150       32-25-150       32-25-150       32-25-150       32-25-150       32-25-150       32-25-150       32-25-150       32-25-150       32-25-150       32-25-150       32-25-150       32-25-150       32-25-150       32-25-150       32-25-150       32-25-150       32-25-150       32-25-150       32-25-150       32-25-150       32-25-150       32-25-150       32-25-150       32-25-150       32-25-150       32-25-150       32-25-150       32-25-150       32-25-150       32-25-150       32-25-150       32-25-150       32-25-150       32-25-150       32-25-150       32-25-150       32-25-150       32-25-150       32-25-150       32-25-150       32-25-150       32-25-150       <	Perfluoro-n-undecanoic acid (PFUdA)	2058-94-	8 PFAS by ID SOP	ND	3.4	0.86	ng/L	1	
SurrogateQRun 1 % RecoveryAcceptance Limits13C2_4:2FTS9025-15013C2_6:2FTS9625-15013C2_8:2FTS8125-15013C2_PFDoA8625-15013C2_PFHxDA8125-15013C2_PFTeDA8225-15013C2_PFTeDA8225-150LOQ = Limit of QuantitationB = Detected in the method blankE = Quantitation of compound exceeded the calibration rangeDL = Detection LimitND = Not detected at or above the DLN = Recovery is out of criteriaP = The RPD between two GC columns exceeds 40%J = Estimated result < LOQ and $\ge$ DL	Perfluorooctanesulfonic acid (PFOS)	1763-23-	1 PFAS by ID SOP	5.8	3.4	0.86	ng/L	1	
13C2_4:2FTS9025-15013C2_6:2FTS9625-15013C2_8:2FTS8125-15013C2_PFDoA8625-15013C2_PFHxDA8125-15013C2_PFTeDA8225-150LOQ = Limit of QuantitationND = Not detected at or above the DLN = Recovery is out of criteriaE = Quantitation of compound exceeded the calibration rangeDL = Detection LimitND = Not detected at or above the DLN = Recovery is out of criteriaP = The RPD between two GC columns exceeds 40%J = Estimated result < LOQ and $\geq$ DL	Surrogate Q % Ro	Run 1 Acc ecovery L	eptance ∟imits						
13C2_6:2FTS9625-15013C2_8:2FTS8125-15013C2_PFDoA8625-15013C2_PFHxDA8125-15013C2_PFTeDA8225-150LOQ = Limit of QuantitationND = Not detected at or above the DLN = Recovery is out of criteriaP = The RPD between two GC columns exceeds 40%DL = Detection LimitN = Recovery is out of criteriaP = The RPD between two GC columns exceeds 40%J = Estimated result < LOQ and $\geq$ DL	13C2_4:2FTS	90	25-150						
13C2_8:2FTS8125-15013C2_PFDoA8625-15013C2_PFHxDA8125-15013C2_PFTeDA8225-150LOQ = Limit of QuantitationB = Detected in the method blankE = Quantitation of compound exceeded the calibration rangeND = Not detected at or above the DLN = Recovery is out of criteriaP = The RPD between two GC columns exceeds 40%J = Estimated result < LOQ and $\geq$ DL	13C2_6:2FTS	96	25-150						
13C2_PFDoA       86       25-150         13C2_PFHxDA       81       25-150         13C2_PFTeDA       82       25-150         LOQ = Limit of Quantitation       B = Detected in the method blank       E = Quantitation of compound exceeded the calibration range       DL = Detection Limit         ND = Not detected at or above the DL       N = Recovery is out of criteria       P = The RPD between two GC columns exceeds 40%       J = Estimated result < LOQ and ≥ DL	13C2_8:2FTS	81	25-150						
13C2_PFHxDA       81       25-150         13C2_PFTeDA       82       25-150         LOQ = Limit of Quantitation       B = Detected in the method blank       E = Quantitation of compound exceeded the calibration range       DL = Detection Limit         ND = Not detected at or above the DL       N = Recovery is out of criteria       P = The RPD between two GC columns exceeds 40%       J = Estimated result < LOQ and ≥ DL	13C2_PFDoA	86	25-150						
13C2_PFTeDA     82     25-150       LOQ = Limit of Quantitation     B = Detected in the method blank     E = Quantitation of compound exceeded the calibration range     DL = Detection Limit       ND = Not detected at or above the DL     N = Recovery is out of criteria     P = The RPD between two GC columns exceeds 40%     J = Estimated result < LOQ and ≥ DL	13C2_PFHxDA	81	25-150						
LOQ = Limit of QuantitationB = Detected in the method blankE = Quantitation of compound exceeded the calibration rangeDL = Detection LimitND = Not detected at or above the DLN = Recovery is out of criteriaP = The RPD between two GC columns exceeds 40%J = Estimated result < LOQ and ≥ DL	13C2_PFTeDA	82	25-150						
ND = Not detected at or above the DL N = Recovery is out of criteria P = The RPD between two GC columns exceeds 40% J = Estimated result < LOQ and $\geq$ DL	LOQ = Limit of Quantitation B = Detected in the method blank	E = Quantitatio	on of compound exceeded the	calibration range D	DL = Detection Lim	hit			
H = Out of holding time W = Reported on wet weight basis	ND = Not detected at or above the DL     N = Recovery is out of criteria       H = Out of holding time     W = Reported on wet weight basis	P = The RPD b	between two GC columns exce	eds 40% J	= Estimated resu	It < LOQ and $\ge$ D	)L		

Client: Pace Analytical Services, LLC		Laboratory ID: VK08043-022
Description: 334-0		Matrix: Aqueous
Date Sampled:11/03/2020 1305	Project Name: LACROSSE WELL #23 & 24	
Date Received: 11/06/2020	Project Number: 40217713	

	Run 1 A	cceptance
Surrogate	Q % Recovery	Limits
13C3_PFBS	87	25-150
13C3_PFHxS	90	25-150
13C3-HFPO-DA	103	25-150
13C4_PFBA	96	25-150
13C4_PFHpA	87	25-150
13C5_PFHxA	93	25-150
13C5_PFPeA	95	25-150
13C6_PFDA	83	25-150
13C7_PFUdA	85	25-150
13C8_PFOA	95	25-150
13C8_PFOS	82	25-150
13C8_PFOSA	95	10-150
13C9_PFNA	89	25-150
d-EtFOSA	85	10-150
d5-EtFOSAA	88	25-150
d9-EtFOSE	87	10-150
d-MeFOSA	79	10-150
d3-MeFOSAA	87	25-150
d7-MeFOSE	83	10-150

LOQ = Limit of Quantitation	B = Detected in the method blank	E = Quantitation of compound exceeded the calibration range	DL = Detection Limit
ND = Not detected at or above the DL	N = Recovery is out of criteria	P = The RPD between two GC columns exceeds 40%	J = Estimated result < LOQ and $\ge$ DL
H = Out of holding time	W = Reported on wet weight basis		



#### ANALYTICAL RESULTS

#### Project: LACROSSE WELL #23 & 24

Pace Project No.: 40217713

Sample:         334-0         Lab ID:         40217713022         Collected:         11/03/20         13:05			) 13:05	Received: 11/04/20 11:10 Matrix: Water					
Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
537.1 PFAS Compounds, Water	Analytical	Method: EPA 5	37.1 Prep	aration Meth	nod: EP	A 537.1			
	Pace Anal	lytical Services	- Ormond I	Beach					
11CI-PF3OUdS	<0.0015	ug/L	0.0019	0.0015	1	11/09/20 10:05	11/12/20 08:52	763051-92-9	1q
9CI-PF3ONS	<0.0011	ug/L	0.0019	0.0011	1	11/09/20 10:05	11/12/20 08:52	756426-58-1	1q
ADONA	<0.00069	ug/L	0.0019	0.00069	1	11/09/20 10:05	11/12/20 08:52	919005-14-4	1q
HFPO-DA	<0.0015	ug/L	0.0019	0.0015	1	11/09/20 10:05	11/12/20 08:52	13252-13-6	1q
NEtFOSAA	<0.00088	ug/L	0.0019	0.00088	1	11/09/20 10:05	11/12/20 08:52	2991-50-6	1q
NMeFOSAA	<0.0015	ug/L	0.0019	0.0015	1	11/09/20 10:05	11/12/20 08:52	2355-31-9	1q
Perfluorobutanesulfonic acid	0.0069	ug/L	0.0019	0.00063	1	11/09/20 10:05	11/12/20 08:52	375-73-5	1q
Perfluorodecanoic acid	<0.0019	ug/L	0.0019	0.0019	1	11/09/20 10:05	11/12/20 08:52	335-76-2	1q
Perfluorohexanoic acid	0.0023	ug/L	0.0019	0.0012	1	11/09/20 10:05	11/12/20 08:52	307-24-4	1q
Perfluorododecanoic acid	<0.0014	ug/L	0.0019	0.0014	1	11/09/20 10:05	11/12/20 08:52	307-55-1	1q
Perfluoroheptanoic acid	<0.00095	ug/L	0.0019	0.00095	1	11/09/20 10:05	11/12/20 08:52	375-85-9	1q
Perfluorohexanesulfonic acid	0.026	ug/L	0.0019	0.00070	1	11/09/20 10:05	11/12/20 08:52	355-46-4	1q
Perfluorononanoic acid	<0.0019	ug/L	0.0019	0.0019	1	11/09/20 10:05	11/12/20 08:52	375-95-1	1q
Perfluorooctanesulfonic acid	<0.0011	ug/L	0.0019	0.0011	1	11/09/20 10:05	11/12/20 08:52	1763-23-1	1q
Perfluorooctanoic acid	0.0017J	ug/L	0.0019	0.00083	1	11/09/20 10:05	11/12/20 08:52	335-67-1	1q
Perfluorotetradecanoic acid	<0.0018	ug/L	0.0019	0.0018	1	11/09/20 10:05	11/12/20 08:52	376-06-7	1q
Perfluorotridecanoic acid	<0.0016	ug/L	0.0019	0.0016	1	11/09/20 10:05	11/12/20 08:52	72629-94-8	1q
Perfluoroundecanoic acid	<0.0019	ug/L	0.0019	0.0019	1	11/09/20 10:05	11/12/20 08:52	2058-94-8	1q
Surrogates									
13C2-PFDA (S)	102	%	70-130		1	11/09/20 10:05	11/12/20 08:52		
13C2-PFHxA (S)	95	%	70-130		1	11/09/20 10:05	11/12/20 08:52		
NEtFOSAA-d5 (S)	115	%	70-130		1	11/09/20 10:05	11/12/20 08:52		
HFPO-DAS (S)	88	%	70-130		1	11/09/20 10:05	11/12/20 08:52		

#### **REPORT OF LABORATORY ANALYSIS**

As required by law, we will be submitting these results to the Department of Natural Resources (DNR). The DNR may consult with the Department of Health Services (DHS) about these test results. DHS may review all PFAS tests and follow-up with you directly if any actions are recommended to protect your health.

Thank you for your patience and assistance with our investigation. We will provide updates on the project at <u>https://www.cityoflacrosse.org/wells</u> as our work continues. If you have any questions, please call The OS Group at (608) 668-2718 or email them at <u>PFAS@theOSgrp.com</u>.

You can also contact the DNR and DHS with questions about PFAS or the water sample results at the numbers provided below.

Questions about		<u>Contact</u>	<u>Phone</u>	E-mail Address
Soil & Groundwater Testing, Clean Up	DNR	David Rozeboom	715-215-2078	David.Rozeboom@wisconsin.gov
Drinking Water or Private wells	DNR	Kyle Burton	920-360-2112	kyle.burton@wisconsin.gov
Health Concerns	DHS	Curtis Hedman	608-266-6677	Curtis.Hedman@dhs.wisconsin.gov

On behalf of The City of La Crosse *The OS Group, LLC* 

Attachment: Lab report for your well



444 21st Street South · La Crosse, Wisconsin · 54601

December 1, 2020

2558 1st Avenue West La Crosse, WI 54603

Subject: Private Well Sampling Results 2558 1st Avenue West, La Crosse, WI 54603 Tax parcel # 4-343-0 Sample ID # 343-0

## Dear

We have received and reviewed the test results for the sample collected on November 3, 2020 at the above address. Some PFAS compounds were found at levels <u>above</u> the Department of Health Services (DHS) levels recommended for protecting health. These levels are called the "Recommended Public Health Standard" in the table below. The levels found in your well are called the "Sample Result" in the table below.

Because some of the levels are above the recommended Public Health Standard, the City is offering to provide bottled water delivered to your home for drinking, cooking, and brushing your teeth. There will be no cost to you for the bottled water. Please complete the attached form and mail it to The OS Group to make arrangements for having a water dispenser and bottles delivered to your home. Call 608-668-2718 or email <u>PFAS@theOSgrp.com</u>. You may also complete this form on line at <u>www.cityoflacrosse.org/bottledwater</u>

The following table summarizes the test results from the sample. **Bolded results** are above a current recommended level intended to protect your health according to the Department of Health Services (DHS).

Private Well Sampling Results for 2558 1st Avenue West, La Crosse, WI 54603 Tax Parcel # 4-343-0 December 1, 2020

Sample Results	•
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Compound	Sample Result (unit)	Recommended Public Health Standard (unit <sup>e</sup> )			
N-Ethyl Perfluorooctane sulfonamide (NEtFOSA) CAS # 4151-50-2	Not Detected	20 ppt <sup>a,b</sup>	) ppt unds I 6		
N-Ethyl perfluorooctane sulfonamidoacetic acid (NEtFOSAA) CAS # 2991-50-6	Not Detected	20 ppt <sup>a,b</sup>	it is 2C compo <i>il</i> of al		
N-Ethyl perfluorooctane sulfonamidoethanol (NEtFOSE) CAS # 1691-99-2	Not Detected	d tota			
Perfluorooctane sulfonamide (FOSA) CAS # 754-91-6	Not Detected	20 ppt <sup>a,b</sup>	mend of the		
Perfluorooctanoic acid (PFOA) CAS # 335-67-1	10 ppt	20 ppt <sup>a,b</sup>	recom ny <i>one</i> the <i>c</i> c		
Perfluorooctanesulfonic acid (PFOS) CAS # 1763-23-1	38 ppt	20 ppt <sup>a,b</sup>	The for a or		
Hexafluoropropylene oxide dimer acid (HPFO-DA; GenX) CAS # 13252-13-6	Not Detected		300 ppt <sup>a</sup>		
Perfluorobutanesulfonic acid (PFBS) CAS # 375-73-5	6.9 ppt	450	0,000 ppt <sup>a</sup>		
Perfluorohexanesulfonic acid (PFHxS) CAS # 355-46-4	87 ppt		40 ppt <sup>a</sup>		
Perfluorobutanoic acid (PFBA) CAS # 375-22-4	44 ppt	10	0,000 ppt <sup>a</sup>		
Perfluorodecanoic acid (PFDA) CAS # 335-76-2	Not Detected		300 ppt <sup>a</sup>		
Perfluorododecanoic acid (PFDoA) CAS # 307-55-1	Not Detected		500 ppt <sup>a</sup>		
Perfluorohexanoic acid (PFHxA) CAS # 307-24-4	2.7 ppt	150	),000 ppt <sup>a</sup>		
Perfluorononanoic acid (PFNA) CAS # 375-95-1	Not Detected		30 ppt <sup>a</sup>		
Perfluorotetradecanoic acid (PFTeA) CAS # 376-06-7	Not Detected	10	),000 ppt <sup>a</sup>		
Perfluoroundecanoic acid (PFUnA) CAS # 2058-94-8	Not Detected	3	3,000 ppt <sup>a</sup>		
4,8-Dioxa-3H-perfluorononanoic acid (DONA) CAS # 919005-14-4	Not Detected	3	3,000 ppt <sup>a</sup>		
Perfluorooctadecanoic acid (PFODA) CAS # 16517-11-6	Not Detected	400	0,000 ppt <sup>a</sup>		

Private Well Sampling Results for 2558 1st Avenue West, La Crosse, WI 54603 Tax Parcel # 4-343-0 December 1, 2020

Perfluoro-1-heptanesulfonic acid (PFHpS) CAS # 375-92-8	2.4 ppt	None Established <sup>c</sup>				
Perfluoro-1-pentanesulfonic acid (PFPeS) CAS # 2706-91-4	10 ppt	None Established <sup>c</sup>				
Perfluoro-n-heptanoic acid (PFHpA) CAS # 375-85-9	1.1 ppt	None Established <sup>c</sup>				
Perfluoro-n-pentanoic acid (PFPeA) CAS #2706-90-3	1.6 ppt	None Established <sup>c</sup>				
<ul> <li><sup>a</sup> Public health enforcement standard (ES) recommended by DHS.</li> <li><sup>b</sup> DHS recommends a combined enforcement standard of 20 ng/L and combined preventive action limit of 2 ng/L for FOSA, NEt-FOSA, NetFOSAA, PFOS, and PFOA.</li> <li><sup>c</sup> A current standard is not available; the compound is currently under review by DHS for potential public health standard recommendation.</li> <li><sup>d</sup> Public health enforcement standard (ES) in NR 140, Wisconsin Administrative Code.</li> <li><sup>e</sup> Units: Parts per trillion (ppt) = nanograms of substance per liter of water (ng/L)</li> </ul>						

As required by law, we will be submitting these results to the Department of Natural Resources (DNR). The DNR may consult with the Department of Health Services (DHS) about these test results. DHS may review all PFAS tests and follow-up with you directly if any actions are recommended to protect your health.

Thank you for your patience and assistance with our investigation. We will provide updates on the project at <u>https://www.cityoflacrosse.org/wells</u> as our work continues. If you have any questions, please call The OS Group at (608) 668-2718 or email them at <u>PFAS@theOSgrp.com</u>.

You can also contact the DNR and DHS with questions about PFAS or the water sample results at the numbers provided below.

Questions about		<u>Contact</u>	<u>Phone</u>	E-mail Address
Soil & Groundwate Testing, Clean Up	r DNR	David Rozeboom	715-215-2078	David.Rozeboom@wisconsin.gov
Drinking Water or Private wells	DNR	Kyle Burton	920-360-2112	kyle.burton@wisconsin.gov
Health Concerns	DHS	Curtis Hedman	608-266-6677	Curtis.Hedman@dhs.wisconsin.gov

On behalf of The City of La Crosse *The OS Group, LLC* 

Attachment: Lab report for your well Bottled Water Acknowledgement

Client: Pace Analytical Services, LLC					I	Laboratory I	D: VK08043-0	)24	
Description: 343-0						Matri	x: Aqueous		
Date Sampled:11/03/2020 1335	Project N	Jame:	LACROSSE WELL #	<sup>£</sup> 23 & 24			I		
Date Received: 11/06/2020	Project Nu	mher	40217713						
	Troject Na		40217713						
RunPrep MethodAnalytical1SOP SPEPFAS by	Method Dilution ID SOP 1	Ana 11/18	lysis Date Analyst 3/2020 1624 MMM	Prep 11/17/2	Date 2020 103	Batch 34 73728			
Parameter	Nur	CAS mber	Analytical Method	Result	Q	LOQ	DL	Units	Run
9-chlorohexadecafluoro-3-oxanone-1-sulfonic acid (90	I-PF3ONS) 75642	6-58-1	PFAS by ID SOP	ND		7.0	1.7	ng/L	1
11-chloroeicosafluoro-3-oxaundecane-1-sulfonic acid	11CI-PF3) 76305	1-92-9	PFAS by ID SOP	ND		7.0	1.7	ng/L	1
1H, 1H, 2H, 2H-perfluorodecane sulfonic acid (8:2 FTS	3910	8-34-4	PFAS by ID SOP	ND		7.0	1.7	ng/L	1
1H, 1H, 2H, 2H-perfluorooctane sulfonic acid (6:2 FTS	) 2761	9-97-2	PFAS by ID SOP	ND		7.0	1.7	ng/L	1
1H,1H,2H,2H-perfluorododecane sulfonic acid (10:2 F	TS) 12022	6-60-0	PFAS by ID SOP	ND		7.0	1.7	ng/L	1
1H,1H,2H,2H-perfluorohexane sulfonic acid (4:2 FTS)	75712	4-72-4	PFAS by ID SOP	ND		7.0	1.7	ng/L	1
Hexafluoropropylene oxide dimer acid (GenX)	1325	2-13-6	PFAS by ID SOP	ND		7.0	1.7	ng/L	1
4,8-dioxa-3H-perfluorononanoic acid (ADONA)	91900	5-14-4	PFAS by ID SOP	ND		7.0	1.7	ng/L	1
N-ethylperfluoro-1-octanesulfonamide (EtFOSA)	415	1-50-2	PFAS by ID SOP	ND		7.0	1.7	ng/L	1
N-ethylperfluoro-1-octanesulfonamidoacetic acid (EtFC	DSAA) 299 <sup>-</sup>	1-50-6	PFAS by ID SOP	ND		7.0	1.7	ng/L	1
2-N-ethylperfluoro-1-octanesulfonamido-ethanol (EtFC	SE) 169 <sup>-</sup>	1-99-2	PFAS by ID SOP	ND		7.0	1.7	ng/L	1
N-methylperfluoro-1-octanesulfonamide (MeFOSA)	3150	6-32-8	PFAS by ID SOP	ND		14	3.5	ng/L	1
N-methylperfluoro-1-octanesulfonamidoacetic acid (Me	FOSAA) 235	5-31-9	PFAS by ID SOP	ND		7.0	1.7	ng/L	1
2-N-methylperfluoro-1-octanesulfonamido-ethanol (Me	FOSE) 2444	8-09-7	PFAS by ID SOP	ND		7.0	1.7	ng/L	1
Perfluoro-1-butanesulfonic acid (PFBS)	375	5-73-5	PFAS by ID SOP	6.9		3.5	0.87	ng/L	1
Perfluoro-1-decanesulfonic acid (PFDS)	335	5-77-3	PFAS by ID SOP	ND		3.5	0.87	ng/L	1
Perfluoro-1-heptanesulfonic acid (PFHpS)	375	5-92-8	PFAS by ID SOP	2.4	J	3.5	0.87	ng/L	1
Perfluoro-1-nonanesulfonic acid (PFNS)	6825	9-12-1	PFAS by ID SOP	ND		3.5	0.87	ng/L	1
Perfluoro-1-octanesulfonamide (PFOSA)	754	1-91-6	PFAS by ID SOP	ND		3.5	0.87	ng/L	1
Perfluoro-1-pentanesulfonic acid (PFPeS)	2700	5-91-4	PFAS by ID SOP	10		3.5	0.87	ng/L	1
Perfluorododecanesulfonic acid (PFDOS)	7978	0-39-5	PFAS by ID SOP	ND		7.0	1.7	ng/L	1
Perfluorohexanesulfonic acid (PFHxS)	355	5-46-4	PFAS by ID SOP	87		3.5	0.87	ng/L	1
Perfluoro-n-butanoic acid (PFBA)	375	5-22-4	PFAS by ID SOP	44		3.5	0.87	ng/L	1
Perfluoro-n-decanoic acid (PFDA)	335	5-76-2	PFAS by ID SOP	ND		3.5	0.87	ng/L	1
Perfluoro-n-dodecanoic acid (PFDoA)	30	7-55-1	PFAS by ID SOP	ND		3.5	0.87	ng/L	1
Perfluoro-n-heptanoic acid (PFHpA)	375	5-85-9	PFAS by ID SOP	1.1	J	3.5	0.87	ng/L	1
Perfluoro-n-hexadecanoic acid (PFHxDA)	6790	5-19-5	PFAS by ID SOP	ND		7.0	1.7	ng/L	1
Perfluoro-n-hexanoic acid (PFHxA)	30	7-24-4	PFAS by ID SOP	2.7	J	3.5	0.87	ng/L	1
Perfluoro-n-nonanoic acid (PFNA)	375	5-95-1	PFAS by ID SOP	ND		3.5	0.87	ng/L	1
Perfluoro-n-octadecanoic acid (PFODA)	1651	7-11-6	PFAS by ID SOP	ND		7.0	1.7	ng/L	1
Perfluoro-n-octanoic acid (PFOA)	335	b-67-1	PFAS by ID SOP	10		3.5	0.87	ng/L	1
Perfluoro-n-pentanoic acid (PFPeA)	2700	5-90-3	PFAS by ID SOP	1.6	J	3.5	0.87	ng/L	1
Perfluoro-n-tetradecanoic acid (PFTeDA)	370	5-06-7	PFAS by ID SOP	ND		3.5	0.87	ng/L	1
Perfluoro-n-tridecanoic acid (PF IrDA)	/262	9-94-8	PFAS by ID SOP	ND		3.5	0.87	ng/L	1
Perfluoro-n-undecanoic acid (PFUdA)	2058	3-94-8	PEAS by ID SOP	ND		3.5	0.87	ng/L	1
Perfluorooctanesulfonic acid (PFOS)	1/6	3-23-1	PFAS by ID SOP	38		3.5	0.87	ng/L	1
Surrogate	Run 1 Q % Recovery	Accep Lin	otance nits						
13C2_4:2FTS	105	25	-150						
13C2_6:2FTS	95	25	-150						
13C2_8:2FTS	77	25	-150						
13C2_PFDoA	89	25	-150						
13C2_PFHxDA	88	25	-150						
13C2_PFTeDA	84	25	-150						
					_				
ND = Not detected at or above the DL     N = Recovery is out of the mean of	etnod blank E = Qual f criteria P = The	ntitation of RPD betv	or compound exceeded the o ween two GC columns exce	eds 40%	ange DL J :	<ul> <li>= Detection Lin</li> <li>= Estimated result</li> </ul>	nit Ilt < LOQ and ≥ D	L	
H = Out of holding time W = Reported on wet	weight basis								

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Client: Pace Analytical Services, LLC		Laboratory ID: VK08043-024
Description: 343-0		Matrix: Aqueous
Date Sampled:11/03/2020 1335	Project Name: LACROSSE WELL #23 & 24	
Date Received: 11/06/2020	Project Number: 40217713	

Surrogate	Run 1 Q % Recovery	Acceptance Limits
13C3_PFBS	93	25-150
13C3_PFHxS	94	25-150
13C3-HFPO-DA	97	25-150
13C4_PFBA	96	25-150
13C4_PFHpA	91	25-150
13C5_PFHxA	96	25-150
13C5_PFPeA	98	25-150
13C6_PFDA	89	25-150
13C7_PFUdA	89	25-150
13C8_PFOA	93	25-150
13C8_PFOS	84	25-150
13C8_PFOSA	97	10-150
13C9_PFNA	93	25-150
d-EtFOSA	83	10-150
d5-EtFOSAA	93	25-150
d9-EtFOSE	89	10-150
d-MeFOSA	87	10-150
d3-MeFOSAA	90	25-150
d7-MeFOSE	83	10-150

LOQ = Limit of QuantitationB = Detected in the method blankE = Quantitation of compound exceeded the calibration rangeDL = Detection LimitND = Not detected at or above the DLN = Recovery is out of criteriaP = The RPD between two GC columns exceeds 40%J = Estimated result < LOQ and ≥ DL</td>H = Out of holding timeW = Reported on wet weight basis

# BOTTLED WATER ACKNOWLEDGEMENT

2558 1st Avenue West, La Crosse, WI 54603

If you desire to accept the bottled water delivery, please complete and sign this form and return it to The OS Group at <u>PFAS@TheOSgrp.com</u> or mail to 444 21<sup>st</sup> St. S, La Crosse, WI 54601. You may also complete this form electronically on line at <u>www.cityoflacrosse.org/bottledwater</u>. Call 608-668-2718 with any question you may have.

As pre-caution for the protection of human health, the City of La Crosse (The City) will provide, on a temporary basis, bottled water for drinking, cooking and toothbrushing purposes at the above referenced address. The water will be delivered to your home or business by a commercial water delivery service. At the City's cost, a dispenser / cooler and regular deliveries of 5-gallon containers of water will be provided. The City reserves the right to dictate the conditions of delivery, such as minimum and maximum number of containers per delivery, frequency and timing of deliveries. The City reserves the right to periodically review whether The City should continue to provide bottled water, considering factors such as State and Federal standards and guidance, evolving knowledge and understanding of the sources, cause and responsibility for the contamination, new or reinterpreted test results, and the availability of more permanent or costeffective sources of water for the above purposes. The City of La Crosse makes no warranty or representation regarding the suitability of the bottled water beyond those made by the commercial water delivery service.

All reusable or returnable equipment and supplies, such as the containers and cooler/dispenser, are the property of the commercial water delivery service or the City of La Crosse. By signing below, the Occupant of the above referenced property acknowledges that all reusable or returnable equipment and supplies shall be returned to the commercial water delivery service or the City of La Crosse upon request. The Occupant agrees to provide reasonable access for delivery of bottled water and pick up of reusable or returnable equipment and supplies. Occupant(s) acknowledges that they may be required to sign an agreement with the commercial water delivery service as a condition of receiving bottled water.

Check ownership:

\_\_\_\_\_ Owner-Occupant Occupant Only

Number of Occupants: \_\_\_\_\_

Signed:	Dated:
---------	--------

Printed Name: \_\_\_\_\_



444 21st Street South  $\cdot$  La Crosse, Wisconsin  $\cdot$  54601

December 1, 2020

2514 1st Avenue West La Crosse, WI 54603

Subject: Private Well Sampling Results 2514 1st Avenue West, La Crosse, WI 54603 Tax parcel # 4-350-0 Sample ID # 350-0

Dear

We have received and reviewed the test results for the sample collected on November 2, 2020 at the above address. Some PFAS compounds were found, but the levels found were **below** the Department of Health Services (DHS) levels recommended for protecting health. These levels are called the "Recommended Public Health Standard" in the table below. The levels found in *your* well are called the "Sample Result" in the table below.

#### Sample Results

Compound	Sample Result (unit)	Recommended Public Health Standard (unit <sup>e</sup> )		
N-Ethyl Perfluorooctane sulfonamide (NEtFOSA) CAS # 4151-50-2	Not Detected	20 ppt <sup>a,b</sup>	) ppt unds I 6	
N-Ethyl perfluorooctane sulfonamidoacetic acid (NEtFOSAA) CAS # 2991-50-6	Not Detected	20 ppt <sup>a,b</sup>	it is 2C compo <i>il</i> of al	
N-Ethyl perfluorooctane sulfonamidoethanol (NEtFOSE) CAS # 1691-99-2	Not Detected	20 ppt <sup>a,b</sup>	ed lim ese 6 c ed toto	
Perfluorooctane sulfonamide (FOSA) CAS # 754-91-6	Not Detected	20 ppt <sup>a,b</sup>	mend of the ombine	
Perfluorooctanoic acid (PFOA) CAS # 335-67-1	Not Detected	20 ppt <sup>a,b</sup>	recom ny <i>one</i> the <i>cc</i>	
Perfluorooctanesulfonic acid (PFOS) CAS # 1763-23-1	3.4 ppt	20 ppt <sup>a,b</sup>	The for a	

Private Well Sampling Results for 2514 1st Avenue West, La Crosse, WI 54603 Tax parcel # 4-350-0 Sample ID # 350-0 December 1, 2020

Compound	Sample Result (unit)	Recommended Public Health Standard (unit <sup>e</sup> )
Hexafluoropropylene oxide dimer acid (HPFO-DA; GenX) CAS # 13252-13-6	Not Detected	300 ppt <sup>a</sup>
Perfluorobutanesulfonic acid (PFBS) CAS # 375-73-5	2.4 ppt	450,000 ppt <sup>a</sup>
Perfluorohexanesulfonic acid (PFHxS) CAS # 355-46-4	2.0 ppt	40 ppt <sup>a</sup>
Perfluorobutanoic acid (PFBA) CAS # 375-22-4	4.3 ppt	10,000 ppt <sup>a</sup>
Perfluorodecanoic acid (PFDA) CAS # 335-76-2	Not Detected	300 ppt <sup>a</sup>
Perfluorododecanoic acid (PFDoA) CAS # 307-55-1	Not Detected	500 ppt <sup>a</sup>
Perfluorohexanoic acid (PFHxA) CAS # 307-24-4	Not Detected	150,000 ppt <sup>a</sup>
Perfluorononanoic acid (PFNA) CAS # 375-95-1	Not Detected	30 ppt <sup>a</sup>
Perfluorotetradecanoic acid (PFTeA) CAS # 376-06-7	Not Detected	10,000 ppt <sup>a</sup>
Perfluoroundecanoic acid (PFUnA) CAS # 2058-94-8	Not Detected	3,000 ppt <sup>a</sup>
4,8-Dioxa-3H-perfluorononanoic acid (DONA) CAS # 919005-14-4	Not Detected	3,000 ppt <sup>a</sup>
Perfluorooctadecanoic acid (PFODA) CAS # 16517-11-6	Not Detected	400,000 ppt <sup>a</sup>
Perfluoro-1-pentanesulfonic acid (PFPeS) CAS #2706-91-4	1.3 ppt	None Established <sup>c</sup>

<sup>a</sup> Public health enforcement standard (ES) recommended by DHS.

<sup>b</sup> DHS recommends a combined enforcement standard of 20 ng/L and combined preventive action limit of 2 ng/L for FOSA, NEt-FOSA, NetFOSAA, PFOS, and PFOA.

A current standard is not available; the compound is currently under review by DHS for potential public health standard recommendation.

Public health enforcement standard (ES) in NR 140, Wisconsin Administrative Code.

<sup>2</sup> Units: Parts per trillion (ppt) = nanograms of substance per liter of water (ng/L)

<sup>BL</sup> Detected in the method blank. Possible lab contaminant.

Private Well Sampling Results for 2514 1st Avenue West, La Crosse, WI 54603 Tax parcel # 4-350-0 Sample ID # 350-0 December 1, 2020

As required by law, we will be submitting these results to the Department of Natural Resources (DNR). The DNR may consult with the Department of Health Services (DHS) about these test results. DHS may review all PFAS tests and follow-up with you directly if any actions are recommended to protect your health.

Thank you for your patience and assistance with our investigation. We will provide updates on the project at <u>https://www.cityoflacrosse.org/wells</u> as our work continues. If you have any questions, please call The OS Group at (608) 668-2718 or email them at <u>PFAS@theOSgrp.com</u>.

You can also contact the DNR and DHS with questions about PFAS or the water sample results at the numbers provided below.

Questions about		<u>Contact</u>	<u>Phone</u>	E-mail Address
Soil & Groundwater Testing, Clean Up	DNR	David Rozeboom	715-215-2078	David.Rozeboom@wisconsin.gov
Drinking Water or Private wells	DNR	Kyle Burton	920-360-2112	kyle.burton@wisconsin.gov
Health Concerns	DHS	Curtis Hedman	608-266-6677	Curtis.Hedman@dhs.wisconsin.gov

On behalf of The City of La Crosse *The OS Group, LLC* 

Attachment: Lab report for your well

Client: Pace Analytical Services, LLC				Laboratory	ID: VK08043-	005	
Description: 350-0		Matr	ix: Aqueous				
Date Sampled:11/02/2020 1235	Project Name	e: LACROSSE WELL #	#23 & 24				
Date Received: 11/06/2020 Pr	oject Numbe	r: 40217713					
Dup Drop Method Apolytical Method	Jilution A	alucic Data Analuct	Drop D	ato Batch			
NumberPropriodAnalytical Method1SOP SPEPFAS by ID SOP	1 11	/18/2020 1240 MMM	11/16/202	20 1125 73619			
Parameter	CAS	S Analytical	Posult (		וח	Units	Pup
9-chlorobexadecafluoro-3-oxanone-1-sulfonic acid (9CI-PE3ONS)	756426-58-	1 PEAS by ID SOP	ND	7.5	1.0	ng/l	1
11-chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11CI-PE3	) 763051-92-	9 PEAS by ID SOP	ND	7.5	1.7	ng/L	1
1H, 1H, 2H, 2H-perfluorodecane sulfonic acid (8:2 FTS)	39108-34-	4 PFAS by ID SOP	ND	7.5	1.7	ng/L	1
1H, 1H, 2H, 2H-perfluorooctane sulfonic acid (6:2 FTS)	27619-97-	2 PFAS by ID SOP	ND	7.5	1.7	ng/L	1
1H,1H,2H,2H-perfluorododecane sulfonic acid (10:2 FTS)	120226-60-	0 PFAS by ID SOP	ND	7.5	1.9	ng/L	1
1H,1H,2H,2H-perfluorohexane sulfonic acid (4:2 FTS)	757124-72-	4 PFAS by ID SOP	ND	7.5	1.9	ng/L	1
Hexafluoropropylene oxide dimer acid (GenX)	13252-13-	6 PFAS by ID SOP	ND	7.5	1.9	ng/L	1
4,8-dioxa-3H-perfluorononanoic acid (ADONA)	919005-14-	4 PFAS by ID SOP	ND	7.5	1.9	ng/L	1
N-ethylperfluoro-1-octanesulfonamide (EtFOSA)	4151-50-2	2 PFAS by ID SOP	ND	7.5	1.9	ng/L	1
N-ethylperfluoro-1-octanesulfonamidoacetic acid (EtFOSAA)	2991-50-	6 PFAS by ID SOP	ND	7.5	1.9	ng/L	1
2-N-ethylperfluoro-1-octanesulfonamido-ethanol (EtFOSE)	1691-99-2	2 PFAS by ID SOP	ND	7.5	1.9	ng/L	1
N-methylperfluoro-1-octanesulfonamide (MeFOSA)	31506-32-	8 PFAS by ID SOP	ND	15	3.7	ng/L	1
N-methylperfluoro-1-octanesulfonamidoacetic acid (MeFOSAA)	2355-31-	9 PFAS by ID SOP	ND	7.5	1.9	ng/L	1
2-N-methylperfluoro-1-octanesulfonamido-ethanol (MeFOSE)	24448-09-	7 PFAS by ID SOP	ND	7.5	1.9	ng/L	1
Perfluoro-1-butanesulfonic acid (PFBS)	375-73-	5 PFAS by ID SOP	2.4 J	3.7	0.93	ng/L	1
Perfluoro-1-decanesulfonic acid (PFDS)	335-77-3	3 PFAS by ID SOP	ND	3.7	0.93	ng/L	1
Perfluoro-1-heptanesulfonic acid (PFHpS)	375-92-	B PFAS by ID SOP	ND	3.7	0.93	ng/L	1
Perfluoro-1-nonanesulfonic acid (PFNS)	68259-12-	1 PFAS by ID SOP	ND	3.7	0.93	ng/L	1
Perfluoro-1-octanesulfonamide (PFOSA)	754-91-	6 PFAS by ID SOP	ND	3.7	0.93	ng/L	1
Perfluoro-1-pentanesulfonic acid (PFPeS)	2706-91-	4 PFAS by ID SOP	1.3 J	3.7	0.93	ng/L	1
Perfluorododecanesulfonic acid (PFDOS)	79780-39-	5 PFAS by ID SOP	ND	7.5	1.9	ng/L	1
Perfluorohexanesulfonic acid (PFHxS)	355-46-	4 PFAS by ID SOP	2.0 J	3.7	0.93	ng/L	1
Perfluoro-n-butanoic acid (PFBA)	375-22-	4 PFAS by ID SOP	4.3	3.7	0.93	ng/L	1
Perfluoro-n-decanoic acid (PFDA)	335-76-	2 PFAS by ID SOP	ND	3.7	0.93	ng/L	1
Perfluoro-n-dodecanoic acid (PFDoA)	307-55-	1 PFAS by ID SOP	ND	3.7	0.93	ng/L	1
Perfluoro-n-heptanoic acid (PFHpA)	375-85-	9 PFAS by ID SOP	ND	3.7	0.93	ng/L	1
Perfluoro-n-hexadecanoic acid (PFHxDA)	67905-19-	5 PFAS by ID SOP	ND	7.5	1.9	ng/L	1
Perfluoro-n-hexanoic acid (PFHxA)	307-24-	4 PFAS by ID SOP	ND	3.7	0.93	ng/L	1
Perfluoro-n-nonanoic acid (PFNA)	375-95-	1 PFAS by ID SOP	ND	3.7	0.93	ng/L	1
Perfluoro-n-octadecanoic acid (PFODA)	16517-11-	6 PFAS by ID SOP	ND	7.5	1.9	ng/L	1
Perfluoro-n-octanoic acid (PFOA)	335-67-	1 PFAS by ID SOP	ND	3.7	0.93	ng/L	1
Perfluoro-n-pentanoic acid (PFPeA)	2706-90-3	3 PFAS by ID SOP	ND	3.7	0.93	ng/L	1
Perfluoro-n-tetradecanoic acid (PFTeDA)	376-06-	7 PFAS by ID SOP	ND	3.7	0.93	ng/L	1
Perfluoro-n-tridecanoic acid (PFTrDA)	72629-94-	8 PFAS by ID SOP	ND	3.7	0.93	ng/L	1
Perfluoro-n-undecanoic acid (PFUdA)	2058-94-	B PFAS by ID SOP	ND	3.7	0.93	ng/L	1
Perfluorooctanesulfonic acid (PFOS)	1763-23-	1 PFAS by ID SOP	3.4 J	3.7	0.93	ng/L	1
Surrogate Q % Recovery Limits							
13C2_4:2FTS	107	25-150					
13C2_6:2FTS	98	25-150					
13C2_8:2FTS	88	25-150					
13C2_PFDoA	84	25-150					
13C2_PFHxDA	85	25-150					
I3CZ_PFTEDA	84	25-150					
LOQ = Limit of Quantitation B = Detected in the method blank	E = Quantitatio	n of compound exceeded the	calibration rang	ge DL = Detection Li	mit		
ND = Not detected at or above the DLN = Recovery is out of criteriaP = The RPD between two GC columns exceeds 40%J = Estimated result < LOQ and $\geq$ DLH = Out of holding timeW = Reported on wet weight basis							

& 24

Laboratory ID: VK08043-005 Matrix: Aqueous

Client: Pace Analytical Services, LLC	
Description: 350-0	
Date Sampled:11/02/2020 1235	Project Name: LACROSSE WELL #23
Date Received: 11/06/2020	Project Number: 40217713

d7-MeFOSE

Run 1 Acceptance Surrogate % Recovery Q Limits 13C3\_PFBS 85 25-150 13C3\_PFHxS 86 25-150 13C3-HFPO-DA 98 25-150 13C4\_PFBA 96 25-150 13C4\_PFHpA 89 25-150 13C5\_PFHxA 96 25-150 13C5\_PFPeA 96 25-150 13C6\_PFDA 88 25-150 13C7\_PFUdA 87 25-150 91 13C8\_PFOA 25-150 13C8\_PFOS 80 25-150 13C8\_PFOSA 95 10-150 13C9 PFNA 91 25-150 d-EtFOSA 73 10-150 d5-EtFOSAA 88 25-150 d9-EtFOSE 85 10-150 d-MeFOSA 76 10-150 d3-MeFOSAA 87 25-150

10-150

85

 LOQ = Limit of Quantitation
 B = Detected in the method blank
 E = Quantitation of compound exceeded the calibration range
 DL = Detection Limit

 ND = Not detected at or above the DL
 N = Recovery is out of criteria
 P = The RPD between two GC columns exceeds 40%
 J = Estimated result < LOQ and ≥ DL</td>

 H = Out of holding time
 W = Reported on wet weight basis
 W = Reported on wet weight basis
 H = Out of holding time


444 21st Street South · La Crosse, Wisconsin · 54601

December 1, 2020

2501 Bainbridge Street La Crosse, WI 54603

Subject: Private Well Sampling Results 2501 Bainbridge Street, La Crosse, WI 54603 Tax parcel # 4-363-0 Sample ID # 363-0

Dear

We have received and reviewed the test results for the sample collected on November 3, 2020 at the above address. Some PFAS compounds were found, but the levels found were **below** the Department of Health Services (DHS) levels recommended for protecting health. These levels are called the "Recommended Public Health Standard" in the table below. The levels found in *your* well are called the "Sample Result" in the table below. **PLEASE NOTE:** At your residence we took a second "duplicate" sample for quality control / quality assurance purposes. The two samples' tests confirmed each other, and there were only minor differences. The results in the table below are based on the highest level observed in either of the two samples.

Sample Results

Compound	Sample Result (unit)	Recomm Public H Standard	ended lealth (unit <sup>e</sup> )
N-Ethyl Perfluorooctane sulfonamide (NEtFOSA) CAS # 4151-50-2	Not Detected	20 ppt <sup>a,b</sup>	) ppt unds I 6
N-Ethyl perfluorooctane sulfonamidoacetic acid (NEtFOSAA) CAS # 2991-50-6	Not Detected	20 ppt <sup>a,b</sup>	it is 2C ompo <i>il</i> of all
N-Ethyl perfluorooctane sulfonamidoethanol (NEtFOSE) CAS # 1691-99-2	Not Detected	20 ppt <sup>a,b</sup>	ed lim ese 6 c ed toto
Perfluorooctane sulfonamide (FOSA) CAS # 754-91-6	Not Detected	20 ppt <sup>a,b</sup>	mend of the mbine
Perfluorooctanoic acid (PFOA) CAS # 335-67-1	Not Detected	20 ppt <sup>a,b</sup>	recom ny <i>one</i> the <i>cc</i>
Perfluorooctanesulfonic acid (PFOS) CAS # 1763-23-1	3.7 ppt	20 ppt <sup>a,b</sup>	The for a or

Private Well Sampling Results for 2501 Bainbridge Street, La Crosse, WI 54603 Tax parcel # 4-363-0 Sample ID # 363-0 December 1, 2020

Compound	Sample Result (unit)	Recommended Public Health Standard (unit <sup>e</sup> )
Hexafluoropropylene oxide dimer acid (HPFO-DA; GenX) CAS # 13252-13-6	Not Detected	300 ppt ª
Perfluorobutanesulfonic acid (PFBS) CAS # 375-73-5	1.6 ppt	450,000 ppt <sup>a</sup>
Perfluorohexanesulfonic acid (PFHxS) CAS # 355-46-4	2.5 ppt	40 ppt <sup>a</sup>
Perfluorobutanoic acid (PFBA) CAS # 375-22-4	4.6 ppt	10,000 ppt <sup>a</sup>
Perfluorodecanoic acid (PFDA) CAS # 335-76-2	Not Detected	300 ppt <sup>a</sup>
Perfluorododecanoic acid (PFDoA) CAS # 307-55-1	Not Detected	500 ppt <sup>a</sup>
Perfluorohexanoic acid (PFHxA) CAS # 307-24-4	Not Detected	150,000 ppt <sup>a</sup>
Perfluorononanoic acid (PFNA) CAS # 375-95-1	Not Detected	30 ppt <sup>a</sup>
Perfluorotetradecanoic acid (PFTeA) CAS # 376-06-7	Not Detected	10,000 ppt <sup>a</sup>
Perfluoroundecanoic acid (PFUnA) CAS # 2058-94-8	Not Detected	3,000 ppt <sup>a</sup>
4,8-Dioxa-3H-perfluorononanoic acid (DONA) CAS # 919005-14-4	Not Detected	<b>3,000 ppt</b> <sup>a</sup>
Perfluorooctadecanoic acid (PFODA) CAS # 16517-11-6	Not Detected	400,000 ppt <sup>a</sup>

<sup>a</sup> Public health enforcement standard (ES) recommended by DHS.

<sup>b</sup> DHS recommends a combined enforcement standard of 20 ng/L and combined preventive action limit of 2 ng/L for FOSA, NEt-FOSA, NetFOSAA, PFOS, and PFOA.

A current standard is not available; the compound is currently under review by DHS for potential public health standard recommendation.

<sup>d</sup> Public health enforcement standard (ES) in NR 140, Wisconsin Administrative Code.

Units: Parts per trillion (ppt) = nanograms of substance per liter of water (ng/L)

<sup>BL</sup> Detected in the method blank. Possible lab contaminant.

Private Well Sampling Results for 2501 Bainbridge Street, La Crosse, WI 54603 Tax parcel # 4-363-0 Sample ID # 363-0 December 1, 2020

As required by law, we will be submitting these results to the Department of Natural Resources (DNR). The DNR may consult with the Department of Health Services (DHS) about these test results. DHS may review all PFAS tests and follow-up with you directly if any actions are recommended to protect your health.

Thank you for your patience and assistance with our investigation. We will provide updates on the project at <a href="https://www.cityoflacrosse.org/wells">https://www.cityoflacrosse.org/wells</a> as our work continues. If you have any questions, please call The OS Group at (608) 668-2718 or email them at <a href="https://www.pFAS@theOSgrp.com">PFAS@theOSgrp.com</a>.

You can also contact the DNR and DHS with questions about PFAS or the water sample results at the numbers provided below.

Questions about		<u>Contact</u>	<u>Phone</u>	<u>E-mail Address</u>
Soil & Groundwater Testing, Clean Up	DNR	David Rozeboom	715-215-2078	David.Rozeboom@wisconsin.gov
Drinking Water or Private wells	DNR	Kyle Burton	920-360-2112	kyle.burton@wisconsin.gov
Health Concerns	DHS	Curtis Hedman	608-266-6677	Curtis.Hedman@dhs.wisconsin.gov

On behalf of The City of La Crosse *The OS Group, LLC* 

Attachment: Lab report for your well

Client: Pace Analytical Services, LLC				Laboratory II	D: VK08043-(	025	
Description: 363-0				Matrix	x: Aqueous		
Date Sampled:11/03/2020 1345	Project Nan	ne: LACROSSE WELL #	<sup>£</sup> 23 & 24				
Date Received: 11/06/2020 Pro	niect Numb	er <sup>.</sup> 40217713					
RunPrep MethodAnalytical MethodD1SOP SPEPFAS by ID SOP	ilution A	Analysis Date Analyst 1/18/2020 1635 MMM	Prep Date 11/17/2020	e Batch 1034 73728			
Parameter	CA Numbe	S Analytical er Method	Result Q	LOQ	DL	Units	Run
9-chlorohexadecafluoro-3-oxanone-1-sulfonic acid (9CI-PF3ONS)	756426-58	3-1 PFAS by ID SOP	ND	7.1	1.8	ng/L	1
11-chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3)	763051-92	2-9 PFAS by ID SOP	ND	7.1	1.8	ng/L	1
1H, 1H, 2H, 2H-perfluorodecane sulfonic acid (8:2 FTS)	39108-34	4-4 PFAS by ID SOP	ND	7.1	1.8	ng/L	1
1H, 1H, 2H, 2H-perfluorooctane sulfonic acid (6:2 FTS)	27619-97	7-2 PFAS by ID SOP	ND	7.1	1.8	ng/L	1
1H,1H,2H,2H-perfluorododecane sulfonic acid (10:2 FTS)	120226-60	0-0 PFAS by ID SOP	ND	7.1	1.8	ng/L	1
1H,1H,2H,2H-perfluorohexane sulfonic acid (4:2 FTS)	757124-72	2-4 PFAS by ID SOP	ND	7.1	1.8	ng/L	1
Hexafluoropropylene oxide dimer acid (GenX)	13252-13	3-6 PFAS by ID SOP	ND	7.1	1.8	ng/L	1
4,8-dioxa-3H-perfluorononanoic acid (ADONA)	919005-14	1-4 PFAS by ID SOP	ND	7.1	1.8	ng/L	1
N-ethylperfluoro-1-octanesulfonamide (EtFOSA)	4151-50	-2 PFAS by ID SOP	ND	7.1	1.8	ng/L	1
N-ethylperfluoro-1-octanesulfonamidoacetic acid (EtFOSAA)	2991-50	-6 PFAS by ID SOP	ND	7.1	1.8	ng/L	1
2-N-ethylperfluoro-1-octanesulfonamido-ethanol (EtFOSE)	1691-99	P-2 PFAS by ID SOP	ND	7.1	1.8	ng/L	1
N-methylperfluoro-1-octanesulfonamide (MeFOSA)	31506-32	2-8 PFAS by ID SOP	ND	14	3.5	ng/L	1
N-methylperfluoro-1-octanesulfonamidoacetic acid (MeFOSAA)	2355-31	-9 PFAS by ID SOP	ND	7.1	1.8	ng/L	1
2-N-methylperfluoro-1-octanesulfonamido-ethanol (MeFOSE)	24448-09	9-7 PFAS by ID SOP	ND	7.1	1.8	ng/L	1
Perfluoro-1-butanesulfonic acid (PFBS)	375-73	-5 PFAS by ID SOP	1.6 J	3.5	0.88	ng/L	1
Perfluoro-1-decanesulfonic acid (PFDS)	335-77	-3 PFAS by ID SOP	ND	3.5	0.88	ng/L	1
Perfluoro-1-heptanesulfonic acid (PFHpS)	375-92	P-8 PFAS by ID SOP	ND	3.5	0.88	ng/L	1
Perfluoro-1-nonanesulfonic acid (PFNS)	68259-12	2-1 PFAS by ID SOP	ND	3.5	0.88	ng/L	1
Perfluoro-1-octanesulfonamide (PFOSA)	754-91	-6 PFAS by ID SOP	ND	3.5	0.88	ng/L	1
Perfluoro-1-pentanesulfonic acid (PFPeS)	2706-91	-4 PFAS by ID SOP	ND	3.5	0.88	ng/L	1
Perfluorododecanesulfonic acid (PFDOS)	79780-39	9-5 PFAS by ID SOP	ND	7.1	1.8	ng/L	1
Perfluorohexanesulfonic acid (PFHxS)	355-46	-4 PFAS by ID SOP	2.5 J	3.5	0.88	ng/L	1
Perfluoro-n-butanoic acid (PFBA)	375-22	2-4 PEAS by ID SOP	4.6	3.5	0.88	ng/L	1
Perfluoro-n-decanoic acid (PFDA)	335-76	5-2 PFAS by ID SOP	ND	3.5	0.88	ng/L	1
Perfluoro-n-dodecanoic acid (PFDoA)	307-55	5-1 PFAS by ID SOP	ND	3.5	0.88	ng/L	1
Perfluoro-n-neptanoic acid (PEHPA)	3/5-85	-9 PFAS by ID SOP	ND	3.5	0.88	ng/L	1
Perfluoro-n-nexadecanoic acid (PFHxDA)	6/905-19	P-5 PFAS by ID SOP	ND	7.1	1.8	ng/L	1
Perliuoro-n-nexanoic acid (PENA)	307-24	-4 PFAS by ID SOP	ND	3.5	0.88	ng/L	1
Periluoro-n-nonanoic acid (PFNA)	3/5-95	- I PFAS by ID SOP	ND	3.5	0.88	ng/L	1
Perliuoro-n-octadecanoic acid (PFODA)	225 67	1-6 PFAS by ID SOP		7.1	1.8	ng/L	1
Perfluere a postanoic acid (PEDa)	2706.00			2.5	0.88	ng/L	1
Perfluoro-n-tetradecanoic acid (PETeDA)	376-06			3.5	0.88	ng/L	1
Perfluoro-n-tridecanoic acid (PETrDA)	72620-0/	1-8 PEAS by ID SOP		3.5	0.88	ng/L	1
Perfluoro-n-undecanoic acid (PELIdA)	2058-94	-8 PEAS by ID SOP	ND	3.5	0.00	ng/L	1
Perfluorooctanesulfonic acid (PEOS)	1763-23	L1 PEAS by ID SOP	37	3.5	0.00	ng/L	1
	I703-23		5.7	5.5	0.88	ng/L	I
Surrogate Q % Red	covery	Limits					
13C2_4:2FTS	116	25-150					
1302_0:2F1S	IU/ 05	25-150					
1302_8:2F15	80	25-150					
	93	25-150					
ISC2_PFTeDA	89	25-150 25-150					
	_						
LOQ = Limit of Quantitation         B = Detected in the method blank           ND = Not detected at or above the DL         N = Recovery is out of criteria	E = Quantitat P = The RPD	tion of compound exceeded the c b between two GC columns exceed	calibration range eds 40%	DL = Detection Lin J = Estimated resu	nit Ilt < LOQ and ≥ D	)L	
H = Out of holding time W = Reported on wet weight basis							

Client: Pace Analytical Services, LLC		Laboratory ID: VK08043-025
Description: 363-0		Matrix: Aqueous
Date Sampled:11/03/2020 1345	Project Name: LACROSSE WELL #23 & 24	
Date Received: 11/06/2020	Project Number: 40217713	

Surragata	Run 1 A	cceptance
	Q % Recovery	Limits
13C3_PFBS	94	25-150
13C3_PFHxS	97	25-150
13C3-HFPO-DA	99	25-150
13C4_PFBA	100	25-150
13C4_PFHpA	96	25-150
13C5_PFHxA	102	25-150
13C5_PFPeA	103	25-150
13C6_PFDA	90	25-150
13C7_PFUdA	98	25-150
13C8_PFOA	99	25-150
13C8_PFOS	90	25-150
13C8_PFOSA	100	10-150
13C9_PFNA	94	25-150
d-EtFOSA	88	10-150
d5-EtFOSAA	93	25-150
d9-EtFOSE	89	10-150
d-MeFOSA	92	10-150
d3-MeFOSAA	88	25-150
d7-MeFOSE	81	10-150

LOQ = Limit of Quantitation B = Detected in the method blank E = Quantitation of compound exceeded the calibration range DL = Detection Limit ND = Not detected at or above the DL N = Recovery is out of criteria P = The RPD between two GC columns exceeds 40% J = Estimated result < LOQ and  $\ge$  DL H = Out of holding time W = Reported on wet weight basis

Client: Pace Analytical Services, LLC				Labor	atory ID	:VK08043-0	)26	
Description: DUP 4					Matrix:	: Aqueous		
Date Sampled:11/03/2020 1345	Project Nam	e: LACROSSE WELL #	¢23 & 24					
Date Received: 11/06/2020	piect Numbe	er: 40217713						
Due Deep Matthead Area Mathad Mathad		unaliza Data Avaalizat	David	Data D	- 4 - 1-			
RunPrep MethodAnalytical Method1SOP SPEPFAS by ID SOP	1 11	/18/2020 1645 MMM	Prep 1 11/17/2	Date Ba 020 1034 73	atch 3728			
Parameter	CA Numbe	S Analytical er Method	Result	Q LC	Q	DL	Units	Run
9-chlorohexadecafluoro-3-oxanone-1-sulfonic acid (9CI-PF3ONS)	756426-58	-1 PFAS by ID SOP	ND	7	7.5	1.9	ng/L	1
11-chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3)	763051-92	-9 PFAS by ID SOP	ND	7	7.5	1.9	ng/L	1
1H, 1H, 2H, 2H-perfluorodecane sulfonic acid (8:2 FTS)	39108-34	-4 PFAS by ID SOP	ND	7	7.5	1.9	ng/L	1
1H, 1H, 2H, 2H-perfluorooctane sulfonic acid (6:2 FTS)	27619-97	-2 PFAS by ID SOP	ND	7	7.5	1.9	ng/L	1
1H,1H,2H,2H-perfluorododecane sulfonic acid (10:2 FTS)	120226-60	-0 PFAS by ID SOP	ND	7	7.5	1.9	ng/L	1
1H,1H,2H,2H-perfluorohexane sulfonic acid (4:2 FTS)	757124-72	-4 PFAS by ID SOP	ND	7	7.5	1.9	ng/L	1
Hexafluoropropylene oxide dimer acid (GenX)	13252-13	-6 PFAS by ID SOP	ND	7	7.5	1.9	ng/L	1
4,8-dioxa-3H-perfluorononanoic acid (ADONA)	919005-14	-4 PFAS by ID SOP	ND	7	7.5	1.9	ng/L	1
N-ethylperfluoro-1-octanesulfonamide (EtFOSA)	4151-50	2 PFAS by ID SOP	ND	7	7.5	1.9	ng/L	1
N-ethylperfluoro-1-octanesulfonamidoacetic acid (EtFOSAA)	2991-50	6 PFAS by ID SOP	ND	7	7.5	1.9	ng/L	1
2-N-ethylperfluoro-1-octanesulfonamido-ethanol (EtFOSE)	1691-99	2 PFAS by ID SOP	ND	7	7.5	1.9	ng/L	1
N-methylperfluoro-1-octanesulfonamide (MeFOSA)	31506-32	-8 PFAS by ID SOP	ND		15	3.8	ng/L	1
N-methylperfluoro-1-octanesulfonamidoacetic acid (MeFOSAA)	2355-31	9 PFAS by ID SOP	ND	7	7.5	1.9	ng/L	1
2-N-methylperfluoro-1-octanesulfonamido-ethanol (MeFOSE)	24448-09	-7 PFAS by ID SOP	ND	7	7.5	1.9	ng/L	1
Perfluoro-1-butanesulfonic acid (PFBS)	375-73-	5 PFAS by ID SOP	1.6	J	3.8	0.94	ng/L	1
Perfluoro-1-decanesulfonic acid (PFDS)	335-77-	-3 PFAS by ID SOP	ND	3	3.8	0.94	ng/L	1
Perfluoro-1-heptanesulfonic acid (PFHpS)	375-92-	-8 PFAS by ID SOP	ND	3	3.8	0.94	ng/L	1
Perfluoro-1-nonanesulfonic acid (PFNS)	68259-12	-1 PFAS by ID SOP	ND	3	3.8	0.94	ng/L	1
Perfluoro-1-octanesulfonamide (PFOSA)	754-91	-6 PFAS by ID SOP	ND	3	3.8	0.94	ng/L	1
Perfluoro-1-pentanesulfonic acid (PFPeS)	2706-91	-4 PFAS by ID SOP	ND	3	3.8	0.94	ng/L	1
Perfluorododecanesulfonic acid (PFDOS)	79780-39	-5 PFAS by ID SOP	ND	7	7.5	1.9	ng/L	1
Perfluorohexanesulfonic acid (PFHxS)	355-46	4 PFAS by ID SOP	2.3	J 3	3.8	0.94	ng/L	1
Perfluoro-n-butanoic acid (PFBA)	375-22-	4 PFAS by ID SOP	4.6	3	3.8	0.94	ng/L	1
Perfluoro-n-decanoic acid (PFDA)	335-76	-2 PFAS by ID SOP	ND	3	3.8	0.94	ng/L	1
Perfluoro-n-dodecanoic acid (PFDoA)	307-55	1 PFAS by ID SOP	ND	3	3.8	0.94	ng/L	1
Perfluoro-n-heptanoic acid (PFHpA)	375-85	-9 PFAS by ID SOP	ND	3	3.8	0.94	ng/L	1
Perfluoro-n-hexadecanoic acid (PFHxDA)	67905-19	-5 PFAS by ID SOP	ND	7	7.5	1.9	ng/L	1
Perfluoro-n-hexanoic acid (PFHxA)	307-24	-4 PFAS by ID SOP	ND	3	3.8	0.94	ng/L	1
Perfluoro-n-nonanoic acid (PFNA)	375-95	1 PFAS by ID SOP	ND	3	3.8	0.94	ng/L	1
Perfluoro-n-octadecanoic acid (PFODA)	16517-11	-6 PFAS by ID SOP	ND	7	7.5	1.9	ng/L	1
Perfluoro-n-octanoic acid (PFOA)	335-67-	PFAS by ID SOP	ND	3	3.8	0.94	ng/L	1
Perfluoro-n-pentanoic acid (PFPeA)	2706-90-	-3 PFAS by ID SOP	ND	3	3.8	0.94	ng/L	1
Perfluoro-n-tetradecanoic acid (PFTeDA)	3/6-06-	PFAS by ID SOP	ND	3	3.8	0.94	ng/L	1
Perfluoro-n-tridecanoic acid (PFTrDA)	/2629-94	-8 PFAS by ID SOP	ND	3	3.8	0.94	ng/L	1
Perfluoro-n-undecanoic acid (PFOdA)	2058-94-		ND		3.8	0.94	ng/L	1
Perfluorooctanesulfonic acid (PFOS)	1/63-23	PFAS by ID SOP	3.2	J	3.8	0.94	ng/L	I
Surrogate Q % Re	un 1 Aco covery	ceptance Limits						
13C2_4:2FTS	101	25-150						
13C2_6:2FTS	100	25-150						
13C2_8:2F1S	82	25-150						
13C2_PFDoA	86	25-150						
13C2_PFHxDA	85	25-150						
I3U2_PFIEDA	84	25-150						
LOQ = Limit of Quantitation     B = Detected in the method blank       ND = Not detected at or above the DL     N = Recovery is out of criteria       H = Out of holding time     W = Reported on wet weight basis	E = Quantitati P = The RPD	on of compound exceeded the obtained between two GC columns exceeded to be the obtained between two GC columns exceeded between two gradients and the obtained between the obtain	calibration ra eds 40%	nge DL = Dete J = Estim	ection Limit ated result	t : < LOQ and ≥ D	L	

Client: Pace Analytical Services, LLC		Laboratory ID: VK08043-026
Description: DUP 4		Matrix: Aqueous
Date Sampled:11/03/2020 1345	Project Name: LACROSSE WELL #23 & 24	
Date Received: 11/06/2020	Project Number: 40217713	

Surrogate	Run 1 A Q % Recovery	Acceptance Limits
13C3_PFBS	89	25-150
13C3_PFHxS	93	25-150
13C3-HFPO-DA	100	25-150
13C4_PFBA	97	25-150
13C4_PFHpA	91	25-150
13C5_PFHxA	93	25-150
13C5_PFPeA	99	25-150
13C6_PFDA	82	25-150
13C7_PFUdA	91	25-150
13C8_PFOA	95	25-150
13C8_PFOS	87	25-150
13C8_PFOSA	98	10-150
13C9_PFNA	92	25-150
d-EtFOSA	82	10-150
d5-EtFOSAA	89	25-150
d9-EtFOSE	90	10-150
d-MeFOSA	81	10-150
d3-MeFOSAA	91	25-150
d7-MeFOSE	84	10-150

LOQ = Limit of Quantitation	B = Detected in the method blank	E = Quantitation of compound exceeded the calibration range	DL = Detection Limit
ND = Not detected at or above the DL	N = Recovery is out of criteria	P = The RPD between two GC columns exceeds 40%	J = Estimated result < LOQ and $\ge$ DL
H = Out of holding time	W = Reported on wet weight basis		



December 1, 2020

444 21st Street South · La Crosse, Wisconsin · 54601

2539 1st Avenue West La Crosse, WI 54603

Subject: Private Well Sampling Results 2539 1st Avenue West, La Crosse, WI 54603 Tax parcel # 4-385-0 Sample ID # 385-0

#### Dear

We have received and reviewed the test results for the sample collected on November 3, 2020 at the above address. Some PFAS compounds were found at levels <u>above</u> the Department of Health Services (DHS) levels recommended for protecting health. These levels are called the "Recommended Public Health Standard" in the table below. The levels found in your well are called the "Sample Result" in the table below.

Because some of the levels are above the recommended Public Health Standard, the City is offering to provide bottled water delivered to your home for drinking, cooking, and brushing your teeth. There will be no cost to you for the bottled water. Please complete the attached form and mail it to The OS Group to make arrangements for having a water dispenser and bottles delivered to your home. Call 608-668-2718 or email <u>PFAS@theOSgrp.com</u>. You may also complete this form on line at <u>www.cityoflacrosse.org/bottledwater</u>

The following table summarizes the test results from the sample. **Bolded results** are above a current recommended level intended to protect your health according to the Department of Health Services (DHS). Also, please note, we collected two samples from your house for quality assurance / quality control purposes. The second sample is considered a "split" sample and was sent to a different laboratory for analysis. The "split" sample was analyzed by a different EPA method. That method analyzes for 18 compounds as compared to the 36 compounds under the other method. Thus, in the second table for the "Split" sample provided below, you will see some results listed as "Not Analyzed".

Private Well Sampling Results for 2539 1st Avenue West, La Crosse, WI 54603 Tax Parcel # 4-385-0 December 1, 2020

Compound	Sample Result (unit)	Recomm Public H Standard	ended lealth (unit <sup>e</sup> )	
N-Ethyl Perfluorooctane sulfonamide (NEtFOSA) CAS # 4151-50-2	Not Detected	20 ppt <sup>a,b</sup> to spun		
N-Ethyl perfluorooctane sulfonamidoacetic acid (NEtFOSAA) CAS # 2991-50-6	Not Detected	20 ppt <sup>a,b</sup>	it is 20 ompo <i>il</i> of all	
N-Ethyl perfluorooctane sulfonamidoethanol (NEtFOSE) CAS # 1691-99-2	Not Detected	20 ppt <sup>a,b</sup>	ed lim ese 6 c ed tota	
Perfluorooctane sulfonamide (FOSA) CAS # 754-91-6	Not Detected	20 ppt <sup>a,b</sup>	mend of the	
Perfluorooctanoic acid (PFOA) CAS # 335-67-1	13 ppt	20 ppt <sup>a,b</sup>	recom ny <i>one</i> the <i>c</i> c	
Perfluorooctanesulfonic acid (PFOS) CAS # 1763-23-1	13 ppt	20 ppt <sup>a,b</sup>	The for a or	
Hexafluoropropylene oxide dimer acid (HPFO-DA; GenX) CAS # 13252-13-6	Not Detected	300 ppt <sup>a</sup>		
Perfluorobutanesulfonic acid (PFBS) CAS # 375-73-5	4.2 ppt	450,000 ppt <sup>a</sup>		
Perfluorohexanesulfonic acid (PFHxS) CAS # 355-46-4	7.4 ppt	40 ppt <sup>a</sup>		
Perfluorobutanoic acid (PFBA) CAS # 375-22-4	66 ppt	10,000 ppt <sup>a</sup>		
Perfluorodecanoic acid (PFDA) CAS # 335-76-2	Not Detected		300 ppt <sup>a</sup>	
Perfluorododecanoic acid (PFDoA) CAS # 307-55-1	Not Detected	500 ppt <sup>a</sup>		
Perfluorohexanoic acid (PFHxA) CAS # 307-24-4	0.95 ppt	150,000 ppt <sup>a</sup>		
Perfluorononanoic acid (PFNA) CAS # 375-95-1	Not Detected	30 ppt <sup>a</sup>		
Perfluorotetradecanoic acid (PFTeA) CAS # 376-06-7	Not Detected	10,000 ppt <sup>a</sup>		
Perfluoroundecanoic acid (PFUnA) CAS # 2058-94-8	Not Detected	3	<b>3,000 ppt</b> <sup>a</sup>	
4,8-Dioxa-3H-perfluorononanoic acid (DONA) CAS # 919005-14-4	Not Detected	3,000 ppt <sup>a</sup>		

#### Sample Results

Perfluorooctadecanoic acid (PFODA) CAS # 16517-11-6	Not Detected	400,000 ppt <sup>a</sup>			
Perfluoro-1-pentanesulfonic acid (PFPeS) CAS # 2706-91-4	3.4 ppt	None Established <sup>c</sup>			
<sup>a</sup> Public health enforcement standard (ES) recommended by DHS. <sup>o</sup> DHS recommends a combined enforcement standard of 20 ng/L and combined preventive action limit of 2 ng/L for FOSA, NEt-FOSE, NEt-FOSA, NetFOSAA, PFOS, and PFOA.					

<sup>2</sup> A current standard is not available; the compound is currently under review by DHS for potential public health standard recommendation.

<sup>d</sup> Public health enforcement standard (ES) in NR 140, Wisconsin Administrative Code.

<sup>e</sup> Units: Parts per trillion (ppt) = nanograms of substance per liter of water (ng/L)

<sup>BL</sup> Detected in the method blank. Possible lab contaminant.

#### "Split" Sample Results

Compound	Sample Result (unit)	Recomm Public H Standard	ended lealth (unit <sup>e</sup> )
N-Ethyl Perfluorooctane sulfonamide (NEtFOSA) CAS # 4151-50-2	Not Analyzed	20 ppt <sup>a,b</sup>	) ppt unds I 6
N-Ethyl perfluorooctane sulfonamidoacetic acid (NEtFOSAA) CAS # 2991-50-6	Not Detected	20 ppt <sup>a,b</sup>	it is 2C compo a/ of al
N-Ethyl perfluorooctane sulfonamidoethanol (NEtFOSE) CAS # 1691-99-2	Not Analyzed	20 ppt <sup>a,b</sup>	ed lim ese 6 c ed toto
Perfluorooctane sulfonamide (FOSA) CAS # 754-91-6	Not Analyzed	20 ppt <sup>a,b</sup>	mend of the ombine
Perfluorooctanoic acid (PFOA) CAS # 335-67-1	9.9 ppt	20 ppt <sup>a,b</sup>	recom ny <i>one</i> the <i>c</i> c
Perfluorooctanesulfonic acid (PFOS) CAS # 1763-23-1	9.8 ppt	20 ppt <sup>a,b</sup>	The for a or
Hexafluoropropylene oxide dimer acid (HPFO-DA; GenX) CAS # 13252-13-6	Not Detected		300 ppt <sup>a</sup>
Perfluorobutanesulfonic acid (PFBS) CAS # 375-73-5	3.7 ppt	450	),000 ppt <sup>a</sup>
Perfluorohexanesulfonic acid (PFHxS) CAS # 355-46-4	6.8 ppt		40 ppt <sup>a</sup>
Perfluorobutanoic acid (PFBA) CAS # 375-22-4	Not Analyzed	10	),000 ppt <sup>a</sup>
Perfluorodecanoic acid (PFDA) CAS # 335-76-2	Not Detected		300 ppt <sup>a</sup>

Private Well Sampling Results for 2539 1st Avenue West, La Crosse, WI 54603 Tax Parcel # 4-385-0 December 1, 2020

Perfluorododecanoic acid (PFDoA) CAS # 307-55-1	Not Detected	500 ppt <sup>a</sup>
Perfluorohexanoic acid (PFHxA) CAS # 307-24-4	Not Detected	150,000 ppt <sup>a</sup>
Perfluorononanoic acid (PFNA) CAS # 375-95-1	Not Detected	30 ppt <sup>a</sup>
Perfluorotetradecanoic acid (PFTeA) CAS # 376-06-7	Not Detected	10,000 ppt <sup>a</sup>
Perfluoroundecanoic acid (PFUnA) CAS # 2058-94-8	Not Detected	3,000 ppt <sup>a</sup>
4,8-Dioxa-3H-perfluorononanoic acid (DONA) CAS # 919005-14-4	Not Detected	3,000 ppt <sup>a</sup>
Perfluorooctadecanoic acid (PFODA) CAS # 16517-11-6	Not Analyzed	400,000 ppt <sup>a</sup>
Perfluoro-1-pentanesulfonic acid (PFPeS) CAS # 2706-91-4	Not Analyzed	None Established <sup>c</sup>
<sup>a</sup> Public health enforcement standard (FS) recommended by DHS		

<sup>a</sup> Public health enforcement standard (ES) recommended by DHS.

<sup>b</sup> DHS recommends a combined enforcement standard of 20 ng/L and combined preventive action limit of 2 ng/L for FOSA, NEt-FOSA, NetFOSAA, PFOS, and PFOA.

A current standard is not available; the compound is currently under review by DHS for potential public health standard recommendation.

<sup>4</sup> Public health enforcement standard (ES) in NR 140, Wisconsin Administrative Code.

<sup>2</sup> Units: Parts per trillion (ppt) = nanograms of substance per liter of water (ng/L)

<sup>BL</sup> Detected in the method blank. Possible lab contaminant.

Private Well Sampling Results for 2539 1st Avenue West, La Crosse, WI 54603 Tax Parcel # 4-385-0 December 1, 2020

As required by law, we will be submitting these results to the Department of Natural Resources (DNR). The DNR may consult with the Department of Health Services (DHS) about these test results. DHS may review all PFAS tests and follow-up with you directly if any actions are recommended to protect your health.

Thank you for your patience and assistance with our investigation. We will provide updates on the project at <u>https://www.cityoflacrosse.org/wells</u> as our work continues. If you have any questions, please call The OS Group at (608) 668-2718 or email them at <u>PFAS@theOSgrp.com</u>.

You can also contact the DNR and DHS with questions about PFAS or the water sample results at the numbers provided below.

Questions about		<u>Contact</u>	<u>Phone</u>	<u>E-mail Address</u>
Soil & Groundwater Testing, Clean Up	DNR	David Rozeboom	715-215-2078	David.Rozeboom@wisconsin.gov
Drinking Water or Private wells	DNR	Kyle Burton	920-360-2112	kyle.burton@wisconsin.gov
Health Concerns	DHS	Curtis Hedman	608-266-6677	Curtis.Hedman@dhs.wisconsin.gov

On behalf of The City of La Crosse *The OS Group, LLC* 

Attachment: Lab report for your well Bottled Water Acknowledgement

Client: Pace Analytical Services, LLC				Laboratory I	D: VK08043-	027	
Description: 385-0				Matri	x: Aqueous		
Date Sampled:11/03/2020 1400	Project Name	: LACROSSE WELL #	#23 & 24		·		
Date Received: 11/06/2020 Pr	oject Number	: 40217713					
Pup Prop Mathed Applytical Mathed	Jilution An	alveis Data Analvet	Drop Dat	to Batch			
1 SOP SPE PFAS by ID SOP	1 11/	18/2020 1656 MMM	11/17/2020	D 1034 73728			
Parameter	CAS	Analytical Method	Result O	1.00	וח	Units	Run
9-chlorohexadecafluoro-3-oxanone-1-sulfonic acid (9CI-PF3ONS)	756426-58-1	PFAS by ID SOP	ND	7.5	19	ng/L	1
11-chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11CI-PF3)	) 763051-92-9	PFAS by ID SOP	ND	7.5	1.9	ng/L	1
1H, 1H, 2H, 2H-perfluorodecane sulfonic acid (8:2 FTS)	39108-34-4	PFAS by ID SOP	ND	7.5	1.9	ng/L	1
1H, 1H, 2H, 2H-perfluorooctane sulfonic acid (6:2 FTS)	27619-97-2	2 PFAS by ID SOP	ND	7.5	1.9	ng/L	1
1H,1H,2H,2H-perfluorododecane sulfonic acid (10:2 FTS)	120226-60-0	PFAS by ID SOP	ND	7.5	1.9	ng/L	1
1H,1H,2H,2H-perfluorohexane sulfonic acid (4:2 FTS)	757124-72-4	PFAS by ID SOP	ND	7.5	1.9	ng/L	1
Hexafluoropropylene oxide dimer acid (GenX)	13252-13-6	PFAS by ID SOP	ND	7.5	1.9	ng/L	1
4,8-dioxa-3H-perfluorononanoic acid (ADONA)	919005-14-4	PFAS by ID SOP	ND	7.5	1.9	ng/L	1
N-ethylperfluoro-1-octanesulfonamide (EtFOSA)	4151-50-2	PFAS by ID SOP	ND	7.5	1.9	ng/L	1
N-ethylperfluoro-1-octanesulfonamidoacetic acid (EtFOSAA)	2991-50-6	PFAS by ID SOP	ND	7.5	1.9	ng/L	1
2-N-ethylperfluoro-1-octanesulfonamido-ethanol (EtFOSE)	1691-99-2	PFAS by ID SOP	ND	7.5	1.9	ng/L	1
N-methylperfluoro-1-octanesulfonamide (MeFOSA)	31506-32-8	PFAS by ID SOP	ND	15	3.7	ng/L	1
N-methylperfluoro-1-octanesulfonamidoacetic acid (MeFOSAA)	2355-31-9	PFAS by ID SOP	ND	7.5	1.9	ng/L	1
2-N-methylperfluoro-1-octanesulfonamido-ethanol (MeFOSE)	24448-09-7	PFAS by ID SOP	ND	7.5	1.9	ng/L	1
Perfluoro-1-butanesulfonic acid (PFBS)	375-73-5	PFAS by ID SOP	4.2	3.7	0.94	ng/L	1
Perfluoro-1-decanesulfonic acid (PFDS)	335-77-3	PFAS by ID SOP	ND	3.7	0.94	ng/L	1
Perfluoro-1-heptanesulfonic acid (PFHpS)	375-92-8	PFAS by ID SOP	ND	3.7	0.94	ng/L	1
Perfluoro-1-nonanesulfonic acid (PFNS)	68259-12-1	PFAS by ID SOP	ND	3.7	0.94	ng/L	1
Perfluoro-1-octanesulfonamide (PFOSA)	754-91-6	PFAS by ID SOP	ND	3.7	0.94	ng/L	1
Perfluoro-1-pentanesulfonic acid (PFPeS)	2706-91-4	PFAS by ID SOP	3.4 J	3.7	0.94	ng/L	1
Perfluorododecanesulfonic acid (PFDOS)	79780-39-5	FAS by ID SOP	ND	7.5	1.9	ng/L	1
Perfluorohexanesulfonic acid (PFHxS)	355-46-4	PFAS by ID SOP	7.4	3.7	0.94	ng/L	1
Perfluoro-n-butanoic acid (PFBA)	375-22-4	PFAS by ID SOP	66	3.7	0.94	ng/L	1
Perfluoro-n-decanoic acid (PFDA)	335-76-2	PFAS by ID SOP	ND	3.7	0.94	ng/L	1
Perfluoro-n-dodecanoic acid (PFDoA)	307-55-1	PFAS by ID SOP	ND	3.7	0.94	ng/L	1
Perfluoro-n-heptanoic acid (PFHpA)	375-85-9	PFAS by ID SOP	ND	3.7	0.94	ng/L	1
Perfluoro-n-hexadecanoic acid (PFHxDA)	67905-19-5	PFAS by ID SOP	ND	7.5	1.9	ng/L	1
Perfluoro-n-hexanoic acid (PFHxA)	307-24-4	PFAS by ID SOP	0.95 J	3.7	0.94	ng/L	1
Perfluoro-n-nonanoic acid (PFNA)	375-95-1	PFAS by ID SOP	ND	3.7	0.94	ng/L	1
Perfluoro-n-octadecanoic acid (PFODA)	16517-11-6	PFAS by ID SOP	ND	7.5	1.9	ng/L	1
Perfluoro-n-octanoic acid (PFOA)	335-67-1	PFAS by ID SOP	13	3.7	0.94	ng/L	1
Perfluoro-n-pentanoic acid (PFPeA)	2706-90-3	PFAS by ID SOP	ND	3.7	0.94	ng/L	1
Perfluoro-n-tetradecanoic acid (PFTeDA)	376-06-7	PFAS by ID SOP	ND	3.7	0.94	ng/L	1
Perfluoro-n-tridecanoic acid (PFTrDA)	72629-94-8	PFAS by ID SOP	ND	3.7	0.94	ng/L	1
Perfluoro-n-undecanoic acid (PFUdA)	2058-94-8	PFAS by ID SOP	ND	3.7	0.94	ng/L	1
Perfluorooctanesulfonic acid (PFOS)	1763-23-1	PFAS by ID SOP	13	3.7	0.94	ng/L	1
R	un 1 Acce	eptance					
Surrogate Q % Re	covery L	imits					
13C2_4:2F1S	111 2	5-150					
1302_0:2F15	05 2	5-15U					
1302_8:2F13	<b>4</b> 5 2	5-15U					
	94 2	5-150					
	92 2 90 0	5-15U					
I3U2_PFTEDA	89 2	UCI-C					
LOQ = Limit of Quantitation B = Detected in the method black	E = Quantitation	n of compound exceeded the a	calibration range	DL = Detection Lin	nit		
ND = Not detected at or above the DL N = Recovery is out of criteria	P = The RPD b	etween two GC columns exce	eds 40%	J = Estimated resu	ult < LOQ and <u>&gt;</u> [	DL	
H = Out of holding time W = Reported on wet weight basis							

Client: Pace Analytical Services, LLC	
Description: 385-0	
Date Sampled:11/03/2020 1400	Project Name: LACROSSE WELL #23 & 24
Date Received: 11/06/2020	Project Number: 40217713

Laboratory ID: VK08043-027

Matrix: Aqueous

Surrogate	Run 1 A	cceptance
	Q % Recovery	
13C3_PEBS	94	25-150
13C3_PFHxS	98	25-150
13C3-HFPO-DA	98	25-150
13C4_PFBA	99	25-150
13C4_PFHpA	98	25-150
13C5_PFHxA	103	25-150
13C5_PFPeA	103	25-150
13C6_PFDA	92	25-150
13C7_PFUdA	91	25-150
13C8_PFOA	101	25-150
13C8 PFOS	87	25-150
13C8 PFOSA	101	10-150
13C9 PENA	98	25-150
d-EtEOSA	96	10-150
d5-EtEOSAA	92	25-150
d9-EtEOSE	88	10-150
	05	10 150
	90	10-150
	93	25-150
d7-MeFOSE	89	10-150

LOQ = Limit of QuantitationB = Detected in the method blankE = Quantitation of compound exceeded the calibration rangeDL = Detection LimitND = Not detected at or above the DLN = Recovery is out of criteriaP = The RPD between two GC columns exceeds 40%J = Estimated result < LOQ and ≥ DL</td>H = Out of holding timeW = Reported on wet weight basis



#### ANALYTICAL RESULTS

#### Project: LACROSSE WELL #23 & 24

Pace Project No.: 40217713

Sample: 385-0	Lab ID:	40217713028	Collected: 11/03/20 14:05 Received: 11/04/20 11:10 Matrix: Water						
Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
537.1 PFAS Compounds, Water	Analytical	Method: EPA 5	37.1 Prepa	aration Meth	nod: EP	A 537.1			
	Pace Anal	ytical Services	- Ormond E	Beach					
11CI-PF3OUdS	<0.0015	ug/L	0.0018	0.0015	1	11/09/20 10:05	11/12/20 19:04	763051-92-9	1q
9CI-PF3ONS	<0.0011	ug/L	0.0018	0.0011	1	11/09/20 10:05	11/12/20 19:04	756426-58-1	1q
ADONA	<0.00068	ug/L	0.0018	0.00068	1	11/09/20 10:05	11/12/20 19:04	919005-14-4	1q
HFPO-DA	<0.0015	ug/L	0.0018	0.0015	1	11/09/20 10:05	11/12/20 19:04	13252-13-6	1q
NEtFOSAA	<0.00088	ug/L	0.0018	0.00088	1	11/09/20 10:05	11/12/20 19:04	2991-50-6	1q
NMeFOSAA	<0.0015	ug/L	0.0018	0.0015	1	11/09/20 10:05	11/12/20 19:04	2355-31-9	1q
Perfluorobutanesulfonic acid	0.0037	ug/L	0.0018	0.00063	1	11/09/20 10:05	11/12/20 19:04	375-73-5	1q
Perfluorodecanoic acid	<0.0018	ug/L	0.0018	0.0018	1	11/09/20 10:05	11/12/20 19:04	335-76-2	1q
Perfluorohexanoic acid	<0.0012	ug/L	0.0018	0.0012	1	11/09/20 10:05	11/12/20 19:04	307-24-4	1q
Perfluorododecanoic acid	<0.0014	ug/L	0.0018	0.0014	1	11/09/20 10:05	11/12/20 19:04	307-55-1	1q
Perfluoroheptanoic acid	<0.00095	ug/L	0.0018	0.00095	1	11/09/20 10:05	11/12/20 19:04	375-85-9	1q
Perfluorohexanesulfonic acid	0.0068	ug/L	0.0018	0.00069	1	11/09/20 10:05	11/12/20 19:04	355-46-4	1q
Perfluorononanoic acid	<0.0018	ug/L	0.0018	0.0018	1	11/09/20 10:05	11/12/20 19:04	375-95-1	1q
Perfluorooctanesulfonic acid	0.0098	ug/L	0.0018	0.0011	1	11/09/20 10:05	11/12/20 19:04	1763-23-1	1q
Perfluorooctanoic acid	0.0099	ug/L	0.0018	0.00083	1	11/09/20 10:05	11/12/20 19:04	335-67-1	1q
Perfluorotetradecanoic acid	<0.0018	ug/L	0.0018	0.0018	1	11/09/20 10:05	11/12/20 19:04	376-06-7	1q
Perfluorotridecanoic acid	<0.0016	ug/L	0.0018	0.0016	1	11/09/20 10:05	11/12/20 19:04	72629-94-8	1q
Perfluoroundecanoic acid	<0.0018	ug/L	0.0018	0.0018	1	11/09/20 10:05	11/12/20 19:04	2058-94-8	1q
Surrogates									
13C2-PFDA (S)	118	%	70-130		1	11/09/20 10:05	11/12/20 19:04		
13C2-PFHxA (S)	113	%	70-130		1	11/09/20 10:05	11/12/20 19:04		
NEtFOSAA-d5 (S)	103	%	70-130		1	11/09/20 10:05	11/12/20 19:04		
HFPO-DAS (S)	114	%	70-130		1	11/09/20 10:05	11/12/20 19:04		

#### **REPORT OF LABORATORY ANALYSIS**

## BOTTLED WATER ACKNOWLEDGEMENT

2539 1st Avenue West, La Crosse, WI 54603

If you desire to accept the bottled water delivery, please complete and sign this form and return it to The OS Group at <u>PFAS@TheOSgrp.com</u> or mail to 444 21<sup>st</sup> St. S, La Crosse, WI 54601. You may also complete this form electronically on line at <u>www.cityoflacrosse.org/bottledwater</u>. Call 608-668-2718 with any question you may have.

As pre-caution for the protection of human health, the City of La Crosse (The City) will provide, on a temporary basis, bottled water for drinking, cooking and toothbrushing purposes at the above referenced address. The water will be delivered to your home or business by a commercial water delivery service. At the City's cost, a dispenser / cooler and regular deliveries of 5-gallon containers of water will be provided. The City reserves the right to dictate the conditions of delivery, such as minimum and maximum number of containers per delivery, frequency and timing of deliveries. The City reserves the right to periodically review whether The City should continue to provide bottled water, considering factors such as State and Federal standards and guidance, evolving knowledge and understanding of the sources, cause and responsibility for the contamination, new or reinterpreted test results, and the availability of more permanent or costeffective sources of water for the above purposes. The City of La Crosse makes no warranty or representation regarding the suitability of the bottled water beyond those made by the commercial water delivery service.

All reusable or returnable equipment and supplies, such as the containers and cooler/dispenser, are the property of the commercial water delivery service or the City of La Crosse. By signing below, the Occupant of the above referenced property acknowledges that all reusable or returnable equipment and supplies shall be returned to the commercial water delivery service or the City of La Crosse upon request. The Occupant agrees to provide reasonable access for delivery of bottled water and pick up of reusable or returnable equipment and supplies. Occupant(s) acknowledges that they may be required to sign an agreement with the commercial water delivery service as a condition of receiving bottled water.

Check ownership:

\_\_\_\_\_ Owner-Occupant Occupant Only

Number of Occupants: \_\_\_\_\_

Signed: I	Dated:
-----------	--------

Printed Name: \_\_\_\_\_



444 21st Street South · La Crosse, Wisconsin · 54601

December 1, 2020

PO BOX 2896 La Crosse, WI 54602-2896

Subject: Private Well Sampling Results 2555 1st Avenue West, La Crosse, WI 54603 Tax parcel # 4-389-0 Sample ID # 389-0-A

Dear

We have received and reviewed the test results for the sample collected on November 2, 2020 at the above address. Some PFAS compounds were found at levels <u>above</u> the Department of Health Services (DHS) levels recommended for protecting health. These levels are called the "Recommended Public Health Standard" in the table below. The levels found in your well are called the "Sample Result" in the table below.

Because some of the levels are above the recommended Public Health Standard, the City is offering to provide bottled water delivered to your home for drinking, cooking, and brushing your teeth. There will be no cost to you for the bottled water. Please complete the attached form and mail it to The OS Group to make arrangements for having a water dispenser and bottles delivered to your home. Call 608-668-2718 or email <u>PFAS@theOSgrp.com</u>. You may also complete this form on line at www.cityoflacrosse.org/bottledwater

The following table summarizes the test results from the sample. **Bolded results** are above a current recommended level intended to protect your health according to the Department of Health Services (DHS).

Private Well Sampling Results for 2555 1st Avenue West, La Crosse, WI 54603 Tax Parcel # 4-389-0 Sample ID # 389-0-A December 1, 2020

Compound	Sample Result (unit)	Recomm Public H Standard	nended Health I (unit <sup>e</sup> )	
N-Ethyl Perfluorooctane sulfonamide (NEtFOSA) CAS # 4151-50-2	Not Detected	20 ppt <sup>a,b</sup>	) ppt unds I 6	
N-Ethyl perfluorooctane sulfonamidoacetic acid (NEtFOSAA) CAS # 2991-50-6	Not Detected	20 ppt <sup>a,b</sup>	it is 2C ompo <i>il</i> of al	
N-Ethyl perfluorooctane sulfonamidoethanol (NEtFOSE) CAS # 1691-99-2	Not Detected	20 ppt <sup>a,b</sup>	ed lim ese 6 c ed toto	
Perfluorooctane sulfonamide (FOSA) CAS # 754-91-6	Not Detected	20 ppt <sup>a,b</sup>	mend of the mbine	
Perfluorooctanoic acid (PFOA) CAS # 335-67-1	3.5 ppt	recom 1y <i>one</i> the <i>cc</i>		
Perfluorooctanesulfonic acid (PFOS) CAS # 1763-23-1	18 ppt	20 ppt <sup>a,b</sup>	The for al or	
Hexafluoropropylene oxide dimer acid (HPFO-DA; GenX) CAS # 13252-13-6	Not Detected		300 ppt <sup>a</sup>	
Perfluorobutanesulfonic acid (PFBS) CAS # 375-73-5	12 ppt	450	,000 ppt <sup>a</sup>	
Perfluorohexanesulfonic acid (PFHxS) CAS # 355-46-4	14 ppt		40 ppt <sup>a</sup>	
Perfluorobutanoic acid (PFBA) CAS # 375-22-4	110 ppt	10	,000 ppt <sup>a</sup>	
Perfluorodecanoic acid (PFDA) CAS # 335-76-2	Not Detected	300 ppt <sup>a</sup>		
Perfluorododecanoic acid (PFDoA) CAS # 307-55-1	Not Detected		500 ppt <sup>a</sup>	
Perfluorohexanoic acid (PFHxA) CAS # 307-24-4	1.2 ppt	150	,000 ppt <sup>a</sup>	
Perfluorononanoic acid (PFNA) CAS # 375-95-1	Not Detected		30 ppt <sup>a</sup>	
Perfluorotetradecanoic acid (PFTeA) CAS # 376-06-7	Not Detected	10	,000 ppt <sup>a</sup>	
Perfluoroundecanoic acid (PFUnA) CAS # 2058-94-8	Not Detected	3	,000 ppt <sup>a</sup>	
4,8-Dioxa-3H-perfluorononanoic acid (DONA) CAS # 919005-14-4	Not Detected	3	,000 ppt <sup>a</sup>	

# Sample Results

Private Well Sampling Results for 2555 1st Avenue West, La Crosse, WI 54603 Tax Parcel # 4-389-0 Sample ID # 389-0-A December 1, 2020

Perfluorooctadecanoic acid (PFODA) CAS # 16517-11-6	Not Detected	400,000 ppt <sup>a</sup>					
Perfluoro-1-heptanesulfonic acid (PFHpS) CAS # 375-92-8	0.96 ppt	None Established <sup>c</sup>					
Perfluoro-1-pentanesulfonic acid (PFPeS) CAS # 2706-91-4	7.9 ppt	None Established <sup>c</sup>					
<ul> <li><sup>a</sup> Public health enforcement standard (ES) recommended by DHS.</li> <li><sup>b</sup> DHS recommends a combined enforcement standard of 20 ng/L and combined preventive action limit of 2 ng/L for FOSA, NEt-FOSE, NEt-FOSA, NetFOSAA, PFOS, and PFOA.</li> <li><sup>c</sup> A current standard is not available; the compound is currently under review by DHS for potential public health standard recommendation.</li> <li><sup>d</sup> Public health enforcement standard (ES) in NR 140, Wisconsin Administrative Code.</li> </ul>							

<sup>BL</sup> Detected in the method blank. Possible lab contaminant.

As required by law, we will be submitting these results to the Department of Natural Resources (DNR). The DNR may consult with the Department of Health Services (DHS) about these test results. DHS may review all PFAS tests and follow-up with you directly if any actions are recommended to protect your health.

Thank you for your patience and assistance with our investigation. We will provide updates on the project at <u>https://www.cityoflacrosse.org/wells</u> as our work continues. If you have any questions, please call us at (608) 668-2718 or email us at <u>PFAS@theOSgrp.com</u>.

You can also contact the DNR and DHS with questions about PFAS or the water sample results at the numbers provided below.

Questions about		<u>Contact</u>	<u>Phone</u>	E-mail Address
Soil & Groundwater Testing, Clean Up	DNR	David Rozeboom	715-215-2078	David.Rozeboom@wisconsin.gov
Drinking Water or Private wells	DNR	Kyle Burton	920-360-2112	kyle.burton@wisconsin.gov
Health Concerns	DHS	Curtis Hedman	608-266-6677	Curtis.Hedman@dhs.wisconsin.gov

On behalf of The City of La Crosse *The OS Group, LLC* 

Attachment: Lab report for your well Bottled Water Acknowledgement

Client: Pace Analytical Services, LLC				Laboratory I	D: VK08043-0	010	
Description: 389-0-A				Matrix	: Aqueous		
Date Sampled:11/02/2020 1400	Proiect Nam	e: LACROSSE WELL #	#23 & 24				
Date Received: 11/06/2020	oject Numbe	ar: 10217713	20 4 2 1				
Date Received. 11/00/2020		1.40217713					
RunPrep MethodAnalytical MethodI1SOP SPEPFAS by ID SOP	Dilution A 1 11	nalysis Date Analyst /17/2020 1813 MMM	Prep Date 11/16/2020	Batch Batch 1125 73619			
Parameter	CA: Numbe	S Analytical r Method	Result Q	LOQ	DL	Units	Run
9-chlorohexadecafluoro-3-oxanone-1-sulfonic acid (9CI-PF3ONS)	756426-58	-1 PFAS by ID SOP	ND	7.1	1.8	ng/L	1
11-chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11CI-PF3	) 763051-92	-9 PFAS by ID SOP	ND	7.1	1.8	ng/L	1
1H, 1H, 2H, 2H-perfluorodecane sulfonic acid (8:2 FTS)	39108-34	-4 PFAS by ID SOP	ND	7.1	1.8	ng/L	1
1H, 1H, 2H, 2H-perfluorooctane sulfonic acid (6:2 FTS)	27619-97	-2 PFAS by ID SOP	ND	7.1	1.8	ng/L	1
1H,1H,2H,2H-perfluorododecane sulfonic acid (10:2 FTS)	120226-60	-0 PFAS by ID SOP	ND	7.1	1.8	ng/L	1
1H,1H,2H,2H-perfluorohexane sulfonic acid (4:2 FTS)	757124-72	-4 PFAS by ID SOP	ND	7.1	1.8	ng/L	1
Hexafluoropropylene oxide dimer acid (GenX)	13252-13	-6 PFAS by ID SOP	ND	7.1	1.8	ng/L	1
4,8-dioxa-3H-perfluorononanoic acid (ADONA)	919005-14	-4 PFAS by ID SOP	ND	7.1	1.8	ng/L	1
N-ethylperfluoro-1-octanesulfonamide (EtFOSA)	4151-50-	2 PFAS by ID SOP	ND	7.1	1.8	ng/L	1
N-ethylperfluoro-1-octanesulfonamidoacetic acid (EtFOSAA)	2991-50-	6 PFAS by ID SOP	ND	7.1	1.8	ng/L	1
2-N-ethylperfluoro-1-octanesulfonamido-ethanol (EtFOSE)	1691-99-	2 PFAS by ID SOP	ND	7.1	1.8	ng/L	1
N-methylperfluoro-1-octanesulfonamide (MeFOSA)	31506-32	-8 PFAS by ID SOP	ND	14	3.5	ng/L	1
N-methylperfluoro-1-octanesulfonamidoacetic acid (MeFOSAA)	2355-31-	9 PFAS by ID SOP	ND	7.1	1.8	ng/L	1
2-N-methylperfluoro-1-octanesulfonamido-ethanol (MeFOSE)	24448-09	-7 PFAS by ID SOP	ND	7.1	1.8	ng/L	1
Perfluoro-1-butanesulfonic acid (PFBS)	375-73-	5 PFAS by ID SOP	12	3.5	0.89	ng/L	1
Perfluoro-1-decanesulfonic acid (PFDS)	335-77-	3 PFAS by ID SOP	ND	3.5	0.89	ng/L	1
Perfluoro-1-heptanesulfonic acid (PFHpS)	375-92-	8 PFAS by ID SOP	0.96 J	3.5	0.89	ng/L	1
Perfluoro-1-nonanesulfonic acid (PFNS)	68259-12	-1 PFAS by ID SOP	ND	3.5	0.89	ng/L	1
Perfluoro-1-octanesulfonamide (PFOSA)	754-91-	6 PFAS by ID SOP	ND	3.5	0.89	ng/L	1
Perfluoro-1-pentanesulfonic acid (PFPeS)	2706-91-	4 PFAS by ID SOP	7.9	3.5	0.89	ng/L	1
Perfluorododecanesulfonic acid (PFDOS)	79780-39	-5 PFAS by ID SOP	ND	7.1	1.8	ng/L	1
Perfluorohexanesulfonic acid (PFHxS)	355-46-	4 PFAS by ID SOP	14	3.5	0.89	ng/L	1
Perfluoro-n-butanoic acid (PFBA)	3/5-22-	4 PEAS by ID SOP	110	3.5	0.89	ng/L	1
Perfluoro-n-decanoic acid (PFDA)	335-76-	2 PFAS by ID SOP	ND	3.5	0.89	ng/L	1
Periluoro-n-dodecanoic acid (PFDOA)	307-55-	PFAS by ID SOP	ND	3.5	0.89	ng/L	1
Periluoro-n-neptanoic acid (PEHypA)	3/3-83-	PFAS by ID SOP	ND	3.5	0.89	ng/L	1
Perfluoro n boxanoic acid (PEHxA)	0/905-19			7.1	1.8	ng/L	1
Periluoro-n-nexanoic acid (PENA)	307-24-	1 DEAS by ID SOP	I.2 J	3.5	0.89	ng/L	1
Periluoro-n-nonanoic acid (PENA)	3/0-90-	A DEAS by ID SOP	ND	3.5	0.89	ng/L	1
Perfluoro-n-octanoic acid (PFODA)	335-67-	1 PEAS by ID SOP	3.5	7.1	1.8	ng/L	1
Perfluoro-n-nentanoic acid (PEPeA)	2706-90-	3 PEAS by ID SOP	ND	3.5	0.09	ng/L	1
Perfluoro-n-tetradecanoic acid (PETeDA)	376-06-	7 PEAS by ID SOP	ND	3.5	0.09	ng/L	1
Perfluoro-n-tridecanoic acid (PETrDA)	72629-94	-8 PFAS by ID SOP	ND	3.5	0.09	ng/L	1
Perfluoro-n-undecanoic acid (PFUdA)	2058-94-	8 PFAS by ID SOP	ND	3.5	0.09	ng/L	1
Perfluorooctanesulfonic acid (PFOS)	1763-23-	1 PFAS by ID SOP	18	3.5	0.89	na/L	1
R	un 1 Acc	ceptance			0.07	5	
Surrogate Q % Re	ecovery	Limits					
13C2_4:2FTS	103	25-150					
13C2_6:2F1S	100	25-150					
1302_8:2F15	83	25-150					
13C2_PFD0A	94 102	25-150					
13C2_FTHDA 13C2_PFTeDA	90	25-150					
LOQ = Limit of Quantitation B = Detected in the method blank	E = Quantitati	on of compound exceeded the	calibration range	DL = Detection Lim	hit		
ND = Not detected at or above the DL N = Recovery is out of criteria	P = The RPD	between two GC columns exce	eds 40%	J = Estimated resu	 It < LOQ and ≥ D	L	
H = Out of holding time W = Reported on wet weight basis							

Client: Pace Analytical Services, LLC		Laboratory ID: VK08043-010
Description: 389-0-A		Matrix: Aqueous
Date Sampled:11/02/2020 1400	Project Name: LACROSSE WELL #23 & 24	
Date Received: 11/06/2020	Project Number: 40217713	
	Run 1 Acceptance	

Surrogate	Q % Recovery	Limits
13C3_PFBS	93	25-150
13C3_PFHxS	87	25-150
13C3-HFPO-DA	115	25-150
13C4_PFBA	95	25-150
13C4_PFHpA	103	25-150
13C5_PFHxA	106	25-150
13C5_PFPeA	99	25-150
13C6_PFDA	87	25-150
13C7_PFUdA	97	25-150
13C8_PFOA	99	25-150
13C8_PFOS	89	25-150
13C8_PFOSA	102	10-150
13C9_PFNA	95	25-150
d-EtFOSA	82	10-150
d5-EtFOSAA	94	25-150
d9-EtFOSE	88	10-150
d-MeFOSA	91	10-150
d3-MeFOSAA	97	25-150
d7-MeFOSE	88	10-150

LOQ = Limit of Quantitation	B = Detected in the method blank	E = Quantitation of compound exceeded the calibration range	DL = Detection Limit
ND = Not detected at or above the DL	N = Recovery is out of criteria	P = The RPD between two GC columns exceeds 40%	J = Estimated result < LOQ and $\ge$ DL
H = Out of holding time	W = Reported on wet weight basis		

## BOTTLED WATER ACKNOWLEDGEMENT

2555 1st Avenue West, La Crosse, WI 54603

If you desire to accept the bottled water delivery, please complete and sign this form and return it to The OS Group at <u>PFAS@TheOSgrp.com</u> or mail to 444 21<sup>st</sup> St. S, La Crosse, WI 54601. You may also complete this form electronically on line at <u>www.cityoflacrosse.org/bottledwater</u>. Call 608-668-2718 with any question you may have.

As pre-caution for the protection of human health, the City of La Crosse (The City) will provide, on a temporary basis, bottled water for drinking, cooking and toothbrushing purposes at the above referenced address. The water will be delivered to your home or business by a commercial water delivery service. At the City's cost, a dispenser / cooler and regular deliveries of 5-gallon containers of water will be provided. The City reserves the right to dictate the conditions of delivery, such as minimum and maximum number of containers per delivery, frequency and timing of deliveries. The City reserves the right to periodically review whether The City should continue to provide bottled water, considering factors such as State and Federal standards and guidance, evolving knowledge and understanding of the sources, cause and responsibility for the contamination, new or reinterpreted test results, and the availability of more permanent or costeffective sources of water for the above purposes. The City of La Crosse makes no warranty or representation regarding the suitability of the bottled water beyond those made by the commercial water delivery service.

All reusable or returnable equipment and supplies, such as the containers and cooler/dispenser, are the property of the commercial water delivery service or the City of La Crosse. By signing below, the Occupant of the above referenced property acknowledges that all reusable or returnable equipment and supplies shall be returned to the commercial water delivery service or the City of La Crosse upon request. The Occupant agrees to provide reasonable access for delivery of bottled water and pick up of reusable or returnable equipment and supplies. Occupant(s) acknowledges that they may be required to sign an agreement with the commercial water delivery service as a condition of receiving bottled water.

Check ownership:

\_\_\_\_\_ Owner-Occupant Occupant Only

Number of Occupants: \_\_\_\_\_

Signed: I	Dated:
-----------	--------

Printed Name: \_\_\_\_\_



444 21st Street South · La Crosse, Wisconsin · 54601

December 1, 2020

2555 1st Avenue West La Crosse, WI 54603

Subject: Private Well Sampling Results 2555 1st Avenue West, La Crosse, WI 54603 Tax parcel # 4-389-0 Sample ID # 389-0-A

#### Dear :

We have received and reviewed the test results for the sample collected on November 2, 2020 at the above address. Some PFAS compounds were found at levels <u>above</u> the Department of Health Services (DHS) levels recommended for protecting health. These levels are called the "Recommended Public Health Standard" in the table below. The levels found in your well are called the "Sample Result" in the table below.

Because some of the levels are above the recommended Public Health Standard, the City is offering to provide bottled water delivered to your home for drinking, cooking, and brushing your teeth. There will be no cost to you for the bottled water. Please complete the attached form and mail it to The OS Group to make arrangements for having a water dispenser and bottles delivered to your home. Call 608-668-2718 or email <u>PFAS@theOSgrp.com</u>. You may also complete this form on line at www.cityoflacrosse.org/bottledwater

The following table summarizes the test results from the sample. **Bolded results** are above a current recommended level intended to protect your health according to the Department of Health Services (DHS).

Private Well Sampling Results for 2555 1st Avenue West, La Crosse, WI 54603 Tax Parcel # 4-389-0 Sample ID # 389-0-A December 1, 2020

Compound	Sample Result (unit)	Recomn Public I Standard	nended Health I (unit <sup>e</sup> )
N-Ethyl Perfluorooctane sulfonamide (NEtFOSA) CAS # 4151-50-2	Not Detected	20 ppt <sup>a,b</sup>	) ppt unds I 6
N-Ethyl perfluorooctane sulfonamidoacetic acid (NEtFOSAA) CAS # 2991-50-6	Not Detected	20 ppt <sup>a,b</sup>	it is 20 compo <i>il</i> of al
N-Ethyl perfluorooctane sulfonamidoethanol (NEtFOSE) CAS # 1691-99-2	Not Detected	20 ppt <sup>a,b</sup>	ed lim ese 6 c ed toto
Perfluorooctane sulfonamide (FOSA) CAS # 754-91-6	Not Detected	20 ppt <sup>a,b</sup>	mende of the mbine
Perfluorooctanoic acid (PFOA) CAS # 335-67-1	3.5 ppt	20 ppt <sup>a,b</sup>	recom 1y <i>one</i> the <i>cc</i>
Perfluorooctanesulfonic acid (PFOS) CAS # 1763-23-1	18 ppt	20 ppt <sup>a,b</sup>	The for al or
Hexafluoropropylene oxide dimer acid (HPFO-DA; GenX) CAS # 13252-13-6	Not Detected		300 ppt <sup>a</sup>
Perfluorobutanesulfonic acid (PFBS) CAS # 375-73-5	12 ppt	450	,000 ppt <sup>a</sup>
Perfluorohexanesulfonic acid (PFHxS) CAS # 355-46-4	14 ppt		40 ppt <sup>a</sup>
Perfluorobutanoic acid (PFBA) CAS # 375-22-4	110 ppt	10	,000 ppt <sup>a</sup>
Perfluorodecanoic acid (PFDA) CAS # 335-76-2	Not Detected		300 ppt <sup>a</sup>
Perfluorododecanoic acid (PFDoA) CAS # 307-55-1	Not Detected		500 ppt <sup>a</sup>
Perfluorohexanoic acid (PFHxA) CAS # 307-24-4	1.2 ppt	150	,000 ppt <sup>a</sup>
Perfluorononanoic acid (PFNA) CAS # 375-95-1	Not Detected		30 ppt <sup>a</sup>
Perfluorotetradecanoic acid (PFTeA) CAS # 376-06-7	Not Detected	10	,000 ppt <sup>a</sup>
Perfluoroundecanoic acid (PFUnA) CAS # 2058-94-8	Not Detected	3	,000 ppt <sup>a</sup>
4,8-Dioxa-3H-perfluorononanoic acid (DONA) CAS # 919005-14-4	Not Detected	3	,000 ppt <sup>a</sup>

# Sample Results

Private Well Sampling Results for 2555 1st Avenue West, La Crosse, WI 54603 Tax Parcel # 4-389-0 Sample ID # 389-0-A December 1, 2020

Perfluorooctadecanoic acid (PFODA) CAS # 16517-11-6	Not Detected	400,000 ppt <sup>a</sup>	
Perfluoro-1-heptanesulfonic acid (PFHpS) CAS # 375-92-8	0.96 ppt	None Established <sup>c</sup>	
Perfluoro-1-pentanesulfonic acid (PFPeS) CAS # 2706-91-4	7.9 ppt	None Established <sup>c</sup>	
<ul> <li><sup>a</sup> Public health enforcement standard (ES) recommended by DHS.</li> <li><sup>b</sup> DHS recommends a combined enforcement standard of 20 ng/L and combined preventive action limit of 2 ng/L for FOSA, NEt-FOSE, NEt-FOSA, NetFOSAA, PFOS, and PFOA.</li> <li><sup>c</sup> A current standard is not available; the compound is currently under review by DHS for potential public health standard recommendation.</li> <li><sup>d</sup> Public health enforcement standard (ES) in NR 140, Wisconsin Administrative Code.</li> </ul>			

<sup>e</sup> Units: Parts per trillion (ppt) = nanograms of substance per liter of water (ng/L)

<sup>BL</sup> Detected in the method blank. Possible lab contaminant.

As required by law, we will be submitting these results to the Department of Natural Resources (DNR). The DNR may consult with the Department of Health Services (DHS) about these test results. DHS may review all PFAS tests and follow-up with you directly if any actions are recommended to protect your health.

Thank you for your patience and assistance with our investigation. We will provide updates on the project at <u>https://www.cityoflacrosse.org/wells</u> as our work continues. If you have any questions, please call us at (608) 668-2718 or email us at <u>PFAS@theOSgrp.com</u>.

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On behalf of The City of La Crosse *The OS Group, LLC* 

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Description: 389-0-A				Matrix	: Aqueous		
Date Sampled:11/02/2020 1400	Proiect Nam	e: LACROSSE WELL #	#23 & 24				
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RunPrep MethodAnalytical MethodI1SOP SPEPFAS by ID SOP	Dilution A 1 11	nalysis Date Analyst /17/2020 1813 MMM	Prep Date 11/16/2020	Batch Batch 1125 73619			
Parameter	CA: Numbe	S Analytical r Method	Result Q	LOQ	DL	Units	Run
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N-methylperfluoro-1-octanesulfonamide (MeFOSA)	31506-32	-8 PFAS by ID SOP	ND	14	3.5	ng/L	1
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Description: 389-0-A		Matrix: Aqueous
Date Sampled:11/02/2020 1400	Project Name: LACROSSE WELL #23 & 24	
Date Received: 11/06/2020	Project Number: 40217713	
	Run 1 Acceptance	

Surrogate	Q % Recovery	Limits
13C3_PFBS	93	25-150
13C3_PFHxS	87	25-150
13C3-HFPO-DA	115	25-150
13C4_PFBA	95	25-150
13C4_PFHpA	103	25-150
13C5_PFHxA	106	25-150
13C5_PFPeA	99	25-150
13C6_PFDA	87	25-150
13C7_PFUdA	97	25-150
13C8_PFOA	99	25-150
13C8_PFOS	89	25-150
13C8_PFOSA	102	10-150
13C9_PFNA	95	25-150
d-EtFOSA	82	10-150
d5-EtFOSAA	94	25-150
d9-EtFOSE	88	10-150
d-MeFOSA	91	10-150
d3-MeFOSAA	97	25-150
d7-MeFOSE	88	10-150

LOQ = Limit of Quantitation	B = Detected in the method blank	E = Quantitation of compound exceeded the calibration range	DL = Detection Limit
ND = Not detected at or above the DL	N = Recovery is out of criteria	P = The RPD between two GC columns exceeds 40%	J = Estimated result < LOQ and $\ge$ DL
H = Out of holding time	W = Reported on wet weight basis		

## BOTTLED WATER ACKNOWLEDGEMENT

2555 1st Avenue West, La Crosse, WI 54603

If you desire to accept the bottled water delivery, please complete and sign this form and return it to The OS Group at <u>PFAS@TheOSgrp.com</u> or mail to 444 21<sup>st</sup> St. S, La Crosse, WI 54601. You may also complete this form electronically on line at <u>www.cityoflacrosse.org/bottledwater</u>. Call 608-668-2718 with any question you may have.

As pre-caution for the protection of human health, the City of La Crosse (The City) will provide, on a temporary basis, bottled water for drinking, cooking and toothbrushing purposes at the above referenced address. The water will be delivered to your home or business by a commercial water delivery service. At the City's cost, a dispenser / cooler and regular deliveries of 5-gallon containers of water will be provided. The City reserves the right to dictate the conditions of delivery, such as minimum and maximum number of containers per delivery, frequency and timing of deliveries. The City reserves the right to periodically review whether The City should continue to provide bottled water, considering factors such as State and Federal standards and guidance, evolving knowledge and understanding of the sources, cause and responsibility for the contamination, new or reinterpreted test results, and the availability of more permanent or costeffective sources of water for the above purposes. The City of La Crosse makes no warranty or representation regarding the suitability of the bottled water beyond those made by the commercial water delivery service.

All reusable or returnable equipment and supplies, such as the containers and cooler/dispenser, are the property of the commercial water delivery service or the City of La Crosse. By signing below, the Occupant of the above referenced property acknowledges that all reusable or returnable equipment and supplies shall be returned to the commercial water delivery service or the City of La Crosse upon request. The Occupant agrees to provide reasonable access for delivery of bottled water and pick up of reusable or returnable equipment and supplies. Occupant(s) acknowledges that they may be required to sign an agreement with the commercial water delivery service as a condition of receiving bottled water.

Check ownership:

\_\_\_\_\_ Owner-Occupant Occupant Only

Number of Occupants: \_\_\_\_\_

Signed: I	Dated:
-----------	--------

Printed Name: \_\_\_\_\_



444 21st Street South · La Crosse, Wisconsin · 54601

December 1, 2020

2557 1st Avenue West La Crosse, WI 54603

Subject: Private Well Sampling Results 2557 1st Avenue West, La Crosse, WI 54603 Tax parcel # 4-389-0 Sample ID # 389-0-B

Dear

We have received and reviewed the test results for the sample collected on November 2, 2020 at the above address. Some PFAS compounds were found, but the levels found were **below** the Department of Health Services (DHS) levels recommended for protecting health. These levels are called the "Recommended Public Health Standard" in the table below. The levels found in *your* well are called the "Sample Result" in the table below.

#### Sample Results

Compound	Sample Result (unit)	Recomm Public H Standard	ended ealth (unit <sup>e</sup> )
N-Ethyl Perfluorooctane sulfonamide (NEtFOSA) CAS # 4151-50-2	Not Detected	20 ppt <sup>a,b</sup>	) ppt unds I 6
N-Ethyl perfluorooctane sulfonamidoacetic acid (NEtFOSAA) CAS # 2991-50-6	Not Detected	20 ppt <sup>a,b</sup>	it is 20 ompo <i>I</i> of al
N-Ethyl perfluorooctane sulfonamidoethanol (NEtFOSE) CAS # 1691-99-2	Not Detected	20 ppt <sup>a,b</sup>	ed lim ese 6 c ed toto
Perfluorooctane sulfonamide (FOSA) CAS # 754-91-6	Not Detected	20 ppt <sup>a,b</sup>	mend of the ombine
Perfluorooctanoic acid (PFOA) CAS # 335-67-1	Not Detected	20 ppt <sup>a,b</sup>	recom ny <i>one</i> the <i>c</i> c
Perfluorooctanesulfonic acid (PFOS) CAS # 1763-23-1	15 ppt	20 ppt <sup>a,b</sup>	The for ai or

Private Well Sampling Results for 2557 1st Avenue West, La Crosse, WI 54603 Tax parcel # 4-389-0 Sample ID # 389-0-B December 1, 2020

Compound	Sample Result (unit)	Recommended Public Health Standard (unit <sup>e</sup> )
Hexafluoropropylene oxide dimer acid (HPFO-DA; GenX) CAS # 13252-13-6	Not Detected	300 ppt <sup>a</sup>
Perfluorobutanesulfonic acid (PFBS) CAS # 375-73-5	10 ppt	450,000 ppt <sup>a</sup>
Perfluorohexanesulfonic acid (PFHxS) CAS # 355-46-4	16 ppt	40 ppt <sup>a</sup>
Perfluorobutanoic acid (PFBA) CAS # 375-22-4	130 ppt	10,000 ppt <sup>a</sup>
Perfluorodecanoic acid (PFDA) CAS # 335-76-2	Not Detected	300 ppt <sup>a</sup>
Perfluorododecanoic acid (PFDoA) CAS # 307-55-1	Not Detected	500 ppt <sup>a</sup>
Perfluorohexanoic acid (PFHxA) CAS # 307-24-4	Not Detected	150,000 ppt <sup>a</sup>
Perfluorononanoic acid (PFNA) CAS # 375-95-1	Not Detected	30 ppt <sup>a</sup>
Perfluorotetradecanoic acid (PFTeA) CAS # 376-06-7	Not Detected	10,000 ppt <sup>a</sup>
Perfluoroundecanoic acid (PFUnA) CAS # 2058-94-8	Not Detected	3,000 ppt <sup>a</sup>
4,8-Dioxa-3H-perfluorononanoic acid (DONA) CAS # 919005-14-4	Not Detected	3,000 ppt <sup>a</sup>
Perfluorooctadecanoic acid (PFODA) CAS # 16517-11-6	Not Detected	400,000 ppt <sup>a</sup>
Perfluoro-1-heptanesulfonic acid (PFHpS) CAS # 375-92-8	1.1 ppt	None Established <sup>c</sup>
Perfluoro-1-pentanesulfonic acid (PFPeS) CAS #2706-91-4	7.9 ppt	None Established <sup>c</sup>

<sup>a</sup> Public health enforcement standard (ES) recommended by DHS.

<sup>b</sup> DHS recommends a combined enforcement standard of 20 ng/L and combined preventive action limit of 2 ng/L for FOSA, NEt-FOSA, NetFOSAA, PFOS, and PFOA.

<sup>c</sup> A current standard is not available; the compound is currently under review by DHS for potential public health standard recommendation.

<sup>d</sup> Public health enforcement standard (ES) in NR 140, Wisconsin Administrative Code.

<sup>e</sup> Units: Parts per trillion (ppt) = nanograms of substance per liter of water (ng/L)

<sup>BL</sup> Detected in the method blank. Possible lab contaminant.

Private Well Sampling Results for 2557 1st Avenue West, La Crosse, WI 54603 Tax parcel # 4-389-0 Sample ID # 389-0-B December 1, 2020

As required by law, we will be submitting these results to the Department of Natural Resources (DNR). The DNR may consult with the Department of Health Services (DHS) about these test results. DHS may review all PFAS tests and follow-up with you directly if any actions are recommended to protect your health.

Thank you for your patience and assistance with our investigation. We will provide updates on the project at <u>https://www.cityoflacrosse.org/wells</u> as our work continues. If you have any questions, please call The OS Group at (608) 668-2718 or email them at <u>PFAS@theOSgrp.com</u>.

You can also contact the DNR and DHS with questions about PFAS or the water sample results at the numbers provided below.

Questions about		<u>Contact</u>	<u>Phone</u>	E-mail Address
Soil & Groundwater Testing, Clean Up	DNR	David Rozeboom	715-215-2078	David.Rozeboom@wisconsin.gov
Drinking Water or Private wells	DNR	Kyle Burton	920-360-2112	kyle.burton@wisconsin.gov
Health Concerns	DHS	Curtis Hedman	608-266-6677	Curtis.Hedman@dhs.wisconsin.gov

On behalf of The City of La Crosse *The OS Group, LLC* 

Attachment: Lab report for your well

Client: Pace Analytical Services, LLC				Laboratory II	D: VK08043-0	009	
Description: 389-0-B				Matrix	: Aqueous		
Date Sampled:11/02/2020 1345	Project Name	: LACROSSE WELL #	#23 & 24				
Date Received: 11/06/2020	oiect Number	·· 40217713					
RunPrep MethodAnalytical Method1SOP SPEPFAS by ID SOP	Dilution An 1 11/	alysis Date Analyst 17/2020 1752 MMM	Prep Dat 11/16/2020	e Batch ) 1125 73619			
Parameter	CAS Number	Analytical Method	Result Q	LOQ	DL	Units	Run
9-chlorohexadecafluoro-3-oxanone-1-sulfonic acid (9CI-PF3ONS)	756426-58-1	PFAS by ID SOP	ND	7.0	1.7	ng/L	1
11-chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11CI-PF3	) 763051-92-9	PFAS by ID SOP	ND	7.0	1.7	ng/L	1
1H, 1H, 2H, 2H-perfluorodecane sulfonic acid (8:2 FTS)	39108-34-4	PFAS by ID SOP	ND	7.0	1.7	ng/L	1
1H, 1H, 2H, 2H-perfluorooctane sulfonic acid (6:2 FTS)	27619-97-2	PFAS by ID SOP	ND	7.0	1.7	ng/L	1
1H,1H,2H,2H-perfluorododecane sulfonic acid (10:2 FTS)	120226-60-0	PFAS by ID SOP	ND	7.0	1.7	ng/L	1
1H,1H,2H,2H-perfluorohexane sulfonic acid (4:2 FTS)	757124-72-4	PFAS by ID SOP	ND	7.0	1.7	ng/L	1
Hexafluoropropylene oxide dimer acid (GenX)	13252-13-6	PFAS by ID SOP	ND	7.0	1.7	ng/L	1
4,8-dioxa-3H-perfluorononanoic acid (ADONA)	919005-14-4	PFAS by ID SOP	ND	7.0	1.7	ng/L	1
N-ethylperfluoro-1-octanesulfonamide (EtFOSA)	4151-50-2	PFAS by ID SOP	ND	7.0	1.7	ng/L	1
N-ethylperfluoro-1-octanesulfonamidoacetic acid (EtFOSAA)	2991-50-6	PFAS by ID SOP	ND	7.0	1.7	ng/L	1
2-N-ethylperfluoro-1-octanesulfonamido-ethanol (EtFOSE)	1691-99-2	PFAS by ID SOP	ND	7.0	1.7	ng/L	1
N-methylperfluoro-1-octanesulfonamide (MeFOSA)	31506-32-8	PFAS by ID SOP	ND	14	3.5	ng/L	1
N-methylperfluoro-1-octanesulfonamidoacetic acid (MeFOSAA)	2355-31-9	PFAS by ID SOP	ND	7.0	1.7	ng/L	1
2-N-methylperfluoro-1-octanesulfonamido-ethanol (MeFOSE)	24448-09-7	PFAS by ID SOP	ND	7.0	1.7	ng/L	1
Perfluoro-1-butanesulfonic acid (PFBS)	375-73-5	PFAS by ID SOP	10	3.5	0.87	ng/L	1
Perfluoro-1-decanesulfonic acid (PFDS)	335-77-3	PFAS by ID SOP	ND	3.5	0.87	ng/L	1
Perfluoro-1-heptanesulfonic acid (PFHpS)	375-92-8	PFAS by ID SOP	1.1 J	3.5	0.87	ng/L	1
Perfluoro-1-nonanesulfonic acid (PFNS)	68259-12-1	PFAS by ID SOP	ND	3.5	0.87	ng/L	1
Perfluoro-1-octanesulfonamide (PFOSA)	754-91-6	PFAS by ID SOP	ND	3.5	0.87	ng/L	1
Perfluoro-1-pentanesulfonic acid (PFPeS)	2706-91-4	PFAS by ID SOP	7.9	3.5	0.87	ng/L	1
Perfluorododecanesulfonic acid (PFDOS)	79780-39-5	FAS by ID SOP	ND	7.0	1.7	ng/L	1
Perfluorohexanesulfonic acid (PFHxS)	355-46-4	PFAS by ID SOP	16	3.5	0.87	ng/L	1
Perfluoro-n-butanoic acid (PFBA)	375-22-4	PFAS by ID SOP	130	3.5	0.87	ng/L	1
Perfluoro-n-decanoic acid (PFDA)	335-76-2	PFAS by ID SOP	ND	3.5	0.87	ng/L	1
Perfluoro-n-dodecanoic acid (PFDoA)	307-55-1	PFAS by ID SOP	ND	3.5	0.87	ng/L	1
Perfluoro-n-heptanoic acid (PFHpA)	375-85-9	PFAS by ID SOP	ND	3.5	0.87	ng/L	1
Perfluoro-n-hexadecanoic acid (PFHxDA)	67905-19-5	5 PFAS by ID SOP	ND	7.0	1.7	ng/L	1
Perfluoro-n-hexanoic acid (PFHxA)	307-24-4	PFAS by ID SOP	ND	3.5	0.87	ng/L	1
Perfluoro-n-nonanoic acid (PFNA)	375-95-1	PFAS by ID SOP	ND	3.5	0.87	ng/L	1
Perfluoro-n-octadecanoic acid (PFODA)	16517-11-6	PFAS by ID SOP	ND	7.0	1.7	ng/L	1
Perfluoro-n-octanoic acid (PFOA)	335-67-1	PFAS by ID SOP	ND	3.5	0.87	ng/L	1
Perfluoro-n-pentanoic acid (PFPeA)	2706-90-3	PFAS by ID SOP	ND	3.5	0.87	ng/L	1
Perfluoro-n-tetradecanoic acid (PFTeDA)	376-06-7	PFAS by ID SOP	ND	3.5	0.87	ng/L	1
Perfluoro-n-tridecanoic acid (PF1rDA)	72629-94-8	PFAS by ID SOP	ND	3.5	0.87	ng/L	1
Perfluoro-n-undecanoic acid (PFUdA)	2058-94-8	PFAS by ID SOP	ND	3.5	0.87	ng/L	1
Perfluorooctanesulfonic acid (PFUS)	1/63-23-1	PFAS by ID SOP	15	3.5	0.87	ng/L	1
R Surrogate Q % Re	un 1 Acce ecovery L	eptance imits					
13C2_4:2FTS	96 2	5-150					
13C2_6:2FTS	96 2	5-150					
13C2_8:2FTS	86 2	5-150					
13C2_PFDoA	91 2	5-150					
13C2_PFHxDA	84 2	5-150					
13C2_PFTeDA	83 2	5-150					
	E 0						
LOQ = Limit of Quantilation     B = Detected in the method blank       ND = Not detected at or above the DL     N = Recovery is out of criteria       H = Out of holding time     W = Reported on wet weight basis	E = Quantitation P = The RPD b	n of compound exceeded the o etween two GC columns exce	calibration range eds 40%	DL = Detection Lim J = Estimated resu	hit It < LOQ and $\geq$ D	DL	

Client: Pace Analytical Services, LLC		Laboratory ID: VK08043-009
Description: 389-0-B		Matrix: Aqueous
Date Sampled:11/02/2020 1345	Project Name: LACROSSE WELL #23 & 24	
Date Received: 11/06/2020	Project Number: 40217713	

Surrogate	Run 1 A Q % Recovery	cceptance Limits
13C3_PFBS	91	25-150
13C3_PFHxS	85	25-150
13C3-HFPO-DA	101	25-150
13C4_PFBA	92	25-150
13C4_PFHpA	99	25-150
13C5_PFHxA	96	25-150
13C5_PFPeA	92	25-150
13C6_PFDA	85	25-150
13C7_PFUdA	92	25-150
13C8_PFOA	96	25-150
13C8_PFOS	87	25-150
13C8_PFOSA	95	10-150
13C9_PFNA	94	25-150
d-EtFOSA	80	10-150
d5-EtFOSAA	90	25-150
d9-EtFOSE	91	10-150
d-MeFOSA	84	10-150
d3-MeFOSAA	89	25-150
d7-MeFOSE	86	10-150

LOQ = Limit of Quantitation	B = Detected in the method blank	E = Quantitation of compound exceeded the calibration range	DL = Detection Limit
ND = Not detected at or above the DL	N = Recovery is out of criteria	P = The RPD between two GC columns exceeds 40%	J = Estimated result < LOQ and $\ge$ DL
H = Out of holding time	W = Reported on wet weight basis		



444 21st Street South · La Crosse, Wisconsin · 54601

December 1, 2020

# PO BOX 2896

La Crosse, WI 54602-2896

Subject: Private Well Sampling Results 2557 1st Avenue West, La Crosse, WI 54603 Tax parcel # 4-389-0 Sample ID # 389-0-B

Dear

We have received and reviewed the test results for the sample collected on November 2, 2020 at the above address. Some PFAS compounds were found, but the levels found were **below** the Department of Health Services (DHS) levels recommended for protecting health. These levels are called the "Recommended Public Health Standard" in the table below. The levels found in *your* well are called the "Sample Result" in the table below.

#### Sample Results

Compound	Sample Result (unit)	Recomm Public H Standard	ended ealth (unit <sup>e</sup> )
N-Ethyl Perfluorooctane sulfonamide (NEtFOSA) CAS # 4151-50-2	Not Detected	20 ppt <sup>a,b</sup>	) ppt unds I 6
N-Ethyl perfluorooctane sulfonamidoacetic acid (NEtFOSAA) CAS # 2991-50-6	Not Detected	20 ppt <sup>a,b</sup>	it is 20 ompo <i>il</i> of al
N-Ethyl perfluorooctane sulfonamidoethanol (NEtFOSE) CAS # 1691-99-2	Not Detected	20 ppt <sup>a,b</sup>	ed lim ese 6 c ed toto
Perfluorooctane sulfonamide (FOSA) CAS # 754-91-6	Not Detected	20 ppt <sup>a,b</sup>	mend of the ombine
Perfluorooctanoic acid (PFOA) CAS # 335-67-1	Not Detected	20 ppt <sup>a,b</sup>	recom ny <i>one</i> the <i>cc</i>
Perfluorooctanesulfonic acid (PFOS) CAS # 1763-23-1	15 ppt	20 ppt <sup>a,b</sup>	The for ai or

Private Well Sampling Results for 2557 1st Avenue West, La Crosse, WI 54603 Tax parcel # 4-389-0 Sample ID # 389-0-B December 1, 2020

Compound	Sample Result (unit)	Recommended Public Health Standard (unit <sup>e</sup> )
Hexafluoropropylene oxide dimer acid (HPFO-DA; GenX) CAS # 13252-13-6	Not Detected	300 ppt <sup>a</sup>
Perfluorobutanesulfonic acid (PFBS) CAS # 375-73-5	10 ppt	450,000 ppt <sup>a</sup>
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Perfluorododecanoic acid (PFDoA) CAS # 307-55-1	Not Detected	500 ppt <sup>a</sup>
Perfluorohexanoic acid (PFHxA) CAS # 307-24-4	Not Detected	150,000 ppt <sup>a</sup>
Perfluorononanoic acid (PFNA) CAS # 375-95-1	Not Detected	30 ppt <sup>a</sup>
Perfluorotetradecanoic acid (PFTeA) CAS # 376-06-7	Not Detected	10,000 ppt <sup>a</sup>
Perfluoroundecanoic acid (PFUnA) CAS # 2058-94-8	Not Detected	3,000 ppt <sup>a</sup>
4,8-Dioxa-3H-perfluorononanoic acid (DONA) CAS # 919005-14-4	Not Detected	3,000 ppt <sup>a</sup>
Perfluorooctadecanoic acid (PFODA) CAS # 16517-11-6	Not Detected	400,000 ppt <sup>a</sup>
Perfluoro-1-heptanesulfonic acid (PFHpS) CAS # 375-92-8	1.1 ppt	None Established <sup>c</sup>
Perfluoro-1-pentanesulfonic acid (PFPeS) CAS #2706-91-4	7.9 ppt	None Established <sup>c</sup>

<sup>a</sup> Public health enforcement standard (ES) recommended by DHS.

<sup>b</sup> DHS recommends a combined enforcement standard of 20 ng/L and combined preventive action limit of 2 ng/L for FOSA, NEt-FOSA, NetFOSAA, PFOS, and PFOA.

<sup>c</sup> A current standard is not available; the compound is currently under review by DHS for potential public health standard recommendation.

<sup>d</sup> Public health enforcement standard (ES) in NR 140, Wisconsin Administrative Code.

<sup>e</sup> Units: Parts per trillion (ppt) = nanograms of substance per liter of water (ng/L)

<sup>BL</sup> Detected in the method blank. Possible lab contaminant.

Private Well Sampling Results for 2557 1st Avenue West, La Crosse, WI 54603 Tax parcel # 4-389-0 Sample ID # 389-0-B December 1, 2020

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Health Concerns	DHS	Curtis Hedman	608-266-6677	Curtis.Hedman@dhs.wisconsin.gov

On behalf of The City of La Crosse *The OS Group, LLC* 

Attachment: Lab report for your well
Client: Pace Analytical Services, LLC				Laboratory I	D: VK08043-0	009	
Description: 389-0-B				Matri	x: Aqueous		
Date Sampled:11/02/2020 1345	Project Name	: LACROSSE WELL #	#23 & 24				
Date Received: 11/06/2020	oiect Number	r <sup>.</sup> 40217713					
RunPrep MethodAnalytical MethodI1SOP SPEPFAS by ID SOP	Dilution Ar 1 11/	17/2020 1752 MMM	Prep Da 11/16/202	te Batch 0 1125 73619			
Parameter	CAS Number	Analytical Method	Result Q	LOQ	DL	Units	Run
9-chlorohexadecafluoro-3-oxanone-1-sulfonic acid (9CI-PF3ONS)	756426-58-1	1 PFAS by ID SOP	ND	7.0	1.7	ng/L	1
11-chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11CI-PF3	) 763051-92-9	9 PFAS by ID SOP	ND	7.0	1.7	ng/L	1
1H, 1H, 2H, 2H-perfluorodecane sulfonic acid (8:2 FTS)	39108-34-4	4 PFAS by ID SOP	ND	7.0	1.7	ng/L	1
1H, 1H, 2H, 2H-perfluorooctane sulfonic acid (6:2 FTS)	27619-97-2	2 PFAS by ID SOP	ND	7.0	1.7	ng/L	1
1H,1H,2H,2H-perfluorododecane sulfonic acid (10:2 FTS)	120226-60-0	) PFAS by ID SOP	ND	7.0	1.7	ng/L	1
1H,1H,2H,2H-perfluorohexane sulfonic acid (4:2 FTS)	757124-72-4	4 PFAS by ID SOP	ND	7.0	1.7	ng/L	1
Hexafluoropropylene oxide dimer acid (GenX)	13252-13-6	6 PFAS by ID SOP	ND	7.0	1.7	ng/L	1
4,8-dioxa-3H-perfluorononanoic acid (ADONA)	919005-14-4	4 PFAS by ID SOP	ND	7.0	1.7	ng/L	1
N-ethylperfluoro-1-octanesulfonamide (EtFOSA)	4151-50-2	PFAS by ID SOP	ND	7.0	1.7	ng/L	1
N-ethylperfluoro-1-octanesulfonamidoacetic acid (EtFOSAA)	2991-50-6	PFAS by ID SOP	ND	7.0	1.7	ng/L	1
2-N-ethylperfluoro-1-octanesulfonamido-ethanol (EtFOSE)	1691-99-2	PFAS by ID SOP	ND	7.0	1.7	ng/L	1
N-methylperfluoro-1-octanesulfonamide (MeFOSA)	31506-32-8	B PFAS by ID SOP	ND	14	3.5	ng/L	1
N-methylperfluoro-1-octanesulfonamidoacetic acid (MeFOSAA)	2355-31-9	PFAS by ID SOP	ND	7.0	1.7	ng/L	1
2-N-methylperfluoro-1-octanesulfonamido-ethanol (MeFOSE)	24448-09-7	7 PFAS by ID SOP	ND	7.0	1.7	ng/L	1
Perfluoro-1-butanesulfonic acid (PFBS)	375-73-5	5 PFAS by ID SOP	10	3.5	0.87	ng/L	1
Perfluoro-1-decanesulfonic acid (PFDS)	335-77-3	PFAS by ID SOP	ND	3.5	0.87	ng/L	1
Perfluoro-1-heptanesulfonic acid (PFHpS)	375-92-8	B PFAS by ID SOP	1.1 J	3.5	0.87	ng/L	1
Perfluoro-1-nonanesulfonic acid (PFNS)	68259-12-1	1 PFAS by ID SOP	ND	3.5	0.87	ng/L	1
Perfluoro-1-octanesulfonamide (PFOSA)	754-91-6	PFAS by ID SOP	ND	3.5	0.87	ng/L	1
Perfluoro-1-pentanesulfonic acid (PFPeS)	2706-91-4	PFAS by ID SOP	7.9	3.5	0.87	ng/L	1
Perfluorododecanesulfonic acid (PFDOS)	79780-39-5	5 PFAS by ID SOP	ND	7.0	1.7	ng/L	1
Perfluorohexanesulfonic acid (PFHxS)	355-46-4	PFAS by ID SOP	16	3.5	0.87	ng/L	1
Perfluoro-n-butanoic acid (PFBA)	375-22-4	PFAS by ID SOP	130	3.5	0.87	ng/L	1
Perfluoro-n-decanoic acid (PFDA)	335-76-2	2 PFAS by ID SOP	ND	3.5	0.87	ng/L	1
Perfluoro-n-dodecanoic acid (PFDoA)	307-55-1	PFAS by ID SOP	ND	3.5	0.87	ng/L	1
Perfluoro-n-heptanoic acid (PFHpA)	375-85-9	PFAS by ID SOP	ND	3.5	0.87	ng/L	1
Perfluoro-n-hexadecanoic acid (PFHxDA)	67905-19-5	5 PFAS by ID SOP	ND	7.0	1.7	ng/L	1
Perfluoro-n-hexanoic acid (PFHxA)	307-24-4	PFAS by ID SOP	ND	3.5	0.87	ng/L	1
Perfluoro-n-nonanoic acid (PFNA)	375-95-1	PFAS by ID SOP	ND	3.5	0.87	ng/L	1
Perfluoro-n-octadecanoic acid (PFODA)	16517-11-6	5 PFAS by ID SOP	ND	7.0	1.7	ng/L	1
Perfluoro-n-octanoic acid (PFOA)	335-67-1	PFAS by ID SOP	ND	3.5	0.87	ng/L	1
Perfluoro-n-pentanoic acid (PFPeA)	2706-90-3	PFAS by ID SOP	ND	3.5	0.87	ng/L	1
Perfluoro-n-tetradecanoic acid (PFTeDA)	3/6-06-/	PFAS by ID SOP	ND	3.5	0.87	ng/L	1
Perfluoro-n-tridecanoic acid (PFTrDA)	/2629-94-8	B PFAS by ID SOP	ND	3.5	0.87	ng/L	1
Perfluoro-n-undecanoic acid (PFUdA)	2058-94-8	PFAS by ID SOP	ND 15	3.5	0.87	ng/L	1
Perfluorooctanesulfonic acid (PFOS)	1/63-23-1	PFAS by ID SOP	15	3.5	0.87	ng/L	I
R Surrogate Q % Re	un 1 Acce covery L	eptance .imits					
13C2_4:2FTS	96 2	25-150					
13C2_6:2FTS	96 2	25-150					
13C2_8:2FTS	86 2	25-150					
13C2_PFDoA	91 2	25-150					
13C2_PFHxDA	84 2	25-150					
13C2_PFTeDA	83 2	25-150					
LOQ = Limit of Quantitation B = Detected in the method blank	E = Quantitatio	n of compound exceeded the	calibration range	e DL = Detection I in	nit		
ND = Not detected at or above the DL     N = Recovery is out of criteria       H = Out of holding time     W = Reported on wet weight basis	P = The RPD b	etween two GC columns exce	eds 40%	J = Estimated resu	It < LOQ and $\geq$ E	DL	

Client: Pace Analytical Services, LLC		Laboratory ID: VK08043-009
Description: 389-0-B		Matrix: Aqueous
Date Sampled:11/02/2020 1345	Project Name: LACROSSE WELL #23 & 24	
Date Received: 11/06/2020	Project Number: 40217713	

Surrogate	Run 1 A Q % Recovery	cceptance Limits
13C3_PFBS	91	25-150
13C3_PFHxS	85	25-150
13C3-HFPO-DA	101	25-150
13C4_PFBA	92	25-150
13C4_PFHpA	99	25-150
13C5_PFHxA	96	25-150
13C5_PFPeA	92	25-150
13C6_PFDA	85	25-150
13C7_PFUdA	92	25-150
13C8_PFOA	96	25-150
13C8_PFOS	87	25-150
13C8_PFOSA	95	10-150
13C9_PFNA	94	25-150
d-EtFOSA	80	10-150
d5-EtFOSAA	90	25-150
d9-EtFOSE	91	10-150
d-MeFOSA	84	10-150
d3-MeFOSAA	89	25-150
d7-MeFOSE	86	10-150

LOQ = Limit of Quantitation	B = Detected in the method blank	E = Quantitation of compound exceeded the calibration range	DL = Detection Limit
ND = Not detected at or above the DL	N = Recovery is out of criteria	P = The RPD between two GC columns exceeds 40%	J = Estimated result < LOQ and $\ge$ DL
H = Out of holding time	W = Reported on wet weight basis		



444 21st Street South · La Crosse, Wisconsin · 54601

December 2, 2020

### 2512 2nd Avenue East La Crosse, WI 54603

Subject: Private Well Sampling Results 2512 2nd Avenue East, La Crosse, WI 54603 Tax parcel # 4-188-0 Sample ID # 188-0

Dear

We have received and reviewed the test results for the sample collected on November 5, 2020 at the above address. Some PFAS compounds were found at levels <u>above</u> the Department of Health Services (DHS) levels recommended for protecting health. These levels are called the "Recommended Public Health Standard" in the table below. The levels found in your well are called the "Sample Result" in the table below.

Because some of the levels are above the recommended Public Health Standard, the City is offering to provide bottled water delivered to your home for drinking, cooking, and brushing your teeth. There will be no cost to you for the bottled water. Please complete the attached form and mail it to The OS Group to make arrangements for having a water dispenser and bottles delivered to your home. Call 608-668-2718 or email <u>PFAS@theOSgrp.com</u>. You may also complete this form on line at <u>www.cityoflacrosse.org/bottledwater</u>

The following table summarizes the test results from the sample. **Bolded results** are above a current recommended level intended to protect your health according to the Department of Health Services (DHS). **PLEASE NOTE: At your residence we took a second "duplicate" sample for quality control / quality assurance purposes. The two samples' tests confirmed each other, and there were only minor differences. The results in the table below are based on the highest concentration of contaminants observed in either of the two samples.** 

Private Well Sampling Results for 2512 2nd Avenue East, La Crosse, WI 54603 Tax Parcel # 4-188-0 December 2, 2020

for any one of these 6 compounds or the combined total of all 6

#### Recommended Sample Result Public Health Compound (unit) Standard (unit <sup>e</sup>) N-Ethyl Perfluorooctane sulfonamide (NEtFOSA) 20 ppt <sup>a,b</sup> The recommended limit is 20 ppt Not Detected CAS # 4151-50-2 N-Ethyl perfluorooctane sulfonamidoacetic acid (NEtFOSAA) 20 ppt <sup>a,b</sup> Not Detected CAS # 2991-50-6 N-Ethyl perfluorooctane sulfonamidoethanol (NEtFOSE) 20 ppt <sup>a,b</sup> Not Detected CAS # 1691-99-2 Perfluorooctane sulfonamide (FOSA) 20 ppt <sup>a,b</sup> Not Detected CAS # 754-91-6 Perfluorooctanoic acid (PFOA) 20 ppt <sup>a,b</sup> 8.0 ppt CAS # 335-67-1 Perfluorooctanesulfonic acid (PFOS) 20 ppt <sup>a,b</sup> 15 ppt CAS # 1763-23-1 Hexafluoropropylene oxide dimer acid (HPFO-DA; GenX) Not Detected 300 ppt <sup>a</sup> CAS # 13252-13-6 Perfluorobutanesulfonic acid (PFBS) 450,000 ppt <sup>a</sup> 100 ppt CAS # 375-73-5 Perfluorohexanesulfonic acid (PFHxS) 40 ppt <sup>a</sup> 29 ppt CAS # 355-46-4 Perfluorobutanoic acid (PFBA) 10,000 ppt <sup>a</sup> 12 ppt CAS # 375-22-4 Perfluorodecanoic acid (PFDA) Not Detected 300 ppt <sup>a</sup> CAS # 335-76-2 Perfluorododecanoic acid (PFDoA) 500 ppt <sup>a</sup> Not Detected CAS # 307-55-1 Perfluorohexanoic acid (PFHxA) 150,000 ppt <sup>a</sup> 6.5 ppt CAS # 307-24-4 Perfluorononanoic acid (PFNA) 30 ppt <sup>a</sup> Not Detected CAS # 375-95-1 Perfluorotetradecanoic acid (PFTeA) Not Detected 10,000 ppt <sup>a</sup> CAS # 376-06-7 Perfluoroundecanoic acid (PFUnA) Not Detected CAS # 2058-94-8

#### Sample Results

CAS # 919005-14-4

CAS # 16517-11-6

3,000 ppt <sup>a</sup> 4,8-Dioxa-3H-perfluorononanoic acid (DONA) Not Detected 3,000 ppt <sup>a</sup> Perfluorooctadecanoic acid (PFODA) 400,000 ppt <sup>a</sup> Not Detected

Perfluoro-1-pentanesulfonic acid (PFPeS) CAS # 2706-91-4	22 ppt	None Established <sup>c</sup>		
Perfluoro-n-heptanoic acid (PFHpA) CAS # 375-85-9	2.4 ppt	None Established <sup>c</sup>		
Perfluoro-n-pentanoic acid (PFPeA) CAS #2706-90-3	6.5 ppt	None Established <sup>c</sup>		
<ul> <li><sup>a</sup> Public health enforcement standard (ES) recommended by DHS.</li> <li><sup>b</sup> DHS recommends a combined enforcement standard of 20 ng/L and combined preventive action limit of 2 ng/L for FOSA, NEt-FOSE, NEt-FOSA, NetFOSAA, PFOS, and PFOA.</li> </ul>				

<sup>c</sup> A current standard is not available; the compound is currently under review by DHS for potential public health standard recommendation.

<sup>d</sup> Public health enforcement standard (ES) in NR 140, Wisconsin Administrative Code.

<sup>e</sup> Units: Parts per trillion (ppt) = nanograms of substance per liter of water (ng/L)

<sup>BL</sup> Detected in the method blank. Possible lab contaminant.

As required by law, we will be submitting these results to the Department of Natural Resources (DNR). The DNR may consult with the Department of Health Services (DHS) about these test results. DHS may review all PFAS tests and follow-up with you directly if any actions are recommended to protect your health.

Thank you for your patience and assistance with our investigation. We will provide updates on the project at <u>https://www.cityoflacrosse.org/wells</u> as our work continues. If you have any questions, please call The OS Group at (608) 668-2718 or email them at <u>PFAS@theOSgrp.com</u>.

You can also contact the DNR and DHS with questions about PFAS or the water sample results at the numbers provided below.

Questions about	<u>.</u>	<u>Contact</u>	<u>Phone</u>	<u>E-mail Address</u>
Soil & Groundwater Testing, Clean Up	DNR	David Rozeboom	715-215-2078	David.Rozeboom@wisconsin.gov
Drinking Water or Private wells	DNR	Kyle Burton	920-360-2112	kyle.burton@wisconsin.gov
Health Concerns	DHS	Curtis Hedman	608-266-6677	Curtis.Hedman@dhs.wisconsin.gov

On behalf of The City of La Crosse *The OS Group, LLC* 

Attachment: Lab report for your well Bottled Water Acknowledgement

Client: Pace Analytical Services, LLC	Client: Pace Analytical Services, LLC Laboratory ID: VK12004-002								
Description: 188-0						Matri	x: Aqueous		
Date Sampled:11/05/2020 1140	Project Na	ame:	LACROSSE WELL 2	23 & 24					
Date Received: 11/12/2020	roiect Num	ber:	40217917						
					<b>D</b> 1	<b>D</b> / /			
RunPrep MethodAnalytical Method2SOP SPEPFAS by ID SOP	Dilution 1	Ana 11/2	5/2020 0316 SES	Prep 11/22/2	Date 020 14	Batch 54 74383			
Parameter	C Num	:AS ber	Analytical Method	Result	Q	LOQ	DL	Units	Run
9-chlorohexadecafluoro-3-oxanone-1-sulfonic acid (9CI-PF3ONS	6) 756426-	58-1	PFAS by ID SOP	ND		6.8	1.7	ng/L	2
11-chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11CI-PF3	) 763051-	92-9	PFAS by ID SOP	ND		6.8	1.7	ng/L	2
1H, 1H, 2H, 2H-perfluorodecane sulfonic acid (8:2 FTS)	39108-	34-4	PFAS by ID SOP	ND		6.8	1.7	ng/L	2
1H, 1H, 2H, 2H-perfluorooctane sulfonic acid (6:2 FTS)	27619-	97-2	PFAS by ID SOP	ND		6.8	1.7	ng/L	2
1H,1H,2H,2H-perfluorododecane sulfonic acid (10:2 FTS)	120226-	60-0	PFAS by ID SOP	ND		6.8	1.7	ng/L	2
1H,1H,2H,2H-perfluorohexane sulfonic acid (4:2 FTS)	757124-	72-4	PFAS by ID SOP	ND		6.8	1.7	ng/L	2
Hexafluoropropylene oxide dimer acid (GenX)	13252-	13-6	PFAS by ID SOP	ND		6.8	1.7	ng/L	2
4,8-dioxa-3H-perfluorononanoic acid (ADONA)	919005-	14-4	PFAS by ID SOP	ND		6.8	1.7	ng/L	2
N-ethylperfluoro-1-octanesulfonamide (EtFOSA)	4151-	50-2	PFAS by ID SOP	ND		6.8	1.7	ng/L	2
N-ethylperfluoro-1-octanesulfonamidoacetic acid (EtFOSAA)	2991-	50-6	PFAS by ID SOP	ND		6.8	1.7	ng/L	2
2-N-ethylperfluoro-1-octanesulfonamido-ethanol (EtFOSE)	1691-	99-2	PFAS by ID SOP	ND		6.8	1.7	ng/L	2
N-methylperfluoro-1-octanesulfonamide (MeFOSA)	31506-	32-8	PFAS by ID SOP	ND		14	3.4	ng/L	2
N-methylperfluoro-1-octanesulfonamidoacetic acid (MeFOSAA)	2355-	31-9	PFAS by ID SOP	ND		6.8	1.7	ng/L	2
2-N-methylperfluoro-1-octanesulfonamido-ethanol (MeFOSE)	24448-	09-7	PFAS by ID SOP	ND		6.8	1.7	ng/L	2
Perfluoro-1-butanesulfonic acid (PFBS)	375-	73-5	PFAS by ID SOP	100		3.4	0.85	ng/L	2
Perfluoro-1-decanesulfonic acid (PFDS)	335-	77-3	PFAS by ID SOP	ND		3.4	0.85	ng/L	2
Perfluoro-1-heptanesulfonic acid (PFHpS)	375-	92-8	PFAS by ID SOP	ND		3.4	0.85	ng/L	2
Perfluoro-1-nonanesulfonic acid (PFNS)	68259-	12-1	PFAS by ID SOP	ND		3.4	0.85	ng/L	2
Perfluoro-1-octanesulfonamide (PFOSA)	754-	91-6	PFAS by ID SOP	ND		3.4	0.85	ng/L	2
Perfluoro-1-pentanesulfonic acid (PFPeS)	2706-	91-4	PFAS by ID SOP	22		3.4	0.85	ng/L	2
Perfluorododecanesulfonic acid (PFDOS)	79780-	39-5	PFAS by ID SOP	ND		6.8	1.7	ng/L	2
Perfluorohexanesulfonic acid (PFHxS)	355-	46-4	PFAS by ID SOP	28		3.4	0.85	ng/L	2
Perfluoro-n-butanoic acid (PFBA)	375-	22-4	PFAS by ID SOP	11		3.4	0.85	ng/L	2
Perfluoro-n-decanoic acid (PFDA)	335-	76-2	PFAS by ID SOP	ND		3.4	0.85	ng/L	2
Perfluoro-n-dodecanoic acid (PFDoA)	307-	55-1	PFAS by ID SOP	ND		3.4	0.85	ng/L	2
Perfluoro-n-heptanoic acid (PFHpA)	375-	85-9	PFAS by ID SOP	2.4	J	3.4	0.85	ng/L	2
Perfluoro-n-hexadecanoic acid (PFHxDA)	67905-	19-5	PFAS by ID SOP	ND		6.8	1.7	ng/L	2
Perfluoro-n-hexanoic acid (PFHxA)	307-	24-4	PFAS by ID SOP	6.4		3.4	0.85	ng/L	2
Perfluoro-n-nonanoic acid (PFNA)	375-	95-1	PFAS by ID SOP	ND		3.4	0.85	ng/L	2
Perfluoro-n-octadecanoic acid (PFODA)	16517-	11-6	PFAS by ID SOP	ND		6.8	1.7	ng/L	2
Perfluoro-n-octanoic acid (PFOA)	335-	67-1	PFAS by ID SOP	7.9		3.4	0.85	ng/L	2
Perfluoro-n-pentanoic acid (PFPeA)	2706-	90-3	PFAS by ID SOP	6.5		3.4	0.85	ng/L	2
Perfluoro-n-tetradecanoic acid (PFTeDA)	376-	06-7	PFAS by ID SOP	ND		3.4	0.85	ng/L	2
Perfluoro-n-tridecanoic acid (PFTrDA)	72629-	94-8	PFAS by ID SOP	ND		3.4	0.85	ng/L	2
Perfluoro-n-undecanoic acid (PFUdA)	2058-	94-8	PFAS by ID SOP	ND		3.4	0.85	ng/L	2
Perfluorooctanesulfonic acid (PFOS)	1763-	23-1	PFAS by ID SOP	12		3.4	0.85	ng/L	2
Surrogate Q % F	Run 2 A Recovery	ccep Lin	otance nits						
13C2_4:2FTS	112	25	150						
13C2_6:2FTS	95	25	-150						
13C2_8:2FTS	98	25	-150						
13C2_PFDoA	86	25	-150						
13C2_PFHxDA	89	25	-150						
13C2_PFTeDA	87	25	-150						
LOQ = Limit of Quantitation B = Detected in the method blank	E = Quanti	tation o	of compound exceeded the o	calibration r	ange DL	= Detection Lin	nit		
ND = Not detected at or above the DL N = Recovery is out of criteria H = Out of holding time $W$ = Reported on wet weight basis	P = The RI s	PD bet	ween two GC columns exce	eds 40%	J =	<ul> <li>Estimated result</li> </ul>	It < LOQ and ≥ D	L	

Client: Pace Analytical Services, LLC		Laboratory ID: VK12004-002
Description: 188-0		Matrix: Aqueous
Date Sampled:11/05/2020 1140	Project Name: LACROSSE WELL 23 & 24	
Date Received: 11/12/2020	Project Number: 40217917	

Surrogate	Q % Recovery	Limits
13C3_PFBS	92	25-150
13C3_PFHxS	85	25-150
13C3-HFPO-DA	100	25-150
13C4_PFBA	101	25-150
13C4_PFHpA	90	25-150
13C5_PFHxA	96	25-150
13C5_PFPeA	97	25-150
13C6_PFDA	91	25-150
13C7_PFUdA	96	25-150
13C8_PFOA	94	25-150
13C8_PFOS	92	25-150
13C8_PFOSA	100	10-150
13C9_PFNA	92	25-150
d-EtFOSA	91	10-150
d5-EtFOSAA	94	25-150
d9-EtFOSE	84	10-150
d-MeFOSA	86	10-150
d3-MeFOSAA	103	25-150
d7-MeFOSE	81	10-150

LOQ = Limit of QuantitationB = Detected in the method blankE = Quantitation of compound exceeded the calibration rangeDL = Detection LimitND = Not detected at or above the DLN = Recovery is out of criteriaP = The RPD between two GC columns exceeds 40%J = Estimated result < LOQ and ≥ DL</td>H = Out of holding timeW = Reported on wet weight basis

Client: Pace Analytical Services, LLC					I	Laboratory II	D: VK12004-0	003	
Description: DUP-5						Matrix	k: Aqueous		
Date Sampled:11/05/2020 1145	Project Na	me: L	ACROSSE WELL 2	3 & 24					
Date Received: 11/12/2020 Pr	oject Numl	ber: 40	0217917						
Pup Prop Mathed Apolytical Mathed		Analy	icic Data Analyst	Drop	Dato	Patch			
2 SOP SPE PFAS by ID SOP	1 <i>1</i>	11/25/	2020 0327 SES	11/22/2	020 14	54 74383			
Devenenter	C.	AS	Analytical	Decult	0			Linita	
Parameter    Parameter    Parameter	756426-E	Der 58-1		Result	Q	2.5	1.0	Units	Run
11-chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11CLPE3	750420-3	07_0	PEAS by ID SOP			7.5	1.9	ng/L	2
1H 1H 2H 2H-perfluorodecane sulfonic acid (8:2 ETS)	39108-3	34-4	PEAS by ID SOP	ND		7.5	1.9	ng/L	2
1H 1H 2H 2H-perfluorooctane sulfonic acid (6:2 FTS)	27619-9	97-2	PEAS by ID SOP	ND		7.5	1.7	na/l	2
1H.1H.2H.2H.perfluorododecane sulfonic acid (10:2 FTS)	120226-6	60-0	PFAS by ID SOP	ND		7.5	1.7	na/L	2
1H.1H.2H.2H.perfluorohexane sulfonic acid (4:2 FTS)	757124-7	72-4	PFAS by ID SOP	ND		7.5	1.7	na/L	2
Hexafluoropropylene oxide dimer acid (GenX)	13252-1	13-6	PFAS by ID SOP	ND		7.5	1.9	na/L	2
4.8-dioxa-3H-perfluorononanoic acid (ADONA)	919005-1	14-4	PFAS by ID SOP	ND		7.5	1.9	na/L	2
N-ethylperfluoro-1-octanesulfonamide (EtFOSA)	4151-5	50-2	PFAS by ID SOP	ND		7.5	1.9	na/L	2
N-ethylperfluoro-1-octanesulfonamidoacetic acid (EtFOSAA)	2991-5	50-6	PFAS by ID SOP	ND		7.5	1.9	na/L	2
2-N-ethylperfluoro-1-octanesulfonamido-ethanol (EtFOSE)	1691-9	 79-2	PFAS by ID SOP	ND		7.5	1.9	na/L	2
N-methylperfluoro-1-octanesulfonamide (MeEOSA)	31506-3	32-8	PFAS by ID SOP	ND		15	3.7	na/L	2
N-methylperfluoro-1-octanesulfonamidoacetic acid (MeEOSAA)	2355-3	31-9	PFAS by ID SOP	ND		7.5	1.9	na/L	2
2-N-methylperfluoro-1-octanesulfonamido-ethanol (MeFOSE)	24448-0	09-7	PFAS by ID SOP	ND		7.5	1.9	na/L	2
Perfluoro-1-butanesulfonic acid (PFBS)	375-7	73-5	PFAS by ID SOP	100		3.7	0.94	ng/L	2
Perfluoro-1-decanesulfonic acid (PFDS)	335-7	77-3	PFAS by ID SOP	ND		3.7	0.94	ng/L	2
Perfluoro-1-heptanesulfonic acid (PFHpS)	375-9	92-8	PFAS by ID SOP	ND		3.7	0.94	ng/L	2
Perfluoro-1-nonanesulfonic acid (PFNS)	68259-1	12-1	PFAS by ID SOP	ND		3.7	0.94	ng/L	2
Perfluoro-1-octanesulfonamide (PFOSA)	754-9	91-6	PFAS by ID SOP	ND		3.7	0.94	ng/L	2
Perfluoro-1-pentanesulfonic acid (PFPeS)	2706-9	91-4	PFAS by ID SOP	22		3.7	0.94	ng/L	2
Perfluorododecanesulfonic acid (PFDOS)	79780-3	39-5	PFAS by ID SOP	ND		7.5	1.9	ng/L	2
Perfluorohexanesulfonic acid (PFHxS)	355-4	46-4	PFAS by ID SOP	29		3.7	0.94	ng/L	2
Perfluoro-n-butanoic acid (PFBA)	375-2	22-4	PFAS by ID SOP	12		3.7	0.94	ng/L	2
Perfluoro-n-decanoic acid (PFDA)	335-7	76-2	PFAS by ID SOP	ND		3.7	0.94	ng/L	2
Perfluoro-n-dodecanoic acid (PFDoA)	307-5	55-1	PFAS by ID SOP	ND		3.7	0.94	ng/L	2
Perfluoro-n-heptanoic acid (PFHpA)	375-8	35-9	PFAS by ID SOP	2.2	J	3.7	0.94	ng/L	2
Perfluoro-n-hexadecanoic acid (PFHxDA)	67905-1	19-5	PFAS by ID SOP	ND		7.5	1.9	ng/L	2
Perfluoro-n-hexanoic acid (PFHxA)	307-2	24-4	PFAS by ID SOP	6.5		3.7	0.94	ng/L	2
Perfluoro-n-nonanoic acid (PFNA)	375-9	95-1	PFAS by ID SOP	ND		3.7	0.94	ng/L	2
Perfluoro-n-octadecanoic acid (PFODA)	16517-1	11-6	PFAS by ID SOP	ND		7.5	1.9	ng/L	2
Perfluoro-n-octanoic acid (PFOA)	335-6	57-1	PFAS by ID SOP	8.0		3.7	0.94	ng/L	2
Perfluoro-n-pentanoic acid (PFPeA)	2706-9	90-3	PFAS by ID SOP	6.5		3.7	0.94	ng/L	2
Perfluoro-n-tetradecanoic acid (PFTeDA)	376-0	06-7	PFAS by ID SOP	ND		3.7	0.94	ng/L	2
Perfluoro-n-tridecanoic acid (PFTrDA)	72629-9	94-8	PFAS by ID SOP	ND		3.7	0.94	ng/L	2
Perfluoro-n-undecanoic acid (PFUdA)	2058-9	94-8	PFAS by ID SOP	ND		3.7	0.94	ng/L	2
Perfluorooctanesulfonic acid (PFOS)	1763-2	23-1	PFAS by ID SOP	15		3.7	0.94	ng/L	2
Q	un 2 Δ	ccent	ance						
Surrogate Q % Re	covery	Limi	its						
13C2_4:2FTS	102	25-1	50						
13C2_6:2FTS	97	25-1	50						
13C2_8:2FTS	99	25-1	50						
13C2_PFDoA	86	25-1	50						
13C2_PFHxDA	84	25-1	50						
13C2_PFTeDA	86	25-1	50						
	<b>F O W</b>			- 10 11		Data II II	- 14		
LUQ = LIMIT OF QUARTITATION N = Not detected at or above the DI N = Recovery is out of criteria	E = QuantitaP = The PP	ation of	compound exceeded the open two GC columns excert	alibration ra	ange DL	= Detection Lin	$  t  <   OO   and   V  ^{1}$	01	
H = Out of holding time $W = Reported on wet weight basis$					- ر.			-	

Client: Pace Analytical Services, LL	с	Laboratory ID: VK12004-003
Description: DUP-5		Matrix: Aqueous
Date Sampled:11/05/2020 1145	Project Name: LACROSSE WELL 23 & 24	
Date Received: 11/12/2020	Project Number: 40217917	
Surrogate	Run 2 Acceptance Q % Recovery Limits	
13C3_PFBS	93 25-150	
13C3_PFHxS	85 25-150	

25-150

25-150

25-150

25-150

25-150

25-150

25-150

25-150

25-150

10-150

25-150

10-150

25-150

10-150

10-150

25-150

10-150

97

100

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93

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104

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103

99

88

80

99

90

13C3-HFPO-DA

13C4\_PFBA

13C4\_PFHpA

13C5\_PFHxA

13C5\_PFPeA

13C6\_PFDA

13C7\_PFUdA

13C8\_PFOA

13C8\_PFOS

13C8\_PFOSA

13C9\_PFNA

d5-EtFOSAA

d9-EtFOSE

d-MeFOSA

d3-MeFOSAA

d7-MeFOSE

d-EtFOSA

H = Out of holding time	W = Reported on wet weight basis		
ND = Not detected at or above the DL	N = Recovery is out of criteria	P = The RPD between two GC columns exceeds 40%	J = Estimated result < LOQ and $\geq$ DL
LOQ = Limit of Quantitation	B = Detected in the method blank	E = Quantitation of compound exceeded the calibration range	DL = Detection Limit

## BOTTLED WATER ACKNOWLEDGEMENT

2512 2nd Avenue East, La Crosse, WI 54603

If you desire to accept the bottled water delivery, please complete and sign this form and return it to The OS Group at <u>PFAS@TheOSgrp.com</u> or mail to 444 21<sup>st</sup> St. S, La Crosse, WI 54601. You may also complete this form electronically on line at <u>www.cityoflacrosse.org/bottledwater</u>. Call 608-668-2718 with any question you may have.

As pre-caution for the protection of human health, the City of La Crosse (The City) will provide, on a temporary basis, bottled water for drinking, cooking and toothbrushing purposes at the above referenced address. The water will be delivered to your home or business by a commercial water delivery service. At the City's cost, a dispenser / cooler and regular deliveries of 5-gallon containers of water will be provided. The City reserves the right to dictate the conditions of delivery, such as minimum and maximum number of containers per delivery, frequency and timing of deliveries. The City reserves the right to periodically review whether The City should continue to provide bottled water, considering factors such as State and Federal standards and guidance, evolving knowledge and understanding of the sources, cause and responsibility for the contamination, new or reinterpreted test results, and the availability of more permanent or costeffective sources of water for the above purposes. The City of La Crosse makes no warranty or representation regarding the suitability of the bottled water beyond those made by the commercial water delivery service.

All reusable or returnable equipment and supplies, such as the containers and cooler/dispenser, are the property of the commercial water delivery service or the City of La Crosse. By signing below, the Occupant of the above referenced property acknowledges that all reusable or returnable equipment and supplies shall be returned to the commercial water delivery service or the City of La Crosse upon request. The Occupant agrees to provide reasonable access for delivery of bottled water and pick up of reusable or returnable equipment and supplies. Occupant(s) acknowledges that they may be required to sign an agreement with the commercial water delivery service as a condition of receiving bottled water.

Check ownership:

\_\_\_\_\_ Owner-Occupant Occupant Only

Number of Occupants: \_\_\_\_\_

Signed:	 Dated:	
-		

Printed Name: \_\_\_\_\_



444 21st Street South · La Crosse, Wisconsin · 54601

December 2, 2020

2548 1st Avenue East La Crosse, WI 54603

Subject: Private Well Sampling Results 2548 1st Avenue East, La Crosse, WI 54603 Tax parcel # 4-195-0 Sample ID # 195-0

:

Dear

We have received and reviewed the test results for the sample collected on November 5, 2020 at the above address. Some PFAS compounds were found, but the levels found were **below** the Department of Health Services (DHS) levels recommended for protecting health. These levels are called the "Recommended Public Health Standard" in the table below. The levels found in *your* well are called the "Sample Result" in the table below.

#### Sample Results

Compound	Sample Result (unit)	Recom Public Standar	mended Health d (unit <sup>e</sup> )
N-Ethyl Perfluorooctane sulfonamide (NEtFOSA) CAS # 4151-50-2	Not Detected	20 ppt <sub>a,b</sub>	) ppt unds I 6
N-Ethyl perfluorooctane sulfonamidoacetic acid (NEtFOSAA) CAS # 2991-50-6	Not Detected	20 ppt <sub>a,b</sub>	it is 20 ompo <i>II</i> of al
N-Ethyl perfluorooctane sulfonamidoethanol (NEtFOSE) CAS # 1691-99-2	Not Detected	20 ppt <sub>a,b</sub>	ed lim ese 6 c ed toto
Perfluorooctane sulfonamide (FOSA) CAS # 754-91-6	Not Detected	20 ppt <sub>a,b</sub>	mend of the mbine
Perfluorooctanoic acid (PFOA) CAS # 335-67-1	1.8 ppt	20 ppt <sub>a,b</sub>	recom ny <i>one</i> the co
Perfluorooctanesulfonic acid (PFOS) CAS # 1763-23-1	8.4 ppt	20 ppt <sub>a,b</sub>	The for a or

Compound	Sample Result (unit)	Recommended Public Health Standard (unit <sup>e</sup> )
Hexafluoropropylene oxide dimer acid (HPFO-DA; GenX) CAS # 13252-13-6	Not Detected	300 ppt <sup>a</sup>
Perfluorobutanesulfonic acid (PFBS) CAS # 375-73-5	11 ppt	450,000 ppt <sup>a</sup>
Perfluorohexanesulfonic acid (PFHxS) CAS # 355-46-4	15 ppt	40 ppt <sup>a</sup>
Perfluorobutanoic acid (PFBA) CAS # 375-22-4	30 ppt	10,000 ppt <sup>a</sup>
Perfluorodecanoic acid (PFDA) CAS # 335-76-2	Not Detected	300 ppt <sup>a</sup>
Perfluorododecanoic acid (PFDoA) CAS # 307-55-1	Not Detected	500 ppt <sup>a</sup>
Perfluorohexanoic acid (PFHxA) CAS # 307-24-4	Not Detected	150,000 ppt <sup>a</sup>
Perfluorononanoic acid (PFNA) CAS # 375-95-1	Not Detected	30 ppt <sup>a</sup>
Perfluorotetradecanoic acid (PFTeA) CAS # 376-06-7	Not Detected	10,000 ppt <sup>a</sup>
Perfluoroundecanoic acid (PFUnA) CAS # 2058-94-8	Not Detected	3,000 ppt <sup>a</sup>
4,8-Dioxa-3H-perfluorononanoic acid (DONA) CAS # 919005-14-4	Not Detected	3,000 ppt <sup>a</sup>
Perfluorooctadecanoic acid (PFODA) CAS # 16517-11-6	Not Detected	400,000 ppt <sup>a</sup>
Perfluoro-1-pentanesulfonic acid (PFPeS) CAS #2706-91-4	7.8 ppt	None Established <sup>c</sup>

<sup>9</sup> Public health enforcement standard (ES) recommended by DHS.

<sup>b</sup> DHS recommends a combined enforcement standard of 20 ng/L and combined preventive action limit of 2 ng/L for FOSA, NEt-FOSE, NEt-FOSA, NetFOSAA, PFOS, and PFOA.

A current standard is not available; the compound is currently under review by DHS for potential public health standard recommendation.

<sup>4</sup> Public health enforcement standard (ES) in NR 140, Wisconsin Administrative Code.

Units: Parts per trillion (ppt) = nanograms of substance per liter of water (ng/L)

<sup>BL</sup> Detected in the method blank. Possible lab contaminant.

As required by law, we will be submitting these results to the Department of Natural Resources (DNR). The DNR may consult with the Department of Health Services (DHS) about these test results. DHS may review all PFAS tests and follow-up with you directly if any actions are recommended to protect your health.

Thank you for your patience and assistance with our investigation. We will provide updates on the project at <u>https://www.cityoflacrosse.org/wells</u> as our work continues. If you have any questions, please call The OS Group at (608) 668-2718 or email them at <u>PFAS@theOSgrp.com</u>.

You can also contact the DNR and DHS with questions about PFAS or the water sample results at the numbers provided below.

Questions about.	<u></u>	<u>Contact</u>	<u>Phone</u>	E-mail Address
Soil & Groundwater Testing, Clean Up	DNR	David Rozeboom	715-215-2078	David.Rozeboom@wisconsin.gov
Drinking Water or Private wells	DNR	Kyle Burton	920-360-2112	kyle.burton@wisconsin.gov
Health Concerns	DHS	Curtis Hedman	608-266-6677	Curtis.Hedman@dhs.wisconsin.gov

On behalf of The City of La Crosse *The OS Group, LLC* 

Attachment: Lab report for your well

Description: 195-0Date Sampled:11/05/2020 1200ProjectDate Received: 11/12/2020Project	ject Nam	_				Matrix			
Date Sampled:11/05/2020 1200ProjDate Received: 11/12/2020Project	ject Nam						. Aqueous		
Date Received: 11/12/2020 Project		ne: L	ACROSSE WELL 2	3 & 24			·		
	ct Numb	oer: 40	0217917						
Dura David Matte al Arabiti al Matte al Dilu		A		Dura	Dete	Datak			
Run         Prep Method         Analytical Method         Dilu           2         SOP SPE         PFAS by ID SOP         2	ition A 1 1 <sup>-</sup>	Analy 1/25/	2020 0337 SES	Prep 11/22/2	Date 2020 14	Batch 154 74383			
Parameter	CA Numbe	AS er	Analytical Method	Result	Q	LOQ	DL	Units	Rur
9-chlorohexadecafluoro-3-oxanone-1-sulfonic acid (9CI-PF3ONS) 7	56426-58	8-1	PFAS by ID SOP	ND		7.0	1.7	ng/L	2
11-chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11CI-PF3) 7	63051-92	2-9	PFAS by ID SOP	ND		7.0	1.7	ng/L	2
1H, 1H, 2H, 2H-perfluorodecane sulfonic acid (8:2 FTS)	39108-34	4-4	PFAS by ID SOP	ND		7.0	1.7	ng/L	2
1H, 1H, 2H, 2H-perfluorooctane sulfonic acid (6:2 FTS)	27619-97	7-2	PFAS by ID SOP	ND		7.0	1.7	ng/L	2
1H,1H,2H,2H-perfluorododecane sulfonic acid (10:2 FTS) 1	20226-60	0-0	PFAS by ID SOP	ND		7.0	1.7	ng/L	2
1H,1H,2H,2H-perfluorohexane sulfonic acid (4:2 FTS) 7	57124-72	2-4	PFAS by ID SOP	ND		7.0	1.7	ng/L	2
Hexafluoropropylene oxide dimer acid (GenX)	13252-13	3-6	PFAS by ID SOP	ND		7.0	1.7	ng/L	2
4,8-dioxa-3H-perfluorononanoic acid (ADONA) 9	19005-14	4-4	PFAS by ID SOP	ND		7.0	1.7	ng/L	2
N-ethylperfluoro-1-octanesulfonamide (EtFOSA)	4151-50	D-2	PFAS by ID SOP	ND		7.0	1.7	ng/L	2
N-ethylperfluoro-1-octanesulfonamidoacetic acid (EtFOSAA)	2991-50	D-6	PFAS by ID SOP	ND		7.0	1.7	ng/L	2
2-N-ethylperfluoro-1-octanesulfonamido-ethanol (EtFOSE)	1691-99	9-2	PFAS by ID SOP	ND		7.0	1.7	ng/L	2
N-methylperfluoro-1-octanesulfonamide (MeFOSA)	31506-32	2-8	PFAS by ID SOP	ND		14	3.5	ng/L	2
N-methylperfluoro-1-octanesulfonamidoacetic acid (MeFOSAA)	2355-31	1-9	PFAS by ID SOP	ND		7.0	1.7	ng/L	2
2-N-methylperfluoro-1-octanesulfonamido-ethanol (MeFOSE)	24448-09	9-7	PFAS by ID SOP	ND		7.0	1.7	ng/L	2
Perfluoro-1-butanesulfonic acid (PFBS)	375-73	3-5	PFAS by ID SOP	11		3.5	0.87	ng/L	2
Perfluoro-1-decanesulfonic acid (PFDS)	335-77	7-3	PFAS by ID SOP	ND		3.5	0.87	ng/L	2
Perfluoro-1-heptanesulfonic acid (PFHpS)	375-92	2-8	PFAS by ID SOP	ND		3.5	0.87	ng/L	2
Perfluoro-1-nonanesulfonic acid (PFNS)	68259-12	2-1	PFAS by ID SOP	ND		3.5	0.87	ng/L	2
Perfluoro-1-octanesulfonamide (PFOSA)	754-91	1-6	PFAS by ID SOP	ND		3.5	0.87	ng/L	2
Perfluoro-1-pentanesulfonic acid (PFPeS)	2706-91	1-4	PFAS by ID SOP	7.8		3.5	0.87	ng/L	2
Perfluorododecanesulfonic acid (PFDOS)	79780-39	9-5	PFAS by ID SOP	ND		7.0	1.7	ng/L	2
Perfluorohexanesulfonic acid (PFHxS)	355-46	5-4	PFAS by ID SOP	15		3.5	0.87	ng/L	2
Perfluoro-n-butanoic acid (PFBA)	375-22	2-4	PFAS by ID SOP	30		3.5	0.87	ng/L	2
Perfluoro-n-decanoic acid (PFDA)	335-76	5-2	PFAS by ID SOP	ND		3.5	0.87	ng/L	2
Perfluoro-n-dodecanoic acid (PFDoA)	307-55	5-1	PFAS by ID SOP	ND		3.5	0.87	ng/L	2
Perfluoro-n-heptanoic acid (PFHpA)	375-85	5-9	PFAS by ID SOP	ND		3.5	0.87	ng/L	2
Perfluoro-n-hexadecanoic acid (PFHxDA)	67905-19	9-5	PFAS by ID SOP	ND		7.0	1.7	ng/L	2
Perfluoro-n-hexanoic acid (PFHxA)	307-24	4-4	PFAS by ID SOP	ND		3.5	0.87	ng/L	2
Perfluoro-n-nonanoic acid (PFNA)	375-95	5-1	PFAS by ID SOP	ND		3.5	0.87	ng/L	2
Perfluoro-n-octadecanoic acid (PFODA)	16517-11	1-6	PFAS by ID SOP	ND		7.0	1.7	ng/L	2
Perfluoro-n-octanoic acid (PFOA)	335-67	/-1	PFAS by ID SOP	1.8	J	3.5	0.87	ng/L	2
Perfluoro-n-pentanoic acid (PFPeA)	2706-90	J-3	PFAS by ID SOP	ND		3.5	0.87	ng/L	2
Perfluoro-n-tetradecanoic acid (PFTEDA)	376-06	5-7	PFAS by ID SOP	ND		3.5	0.87	ng/L	2
Perluoro-n-tridecanoic acid (PETITDA)	72629-94	4-8	PFAS by ID SOP	ND		3.5	0.87	ng/L	2
Perliuoro-n-undecanoic acid (PFOdA)	2058-94	4-8	PFAS by ID SOP	ND		3.5	0.87	ng/L	2
Perhuorooctanesuitonic acid (PFOS)	1/63-23	3- I	PFAS by ID SOP	8.4		3.5	0.87	ng/L	2
Surrogate Q % Reco	2 Ac very	cept Limi	ance Its						
13C2_4:2FTS 111		25-1	50						
13C2_6:2FTS 108	3	25-1	50						
13C2_8:2FTS 94		25-1	50						
13C2_PFDoA 95		25-1	50						
13C2_PFHxDA 91		25-1	50						
13C2_PF TeDA 92		25-1	50						
LOQ = Limit of Quantitation B = Detected in the method blank E	= Quantitat	tion of	compound exceeded the c	calibration r	ange D	DL = Detection Lin	nit		
ND = Not detected at or above the DL         N = Recovery is out of criteria         P           H = Out of holding time         W = Reported on wet weight basis         P	= The RPD	) betwe	een two GC columns excee	eds 40%	J	= Estimated resu	It < LOQ and $\geq$ D	L	

Client: Pace Analytical Services	LLC	Laboratory ID: VK12004-004
Description: 195-0		Matrix: Aqueous
Date Sampled:11/05/2020 1200	Project Name: LACROSSE WELL 23 & 24	
Date Received: 11/12/2020	Project Number: 40217917	
Surrogate	Run 2 Acceptance Q % Recovery Limits	

13C3_PFBS	98	25-150
13C3_PFHxS	93	25-150
13C3-HFPO-DA	99	25-150
13C4_PFBA	102	25-150
13C4_PFHpA	95	25-150
13C5_PFHxA	97	25-150
13C5_PFPeA	97	25-150
13C6_PFDA	95	25-150
13C7_PFUdA	103	25-150
13C8_PFOA	95	25-150
13C8_PFOS	98	25-150
13C8_PFOSA	111	10-150
13C9_PFNA	94	25-150
d-EtFOSA	100	10-150
d5-EtFOSAA	110	25-150
d9-EtFOSE	90	10-150
d-MeFOSA	84	10-150
d3-MeFOSAA	105	25-150

10-150

90

LOQ = Limit of Quantitation	B = Detected in the method blank	E = Quantitation of compound exceeded the calibration range	DL = Detection Limit
ND = Not detected at or above the DL	N = Recovery is out of criteria	P = The RPD between two GC columns exceeds 40%	J = Estimated result < LOQ and $\ge$ DL
H = Out of holding time	W = Reported on wet weight basis		

Pace Analytical Services, LLC (formerly Shealy Environmental Services, Inc.) 106 Vantage Point Drive West Columbia, SC 29172 (803) 791-9700 Fax (803) 791-9111 www.pacelabs.com

d7-MeFOSE



444 21st Street South · La Crosse, Wisconsin · 54601

December 2, 2020

2505 2nd Avenue East La Crosse, WI 54603

Subject: Private Well Sampling Results 2505 2nd Avenue East, La Crosse, WI 54603 Tax parcel # 4-211-0 Sample ID # 211-0

#### Dear

We have received and reviewed the test results for the sample collected on November 5, 2020 at the above address. Some PFAS compounds were found, but the levels found were **below** the Department of Health Services (DHS) levels recommended for protecting health. These levels are called the "Recommended Public Health Standard" in the table below. The levels found in *your* well are called the "Sample Result" in the table below.

Also, please note, we collected two samples from your house for quality assurance / quality control purposes. The second sample is considered a "split" sample and was sent to a different laboratory for analysis. The "split" sample was analyzed by a different EPA method. That method analyzes for 18 compounds as compared to the 36 compounds under the other method. Thus, in the second table for the "Split" sample provided below, you will see some results listed as "Not Analyzed".

Compound	Sample Result (unit)	Recomm Public H Standard	ended lealth (unit <sup>e</sup> )	
N-Ethyl Perfluorooctane sulfonamide (NEtFOSA) CAS # 4151-50-2	Not Detected	20 ppt <sup>a,b</sup>	) ppt unds I 6	
N-Ethyl perfluorooctane sulfonamidoacetic acid (NEtFOSAA) CAS # 2991-50-6	Not Detected	20 ppt <sup>a,b</sup>	it is 2C compo <i>il</i> of al	
N-Ethyl perfluorooctane sulfonamidoethanol (NEtFOSE) CAS # 1691-99-2	Not Detected	20 ppt <sup>a,b</sup>		
Perfluorooctane sulfonamide (FOSA) CAS # 754-91-6	Not Detected	20 ppt <sup>a,b</sup>	mend of the mbine	
Perfluorooctanoic acid (PFOA) CAS # 335-67-1	4.9 ppt	20 ppt <sup>a,b</sup>	recom 1y <i>one</i> the <i>cc</i>	
Perfluorooctanesulfonic acid (PFOS) CAS # 1763-23-1	5.5 ppt	20 ppt <sup>a,b</sup>	The for al or	
Hexafluoropropylene oxide dimer acid (HPFO-DA; GenX) CAS # 13252-13-6	Not Detected		300 ppt <sup>a</sup>	
Perfluorobutanesulfonic acid (PFBS) CAS # 375-73-5	3.9 ppt	450	),000 ppt <sup>a</sup>	
Perfluorohexanesulfonic acid (PFHxS) CAS # 355-46-4	2.9 ppt		40 ppt <sup>a</sup>	
Perfluorobutanoic acid (PFBA) CAS # 375-22-4	4.8 ppt	10	),000 ppt <sup>a</sup>	
Perfluorodecanoic acid (PFDA) CAS # 335-76-2	Not Detected		300 ppt <sup>a</sup>	
Perfluorododecanoic acid (PFDoA) CAS # 307-55-1	Not Detected		500 ppt <sup>a</sup>	
Perfluorohexanoic acid (PFHxA) CAS # 307-24-4	2.0 ppt	150	),000 ppt <sup>a</sup>	
Perfluorononanoic acid (PFNA) CAS # 375-95-1	Not Detected		30 ppt <sup>a</sup>	
Perfluorotetradecanoic acid (PFTeA) CAS # 376-06-7	Not Detected	10,000 ppt <sup>a</sup>		
Perfluoroundecanoic acid (PFUnA) CAS # 2058-94-8	Not Detected	3,000 ppt		
4,8-Dioxa-3H-perfluorononanoic acid (DONA) CAS # 919005-14-4	Not Detected	3	3,000 ppt <sup>a</sup>	

### Sample Results

Compound	Sample Result (unit)	Recommended Public Health Standard (unit <sup>e</sup> )
Perfluorooctadecanoic acid (PFODA)	Not	$400.000 \text{ ppt}^3$
CAS # 16517-11-6	Detected	400,000 ppt
Perfluoro-1-pentanesulfonic acid (PFPeS) CAS #2706-91-4	1.1 ppt	None Established <sup>c</sup>
Perfluoro-n-heptanoic acid (PFHpA) CAS # 375-85-9	1.2 ppt	None Established <sup>c</sup>
Perfluoro-n-pentanoic acid (PFPeA) CAS # 2706-90-3	1.9 ppt	None Established <sup>c</sup>

<sup>a</sup> Public health enforcement standard (ES) recommended by DHS.

<sup>b</sup> DHS recommends a combined enforcement standard of 20 ng/L and combined preventive action limit of 2 ng/L for FOSA, NEt-FOSE, NEt-FOSA, NetFOSAA, PFOS, and PFOA.

A current standard is not available; the compound is currently under review by DHS for potential public health standard recommendation.

<sup>4</sup> Public health enforcement standard (ES) in NR 140, Wisconsin Administrative Code.

<sup>e</sup> Units: Parts per trillion (ppt) = nanograms of substance per liter of water (ng/L)

<sup>BL</sup> Detected in the method blank. Possible lab contaminant.

Compound	Sample Result (unit)	Recomn Public Standarc	nended Health I (unit <sup>e</sup> )
N-Ethyl Perfluorooctane sulfonamide (NEtFOSA) CAS # 4151-50-2	Not Analyzed	20 ppt <sup>a,b</sup>	) ppt unds I 6
N-Ethyl perfluorooctane sulfonamidoacetic acid (NEtFOSAA) CAS # 2991-50-6	Not Detected	20 ppt <sup>a,b</sup>	it is 20 ompo <i>Il</i> of al
N-Ethyl perfluorooctane sulfonamidoethanol (NEtFOSE) CAS # 1691-99-2	Not Analyzed	20 ppt <sup>a,b</sup>	ed lim ese 6 c ed toto
Perfluorooctane sulfonamide (FOSA) CAS # 754-91-6	Not Analyzed	20 ppt <sup>a,b</sup>	mend of the mbine
Perfluorooctanoic acid (PFOA) CAS # 335-67-1	3.5 ppt	20 ppt <sup>a,b</sup>	recom ר <i>ין סחפ</i> the <i>ככ</i>
Perfluorooctanesulfonic acid (PFOS) CAS # 1763-23-1	4.6 ppt	20 ppt <sup>a,b</sup>	The for al or
Hexafluoropropylene oxide dimer acid (HPFO-DA; GenX) CAS # 13252-13-6	Not Detected		300 ppt <sup>a</sup>
Perfluorobutanesulfonic acid (PFBS) CAS # 375-73-5	3.1 ppt	45	0,000 ppt <sup>a</sup>

#### "SPLIT" Sample Results

Compound	Sample Result (unit)	Recommended Public Health Standard (unit <sup>e</sup> )
Perfluorohexanesulfonic acid (PFHxS) CAS # 355-46-4	3.1 ppt	40 ppt <sup>a</sup>
Perfluorobutanoic acid (PFBA) CAS # 375-22-4	Not Analyzed	10,000 ppt <sup>a</sup>
Perfluorodecanoic acid (PFDA) CAS # 335-76-2	Not Detected	300 ppt <sup>a</sup>
Perfluorododecanoic acid (PFDoA) CAS # 307-55-1	Not Detected	500 ppt <sup>a</sup>
Perfluorohexanoic acid (PFHxA) CAS # 307-24-4	1.8 ppt	150,000 ppt <sup>a</sup>
Perfluorononanoic acid (PFNA) CAS # 375-95-1	Not Detected	30 ppt ª
Perfluorotetradecanoic acid (PFTeA) CAS # 376-06-7	Not Detected	10,000 ppt <sup>a</sup>
Perfluoroundecanoic acid (PFUnA) CAS # 2058-94-8	Not Detected	3,000 ppt <sup>a</sup>
4,8-Dioxa-3H-perfluorononanoic acid (DONA) CAS # 919005-14-4	Not Detected	3,000 ppt ª
Perfluorooctadecanoic acid (PFODA) CAS # 16517-11-6	Not Analyzed	400,000 ppt <sup>a</sup>
Perfluoro-1-pentanesulfonic acid (PFPeS) CAS #2706-91-4	Not Analyzed	None Established <sup>c</sup>
Perfluoro-n-heptanoic acid (PFHpA) CAS # 375-85-9	1.7 ppt	None Established <sup>c</sup>
Perfluoro-n-pentanoic acid (PFPeA) CAS # 2706-90-3	Not Analyzed	None Established <sup>c</sup>

Public health enforcement standard (ES) recommended by DHS.

<sup>b</sup> DHS recommends a combined enforcement standard of 20 ng/L and combined preventive action limit of 2 ng/L for FOSA, NEt-FOSE, NEt-FOSA, NetFOSAA, PFOS, and PFOA.

A current standard is not available; the compound is currently under review by DHS for potential public health standard recommendation.

<sup>4</sup> Public health enforcement standard (ES) in NR 140, Wisconsin Administrative Code.

<sup>2</sup> Units: Parts per trillion (ppt) = nanograms of substance per liter of water (ng/L)

<sup>BL</sup> Detected in the method blank. Possible lab contaminant.

As required by law, we will be submitting these results to the Department of Natural Resources (DNR). The DNR may consult with the Department of Health Services (DHS) about these test results. DHS may review all PFAS tests and follow-up with you directly if any actions are recommended to protect your health.

Thank you for your patience and assistance with our investigation. We will provide updates on the project at <a href="https://www.cityoflacrosse.org/wells">https://www.cityoflacrosse.org/wells</a> as our work continues. If you have any questions, please call The OS Group at (608) 668-2718 or email them at <a href="https://www.pFAS@theOSgrp.com">PFAS@theOSgrp.com</a>.

You can also contact the DNR and DHS with questions about PFAS or the water sample results at the numbers provided below.

Questions about	<u>.</u>	<b>Contact</b>	<u>Phone</u>	<u>E-mail Address</u>	
Soil & Groundwate Testing, Clean Up	er DNR	David Rozeboom	715-215-2078	David.Rozeboom@wisconsin.gov	
Drinking Water or Private wells	DNR	Kyle Burton	920-360-2112	kyle.burton@wisconsin.gov	
Health Concerns	DHS	Curtis Hedman	608-266-6677	Curtis.Hedman@dhs.wisconsin.gov	

On behalf of The City of La Crosse *The OS Group, LLC* 

Attachment: Lab report for your well

Client: Pace Analytical Services, LLC				L	aboratory II	D: VK12004-0	001	
Description: 211-0					Matrix	: Aqueous		
Date Sampled:11/05/2020 1120	Project Nar	me: LACROSSE WELL 2	23 & 24					
Date Received: 11/12/2020 Pr	oiect Numł	per: 40217917						
RunPrep MethodAnalytical Method2SOP SPEPFAS by ID SOP	Dilution 1 1 1	Analysis Date Analyst 1/25/2020 0305 SES	Prep 11/22/2	Date 2020 145	Batch 4 74383			
Parameter	CA Numb	AS Analytical er Method	Result	Q	LOQ	DL	Units	Run
9-chlorohexadecafluoro-3-oxanone-1-sulfonic acid (9CI-PF3ONS)	756426-5	8-1 PFAS by ID SOP	ND		7.4	1.9	ng/L	2
11-chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11CI-PF3	) 763051-9	2-9 PFAS by ID SOP	ND		7.4	1.9	ng/L	2
1H, 1H, 2H, 2H-perfluorodecane sulfonic acid (8:2 FTS)	39108-3	4-4 PFAS by ID SOP	ND		7.4	1.9	ng/L	2
1H, 1H, 2H, 2H-perfluorooctane sulfonic acid (6:2 FTS)	27619-9	7-2 PFAS by ID SOP	ND		7.4	1.9	ng/L	2
1H,1H,2H,2H-perfluorododecane sulfonic acid (10:2 FTS)	120226-6	0-0 PFAS by ID SOP	ND		7.4	1.9	ng/L	2
1H,1H,2H,2H-perfluorohexane sulfonic acid (4:2 FTS)	757124-7	2-4 PFAS by ID SOP	ND		7.4	1.9	ng/L	2
Hexafluoropropylene oxide dimer acid (GenX)	13252-1	3-6 PFAS by ID SOP	ND		7.4	1.9	ng/L	2
4,8-dioxa-3H-perfluorononanoic acid (ADONA)	919005-1	4-4 PFAS by ID SOP	ND		7.4	1.9	ng/L	2
N-ethylperfluoro-1-octanesulfonamide (EtFOSA)	4151-50	0-2 PFAS by ID SOP	ND		7.4	1.9	ng/L	2
N-ethylperfluoro-1-octanesulfonamidoacetic acid (EtFOSAA)	2991-50	0-6 PFAS by ID SOP	ND		7.4	1.9	ng/L	2
2-N-ethylperfluoro-1-octanesulfonamido-ethanol (EtFOSE)	1691-99	9-2 PFAS by ID SOP	ND		7.4	1.9	ng/L	2
N-methylperfluoro-1-octanesulfonamide (MeFOSA)	31506-3	2-8 PFAS by ID SOP	ND		15	3.7	ng/L	2
N-methylperfluoro-1-octanesulfonamidoacetic acid (MeFOSAA)	2355-3	1-9 PFAS by ID SOP	ND		7.4	1.9	ng/L	2
2-N-methylperfluoro-1-octanesulfonamido-ethanol (MeFOSE)	24448-0	9-7 PFAS by ID SOP	ND		7.4	1.9	ng/L	2
Perfluoro-1-butanesulfonic acid (PFBS)	375-73	3-5 PFAS by ID SOP	3.9		3.7	0.93	ng/L	2
Perfluoro-1-decanesulfonic acid (PFDS)	335-7	7-3 PFAS by ID SOP	ND		3.7	0.93	ng/L	2
Perfluoro-1-heptanesulfonic acid (PFHpS)	375-92	2-8 PFAS by ID SOP	ND		3.7	0.93	ng/L	2
Perfluoro-1-nonanesulfonic acid (PFNS)	68259-1	2-1 PFAS by ID SOP	ND		3.7	0.93	ng/L	2
Perfluoro-1-octanesulfonamide (PFOSA)	754-91	1-6 PFAS by ID SOP	ND		3.7	0.93	ng/L	2
Perfluoro-1-pentanesulfonic acid (PFPeS)	2706-9	1-4 PFAS by ID SOP	1.1	J	3.7	0.93	ng/L	2
Perfluorododecanesulfonic acid (PFDOS)	79780-3	9-5 PFAS by ID SOP	ND		7.4	1.9	ng/L	2
Perfluorohexanesulfonic acid (PFHxS)	355-40	6-4 PFAS by ID SOP	2.9	J	3.7	0.93	ng/L	2
Perfluoro-n-butanoic acid (PFBA)	375-22	2-4 PFAS by ID SOP	4.8		3.7	0.93	ng/L	2
Perfluoro-n-decanoic acid (PFDA)	335-70	6-2 PFAS by ID SOP	ND		3.7	0.93	ng/L	2
Perfluoro-n-dodecanoic acid (PFDoA)	307-5	5-1 PFAS by ID SOP	ND		3.7	0.93	ng/L	2
Perfluoro-n-heptanoic acid (PFHpA)	375-8	5-9 PFAS by ID SOP	1.2	J	3.7	0.93	ng/L	2
Perfluoro-n-hexadecanoic acid (PFHxDA)	67905-1	9-5 PFAS by ID SOP	ND		7.4	1.9	ng/L	2
Perfluoro-n-hexanoic acid (PFHxA)	307-24	4-4 PFAS by ID SOP	2.0	J	3.7	0.93	ng/L	2
Perfluoro-n-nonanoic acid (PFNA)	375-9	5-1 PFAS by ID SOP	ND		3.7	0.93	ng/L	2
Perfluoro-n-octadecanoic acid (PFODA)	16517-1	1-6 PFAS by ID SOP	ND		7.4	1.9	ng/L	2
Perfluoro-n-octanoic acid (PFOA)	335-6	7-1 PFAS by ID SOP	4.9		3.7	0.93	ng/L	2
Perfluoro-n-pentanoic acid (PFPeA)	2706-90	J-3 PFAS by ID SOP	1.9	J	3.7	0.93	ng/L	2
Perfluoro-n-tetradecanoic acid (PFTeDA)	376-00	5-7 PEAS by ID SOP	ND		3.7	0.93	ng/L	2
Perfluoro-n-tridecanoic acid (PFTrDA)	/2629-9	4-8 PEAS by ID SOP	ND		3.7	0.93	ng/L	2
Perlivoro-n-undecanoic acid (PFOdA)	2058-94	4-8 PFAS by ID SOP			3.7	0.93	ng/L	2
Perfluorooctanesulfonic acid (PFOS)	1/63-2	3-1 PEAS BY ID SOP	5.5		3.7	0.93	ng/L	2
Surrogate Q % Re	un 2 Ac ecovery	cceptance Limits						
13C2_4:2FTS	106	25-150						
13C2_6:2F1S	101	25-150						
13C2_8:2FTS	96	25-150						
13C2_PFDoA	92	25-150						
13C2_PFHxDA	89	25-150						
T3C2_PFTeDA	89	25-150						
100 = Limit of Quantitation B = Detected in the method black	F = Quantita	tion of compound exceeded the	calibration r	ange Di	= Detection Lim	nit		
ND = Not detected at or above the DL N = Recovery is out of criteria	P = The RPI	D between two GC columns exce	eds 40%	J=	Estimated resu	ייי It < LOQ and > ר	)L	
H = Out of holding time W = Reported on wet weight basis								

Client: Pace Analytical Services, LLC		Laboratory ID: VK12004-001
Description: 211-0		Matrix: Aqueous
Date Sampled:11/05/2020 1120	Project Name: LACROSSE WELL 23 & 24	
Date Received: 11/12/2020	Project Number: 40217917	

Surrogate	Run 2 Ac Q % Recovery	Acceptance Limits
13C3_PFBS	92	25-150
13C3_PFHxS	86	25-150
13C3-HFPO-DA	101	25-150
13C4_PFBA	103	25-150
13C4_PFHpA	97	25-150
13C5_PFHxA	96	25-150
13C5_PFPeA	98	25-150
13C6_PFDA	92	25-150
13C7_PFUdA	96	25-150
13C8_PFOA	93	25-150
13C8_PFOS	93	25-150
13C8_PFOSA	106	10-150
13C9_PFNA	95	25-150
d-EtFOSA	98	10-150
d5-EtFOSAA	102	25-150
d9-EtFOSE	85	10-150
d-MeFOSA	86	10-150
d3-MeFOSAA	102	25-150
d7-MeFOSE	89	10-150

LOQ = Limit of QuantitationB = Detected in the method blankE = Quantitation of compound exceeded the calibration rangeDL = Detection LimitND = Not detected at or above the DLN = Recovery is out of criteriaP = The RPD between two GC columns exceeds 40%J = Estimated result < LOQ and ≥ DL</td>H = Out of holding timeW = Reported on wet weight basis



#### ANALYTICAL RESULTS

#### Project: LACROSSE WELL #23 & 24

Pace Project No.: 40217917

Sample: 211-0	Lab ID:	40217917001	Collecte	ed: 11/05/20	) 11:20	Received: 11/06/20 09:20 Matrix: Water			
Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
537.1 PFAS Compounds, Water	Analytical Pace Ana	Method: EPA 5 lytical Services	37.1 Prepa - Ormond I	aration Meth Beach	nod: EP	PA 537.1			
11CI-PF3OUdS	<0.0015	ug/L	0.0019	0.0015	1	11/11/20 09:07	11/17/20 21:49	763051-92-9	
9CI-PF3ONS	<0.0011	ug/L	0.0019	0.0011	1	11/11/20 09:07	11/17/20 21:49	756426-58-1	
ADONA	<0.00069	ug/L	0.0019	0.00069	1	11/11/20 09:07	11/17/20 21:49	919005-14-4	
HFPO-DA	<0.0016	ug/L	0.0019	0.0016	1	11/11/20 09:07	11/17/20 21:49	13252-13-6	
NEtFOSAA	<0.00089	ug/L	0.0019	0.00089	1	11/11/20 09:07	11/17/20 21:49	2991-50-6	
NMeFOSAA	<0.0015	ug/L	0.0019	0.0015	1	11/11/20 09:07	11/17/20 21:49	2355-31-9	
Perfluorobutanesulfonic acid	0.0031	ug/L	0.0019	0.00063	1	11/11/20 09:07	11/17/20 21:49	375-73-5	
Perfluorodecanoic acid	<0.0019	ug/L	0.0019	0.0019	1	11/11/20 09:07	11/17/20 21:49	335-76-2	
Perfluorohexanoic acid	0.0018J	ug/L	0.0019	0.0012	1	11/11/20 09:07	11/17/20 21:49	307-24-4	
Perfluorododecanoic acid	<0.0014	ug/L	0.0019	0.0014	1	11/11/20 09:07	11/17/20 21:49	307-55-1	
Perfluoroheptanoic acid	0.0017J	ug/L	0.0019	0.00096	1	11/11/20 09:07	11/17/20 21:49	375-85-9	
Perfluorohexanesulfonic acid	0.0031	ug/L	0.0019	0.00070	1	11/11/20 09:07	11/17/20 21:49	355-46-4	
Perfluorononanoic acid	<0.0019	ug/L	0.0019	0.0019	1	11/11/20 09:07	11/17/20 21:49	375-95-1	
Perfluorooctanesulfonic acid	0.0046	ug/L	0.0019	0.0011	1	11/11/20 09:07	11/17/20 21:49	1763-23-1	
Perfluorooctanoic acid	0.0035	ug/L	0.0019	0.00083	1	11/11/20 09:07	11/17/20 21:49	335-67-1	
Perfluorotetradecanoic acid	<0.0018	ug/L	0.0019	0.0018	1	11/11/20 09:07	11/17/20 21:49	376-06-7	
Perfluorotridecanoic acid	<0.0017	ug/L	0.0019	0.0017	1	11/11/20 09:07	11/17/20 21:49	72629-94-8	
Perfluoroundecanoic acid	<0.0019	ug/L	0.0019	0.0019	1	11/11/20 09:07	11/17/20 21:49	2058-94-8	
Surrogates									
13C2-PFDA (S)	122	%	70-130		1	11/11/20 09:07	11/17/20 21:49		
13C2-PFHxA (S)	116	%	70-130		1	11/11/20 09:07	11/17/20 21:49		
NEtFOSAA-d5 (S)	100	%	70-130		1	11/11/20 09:07	11/17/20 21:49		
HFPO-DAS (S)	111	%	70-130		1	11/11/20 09:07	11/17/20 21:49		

#### **REPORT OF LABORATORY ANALYSIS**



444 21st Street South · La Crosse, Wisconsin · 54601

December 2, 2020

### 2507 1st Avenue East La Crosse, WI 54603

Subject: Private Well Sampling Results 2507 1st Avenue East, La Crosse, WI 54603 Tax parcel # 4-245-0 Sample ID # 245-0

Dear

We have received and reviewed the test results for the sample collected on November 5, 2020 at the above address. Some PFAS compounds were found, but the levels found were **below** the Department of Health Services (DHS) levels recommended for protecting health. These levels are called the "Recommended Public Health Standard" in the table below. The levels found in *your* well are called the "Sample Result" in the table below.

#### Sample Results

Compound	Sample Result (unit)	Recomm Public H Standard	ended lealth (unit <sup>e</sup> )
N-Ethyl Perfluorooctane sulfonamide (NEtFOSA) CAS # 4151-50-2	Not Detected	20 ppt <sup>a,b</sup>	) ppt unds I 6
N-Ethyl perfluorooctane sulfonamidoacetic acid (NEtFOSAA) CAS # 2991-50-6	Not Detected	20 ppt <sup>a,b</sup>	it is 20 ompo <i>il</i> of al
N-Ethyl perfluorooctane sulfonamidoethanol (NEtFOSE) CAS # 1691-99-2	Not Detected	20 ppt <sup>a,b</sup>	ed lim ese 6 c ed totc
Perfluorooctane sulfonamide (FOSA) CAS # 754-91-6	Not Detected	20 ppt <sup>a,b</sup>	mend of the ombine
Perfluorooctanoic acid (PFOA) CAS # 335-67-1	Not Detected	20 ppt <sup>a,b</sup>	recom ny <i>one</i> the <i>c</i> c
Perfluorooctanesulfonic acid (PFOS) CAS # 1763-23-1	9.0 ppt	20 ppt <sup>a,b</sup>	The for ai or

Compound	Sample Result (unit)	Recommended Public Health Standard (unit <sup>e</sup> )
Hexafluoropropylene oxide dimer acid (HPFO-DA; GenX) CAS # 13252-13-6	Not Detected	300 ppt ª
Perfluorobutanesulfonic acid (PFBS) CAS # 375-73-5	4.9 ppt	450,000 ppt <sup>a</sup>
Perfluorohexanesulfonic acid (PFHxS) CAS # 355-46-4	6.7 ppt	40 ppt <sup>a</sup>
Perfluorobutanoic acid (PFBA) CAS # 375-22-4	12 ppt	10,000 ppt <sup>a</sup>
Perfluorodecanoic acid (PFDA) CAS # 335-76-2	Not Detected	300 ppt <sup>a</sup>
Perfluorododecanoic acid (PFDoA) CAS # 307-55-1	Not Detected	500 ppt <sup>a</sup>
Perfluorohexanoic acid (PFHxA) CAS # 307-24-4	Not Detected	150,000 ppt <sup>a</sup>
Perfluorononanoic acid (PFNA) CAS # 375-95-1	Not Detected	30 ppt ª
Perfluorotetradecanoic acid (PFTeA) CAS # 376-06-7	Not Detected	10,000 ppt <sup>a</sup>
Perfluoroundecanoic acid (PFUnA) CAS # 2058-94-8	Not Detected	3,000 ppt <sup>a</sup>
4,8-Dioxa-3H-perfluorononanoic acid (DONA) CAS # 919005-14-4	Not Detected	3,000 ppt <sup>a</sup>
Perfluorooctadecanoic acid (PFODA) CAS # 16517-11-6	Not Detected	400,000 ppt <sup>a</sup>
Perfluoro-1-pentanesulfonic acid (PFPeS) CAS #2706-91-4	3.4 ppt	None Established <sup>c</sup>

<sup>a</sup> Public health enforcement standard (ES) recommended by DHS.

<sup>b</sup> DHS recommends a combined enforcement standard of 20 ng/L and combined preventive action limit of 2 ng/L for FOSA, NEt-FOSE, NEt-FOSA, NetFOSAA, PFOS, and PFOA.

A current standard is not available; the compound is currently under review by DHS for potential public health standard recommendation.

<sup>d</sup> Public health enforcement standard (ES) in NR 140, Wisconsin Administrative Code.

<sup>2</sup> Units: Parts per trillion (ppt) = nanograms of substance per liter of water (ng/L)

<sup>BL</sup> Detected in the method blank. Possible lab contaminant.

As required by law, we will be submitting these results to the Department of Natural Resources (DNR). The DNR may consult with the Department of Health Services (DHS) about these test results. DHS may review all PFAS tests and follow-up with you directly if any actions are recommended to protect your health.

Thank you for your patience and assistance with our investigation. We will provide updates on the project at <a href="https://www.cityoflacrosse.org/wells">https://www.cityoflacrosse.org/wells</a> as our work continues. If you have any questions, please call The OS Group at (608) 668-2718 or email them at <a href="https://www.pFAS@theOSgrp.com">PFAS@theOSgrp.com</a>.

You can also contact the DNR and DHS with questions about PFAS or the water sample results at the numbers provided below.

Questions about		<u>Contact</u>	<u>Phone</u>	<u>E-mail Address</u>
Soil & Groundwater Testing, Clean Up	DNR	David Rozeboom	715-215-2078	David.Rozeboom@wisconsin.gov
Drinking Water or Private wells	DNR	Kyle Burton	920-360-2112	kyle.burton@wisconsin.gov
Health Concerns	DHS	Curtis Hedman	608-266-6677	Curtis.Hedman@dhs.wisconsin.gov

On behalf of The City of La Crosse *The OS Group, LLC* 

Attachment: Lab report for your well

Client: Pace Analytical Services, LLC	Laboratory ID: VK12004-006						
Description: 245-0				Matrix	k: Aqueous		
Date Sampled:11/05/2020 1235	roject Nar	ne: LACROSSE WELL 2	23 & 24				
Date Received: 11/12/2020 Pro	niect Numb	per: 40217917					
	joot Huma						
RunPrep MethodAnalytical MethodD1SOP SPEPFAS by ID SOP	ilution / 1 1	Analysis Date Analyst 1/20/2020 1901 KMM2	Prep Date 11/19/2020 1	Batch 221 74049			
Parameter	CA Numb	AS Analytical er Method	Result Q	LOQ	DL	Units	Run
9-chlorohexadecafluoro-3-oxanone-1-sulfonic acid (9CI-PF3ONS)	756426-5	8-1 PFAS by ID SOP	ND	6.9	1.7	ng/L	1
11-chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11CI-PF3)	763051-92	2-9 PFAS by ID SOP	ND	6.9	1.7	ng/L	1
1H, 1H, 2H, 2H-perfluorodecane sulfonic acid (8:2 FTS)	39108-34	4-4 PFAS by ID SOP	ND	6.9	1.7	ng/L	1
1H, 1H, 2H, 2H-perfluorooctane sulfonic acid (6:2 FTS)	27619-9	7-2 PFAS by ID SOP	ND	6.9	1.7	ng/L	1
1H,1H,2H,2H-perfluorododecane sulfonic acid (10:2 FTS)	120226-60	0-0 PFAS by ID SOP	ND	6.9	1.7	ng/L	1
1H,1H,2H,2H-perfluorohexane sulfonic acid (4:2 FTS)	757124-72	2-4 PFAS by ID SOP	ND	6.9	1.7	ng/L	1
Hexafluoropropylene oxide dimer acid (GenX)	13252-13	3-6 PFAS by ID SOP	ND	6.9	1.7	ng/L	1
4,8-dioxa-3H-perfluorononanoic acid (ADONA)	919005-1	4-4 PFAS by ID SOP	ND	6.9	1.7	ng/L	1
N-ethylperfluoro-1-octanesulfonamide (EtFOSA)	4151-50	0-2 PFAS by ID SOP	ND	6.9	1.7	ng/L	1
N-ethylperfluoro-1-octanesulfonamidoacetic acid (EtFOSAA)	2991-50	0-6 PFAS by ID SOP	ND	6.9	1.7	ng/L	1
2-N-ethylperfluoro-1-octanesulfonamido-ethanol (EtFOSE)	1691-99	9-2 PFAS by ID SOP	ND	6.9	1.7	ng/L	1
N-methylperfluoro-1-octanesulfonamide (MeFOSA)	31506-32	2-8 PFAS by ID SOP	ND	14	3.4	ng/L	1
N-methylperfluoro-1-octanesulfonamidoacetic acid (MeFOSAA)	2355-31	1-9 PFAS by ID SOP	ND	6.9	1.7	ng/L	1
2-N-methylperfluoro-1-octanesulfonamido-ethanol (MeFOSE)	24448-0	9-7 PFAS by ID SOP	ND	6.9	1.7	ng/L	1
Perfluoro-1-butanesulfonic acid (PFBS)	375-73	3-5 PFAS by ID SOP	4.9 B	3.4	0.86	ng/L	1
Perfluoro-1-decanesulfonic acid (PFDS)	335-77	7-3 PFAS by ID SOP	ND	3.4	0.86	ng/L	1
Perfluoro-1-heptanesulfonic acid (PFHpS)	375-92	2-8 PFAS by ID SOP	ND	3.4	0.86	ng/L	1
Perfluoro-1-nonanesulfonic acid (PFNS)	68259-12	2-1 PFAS by ID SOP	ND	3.4	0.86	ng/L	1
Perfluoro-1-octanesulfonamide (PFOSA)	754-91	1-6 PFAS by ID SOP	ND	3.4	0.86	ng/L	1
Perfluoro-1-pentanesulfonic acid (PFPeS)	2706-91	1-4 PFAS by ID SOP	3.4	3.4	0.86	ng/L	1
Perfluorododecanesulfonic acid (PFDOS)	79780-39	9-5 PFAS by ID SOP	ND	6.9	1.7	ng/L	1
Perfluorohexanesulfonic acid (PFHxS)	355-46	5-4 PFAS by ID SOP	6.7	3.4	0.86	ng/L	1
Perfluoro-n-butanoic acid (PFBA)	375-22	2-4 PFAS by ID SOP	12 B	3.4	0.86	ng/L	1
Perfluoro-n-decanoic acid (PFDA)	335-76	5-2 PFAS by ID SOP	ND	3.4	0.86	ng/L	1
Perfluoro-n-dodecanoic acid (PFDoA)	307-55	5-1 PFAS by ID SOP	ND	3.4	0.86	ng/L	1
Perfluoro-n-heptanoic acid (PFHpA)	375-85	5-9 PFAS by ID SOP	ND	3.4	0.86	ng/L	1
Perfluoro-n-hexadecanoic acid (PFHxDA)	67905-1	9-5 PFAS by ID SOP	ND	6.9	1.7	ng/L	1
Perfluoro-n-hexanoic acid (PFHxA)	307-24	4-4 PFAS by ID SOP	ND	3.4	0.86	ng/L	1
Perfluoro-n-nonanoic acid (PFNA)	375-95	5-1 PFAS by ID SOP	ND	3.4	0.86	ng/L	1
Perfluoro-n-octadecanoic acid (PFODA)	16517-1	1-6 PFAS by ID SOP	ND	6.9	1.7	ng/L	1
Perfluoro-n-octanoic acid (PFOA)	335-67	7-1 PFAS by ID SOP	ND	3.4	0.86	ng/L	1
Perfluoro-n-pentanoic acid (PFPeA)	2706-90	D-3 PEAS by ID SOP	ND	3.4	0.86	ng/L	1
Perfluoro-n-tetradecanoic acid (PFTeDA)	376-06	5-7 PEAS by ID SOP	ND	3.4	0.86	ng/L	1
Perfluoro-n-tridecanoic acid (PF IrDA)	72629-94	4-8 PEAS by ID SOP	ND	3.4	0.86	ng/L	1
Perfluoro-n-undecanoic acid (PFUdA)	2058-94	4-8 PEAS by ID SOP	ND	3.4	0.86	ng/L	1
Perfluorooctanesulfonic acid (PFOS)	1763-23	3-1 PEAS by ID SOP	9.0	3.4	0.86	ng/L	1
Surrogate Q % Rec	un 1 Ac covery	cceptance Limits					
13C2_4:2FTS	111	25-150					
13C2_6:2FTS 1	111	25-150					
13C2_8:2FTS 1	110	25-150					
13C2_PFDoA	88	25-150					
13C2_PFHxDA 1	100	25-150					
13C2_PFTeDA	86	25-150					
LOQ = Limit of Quantitation     B = Detected in the method blank       ND = Not detected at or above the DL     N = Recovery is out of criteria       H = Out of holding time     W = Reported on wet weight basis	E = Quantita P = The RPE	tion of compound exceeded the o	calibration range eds 40%	DL = Detection Lim J = Estimated resu	hit It < LOQ and $\ge$ E	DL	

Client: Pace Analytical Services, LLC		Laboratory ID: VK12004-006
Description: 245-0		Matrix: Aqueous
Date Sampled:11/05/2020 1235	Project Name: LACROSSE WELL 23 & 24	
Date Received: 11/12/2020	Project Number: 40217917	

Surrogate	Run 1 A Q % Recovery	Acceptance Limits
13C3_PFBS	89	25-150
13C3_PFHxS	94	25-150
13C3-HFPO-DA	108	25-150
13C4_PFBA	100	25-150
13C4_PFHpA	101	25-150
13C5_PFHxA	95	25-150
13C5_PFPeA	100	25-150
13C6_PFDA	98	25-150
13C7_PFUdA	95	25-150
13C8_PFOA	99	25-150
13C8_PFOS	91	25-150
13C8_PFOSA	108	10-150
13C9_PFNA	94	25-150
d-EtFOSA	84	10-150
d5-EtFOSAA	102	25-150
d9-EtFOSE	97	10-150
d-MeFOSA	92	10-150
d3-MeFOSAA	106	25-150
d7-MeFOSE	104	10-150

LOQ = Limit of Quantitation	B = Detected in the method blank	E = Quantitation of compound exceeded the calibration range	DL = Detection Limit
ND = Not detected at or above the DL	N = Recovery is out of criteria	P = The RPD between two GC columns exceeds 40%	J = Estimated result < LOQ and $\ge$ DL
H = Out of holding time	W = Reported on wet weight basis		



444 21st Street South · La Crosse, Wisconsin · 54601

December 2, 2020

2545 1st Avenue East La Crosse, WI 54603

Subject: Private Well Sampling Results 2545 1st Avenue East, La Crosse, WI 54603 Tax parcel # 4-255-0 Sample ID # 255-0

#### Dear

We have received and reviewed the test results for the sample collected on November 5, 2020 at the above address. Some PFAS compounds were found at levels <u>above</u> the Department of Health Services (DHS) levels recommended for protecting health. These levels are called the "Recommended Public Health Standard" in the table below. The levels found in your well are called the "Sample Result" in the table below.

Because some of the levels are above the recommended Public Health Standard, the City is offering to provide bottled water delivered to your home for drinking, cooking, and brushing your teeth. There will be no cost to you for the bottled water. Please complete the attached form and mail it to The OS Group to make arrangements for having a water dispenser and bottles delivered to your home. Call 608-668-2718 or email <u>PFAS@theOSgrp.com</u>. You may also complete this form on line at <u>www.cityoflacrosse.org/bottledwater</u>

The following table summarizes the test results from the sample. **Bolded results** are above a current recommended level intended to protect your health according to the Department of Health Services (DHS).

Private Well Sampling Results for 2545 1st Avenue East, La Crosse, WI 54603 Tax Parcel # 4-255-0 December 2, 2020

Compound	Sample Result (unit)	Recommended Public Health Standard (unit <sup>e</sup> )		
N-Ethyl Perfluorooctane sulfonamide (NEtFOSA) CAS # 4151-50-2	Not Detected	20 ppt <sup>a,b</sup>	) ppt unds I 6	
N-Ethyl perfluorooctane sulfonamidoacetic acid (NEtFOSAA) CAS # 2991-50-6	Not Detected	7 of all		
N-Ethyl perfluorooctane sulfonamidoethanol (NEtFOSE) CAS # 1691-99-2	Not Detected	20 ppt <sup>a,b</sup> d tota		
Perfluorooctane sulfonamide (FOSA) CAS # 754-91-6	1.2 ppt	of the <i>a</i> 'p of the <i>b</i>		
Perfluorooctanoic acid (PFOA) CAS # 335-67-1	27 ppt	20 ppt <sup>a,b</sup>	recom ny <i>one</i> the <i>cc</i>	
Perfluorooctanesulfonic acid (PFOS) CAS # 1763-23-1	190 ppt	20 ppt <sup>a,b</sup> L u of		
Hexafluoropropylene oxide dimer acid (HPFO-DA; GenX) CAS # 13252-13-6	Not Detected	300 ppt <sup>a</sup>		
Perfluorobutanesulfonic acid (PFBS) CAS # 375-73-5	28 ppt	450,000 ppt <sup>a</sup>		
Perfluorohexanesulfonic acid (PFHxS) CAS # 355-46-4	580 ppt	40 ppt <sup>a</sup>		
Perfluorobutanoic acid (PFBA) CAS # 375-22-4	33 ppt	10,000 ppt <sup>a</sup>		
Perfluorodecanoic acid (PFDA) CAS # 335-76-2	Not Detected	300 ppt <sup>a</sup>		
Perfluorododecanoic acid (PFDoA) CAS # 307-55-1	Not Detected	500 ppt <sup>a</sup>		
Perfluorohexanoic acid (PFHxA) CAS # 307-24-4	15 ppt	150,000 ppt <sup>a</sup>		
Perfluorononanoic acid (PFNA) CAS # 375-95-1	Not Detected	30 ppt <sup>a</sup>		
Perfluorotetradecanoic acid (PFTeA) CAS # 376-06-7	Not Detected	10,000 ppt <sup>a</sup>		
Perfluoroundecanoic acid (PFUnA) CAS # 2058-94-8	Not Detected	3,000 ppt <sup>a</sup>		
4,8-Dioxa-3H-perfluorononanoic acid (DONA) CAS # 919005-14-4	Not Detected	3,000 ppt <sup>a</sup>		

#### Sample Results

Private Well Sampling Results for 2545 1st Avenue East, La Crosse, WI 54603 Tax Parcel # 4-255-0 December 2, 2020

Perfluorooctadecanoic acid (PFODA) CAS # 16517-11-6	Not Detected	400,000 ppt <sup>a</sup>
Perfluoro-1-heptanesulfonic acid (PFHpS) CAS # 375-92-8	25 ppt	None Established <sup>c</sup>
Perfluoro-1-pentanesulfonic acid (PFPeS) CAS # 2706-91-4	51 ppt	None Established <sup>c</sup>
Perfluoro-n-heptanoic acid (PFHpA) CAS # 375-85-9	3.2 ppt	None Established <sup>c</sup>
Perfluoro-n-pentanoic acid (PFPeA) CAS #2706-90-3	3.8 ppt	None Established <sup>c</sup>

<sup>a</sup> Public health enforcement standard (ES) recommended by DHS.

<sup>b</sup> DHS recommends a combined enforcement standard of 20 ng/L and combined preventive action limit of 2 ng/L for FOSA, NEt-FOSE, NEt-FOSA, NetFOSAA, PFOS, and PFOA.

<sup>c</sup> A current standard is not available; the compound is currently under review by DHS for potential public health standard recommendation.

<sup>d</sup> Public health enforcement standard (ES) in NR 140, Wisconsin Administrative Code.

<sup>e</sup> Units: Parts per trillion (ppt) = nanograms of substance per liter of water (ng/L)

<sup>BL</sup> Detected in the method blank. Possible lab contaminant.

As required by law, we will be submitting these results to the Department of Natural Resources (DNR). The DNR may consult with the Department of Health Services (DHS) about these test results. DHS may review all PFAS tests and follow-up with you directly if any actions are recommended to protect your health.

Thank you for your patience and assistance with our investigation. We will provide updates on the project at <a href="https://www.cityoflacrosse.org/wells">https://www.cityoflacrosse.org/wells</a> as our work continues. If you have any questions, please call The OS Group at (608) 668-2718 or email them at <a href="https://www.pFAS@theOSgrp.com">PFAS@theOSgrp.com</a>.

Private Well Sampling Results for 2545 1st Avenue East, La Crosse, WI 54603 Tax Parcel # 4-255-0 December 2, 2020

You can also contact the DNR and DHS with questions about PFAS or the water sample results at the numbers provided below.

Questions about		<u>Contact</u>	<u>Phone</u>	E-mail Address
Soil & Groundwater Testing, Clean Up	DNR	David Rozeboom	715-215-2078	David.Rozeboom@wisconsin.gov
Drinking Water or Private wells	DNR	Kyle Burton	920-360-2112	kyle.burton@wisconsin.gov
Health Concerns	DHS	Curtis Hedman	608-266-6677	Curtis.Hedman@dhs.wisconsin.gov

On behalf of The City of La Crosse *The OS Group, LLC* 

Attachment: Lab report for your well Bottled Water Acknowledgement

Client: Pace Analytical Services, LLC				Laboratory II	D: VK12004-	005	
Description: 255-0				Matrix	x: Aqueous		
Date Sampled:11/05/2020 1215	Project Name	: LACROSSE WELL 2	23 & 24				
Date Received: 11/12/2020 F	Project Number	r: 40217917					
Run Pren Method Analytical Method	Dilution An	alvsis Date Analyst	Pron Dato	Batch			
1SOP SPEPFAS by ID SOP	1 11/	20/2020 1840 KMM2	11/19/2020 1	221 74049			
Deservator	CAS	Analytical	Descult. O	1.00		Linite	Dura
Parameter 9. chlorobevadecafluoro. 3. ovanone. 1. sulfonic acid (901-PE30NS	Number			2 LOQ	1.0	Units	Run
11-chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11CL-PE3	) 763051-92-0	PEAS by ID SOP	ND	7.1	1.8	ng/L	1
1H 1H 2H 2H-perfluorodecane sulfonic acid (8:2 FTS)	39108-34-4	PEAS by ID SOP	ND	7.1	1.0	ng/L	1
1H 1H 2H 2H-perfluorooctane sulfonic acid (6:2 FTS)	27619-97-2	PEAS by ID SOP	ND	7.1	1.0	ng/L	1
1H 1H 2H 2H-perfluorododecane sulfonic acid (10:2 FTS)	120226-60-0	) PEAS by ID SOP	ND	7.1	1.0	ng/L	1
1H 1H 2H 2H-perfluorobexane sulfonic acid (4·2 FTS)	757124-72-4	PFAS by ID SOP	ND	7.1	1.0	ng/L	1
Hexafluoropropylene oxide dimer acid (GenX)	13252-13-6	5 PEAS by ID SOP	ND	7.1	1.0	ng/L	1
4.8-dioxa-3H-perfluorononanoic acid (ADONA)	919005-14-4	PFAS by ID SOP	ND	7.1	1.8	ng/L	1
N-ethylperfluoro-1-octanesulfonamide (EtEQSA)	4151-50-2	PFAS by ID SOP	ND	7.1	1.8	ng/L	1
N-ethylperfluoro-1-octanesulfonamidoacetic acid (EtEOSAA)	2991-50-6	PFAS by ID SOP	ND	7.1	1.8	ng/L	1
2-N-ethylperfluoro-1-octanesulfonamido-ethanol (EtFOSE)	1691-99-2	PFAS by ID SOP	ND	7.1	1.8	ng/L	1
N-methylperfluoro-1-octanesulfonamide (MeEOSA)	31506-32-8	PFAS by ID SOP	ND	14	3.6	ng/l	1
N-methylperfluoro-1-octanesulfonamidoacetic acid (MeEOSAA)	2355-31-9	PFAS by ID SOP	ND	7.1	1.8	ng/l	1
2-N-methylperfluoro-1-octanesulfonamido-ethanol (MeFQSF)	24448-09-7	7 PFAS by ID SOP	ND	7.1	1.8	ng/L	1
Perfluoro-1-butanesulfonic acid (PFBS)	375-73-5	FFAS by ID SOP	28 B	3.6	0.89	ng/L	1
Perfluoro-1-decanesulfonic acid (PFDS)	335-77-3	PFAS by ID SOP	ND	3.6	0.89	ng/L	1
Perfluoro-1-heptanesulfonic acid (PFHpS)	375-92-8	PFAS by ID SOP	25	3.6	0.89	ng/L	1
Perfluoro-1-nonanesulfonic acid (PFNS)	68259-12-1	I PFAS by ID SOP	ND	3.6	0.89	ng/L	1
Perfluoro-1-octanesulfonamide (PFOSA)	754-91-6	PFAS by ID SOP	1.2 J	3.6	0.89	ng/L	1
Perfluoro-1-pentanesulfonic acid (PFPeS)	2706-91-4	PFAS by ID SOP	51	3.6	0.89	ng/L	1
Perfluorododecanesulfonic acid (PFDOS)	79780-39-5	5 PFAS by ID SOP	ND	7.1	1.8	ng/L	1
Perfluorohexanesulfonic acid (PFHxS)	355-46-4	PFAS by ID SOP	580	3.6	0.89	ng/L	1
Perfluoro-n-butanoic acid (PFBA)	375-22-4	PFAS by ID SOP	33 B	3.6	0.89	ng/L	1
Perfluoro-n-decanoic acid (PFDA)	335-76-2	PFAS by ID SOP	ND	3.6	0.89	ng/L	1
Perfluoro-n-dodecanoic acid (PFDoA)	307-55-1	PFAS by ID SOP	ND	3.6	0.89	ng/L	1
Perfluoro-n-heptanoic acid (PFHpA)	375-85-9	PFAS by ID SOP	3.2 J	3.6	0.89	ng/L	1
Perfluoro-n-hexadecanoic acid (PFHxDA)	67905-19-5	5 PFAS by ID SOP	ND	7.1	1.8	ng/L	1
Perfluoro-n-hexanoic acid (PFHxA)	307-24-4	PFAS by ID SOP	15	3.6	0.89	ng/L	1
Perfluoro-n-nonanoic acid (PFNA)	375-95-1	PFAS by ID SOP	ND	3.6	0.89	ng/L	1
Perfluoro-n-octadecanoic acid (PFODA)	16517-11-6	6 PFAS by ID SOP	ND	7.1	1.8	ng/L	1
Perfluoro-n-octanoic acid (PFOA)	335-67-1	PFAS by ID SOP	27 B	3.6	0.89	ng/L	1
Perfluoro-n-pentanoic acid (PFPeA)	2706-90-3	PFAS by ID SOP	3.8	3.6	0.89	ng/L	1
Perfluoro-n-tetradecanoic acid (PFTeDA)	376-06-7	PFAS by ID SOP	ND	3.6	0.89	ng/L	1
Perfluoro-n-tridecanoic acid (PFTrDA)	72629-94-8	B PFAS by ID SOP	ND	3.6	0.89	ng/L	1
Perfluoro-n-undecanoic acid (PFUdA)	2058-94-8	B PFAS by ID SOP	ND	3.6	0.89	ng/L	1
Perfluorooctanesulfonic acid (PFOS)	1763-23-1	PFAS by ID SOP	190	3.6	0.89	ng/L	1
Surrogate Q % F	Run 1 Acce Recovery L	eptance imits					
13C2_4:2FTS	122 2	25-150					
13C2_6:2FTS	110 2	25-150					
13C2_8:2FTS	109 2	25-150					
13C2_PFDoA	88 2	25-150					
13C2_PFHxDA	105 2	25-150					
13C2_PFTeDA	91 2	25-150					
LOQ = Limit of Quantitation B = Detected in the method blank	E = Quantitation	n of compound exceeded the	calibration range	DL = Detection Lin	nit		
ND = Not detected at or above the DL N = Recovery is out of criteria	P = The RPD b	etween two GC columns exce	eeds 40%	= Estimated resu	It < LOQ and $\geq$ E	DL	
H = Out of notaing time W = Reported on wet weight basi	5						

Client: Pace Analytical Services, LLC		Laboratory ID: VK12004-005
Description: 255-0		Matrix: Aqueous
Date Sampled:11/05/2020 1215	Project Name: LACROSSE WELL 23 & 24	
Date Received: 11/12/2020	Project Number: 40217917	

Surrogate	Run 1 Ao Q % Recovery	cceptance Limits
13C3_PFBS	89	25-150
13C3_PFHxS	85	25-150
13C3-HFPO-DA	108	25-150
13C4_PFBA	105	25-150
13C4_PFHpA	98	25-150
13C5_PFHxA	100	25-150
13C5_PFPeA	102	25-150
13C6_PFDA	97	25-150
13C7_PFUdA	92	25-150
13C8_PFOA	92	25-150
13C8_PFOS	95	25-150
13C8_PFOSA	114	10-150
13C9_PFNA	96	25-150
d-EtFOSA	76	10-150
d5-EtFOSAA	103	25-150
d9-EtFOSE	92	10-150
d-MeFOSA	94	10-150
d3-MeFOSAA	106	25-150
d7-MeFOSE	98	10-150

LOQ = Limit of QuantitationB = Detected in the method blankE = Quantitation of compound exceeded the calibration rangeDL = Detection LimitND = Not detected at or above the DLN = Recovery is out of criteriaP = The RPD between two GC columns exceeds 40%J = Estimated result < LOQ and ≥ DL</td>H = Out of holding timeW = Reported on wet weight basis

## BOTTLED WATER ACKNOWLEDGEMENT

2545 1st Avenue East, La Crosse, WI 54603

If you desire to accept the bottled water delivery, please complete and sign this form and return it to The OS Group at <u>PFAS@TheOSqrp.com</u> or mail to 444 21<sup>st</sup> St. S, La Crosse, WI 54601. You may also complete this form electronically on line at <u>www.cityoflacrosse.org/bottledwater</u>. Call 608-668-2718 with any question you may have.

As pre-caution for the protection of human health, the City of La Crosse (The City) will provide, on a temporary basis, bottled water for drinking, cooking and toothbrushing purposes at the above referenced address. The water will be delivered to your home or business by a commercial water delivery service. At the City's cost, a dispenser / cooler and regular deliveries of 5-gallon containers of water will be provided. The City reserves the right to dictate the conditions of delivery, such as minimum and maximum number of containers per delivery, frequency and timing of deliveries. The City reserves the right to periodically review whether The City should continue to provide bottled water, considering factors such as State and Federal standards and guidance, evolving knowledge and understanding of the sources, cause and responsibility for the contamination, new or reinterpreted test results, and the availability of more permanent or cost-effective sources of water for the above purposes. The City of La Crosse makes no warranty or representation regarding the suitability of the bottled water beyond those made by the commercial water delivery service.

All reusable or returnable equipment and supplies, such as the containers and cooler/dispenser, are the property of the commercial water delivery service or the City of La Crosse. By signing below, the Occupant of the above referenced property acknowledges that all reusable or returnable equipment and supplies shall be returned to the commercial water delivery service or the City of La Crosse upon request. The Occupant agrees to provide reasonable access for delivery of bottled water and pick up of reusable or returnable equipment(s) acknowledges that they may be required to sign an agreement with the commercial water delivery service as a condition of receiving bottled water.

Check ownership:

\_\_\_\_\_ Owner-Occupant

\_\_\_\_\_ Occupant Only

Number of Occupants: \_\_\_\_\_

Signed: \_\_\_\_\_ Dated: \_\_\_\_\_

Printed Name: \_\_\_\_\_



444 21st Street South · La Crosse, Wisconsin · 54601

December 2, 2020

2510 1st Avenue West La Crosse, WI 54603

Subject: Private Well Sampling Results 2510 1st Avenue West, La Crosse, WI 54603 Tax parcel # 4-347-0 Sample ID # 347-0

:

Dear

We have received and reviewed the test results for the sample collected on November 5, 2020 at the above address. Some PFAS compounds were found, but the levels found were **below** the Department of Health Services (DHS) levels recommended for protecting health. These levels are called the "Recommended Public Health Standard" in the table below. The levels found in *your* well are called the "Sample Result" in the table below.

#### Sample Results

Compound	Sample Result (unit)	Recommended Public Health Standard (unit <sup>e</sup> )	
N-Ethyl Perfluorooctane sulfonamide (NEtFOSA) CAS # 4151-50-2	Not Detected	20 ppt <sup>a,b</sup>	) ppt unds I 6
N-Ethyl perfluorooctane sulfonamidoacetic acid (NEtFOSAA) CAS # 2991-50-6	Not Detected	20 ppt <sup>a,b</sup>	it is 20 ompo <i>i</i> / of all
N-Ethyl perfluorooctane sulfonamidoethanol (NEtFOSE) CAS # 1691-99-2	Not Detected	20 ppt <sup>a,b</sup>	ed lim ese 6 c ed toto
Perfluorooctane sulfonamide (FOSA) CAS # 754-91-6	Not Detected	20 ppt <sup>a,b</sup>	mend of the mbine
Perfluorooctanoic acid (PFOA) CAS # 335-67-1	1.8 ppt	20 ppt <sup>a,b</sup>	recom ny <i>one</i> the <i>c</i> c
Perfluorooctanesulfonic acid (PFOS) CAS # 1763-23-1	4.7 ppt	20 ppt <sup>a,b</sup>	The for a or
Private Well Sampling Results for 2510 1st Avenue West, La Crosse, WI 54603 Tax parcel # 4-347-0 Sample ID # 347-0 December 2, 2020

Compound	Sample Result (unit)	Recommended Public Health Standard (unit <sup>e</sup> )
Hexafluoropropylene oxide dimer acid (HPFO-DA; GenX) CAS # 13252-13-6	Not Detected	300 ppt <sup>a</sup>
Perfluorobutanesulfonic acid (PFBS) CAS # 375-73-5	6.1 ppt	450,000 ppt <sup>a</sup>
Perfluorohexanesulfonic acid (PFHxS) CAS # 355-46-4	6.5 ppt	40 ppt <sup>a</sup>
Perfluorobutanoic acid (PFBA) CAS # 375-22-4	13 ppt	10,000 ppt <sup>a</sup>
Perfluorodecanoic acid (PFDA) CAS # 335-76-2	Not Detected	300 ppt <sup>a</sup>
Perfluorododecanoic acid (PFDoA) CAS # 307-55-1	Not Detected	500 ppt <sup>a</sup>
Perfluorohexanoic acid (PFHxA) CAS # 307-24-4	Not Detected	150,000 ppt <sup>a</sup>
Perfluorononanoic acid (PFNA) CAS # 375-95-1	Not Detected	30 ppt <sup>a</sup>
Perfluorotetradecanoic acid (PFTeA) CAS # 376-06-7	Not Detected	10,000 ppt <sup>a</sup>
Perfluoroundecanoic acid (PFUnA) CAS # 2058-94-8	Not Detected	3,000 ppt <sup>a</sup>
4,8-Dioxa-3H-perfluorononanoic acid (DONA) CAS # 919005-14-4	Not Detected	3,000 ppt <sup>a</sup>
Perfluorooctadecanoic acid (PFODA) CAS # 16517-11-6	Not Detected	400,000 ppt <sup>a</sup>
Perfluoro-1-pentanesulfonic acid (PFPeS) CAS #2706-91-4	5.0 ppt	None Established <sup>c</sup>

<sup>a</sup> Public health enforcement standard (ES) recommended by DHS.

<sup>b</sup> DHS recommends a combined enforcement standard of 20 ng/L and combined preventive action limit of 2 ng/L for FOSA, NEt-FOSE, NEt-FOSA, NetFOSAA, PFOS, and PFOA.

A current standard is not available; the compound is currently under review by DHS for potential public health standard recommendation.

<sup>4</sup> Public health enforcement standard (ES) in NR 140, Wisconsin Administrative Code.

Units: Parts per trillion (ppt) = nanograms of substance per liter of water (ng/L)

<sup>BL</sup> Detected in the method blank. Possible lab contaminant.

Private Well Sampling Results for 2510 1st Avenue West, La Crosse, WI 54603 Tax parcel # 4-347-0 Sample ID # 347-0 December 2, 2020

As required by law, we will be submitting these results to the Department of Natural Resources (DNR). The DNR may consult with the Department of Health Services (DHS) about these test results. DHS may review all PFAS tests and follow-up with you directly if any actions are recommended to protect your health.

Thank you for your patience and assistance with our investigation. We will provide updates on the project at <a href="https://www.cityoflacrosse.org/wells">https://www.cityoflacrosse.org/wells</a> as our work continues. If you have any questions, please call The OS Group at (608) 668-2718 or email them at <a href="https://www.pFAS@theOSgrp.com">PFAS@theOSgrp.com</a>.

You can also contact the DNR and DHS with questions about PFAS or the water sample results at the numbers provided below.

Questions about		<u>Contact</u>	<u>Phone</u>	E-mail Address
Soil & Groundwater Testing, Clean Up	DNR	David Rozeboom	715-215-2078	David.Rozeboom@wisconsin.gov
Drinking Water or Private wells	DNR	Kyle Burton	920-360-2112	kyle.burton@wisconsin.gov
Health Concerns	DHS	Curtis Hedman	608-266-6677	Curtis.Hedman@dhs.wisconsin.gov

On behalf of The City of La Crosse *The OS Group, LLC* 

Attachment: Lab report for your well

Client: Pace Analytical Services, LLC						Laboratory II	D:VK12004-0	800	
Description: 347-0						Matri	x: Aqueous		
Date Sampled:11/05/2020 1300	Project Na	me: L	ACROSSE WELL 2	23 & 24					
Date Received: 11/12/2020 Pr	oiect Numl	her· 4	10217917						
	oject Num	001	10217717						
RunPrep MethodAnalytical MethodI2SOP SPEPFAS by ID SOP	Dilution 1	Anal 11/25	ysis Date Analyst /2020 0348 SES	Prep 11/22/2	Date 2020 14	Batch 54 74383			
Parameter	C/ Numb	AS ber	Analytical Method	Result	Q	LOQ	DL	Units	Run
9-chlorohexadecafluoro-3-oxanone-1-sulfonic acid (9CI-PF3ONS)	756426-5	8-1	PFAS by ID SOP	ND		6.9	1.7	ng/L	2
11-chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3)	) 763051-9	2-9	PFAS by ID SOP	ND		6.9	1.7	ng/L	2
1H, 1H, 2H, 2H-perfluorodecane sulfonic acid (8:2 FTS)	39108-3	84-4	PFAS by ID SOP	ND		6.9	1.7	ng/L	2
1H, 1H, 2H, 2H-perfluorooctane sulfonic acid (6:2 FTS)	27619-9	7-2	PFAS by ID SOP	ND		6.9	1.7	ng/L	2
1H,1H,2H,2H-perfluorododecane sulfonic acid (10:2 FTS)	120226-6	0-0	PFAS by ID SOP	ND		6.9	1.7	ng/L	2
1H,1H,2H,2H-perfluorohexane sulfonic acid (4:2 FTS)	757124-7	2-4	PFAS by ID SOP	ND		6.9	1.7	ng/L	2
Hexafluoropropylene oxide dimer acid (GenX)	13252-1	3-6	PFAS by ID SOP	ND		6.9	1.7	ng/L	2
4,8-dioxa-3H-perfluorononanoic acid (ADONA)	919005-1	4-4	PFAS by ID SOP	ND		6.9	1.7	ng/L	2
N-ethylperfluoro-1-octanesulfonamide (EtFOSA)	4151-5	0-2	PFAS by ID SOP	ND		6.9	1.7	ng/L	2
N-ethylperfluoro-1-octanesulfonamidoacetic acid (EtFOSAA)	2991-5	0-6	PFAS by ID SOP	ND		6.9	1.7	ng/L	2
2-N-ethylperfluoro-1-octanesulfonamido-ethanol (EtFOSE)	1691-9	9-2	PFAS by ID SOP	ND		6.9	1.7	ng/L	2
N-methylperfluoro-1-octanesulfonamide (MeFOSA)	31506-3	2-8	PFAS by ID SOP	ND		14	3.5	ng/L	2
N-methylperfluoro-1-octanesulfonamidoacetic acid (MeFOSAA)	2355-3	1-9	PFAS by ID SOP	ND		6.9	1.7	ng/L	2
2-N-methylperfluoro-1-octanesulfonamido-ethanol (MeFOSE)	24448-0	9-7	PFAS by ID SOP	ND		6.9	1.7	ng/L	2
Perfluoro-1-butanesulfonic acid (PFBS)	375-7	3-5	PFAS by ID SOP	6.1		3.5	0.87	ng/L	2
Perfluoro-1-decanesulfonic acid (PFDS)	335-7	7-3	PFAS by ID SOP	ND		3.5	0.87	ng/L	2
Perfluoro-1-heptanesulfonic acid (PFHpS)	375-9	2-8	PFAS by ID SOP	ND		3.5	0.87	ng/L	2
Perfluoro-1-nonanesulfonic acid (PFNS)	68259-1	2-1	PFAS by ID SOP	ND		3.5	0.87	ng/L	2
Perfluoro-1-octanesulfonamide (PFOSA)	754-9	1-6	PFAS by ID SOP	ND		3.5	0.87	ng/L	2
Perfluoro-1-pentanesulfonic acid (PFPeS)	2706-9	1-4	PFAS by ID SOP	5.0		3.5	0.87	ng/L	2
Perfluorododecanesulfonic acid (PFDOS)	79780-3	9-5	PFAS by ID SOP	ND		6.9	1.7	ng/L	2
Perfluorohexanesulfonic acid (PFHxS)	355-4	6-4	PFAS by ID SOP	6.5		3.5	0.87	ng/L	2
Perfluoro-n-butanoic acid (PFBA)	375-2	2-4	PFAS by ID SOP	13		3.5	0.87	ng/L	2
Perfluoro-n-decanoic acid (PFDA)	335-7	6-2	PFAS by ID SOP	ND		3.5	0.87	ng/L	2
Perfluoro-n-dodecanoic acid (PFDoA)	307-5	5-1	PFAS by ID SOP	ND		3.5	0.87	ng/L	2
Perfluoro-n-heptanoic acid (PFHpA)	375-8	5-9	PFAS by ID SOP	ND		3.5	0.87	ng/L	2
Perfluoro-n-hexadecanoic acid (PFHxDA)	67905-1	9-5	PFAS by ID SOP	ND		6.9	1.7	ng/L	2
Perfluoro-n-hexanoic acid (PFHxA)	307-2	4-4	PFAS by ID SOP	ND		3.5	0.87	ng/L	2
Perfluoro-n-nonanoic acid (PFNA)	375-9	5-1	PFAS by ID SOP	ND		3.5	0.87	ng/L	2
Perfluoro-n-octadecanoic acid (PFODA)	16517-1	1-6	PFAS by ID SOP	ND		6.9	1.7	ng/L	2
Perfluoro-n-octanoic acid (PFOA)	335-6	7-1	PFAS by ID SOP	1.8	J	3.5	0.87	ng/L	2
Perfluoro-n-pentanoic acid (PFPeA)	2706-9	0-3	PFAS by ID SOP	ND		3.5	0.87	ng/L	2
Perfluoro-n-tetradecanoic acid (PFTeDA)	376-0	6-7	PFAS by ID SOP	ND		3.5	0.87	ng/L	2
Perfluoro-n-tridecanoic acid (PFTrDA)	72629-9	94-8	PFAS by ID SOP	ND		3.5	0.87	ng/L	2
Perfluoro-n-undecanoic acid (PFUdA)	2058-9	4-8	PFAS by ID SOP	ND		3.5	0.87	ng/L	2
Perfluorooctanesulfonic acid (PFOS)	1763-2	3-1	PFAS by ID SOP	4.7		3.5	0.87	ng/L	2
Surrogate Q % Re	un 2 Ao covery	ccep Lim	tance hits						
13C2_4:2FTS	99	25-	150						
13C2_6:2FTS	93	25-	150						
13C2_8:2FTS	93	25-	150						
13C2_PFDoA	81	25-	150						
13C2_PFHxDA	78	25-	150						
13C2_PFTeDA	82	25-	150						
LOQ = Limit of QuantitationB = Detected in the method blankND = Not detected at or above the DLN = Recovery is out of criteriaH = Out of holding timeW = Reported on wet weight basis	E = Quantita P = The RP	ation of D betw	f compound exceeded the over two GC columns exceeded the over two GC columns exceeded the over the ove	calibration r eds 40%	ange D J	L = Detection Lin = Estimated resu	nit Ilt < LOQ and ≥ D	L	

Client: Pace Analytical Services, LLC		Laboratory ID: VK12004-008
Description: 347-0		Matrix: Aqueous
Date Sampled:11/05/2020 1300	Project Name: LACROSSE WELL 23 & 24	
Date Received: 11/12/2020	Project Number: 40217917	
Surrogate	Run 2 Acceptance Q % Recovery Limits	

Surrogate	Q % Recovery	Limits	
13C3_PFBS	88	25-150	
13C3_PFHxS	82	25-150	
13C3-HFPO-DA	93	25-150	
13C4_PFBA	94	25-150	
13C4_PFHpA	88	25-150	
13C5_PFHxA	92	25-150	
13C5_PFPeA	92	25-150	
13C6_PFDA	90	25-150	
13C7_PFUdA	90	25-150	
13C8_PFOA	91	25-150	
13C8_PFOS	79	25-150	
13C8_PFOSA	102	10-150	
13C9_PFNA	90	25-150	
d-EtFOSA	91	10-150	
d5-EtFOSAA	93	25-150	
d9-EtFOSE	88	10-150	
d-MeFOSA	86	10-150	
d3-MeFOSAA	102	25-150	
d7-MeFOSE	80	10-150	

LOQ = Limit of Quantitation	B = Detected in the method blank	E = Quantitation of compound exceeded the calibration range	DL = Detection Limit
ND = Not detected at or above the DL	N = Recovery is out of criteria	P = The RPD between two GC columns exceeds 40%	J = Estimated result < LOQ and $\ge$ DL
H = Out of holding time	W = Reported on wet weight basis		



444 21<sup>st</sup> Street South  $\cdot$  La Crosse, Wisconsin  $\cdot$  54601

December 9, 2020

2640 Fanta Reed Road La Crosse, WI 54603

Subject: Private Well Sampling Results 2640 Fanta Reed Road, La Crosse, WI 54603 Tax parcel # 4-106-0 Sample ID # 106-0

#### Dear :

We have received and reviewed the test results for the sample collected on November 9, 2020 at the above address. Some PFAS compounds were found at levels <u>above</u> the Department of Health Services (DHS) levels recommended for protecting health. These levels are called the "Recommended Public Health Standard" in the table below. The levels found in your well are called the "Sample Result" in the table below.

Because some of the levels are above the recommended Public Health Standard, the City is offering to provide bottled water delivered to your home for drinking, cooking, and brushing your teeth. There will be no cost to you for the bottled water. Please complete the attached form and mail it to The OS Group to make arrangements for having a water dispenser and bottles delivered to your home. Call 608-668-2718 or email <u>PFAS@theOSgrp.com</u>. You may also complete this form on line at <u>www.cityoflacrosse.org/bottledwater</u>

The following table summarizes the test results from the sample. **Bolded results** are above a current recommended level intended to protect your health according to the Department of Health Services (DHS).

Private Well Sampling Results for 2640 Fanta Reed Road, La Crosse, WI 54603 Tax Parcel # 4-106-0 December 9, 2020

Samp	le Result	S
-		

Compound	Sample Result (unit)	Recomm Public H Standard	ended Iealth (unit <sup>e</sup> )	
N-Ethyl Perfluorooctane sulfonamide (NEtFOSA) CAS # 4151-50-2	Not Detected	20 ppt <sup>a,b</sup>		
N-Ethyl perfluorooctane sulfonamidoacetic acid (NEtFOSAA) CAS # 2991-50-6	Not Detected	20 ppt <sup>a,b</sup>	it is 20 ompo // of all	
N-Ethyl perfluorooctane sulfonamidoethanol (NEtFOSE) CAS # 1691-99-2	Not Detected	20 ppt <sup>a,b</sup> 20 ppt <sup>a,b</sup>		
Perfluorooctane sulfonamide (FOSA) CAS # 754-91-6	Not Detected	20 ppt <sup>a,b</sup>	mend of the	
Perfluorooctanoic acid (PFOA) CAS # 335-67-1	34 ppt	20 ppt <sup>a,b</sup>	recom ny <i>one</i> the <i>c</i> c	
Perfluorooctanesulfonic acid (PFOS) CAS # 1763-23-1	390 ppt	20 ppt <sup>a,b</sup>	The for a or	
Hexafluoropropylene oxide dimer acid (HPFO-DA; GenX) CAS # 13252-13-6	Not Detected	300 ppt		
Perfluorobutanesulfonic acid (PFBS) CAS # 375-73-5	16 ppt	450	),000 ppt <sup>a</sup>	
Perfluorohexanesulfonic acid (PFHxS) CAS # 355-46-4	130 ppt	40 ppt <sup>a</sup>		
Perfluorobutanoic acid (PFBA) CAS # 375-22-4	17 ppt	10,000 ppt <sup>a</sup>		
Perfluorodecanoic acid (PFDA) CAS # 335-76-2	Not Detected	300 ppt <sup>a</sup>		
Perfluorododecanoic acid (PFDoA) CAS # 307-55-1	Not Detected	500 ppt ª		
Perfluorohexanoic acid (PFHxA) CAS # 307-24-4	38 ppt	150	),000 ppt <sup>a</sup>	
Perfluorononanoic acid (PFNA) CAS # 375-95-1	1.9 ppt	30 ppt <sup>a</sup>		
Perfluorotetradecanoic acid (PFTeA) CAS # 376-06-7	Not Detected	10,000 ppt <sup>a</sup>		
Perfluoroundecanoic acid (PFUnA) CAS # 2058-94-8	Not Detected	3,000 ppt <sup>a</sup>		
4,8-Dioxa-3H-perfluorononanoic acid (DONA) CAS # 919005-14-4	Not Detected	3	8,000 ppt <sup>a</sup>	
Perfluorooctadecanoic acid (PFODA) CAS # 16517-11-6	Not Detected	400	),000 ppt <sup>a</sup>	

1H, 1H, 2H, 2H-perflurooctane sulfonic acid (6:2 FTS) CAS # 27619-97-2	48 ppt	None Established <sup>c</sup>
Perfluoro-1-heptanesulfonic acid (PFHpS) CAS # 375-92-8	9.1 ppt	None Established <sup>c</sup>
Perfluoro-1-pentanesulfonic acid (PFPeS) CAS # 2706-91-4	18 ppt	None Established <sup>c</sup>
Perfluoro-n-heptanoic acid (PFHpA) CAS # 375-85-9	17 ppt	None Established <sup>c</sup>
Perfluoro-n-pentanoic acid (PFPeA) CAS #2706-90-3	42 ppt	None Established <sup>c</sup>

<sup>a</sup> Public health enforcement standard (ES) recommended by DHS.

<sup>b</sup> DHS recommends a combined enforcement standard of 20 ng/L and combined preventive action limit of 2 ng/L for FOSA, NEt-FOSE, NEt-FOSA, NetFOSAA, PFOS, and PFOA.

<sup>c</sup> A current standard is not available; the compound is currently under review by DHS for potential public health standard recommendation.

<sup>d</sup> Public health enforcement standard (ES) in NR 140, Wisconsin Administrative Code.

<sup>e</sup> Units: Parts per trillion (ppt) = nanograms of substance per liter of water (ng/L)

<sup>BL</sup> Detected in the method blank. Possible lab contaminant.

As required by law, we will be submitting these results to the Department of Natural Resources (DNR). The DNR may consult with the Department of Health Services (DHS) about these test results. DHS may review all PFAS tests and follow-up with you directly if any actions are recommended to protect your health.

Thank you for your patience and assistance with our investigation. We will provide updates on the project at <a href="https://www.cityoflacrosse.org/wells">https://www.cityoflacrosse.org/wells</a> as our work continues. If you have any questions, please call The OS Group at (608) 668-2718 or email them at <a href="https://www.pFAS@theOSgrp.com">PFAS@theOSgrp.com</a>.

You can also contact the DNR and DHS with questions about PFAS or the water sample results at the numbers provided below.

Questions about.	<u></u>	<u>Contact</u>	<u>Phone</u>	E-mail Address
Soil & Groundwater Testing, Clean Up	DNR	David Rozeboom	715-215-2078	David.Rozeboom@wisconsin.gov
Drinking Water or Private wells	DNR	Kyle Burton	920-360-2112	kyle.burton@wisconsin.gov
Health Concerns	DHS	Curtis Hedman	608-266-6677	Curtis.Hedman@dhs.wisconsin.gov

On behalf of The City of La Crosse *The OS Group, LLC* 

Attachment: Lab report for your well Bottled Water Acknowledgement

## BOTTLED WATER ACKNOWLEDGEMENT

2640 Fanta Reed Road, La Crosse, WI 54603

If you desire to accept the bottled water delivery, please complete and sign this form and return it to The OS Group at <u>PFAS@TheOSqrp.com</u> or mail to 444 21<sup>st</sup> St. S, La Crosse, WI 54601. You may also complete this form electronically on line at <u>www.cityoflacrosse.org/bottledwater</u>. Call 608-668-2718 with any question you may have.

As pre-caution for the protection of human health, the City of La Crosse (The City) will provide, on a temporary basis, bottled water for drinking, cooking and toothbrushing purposes at the above referenced address. The water will be delivered to your home or business by a commercial water delivery service. At the City's cost, a dispenser / cooler and regular deliveries of 5-gallon containers of water will be provided. The City reserves the right to dictate the conditions of delivery, such as minimum and maximum number of containers per delivery, frequency and timing of deliveries. The City reserves the right to periodically review whether The City should continue to provide bottled water, considering factors such as State and Federal standards and guidance, evolving knowledge and understanding of the sources, cause and responsibility for the contamination, new or reinterpreted test results, and the availability of more permanent or cost-effective sources of water for the above purposes. The City of La Crosse makes no warranty or representation regarding the suitability of the bottled water beyond those made by the commercial water delivery service.

All reusable or returnable equipment and supplies, such as the containers and cooler/dispenser, are the property of the commercial water delivery service or the City of La Crosse. By signing below, the Occupant of the above referenced property acknowledges that all reusable or returnable equipment and supplies shall be returned to the commercial water delivery service or the City of La Crosse upon request. The Occupant agrees to provide reasonable access for delivery of bottled water and pick up of reusable or returnable equipment(s) acknowledges that they may be required to sign an agreement with the commercial water delivery service as a condition of receiving bottled water.

**Check ownership:** 

Owner-Occupant	
Occupant Only	
Number of Occupants:	-
Signed:	_ Dated:
Printed Name:	
Phone Number: ()	

Client: Pace Analytical Services, LLC				Laboratory ID	D: VK15010-	004	
Description: 106-0				Matrix	: Aqueous		
Date Sampled:11/09/2020 1325	Project Name	LACROSSE WELLS	5 23 & 24		·		
Date Received: 11/13/2020 Pr	oiect Number	· 40218153					
		. 40210133					
Run Prep Method Analytical Method I	Dilution An	alysis Date Analyst	Prep Date	Batch			
I SOP SPE PEAS by ID SOP	1 11/.	29/2020 1504 MIMIN	11/25/2020	1438 /4//3			
2 SOP SPE PEAS by ID SOP	1 12/0	J3/2020 2235 IVIIVIIVI	12/02/2020	1200 75232			
	CAS	Analytical					_
Parameter	Number	Method	Result Q	LOQ	DL	Units	Run
9-chloronexadecalluoro-3-oxanone-1-sullonic acid (9CI-PF3ONS)	/50420-58-1		ND	7.1	1.8	ng/L	1
11-chloroelcosalluoro-3-oxaundecane-1-sullonic acid (11CI-PF3	) 763051-92-9		ND	7.1	1.8	ng/L	1
TH, TH, 2H, 2H-periluorodecane suifonic acid (8:2 FTS)	39108-34-4		ND 40	7.1	1.8	ng/L	1
11, 11, 21, 21, perfluorooctane suitonic acid (6:2 FTS)	27619-97-2		48	7.3	1.8	ng/L	2
IH, IH, 2H, 2H-perfluorododecane sulfonic acid (10:2 FTS)	120226-60-0	PFAS by ID SOP	ND	7.1	1.8	ng/L	1
IH, IH, 2H, 2H-perfluoronexane sulfonic acid (4:2 FTS)	/5/124-/2-4	PFAS by ID SOP	ND	7.1	1.8	ng/L	1
Hexafluoropropylene oxide dimer acid (GenX)	13252-13-6	PFAS by ID SOP	ND	7.1	1.8	ng/L	1
4,8-dioxa-3H-perfluorononanoic acid (ADONA)	919005-14-4	PFAS by ID SOP	ND	7.1	1.8	ng/L	1
N-ethylperfluoro-1-octanesulfonamide (EtFOSA)	4151-50-2	PEAS by ID SOP	ND	7.1	1.8	ng/L	1
N-ethylperfluoro-1-octanesulfonamidoacetic acid (EtFOSAA)	2991-50-6	PEAS by ID SOP	ND	7.1	1.8	ng/L	1
2-N-ethylperfluoro-1-octanesulfonamido-ethanol (EtFOSE)	1691-99-2	PEAS by ID SOP	ND	7.1	1.8	ng/L	1
N-methylperfluoro-1-octanesultonamide (MeFOSA)	31506-32-8	PEAS by ID SOP	ND	14	3.5	ng/L	1
N-methylperfluoro-1-octanesulfonamidoacetic acid (MeFOSAA)	2355-31-9	PFAS by ID SOP	ND	7.1	1.8	ng/L	1
2-N-methylperfluoro-1-octanesultonamido-ethanol (MeFOSE)	24448-09-7	PFAS by ID SOP	ND	7.1	1.8	ng/L	1
Perfluoro-1-butanesulfonic acid (PFBS)	375-73-5	PFAS by ID SOP	16	3.5	0.89	ng/L	1
Perfluoro-1-decanesulfonic acid (PFDS)	335-77-3	PFAS by ID SOP	ND	3.5	0.89	ng/L	1
Perfluoro-1-heptanesulfonic acid (PFHpS)	375-92-8	PFAS by ID SOP	9.1	3.5	0.89	ng/L	1
Perfluoro-1-nonanesulfonic acid (PFNS)	68259-12-1	PFAS by ID SOP	ND	3.5	0.89	ng/L	1
Perfluoro-1-octanesulfonamide (PFOSA)	754-91-6	PFAS by ID SOP	ND	3.5	0.89	ng/L	1
Perfluoro-1-pentanesulfonic acid (PFPeS)	2706-91-4	PFAS by ID SOP	18	3.5	0.89	ng/L	1
Perfluorododecanesulfonic acid (PFDOS)	79780-39-5	PFAS by ID SOP	ND	7.1	1.8	ng/L	1
Perfluorohexanesulfonic acid (PFHxS)	355-46-4	PFAS by ID SOP	130	3.5	0.89	ng/L	1
Perfluoro-n-butanoic acid (PFBA)	375-22-4	PFAS by ID SOP	17	3.5	0.89	ng/L	1
Perfluoro-n-decanoic acid (PFDA)	335-76-2	PFAS by ID SOP	ND	3.5	0.89	ng/L	1
Perfluoro-n-dodecanoic acid (PFDoA)	307-55-1	PFAS by ID SOP	ND	3.5	0.89	ng/L	1
Perfluoro-n-heptanoic acid (PFHpA)	375-85-9	PFAS by ID SOP	17	3.5	0.89	ng/L	1
Perfluoro-n-hexadecanoic acid (PFHxDA)	67905-19-5	FAS by ID SOP	ND	7.1	1.8	ng/L	1
Perfluoro-n-hexanoic acid (PFHxA)	307-24-4	PFAS by ID SOP	38	3.5	0.89	ng/L	1
Perfluoro-n-nonanoic acid (PFNA)	375-95-1	PFAS by ID SOP	1.9 J	3.5	0.89	ng/L	1
Perfluoro-n-octadecanoic acid (PFODA)	16517-11-6	PFAS by ID SOP	ND	7.1	1.8	ng/L	1
Perfluoro-n-octanoic acid (PFOA)	335-67-1	PFAS by ID SOP	34	3.5	0.89	ng/L	1
Perfluoro-n-pentanoic acid (PFPeA)	2706-90-3	PFAS by ID SOP	42	3.5	0.89	ng/L	1
Perfluoro-n-tetradecanoic acid (PFTeDA)	376-06-7	PFAS by ID SOP	ND	3.5	0.89	ng/L	1
Perfluoro-n-tridecanoic acid (PFTrDA)	72629-94-8	PFAS by ID SOP	ND	3.5	0.89	ng/L	1
Perfluoro-n-undecanoic acid (PFUdA)	2058-94-8	PFAS by ID SOP	ND	3.5	0.89	ng/L	1
Perfluorooctanesulfonic acid (PFOS)	1763-23-1	PFAS by ID SOP	390	3.5	0.89	ng/L	1
C		ntanco Dur	12 Accent	ance			
Surrogate Q % Re	ecovery L	imits Q % Rec	overy Lim	its			

Surrogate	Q % F	Recovery	Limits	Q	% Recovery	Limits	
13C2_4:2FTS		98	25-150		128	25-150	
13C2_6:2FTS		86	25-150		102	25-150	
13C2_8:2FTS		76	25-150		115	25-150	
13C2_PFDoA		64	25-150		81	25-150	
13C2_PFHxDA		53	25-150		96	25-150	
LOQ = Limit of Quantitation	B = Detected in the method blank	E = Quantita	tion of compou	nd exc	eeded the calibration r	ange DL = Detection Limit	
ND = Not detected at or above the DL	N = Recovery is out of criteria	P = The RPE	) between two	GC col	umns exceeds 40%	$J = Estimated result < LOQ and \ge DL$	
ri - Out of floraling tille	w = reported off wet weight basi	2					

Project Number: 40218153

Client: Pace Analytical Services, LLC Description: 106-0 Date Sampled:11/09/2020 1325

Date Received: 11/13/2020

Project Name: LACROSSE WELLS 23 & 24

Laboratory ID: VK15010-004

Matrix: Aqueous

Surrogate	0	Run 1 A % Recovery	Acceptance	0	Run 2 A % Recovery	Acceptance
13C2_PFTeDA		61	25-150	~	86	25-150
13C3_PFBS		82	25-150		93	25-150
13C3_PFHxS		73	25-150		94	25-150
13C3-HFPO-DA		88	25-150		112	25-150
13C4_PFBA		94	25-150		97	25-150
13C4_PFHpA		89	25-150		94	25-150
13C5_PFHxA		91	25-150		97	25-150
13C5_PFPeA		91	25-150		95	25-150
13C6_PFDA		84	25-150		88	25-150
13C7_PFUdA		72	25-150		86	25-150
13C8_PFOA		82	25-150		94	25-150
13C8_PFOS		61	25-150		82	25-150
13C8_PFOSA		87	10-150		100	10-150
13C9_PFNA		82	25-150		88	25-150
d-EtFOSA		66	10-150		92	10-150
d5-EtFOSAA		74	25-150		99	25-150
d9-EtFOSE		75	10-150		92	10-150
d-MeFOSA		61	10-150		104	10-150
d3-MeFOSAA		77	25-150		103	25-150
d7-MeFOSE		76	10-150		95	10-150

LOQ = Limit of QuantitationB = Detected in the method blankE = Quantitation of compound exceeded the calibration rangeDL = Detection LimitND = Not detected at or above the DLN = Recovery is out of criteriaP = The RPD between two GC columns exceeds 40%J = Estimated result < LOQ and ≥ DL</td>H = Out of holding timeW = Reported on wet weight basis



444 21st Street South · La Crosse, Wisconsin · 54601

December 9, 2020

N6940 County Road M Holmen, WI 54636

Subject: Private Well Sampling Results 2640 Fanta Reed Road, La Crosse, WI 54603 Tax parcel # 4-106-0 Sample ID # 106-0

#### Dear :

We have received and reviewed the test results for the sample collected on November 9, 2020 at the above address. Some PFAS compounds were found at levels <u>above</u> the Department of Health Services (DHS) levels recommended for protecting health. These levels are called the "Recommended Public Health Standard" in the table below. The levels found in your well are called the "Sample Result" in the table below.

Because some of the levels are above the recommended Public Health Standard, the City is offering to provide bottled water delivered to your home for drinking, cooking, and brushing your teeth. There will be no cost to you for the bottled water. Please complete the attached form and mail it to The OS Group to make arrangements for having a water dispenser and bottles delivered to your home. Call 608-668-2718 or email <u>PFAS@theOSgrp.com</u>. You may also complete this form on line at <u>www.cityoflacrosse.org/bottledwater</u>

The following table summarizes the test results from the sample. **Bolded results** are above a current recommended level intended to protect your health according to the Department of Health Services (DHS).

Private Well Sampling Results for 2640 Fanta Reed Road, La Crosse, WI 54603 Tax Parcel # 4-106-0 December 9, 2020

Samp	le Result	S
-		

Compound	Sample Result (unit)	Recomm Public H Standard	ended Iealth (unit <sup>e</sup> )	
N-Ethyl Perfluorooctane sulfonamide (NEtFOSA) CAS # 4151-50-2	Not Detected	20 ppt <sup>a,b</sup>	) ppt unds I 6	
N-Ethyl perfluorooctane sulfonamidoacetic acid (NEtFOSAA) CAS # 2991-50-6	Not Detected	20 ppt <sup>a,b</sup>	it is 20 ompo // of all	
N-Ethyl perfluorooctane sulfonamidoethanol (NEtFOSE) CAS # 1691-99-2	Not Detected	20 ppt <sup>a,b</sup>	ed lim ese 6 c ed totc	
Perfluorooctane sulfonamide (FOSA) CAS # 754-91-6	Not Detected	20 ppt <sup>a,b</sup>	mend of the	
Perfluorooctanoic acid (PFOA) CAS # 335-67-1	34 ppt	20 ppt <sup>a,b</sup>	recom ny <i>one</i> the <i>c</i> c	
Perfluorooctanesulfonic acid (PFOS) CAS # 1763-23-1	390 ppt	20 ppt <sup>a,b</sup>	The for a or	
Hexafluoropropylene oxide dimer acid (HPFO-DA; GenX) CAS # 13252-13-6	Not Detected		300 ppt <sup>a</sup>	
Perfluorobutanesulfonic acid (PFBS) CAS # 375-73-5	16 ppt	450	),000 ppt <sup>a</sup>	
Perfluorohexanesulfonic acid (PFHxS) CAS # 355-46-4	130 ppt		40 ppt <sup>a</sup>	
Perfluorobutanoic acid (PFBA) CAS # 375-22-4	17 ppt	10	),000 ppt <sup>a</sup>	
Perfluorodecanoic acid (PFDA) CAS # 335-76-2	Not Detected		300 ppt <sup>a</sup>	
Perfluorododecanoic acid (PFDoA) CAS # 307-55-1	Not Detected		500 ppt <sup>a</sup>	
Perfluorohexanoic acid (PFHxA) CAS # 307-24-4	38 ppt	150	),000 ppt <sup>a</sup>	
Perfluorononanoic acid (PFNA) CAS # 375-95-1	1.9 ppt		30 ppt <sup>a</sup>	
Perfluorotetradecanoic acid (PFTeA) CAS # 376-06-7	Not Detected	10	),000 ppt <sup>a</sup>	
Perfluoroundecanoic acid (PFUnA) CAS # 2058-94-8	Not Detected	3	3,000 ppt <sup>a</sup>	
4,8-Dioxa-3H-perfluorononanoic acid (DONA) CAS # 919005-14-4	Not Detected	3,000 ppt <sup>a</sup>		
Perfluorooctadecanoic acid (PFODA) CAS # 16517-11-6	Not Detected	400	),000 ppt <sup>a</sup>	

1H, 1H, 2H, 2H-perflurooctane sulfonic acid (6:2 FTS)	48 ppt	None Established <sup>c</sup>
Perfluoro-1-heptanesulfonic acid (PFHpS) CAS # 375-92-8	9.1 ppt	None Established <sup>c</sup>
Perfluoro-1-pentanesulfonic acid (PFPeS) CAS # 2706-91-4	18 ppt	None Established <sup>c</sup>
Perfluoro-n-heptanoic acid (PFHpA) CAS # 375-85-9	17 ppt	None Established <sup>c</sup>
Perfluoro-n-pentanoic acid (PFPeA) CAS #2706-90-3	42 ppt	None Established <sup>c</sup>

<sup>a</sup> Public health enforcement standard (ES) recommended by DHS.

<sup>b</sup> DHS recommends a combined enforcement standard of 20 ng/L and combined preventive action limit of 2 ng/L for FOSA, NEt-FOSE, NEt-FOSA, NetFOSAA, PFOS, and PFOA.

<sup>c</sup> A current standard is not available; the compound is currently under review by DHS for potential public health standard recommendation.

<sup>d</sup> Public health enforcement standard (ES) in NR 140, Wisconsin Administrative Code.

<sup>e</sup> Units: Parts per trillion (ppt) = nanograms of substance per liter of water (ng/L)

<sup>BL</sup> Detected in the method blank. Possible lab contaminant.

As required by law, we will be submitting these results to the Department of Natural Resources (DNR). The DNR may consult with the Department of Health Services (DHS) about these test results. DHS may review all PFAS tests and follow-up with you directly if any actions are recommended to protect your health.

Thank you for your patience and assistance with our investigation. We will provide updates on the project at <a href="https://www.cityoflacrosse.org/wells">https://www.cityoflacrosse.org/wells</a> as our work continues. If you have any questions, please call The OS Group at (608) 668-2718 or email them at <a href="https://www.pFAS@theOSgrp.com">PFAS@theOSgrp.com</a>.

You can also contact the DNR and DHS with questions about PFAS or the water sample results at the numbers provided below.

Questions about.	<u></u>	<b>Contact</b>	<u>Phone</u>	<u>E-mail Address</u>
Soil & Groundwater Testing, Clean Up	DNR	David Rozeboom	715-215-2078	David.Rozeboom@wisconsin.gov
Drinking Water or Private wells	DNR	Kyle Burton	920-360-2112	kyle.burton@wisconsin.gov
Health Concerns	DHS	Curtis Hedman	608-266-6677	Curtis.Hedman@dhs.wisconsin.gov

On behalf of The City of La Crosse *The OS Group, LLC* 

Attachment: Lab report for your well Bottled Water Acknowledgement

## BOTTLED WATER ACKNOWLEDGEMENT

2640 Fanta Reed Road, La Crosse, WI 54603

If you desire to accept the bottled water delivery, please complete and sign this form and return it to The OS Group at <u>PFAS@TheOSqrp.com</u> or mail to 444 21<sup>st</sup> St. S, La Crosse, WI 54601. You may also complete this form electronically on line at <u>www.cityoflacrosse.org/bottledwater</u>. Call 608-668-2718 with any question you may have.

As pre-caution for the protection of human health, the City of La Crosse (The City) will provide, on a temporary basis, bottled water for drinking, cooking and toothbrushing purposes at the above referenced address. The water will be delivered to your home or business by a commercial water delivery service. At the City's cost, a dispenser / cooler and regular deliveries of 5-gallon containers of water will be provided. The City reserves the right to dictate the conditions of delivery, such as minimum and maximum number of containers per delivery, frequency and timing of deliveries. The City reserves the right to periodically review whether The City should continue to provide bottled water, considering factors such as State and Federal standards and guidance, evolving knowledge and understanding of the sources, cause and responsibility for the contamination, new or reinterpreted test results, and the availability of more permanent or cost-effective sources of water for the above purposes. The City of La Crosse makes no warranty or representation regarding the suitability of the bottled water beyond those made by the commercial water delivery service.

All reusable or returnable equipment and supplies, such as the containers and cooler/dispenser, are the property of the commercial water delivery service or the City of La Crosse. By signing below, the Occupant of the above referenced property acknowledges that all reusable or returnable equipment and supplies shall be returned to the commercial water delivery service or the City of La Crosse upon request. The Occupant agrees to provide reasonable access for delivery of bottled water and pick up of reusable or returnable equipment(s) acknowledges that they may be required to sign an agreement with the commercial water delivery service as a condition of receiving bottled water.

**Check ownership:** 

Owner-Occupant	
Occupant Only	
Number of Occupants:	-
Signed:	_ Dated:
Printed Name:	
Phone Number: ()	

Client: Pace Analytical Services, LLC				Laboratory ID	D: VK15010-	004				
Description: 106-0	Matrix: Aqueous									
Date Sampled:11/09/2020 1325	Project Name	LACROSSE WELLS	5 23 & 24		·					
Date Received: 11/13/2020 Pr	oiect Number	· 40218153								
		. 40210133								
Run Prep Method Analytical Method I	Dilution An	alysis Date Analyst	Prep Date	e Batch						
I SOP SPE PEAS by ID SOP	1 11/.	29/2020 1504 MIMIN	11/25/2020	1438 /4//3						
2 SOP SPE PEAS by ID SOP	1 12/0	J3/2020 2235 IVIIVIIVI	12/02/2020	1200 75232						
	CAS	Analytical					_			
Parameter	Number	Method	Result Q	LOQ	DL	Units	Run			
9-chloronexadecalluoro-3-oxanone-1-sullonic acid (9CI-PF3ONS)	/50420-58-1		ND	7.1	1.8	ng/L	1			
11-chloroelcosalluoro-3-oxaundecane-1-sullonic acid (11CI-PF3	) 763051-92-9		ND	7.1	1.8	ng/L	1			
TH, TH, 2H, 2H-periluorodecane suifonic acid (8:2 FTS)	39108-34-4		ND 40	7.1	1.8	ng/L	1			
11, 11, 21, 21, perfluorooctane suitonic acid (6:2 FTS)	27619-97-2		48	7.3	1.8	ng/L	2			
IH, IH, 2H, 2H-perfluorododecane sulfonic acid (10:2 FTS)	120226-60-0	PFAS by ID SOP	ND	7.1	1.8	ng/L	1			
IH, IH, 2H, 2H-perfluoronexane sulfonic acid (4:2 FTS)	/5/124-/2-4	PFAS by ID SOP	ND	7.1	1.8	ng/L	1			
Hexafluoropropylene oxide dimer acid (GenX)	13252-13-6	PFAS by ID SOP	ND	7.1	1.8	ng/L	1			
4,8-dioxa-3H-perfluorononanoic acid (ADONA)	919005-14-4	PFAS by ID SOP	ND	7.1	1.8	ng/L	1			
N-ethylperfluoro-1-octanesulfonamide (EtFOSA)	4151-50-2	PEAS by ID SOP	ND	7.1	1.8	ng/L	1			
N-ethylperfluoro-1-octanesulfonamidoacetic acid (EtFOSAA)	2991-50-6	PEAS by ID SOP	ND	7.1	1.8	ng/L	1			
2-N-ethylperfluoro-1-octanesulfonamido-ethanol (EtFOSE)	1691-99-2	PEAS by ID SOP	ND	7.1	1.8	ng/L	1			
N-methylperfluoro-1-octanesulfonamide (MeFOSA)	31506-32-8	PEAS by ID SOP	ND	14	3.5	ng/L	1			
N-methylperfluoro-1-octanesulfonamidoacetic acid (MeFOSAA)	2355-31-9	PFAS by ID SOP	ND	7.1	1.8	ng/L	1			
2-N-methylperfluoro-1-octanesultonamido-ethanol (MeFOSE)	24448-09-7	PFAS by ID SOP	ND	7.1	1.8	ng/L	1			
Perfluoro-1-butanesulfonic acid (PFBS)	375-73-5	PFAS by ID SOP	16	3.5	0.89	ng/L	1			
Perfluoro-1-decanesulfonic acid (PFDS)	335-77-3	PFAS by ID SOP	ND	3.5	0.89	ng/L	1			
Perfluoro-1-heptanesulfonic acid (PFHpS)	375-92-8	PFAS by ID SOP	9.1	3.5	0.89	ng/L	1			
Perfluoro-1-nonanesulfonic acid (PFNS)	68259-12-1	PFAS by ID SOP	ND	3.5	0.89	ng/L	1			
Perfluoro-1-octanesulfonamide (PFOSA)	754-91-6	PFAS by ID SOP	ND	3.5	0.89	ng/L	1			
Perfluoro-1-pentanesulfonic acid (PFPeS)	2706-91-4	PFAS by ID SOP	18	3.5	0.89	ng/L	1			
Perfluorododecanesulfonic acid (PFDOS)	79780-39-5	PFAS by ID SOP	ND	7.1	1.8	ng/L	1			
Perfluorohexanesulfonic acid (PFHxS)	355-46-4	PFAS by ID SOP	130	3.5	0.89	ng/L	1			
Perfluoro-n-butanoic acid (PFBA)	375-22-4	PFAS by ID SOP	17	3.5	0.89	ng/L	1			
Perfluoro-n-decanoic acid (PFDA)	335-76-2	PFAS by ID SOP	ND	3.5	0.89	ng/L	1			
Perfluoro-n-dodecanoic acid (PFDoA)	307-55-1	PFAS by ID SOP	ND	3.5	0.89	ng/L	1			
Perfluoro-n-heptanoic acid (PFHpA)	375-85-9	PFAS by ID SOP	17	3.5	0.89	ng/L	1			
Perfluoro-n-hexadecanoic acid (PFHxDA)	67905-19-5	PFAS by ID SOP	ND	7.1	1.8	ng/L	1			
Perfluoro-n-hexanoic acid (PFHxA)	307-24-4	PFAS by ID SOP	38	3.5	0.89	ng/L	1			
Perfluoro-n-nonanoic acid (PFNA)	375-95-1	PFAS by ID SOP	1.9 J	3.5	0.89	ng/L	1			
Perfluoro-n-octadecanoic acid (PFODA)	16517-11-6	PFAS by ID SOP	ND	7.1	1.8	ng/L	1			
Perfluoro-n-octanoic acid (PFOA)	335-67-1	PFAS by ID SOP	34	3.5	0.89	ng/L	1			
Perfluoro-n-pentanoic acid (PFPeA)	2706-90-3	PFAS by ID SOP	42	3.5	0.89	ng/L	1			
Perfluoro-n-tetradecanoic acid (PFTeDA)	376-06-7	PFAS by ID SOP	ND	3.5	0.89	ng/L	1			
Perfluoro-n-tridecanoic acid (PFTrDA)	72629-94-8	PFAS by ID SOP	ND	3.5	0.89	ng/L	1			
Perfluoro-n-undecanoic acid (PFUdA)	2058-94-8	PFAS by ID SOP	ND	3.5	0.89	ng/L	1			
Perfluorooctanesulfonic acid (PFOS)	1763-23-1	PFAS by ID SOP	390	3.5	0.89	ng/L	1			
C		ntance Dur	12 Accent	ance						
Surrogate Q % Re	ecovery L	imits Q % Rec	overy Lim	nits						

Surrogate	Q %	Recovery	Limits	Q	% Recovery	Limits
13C2_4:2FTS		98	25-150		128	25-150
13C2_6:2FTS		86	25-150		102	25-150
13C2_8:2FTS		76	25-150		115	25-150
13C2_PFDoA		64	25-150		81	25-150
13C2_PFHxDA		53	25-150		96	25-150
LOQ = Limit of Quantitation	B = Detected in the method blan	k E = Quantit	ation of compo	und exc	eeded the calibration	range DL = Detection Limit
ND = Not detected at or above the DL H = Out of holding time	N = Recovery is out of criteria W = Reported on wet weight bas	P = The RP is	D between two	o GC co	lumns exceeds 40%	J = Estimated result < LOQ and $\geq$ DL

Project Number: 40218153

Client: Pace Analytical Services, LLC Description: 106-0 Date Sampled:11/09/2020 1325

Date Received: 11/13/2020

Project Name: LACROSSE WELLS 23 & 24

Laboratory ID: VK15010-004

Matrix: Aqueous

Surrogate	0	Run 1 A % Recovery	Acceptance Limits	0	Run 2 A % Recoverv	Acceptance Limits
13C2_PFTeDA		61	25-150		86	25-150
13C3_PFBS		82	25-150		93	25-150
13C3_PFHxS		73	25-150		94	25-150
13C3-HFPO-DA		88	25-150		112	25-150
13C4_PFBA		94	25-150		97	25-150
13C4_PFHpA		89	25-150		94	25-150
13C5_PFHxA		91	25-150		97	25-150
13C5_PFPeA		91	25-150		95	25-150
13C6_PFDA		84	25-150		88	25-150
13C7_PFUdA		72	25-150		86	25-150
13C8_PFOA		82	25-150		94	25-150
13C8_PFOS		61	25-150		82	25-150
13C8_PFOSA		87	10-150		100	10-150
13C9_PFNA		82	25-150		88	25-150
d-EtFOSA		66	10-150		92	10-150
d5-EtFOSAA		74	25-150		99	25-150
d9-EtFOSE		75	10-150		92	10-150
d-MeFOSA		61	10-150		104	10-150
d3-MeFOSAA		77	25-150		103	25-150
d7-MeFOSE		76	10-150		95	10-150

LOQ = Limit of QuantitationB = Detected in the method blankE = Quantitation of compound exceeded the calibration rangeDL = Detection LimitND = Not detected at or above the DLN = Recovery is out of criteriaP = The RPD between two GC columns exceeds 40%J = Estimated result < LOQ and ≥ DL</td>H = Out of holding timeW = Reported on wet weight basis



444 21st Street South · La Crosse, Wisconsin · 54601

December 9, 2020

2516 1st Avenue East La Crosse, WI 54603

Subject: Private Well Sampling Results 2516 1st Avenue East, La Crosse, WI 54603 Tax parcel # 4-204-0 Sample ID # 204-0

Dear

We have received and reviewed the test results for the sample collected on November 9, 2020 at the above address. Some PFAS compounds were found, but the levels found were **below** the Department of Health Services (DHS) levels recommended for protecting health. These levels are called the "Recommended Public Health Standard" in the table below. The levels found in *your* well are called the "Sample Result" in the table below.

#### Sample Results

Compound	Sample Result (unit)	Recomn Public I Standard	nended Health I (unit <sup>e</sup> )
N-Ethyl Perfluorooctane sulfonamide (NEtFOSA) CAS # 4151-50-2	Not Detected	20 ppt <sup>a,b</sup>	ppt nds 6
N-Ethyl perfluorooctane sulfonamidoacetic acid (NEtFOSAA) CAS # 2991-50-6	Not Detected	20 ppt <sup>a,b</sup>	nit is 20 compou t <i>al</i> of all
N-Ethyl perfluorooctane sulfonamidoethanol (NEtFOSE) CAS # 1691-99-2	Not Detected	20 ppt <sup>a,b</sup>	ded lin Jese 6 Jed tot
Perfluorooctane sulfonamide (FOSA) CAS # 754-91-6	Not Detected	20 ppt <sup>a,b</sup>	nmen e of th ombir
Perfluorooctanoic acid (PFOA) CAS # 335-67-1	Not Detected	20 ppt <sup>a,b</sup>	e recor any <i>on</i> r the <i>c</i>
Perfluorooctanesulfonic acid (PFOS) CAS # 1763-23-1	10 ppt	20 ppt <sup>a,b</sup>	The for a

Private Well Sampling Results for 2516 1st Avenue East, La Crosse, WI 54603 Tax parcel # 4-204-0 Sample ID # 204-0 December 9, 2020

Compound	Sample Result (unit)	Recommended Public Health Standard (unit <sup>e</sup> )
Hexafluoropropylene oxide dimer acid (HPFO-DA; GenX) CAS # 13252-13-6	Not Detected	300 ppt <sup>a</sup>
Perfluorobutanesulfonic acid (PFBS) CAS # 375-73-5	11 ppt	450,000 ppt <sup>a</sup>
Perfluorohexanesulfonic acid (PFHxS) CAS # 355-46-4	21 ppt	40 ppt <sup>a</sup>
Perfluorobutanoic acid (PFBA) CAS # 375-22-4	130 ppt	10,000 ppt <sup>a</sup>
Perfluorodecanoic acid (PFDA) CAS # 335-76-2	Not Detected	300 ppt <sup>a</sup>
Perfluorododecanoic acid (PFDoA) CAS # 307-55-1	Not Detected	500 ppt <sup>a</sup>
Perfluorohexanoic acid (PFHxA) CAS # 307-24-4	2.6 ppt	150,000 ppt <sup>a</sup>
Perfluorononanoic acid (PFNA) CAS # 375-95-1	Not Detected	30 ppt <sup>a</sup>
Perfluorotetradecanoic acid (PFTeA) CAS # 376-06-7	Not Detected	10,000 ppt <sup>a</sup>
Perfluoroundecanoic acid (PFUnA) CAS # 2058-94-8	Not Detected	3,000 ppt <sup>a</sup>
4,8-Dioxa-3H-perfluorononanoic acid (DONA) CAS # 919005-14-4	Not Detected	3,000 ppt <sup>a</sup>
Perfluorooctadecanoic acid (PFODA) CAS # 16517-11-6	Not Detected	400,000 ppt <sup>a</sup>
Perfluoro-1-pentanesulfonic acid (PFPeS) CAS #2706-91-4	11 ppt	None Established <sup>c</sup>
Perfluoro-n-pentanoic acid (PFPeA) CAS # 2706-90-3	0.93 ppt	None Established <sup>c</sup>

<sup>a</sup> Public health enforcement standard (ES) recommended by DHS.

<sup>b</sup> DHS recommends a combined enforcement standard of 20 ng/L and combined preventive action limit of 2 ng/L for FOSA, NEt-FOSE, NEt-FOSA, NetFOSAA, PFOS, and PFOA.

A current standard is not available; the compound is currently under review by DHS for potential public health standard recommendation.

<sup>d</sup> Public health enforcement standard (ES) in NR 140, Wisconsin Administrative Code.

<sup>2</sup> Units: Parts per trillion (ppt) = nanograms of substance per liter of water (ng/L)

<sup>BL</sup> Detected in the method blank. Possible lab contaminant.

Private Well Sampling Results for 2516 1st Avenue East, La Crosse, WI 54603 Tax parcel # 4-204-0 Sample ID # 204-0 December 9, 2020

As required by law, we will be submitting these results to the Department of Natural Resources (DNR). The DNR may consult with the Department of Health Services (DHS) about these test results. DHS may review all PFAS tests and follow-up with you directly if any actions are recommended to protect your health.

Thank you for your patience and assistance with our investigation. We will provide updates on the project at <u>https://www.cityoflacrosse.org/wells</u> as our work continues. If you have any questions, please call The OS Group at (608) 668-2718 or email them at <u>PFAS@theOSgrp.com</u>.

You can also contact the DNR and DHS with questions about PFAS or the water sample results at the numbers provided below.

Questions about		<u>Contact</u>	<u>Phone</u>	E-mail Address		
Soil & Groundwate Testing, Clean Up	<sup>er</sup> DNR	David Rozeboom	715-215-2078	David.Rozeboom@wisconsin.gov		
Drinking Water or Private wells	DNR	Kyle Burton	920-360-2112	kyle.burton@wisconsin.gov		
Health Concerns	DHS	Curtis Hedman	608-266-6677	Curtis.Hedman@dhs.wisconsin.gov		

On behalf of The City of La Crosse *The OS Group, LLC* 

Attachment: Lab report for your well

Client: Pace Analytical Services, LLC				Laboratory ID	): VK15010-0	001	
Description: 204-0				Matrix	: Aqueous		
Date Sampled:11/09/2020 1225	Project Name:	LACROSSE WELLS	3 23 & 24				
Date Received 11/13/2020	Project Number	40218153					
Run Prep Method Analytical Method   1 SOB SPE DEAD hulb COD	Dilution Ana	alysis Date Analyst	Prep Date	Batch			
1 JUP JPE PEAS by ID SOP	1 11/2	3/2020 1432 IVIVIVI	12/02/2020 1	430 14/13			
2 JUF JFE PFAS DY ID SOP	ı 12/C	JJIZUZU ZZUJ IVIIVIIVI	12/02/2020 1	200 10232			
Parameter	CAS Number	Analytical Method	Result Q	LOQ	DL	Units	Run
9-chlorohexadecafluoro-3-oxanone-1-sulfonic acid (9CI-PF3ONS	S) 75 <u>6426-58-1</u>	PFAS by ID SOP	ND	7.4	1.9	ng/L	1
11-chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11CI-PF3.	) 763051-92-9	PFAS by ID SOP	ND	7.4	1.9	ng/L	1
1H, 1H, 2H, 2H-perfluorodecane sulfonic acid (8:2 FTS)	39108-34-4	PFAS by ID SOP	ND	7.4	1.9	ng/L	1
1H, 1H, 2H, 2H-perfluorooctane sulfonic acid (6:2 FTS)	27619-97-2	PFAS by ID SOP	ND	7.4	1.9	ng/L	2
1H,1H,2H,2H-perfluorododecane sulfonic acid (10:2 FTS)	120226-60-0	PFAS by ID SOP	ND	7.4	1.9	ng/L	1
1H,1H,2H,2H-perfluorohexane sulfonic acid (4:2 FTS)	757124-72-4	PFAS by ID SOP	ND	7.4	1.9	ng/L	1
Hexafluoropropylene oxide dimer acid (GenX)	13252-13-6	PFAS by ID SOP	ND	7.4	1.9	ng/L	1
4,8-dioxa-3H-perfluorononanoic acid (ADONA)	919005-14-4	PFAS by ID SOP	ND	7.4	1.9	ng/L	1
N-ethylperfluoro-1-octanesulfonamide (EtFOSA)	4151-50-2	PFAS by ID SOP	ND	7.4	1.9	ng/L	1
N-ethylperfluoro-1-octanesulfonamidoacetic acid (EtFOSAA)	2991-50-6	PFAS by ID SOP	ND	7.4	1.9	ng/L	1
2-N-ethylperfluoro-1-octanesulfonamido-ethanol (EtFOSE)	1691-99-2	PFAS by ID SOP	ND	7.4	1.9	ng/L	1
N-methylperfluoro-1-octanesulfonamide (MeFOSA)	31506-32-8	PFAS by ID SOP	ND	15	3.7	ng/L	1
$N\mbox{-methylperfluoro-1-octanesulfonamidoacetic acid (MeFOSAA)}$	2355-31-9	PFAS by ID SOP	ND	7.4	1.9	ng/L	1
2-N-methylperfluoro-1-octanesulfonamido-ethanol (MeFOSE)	24448-09-7	PFAS by ID SOP	ND	7.4	1.9	ng/L	1
Perfluoro-1-butanesulfonic acid (PFBS)	375-73-5	PFAS by ID SOP	11	3.7	0.93	ng/L	1
Perfluoro-1-decanesulfonic acid (PFDS)	335-77-3	PFAS by ID SOP	ND	3.7	0.93	ng/L	1
Perfluoro-1-heptanesulfonic acid (PFHpS)	375-92-8	PFAS by ID SOP	ND	3.7	0.93	ng/L	1
Perfluoro-1-nonanesulfonic acid (PFNS)	68259-12-1	PFAS by ID SOP	ND	3.7	0.93	ng/L	1
Perfluoro-1-octanesulfonamide (PFOSA)	754-91-6	PFAS by ID SOP	ND	3.7	0.93	ng/L	1
Perfluoro-1-pentanesulfonic acid (PFPeS)	2706-91-4	PFAS by ID SOP	11	3.7	0.93	ng/L	1
Perfluorododecanesulfonic acid (PFDOS)	79780-39-5	PFAS by ID SOP	ND	7.4	1.9	ng/L	1
Perfluorohexanesulfonic acid (PFHxS)	355-46-4	PFAS by ID SOP	21	3.7	0.93	ng/L	1
Perfluoro-n-butanoic acid (PFBA)	375-22-4	PFAS by ID SOP	130	3.7	0.93	ng/L	1
Perfluoro-n-decanoic acid (PFDA)	335-76-2	PFAS by ID SOP	ND	3.7	0.93	ng/L	1
Perfluoro-n-dodecanoic acid (PFDoA)	307-55-1	PFAS by ID SOP	ND	3.7	0.93	ng/L	1
Perfluoro-n-heptanoic acid (PFHpA)	375-85-9	PFAS by ID SOP	ND	3.7	0.93	ng/L	1
Perfluoro-n-hexadecanoic acid (PFHxDA)	67905-19-5	PFAS by ID SOP	ND	7.4	1.9	ng/L	1
Perfluoro-n-hexanoic acid (PFHxA)	307-24-4	PFAS by ID SOP	2.6 J	3.7	0.93	ng/L	1
Perfluoro-n-nonanoic acid (PFNA)	375-95-1	PFAS by ID SOP	ND	3.7	0.93	ng/L	1
Perfluoro-n-octadecanoic acid (PFODA)	16517-11-6	PFAS by ID SOP	ND	7.4	1.9	ng/L	1
Perfluoro-n-octanoic acid (PFOA)	335-67-1	PFAS by ID SOP	ND	3.7	0.93	ng/L	1
Perfluoro-n-pentanoic acid (PFPeA)	2706-90-3	PFAS by ID SOP	0.93 J	3.7	0.93	ng/L	1
Perfluoro-n-tetradecanoic acid (PFTeDA)	376-06-7	PFAS by ID SOP	ND	3.7	0.93	ng/L	1
Perfluoro-n-tridecanoic acid (PFTrDA)	72629-94-8	PFAS by ID SOP	ND	3.7	0.93	ng/L	1
Perfluoro-n-undecanoic acid (PFUdA)	2058-94-8	PFAS by ID SOP	ND	3.7	0.93	ng/L	1
Perfluorooctanesulfonic acid (PFOS)	1763-23-1	PFAS by ID SOP	10	3.7	0.93	ng/L	1
		ntanco Dur	12 10000000	nce			
Surrogate Q % F	Recovery Li	mits Q % Reco	overy Limit	S			

Surrogate	Q % Re	ecovery	Limits	Q	% Recovery	Limits
13C2_4:2FTS		103	25-150		123	25-150
13C2_6:2FTS		101	25-150		113	25-150
13C2_8:2FTS		86	25-150		107	25-150
13C2_PFDoA		78	25-150		85	25-150
13C2_PFHxDA		77	25-150		102	25-150
LOQ = Limit of Quantitation	B = Detected in the method blank	E = Quantitati	ion of compoun	d exce	eded the calibration ra	nge DL = Detection Limit
ND = Not detected at or above the DL H = Out of holding time	N = Recovery is out of criteria W = Reported on wet weight basis	P = The RPD	between two G	GC colu	Imns exceeds 40%	J = Estimated result < LOQ and $\geq$ DL

Project Number: 40218153

Client: Pace Analytical Services, LLC Description: 204-0 Date Sampled:11/09/2020 1225

Date Received: 11/13/2020

Project Name: LACROSSE WELLS 23 & 24

Laboratory ID: VK15010-001

Matrix: Aqueous

Surrogate	0	Run 1 A	Acceptance	h	Run 2 A	cceptance
13C2 PETeDA	Q	79	25-150	2	88	25-150
13C3_PEBS		87	25-150		93	25-150
1303_PEHvS		85	25-150		89	25-150
13C3_HEPO_DA		02	25 150		117	25-150
		92	25-150		00	25-150
1304_FLBA		90	25-150		70 95	25-150
1305_DEHvA		20 02	25-150		,5 07	25-150
1205 DEDoA		72	25-150		77	25-150
1303_FFFEA		95	25-150		78	20-100
I3C6_PFDA		88	25-150		91	25-150
13C7_PFUdA		85	25-150		91	25-150
13C8_PFOA		89	25-150		96	25-150
13C8_PFOS		78	25-150		86	25-150
13C8_PFOSA		90	10-150		100	10-150
13C9_PFNA		92	25-150		92	25-150
d-EtFOSA		68	10-150		109	10-150
d5-EtFOSAA		83	25-150		101	25-150
d9-EtFOSE		73	10-150		94	10-150
d-MeFOSA		79	10-150		115	10-150
d3-MeFOSAA		84	25-150		105	25-150
d7-MeFOSE		71	10-150		101	10-150

LOQ = Limit of QuantitationB = Detected in the method blankE = Quantitation of compound exceeded the calibration rangeDL = Detection LimitND = Not detected at or above the DLN = Recovery is out of criteriaP = The RPD between two GC columns exceeds 40%J = Estimated result < LOQ and ≥ DL</td>H = Out of holding timeW = Reported on wet weight basis



444 21st Street South · La Crosse, Wisconsin · 54601

December 9, 2020

2504 1st Avenue West La Crosse, WI 54603

:

Subject: Private Well Sampling Results 2504 1st Avenue West, La Crosse, WI 54603 Tax parcel # 4-346-0 Sample ID # 346-0

Dear

We have received and reviewed the test results for the sample collected on November 9, 2020 at the above address. Some PFAS compounds were found, but the levels found were **below** the Department of Health Services (DHS) levels recommended for protecting health. These levels are called the "Recommended Public Health Standard" in the table below. The levels found in *your* well are called the "Sample Result" in the table below.

#### Sample Results

Compound	Sample Result (unit)	Recommended Public Health Standard (unit <sup>e</sup> )		
N-Ethyl Perfluorooctane sulfonamide (NEtFOSA) CAS # 4151-50-2	Not Detected	20 ppt <sup>a,b</sup>	ppt nds 6	
N-Ethyl perfluorooctane sulfonamidoacetic acid (NEtFOSAA) CAS # 2991-50-6	Not Detected	20 ppt <sup>a,b</sup>	nit is 20 compou t <i>al</i> of all	
N-Ethyl perfluorooctane sulfonamidoethanol (NEtFOSE) CAS # 1691-99-2	Not Detected	20 ppt <sup>a,b</sup>	ded lin Jese 6 Jed tot	
Perfluorooctane sulfonamide (FOSA) CAS # 754-91-6	Not Detected	20 ppt <sup>a,b</sup>	nmen e of th ombir	
Perfluorooctanoic acid (PFOA) CAS # 335-67-1	16 ppt	20 ppt <sup>a,b</sup>	e recor any <i>on</i> r the <i>c</i>	
Perfluorooctanesulfonic acid (PFOS) CAS # 1763-23-1	2.8 ppt	20 ppt <sup>a,b</sup>	The for a	

Private Well Sampling Results for 2504 1st Avenue West, La Crosse, WI 54603 Tax parcel # 4-346-0 Sample ID # 346-0 December 9, 2020

Compound	Sample Result (unit)	Recommended Public Health Standard (unit <sup>e</sup> )
Hexafluoropropylene oxide dimer acid (HPFO-DA; GenX) CAS # 13252-13-6	Not Detected	300 ppt <sup>a</sup>
Perfluorobutanesulfonic acid (PFBS) CAS # 375-73-5	1.5 ppt	450,000 ppt <sup>a</sup>
Perfluorohexanesulfonic acid (PFHxS) CAS # 355-46-4	17 ppt	40 ppt <sup>a</sup>
Perfluorobutanoic acid (PFBA) CAS # 375-22-4	15 ppt	10,000 ppt <sup>a</sup>
Perfluorodecanoic acid (PFDA) CAS # 335-76-2	Not Detected	300 ppt <sup>a</sup>
Perfluorododecanoic acid (PFDoA) CAS # 307-55-1	Not Detected	500 ppt <sup>a</sup>
Perfluorohexanoic acid (PFHxA) CAS # 307-24-4	2.4 ppt	150,000 ppt <sup>a</sup>
Perfluorononanoic acid (PFNA) CAS # 375-95-1	Not Detected	30 ppt <sup>a</sup>
Perfluorotetradecanoic acid (PFTeA) CAS # 376-06-7	Not Detected	10,000 ppt <sup>a</sup>
Perfluoroundecanoic acid (PFUnA) CAS # 2058-94-8	Not Detected	3,000 ppt <sup>a</sup>
4,8-Dioxa-3H-perfluorononanoic acid (DONA) CAS # 919005-14-4	Not Detected	3,000 ppt <sup>a</sup>
Perfluorooctadecanoic acid (PFODA) CAS # 16517-11-6	Not Detected	400,000 ppt <sup>a</sup>
Perfluoro-n-heptanoic acid (PFHpA) CAS # 375-85-9	5.2 ppt	None Established <sup>c</sup>
Perfluoro-n-pentanoic acid (PFPeA) CAS # 2706-90-3	1.6 ppt	None Established <sup>c</sup>

<sup>a</sup> Public health enforcement standard (ES) recommended by DHS.

<sup>b</sup> DHS recommends a combined enforcement standard of 20 ng/L and combined preventive action limit of 2 ng/L for FOSA, NEt-FOSE, NEt-FOSA, NetFOSAA, PFOS, and PFOA.

A current standard is not available; the compound is currently under review by DHS for potential public health standard recommendation.

<sup>d</sup> Public health enforcement standard (ES) in NR 140, Wisconsin Administrative Code.

<sup>2</sup> Units: Parts per trillion (ppt) = nanograms of substance per liter of water (ng/L)

<sup>BL</sup> Detected in the method blank. Possible lab contaminant.

Private Well Sampling Results for 2504 1st Avenue West, La Crosse, WI 54603 Tax parcel # 4-346-0 Sample ID # 346-0 December 9, 2020

As required by law, we will be submitting these results to the Department of Natural Resources (DNR). The DNR may consult with the Department of Health Services (DHS) about these test results. DHS may review all PFAS tests and follow-up with you directly if any actions are recommended to protect your health.

Thank you for your patience and assistance with our investigation. We will provide updates on the project at <u>https://www.cityoflacrosse.org/wells</u> as our work continues. If you have any questions, please call The OS Group at (608) 668-2718 or email them at <u>PFAS@theOSgrp.com</u>.

You can also contact the DNR and DHS with questions about PFAS or the water sample results at the numbers provided below.

Questions about		<u>Contact</u>	<u>Phone</u>	E-mail Address		
Soil & Groundwate Testing, Clean Up	<sup>er</sup> DNR	David Rozeboom	715-215-2078	David.Rozeboom@wisconsin.gov		
Drinking Water or Private wells	DNR	Kyle Burton	920-360-2112	kyle.burton@wisconsin.gov		
Health Concerns	DHS	Curtis Hedman	608-266-6677	Curtis.Hedman@dhs.wisconsin.gov		

On behalf of The City of La Crosse *The OS Group, LLC* 

Attachment: Lab report for your well

Client: Pace Analytical S	Services, LLC				Laboratory I	D: VK15010-	·003	
Description: 346-0					Matri	ix: Aqueous		
Date Sampled:11/09/2020 1315	P	roject Nar	me: LACROSSE WELLS	5 23 & 24	1	-		
Date Received 11/13/2020	Pro	iect Num	ber: 40218153					
Run Prep Method	Analytical Method D	ilution .	Analysis Date Analyst	Prep	Date Batch			
	PEAS BY ID SOP	1 1	11/29/2020 1453 IVIIVIIVI	12/02/2	2020 1438 /4//3			
2 SUP SPE	PLAS DY ID SOP	1 1	12/03/2020 2224 11111111	12/02/2	2020 1200 75232			
Parameter		C <i>i</i> Numb	AS Analytical	Result	0 1.00	וח	Units	Run
9-chlorohexadecafluoro-3-oxanone-1-	sulfonic acid (9CI-PF3ONS)	756426-5	i8-1 PFAS by ID SOP	ND	6.9	17	na/L	1
11-chloroeicosafluoro-3-oxaundecane	-1-sulfonic acid (11Cl-PF3)	763051-9	2-9 PFAS by ID SOP	ND	6.9	1.7	na/L	1
1H. 1H. 2H. 2H-perfluorodecane sulfo	nic acid (8:2 FTS)	39108-3	4-4 PFAS by ID SOP	ND	6.9	1.7	na/L	1
1H. 1H. 2H. 2H-perfluorooctane sulfor	nic acid (6:2 FTS)	27619-9	7-2 PFAS by ID SOP	ND	7.5	1.7	na/l	2
1H.1H.2H.2H-perfluorododecape sulfo	pnic acid (10:2 FTS)	120226-6	0-0 PFAS by ID SOP	ND	6.9	1.7	ng/L	- 1
1H.1H.2H.2H-perfluorobexane sulfoni	c acid (4:2 FTS)	757124-7	2-4 PEAS by ID SOP	ND	6.9	1.7	ng/L	1
Hexafluoropropylene oxide dimer acid	(GenX)	13252-1	3-6 PEAS by ID SOP	ND	6.9	1.7	na/l	1
4.8-dioxa-3H-perfluorononanoic acid (	ADONA)	919005-1	4-4 PEAS by ID SOP	ND	6.9	1.7	na/l	1
N-ethylperfluoro-1-octanesulfonamide	(EtEOSA)	4151-5	0-2 PEAS by ID SOP		6.9	1.7	ng/L	1
N-ethylperfluoro-1-octanesulfonamido	acetic acid (EtEOSAA)	2991-5	0-6 PEAS by ID SOP		6.9	1.7	na/l	1
2-N-ethylperfluoro-1-octanesulfonamic	ho-ethanol (EtEOSE)	1601-0	9-2 PEAS by ID SOP		6.9	1.7	ng/L	י 1
N-methylperfluoro-1-octanesulfonamic	te (MeEOSA)	31506-3	2-8 PEAS by ID SOP		14	25	ng/L	1
N-methylperfluoro-1-octanesulfonamic	toacetic acid (MeEOSAA)	2255.2	1-9 PEAS by ID SOP		÷۱ ۵ ک	17	ng/L	י 1
2-N-methylperfluoro-1-octanesulfonam	nido-ethanol (MeFOSF)	24448-0	19-7 PEAS by ID SOP	ND	6.9	1.7	ng/L	1
Perfluoro-1-butanesulfonic acid (PE	<sup></sup>	375-7	3-5 PEAS by ID SOP	15	J 35	0.87	ng/L	1
Perfluoro-1-decanesulfonic acid (PED	, S)	335-7	7-3 PEAS by ID SOP	ND	3.5	0.07	ng/l	1
Perfluoro-1-heptanesulfonic acid (PEL	=, IpS)	375-9	2-8 PEAS by ID SOP	ND	3.5	0.07	ng/L	1
Perfluoro-1-nonanesulfonic acid (PEN	S)	68259-1	2-1 PEAS by ID SOP	ND	3.5	0.07	ng/L	1
Perfluoro-1-octanesulfonamide (PEOS	5A)	754-9	1-6 PEAS by ID SOP	ND	3.5	0.07	ng/L	1
Perfluoro-1-pentanesulfonic acid (PEP	veS)	2706-9	1-4 PEAS by ID SOP		3.5	0.07	ng/L	1
Perfluorododecanesulfonic acid (PED)	22, 25)	79780-3	19-5 PEAS by ID SOP		6.9	17	ng/L	1
Perfluorohexanesulfonic acid (PFH)	xS)	355-4	6-4 PFAS by ID SOP	17	3.5	0.87	na/L	1
Perfluoro-n-butanoic acid (PFBA)		375-2	2-4 PFAS by ID SOP	15	3.5	0.87	na/L	1
Perfluoro-n-decanoic acid (PEDA)		335-7	6-2 PFAS by ID SOP	ND	3.5	0.07	na/l	1
Perfluoro-n-dodecanoic acid (PEDoA)		307-5	5-1 PFAS by ID SOP	ND	3.5	0.07	na/l	1
Perfluoro-n-heptanoic acid (PEHnA)	)	375-8	5-9 PFAS by ID SOP	52	3.5	0.07	na/l	1
Perfluoro-n-hexadecanoic acid (PEHvi	, DA)	67905-1	9-5 PFAS hv ID SOP	ND	6.9	17	na/l	' 1
Perfluoro-n-hexanoic acid (PEHxA)	,	307-2	4-4 PFAS by ID SOP	24	J 35	0.87	na/l	1
Perfluoro-n-nonanoic acid (PENA)		375-9	5-1 PFAS by ID SOP	ND	3.5	0.07	na/l	1
Perfluoro-n-octadecanoic acid (PFOD	A)	16517-1	1-6 PFAS by ID SOP	ND	6.9	1.7	na/L	1
Perfluoro-n-octanoic acid (PFOA)		335-6	7-1 PFAS by ID SOP	16	3.5	0.87	na/L	1
Perfluoro-n-pentanoic acid (PFPeA)	1	2706-9	0-3 PFAS by ID SOP	1.6	J 3.5	0.87	na/L	1
Perfluoro-n-tetradecanoic acid (PFTer	DA)	376-0	6-7 PFAS by ID SOP	ND	3.5	0.87	na/L	1
Perfluoro-n-tridecanoic acid (PFTrDA)		72629-9	14-8 PFAS by ID SOP	ND	3.5	0.87	na/L	1
Perfluoro-n-undecanoic acid (PFI IdA)		2058-9	4-8 PFAS by ID SOP	ND	3.5	0.87	na/L	1
Perfluorooctanesulfonic acid (PFOS	5)	1763-2	3-1 PFAS by ID SOP	2.8	J 3.5	0.87	na/L	1
						0.07	· · g/ –	
Surrogate		In 1 Ac	cceptance Run	12 Ac	ceptance			
		JUNELA		overy	LIIIIIII			

Surrogate	Q % R	ecovery	Limits	Q	% Recovery	Limits
13C2_4:2FTS		103	25-150		121	25-150
13C2_6:2FTS		91	25-150		110	25-150
13C2_8:2FTS		85	25-150		114	25-150
13C2_PFDoA		79	25-150		91	25-150
13C2_PFHxDA		76	25-150		100	25-150
LOQ = Limit of Quantitation	B = Detected in the method blank	E = Quantitati	on of compour	nd exce	eded the calibration ra	nge DL = Detection Limit
ND = Not detected at or above the DL H = Out of holding time	N = Recovery is out of criteria W = Reported on wet weight basis	P = The RPD	between two C	GC colu	Imns exceeds 40%	$J = Estimated result < LOQ and \ge DL$

Project Name: LACROSSE WELLS 23 & 24

Client: Pace Analytical Services, LLC Description: 346-0 Date Sampled:11/09/2020 1315

Mat

Laboratory ID: VK15010-003

Matrix: Aqueous

Date Received: 11/13/2020	Project Number: 40218153	
Surrogate	Run 1 Acceptance Run 2 Acceptance Q % Recovery Limits Q % Recovery Limits	
13C2_PFTeDA	76 25-150 88 25-150	
13C3_PFBS	89 25-150 97 25-150	
13C3_PFHxS	89 25-150 95 25-150	
13C3-HFPO-DA	95 25-150 118 25-150	
13C4_PFBA	98 25-150 101 25-150	
13C4_PFHpA	92 25-150 98 25-150	
13C5_PFHxA	95 25-150 94 25-150	
13C5_PFPeA	100 25-150 100 25-150	
13C6_PFDA	92 25-150 96 25-150	
13C7_PFUdA	91 25-150 92 25-150	
13C8_PFOA	91 25-150 96 25-150	
13C8_PFOS	83 25-150 83 25-150	
13C8_PFOSA	87 10-150 110 10-150	
13C9_PFNA	90 25-150 94 25-150	
d-EtFOSA	62 10-150 98 10-150	
d5-EtFOSAA	83 25-150 106 25-150	
d9-EtFOSE	70 10-150 88 10-150	
d-MeFOSA	70 10-150 116 10-150	
d3-MeFOSAA	86 25-150 103 25-150	
d7-MeFOSE	68 10-150 98 10-150	

LOQ = Limit of QuantitationB = Detected in the method blankE = Quantitation of compound exceeded the calibration rangeDL = Detection LimitND = Not detected at or above the DLN = Recovery is out of criteriaP = The RPD between two GC columns exceeds 40%J = Estimated result < LOQ and ≥ DL</td>H = Out of holding timeW = Reported on wet weight basis



444 21st Street South · La Crosse, Wisconsin · 54601

December 9, 2020

2505 1st Avenue West La Crosse, WI 54603

Subject: Private Well Sampling Results 2505 1st Avenue West, La Crosse, WI 54603 Tax parcel # 4-366-0 Sample ID # 366-0

Dear

We have received and reviewed the test results for the sample collected on November 9, 2020 at the above address. Some PFAS compounds were found, but the levels found were **below** the Department of Health Services (DHS) levels recommended for protecting health. These levels are called the "Recommended Public Health Standard" in the table below. The levels found in *your* well are called the "Sample Result" in the table below.

:

#### Sample Results

Compound	Sample Result (unit)	Recommended Public Health Standard (unit <sup>e</sup> )		
N-Ethyl Perfluorooctane sulfonamide (NEtFOSA) CAS # 4151-50-2	Not Detected	20 ppt <sup>a,b</sup>	ppt nds 6	
N-Ethyl perfluorooctane sulfonamidoacetic acid (NEtFOSAA) CAS # 2991-50-6	Not Detected	20 ppt <sup>a,b</sup>	nit is 20 compou t <i>al</i> of all	
N-Ethyl perfluorooctane sulfonamidoethanol (NEtFOSE) CAS # 1691-99-2	Not Detected	20 ppt <sup>a,b</sup>	ded lin Iese 6 Ied tot	
Perfluorooctane sulfonamide (FOSA) CAS # 754-91-6	Not Detected	20 ppt <sup>a,b</sup>	nmen e of th ombir	
Perfluorooctanoic acid (PFOA) CAS # 335-67-1	Not Detected	20 ppt <sup>a,b</sup>	e recor any <i>on</i> r the <i>c</i>	
Perfluorooctanesulfonic acid (PFOS) CAS # 1763-23-1	Not Detected	20 ppt <sup>a,b</sup>	The for a	

Private Well Sampling Results for 2505 1st Avenue West, La Crosse, WI 54603 Tax parcel # 4-366-0 Sample ID # 366-0 December 9, 2020

Compound	Sample Result (unit)	Recommended Public Health Standard (unit <sup>e</sup> )
Hexafluoropropylene oxide dimer acid (HPFO-DA; GenX) CAS # 13252-13-6	Not Detected	300 ppt <sup>a</sup>
Perfluorobutanesulfonic acid (PFBS) CAS # 375-73-5	2.9 ppt	450,000 ppt <sup>a</sup>
Perfluorohexanesulfonic acid (PFHxS) CAS # 355-46-4	5.3 ppt	40 ppt <sup>a</sup>
Perfluorobutanoic acid (PFBA) CAS # 375-22-4	13 ppt	10,000 ppt <sup>a</sup>
Perfluorodecanoic acid (PFDA) CAS # 335-76-2	Not Detected	300 ppt <sup>a</sup>
Perfluorododecanoic acid (PFDoA) CAS # 307-55-1	Not Detected	500 ppt <sup>a</sup>
Perfluorohexanoic acid (PFHxA) CAS # 307-24-4	Not Detected	150,000 ppt <sup>a</sup>
Perfluorononanoic acid (PFNA) CAS # 375-95-1	Not Detected	30 ppt <sup>a</sup>
Perfluorotetradecanoic acid (PFTeA) CAS # 376-06-7	Not Detected	10,000 ppt <sup>a</sup>
Perfluoroundecanoic acid (PFUnA) CAS # 2058-94-8	Not Detected	3,000 ppt <sup>a</sup>
4,8-Dioxa-3H-perfluorononanoic acid (DONA) CAS # 919005-14-4	Not Detected	3,000 ppt <sup>a</sup>
Perfluorooctadecanoic acid (PFODA) CAS # 16517-11-6	Not Detected	400,000 ppt <sup>a</sup>
Perfluoro-1-pentanesulfonic acid (PFPeS) CAS #2706-91-4	2.1 ppt	None Established <sup>c</sup>

<sup>a</sup> Public health enforcement standard (ES) recommended by DHS.

<sup>b</sup> DHS recommends a combined enforcement standard of 20 ng/L and combined preventive action limit of 2 ng/L for FOSA, NEt-FOSE, NEt-FOSA, NetFOSAA, PFOS, and PFOA.

A current standard is not available; the compound is currently under review by DHS for potential public health standard recommendation.

<sup>4</sup> Public health enforcement standard (ES) in NR 140, Wisconsin Administrative Code.

Units: Parts per trillion (ppt) = nanograms of substance per liter of water (ng/L)

<sup>BL</sup> Detected in the method blank. Possible lab contaminant.

Private Well Sampling Results for 2505 1st Avenue West, La Crosse, WI 54603 Tax parcel # 4-366-0 Sample ID # 366-0 December 9, 2020

As required by law, we will be submitting these results to the Department of Natural Resources (DNR). The DNR may consult with the Department of Health Services (DHS) about these test results. DHS may review all PFAS tests and follow-up with you directly if any actions are recommended to protect your health.

Thank you for your patience and assistance with our investigation. We will provide updates on the project at <a href="https://www.cityoflacrosse.org/wells">https://www.cityoflacrosse.org/wells</a> as our work continues. If you have any questions, please call The OS Group at (608) 668-2718 or email them at <a href="https://www.pFAS@theOSgrp.com">PFAS@theOSgrp.com</a>.

You can also contact the DNR and DHS with questions about PFAS or the water sample results at the numbers provided below.

Questions about	<u></u>	<u>Contact</u>	<u>Phone</u>	E-mail Address
Soil & Groundwate Testing, Clean Up	<sup>er</sup> DNR	David Rozeboom	715-215-2078	David.Rozeboom@wisconsin.gov
Drinking Water or Private wells	DNR	Kyle Burton	920-360-2112	kyle.burton@wisconsin.gov
Health Concerns	DHS	Curtis Hedman	608-266-6677	Curtis.Hedman@dhs.wisconsin.gov

On behalf of The City of La Crosse *The OS Group, LLC* 

Attachment: Lab report for your well

Client: Pace Analytical Ser	vices, LLC					La	boratory I	D: VK15010-0	)02	
Description: 366-0							Matri	x: Aqueous		
Date Sampled:11/09/2020 1255	Р	roject Na	me: I	LACROSSE WELLS	5 23 & 24	1				
Date Received: 11/13/2020	Pro	iect Num	ber: 4	40218153						
					5	<b>.</b>	<b>D</b>			
1 SOP SPE	PEAS by ID SOP	ilution	Anai 11/20	Iysis Date Analyst	Prep 11/25/2	Date 020 1/38	Batch 7/773			
2 SOP SPE	PEAS by ID SOP	1	12/03	8/2020 1443 MMMM	12/02/2	020 1430	75232			
2 301 31 2	11 AS BY 10 301	I	12/00		12/02/2	.020 1200	75252			
Parameter		C Numl	AS oer	Analytical Method	Result	Q	LOQ	DL	Units	Run
9-chlorohexadecafluoro-3-oxanone-1-sulf	fonic acid (9CI-PF3ONS)	756426-5	58-1	PFAS by ID SOP	ND		7.5	1.9	ng/L	1
11-chloroeicosafluoro-3-oxaundecane-1-s	sulfonic acid (11CI-PF3)	763051-9	92-9	PFAS by ID SOP	ND		7.5	1.9	ng/L	1
1H, 1H, 2H, 2H-perfluorodecane sulfonic	acid (8:2 FTS)	39108-3	34-4	PFAS by ID SOP	ND		7.5	1.9	ng/L	1
1H, 1H, 2H, 2H-perfluorooctane sulfonic	acid (6:2 FTS)	27619-9	97-2	PFAS by ID SOP	ND		7.6	1.9	ng/L	2
1H,1H,2H,2H-perfluorododecane sulfonic	c acid (10:2 FTS)	120226-6	50-0	PFAS by ID SOP	ND		7.5	1.9	ng/L	1
1H,1H,2H,2H-perfluorohexane sulfonic ad	cid (4:2 FTS)	757124-7	72-4	PFAS by ID SOP	ND		7.5	1.9	ng/L	1
Hexafluoropropylene oxide dimer acid (G	enX)	13252-1	13-6	PFAS by ID SOP	ND		7.5	1.9	ng/L	1
4,8-dioxa-3H-perfluorononanoic acid (AD	ONA)	919005-1	14-4	PFAS by ID SOP	ND		7.5	1.9	ng/L	1
N-ethylperfluoro-1-octanesulfonamide (Et	tFOSA)	4151-5	50-2	PFAS by ID SOP	ND		7.5	1.9	ng/L	1
N-ethylperfluoro-1-octanesulfonamidoace	etic acid (EtFOSAA)	2991-5	50-6	PFAS by ID SOP	ND		7.5	1.9	ng/L	1
2-N-ethylperfluoro-1-octanesulfonamido-e	ethanol (EtFOSE)	1691-9	99-2	PFAS by ID SOP	ND		7.5	1.9	ng/L	1
N-methylperfluoro-1-octanesulfonamide (	MeFOSA)	31506-3	32-8	PFAS by ID SOP	ND		15	3.7	ng/L	1
N-methylperfluoro-1-octanesulfonamidoa	cetic acid (MeFOSAA)	2355-3	31-9	PFAS by ID SOP	ND		7.5	1.9	ng/L	1
2-IN-methylperfluoro-I-octanesultonamide	D-ethanol (MeFUSE)	24448-0	J9-7	PFAS by ID SOP	ND		7.5	1.9	ng/L	1
Perfluoro-1-butanesultonic acid (PFBS	<b>)</b>	3/5-/	/3-5	PFAS by ID SOP	2.9	J	3.7	0.93	ng/L	1
Perfluoro-I-decanesulfonic acid (PFDS)	<b>.</b>	335-7	//-3	PFAS by ID SOP	ND		3.7	0.93	ng/L	1
Perfluoro-I-neptanesulfonic acid (PFHpS	)	3/5-9	12-8	PFAS by ID SOP	ND		3.7	0.93	ng/L	1
Perfluoro-I-nonanesultonic acid (PFNS)		68259-	12-1	PFAS by ID SOP	ND		3.7	0.93	ng/L	1
Perfluoro-1-octanesultonamide (PFOSA)		/54-9	/1-6	PFAS by ID SOP	ND		3.7	0.93	ng/L	1
Perfluoro-I-pentanesultonic acid (PFP	'es)	2706-9	71-4 20 F	PFAS by ID SOP	2.1	J	3.7	0.93	ng/L	1
Perflueroboxanesulfonic acid (PFDOS)	)	79780-3 255 A	39-5 14 4	PEAS by ID SOP	ND E 2		7.5 2.7	1.9	ng/L	1
Perfluoro n butanoic acid (PERA)		275 2	10-4 00 1	PFAS by ID SOP	0.0 12		3.7 2.7	0.93	ng/L	1
Perfluere p decapois acid (PEDA)		225 7	16 0	PEAS by ID SOP			27	0.93	ng/L	1
Perfluere p dedecapoic acid (PEDA)		207 F	5 1	PEAS by ID SOP			27	0.93	ng/L	1
Perfluere p hoptapois acid (PEUpA)		275 0	05-1 05-0	PEAS by ID SOP			27	0.93	ng/L	1
Perfluoro-n-hevadecanoic acid (PEHvDA)	)	67005-0	10-5	PEAS by ID SOP			7.5	0.93	ng/L	1
Perfluoro-n-hexanoic acid (PEHyA)	)	307-2	04_A	PEAS by ID SOP			37	1.9	ng/L	1
Perfluoro-n-nenanoic acid (PENA)		375-0	 05_1	PEAS by ID SOP			3.7	0.93	ng/L	1
Perfluoro-n-octadecanoic acid (PEODA)		16517-1	11-6	PEAS by ID SOP			3.7 7.5	0.93	ng/L	1
Perfluoro-n-octanoic acid (PEQA)		335-6	57-1	PEAS by ID SOP	ND		37	0.93	ng/l	1
Perfluoro-n-pentanoic acid (PEPeA)		2706-9	90-3	PEAS by ID SOP	ND		3.7	0.93	ng/l	1
Perfluoro-n-tetradecanoic acid (PFTeDA)		376-0	)6-7	PFAS by ID SOP	ND		3.7	0.93	ng/L	1
Perfluoro-n-tridecanoic acid (PETrDA)		72629-9	94-8	PFAS by ID SOP	ND		3.7	0.93	ng/L	1
Perfluoro-n-undecanoic acid (PFUdA)		2058-9	94-8	PFAS by ID SOP	ND		3.7	0.93	na/L	1
Perfluorooctanesulfonic acid (PFOS)		1763-2	23-1	PFAS by ID SOP	ND		3.7	0.93	na/L	1
								0.75		·
Surrogate		in 1 A	ccep	otance Run	2 Ac	ceptance				
13C2 4-2ETS	2 % Ret		25-	110 11 70 KeU		25-150				

Surrogate	Q % R	ecovery	LIIIIIIS	Q	% Recovery	LIIIIIIS
13C2_4:2FTS		106	25-150		114	25-150
13C2_6:2FTS		106	25-150		103	25-150
13C2_8:2FTS		88	25-150		98	25-150
13C2_PFDoA		87	25-150		84	25-150
13C2_PFHxDA		94	25-150		100	25-150
LOQ = Limit of Quantitation	B = Detected in the method blank	E = Quantitat	ion of compour	nd exce	eded the calibration r	ange DL = Detection Limit
ND = Not detected at or above the DL	N = Recovery is out of criteria	P = The RPD	between two 0	GC colu	mns exceeds 40%	J = Estimated result < LOQ and $\geq$ DL
H = Out of holding time	W = Reported on wet weight basis					

Project Number: 40218153

Project Name: LACROSSE WELLS 23 & 24

Client: Pace Analytical Services, LLC Description: 366-0 Date Sampled:11/09/2020 1255

Date Received: 11/13/2020

Laboratory ID: VK15010-002 Matrix: Aqueous

Currente	~	Run 1	Acceptance	~	Run 2	Acceptance
Surrogate	Q	% Recovery	Limits	Q	% Recovery	y Limits
13C2_PFTeDA		91	25-150		84	25-150
13C3_PFBS		98	25-150		88	25-150
13C3_PFHxS		99	25-150		86	25-150
13C3-HFPO-DA		101	25-150		111	25-150
13C4_PFBA		102	25-150		96	25-150
13C4_PFHpA		106	25-150		95	25-150
13C5_PFHxA		96	25-150		94	25-150
13C5_PFPeA		102	25-150		96	25-150
13C6_PFDA		100	25-150		92	25-150
13C7_PFUdA		100	25-150		88	25-150
13C8_PFOA		102	25-150		94	25-150
13C8_PFOS		97	25-150		72	25-150
13C8_PFOSA		96	10-150		103	10-150
13C9_PFNA		101	25-150		86	25-150
d-EtFOSA		72	10-150		104	10-150
d5-EtFOSAA		102	25-150		97	25-150
d9-EtFOSE		88	10-150		93	10-150
d-MeFOSA		87	10-150		109	10-150
d3-MeFOSAA		95	25-150		103	25-150
d7-MeFOSE		88	10-150		92	10-150

LOQ = Limit of QuantitationB = Detected in the method blankE = Quantitation of compound exceeded the calibration rangeDL = Detection LimitND = Not detected at or above the DLN = Recovery is out of criteriaP = The RPD between two GC columns exceeds 40%J = Estimated result < LOQ and ≥ DL</td>H = Out of holding timeW = Reported on wet weight basis



444 21st Street South  $\cdot$  La Crosse, Wisconsin  $\cdot$  54601

December 9, 2020

N3280 Hidden Springs Road La Crosse, WI 54601

Subject: Private Well Sampling Results 2505 1<sup>ST</sup> Avenue West, La Crosse, WI 54603 Tax parcel # 4-366-0 Sample ID # 366-0

Dear

We have received and reviewed the test results for the sample collected on November 9, 2020 at the above address. Some PFAS compounds were found, but the levels found were **below** the Department of Health Services (DHS) levels recommended for protecting health. These levels are called the "Recommended Public Health Standard" in the table below. The levels found in *your* well are called the "Sample Result" in the table below.

#### Sample Results

Compound	Sample Result (unit)	Recomn Public I Standard	nended Health I (unit <sup>e</sup> )
N-Ethyl Perfluorooctane sulfonamide (NEtFOSA) CAS # 4151-50-2	Not Detected	20 ppt <sup>a,b</sup>	ppt nds 6
N-Ethyl perfluorooctane sulfonamidoacetic acid (NEtFOSAA) CAS # 2991-50-6	Not Detected	20 ppt <sup>a,b</sup>	nit is 20 compou t <i>al</i> of all
N-Ethyl perfluorooctane sulfonamidoethanol (NEtFOSE) CAS # 1691-99-2	Not Detected	20 ppt <sup>a,b</sup>	ded lin Jese 6 J <i>ed to</i> t
Perfluorooctane sulfonamide (FOSA) CAS # 754-91-6	Not Detected	20 ppt <sup>a,b</sup>	nmen e of th ombir
Perfluorooctanoic acid (PFOA) CAS # 335-67-1	Not Detected	20 ppt <sup>a,b</sup>	e recor any <i>on</i> r the <i>c</i>
Perfluorooctanesulfonic acid (PFOS) CAS # 1763-23-1	Not Detected	20 ppt <sup>a,b</sup>	The for a

Private Well Sampling Results for 2505 1<sup>st</sup> Avenue West, La Crosse, WI 54601 Tax parcel # 4-366-0 Sample ID # 366-0 December 9, 2020

Compound	Sample Result (unit)	Recommended Public Health Standard (unit <sup>e</sup> )
Hexafluoropropylene oxide dimer acid (HPFO-DA; GenX) CAS # 13252-13-6	Not Detected	300 ppt <sup>a</sup>
Perfluorobutanesulfonic acid (PFBS) CAS # 375-73-5	2.9 ppt	450,000 ppt <sup>a</sup>
Perfluorohexanesulfonic acid (PFHxS) CAS # 355-46-4	5.3 ppt	40 ppt <sup>a</sup>
Perfluorobutanoic acid (PFBA) CAS # 375-22-4	13 ppt	10,000 ppt <sup>a</sup>
Perfluorodecanoic acid (PFDA) CAS # 335-76-2	Not Detected	300 ppt <sup>a</sup>
Perfluorododecanoic acid (PFDoA) CAS # 307-55-1	Not Detected	500 ppt <sup>a</sup>
Perfluorohexanoic acid (PFHxA) CAS # 307-24-4	Not Detected	150,000 ppt <sup>a</sup>
Perfluorononanoic acid (PFNA) CAS # 375-95-1	Not Detected	30 ppt <sup>a</sup>
Perfluorotetradecanoic acid (PFTeA) CAS # 376-06-7	Not Detected	10,000 ppt <sup>a</sup>
Perfluoroundecanoic acid (PFUnA) CAS # 2058-94-8	Not Detected	3,000 ppt <sup>a</sup>
4,8-Dioxa-3H-perfluorononanoic acid (DONA) CAS # 919005-14-4	Not Detected	3,000 ppt <sup>a</sup>
Perfluorooctadecanoic acid (PFODA) CAS # 16517-11-6	Not Detected	400,000 ppt <sup>a</sup>
Perfluoro-1-pentanesulfonic acid (PFPeS) CAS #2706-91-4	2.1 ppt	None Established <sup>c</sup>

<sup>a</sup> Public health enforcement standard (ES) recommended by DHS.

<sup>b</sup> DHS recommends a combined enforcement standard of 20 ng/L and combined preventive action limit of 2 ng/L for FOSA, NEt-FOSE, NEt-FOSA, NetFOSAA, PFOS, and PFOA.

A current standard is not available; the compound is currently under review by DHS for potential public health standard recommendation.

<sup>1</sup> Public health enforcement standard (ES) in NR 140, Wisconsin Administrative Code.

Units: Parts per trillion (ppt) = nanograms of substance per liter of water (ng/L)

<sup>BL</sup> Detected in the method blank. Possible lab contaminant.

Private Well Sampling Results for 2505 1<sup>st</sup> Avenue West, La Crosse, WI 54601 Tax parcel # 4-366-0 Sample ID # 366-0 December 9, 2020

As required by law, we will be submitting these results to the Department of Natural Resources (DNR). The DNR may consult with the Department of Health Services (DHS) about these test results. DHS may review all PFAS tests and follow-up with you directly if any actions are recommended to protect your health.

Thank you for your patience and assistance with our investigation. We will provide updates on the project at <a href="https://www.cityoflacrosse.org/wells">https://www.cityoflacrosse.org/wells</a> as our work continues. If you have any questions, please call The OS Group at (608) 668-2718 or email them at <a href="https://www.pFAS@theOSgrp.com">PFAS@theOSgrp.com</a>.

You can also contact the DNR and DHS with questions about PFAS or the water sample results at the numbers provided below.

Questions about	<u></u>	<u>Contact</u>	<u>Phone</u>	E-mail Address
Soil & Groundwate Testing, Clean Up	<sup>er</sup> DNR	David Rozeboom	715-215-2078	David.Rozeboom@wisconsin.gov
Drinking Water or Private wells	DNR	Kyle Burton	920-360-2112	kyle.burton@wisconsin.gov
Health Concerns	DHS	Curtis Hedman	608-266-6677	Curtis.Hedman@dhs.wisconsin.gov

On behalf of The City of La Crosse *The OS Group, LLC* 

Attachment: Lab report for your well

Client: Pace Analytical Services, LLC					Laboratory	ID: VK15010-	002	
Description: 366-0					Mat	rix: Aqueous		
Date Sampled:11/09/2020 1255	Project	Name:	LACROSSE WELLS	5 23 & 24	Ļ			
Date Received: 11/13/2020	Project N	lumber <sup>.</sup>	40218153					
		uniber.	10210100	_				
Run Prep Method Analytical M	ethod Dilutio	n Ana	llysis Date Analyst	Prep	Date Batch			
I SUP SPE PEAS by II	1 SOP 1	11/2	9/2020 1443 IVIIVIIVI 2/2020 2214 MAMAA	11/25/2	020 1438 74773			
2 SOP SPE PPAS by II	150P I	12/0	3/2020 2214 101101101	12/02/2	020 1200 75232			
Parameter	N	CAS umber	Analytical Method	Result	Q LOQ	DL	Units	Run
9-chlorohexadecafluoro-3-oxanone-1-sulfonic acid (9CI-I	PF3ONS) 7564	26-58-1	PFAS by ID SOP	ND	7.5	1.9	ng/L	1
11-chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (1	CI-PF3) 7630	51-92-9	PFAS by ID SOP	ND	7.5	1.9	ng/L	1
1H, 1H, 2H, 2H-perfluorodecane sulfonic acid (8:2 FTS)	391	08-34-4	PFAS by ID SOP	ND	7.5	1.9	ng/L	1
1H, 1H, 2H, 2H-perfluorooctane sulfonic acid (6:2 FTS)	276	19-97-2	PFAS by ID SOP	ND	7.6	1.9	ng/L	2
1H,1H,2H,2H-perfluorododecane sulfonic acid (10:2 FTS	) 1202	26-60-0	PFAS by ID SOP	ND	7.5	1.9	ng/L	1
1H,1H,2H,2H-perfluorohexane sulfonic acid (4:2 FTS)	7571	24-72-4	PFAS by ID SOP	ND	7.5	1.9	ng/L	1
Hexafluoropropylene oxide dimer acid (GenX)	132	52-13-6	PFAS by ID SOP	ND	7.5	1.9	ng/L	1
4,8-dioxa-3H-perfluorononanoic acid (ADONA)	9190	05-14-4	PFAS by ID SOP	ND	7.5	1.9	ng/L	1
N-ethylperfluoro-1-octanesulfonamide (EtFOSA)	41	51-50-2	PFAS by ID SOP	ND	7.5	1.9	ng/L	1
N-ethylperfluoro-1-octanesulfonamidoacetic acid (EtFOS	AA) 29	91-50-6	PFAS by ID SOP	ND	7.5	1.9	ng/L	1
2-N-ethylperfluoro-1-octanesulfonamido-ethanol (EtFOS	E) 16	91-99-2	PFAS by ID SOP	ND	7.5	1.9	ng/L	1
N-methylperfluoro-1-octanesulfonamide (MeFOSA)	315	06-32-8	PFAS by ID SOP	ND	15	3.7	ng/L	1
N-methylperfluoro-1-octanesulfonamidoacetic acid (MeF	OSAA) 23	55-31-9	PFAS by ID SOP	ND	7.5	1.9	ng/L	1
2-N-methylperfluoro-1-octanesulfonamido-ethanol (MeF	DSE) 244	48-09-7	PFAS by ID SOP	ND	7.5	1.9	ng/L	1
Perfluoro-1-butanesulfonic acid (PFBS)	3	75-73-5	PFAS by ID SOP	2.9	J 3.7	0.93	ng/L	1
Perfluoro-1-decanesulfonic acid (PFDS)	3	35-77-3	PFAS by ID SOP	ND	3.7	0.93	ng/L	1
Perfluoro-1-heptanesulfonic acid (PFHpS)	3	75-92-8	PFAS by ID SOP	ND	3.7	0.93	ng/L	1
Perfluoro-1-nonanesulfonic acid (PFNS)	682	59-12-1	PFAS by ID SOP	ND	3.7	0.93	ng/L	1
Perfluoro-1-octanesulfonamide (PFOSA)	7	54-91-6	PFAS by ID SOP	ND	3.7	0.93	ng/L	1
Perfluoro-1-pentanesulfonic acid (PFPeS)	27	06-91-4	PFAS by ID SOP	2.1	J 3.7	0.93	ng/L	1
Perfluorododecanesulfonic acid (PFDOS)	797	80-39-5	PFAS by ID SOP	ND	7.5	1.9	ng/L	1
Perfluorohexanesulfonic acid (PFHxS)	3	55-46-4	PFAS by ID SOP	5.3	3.7	0.93	ng/L	1
Perfluoro-n-butanoic acid (PFBA)	3	75-22-4	PFAS by ID SOP	13	3.7	0.93	ng/L	1
Perfluoro-n-decanoic acid (PFDA)	3	35-76-2	PFAS by ID SOP	ND	3.7	0.93	ng/L	1
Perfluoro-n-dodecanoic acid (PFDoA)	3	07-55-1	PFAS by ID SOP	ND	3.7	0.93	ng/L	1
Perfluoro-n-heptanoic acid (PFHpA)	3	75-85-9	PFAS by ID SOP	ND	3.7	0.93	ng/L	1
Perfluoro-n-hexadecanoic acid (PFHxDA)	679	05-19-5	PFAS by ID SOP	ND	7.5	1.9	ng/L	1
Perfluoro-n-hexanoic acid (PFHxA)	3	07-24-4	PFAS by ID SOP	ND	3.7	0.93	ng/L	1
Perfluoro-n-nonanoic acid (PFNA)	3	75-95-1	PFAS by ID SOP	ND	3.7	0.93	ng/L	1
Perfluoro-n-octadecanoic acid (PFODA)	165	17-11-6	PFAS by ID SOP	ND	7.5	1.9	ng/L	1
Perfluoro-n-octanoic acid (PFOA)	3	35-67-1	PFAS by ID SOP	ND	3.7	0.93	ng/L	1
Perfluoro-n-pentanoic acid (PFPeA)	27	06-90-3	PFAS by ID SOP	ND	3.7	0.93	ng/L	1
Perfluoro-n-tetradecanoic acid (PFTeDA)	3	76-06-7	PFAS by ID SOP	ND	3.7	0.93	ng/L	1
Perfluoro-n-tridecanoic acid (PFTrDA)	726	29-94-8	PFAS by ID SOP	ND	3.7	0.93	ng/L	1
Perfluoro-n-undecanoic acid (PFUdA)	20	58-94-8	PFAS by ID SOP	ND	3.7	0.93	ng/L	1
Perfluorooctanesulfonic acid (PFOS)	17	63-23-1	PFAS by ID SOP	ND	3.7	0.93	ng/L	1
	Run 1	Accer	otance Run		ceptance			
Surrogate Q	% Recover	y Lir	mits Q % Rec	overy	Limits			
13C2 4.2ETS	106	25	-150 11	4	25-150			

5	<b>a</b> /0/10	, e e i e i e i e	2000	/*******	Ennito
13C2_4:2FTS		106	25-150	114	25-150
13C2_6:2FTS		106	25-150	103	25-150
13C2_8:2FTS		88	25-150	98	25-150
13C2_PFDoA		87	25-150	84	25-150
13C2_PFHxDA		94	25-150	100	25-150
LOQ = Limit of Quantitation	B = Detected in the method blank	E = Quantita	tion of compound exe	ceeded the calibration r	range DL = Detection Limit
ND = Not detected at or above the DL	N = Recovery is out of criteria	P = The RPI	D between two GC co	lumns exceeds 40%	J = Estimated result < LOQ and $\geq$ DL
H = Out of holding time	W = Reported on wet weight basis				

Project Number: 40218153

Client: Pace Analytical Services, LLC Description: 366-0 Date Sampled:11/09/2020 1255

Matrix: Aqueous

Laboratory ID: VK15010-002

Date Received: 11/13/2020

Project Name: LACROSSE WELLS 23 & 24

	Ru	n 1 Au	ccentance		Run 2	Acceptance
Surrogate	Q % Rec	overy	Limits	Q	% Recovery	y Limits
13C2_PFTeDA	ç	1	25-150		84	25-150
13C3_PFBS	ç	8	25-150		88	25-150
13C3_PFHxS	ç	9	25-150		86	25-150
13C3-HFPO-DA	1	01	25-150		111	25-150
13C4_PFBA	1	02	25-150		96	25-150
13C4_PFHpA	1	06	25-150		95	25-150
13C5_PFHxA	ç	6	25-150		94	25-150
13C5_PFPeA	1	02	25-150		96	25-150
13C6_PFDA	1	00	25-150		92	25-150
13C7_PFUdA	1	00	25-150		88	25-150
13C8_PFOA	1	02	25-150		94	25-150
13C8_PFOS	ç	7	25-150		72	25-150
13C8_PFOSA	ç	6	10-150		103	10-150
13C9_PFNA	1	01	25-150		86	25-150
d-EtFOSA	7	2	10-150		104	10-150
d5-EtFOSAA	1	02	25-150		97	25-150
d9-EtFOSE	8	8	10-150		93	10-150
d-MeFOSA	8	7	10-150		109	10-150
d3-MeFOSAA	ç	5	25-150		103	25-150
d7-MeFOSE	8	8	10-150		92	10-150

LOQ = Limit of Quantitation B = Detected in the method blank E = Quantitation of compound exceeded the calibration range DL = Detection Limit ND = Not detected at or above the DL N = Recovery is out of criteria P = The RPD between two GC columns exceeds 40% J = Estimated result < LOQ and  $\ge$  DL H = Out of holding time W = Reported on wet weight basis


444 21st Street South · La Crosse, Wisconsin · 54601

December 23, 2020

2509 2nd Avenue East La Crosse, WI 54603

Subject: Private Well Sampling Results 2509 2nd Avenue East, La Crosse, WI 54603 Tax parcel # 4-212-0 Sample ID # 212-0

:

Dear

We have received and reviewed the test results for the sample collected on November 18, 2020 at the above address. Some PFAS compounds were found, but the levels found were **below** the Department of Health Services (DHS) levels recommended for protecting health. These levels are called the "Recommended Public Health Standard" in the table below. The levels found in *your* well are called the "Sample Result" in the table below.

#### Sample Results

Compound	Sample Result (unit)	Recomn Public I Standard	nended Health I (unit <sup>e</sup> )
N-Ethyl Perfluorooctane sulfonamide (NEtFOSA) CAS # 4151-50-2	Not Detected	20 ppt <sup>a,b</sup>	ppt nds 6
N-Ethyl perfluorooctane sulfonamidoacetic acid (NEtFOSAA) CAS # 2991-50-6	Not Detected	20 ppt <sup>a,b</sup>	nit is 20 compou t <i>al</i> of all
N-Ethyl perfluorooctane sulfonamidoethanol (NEtFOSE) CAS # 1691-99-2	Not Detected	20 ppt <sup>a,b</sup>	ded lin Jese 6 Jed tot
Perfluorooctane sulfonamide (FOSA) CAS # 754-91-6	Not Detected	20 ppt <sup>a,b</sup>	nmen e of th ombir
Perfluorooctanoic acid (PFOA) CAS # 335-67-1	3.2 ppt	20 ppt <sup>a,b</sup>	e recor any <i>on</i> r the <i>c</i>
Perfluorooctanesulfonic acid (PFOS) CAS # 1763-23-1	3.9 ppt	20 ppt <sup>a,b</sup>	The for a

Private Well Sampling Results for 2509 2nd Avenue East, La Crosse, WI 54603 Tax parcel # 4-212-0 Sample ID # 212-0 December 23, 2020

Compound	Sample Result (unit)	Recommended Public Health Standard (unit <sup>e</sup> )
Hexafluoropropylene oxide dimer acid (HPFO-DA; GenX) CAS # 13252-13-6	Not Detected	300 ppt <sup>a</sup>
Perfluorobutanesulfonic acid (PFBS) CAS # 375-73-5	7.7 ppt	450,000 ppt <sup>a</sup>
Perfluorohexanesulfonic acid (PFHxS) CAS # 355-46-4	13 ppt	40 ppt <sup>a</sup>
Perfluorobutanoic acid (PFBA) CAS # 375-22-4	6.3 ppt	10,000 ppt <sup>a</sup>
Perfluorodecanoic acid (PFDA) CAS # 335-76-2	Not Detected	300 ppt <sup>a</sup>
Perfluorododecanoic acid (PFDoA) CAS # 307-55-1	Not Detected	500 ppt <sup>a</sup>
Perfluorohexanoic acid (PFHxA) CAS # 307-24-4	1.7 ppt	150,000 ppt <sup>a</sup>
Perfluorononanoic acid (PFNA) CAS # 375-95-1	Not Detected	30 ppt <sup>a</sup>
Perfluorotetradecanoic acid (PFTeA) CAS # 376-06-7	Not Detected	10,000 ppt <sup>a</sup>
Perfluoroundecanoic acid (PFUnA) CAS # 2058-94-8	Not Detected	3,000 ppt <sup>a</sup>
4,8-Dioxa-3H-perfluorononanoic acid (DONA) CAS # 919005-14-4	Not Detected	3,000 ppt <sup>a</sup>
Perfluorooctadecanoic acid (PFODA) CAS # 16517-11-6	Not Detected	400,000 ppt <sup>a</sup>
Perfluoro-1-pentanesulfonic acid (PFPeS) CAS #2706-91-4	5.6 ppt	None Established <sup>c</sup>
Perfluoro-n-heptanoic acid (PFHpA) CAS # 375-85-9	1.2 ppt	None Established <sup>c</sup>
Perfluoro-n-pentanoic acid (PFPeA) CAS # 2706-90-3	1.6 ppt	None Established <sup>c</sup>

<sup>a</sup> Public health enforcement standard (ES) recommended by DHS.

<sup>b</sup> DHS recommends a combined enforcement standard of 20 ng/L and combined preventive action limit of 2 ng/L for FOSA, NEt-FOSE, NEt-FOSA, NetFOSAA, PFOS, and PFOA.

A current standard is not available; the compound is currently under review by DHS for potential public health standard recommendation.

Public health enforcement standard (ES) in NR 140, Wisconsin Administrative Code.

<sup>e</sup> Units: Parts per trillion (ppt) = nanograms of substance per liter of water (ng/L)

Private Well Sampling Results for 2509 2nd Avenue East, La Crosse, WI 54603 Tax parcel # 4-212-0 Sample ID # 212-0 December 23, 2020

As required by law, we will be submitting these results to the Department of Natural Resources (DNR). The DNR may consult with the Department of Health Services (DHS) about these test results. DHS may review all PFAS tests and follow-up with you directly if any actions are recommended to protect your health.

Thank you for your patience and assistance with our investigation. We will provide updates on the project at <u>https://www.cityoflacrosse.org/wells</u> as our work continues. If you have any questions, please call The OS Group at (608) 668-2718 or email them at <u>PFAS@theOSgrp.com</u>.

You can also contact the DNR and DHS with questions about PFAS or the water sample results at the numbers provided below.

Questions about	<u></u>	<u>Contact</u>	<u>Phone</u>	E-mail Address
Soil & Groundwate Testing, Clean Up	<sup>er</sup> DNR	David Rozeboom	715-215-2078	David.Rozeboom@wisconsin.gov
Drinking Water or Private wells	DNR	Kyle Burton	920-360-2112	kyle.burton@wisconsin.gov
Health Concerns	DHS	Curtis Hedman	608-266-6677	Curtis.Hedman@dhs.wisconsin.gov

On behalf of The City of La Crosse *The OS Group, LLC* 

Attachment: Lab report for your well

Client: Pace Analytical Services, LLC						Laboratory II	D: VK21043-0	007	
Description: 212-0						Matri	x: Aqueous		
Date Sampled:11/18/2020 1600	Project Nar	me: 190 <sup>-</sup>	1155 LACROSSE	E WELL	23 &				
Date Received: 11/20/2020 Pro	piect Numb	ber: 402 <sup>-</sup>	18686						
		Amaluat	- Data Arrahuat	Dream	Data	Datab			
2 SOP SPE PFAS by ID SOP	1 1	Analysi: 2/17/20	s Date Analyst 20 0337 SES	Prep 12/15/2	Date 2020 13	Batch 330 76544			
Parameter	CA Numb	AS ber	Analytical Method	Result	Q	LOQ	DL	Units	Run
9-chlorohexadecafluoro-3-oxanone-1-sulfonic acid (9CI-PF3ONS)	756426-5	8-1 PF	AS by ID SOP	ND		7.9	2.0	ng/L	2
11-chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11CI-PF3)	763051-92	2-9 PF	AS by ID SOP	ND		7.9	2.0	ng/L	2
1H, 1H, 2H, 2H-perfluorodecane sulfonic acid (8:2 FTS)	39108-34	4-4 PF	AS by ID SOP	ND		7.9	2.0	ng/L	2
1H, 1H, 2H, 2H-perfluorooctane sulfonic acid (6:2 FTS)	27619-9	7-2 PF	AS by ID SOP	ND		7.9	2.0	ng/L	2
1H,1H,2H,2H-perfluorododecane sulfonic acid (10:2 FTS)	120226-60	0-0 PF	AS by ID SOP	ND		7.9	2.0	ng/L	2
1H,1H,2H,2H-perfluorohexane sulfonic acid (4:2 FTS)	757124-72	2-4 PF	AS by ID SOP	ND		7.9	2.0	ng/L	2
Hexafluoropropylene oxide dimer acid (GenX)	13252-1	3-6 PF	AS by ID SOP	ND		7.9	2.0	ng/L	2
4,8-dioxa-3H-perfluorononanoic acid (ADONA)	919005-1	4-4 PF	AS by ID SOP	ND		7.9	2.0	ng/L	2
N-ethylperfluoro-1-octanesulfonamide (EtFOSA)	4151-50	0-2 PF	AS by ID SOP	ND		7.9	2.0	ng/L	2
N-ethylperfluoro-1-octanesulfonamidoacetic acid (EtFOSAA)	2991-50	0-6 PF	AS by ID SOP	ND		7.9	2.0	ng/L	2
2-N-ethylperfluoro-1-octanesulfonamido-ethanol (EtFOSE)	1691-99	9-2 PF	AS by ID SOP	ND		7.9	2.0	ng/L	2
N-methylperfluoro-1-octanesulfonamide (MeFOSA)	31506-32	2-8 PF	AS by ID SOP	ND		16	4.0	ng/L	2
N-methylperfluoro-1-octanesulfonamidoacetic acid (MeFOSAA)	2355-31	1-9 PF	AS by ID SOP	ND		7.9	2.0	ng/L	2
2-N-methylperfluoro-1-octanesulfonamido-ethanol (MeFOSE)	24448-0	9-7 PF	AS by ID SOP	ND		7.9	2.0	ng/L	2
Perfluoro-1-butanesulfonic acid (PFBS)	375-73	3-5 PF	AS by ID SOP	7.7		4.0	0.99	ng/L	2
Perfluoro-1-decanesulfonic acid (PFDS)	335-77	7-3 PF	AS by ID SOP	ND		4.0	0.99	ng/L	2
Perfluoro-1-heptanesulfonic acid (PFHpS)	375-92	2-8 PF	AS by ID SOP	ND		4.0	0.99	ng/L	2
Perfluoro-1-nonanesulfonic acid (PFNS)	68259-12	2-1 PF	AS by ID SOP	ND		4.0	0.99	ng/L	2
Perfluoro-1-octanesultonamide (PFOSA)	754-91	1-6 PF	AS by ID SOP	ND		4.0	0.99	ng/L	2
Perfluoro-1-pentanesultonic acid (PFPeS)	2706-91	1-4 PF	AS by ID SOP	5.6		4.0	0.99	ng/L	2
Perfluorododecanesultonic acid (PFDOS)	/9/80-39	9-5 PF	AS by ID SOP	ND		7.9	2.0	ng/L	2
Perfluoronexanesultonic acid (PERA)	355-40	6-4 PF 24 DE	AS by ID SOP	13		4.0	0.99	ng/L	2
	225 74	2-4 FI 6.0 DE	AS by ID SOP	0.5		4.0	0.99	ng/L	2
Perfluere p dedecapeic acid (PEDA)	207 5	0-2 FI 51 DE	AS by ID SOP			4.0	0.99	ng/L	2
Perfluoro-n-bentanoic acid (PEHnA)	375_8	5-0 DE		1 2	1	4.0	0.99	ng/L	2
	67005-10	0.5 DF	AS by ID SOP		5	7.0	0.99	ng/L	2
Perfluoro-n-bevanoic acid ( $PEH_V\Lambda$ )	307-2/	7-3 II 4-4 DE		17	1	1.7	2.0	ng/L	2
Perfluoro-n-nonanoic acid (PENA)	375-95	5-1 PF	AS by ID SOP		5	4.0	0.99	ng/L	2
Perfluoro.n.octadecanoic acid (PEODA)	16517-1	1-6 DF				7.0	0.99	ng/L	2
Perfluoro-n-octanoic acid (PEQA)	335-67	7-1 PF	AS by ID SOP	3.2	J	4.0	2.0	ng/L	2
Perfluoro-n-pentanoic acid (PFPeA)	2706-90	0-3 PF	AS by ID SOP	1.6	J	4.0	0.99	na/L	2
Perfluoro-n-tetradecanoic acid (PFTeDA)	376-06	6-7 PF	AS by ID SOP	ND		4.0	0.99	na/L	2
Perfluoro-n-tridecanoic acid (PFTrDA)	72629-9	4-8 PF	AS by ID SOP	ND		4.0	0.99	na/L	2
Perfluoro-n-undecanoic acid (PFUdA)	2058-94	4-8 PF	AS by ID SOP	ND		4.0	0.99	ng/L	2
Perfluorooctanesulfonic acid (PFOS)	1763-23	3-1 PF	AS by ID SOP	3.9	J	4.0	0.99	ng/L	2
R	un 2 Ac	cceptan	се					0	
Surroyate Q % Re	covery	Limits							
1302_4.2F13 13C2_6:2FTS	103	20-150 25_150							
13C2_8:2ETS	112	25-150							
13C2_PEDoA	101	25-150							
13C2_PEHXDA	98	25-150							
13C2_PFTeDA	100	25-150							
LOQ = Limit of QuantitationB = Detected in the method blankND = Not detected at or above the DLN = Recovery is out of criteriaH = Out of holding timeW = Reported on wet weight basis	E = Quantita P = The RPE	ation of con D between	npound exceeded the c two GC columns excee	alibration r eds 40%	ange D J	L = Detection Lin = Estimated resu	nit IIt < LOQ and ≥ D	L	

Client: Pace Analytical Services, LLC	
Description: 212-0	
Date Sampled:11/18/2020 1600	
Data Data in 11/00/0000	

Project Name: 1901155 LACROSSE WELL 23 &

Laboratory ID: VK21043-007 Matrix: Aqueous

Date Received: 11/20/2020	Project Number:	40218686
Surrogate	Run 2 Accep Q % Recovery Lin	otance nits
13C3_PFBS	111 25-	-150
13C3_PFHxS	100 25-	-150
13C3-HFPO-DA	106 25-	-150
13C4_PFBA	115 25-	-150
13C4_PFHpA	107 25-	-150
13C5_PFHxA	108 25-	-150
13C5_PFPeA	105 25-	-150
13C6_PFDA	105 25-	-150
13C7_PFUdA	106 25-	-150
13C8_PFOA	110 25-	-150
13C8_PFOS	101 25-	-150
13C8_PFOSA	108 10-	-150
13C9_PFNA	107 25-	-150
d-EtFOSA	73 10-	-150
d5-EtFOSAA	100 25-	-150
d9-EtFOSE	87 10-	-150
d-MeFOSA	81 10-	-150
d3-MeFOSAA	102 25-	-150
d7-MeFOSE	93 10-	-150

LOQ = Limit of QuantitationB = Detected in the method blankE = Quantitation of compound exceeded the calibration rangeDL = Detection LimitND = Not detected at or above the DLN = Recovery is out of criteriaP = The RPD between two GC columns exceeds 40%J = Estimated result < LOQ and  $\geq$  DLH = Out of holding timeW = Reported on wet weight basis



444 21st Street South · La Crosse, Wisconsin · 54601

December 23, 2020

2561 2nd Avenue East La Crosse, WI 54603

Subject: Private Well Sampling Results 2561 2nd Avenue East, La Crosse, WI 54603 Tax parcel # 4-227-0 Sample ID # 227-0

:

Dear

We have received and reviewed the test results for the sample collected on November 17, 2020 at the above address. Some PFAS compounds were found, but the levels found were **below** the Department of Health Services (DHS) levels recommended for protecting health. These levels are called the "Recommended Public Health Standard" in the table below. The levels found in *your* well are called the "Sample Result" in the table below.

#### Sample Results

Compound	Sample Result (unit)	Recomn Public I Standard	nended Health I (unit <sup>e</sup> )
N-Ethyl Perfluorooctane sulfonamide (NEtFOSA) CAS # 4151-50-2	Not Detected	20 ppt <sup>a,b</sup>	ppt nds 6
N-Ethyl perfluorooctane sulfonamidoacetic acid (NEtFOSAA) CAS # 2991-50-6	Not Detected	20 ppt <sup>a,b</sup>	nit is 20 compou t <i>al</i> of all
N-Ethyl perfluorooctane sulfonamidoethanol (NEtFOSE) CAS # 1691-99-2	Not Detected	20 ppt <sup>a,b</sup>	ded lin Jese 6 Jed tot
Perfluorooctane sulfonamide (FOSA) CAS # 754-91-6	Not Detected	20 ppt <sup>a,b</sup>	nmen e of th ombir
Perfluorooctanoic acid (PFOA) CAS # 335-67-1	Not Detected	20 ppt <sup>a,b</sup>	e recor any <i>on</i> r the <i>c</i>
Perfluorooctanesulfonic acid (PFOS) CAS # 1763-23-1	0.92 ppt	20 ppt <sup>a,b</sup>	The for a

Private Well Sampling Results for 2561 2nd Avenue East, La Crosse, WI 54603 Tax parcel # 4-227-0 Sample ID # 227-0 December 23, 2020

Compound	Sample Result (unit)	Recommended Public Health Standard (unit <sup>e</sup> )
Hexafluoropropylene oxide dimer acid (HPFO-DA; GenX) CAS # 13252-13-6	Not Detected	300 ppt <sup>a</sup>
Perfluorobutanesulfonic acid (PFBS) CAS # 375-73-5	0.98 ppt	450,000 ppt <sup>a</sup>
Perfluorohexanesulfonic acid (PFHxS) CAS # 355-46-4	1.8 ppt	40 ppt <sup>a</sup>
Perfluorobutanoic acid (PFBA) CAS # 375-22-4	2.7 ppt	10,000 ppt <sup>a</sup>
Perfluorodecanoic acid (PFDA) CAS # 335-76-2	Not Detected	300 ppt <sup>a</sup>
Perfluorododecanoic acid (PFDoA) CAS # 307-55-1	Not Detected	500 ppt <sup>a</sup>
Perfluorohexanoic acid (PFHxA) CAS # 307-24-4	Not Detected	150,000 ppt <sup>a</sup>
Perfluorononanoic acid (PFNA) CAS # 375-95-1	Not Detected	30 ppt <sup>a</sup>
Perfluorotetradecanoic acid (PFTeA) CAS # 376-06-7	Not Detected	10,000 ppt <sup>a</sup>
Perfluoroundecanoic acid (PFUnA) CAS # 2058-94-8	Not Detected	3,000 ppt <sup>a</sup>
4,8-Dioxa-3H-perfluorononanoic acid (DONA) CAS # 919005-14-4	Not Detected	3,000 ppt <sup>a</sup>
Perfluorooctadecanoic acid (PFODA) CAS # 16517-11-6	Not Detected	400,000 ppt <sup>a</sup>
Perfluoro-1-pentanesulfonic acid (PFPeS) CAS #2706-91-4	0.92 ppt	None Established <sup>c</sup>

<sup>a</sup> Public health enforcement standard (ES) recommended by DHS.

<sup>b</sup> DHS recommends a combined enforcement standard of 20 ng/L and combined preventive action limit of 2 ng/L for FOSA, NEt-FOSE, NEt-FOSA, NetFOSAA, PFOS, and PFOA.

A current standard is not available; the compound is currently under review by DHS for potential public health standard recommendation.

<sup>4</sup> Public health enforcement standard (ES) in NR 140, Wisconsin Administrative Code.

Units: Parts per trillion (ppt) = nanograms of substance per liter of water (ng/L)

<sup>BL</sup> Detected in the method blank. Possible lab contaminant.

Private Well Sampling Results for 2561 2nd Avenue East, La Crosse, WI 54603 Tax parcel # 4-227-0 Sample ID # 227-0 December 23, 2020

As required by law, we will be submitting these results to the Department of Natural Resources (DNR). The DNR may consult with the Department of Health Services (DHS) about these test results. DHS may review all PFAS tests and follow-up with you directly if any actions are recommended to protect your health.

Thank you for your patience and assistance with our investigation. We will provide updates on the project at <u>https://www.cityoflacrosse.org/wells</u> as our work continues. If you have any questions, please call The OS Group at (608) 668-2718 or email them at <u>PFAS@theOSgrp.com</u>.

You can also contact the DNR and DHS with questions about PFAS or the water sample results at the numbers provided below.

Questions about	<u></u>	<u>Contact</u>	<u>Phone</u>	E-mail Address
Soil & Groundwate Testing, Clean Up	<sup>er</sup> DNR	David Rozeboom	715-215-2078	David.Rozeboom@wisconsin.gov
Drinking Water or Private wells	DNR	Kyle Burton	920-360-2112	kyle.burton@wisconsin.gov
Health Concerns	DHS	Curtis Hedman	608-266-6677	Curtis.Hedman@dhs.wisconsin.gov

On behalf of The City of La Crosse *The OS Group, LLC* 

Attachment: Lab report for your well

Client: Pace Analytical Services, LLC					Laboratory II	D: VK21043-0	003	
Description: 227-0					Matrix	: Aqueous		
Date Sampled:11/17/2020 1340	roject Nam	ne: 1901155 LACROSSI	E WELL	23 &		·		
Date Received: 11/20/2020	iect Numh	er: 40218686						
				<b>.</b> .				
RunPrep MethodAnalytical MethodD2SOP SPEPFAS by ID SOP	1 12	2/17/2020 0255 SES	Prep 12/15/2	Date 020 13	Batch 330 76544			
Parameter	CA Numbe	S Analytical er Method	Result	Q	LOQ	DL	Units	Run
9-chlorohexadecafluoro-3-oxanone-1-sulfonic acid (9CI-PF3ONS)	756426-58	B-1 PFAS by ID SOP	ND		7.3	1.8	ng/L	2
11-chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11CI-PF3)	763051-92	2-9 PFAS by ID SOP	ND		7.3	1.8	ng/L	2
1H, 1H, 2H, 2H-perfluorodecane sulfonic acid (8:2 FTS)	39108-34	I-4 PFAS by ID SOP	ND		7.3	1.8	ng/L	2
1H, 1H, 2H, 2H-perfluorooctane sulfonic acid (6:2 FTS)	27619-97	2-2 PFAS by ID SOP	ND		7.3	1.8	ng/L	2
1H,1H,2H,2H-perfluorododecane sulfonic acid (10:2 FTS)	120226-60	0-0 PFAS by ID SOP	ND		7.3	1.8	ng/L	2
1H,1H,2H,2H-perfluorohexane sulfonic acid (4:2 FTS)	757124-72	2-4 PFAS by ID SOP	ND		7.3	1.8	ng/L	2
Hexafluoropropylene oxide dimer acid (GenX)	13252-13	B-6 PFAS by ID SOP	ND		7.3	1.8	ng/L	2
4,8-dioxa-3H-perfluorononanoic acid (ADONA)	919005-14	I-4 PFAS by ID SOP	ND		7.3	1.8	ng/L	2
N-ethylperfluoro-1-octanesulfonamide (EtFOSA)	4151-50	-2 PFAS by ID SOP	ND		7.3	1.8	ng/L	2
N-ethylperfluoro-1-octanesulfonamidoacetic acid (EtFOSAA)	2991-50	-6 PFAS by ID SOP	ND		7.3	1.8	ng/L	2
2-N-ethylperfluoro-1-octanesulfonamido-ethanol (EtFOSE)	1691-99	-2 PFAS by ID SOP	ND		7.3	1.8	ng/L	2
N-methylperfluoro-1-octanesulfonamide (MeFOSA)	31506-32	2-8 PFAS by ID SOP	ND		15	3.6	ng/L	2
N-methylperfluoro-1-octanesulfonamidoacetic acid (MeFOSAA)	2355-31	-9 PFAS by ID SOP	ND		7.3	1.8	ng/L	2
2-N-methylperfluoro-1-octanesulfonamido-ethanol (MeFOSE)	24448-09	P-7 PFAS by ID SOP	ND		7.3	1.8	ng/L	2
Perfluoro-1-butanesulfonic acid (PFBS)	375-73	-5 PFAS by ID SOP	0.98	J	3.6	0.91	ng/L	2
Perfluoro-1-decanesulfonic acid (PFDS)	335-77	-3 PFAS by ID SOP	ND		3.6	0.91	ng/L	2
Perfluoro-1-heptanesulfonic acid (PFHpS)	375-92	-8 PFAS by ID SOP	ND		3.6	0.91	ng/L	2
Perfluoro-1-nonanesulfonic acid (PFNS)	68259-12	2-1 PFAS by ID SOP	ND		3.6	0.91	ng/L	2
Perfluoro-1-octanesulfonamide (PFOSA)	754-91	-6 PFAS by ID SOP	ND		3.6	0.91	ng/L	2
Perfluoro-1-pentanesulfonic acid (PFPeS)	2706-91	-4 PFAS by ID SOP	0.92	J	3.6	0.91	ng/L	2
Perfluorododecanesulfonic acid (PFDOS)	79780-39	P-5 PFAS by ID SOP	ND		7.3	1.8	ng/L	2
Perfluorohexanesulfonic acid (PFHxS)	355-46	-4 PFAS by ID SOP	1.8	J	3.6	0.91	ng/L	2
Perfluoro-n-butanoic acid (PFBA)	375-22	-4 PFAS by ID SOP	2.7	J	3.6	0.91	ng/L	2
Perfluoro-n-decanoic acid (PFDA)	335-76	-2 PEAS by ID SOP	ND		3.6	0.91	ng/L	2
Perfluoro-n-dodecanoic acid (PFDoA)	307-55	-1 PEAS by ID SOP	ND		3.6	0.91	ng/L	2
Perfluoro-n-heptanoic acid (PFHpA)	3/5-85	-9 PFAS by ID SOP	ND		3.6	0.91	ng/L	2
Perfluoro-n-hexadecanoic acid (PFHxDA)	6/905-19	P-5 PFAS by ID SOP	ND		7.3	1.8	ng/L	2
Perfluoro-n-hexanoic acid (PFHXA)	307-24	-4 PEAS by ID SOP	ND		3.6	0.91	ng/L	2
Perfluoro-n-nonanoic acid (PFNA)	3/5-95	- I PFAS by ID SOP	ND		3.6	0.91	ng/L	2
Perfluoro-n-octadecanoic acid (PFODA)	16517-11	1 DEAS by ID SOP			7.3	1.8	ng/L	2
Perfluoro n postanoic acid (PEDA)	2704 00	2 DEAS by ID SOP			3.0	0.91	ng/L	2
Perfluoro n tetradocanois acid (PETeDA)	2700-90	7 DEAS by ID SOP			2.6	0.91	ng/L	2
Perfluoro n tridecanoic acid (PETrDA)	370-00				2.6	0.91	ng/L	2
Perfluoro n undecanoic acid (PELIdA)	2029-94	PFAS by ID SOP			3.0	0.91	ng/L	2
Porfluorooctanosulfonic acid (PEOS)	1762 22		0.02		2.6	0.91	ng/L	2
Perhuorooctariesuironic acid (PPOS)	1703-23	-1 PFAS by ID SOP	0.92	J	3.0	0.91	ng/L	2
Surrogate Q % Rec	un 2 Ac covery	ceptance Limits						
13C2_4:2ETS 1	102	25-150						
1302_0:2F13	రు రా	20-100						
1302_8:2F13	03 07	20-100						
13C2_PFD0A	8/	25-150						
13C2_PFTeDA	83	25-150						
LOQ = Limit of QuantitationB = Detected in the method blankND = Not detected at or above the DLN = Recovery is out of criteriaH = Out of holding timeW = Reported on wet weight basis	E = Quantitat P = The RPD	ion of compound exceeded the o between two GC columns exce	calibration ra eds 40%	ange D J	<ul><li>L = Detection Lim</li><li>= Estimated resu</li></ul>	nit It < LOQ and ≥ D	Ľ	

Client: Pace Analytical Services, LLC	
Description: 227-0	
Date Sampled:11/17/2020 1340	
Date Received: 11/20/2020	

Project Name: 1901155 LACROSSE WELL 23 &

Laboratory ID: VK21043-003 Matrix: Aqueous

Date Received: 11/20/2020	Project Number: 40218686
Surrogate	Run 2 Acceptance Q % Recovery Limits
13C3_PFBS	96 25-150
13C3_PFHxS	91 25-150
13C3-HFPO-DA	94 25-150
13C4_PFBA	96 25-150
13C4_PFHpA	95 25-150
13C5_PFHxA	93 25-150
13C5_PFPeA	94 25-150
13C6_PFDA	100 25-150
13C7_PFUdA	97 25-150
13C8_PFOA	95 25-150
13C8_PFOS	91 25-150
13C8_PFOSA	93 10-150
13C9_PFNA	92 25-150
d-EtFOSA	77 10-150
d5-EtFOSAA	90 25-150
d9-EtFOSE	74 10-150
d-MeFOSA	73 10-150
d3-MeFOSAA	91 25-150
d7-MeFOSE	74 10-150

LOQ = Limit of QuantitationB = Detected in the method blankE = Quantitation of compound exceeded the calibration rangeDL = Detection LimitND = Not detected at or above the DLN = Recovery is out of criteriaP = The RPD between two GC columns exceeds 40%J = Estimated result < LOQ and ≥ DL</td>H = Out of holding timeW = Reported on wet weight basis



444 21st Street South · La Crosse, Wisconsin · 54601

December 23, 2020

#### 2549 Bainbridge Street La Crosse, WI 54603

Subject: Private Well Sampling Results 2549 Bainbridge Street, La Crosse, WI 54603 Tax parcel # 4-338-0 Sample ID # 338-0

Dear

We have received and reviewed the test results for the sample collected on November 18, 2020 at the above address. Some PFAS compounds were found at levels <u>above</u> the Department of Health Services (DHS) levels recommended for protecting health. These levels are called the "Recommended Public Health Standard" in the table below. The levels found in your well are called the "Sample Result" in the table below.

Because some of the levels are above the recommended Public Health Standard, the City is offering to provide bottled water delivered to your home for drinking, cooking, and brushing your teeth. The bottled water is being provided by Culligan is bottled in Rothschild, WI from a municipal water system. Culligan's source water is filtered and treated by carbon filter, reverse osmosis, distillation and other methods before it is bottled. It has been sampled for PFAS, and no PFAS was detected in the sample. There will be no cost to you for the bottled water. Please complete the attached form and mail it to The OS Group to make arrangements for having a water dispenser and bottles delivered to your home. Call 608-668-2718 or email <u>PFAS@theOSgrp.com</u>. You may also complete this form online at <u>www.cityoflacrosse.org/bottledwater</u>

The following table summarizes the test results from the sample. **Bolded results** are above a current recommended level intended to protect your health according to the Department of Health Services (DHS). **PLEASE NOTE:** At your residence we took a second "duplicate" sample for quality control / quality assurance purposes. The two samples' tests confirmed each other, and there were only minor differences. The results in the table below are based on the highest concentration of contaminants observed in either of the two samples.

Private Well Sampling Results for 2549 Bainbridge Street, La Crosse, WI 54603 Tax Parcel # 4-338-0 December 23, 2020

### Sample Results

Compound	Sample Result (unit)	Recomm Public H Standard	ended Iealth (unit <sup>e</sup> )	
N-Ethyl Perfluorooctane sulfonamide (NEtFOSA) CAS # 4151-50-2	Not Detected	20 ppt <sup>a,b</sup>	) ppt unds I 6	
N-Ethyl perfluorooctane sulfonamidoacetic acid (NEtFOSAA) CAS # 2991-50-6	Not Detected	20 ppt <sup>a,b</sup>	it is 20 compo <i>il</i> of al	
N-Ethyl perfluorooctane sulfonamidoethanol (NEtFOSE) CAS # 1691-99-2	Not Detected	20 bbt <sub>a'p</sub> dd 05		
Perfluorooctane sulfonamide (FOSA) CAS # 754-91-6	Not Detected	20 ppt <sup>a,b</sup>	mend of the	
Perfluorooctanoic acid (PFOA) CAS # 335-67-1	6.5 ppt	20 ppt <sup>a,b</sup>	recom ny <i>on</i> e the <i>c</i> c	
Perfluorooctanesulfonic acid (PFOS) CAS # 1763-23-1	160 ppt	20 ppt <sup>a,b</sup>	The for a or	
Hexafluoropropylene oxide dimer acid (HPFO-DA; GenX) CAS # 13252-13-6	Not Detected		300 ppt <sup>a</sup>	
Perfluorobutanesulfonic acid (PFBS) CAS # 375-73-5	6.5 ppt	450	),000 ppt ª	
Perfluorohexanesulfonic acid (PFHxS) CAS # 355-46-4	140 ppt		40 ppt <sup>a</sup>	
Perfluorobutanoic acid (PFBA) CAS # 375-22-4	8.0 ppt	10,000 ppt <sup>a</sup>		
Perfluorodecanoic acid (PFDA) CAS # 335-76-2	Not Detected		300 ppt ª	
Perfluorododecanoic acid (PFDoA) CAS # 307-55-1	Not Detected	500 ppt <sup>a</sup>		
Perfluorohexanoic acid (PFHxA) CAS # 307-24-4	3.4 ppt	150	),000 ppt <sup>a</sup>	
Perfluorononanoic acid (PFNA) CAS # 375-95-1	Not Detected		30 ppt <sup>a</sup>	
Perfluorotetradecanoic acid (PFTeDA) CAS # 376-06-7	Not Detected	10,000 ppt <sup>a</sup>		
Perfluoroundecanoic acid (PFUdA) CAS # 2058-94-8	Not Detected	3,000 ppt <sup>a</sup>		
4,8-Dioxa-3H-perfluorononanoic acid (DONA) CAS # 919005-14-4	Not Detected	3	8,000 ppt <sup>a</sup>	
Perfluorooctadecanoic acid (PFODA) CAS # 16517-11-6	Not Detected	400	),000 ppt <sup>a</sup>	

Perfluoro-1-heptanesulfonic acid (PFHpS) CAS # 375-92-8	6.1 ppt	None Established <sup>c</sup>				
Perfluoro-1-pentanesulfonic acid (PFPeS) CAS # 2706-91-4	13 ppt	None Established <sup>c</sup>				
Perfluoro-n-pentanoic acid (PFPeA) CAS #2706-90-3	1.5 ppt	None Established <sup>c</sup>				
<sup>a</sup> Public health enforcement standard (ES) recommended by DHS. <sup>b</sup> DHS recommends a combined enforcement standard of 20 ng/L and combined preventive action limit of 2 ng/L						

for FOSA, NEt-FOSE, NEt-FOSA, NetFOSAA, PFOS, and PFOA.

<sup>c</sup> A current standard is not available; the compound is currently under review by DHS for potential public health standard recommendation.

<sup>d</sup> Public health enforcement standard (ES) in NR 140, Wisconsin Administrative Code.

<sup>e</sup> Units: Parts per trillion (ppt) = nanograms of substance per liter of water (ng/L)

<sup>BL</sup> Detected in the method blank. Possible lab contaminant.

As required by law, we will be submitting these results to the Department of Natural Resources (DNR). The DNR may consult with the Department of Health Services (DHS) about these test results. DHS may review all PFAS tests and follow-up with you directly if any actions are recommended to protect your health.

Thank you for your patience and assistance with our investigation. We will provide updates on the project at <u>https://www.cityoflacrosse.org/wells</u> as our work continues. If you have any questions, please call The OS Group at (608) 668-2718 or email them at <u>PFAS@theOSgrp.com</u>.

You can also contact the DNR and DHS with questions about PFAS or the water sample results at the numbers provided below.

Questions about	<u></u>	<b>Contact</b>	<u>Phone</u>	<u>E-mail Address</u>
Soil & Groundwater Testing, Clean Up	DNR	David Rozeboom	715-215-2078	David.Rozeboom@wisconsin.gov
Drinking Water or Private wells	DNR	Kyle Burton	920-360-2112	kyle.burton@wisconsin.gov
Health Concerns	DHS	Curtis Hedman	608-266-6677	Curtis.Hedman@dhs.wisconsin.gov

On behalf of The City of La Crosse *The OS Group, LLC* 

Attachment: Lab report for your well Bottled Water Acknowledgement

### BOTTLED WATER ACKNOWLEDGEMENT

2549 Bainbridge Street, La Crosse, WI 54603

If you desire to accept the bottled water delivery, please complete and sign this form and return it to The OS Group at <u>PFAS@TheOSqrp.com</u> or mail to 444 21<sup>st</sup> St. S, La Crosse, WI 54601. You may also complete this form electronically on line at <u>www.cityoflacrosse.org/bottledwater</u>. Call 608-668-2718 with any question you may have.

As pre-caution for the protection of human health, the City of La Crosse (The City) will provide, on a temporary basis, bottled water for drinking, cooking and toothbrushing purposes at the above referenced address. The water will be delivered to your home or business by a commercial water delivery service. At the City's cost, a dispenser / cooler and regular deliveries of 5-gallon containers of water will be provided. The City reserves the right to dictate the conditions of delivery, such as minimum and maximum number of containers per delivery, frequency and timing of deliveries. The City reserves the right to periodically review whether The City should continue to provide bottled water, considering factors such as State and Federal standards and guidance, evolving knowledge and understanding of the sources, cause and responsibility for the contamination, new or reinterpreted test results, and the availability of more permanent or cost-effective sources of water for the above purposes. The City of La Crosse makes no warranty or representation regarding the suitability of the bottled water beyond those made by the commercial water delivery service.

All reusable or returnable equipment and supplies, such as the containers and cooler/dispenser, are the property of the commercial water delivery service or the City of La Crosse. By signing below, the Occupant of the above referenced property acknowledges that all reusable or returnable equipment and supplies shall be returned to the commercial water delivery service or the City of La Crosse upon request. The Occupant agrees to provide reasonable access for delivery of bottled water and pick up of reusable or returnable equipment (s) acknowledges that they may be required to sign an agreement with the commercial water delivery service as a condition of receiving bottled water.

**Check ownership:** 

Owner-Occupant	
Occupant Only	
Number of Occupants:	-
Signed:	_ Dated:
Printed Name:	
Phone Number: ()	

Client: Pace Analytical Services, LLC				Laboratory I	D: VK21043-0	005	
Description: 338-0				Matri	x: Aqueous		
Date Sampled:11/18/2020 1545	Project Nam	e: 1901155 LACROSSI	E WELL 23	3 &	·		
Date Received: 11/20/2020 Pro	piect Numbe	er: 40218686					
Due Dree Method Architical Method D		naluaia Data Analuat	Dress D	ata Datak			
2 SOP SPE PFAS by ID SOP	1 12	2/17/2020 0316 SES	Prep D 12/15/20	ate Batch 20 1330 76544			
Parameter	CA Numbe	S Analytical Method	Result (		DI	Units	Run
9-chlorohexadecafluoro-3-oxanone-1-sulfonic acid (9CI-PF3ONS)	756426-58	-1 PFAS by ID SOP	ND	9.3	2.3	ng/L	2
11-chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11CI-PF3)	763051-92	-9 PFAS by ID SOP	ND	9.3	2.3	ng/L	2
1H, 1H, 2H, 2H-perfluorodecane sulfonic acid (8:2 FTS)	39108-34	-4 PFAS by ID SOP	ND	9.3	2.3	ng/L	2
1H, 1H, 2H, 2H-perfluorooctane sulfonic acid (6:2 FTS)	27619-97	-2 PFAS by ID SOP	ND	9.3	2.3	ng/L	2
1H,1H,2H,2H-perfluorododecane sulfonic acid (10:2 FTS)	120226-60	-0 PFAS by ID SOP	ND	9.3	2.3	ng/L	2
1H,1H,2H,2H-perfluorohexane sulfonic acid (4:2 FTS)	757124-72	-4 PFAS by ID SOP	ND	9.3	2.3	ng/L	2
Hexafluoropropylene oxide dimer acid (GenX)	13252-13	-6 PFAS by ID SOP	ND	9.3	2.3	ng/L	2
4,8-dioxa-3H-perfluorononanoic acid (ADONA)	919005-14	-4 PFAS by ID SOP	ND	9.3	2.3	ng/L	2
N-ethylperfluoro-1-octanesulfonamide (EtFOSA)	4151-50	-2 PFAS by ID SOP	ND	9.3	2.3	ng/L	2
N-ethylperfluoro-1-octanesulfonamidoacetic acid (EtFOSAA)	2991-50	-6 PFAS by ID SOP	ND	9.3	2.3	ng/L	2
2-N-ethylperfluoro-1-octanesulfonamido-ethanol (EtFOSE)	1691-99	-2 PFAS by ID SOP	ND	9.3	2.3	ng/L	2
N-methylperfluoro-1-octanesulfonamide (MeFOSA)	31506-32	-8 PFAS by ID SOP	ND	19	4.6	ng/L	2
N-methylperfluoro-1-octanesulfonamidoacetic acid (MeFOSAA)	2355-31	-9 PFAS by ID SOP	ND	9.3	2.3	ng/L	2
2-N-methylperfluoro-1-octanesulfonamido-ethanol (MeFOSE)	24448-09	-7 PFAS by ID SOP	ND	9.3	2.3	ng/L	2
Perfluoro-1-butanesulfonic acid (PFBS)	375-73	-5 PFAS by ID SOP	6.5	4.6	1.2	ng/L	2
Perfluoro-1-decanesulfonic acid (PFDS)	335-77	-3 PFAS by ID SOP	ND	4.6	1.2	ng/L	2
Perfluoro-1-heptanesulfonic acid (PFHpS)	375-92	-8 PFAS by ID SOP	5.8	4.6	1.2	ng/L	2
Perfluoro-1-nonanesulfonic acid (PFNS)	68259-12	-1 PFAS by ID SOP	ND	4.6	1.2	ng/L	2
Perfluoro-1-octanesulfonamide (PFOSA)	754-91	-6 PFAS by ID SOP	ND	4.6	1.2	ng/L	2
Perfluoro-1-pentanesulfonic acid (PFPeS)	2706-91	-4 PFAS by ID SOP	13	4.6	1.2	ng/L	2
Perfluorododecanesulfonic acid (PFDOS)	79780-39	-5 PFAS by ID SOP	ND	9.3	2.3	ng/L	2
Perfluorohexanesulfonic acid (PFHxS)	355-46	-4 PFAS by ID SOP	130	4.6	1.2	ng/L	2
Perfluoro-n-butanoic acid (PFBA)	375-22	-4 PFAS by ID SOP	7.8	4.6	1.2	ng/L	2
Perfluoro-n-decanoic acid (PFDA)	335-76	-2 PFAS by ID SOP	ND	4.6	1.2	ng/L	2
Perfluoro-n-dodecanoic acid (PFDoA)	307-55	-1 PFAS by ID SOP	ND	4.6	1.2	ng/L	2
Perfluoro-n-heptanoic acid (PFHpA)	375-85	-9 PFAS by ID SOP	ND	4.6	1.2	ng/L	2
Perfluoro-n-hexadecanoic acid (PFHxDA)	67905-19	-5 PFAS by ID SOP	ND	9.3	2.3	ng/L	2
Perfluoro-n-hexanoic acid (PFHxA)	307-24	-4 PFAS by ID SOP	3.4 J	4.6	1.2	ng/L	2
Perfluoro-n-nonanoic acid (PFNA)	375-95	-1 PFAS by ID SOP	ND	4.6	1.2	ng/L	2
Perfluoro-n-octadecanoic acid (PFODA)	16517-11	-6 PFAS by ID SOP	ND	9.3	2.3	ng/L	2
Perfluoro-n-octanoic acid (PFOA)	335-67	-1 PFAS by ID SOP	6.3	4.6	1.2	ng/L	2
Perfluoro-n-pentanoic acid (PFPeA)	2706-90	-3 PFAS by ID SOP	1.5 J	4.6	1.2	ng/L	2
Perfluoro-n-tetradecanoic acid (PFTeDA)	376-06	-7 PFAS by ID SOP	ND	4.6	1.2	ng/L	2
Pertluoro-n-tridecanoic acid (PF1rDA)	72629-94	-8 PFAS by ID SOP	ND	4.6	1.2	ng/L	2
Perfluoro-n-undecanoic acid (PFUdA)	2058-94	-8 PFAS by ID SOP	ND	4.6	1.2	ng/L	2
Perfluorooctanesulfonic acid (PFOS)	1763-23	-1 PFAS by ID SOP	160	4.6	1.2	ng/L	2
Surrogate Q % Re	un 2 Aco covery	ceptance Limits					
13C2_4:2FTS	95	25-150					
13C2_6:2FTS	78	25-150					
13C2_8:2FTS	81	25-150					
13C2_PFDoA	82	25-150					
13C2_PFHxDA	79	25-150					
13C2_PFTeDA	75	25-150					
LOQ = Limit of Quantitation B = Detected in the method blank	E = Quantitati	on of compound exceeded the o	calibration ran	ge DL = Detection Li	nit		
ND = Not detected at or above the DL N = Recovery is out of criteria	P = The RPD	between two GC columns exce	eds 40%	J = Estimated res	ult < LOQ and $\geq$ D	)L	
H = Out of holding time W = Reported on wet weight basis							

Client: Pace Analytical Services, LLC	
Description: 338-0	
Date Sampled:11/18/2020 1545	Project Name: 1901155 L
Date Received: 11/20/2020	Project Number: 40218686

Laboratory ID: VK21043-005

Matrix: Aqueous

Project Name: 1901155 LACROSSE WELL 23 &

Surrogate	Run 2 A Q % Recovery	cceptance Limits
13C3_PFBS	85	25-150
13C3_PFHxS	84	25-150
13C3-HFPO-DA	88	25-150
13C4_PFBA	92	25-150
13C4_PFHpA	91	25-150
13C5_PFHxA	86	25-150
13C5_PFPeA	89	25-150
13C6_PFDA	85	25-150
13C7_PFUdA	88	25-150
13C8_PFOA	88	25-150
13C8_PFOS	86	25-150
13C8_PFOSA	89	10-150
13C9_PFNA	85	25-150
d-EtFOSA	60	10-150
d5-EtFOSAA	78	25-150
d9-EtFOSE	71	10-150
d-MeFOSA	68	10-150
d3-MeFOSAA	81	25-150
d7-MeFOSE	77	10-150

LOQ = Limit of QuantitationB = Detected in the method blankE = Quantitation of compound exceeded the calibration rangeDL = Detection LimitND = Not detected at or above the DLN = Recovery is out of criteriaP = The RPD between two GC columns exceeds 40%J = Estimated result < LOQ and ≥ DL</td>H = Out of holding timeW = Reported on wet weight basis

Client: Pace Analytical Services, LLC				Laboratory I	D: VK21043-0	006	
Description: DUP#6				Matrix	: Aqueous		
Date Sampled:11/18/2020 1550 F	Project Nam	e: 1901155 LACROSSI	E WELL 23 &				
Date Received: 11/20/2020 Pro	piect Numbe	er: 40218686					
		ushusia Data Austrat	Duran Data	Datab			
2 SOP SPE PFAS by ID SOP	1 12	2/17/2020 0326 SES	Prep Date 12/15/2020 2	Batch 1330 76544			
Parameter	CA: Numbe	S Analytical r Method	Result Q	LOQ	DL	Units	Run
9-chlorohexadecafluoro-3-oxanone-1-sulfonic acid (9CI-PF3ONS)	756426-58	-1 PFAS by ID SOP	ND	9.2	2.3	ng/L	2
11-chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11CI-PF3)	763051-92	-9 PFAS by ID SOP	ND	9.2	2.3	ng/L	2
1H, 1H, 2H, 2H-perfluorodecane sulfonic acid (8:2 FTS)	39108-34	-4 PFAS by ID SOP	ND	9.2	2.3	ng/L	2
1H, 1H, 2H, 2H-perfluorooctane sulfonic acid (6:2 FTS)	27619-97	-2 PFAS by ID SOP	ND	9.2	2.3	ng/L	2
1H,1H,2H,2H-perfluorododecane sulfonic acid (10:2 FTS)	120226-60	-0 PFAS by ID SOP	ND	9.2	2.3	ng/L	2
1H,1H,2H,2H-perfluorohexane sulfonic acid (4:2 FTS)	757124-72	-4 PFAS by ID SOP	ND	9.2	2.3	ng/L	2
Hexafluoropropylene oxide dimer acid (GenX)	13252-13	-6 PFAS by ID SOP	ND	9.2	2.3	ng/L	2
4,8-dioxa-3H-perfluorononanoic acid (ADONA)	919005-14	-4 PFAS by ID SOP	ND	9.2	2.3	ng/L	2
N-ethylperfluoro-1-octanesulfonamide (EtFOSA)	4151-50-	2 PFAS by ID SOP	ND	9.2	2.3	ng/L	2
N-ethylperfluoro-1-octanesulfonamidoacetic acid (EtFOSAA)	2991-50-	6 PFAS by ID SOP	ND	9.2	2.3	ng/L	2
2-N-ethylperfluoro-1-octanesulfonamido-ethanol (EtFOSE)	1691-99-	2 PFAS by ID SOP	ND	9.2	2.3	ng/L	2
N-methylperfluoro-1-octanesulfonamide (MeFOSA)	31506-32	-8 PFAS by ID SOP	ND	18	4.6	ng/L	2
N-methylperfluoro-1-octanesulfonamidoacetic acid (MeFOSAA)	2355-31-	9 PFAS by ID SOP	ND	9.2	2.3	ng/L	2
2-N-methylperfluoro-1-octanesulfonamido-ethanol (MeFOSE)	24448-09	-7 PFAS by ID SOP	ND	9.2	2.3	ng/L	2
Perfluoro-1-butanesulfonic acid (PFBS)	375-73-	5 PFAS by ID SOP	6.4	4.6	1.1	ng/L	2
Perfluoro-1-decanesulfonic acid (PFDS)	335-77-	3 PFAS by ID SOP	ND	4.6	1.1	ng/L	2
Perfluoro-1-heptanesulfonic acid (PFHpS)	375-92-	8 PFAS by ID SOP	6.1	4.6	1.1	ng/L	2
Perfluoro-1-nonanesulfonic acid (PFNS)	68259-12	-1 PFAS by ID SOP	ND	4.6	1.1	ng/L	2
Perfluoro-1-octanesulfonamide (PFOSA)	754-91-	6 PFAS by ID SOP	ND	4.6	1.1	ng/L	2
Perfluoro-1-pentanesulfonic acid (PFPeS)	2706-91-	4 PFAS by ID SOP	12	4.6	1.1	ng/L	2
Perfluorododecanesultonic acid (PFDOS)	79780-39	-5 PEAS by ID SOP	ND	9.2	2.3	ng/L	2
Perfluorohexanesulfonic acid (PFHxS)	355-46-	4 PEAS by ID SOP	140	4.6	1.1	ng/L	2
Perliuoro-n-bulanoic acid (PEBA)	375-22-	2 PEAS by ID SOP	8.0	4.6	1.1	ng/L	2
Perfluoro-n-decanoic acid (PFDA)	333-70-		ND	4.0	1.1	ng/L	2
Perfluoro-n-dodecanoic acid (PFDoA)	307-55-		ND	4.0	1.1	ng/L	2
	3/3-83-	E DEAS by ID SOP		4.0	1.1	ng/L	2
Perfluoro-n-nexadecanoic acid (PFHxDA)	207.24	4 DEAS by ID SOP		9.2	2.3	ng/L	2
	275 05		3.2 J	4.0	1.1	ng/L	2
Perfluoro-n-honanoic acid (PENA)	3/0-90-	A DEAS by ID SOP		4.0	1.1	ng/L	2
Perfluoro-n-octanoic acid (PFODA)	335-67-	1 PEAS by ID SOP	5.8	9.2	2.3	ng/L	2
Perfluoro-n-pentanoic acid (PEPeA)	2706-90-	3 PEAS by ID SOP	14	4.6	1.1	ng/L	2
Perfluoro-n-tetradecanoic acid (PETeDA)	376-06-	7 PEAS by ID SOP	ND	4.6	1.1	ng/L	2
Perfluoro-n-tridecanoic acid (PETrDA)	72629-94	-8 PEAS by ID SOP	ND	4.6	1.1	na/l	2
Perfluoro-n-undecanoic acid (PELIdA)	2058-94-	8 PEAS by ID SOP	ND	4.6	1.1	ng/L	2
Perfluorooctanesulfonic acid (PEOS)	1763-23-	1 PEAS by ID SOP	160	4.6	1.1	ng/L	2
	1700 20		100	1.0	1.1	119/1	2
Surrogate Q % Re	un 2 Acc covery	ceptance Limits					
13U2_4:2F1S	1U2 90	25-15U 25-150					
1302_0.21 13 1302_8.2ETS	83	25-150					
1302_0.2F13	03	25-150					
1302_FT DUA 1302_DEHVDA	80	25-150					
13C2_PFTeDA	77	25-150					
LOQ = Limit of QuantitationB = Detected in the method blankND = Not detected at or above the DLN = Recovery is out of criteriaH = Out of holding timeW = Reported on wet weight basis	E = Quantitation P = The RPD	on of compound exceeded the obstruction between two GC columns exce	calibration range eds 40%	DL = Detection Lim J = Estimated resu	hit It < LOQ and $\ge$ D	Ľ	

Client: Pace Analy	tical Services, LLC	
Description: DUP#6		
Date Sampled:11/18/2020	1550	Project Name: 1901155 L
Date Received: 11/20/2020		Project Number: 40218686

Matrix: Aqueous

Laboratory ID: VK21043-006

Project Name: 1901155 LACROSSE WELL 23 &

Currente	Run 2	Acceptance
Surrogate	Q % Recovery	Limits
13C3_PFBS	93	25-150
13C3_PFHxS	88	25-150
13C3-HFPO-DA	92	25-150
13C4_PFBA	97	25-150
13C4_PFHpA	92	25-150
13C5_PFHxA	90	25-150
13C5_PFPeA	91	25-150
13C6_PFDA	96	25-150
13C7_PFUdA	92	25-150
13C8_PFOA	89	25-150
13C8_PFOS	89	25-150
13C8_PFOSA	91	10-150
13C9_PFNA	89	25-150
d-EtFOSA	71	10-150
d5-EtFOSAA	83	25-150
d9-EtFOSE	79	10-150
d-MeFOSA	60	10-150
d3-MeFOSAA	81	25-150
d7-MeFOSE	79	10-150

 LOQ = Limit of Quantilation
 B = Detected in the method blank
 E = Quantilation of compound exceeded the calibration range
 DL = Detection Limit

 ND = Not detected at or above the DL
 N = Recovery is out of criteria
 P = The RPD between two GC columns exceeds 40%
 J = Estimated result < LOQ and ≥ DL</td>

 H = Out of holding time
 W = Reported on wet weight basis
 W = Reported on wet weight basis
 H = Out of holding time

### BOTTLED WATER ACKNOWLEDGEMENT

2549 Bainbridge Street, La Crosse, WI 54603

If you desire to accept the bottled water delivery, please complete and sign this form and return it to The OS Group at <u>PFAS@TheOSqrp.com</u> or mail to 444 21<sup>st</sup> St. S, La Crosse, WI 54601. You may also complete this form electronically on line at <u>www.cityoflacrosse.org/bottledwater</u>. Call 608-668-2718 with any question you may have.

As pre-caution for the protection of human health, the City of La Crosse (The City) will provide, on a temporary basis, bottled water for drinking, cooking and toothbrushing purposes at the above referenced address. The water will be delivered to your home or business by a commercial water delivery service. At the City's cost, a dispenser / cooler and regular deliveries of 5-gallon containers of water will be provided. The City reserves the right to dictate the conditions of delivery, such as minimum and maximum number of containers per delivery, frequency and timing of deliveries. The City reserves the right to periodically review whether The City should continue to provide bottled water, considering factors such as State and Federal standards and guidance, evolving knowledge and understanding of the sources, cause and responsibility for the contamination, new or reinterpreted test results, and the availability of more permanent or cost-effective sources of water for the above purposes. The City of La Crosse makes no warranty or representation regarding the suitability of the bottled water beyond those made by the commercial water delivery service.

All reusable or returnable equipment and supplies, such as the containers and cooler/dispenser, are the property of the commercial water delivery service or the City of La Crosse. By signing below, the Occupant of the above referenced property acknowledges that all reusable or returnable equipment and supplies shall be returned to the commercial water delivery service or the City of La Crosse upon request. The Occupant agrees to provide reasonable access for delivery of bottled water and pick up of reusable or returnable equipment (s) acknowledges that they may be required to sign an agreement with the commercial water delivery service as a condition of receiving bottled water.

**Check ownership:** 

Owner-Occupant	
Occupant Only	
Number of Occupants:	-
Signed:	_ Dated:
Printed Name:	
Phone Number: ()	



444 21st Street South  $\cdot$  La Crosse, Wisconsin  $\cdot$  54601

December 23, 2020

2501 1st Avenue West La Crosse, WI 54603

Subject: Private Well Sampling Results 2501 1st Avenue West, La Crosse, WI 54603 Tax parcel # 4-365-0 Sample ID # 365-0

#### Dear

We have received and reviewed the test results for the sample collected on November 16, 2020 at the above address. Some PFAS compounds were found, but the levels found were **below** the Department of Health Services (DHS) levels recommended for protecting health. These levels are called the "Recommended Public Health Standard" in the table below. The levels found in *your* well are called the "Sample Result" in the table below.

PLEASE NOTE: Due to a laboratory quality control/ quality assurance issue, the laboratory ran a second "confirmation" analysis on your sample. The two laboratory analyses confirmed each other, and there were only minor differences. The results in the table below are based on the highest concentration of contaminants observed in either of the two analyses.

Private Well Sampling Results for 2501 1st Avenue West, La Crosse, WI 54603 Tax parcel # 4-365-0 Sample ID # 365-0 December 23, 2020

Compound	Sample Result (unit)	Recomn Public I Standard	nended Health I (unit <sup>e</sup> )	
N-Ethyl Perfluorooctane sulfonamide (NEtFOSA) CAS # 4151-50-2	Not Detected	20 ppt <sup>a,b</sup>	ppt nds 6	
N-Ethyl perfluorooctane sulfonamidoacetic acid (NEtFOSAA) CAS # 2991-50-6	Not Detected	20 ppt <sup>a,b</sup>	nit is 20 compou <i>tal</i> of all	
N-Ethyl perfluorooctane sulfonamidoethanol (NEtFOSE) CAS # 1691-99-2	Not Detected	20 ppt <sup>a,b</sup> ge 6 lin 20 ppt <sup>a,b</sup>		
Perfluorooctane sulfonamide (FOSA) CAS # 754-91-6	0.98 ppt	20 ppt <sup>a,b</sup>	nmen e of th ombin	
Perfluorooctanoic acid (PFOA) CAS # 335-67-1	3.2 ppt	20 ppt <sup>a,b</sup>	e recor any <i>on</i> r the <i>c</i>	
Perfluorooctanesulfonic acid (PFOS) CAS # 1763-23-1	8.3 ppt	20 ppt <sup>a,b</sup>		
Hexafluoropropylene oxide dimer acid (HPFO-DA; GenX) CAS # 13252-13-6	Not Detected		300 ppt <sup>a</sup>	
Perfluorobutanesulfonic acid (PFBS) CAS # 375-73-5	Not Detected	450,000 ppt <sup>a</sup>		
Perfluorohexanesulfonic acid (PFHxS) CAS # 355-46-4	4.4 ppt		40 ppt <sup>a</sup>	
Perfluorobutanoic acid (PFBA) CAS # 375-22-4	2.2 ppt	10	,000 ppt <sup>a</sup>	
Perfluorodecanoic acid (PFDA) CAS # 335-76-2	Not Detected	300 ppt <sup>a</sup>		
Perfluorododecanoic acid (PFDoA) CAS # 307-55-1	Not Detected		500 ppt <sup>a</sup>	
Perfluorohexanoic acid (PFHxA) CAS # 307-24-4	1.5 ppt	150	,000 ppt <sup>a</sup>	
Perfluorononanoic acid (PFNA) CAS # 375-95-1	Not Detected	30 ppt ª		
Perfluorotetradecanoic acid (PFTeA) CAS # 376-06-7	Not Detected	10,000 ppt <sup>a</sup>		
Perfluoroundecanoic acid (PFUnA) CAS # 2058-94-8	Not Detected	3	,000 ppt <sup>a</sup>	
4,8-Dioxa-3H-perfluorononanoic acid (DONA) CAS # 919005-14-4	Not Detected	3,000 ppt <sup>a</sup>		

#### Sample Results

Private Well Sampling Results for 2501 1st Avenue West, La Crosse, WI 54603 Tax parcel # 4-365-0 Sample ID # 365-0 December 23, 2020

Compound	Sample Result (unit)	Recommended Public Health Standard (unit <sup>e</sup> )						
Perfluorooctadecanoic acid (PFODA) CAS # 16517-11-6	Not Detected	400,000 ppt <sup>a</sup>						
Perfluoro-n-pentanoic acid (PFPeA) CAS # 2706-90-3	1.2 ppt	Not established <sup>c</sup>						
CAS # 2706-90-3       I.2 ppt       Not established         a Public health enforcement standard (ES) recommended by DHS.       b       DHS recommends a combined enforcement standard of 20 ng/L and combined preventive action limit of 2 ng/L for FOSA, NEt-FOSE, NEt-FOSA, NetFOSAA, PFOS, and PFOA.         c A current standard is not available; the compound is currently under review by DHS for potential public health standard recommendation.       d         d Public health enforcement standard (ES) in NR 140, Wisconsin Administrative Code.       e         Units: Parts per trillion (ppt) = nanograms of substance per liter of water (ng/L)								

As required by law, we will be submitting these results to the Department of Natural Resources (DNR). The DNR may consult with the Department of Health Services (DHS) about these test results. DHS may review all PFAS tests and follow-up with you directly if any actions are recommended to protect your health.

Thank you for your patience and assistance with our investigation. We will provide updates on the project at <u>https://www.cityoflacrosse.org/wells</u> as our work continues. If you have any questions, please call The OS Group at (608) 668-2718 or email them at <u>PFAS@theOSgrp.com</u>.

You can also contact the DNR and DHS with questions about PFAS or the water sample results at the numbers provided below.

Questions about		<u>Contact</u>	<u>Phone</u>	E-mail Address		
Soil & Groundwate Testing, Clean Up	<sup>r</sup> DNR	David Rozeboom	715-215-2078	David.Rozeboom@wisconsin.gov		
Drinking Water or Private wells	DNR	Kyle Burton	920-360-2112	kyle.burton@wisconsin.gov		
Health Concerns	DHS	Curtis Hedman	608-266-6677	Curtis.Hedman@dhs.wisconsin.gov		

On behalf of The City of La Crosse *The OS Group, LLC* 

Attachment: Lab report for your well

Client: Pace Analytical	Services, LLC				La	aboratory II	D: VK21043-0	001	
Description: 365-0						Matrix	k: Aqueous		
Date Sampled:11/16/2020 1440	Р	roject Name	e: 1901155 LACROSSI	E WELL	23 &				
Date Received: 11/20/2020	Pro	ject Numbe	r: 40218686						
Run Prep Method	Analytical Method D	ilution A	nalvsis Date Analvst	Prep	Date	Batch			
1 SOP SPE	PFAS by ID SOP	1 12	/09/2020 1933 SES	12/07/2	2020 1226	5 75710			
2 SOP SPE	PFAS by ID SOP	1 12	/17/2020 0234 SES	12/15/2	2020 1330	0 76544			
Parameter		CAS Numbe	6 Analytical r Method	Result	Q	LOQ	DL	Units	Run
9-chlorohexadecafluoro-3-oxanone-1	-sulfonic acid (9CI-PF3ONS)	756426-58-	1 PFAS by ID SOP	ND		7.3	1.8	ng/L	1
11-chloroeicosafluoro-3-oxaundecano	e-1-sulfonic acid (11CI-PF3)	763051-92-	9 PFAS by ID SOP	ND		7.3	1.8	ng/L	1
1H, 1H, 2H, 2H-perfluorodecane sulf	onic acid (8:2 FTS)	39108-34-	4 PFAS by ID SOP	ND		7.3	1.8	ng/L	1
1H, 1H, 2H, 2H-perfluorooctane sulfo	onic acid (6:2 FTS)	27619-97-	2 PFAS by ID SOP	ND		7.3	1.8	ng/L	1
1H,1H,2H,2H-perfluorododecane sulf	fonic acid (10:2 FTS)	120226-60-	0 PFAS by ID SOP	ND		7.3	1.8	ng/L	1
1H,1H,2H,2H-perfluorohexane sulfon	nic acid (4:2 FTS)	757124-72-	4 PFAS by ID SOP	ND		7.3	1.8	ng/L	1
Hexafluoropropylene oxide dimer acie	d (GenX)	13252-13-	6 PFAS by ID SOP	ND		7.3	1.8	ng/L	1
4,8-dioxa-3H-perfluorononanoic acid	(ADONA)	919005-14-	4 PFAS by ID SOP	ND		7.3	1.8	ng/L	1
N-ethylperfluoro-1-octanesulfonamide	e (EtFOSA)	4151-50-	2 PFAS by ID SOP	ND		7.3	1.8	ng/L	1
N-ethylperfluoro-1-octanesulfonamide	oacetic acid (EtFOSAA)	2991-50-	6 PFAS by ID SOP	ND		7.3	1.8	ng/L	1
2-N-ethylperfluoro-1-octanesulfonam	ido-ethanol (EtFOSE)	1691-99-	2 PFAS by ID SOP	ND		7.3	1.8	ng/L	1
N-methylperfluoro-1-octanesulfonami	ide (MeFOSA)	31506-32-	8 PFAS by ID SOP	ND		15	3.7	ng/L	1
N-methylperfluoro-1-octanesulfonami	idoacetic acid (MeFOSAA)	2355-31-	9 PFAS by ID SOP	ND		7.3	1.8	ng/L	1
2-N-methylperfluoro-1-octanesulfona	mido-ethanol (MeFOSE)	24448-09-	7 PFAS by ID SOP	ND		7.3	1.8	ng/L	1
Perfluoro-1-butanesulfonic acid (PFB	S)	375-73-	5 PFAS by ID SOP	ND		3.7	0.92	ng/L	1
Perfluoro-1-decanesulfonic acid (PFD	DS)	335-77-	3 PFAS by ID SOP	ND		3.7	0.92	ng/L	1
Perfluoro-1-heptanesulfonic acid (PF	HpS)	375-92-	8 PFAS by ID SOP	ND		3.7	0.92	ng/L	1
Perfluoro-1-nonanesulfonic acid (PFN	NS)	68259-12-	1 PFAS by ID SOP	ND		3.7	0.92	ng/L	1
Perfluoro-1-octanesulfonamide (Pf	FOSA)	754-91-	6 PFAS by ID SOP	0.98	J	3.7	0.92	ng/L	1
Perfluoro-1-pentanesulfonic acid (PF	PeS)	2706-91-	4 PFAS by ID SOP	ND		3.7	0.92	ng/L	1
Perfluorododecanesulfonic acid (PFD	DOS)	79780-39-	5 PFAS by ID SOP	ND		7.3	1.8	ng/L	1
Perfluorohexanesulfonic acid (PFF	HxS)	355-46-	4 PFAS by ID SOP	4.4		3.7	0.92	ng/L	1
Perfluoro-n-butanoic acid (PFBA)		375-22-	4 PFAS by ID SOP	2.2	BJ	3.7	0.92	ng/L	1
Perfluoro-n-decanoic acid (PFDA)		335-76-	2 PFAS by ID SOP	ND		3.7	0.92	ng/L	1
Perfluoro-n-dodecanoic acid (PFDoA	)	307-55-	1 PFAS by ID SOP	ND		3.7	0.92	ng/L	1
Perfluoro-n-heptanoic acid (PFHpA)		375-85-	9 PFAS by ID SOP	ND		3.7	0.92	ng/L	1
Perfluoro-n-hexadecanoic acid (PFH)	xDA)	67905-19-	5 PFAS by ID SOP	ND		7.3	1.8	ng/L	1
Perfluoro-n-hexanoic acid (PFHxA)	)	307-24-	4 PFAS by ID SOP	1.4	J	3.7	0.92	ng/L	1
Perfluoro-n-nonanoic acid (PFNA)		375-95-	1 PFAS by ID SOP	ND		3.7	0.92	ng/L	1
Perfluoro-n-octadecanoic acid (PFOE	DA)	16517-11-	6 PFAS by ID SOP	ND		7.3	1.8	ng/L	1
Perfluoro-n-octanoic acid (PFOA)		335-67-	1 PFAS by ID SOP	2.8	J	3.7	0.92	ng/L	1
Perfluoro-n-pentanoic acid (PFPeA	A)	2706-90-	3 PFAS by ID SOP	0.98	J	3.7	0.92	ng/L	1
Perfluoro-n-tetradecanoic acid (PFTe	eDA)	376-06-	7 PFAS by ID SOP	ND		3.7	0.92	ng/L	1
Perfluoro-n-tridecanoic acid (PFTrDA	<b>(</b> )	72629-94-	8 PFAS by ID SOP	ND		3.7	0.92	ng/L	1
Perfluoro-n-undecanoic acid (PFUdA	)	2058-94-	8 PFAS by ID SOP	ND		3.7	0.92	ng/L	1
Perfluorooctanesulfonic acid (PFO	DS)	1763-23-	1 PFAS by ID SOP	8.3		3.7	0.92	ng/L	1
	Ru	in 1 Acc	eptance Rur	n 2 Ac	ceptance	e			
Surrogate	Q % Red	covery l	imits Q % Rec	overy	Limits				

Surrogate	Q % R	ecovery	Limits	Q	% Recovery	Limits
13C2_4:2FTS		100	25-150	Н	113	25-150
13C2_6:2FTS		104	25-150	Н	94	25-150
13C2_8:2FTS		95	25-150	Н	98	25-150
13C2_PFDoA		79	25-150	Н	91	25-150
13C2_PFHxDA		90	25-150	Н	88	25-150
LOQ = Limit of Quantitation	B = Detected in the method blank	E = Quantitat	ion of compour	nd exce	eded the calibration ra	inge DL = Detection Limit
ND = Not detected at or above the DL H = Out of holding time	N = Recovery is out of criteria W = Reported on wet weight basis	P = The RPD between two GC columns exceeds 40%				$J = Estimated result < LOQ and \ge DL$

Project Number: 40218686

Project Name: 1901155 LACROSSE WELL 23 &

Client: Pace Analytical Services, LLC Description: 365-0 Date Sampled:11/16/2020 1440

Date Received: 11/20/2020

Laboratory ID: VK21043-001

Matrix: Aqueous

Run 1 Acceptance Run 2 Acceptance Surrogate Q % Recovery % Recovery 0 Limits Limits 13C2\_PFTeDA 88 25-150 84 25-150 Н 13C3\_PFBS 98 25-150 Н 103 25-150 13C3\_PFHxS 90 25-150 Н 95 25-150 98 13C3-HFPO-DA 25-150 Н 96 25-150 13C4\_PFBA 106 25-150 105 Н 25-150 13C4\_PFHpA 101 25-150 Н 102 25-150 13C5\_PFHxA 97 25-150 Н 100 25-150 13C5\_PFPeA 103 25-150 Н 100 25-150 13C6\_PFDA 97 25-150 Н 101 25-150 13C7\_PFUdA 86 Н 92 25-150 25-150 13C8\_PFOA 98 25-150 Н 101 25-150 90 13C8\_PFOS 25-150 Н 93 25-150 13C8 PFOSA 103 10-150 Н 104 10-150 13C9\_PFNA 25-150 95 96 Н 25-150 d-EtFOSA 75 10-150 Н 75 10-150 d5-EtFOSAA 92 25-150 н 87 25-150 d9-EtFOSE 74 10-150 Н 75 10-150 d-MeFOSA 75 Н 10-150 74 10-150 d3-MeFOSAA 96 25-150 Н 87 25-150 d7-MeFOSE 78 10-150 н 76 10-150

 LOQ = Limit of Quantitation
 B = Detected in the method blank
 E = Quantitation of compound exceeded the calibration range
 DL = Detection Limit

 ND = Not detected at or above the DL
 N = Recovery is out of criteria
 P = The RPD between two GC columns exceeds 40%
 J = Estimated result < LOQ and ≥ DL</td>

 H = Out of holding time
 W = Reported on wet weight basis
 W = Reported on wet weight basis
 H = Out of holding time

Client: Pace Analytical Se	ervices, LLC				La	boratory I	D: VK21043-001		
Description: 365-0						Matrix	<: Aqueous		
Date Sampled:11/16/2020 1440	Pi	roject Name	e: 1901155 LACROSSE	E WELL	23 &				
Date Received: 11/20/2020	Pro	ject Numbe	er: 40218686						
Run Prep Method	Analytical Method Di	lution A	nalysis Date Analyst	Pren	Date	Batch			
1 SOP SPE	PFAS by ID SOP	1 12	/09/2020 1933 SES	12/07/2	020 1226	75710			
2 SOP SPE	PFAS by ID SOP	1 12	/17/2020 0234 SES	12/15/2	020 1330	76544			
Parameter		CAS Numbe	S Analytical r Method	Result	Q	LOQ	DL	Units	Run
9-chlorohexadecafluoro-3-oxanone-1-s	ulfonic acid (9CI-PF3ONS)	756426-58-	1 PFAS by ID SOP	ND	Н	7.0	1.7	ng/L	2
11-chloroeicosafluoro-3-oxaundecane-	1-sulfonic acid (11CI-PF3)	763051-92-	9 PFAS by ID SOP	ND	Н	7.0	1.7	ng/L	2
1H, 1H, 2H, 2H-perfluorodecane sulfon	nic acid (8:2 FTS)	39108-34-	4 PFAS by ID SOP	ND	Н	7.0	1.7	ng/L	2
1H, 1H, 2H, 2H-perfluorooctane sulfoni	ic acid (6:2 FTS)	27619-97-	2 PFAS by ID SOP	ND	Н	7.0	1.7	ng/L	2
1H,1H,2H,2H-perfluorododecane sulfor	nic acid (10:2 FTS)	120226-60-	0 PFAS by ID SOP	ND	Н	7.0	1.7	ng/L	2
1H,1H,2H,2H-perfluorohexane sulfonic	acid (4:2 FTS)	757124-72-	4 PFAS by ID SOP	ND	Н	7.0	1.7	ng/L	2
Hexafluoropropylene oxide dimer acid	(GenX)	13252-13-	6 PFAS by ID SOP	ND	Н	7.0	1.7	ng/L	2
4,8-dioxa-3H-perfluorononanoic acid (A	ADONA)	919005-14-	4 PFAS by ID SOP	ND	Н	7.0	1.7	ng/L	2
N-ethylperfluoro-1-octanesulfonamide (	(EtFOSA)	4151-50-2	2 PFAS by ID SOP	ND	Н	7.0	1.7	ng/L	2
N-ethylperfluoro-1-octanesulfonamidoa	acetic acid (EtFOSAA)	2991-50-	6 PFAS by ID SOP	ND	Н	7.0	1.7	ng/L	2
2-N-ethylperfluoro-1-octanesulfonamide	o-ethanol (EtFOSE)	1691-99-	2 PFAS by ID SOP	ND	Н	7.0	1.7	ng/L	2
N-methylperfluoro-1-octanesulfonamide	e (MeFOSA)	31506-32-	8 PFAS by ID SOP	ND	Н	14	3.5	ng/L	2
N-methylperfluoro-1-octanesulfonamide	pacetic acid (MeFOSAA)	2355-31-	9 PFAS by ID SOP	ND	Н	7.0	1.7	ng/L	2
2-N-methylperfluoro-1-octanesulfonami	ido-ethanol (MeFOSE)	24448-09-	7 PFAS by ID SOP	ND	Н	7.0	1.7	ng/L	2
Perfluoro-1-butanesulfonic acid (PFBS)	)	375-73-	5 PFAS by ID SOP	ND	Н	3.5	0.87	ng/L	2
Perfluoro-1-decanesulfonic acid (PFDS	\$)	335-77-	3 PFAS by ID SOP	ND	Н	3.5	0.87	ng/L	2
Perfluoro-1-heptanesulfonic acid (PFH	pS)	375-92-	8 PFAS by ID SOP	ND	Н	3.5	0.87	ng/L	2
Perfluoro-1-nonanesulfonic acid (PFNS	5)	68259-12-	1 PFAS by ID SOP	ND	Н	3.5	0.87	ng/L	2
Perfluoro-1-octanesulfonamide (PFOS)	А)	754-91-	6 PFAS by ID SOP	ND	Н	3.5	0.87	ng/L	2
Perfluoro-1-pentanesulfonic acid (PFPe	∋S)	2706-91-	4 PFAS by ID SOP	ND	Н	3.5	0.87	ng/L	2
Perfluorododecanesulfonic acid (PFDO	IS)	79780-39-	5 PFAS by ID SOP	ND	Н	7.0	1.7	ng/L	2
Perfluorohexanesulfonic acid (PFHx	S)	355-46-	4 PFAS by ID SOP	4.2	Н	3.5	0.87	ng/L	2
Perfluoro-n-butanoic acid (PFBA)		375-22-	4 PFAS by ID SOP	1.9	HJ	3.5	0.87	ng/L	2
Perfluoro-n-decanoic acid (PFDA)		335-76-2	2 PFAS by ID SOP	ND	Н	3.5	0.87	ng/L	2
Perfluoro-n-dodecanoic acid (PFDoA)		307-55-	1 PFAS by ID SOP	ND	Н	3.5	0.87	ng/L	2
Perfluoro-n-heptanoic acid (PFHpA)		375-85-	9 PFAS by ID SOP	ND	Н	3.5	0.87	ng/L	2
Perfluoro-n-hexadecanoic acid (PFHxD	DA)	67905-19-	5 PFAS by ID SOP	ND	Н	7.0	1.7	ng/L	2
Perfluoro-n-hexanoic acid (PFHxA)		307-24-	4 PFAS by ID SOP	1.5	НJ	3.5	0.87	ng/L	2
Perfluoro-n-nonanoic acid (PFNA)		375-95-	1 PFAS by ID SOP	ND	Н	3.5	0.87	ng/L	2
Perfluoro-n-octadecanoic acid (PFODA	١)	16517-11-	6 PFAS by ID SOP	ND	Н	7.0	1.7	ng/L	2
Perfluoro-n-octanoic acid (PFOA)		335-67-	1 PFAS by ID SOP	3.2	НJ	3.5	0.87	ng/L	2
Perfluoro-n-pentanoic acid (PFPeA)		2706-90-3	3 PFAS by ID SOP	1.2	НJ	3.5	0.87	ng/L	2
Perfluoro-n-tetradecanoic acid (PFTeD	A)	376-06-	7 PFAS by ID SOP	ND	Н	3.5	0.87	ng/L	2
Perfluoro-n-tridecanoic acid (PFTrDA)		72629-94-	8 PFAS by ID SOP	ND	Н	3.5	0.87	ng/L	2
Perfluoro-n-undecanoic acid (PFUdA)		2058-94-	8 PFAS by ID SOP	ND	Н	3.5	0.87	na/L	2
Perfluorooctanesulfonic acid (PFOS)	)	1763-23-	1 PFAS by ID SOP	7.9	Н	3.5	0.87	ng/L	2
		. =-						3	-
Surrogate		in 1 Acc	ceptance Run	12 Ac	ceptance	ġ			

Surrogate	Q % R	ecovery	Limits	Q	% Recovery	Limits
13C2_4:2FTS		100	25-150	Н	113	25-150
13C2_6:2FTS		104	25-150	Н	94	25-150
13C2_8:2FTS		95	25-150	Н	98	25-150
13C2_PFDoA		79	25-150	Н	91	25-150
13C2_PFHxDA		90	25-150	Н	88	25-150
LOQ = Limit of Quantitation	B = Detected in the method blank	E = Quantitat	ion of compoun	d exce	eded the calibration ra	inge DL = Detection Limit
ND = Not detected at or above the DL	N = Recovery is out of criteria	P = The RPD	between two G	J = Estimated result < LOQ and $\geq$ DL		
H = Out of holding time	W = Reported on wet weight basis					

Project Number: 40218686

Project Name: 1901155 LACROSSE WELL 23 &

Client: Pace Analytical Services, LLC Description: 365-0 Date Sampled:11/16/2020 1440

Date Received: 11/20/2020

Laboratory ID: VK21043-001

Matrix: Aqueous

Surrogate	$\circ$	Run 1 A		$\circ$	Run 2 Ac	ceptance
	Q	20 Recovery	25-150	<u>ч</u>	20 Recovery	25-150
		00	25-150		04	25-150
13C3_PFBS		98	25-150	н	103	25-150
13C3_PFHxS		90	25-150	Н	95	25-150
13C3-HFPO-DA		98	25-150	Н	96	25-150
13C4_PFBA		106	25-150	Н	105	25-150
13C4_PFHpA		101	25-150	Н	102	25-150
13C5_PFHxA		97	25-150	Н	100	25-150
13C5_PFPeA		103	25-150	Н	100	25-150
13C6_PFDA		97	25-150	Н	101	25-150
13C7_PFUdA		86	25-150	Н	92	25-150
13C8_PFOA		98	25-150	Н	101	25-150
13C8_PFOS		90	25-150	Н	93	25-150
13C8_PFOSA		103	10-150	Н	104	10-150
13C9_PFNA		96	25-150	Н	95	25-150
d-EtFOSA		75	10-150	Н	75	10-150
d5-EtFOSAA		92	25-150	Н	87	25-150
d9-EtFOSE		74	10-150	Н	75	10-150
d-MeFOSA		75	10-150	Н	74	10-150
d3-MeFOSAA		96	25-150	Н	87	25-150
d7-MeFOSE		78	10-150	Н	76	10-150

LOQ = Limit of QuantitationB = Detected in the method blankE = Quantitation of compound exceeded the calibration rangeDL = Detection LimitND = Not detected at or above the DLN = Recovery is out of criteriaP = The RPD between two GC columns exceeds 40%J = Estimated result < LOQ and ≥ DL</td>H = Out of holding timeW = Reported on wet weight basis



444 21st Street South · La Crosse, Wisconsin · 54601

December 23, 2020

#### 2531 1st Avenue West La Crosse, WI 54603

Subject: Private Well Sampling Results 2531 1st Avenue West, La Crosse, WI 54603 Tax parcel # 4-383-0 Sample ID # 383-0

:

Dear

We have received and reviewed the test results for the sample collected on November 17, 2020 at the above address. Some PFAS compounds were found, but the levels found were **below** the Department of Health Services (DHS) levels recommended for protecting health. These levels are called the "Recommended Public Health Standard" in the table below. The levels found in *your* well are called the "Sample Result" in the table below.

#### Sample Results

Compound	Sample Result (unit)	Recomn Public I Standard	nended Health I (unit <sup>e</sup> )
N-Ethyl Perfluorooctane sulfonamide (NEtFOSA) CAS # 4151-50-2	Not Detected	20 ppt <sup>a,b</sup>	ppt nds 6
N-Ethyl perfluorooctane sulfonamidoacetic acid (NEtFOSAA) CAS # 2991-50-6	Not Detected	20 ppt <sup>a,b</sup>	nit is 20 compou t <i>al</i> of all
N-Ethyl perfluorooctane sulfonamidoethanol (NEtFOSE) CAS # 1691-99-2	Not Detected	20 ppt <sup>a,b</sup>	ded lin Iese 6 Ied tot
Perfluorooctane sulfonamide (FOSA) CAS # 754-91-6	Not Detected	20 ppt <sup>a,b</sup>	nmen e of th ombir
Perfluorooctanoic acid (PFOA) CAS # 335-67-1	Not Detected	20 ppt <sup>a,b</sup>	e recor any <i>on</i> r the <i>c</i>
Perfluorooctanesulfonic acid (PFOS) CAS # 1763-23-1	Not Detected	20 ppt <sup>a,b</sup>	The for a

Private Well Sampling Results for 2531 1st Avenue West, La Crosse, WI 54603 Tax parcel # 4-383-0 Sample ID # 383-0 December 23, 2020

Compound	Sample Result (unit)	Recommended Public Health Standard (unit <sup>e</sup> )
Hexafluoropropylene oxide dimer acid (HPFO-DA; GenX) CAS # 13252-13-6	Not Detected	300 ppt <sup>a</sup>
Perfluorobutanesulfonic acid (PFBS) CAS # 375-73-5	2.5 ppt	450,000 ppt <sup>a</sup>
Perfluorohexanesulfonic acid (PFHxS) CAS # 355-46-4	3.0 ppt	40 ppt <sup>a</sup>
Perfluorobutanoic acid (PFBA) CAS # 375-22-4	16 ppt	10,000 ppt <sup>a</sup>
Perfluorodecanoic acid (PFDA) CAS # 335-76-2	Not Detected	300 ppt <sup>a</sup>
Perfluorododecanoic acid (PFDoA) CAS # 307-55-1	Not Detected	500 ppt <sup>a</sup>
Perfluorohexanoic acid (PFHxA) CAS # 307-24-4	Not Detected	150,000 ppt <sup>a</sup>
Perfluorononanoic acid (PFNA) CAS # 375-95-1	Not Detected	30 ppt <sup>a</sup>
Perfluorotetradecanoic acid (PFTeA) CAS # 376-06-7	Not Detected	10,000 ppt <sup>a</sup>
Perfluoroundecanoic acid (PFUnA) CAS # 2058-94-8	Not Detected	3,000 ppt <sup>a</sup>
4,8-Dioxa-3H-perfluorononanoic acid (DONA) CAS # 919005-14-4	Not Detected	3,000 ppt <sup>a</sup>
Perfluorooctadecanoic acid (PFODA) CAS # 16517-11-6	Not Detected	400,000 ppt <sup>a</sup>
Perfluoro-1-pentanesulfonic acid (PFPeS) CAS #2706-91-4	1.7 ppt	None Established <sup>c</sup>

<sup>a</sup> Public health enforcement standard (ES) recommended by DHS.

<sup>b</sup> DHS recommends a combined enforcement standard of 20 ng/L and combined preventive action limit of 2 ng/L for FOSA, NEt-FOSE, NEt-FOSA, NetFOSAA, PFOS, and PFOA.

A current standard is not available; the compound is currently under review by DHS for potential public health standard recommendation.

<sup>4</sup> Public health enforcement standard (ES) in NR 140, Wisconsin Administrative Code.

Units: Parts per trillion (ppt) = nanograms of substance per liter of water (ng/L)

<sup>BL</sup> Detected in the method blank. Possible lab contaminant.

Private Well Sampling Results for 2531 1st Avenue West, La Crosse, WI 54603 Tax parcel # 4-383-0 Sample ID # 383-0 December 23, 2020

As required by law, we will be submitting these results to the Department of Natural Resources (DNR). The DNR may consult with the Department of Health Services (DHS) about these test results. DHS may review all PFAS tests and follow-up with you directly if any actions are recommended to protect your health.

Thank you for your patience and assistance with our investigation. We will provide updates on the project at <a href="https://www.cityoflacrosse.org/wells">https://www.cityoflacrosse.org/wells</a> as our work continues. If you have any questions, please call The OS Group at (608) 668-2718 or email them at <a href="https://www.pFAS@theOSgrp.com">PFAS@theOSgrp.com</a>.

You can also contact the DNR and DHS with questions about PFAS or the water sample results at the numbers provided below.

Questions about		<u>Contact</u>	<u>Phone</u>	<u>E-mail Address</u>		
Soil & Groundwate Testing, Clean Up	<sup>er</sup> DNR	David Rozeboom	715-215-2078	David.Rozeboom@wisconsin.gov		
Drinking Water or Private wells	DNR	Kyle Burton	920-360-2112	kyle.burton@wisconsin.gov		
Health Concerns	DHS	Curtis Hedman	608-266-6677	Curtis.Hedman@dhs.wisconsin.gov		

On behalf of The City of La Crosse *The OS Group, LLC* 

Attachment: Lab report for your well

Client: Pace Analytical Services, LLC				Laboratory	ID: VK21043-0	004	
Description: 383-0				Matr	rix: Aqueous		
Date Sampled:11/17/2020 1505 P	roject Nam	ne: 1901155 LACROSSI	E WELL 2	23 &			
Date Received: 11/20/2020 Pro	piect Numb	er <sup>.</sup> 40218686					
Run   Prep   Method   Analytical Method   D     2   SOP SPE   PFAS by ID SOP	1 12 12	2/17/2020 0305 SES	Prep L 12/15/20	Date Batch 020 1330 76544			
Parameter	CA Numbe	S Analytical er Method	Result	Q LOQ	DL	Units	Run
9-chlorohexadecafluoro-3-oxanone-1-sulfonic acid (9CI-PF3ONS)	756426-58	8-1 PFAS by ID SOP	ND	7.9	2.0	ng/L	2
11-chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11CI-PF3)	763051-92	2-9 PFAS by ID SOP	ND	7.9	2.0	ng/L	2
1H, 1H, 2H, 2H-perfluorodecane sulfonic acid (8:2 FTS)	39108-34	-4 PFAS by ID SOP	ND	7.9	2.0	ng/L	2
1H, 1H, 2H, 2H-perfluorooctane sulfonic acid (6:2 FTS)	27619-97	7-2 PFAS by ID SOP	ND	7.9	2.0	ng/L	2
1H,1H,2H,2H-perfluorododecane sulfonic acid (10:2 FTS)	120226-60	0-0 PFAS by ID SOP	ND	7.9	2.0	ng/L	2
1H,1H,2H,2H-perfluorohexane sulfonic acid (4:2 FTS)	757124-72	2-4 PFAS by ID SOP	ND	7.9	2.0	ng/L	2
Hexafluoropropylene oxide dimer acid (GenX)	13252-13	8-6 PFAS by ID SOP	ND	7.9	2.0	ng/L	2
4,8-dioxa-3H-perfluorononanoic acid (ADONA)	919005-14	I-4 PFAS by ID SOP	ND	7.9	2.0	ng/L	2
N-ethylperfluoro-1-octanesulfonamide (EtFOSA)	4151-50	-2 PFAS by ID SOP	ND	7.9	2.0	ng/L	2
N-ethylperfluoro-1-octanesulfonamidoacetic acid (EtFOSAA)	2991-50	-6 PFAS by ID SOP	ND	7.9	2.0	ng/L	2
2-N-ethylperfluoro-1-octanesulfonamido-ethanol (EtFOSE)	1691-99	-2 PFAS by ID SOP	ND	7.9	2.0	ng/L	2
N-methylperfluoro-1-octanesulfonamide (MeFOSA)	31506-32	2-8 PFAS by ID SOP	ND	16	4.0	ng/L	2
N-methylperfluoro-1-octanesulfonamidoacetic acid (MeFOSAA)	2355-31	-9 PFAS by ID SOP	ND	7.9	2.0	ng/L	2
2-N-methylperfluoro-1-octanesulfonamido-ethanol (MeFOSE)	24448-09	P-7 PFAS by ID SOP	ND	7.9	2.0	ng/L	2
Perfluoro-1-butanesulfonic acid (PFBS)	375-73	-5 PFAS by ID SOP	2.5	J 4.0	0.99	ng/L	2
Perfluoro-1-decanesulfonic acid (PFDS)	335-77	-3 PFAS by ID SOP	ND	4.0	0.99	ng/L	2
Perfluoro-1-heptanesulfonic acid (PFHpS)	375-92	-8 PFAS by ID SOP	ND	4.0	0.99	ng/L	2
Perfluoro-1-nonanesulfonic acid (PFNS)	68259-12	2-1 PFAS by ID SOP	ND	4.0	0.99	ng/L	2
Perfluoro-1-octanesulfonamide (PFOSA)	754-91	-6 PFAS by ID SOP	ND	4.0	0.99	ng/L	2
Perfluoro-1-pentanesulfonic acid (PFPeS)	2706-91	-4 PFAS by ID SOP	1.7	J 4.0	0.99	ng/L	2
Perfluorododecanesulfonic acid (PFDOS)	79780-39	P-5 PFAS by ID SOP	ND	7.9	2.0	ng/L	2
Perfluorohexanesulfonic acid (PFHxS)	355-46	-4 PFAS by ID SOP	3.0	J 4.0	0.99	ng/L	2
Perfluoro-n-butanoic acid (PFBA)	3/5-22	-4 PFAS by ID SOP	16	4.0	0.99	ng/L	2
Perliuoro-n-decanoic acid (PFDA)	335-76	1 DEAS by ID SOP	ND	4.0	0.99	ng/L	2
Perfluoro n hontanoic acid (PEUnA)	307-33	0 DEAS by ID SOP		4.0	0.99	ng/L	2
Perfluoro-n-heptanoic acid (PEHpA)	3/3-83	-9 PFAS by ID SOP		4.0	0.99	ng/L	2
Perfluoro n heveneis asid (PEHxA)	0/905-15	4 DEAS by ID SOP		1.9	2.0	ng/L	2
Perfluoro n nononcia acid (PENA)	307-24	1 DEAS by ID SOP		4.0	0.99	ng/L	2
Perfluere plactadesapois acid (PENA)	3/0-90	-1 PFAS by ID SOP		4.0	0.99	ng/L	2
Perfluoro-n-octanoic acid (PFODA) Perfluoro-n-octanoic acid (PEOA)	335-67	-0 PFAS by ID SOP		4.0	2.0	ng/L	2
Perfluoro-n-pentanoic acid (PEPeA)	2706-90	-3 PEAS by ID SOP	ND	4.0	0.99	ng/L	2
Perfluoro-n-tetradecanoic acid (PETeDA)	376-06	-7 PEAS by ID SOP	ND	4.0	0.99	ng/L	2
Perfluoro-n-tridecanoic acid (PETrDA)	72629-94	L-8 PEAS by ID SOP	ND	4.0	0.99	ng/L	2
Perfluoro-n-undecanoic acid (PELIdA)	2058-94	-8 PEAS by ID SOP	ND	4.0	0.99	ng/L	2
Perfluorooctanesulfonic acid (PEOS)	1763-23	-1 PEAS by ID SOP	ND	4.0	0.99	ng/L	2
	0.0020		ND	1.0	0.77	ng/E	2
Surrogate Q % Rec	in 2 Ac covery	ceptance Limits					
1302_4:2F13	05	20-10U					
1302_0.21 13 1302_8.2ETS	70 07	25-150					
1302_0.2110 1302_DEDoA	27 02	25-150					
1302_F1 DUA 1302_DEHVDA	74 97	25-150					
	87	25-150					
1302_1116DA	07	20-100					
LOQ = Limit of Quantitation B = Detected in the method blank	E = Quantitat	ion of compound exceeded the o	calibration ra	nge DL = Detection L	imit		
ND = Not detected at or above the DL N = Recovery is out of criteria	P = The RPD	between two GC columns exce	eds 40%	J = Estimated res	sult < LOQ and $\geq$ D	DL	
H = Out of holding time W = Reported on wet weight basis							

Client: Pace Analytical Services, LLC	
Description: 383-0	
Date Sampled:11/17/2020 1505	
Date Received: 11/20/2020	

Project Name: 1901155 LACROSSE WELL 23 &

Laboratory ID: VK21043-004 Matrix: Aqueous

Date Received: 11/20/2020	Project Number: 40218686	
Surrogate	Run 2 Acceptance Q % Recovery Limits	
13C3_PFBS	106 25-150	
13C3_PFHxS	101 25-150	
13C3-HFPO-DA	103 25-150	
13C4_PFBA	108 25-150	
13C4_PFHpA	106 25-150	
13C5_PFHxA	100 25-150	
13C5_PFPeA	102 25-150	
13C6_PFDA	108 25-150	
13C7_PFUdA	104 25-150	
13C8_PFOA	105 25-150	
13C8_PFOS	97 25-150	
13C8_PFOSA	107 10-150	
13C9_PFNA	99 25-150	
d-EtFOSA	81 10-150	
d5-EtFOSAA	98 25-150	
d9-EtFOSE	78 10-150	
d-MeFOSA	85 10-150	
d3-MeFOSAA	96 25-150	
d7-MeFOSE	86 10-150	

LOQ = Limit of QuantitationB = Detected in the method blankE = Quantitation of compound exceeded the calibration rangeDL = Detection LimitND = Not detected at or above the DLN = Recovery is out of criteriaP = The RPD between two GC columns exceeds 40%J = Estimated result < LOQ and ≥ DL</td>H = Out of holding timeW = Reported on wet weight basis



444 21st Street South · La Crosse, Wisconsin · 54601

December 23, 2020

Colgan Air Services 2709 Fanta Reed Road La Crosse, WI 54603

Subject: Private Well Sampling Results 2717 Fanta Reed Road, La Crosse, WI 54603 Tax Parcel # 17-10253-20 Sample ID # 2717-FR

#### Dear

We have received and reviewed the test results for the sample collected on November 16, 2020 at the above address. Some PFAS compounds were found at levels <u>above</u> the Department of Health Services (DHS) levels recommended for protecting health. These levels are called the "Recommended Public Health Standard" in the table below. The levels found in the well are called the "Sample Result" in the table below.

Because some of the levels are above the recommended Public Health Standard and because we understand the water is not used for drinking water, we recommend you take measures to ensure the water is NOT used for drinking, cooking, and brushing teeth.

The following table summarizes the test results from the sample. **Bolded results** are above a current recommended level intended to protect your health according to the Department of Health Services (DHS). **PLEASE NOTE: Due to a laboratory quality control/ quality assurance issue, the laboratory ran a second "confirmation" analysis on your sample.** The two laboratory analyses confirmed each other, and there were **only minor differences.** The results in the table below are based on the highest **concentration of contaminants observed in either of the two analyses.** 

Private Well Sampling Results for 2717 Fanta Reed Road, La Crosse, WI 54603 Tax Parcel # 17-10253-20 December 23, 2020

400,000 ppt <sup>a</sup>

#### Recommended Sample Result Compound Public Health (unit) Standard (unit <sup>e</sup>) N-Ethyl Perfluorooctane sulfonamide (NEtFOSA) for any one of these 6 compounds or the combined total of all 6 20 ppt <sup>a,b</sup> The recommended limit is 20 ppt Not Detected CAS # 4151-50-2 N-Ethyl perfluorooctane sulfonamidoacetic acid (NEtFOSAA) 20 ppt <sup>a,b</sup> Not Detected CAS # 2991-50-6 N-Ethyl perfluorooctane sulfonamidoethanol (NEtFOSE) 20 ppt <sup>a,b</sup> Not Detected CAS # 1691-99-2 Perfluorooctane sulfonamide (FOSA) 20 ppt <sup>a,b</sup> 1.6 ppt CAS # 754-91-6 Perfluorooctanoic acid (PFOA) 20 ppt <sup>a,b</sup> 95 ppt CAS # 335-67-1 Perfluorooctanesulfonic acid (PFOS) 20 ppt <sup>a,b</sup> 20 ppt CAS # 1763-23-1 Hexafluoropropylene oxide dimer acid (HPFO-DA; GenX) Not Detected 300 ppt <sup>a</sup> CAS # 13252-13-6 Perfluorobutanesulfonic acid (PFBS) 450,000 ppt <sup>a</sup> 2.3 ppt CAS # 375-73-5 Perfluorohexanesulfonic acid (PFHxS) 40 ppt <sup>a</sup> 26 ppt CAS # 355-46-4 Perfluorobutanoic acid (PFBA) 10,000 ppt <sup>a</sup> 21 ppt CAS # 375-22-4 Perfluorodecanoic acid (PFDA) 300 ppt <sup>a</sup> Not Detected CAS # 335-76-2 Perfluorododecanoic acid (PFDoA) 500 ppt <sup>a</sup> Not Detected CAS # 307-55-1 Perfluorohexanoic acid (PFHxA) 150,000 ppt <sup>a</sup> 43 ppt CAS # 307-24-4 Perfluorononanoic acid (PFNA) 30 ppt <sup>a</sup> 2.2 ppt CAS # 375-95-1 Perfluorotetradecanoic acid (PFTeDA) Not Detected 10,000 ppt <sup>a</sup> CAS # 376-06-7 Perfluoroundecanoic acid (PFUdA) 3,000 ppt <sup>a</sup> Not Detected CAS # 2058-94-8 4,8-Dioxa-3H-perfluorononanoic acid (DONA) Not Detected 3,000 ppt <sup>a</sup> CAS # 919005-14-4

#### Sample Results

Not Detected

Perfluorooctadecanoic acid (PFODA)

CAS # 16517-11-6

Perfluoro-1-heptanesulfonic acid (PFHpS) CAS # 375-92-8	1.7 ppt	None Established <sup>c</sup>
Perfluoro-1-pentanesulfonic acid (PFPeS) CAS # 2706-91-4	1.7 ppt	None Established <sup>c</sup>
Perfluoro-n-heptanoic acid ( PFHpA) CAS # 375-85-9	22 ppt	None Established <sup>c</sup>
Perfluoro-n-pentanoic acid (PFPeA) CAS #2706-90-3	36 ppt	None Established <sup>c</sup>
<ul> <li><sup>a</sup> Public health enforcement standard (ES) recommended by DHS.</li> <li><sup>b</sup> DHS recommends a combined enforcement standard of 20 ng/L an for FOSA, NEt-FOSE, NEt-FOSA, NetFOSAA, PFOS, and PFOA.</li> <li><sup>c</sup> A current standard is not available; the compound is currently under standard recommendation.</li> <li><sup>d</sup> Public health enforcement standard (ES) in NR 140, Wisconsin Adm</li> </ul>	d combined prevent er review by DHS for inistrative Code.	ive action limit of 2 ng/L potential public health
<sup>e</sup> Units: Parts per trillion (ppt) = nanograms of substance per liter of v	water (ng/L)	

<sup>BL</sup> Detected in the method blank. Possible lab contaminant.

As required by law, we will be submitting these results to the Department of Natural Resources (DNR). The DNR may consult with the Department of Health Services (DHS) about these test results. DHS may review all PFAS tests and follow-up with you directly if any actions are recommended to protect your health.

Thank you for your patience and assistance with our investigation. We will provide updates on the project at <a href="https://www.cityoflacrosse.org/wells">https://www.cityoflacrosse.org/wells</a> as our work continues. If you have any questions, please call The OS Group at (608) 668-2718 or email them at <a href="https://www.pFAS@theOSgrp.com">PFAS@theOSgrp.com</a>.

You can also contact the DNR and DHS with questions about PFAS or the water sample results at the numbers provided below.

Questions about	<u></u>	<u>Contact</u>	<u>Phone</u>	E-mail Address
Soil & Groundwater Testing, Clean Up	DNR	David Rozeboom	715-215-2078	David.Rozeboom@wisconsin.gov
Drinking Water or Private wells	DNR	Kyle Burton	920-360-2112	kyle.burton@wisconsin.gov
Health Concerns	DHS	Curtis Hedman	608-266-6677	Curtis.Hedman@dhs.wisconsin.gov

On behalf of The City of La Crosse *The OS Group, LLC* 

Attachment: Lab report for your well

cc Ian Turner, La Crosse Regional Airport

Client: Pace Analytical Services, LLC		La	aboratory I	D: VK21043-00	02			
Description: 2717-FR					Matri	ix: Aqueous		
Date Sampled:11/16/2020 1505	Project Nam	e: 1901155 LACROSSI	E WELL	23 &		-		
Date Received: 11/20/2020 Pro	- oject Numbe	er: 40218686						
Dup Drap Method Apolytical Method D	ilution A	nalvoia Data Analvot	Drop	Data	Datab			
1 SOP SPE PEAS by ID SOP	1 12	/09/2020 1944 SES	12/07/2	Date 2020 1226	5 75710			
2 SOP SPE PEAS by ID SOP	1 12	/17/2020 0244 SES	12/15/2	2020 1330	) 76544			
	=		12/10/2					
Parameter	CAS Numbe	S Analytical r Method	Result	Q	LOQ	DL	Units	Run
9-chlorohexadecafluoro-3-oxanone-1-sulfonic acid (9CI-PF3ONS)	756426-58	1 PFAS by ID SOP	ND		9.0	2.2	ng/L	1
11-chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11CI-PF3)	763051-92	9 PFAS by ID SOP	ND		9.0	2.2	ng/L	1
1H, 1H, 2H, 2H-perfluorodecane sulfonic acid (8:2 FTS)	39108-34	4 PFAS by ID SOP	ND		9.0	2.2	ng/L	1
1H, 1H, 2H, 2H-perfluorooctane sulfonic acid (6:2 FTS)	27619-97	2 PFAS by ID SOP	ND		9.0	2.2	ng/L	1
1H,1H,2H,2H-perfluorododecane sulfonic acid (10:2 FTS)	120226-60-	0 PFAS by ID SOP	ND		9.0	2.2	ng/L	1
1H,1H,2H,2H-perfluorohexane sulfonic acid (4:2 FTS)	757124-72-	4 PFAS by ID SOP	ND		9.0	2.2	ng/L	1
Hexafluoropropylene oxide dimer acid (GenX)	13252-13	6 PFAS by ID SOP	ND		9.0	2.2	ng/L	1
4,8-dioxa-3H-perfluorononanoic acid (ADONA)	919005-14	4 PFAS by ID SOP	ND		9.0	2.2	ng/L	1
N-ethylperfluoro-1-octanesulfonamide (EtFOSA)	4151-50-	2 PFAS by ID SOP	ND		9.0	2.2	ng/L	1
N-ethylperfluoro-1-octanesulfonamidoacetic acid (EtFOSAA)	2991-50-	6 PFAS by ID SOP	ND		9.0	2.2	ng/L	1
2-N-ethylperfluoro-1-octanesulfonamido-ethanol (EtFOSE)	1691-99-	2 PFAS by ID SOP	ND		9.0	2.2	ng/L	1
N-methylperfluoro-1-octanesulfonamide (MeFOSA)	31506-32-	8 PFAS by ID SOP	ND		18	4.5	ng/L	1
N-methylperfluoro-1-octanesulfonamidoacetic acid (MeFOSAA)	2355-31-	9 PFAS by ID SOP	ND		9.0	2.2	ng/L	1
2-N-methylperfluoro-1-octanesulfonamido-ethanol (MeFOSE)	24448-09-	PFAS by ID SOP	ND		9.0	2.2	ng/L	1
Perfluoro-1-butanesulfonic acid (PFBS)	375-73-	5 PFAS by ID SOP	2.3	J	4.5	1.1	ng/L	1
Perfluoro-1-decanesultonic acid (PFDS)	335-77-	3 PEAS by ID SOP	ND		4.5	1.1	ng/L	1
Perfluoro-I-neptanesultonic acid (PFHpS)	375-92-	8 PFAS by ID SOP	1.7	J	4.5	1.1	ng/L	1
Perfluoro- I-nonanesulfonic acid (PENS)	68259-12- 754-01		ND		4.5	1.1	ng/L	1
Periluoro-1-octanesullonamide (PFOSA)	754-91-	6 PFAS by ID SOP	1.4	J	4.5	1.1	ng/L	1
Perfuere de de server la reix (PEDOC)	2706-91-	4 PFAS by ID SOP	1.7	J	4.5	1.1	ng/L	1
Perfluorododecanesulfonic acid (PEDOS)	79780-39- 255.46	A DEAS by ID SOP	ND 25		9.0 4.5	2.2	ng/L	1
Perfuoro n-butanoic acid (PEBA)	375-22-	4 PEAS by ID SOP	20	в	4.5	1.1	ng/L	1
	375-22-	2 DEAS by ID SOP		Б	4.5	1.1	ng/L	1
Perfluere n dedecaneic acid (PEDA)	207 55	1 DEAS by ID SOP			4.5	1.1	ng/L	1
Perfluere p bentancic acid (PEHpA)	275 05		22		4.5	1.1	ng/L	1
	67005 10	5 DEAS by ID SOP			4.5	1.1	ng/L	1
	307-24-		13		7.0 1.5	2.2	ng/L	1
Perfluoro-n-nonanoic acid (PENA)	375-05-	1 PEAS by ID SOP	4J 2 1		4.5	1.1	ng/L	1
Perfluoro-n-octadecanoic acid (PEODA)	16517-11-	6 PEAS by ID SOP	2.1 ND	5	9.0	1.1	ng/L	1
Perfluoro-n-octanoic acid (PEOA)	335-67-	1 PFAS by ID SOP	95		4.5	1 1	ng/L	1
Perfluoro-n-pentanoic acid (PEPeA)	2706-90-	3 PFAS by ID SOP	36		4.5	1.1	ng/L	1
Perfluoro-n-tetradecanoic acid (PFTeDA)	376-06-	7 PFAS by ID SOP	ND		4.5	11	na/L	1
Perfluoro-n-tridecanoic acid (PFTrDA)	72629-94	8 PFAS by ID SOP	ND		4.5	11	na/L	1
Perfluoro-n-undecanoic acid (PFUdA)	2058-94-	8 PFAS by ID SOP	ND		4.5	11	na/L	1
Perfluorooctanesulfonic acid (PFOS)	1763-23-	1 PFAS by ID SOP	20		4.5	11	na/L	1
····· ··· · · · · · · · · · · · · · ·						1.1	<u> </u>	
Surrogate RI	un 1 Acc	eptance Rur	12 Ac	ceptance	e			
13C2_4:2FTS	103	25-150 H 10	)5	25-150				

Surrogate	Q % R	ecovery	Limits	Q	% Recovery	Limits
13C2_4:2FTS		103	25-150	Н	105	25-150
13C2_6:2FTS		109	25-150	Н	94	25-150
13C2_8:2FTS		88	25-150	Н	88	25-150
13C2_PFDoA		82	25-150	Н	76	25-150
13C2_PFHxDA		85	25-150	Н	79	25-150
LOQ = Limit of Quantitation	B = Detected in the method blank	E = Quantita	ation of compo	und exc	eeded the calibration	range DL = Detection Limit
ND = Not detected at or above the DL	N = Recovery is out of criteria	P = The RP	D between two	o GC col	umns exceeds 40%	J = Estimated result < LOQ and $\geq$ DL
H = Out of holding time	W = Reported on wet weight basis					

Project Number: 40218686

Client: Pace Analytical Services, LLC Description: 2717-FR Date Sampled:11/16/2020 1505

Date Received: 11/20/2020

Laboratory ID: VK21043-002 Matrix: Aqueous

Matrix Project Name: 1901155 LACROSSE WELL 23 &

Surrogate	$\cap$	Run 1 A		$\cap$	Run 2 A	cceptance
13C2 PETeDA	Q	83	25-150	н	73	25-150
12C2 DEPS		04	25 150	 Ц	100	25 150
13C3_FFB3		94	25-150	п 	100	25-150
13C3_PFHxS		89	25-150	н	90	25-150
13C3-HFPO-DA		96	25-150	Н	98	25-150
13C4_PFBA		101	25-150	Н	103	25-150
13C4_PFHpA		100	25-150	Н	98	25-150
13C5_PFHxA		97	25-150	Н	96	25-150
13C5_PFPeA		100	25-150	Н	99	25-150
13C6_PFDA		96	25-150	Н	95	25-150
13C7_PFUdA		85	25-150	Н	87	25-150
13C8_PFOA		94	25-150	Н	100	25-150
13C8_PFOS		85	25-150	Н	90	25-150
13C8_PFOSA		98	10-150	Н	92	10-150
13C9_PFNA		92	25-150	Н	96	25-150
d-EtFOSA		77	10-150	Н	78	10-150
d5-EtFOSAA		86	25-150	Н	78	25-150
d9-EtFOSE		78	10-150	Н	66	10-150
d-MeFOSA		78	10-150	Н	77	10-150
d3-MeFOSAA		91	25-150	Н	81	25-150
d7-MeFOSE		83	10-150	Н	67	10-150

LOQ = Limit of QuantitationB = Detected in the method blankE = Quantitation of compound exceeded the calibration rangeDL = Detection LimitND = Not detected at or above the DLN = Recovery is out of criteriaP = The RPD between two GC columns exceeds 40%J = Estimated result < LOQ and ≥ DL</td>H = Out of holding timeW = Reported on wet weight basisH = Out of holding timeH = Out of holding timeH = Out of holding time
# PFAS by LC/MS/MS

Client: Pace Analytical	Services, LLC				L	aboratory ID	D: VK21043-0	002		
Description: 2717-FR						Matrix	: Aqueous			
Date Sampled:11/16/2020 1505	Р	roject Name:	1901155 LACROSSI	E WELL	23 &		-			
Date Received: 11/20/2020	Pro	ject Number:	40218686							
Pup Pren Method	Analytical Mothod D	ilution And	alveis Date Analvet	Dron	Dato	Batch				
1 SOP SPE	PFAS by ID SOP	1 12/0	9/2020 1944 SES	12/07/2	2020 122	26 75710				
2 SOP SPE	PFAS by ID SOP	1 12/1	7/2020 0244 SES	12/15/2	2020 133	80 76544				
Parameter		CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run	
9-chlorohexadecafluoro-3-oxanone-1	I-sulfonic acid (9CI-PF3ONS)	756426-58-1	PFAS by ID SOP	ND	н	7.7	1.9	ng/L	2	
11-chloroeicosatluoro-3-oxaundecan	e-1-sulfonic acid (11CI-PF3)	/63051-92-9	PFAS by ID SOP	ND	н	1.1	1.9	ng/L	2	
IH, IH, 2H, 2H-perfluorodecane sulf	onic acid (8:2 FTS)	39108-34-4	PFAS by ID SOP	ND	н	1.1	1.9	ng/L	2	
1H, 1H, 2H, 2H-perfluorooctane sulfo	onic acid (6:2 FTS)	2/619-9/-2	PFAS by ID SOP	ND	н	1.1	1.9	ng/L	2	
IH, IH, 2H, 2H-perfluorododecane sui	fonic acid (10:2 FTS)	120226-60-0	PFAS by ID SOP	ND	н	1.1	1.9	ng/L	2	
1H,1H,2H,2H-perfluorohexane sulfor	nic acid (4:2 FTS)	/5/124-/2-4	PFAS by ID SOP	ND	н	1.1	1.9	ng/L	2	
Hexafluoropropylene oxide dimer aci	d (GenX)	13252-13-6	PFAS by ID SOP	ND	н	1.1	1.9	ng/L	2	
4,8-dioxa-3H-perfluorononanoic acid	(ADONA)	919005-14-4	PFAS by ID SOP	ND	н	7.7	1.9	ng/L	2	
N-ethylperfluoro-1-octanesulfonamid	e (EtFOSA)	4151-50-2	PFAS by ID SOP	ND	н	7.7	1.9	ng/L	2	
N-ethylperfluoro-1-octanesulfonamid	oacetic acid (EtFOSAA)	2991-50-6	PFAS by ID SOP	ND	Н	7.7	1.9	ng/L	2	
2-N-ethylperfluoro-1-octanesulfonam	ido-ethanol (EtFOSE)	1691-99-2	PFAS by ID SOP	ND	Н	7.7	1.9	ng/L	2	
N-methylperfluoro-1-octanesulfonam	ide (MeFOSA)	31506-32-8	PFAS by ID SOP	ND	Н	15	3.9	ng/L	2	
N-methylperfluoro-1-octanesulfonam	idoacetic acid (MeFOSAA)	2355-31-9	PFAS by ID SOP	ND	Н	7.7	1.9	ng/L	2	
2-N-methylperfluoro-1-octanesulfona	imido-ethanol (MeFOSE)	24448-09-7	PFAS by ID SOP	ND	н	1.1	1.9	ng/L	2	
Perfluoro-1-butanesulfonic acid (P	rFBS)	375-73-5	PFAS by ID SOP	2.1	HJ	3.9	0.97	ng/L	2	
Perfluoro-1-decanesulfonic acid (PFI	DS)	335-77-3	PFAS by ID SOP	ND	Н	3.9	0.97	ng/L	2	
Perfluoro-1-heptanesulfonic acid (	PFHpS)	375-92-8	PFAS by ID SOP	1.7	HJ	3.9	0.97	ng/L	2	
Perfluoro-1-nonanesulfonic acid (PFI	NS)	68259-12-1	PFAS by ID SOP	ND	Н	3.9	0.97	ng/L	2	
Perfluoro-1-octanesulfonamide (Pl	FOSA)	754-91-6	PFAS by ID SOP	1.6	HJ	3.9	0.97	ng/L	2	
Perfluoro-1-pentanesulfonic acid (	PFPeS)	2706-91-4	PFAS by ID SOP	1.6	HJ	3.9	0.97	ng/L	2	
Perfluorododecanesulfonic acid (PFE	DOS)	79780-39-5	PFAS by ID SOP	ND	Н	7.7	1.9	ng/L	2	
Perfluorohexanesulfonic acid (PFF	HXS)	355-46-4	PFAS by ID SOP	26	н	3.9	0.97	ng/L	2	
Perfluoro-n-butanoic acid (PFBA)		375-22-4	PFAS by ID SOP	19	Н	3.9	0.97	ng/L	2	
Perfluoro-n-decanoic acid (PFDA)		335-76-2	PFAS by ID SOP	ND	Н	3.9	0.97	ng/L	2	
Perfluoro-n-dodecanoic acid (PFDoA	A)	307-55-1	PFAS by ID SOP	ND	Н	3.9	0.97	ng/L	2	
Perfluoro-n-heptanoic acid (PFHp/	A)	375-85-9	PFAS by ID SOP	22	Н	3.9	0.97	ng/L	2	
Perfluoro-n-hexadecanoic acid (PFH	xDA)	67905-19-5	PFAS by ID SOP	ND	Н	7.7	1.9	ng/L	2	
Perfluoro-n-hexanoic acid (PFHxA	)	307-24-4	PFAS by ID SOP	41	Н	3.9	0.97	ng/L	2	
Perfluoro-n-nonanoic acid (PFNA)		375-95-1	PFAS by ID SOP	2.2	HJ	3.9	0.97	ng/L	2	
Perfluoro-n-octadecanoic acid (PFOI	JA)	16517-11-6	PFAS by ID SOP	ND	н	1.1	1.9	ng/L	2	
Perfluoro-n-octanoic acid (PFOA)		335-67-1	PFAS by ID SOP	90	н	3.9	0.97	ng/L	2	
Perfluoro-n-pentanoic acid (PFPeA	A)	2706-90-3	PFAS by ID SOP	33	н	3.9	0.97	ng/L	2	
Perfluoro-n-tetradecanoic acid (PFTe	eda)	3/6-06-7	PEAS by ID SOP	ND	н	3.9	0.97	ng/L	2	
Pertiuoro-n-tridecanoic acid (PFTrDA	A)	/2629-94-8	PEAS by ID SOP	ND	н	3.9	0.97	ng/L	2	
Pertiuoro-n-undecanoic acid (PFUdA	N)	2058-94-8	PEAS by ID SOP	ND	н	3.9	0.97	ng/L	2	
Perfluorooctanesulfonic acid (PFC	)5)	1763-23-1	PEAS by ID SOP	20	Н	3.9	0.97	ng/L	2	
Surrogato	Ru	in 1 Acce	ptance Rur	12 Ac	ceptand	ce				
Surroyate	Q % Rec	covery Li	mits Q % Rec	overy	LIMITS					

Surrogate	Q % R	ecovery	Limits	Q	% Recovery	Limits
13C2_4:2FTS		103	25-150	Н	105	25-150
13C2_6:2FTS		109	25-150	Н	94	25-150
13C2_8:2FTS		88	25-150	Н	88	25-150
13C2_PFDoA		82	25-150	Н	76	25-150
13C2_PFHxDA		85	25-150	Н	79	25-150
LOQ = Limit of Quantitation	B = Detected in the method blank	E = Quantitat	ion of compour	nd exce	eded the calibration ra	nge DL = Detection Limit
ND = Not detected at or above the DL	N = Recovery is out of criteria	P = The RPD	between two C	GC colu	umns exceeds 40%	J = Estimated result < LOQ and $\geq$ DL
H = Out of holding time	W = Reported on wet weight basis					

Pace Analytical Services, LLC (formerly Shealy Environmental Services, Inc.) 106 Vantage Point Drive West Columbia, SC 29172 (803) 791-9700 Fax (803) 791-9111 www.pacelabs.com

## PFAS by LC/MS/MS

Project Number: 40218686

Client: Pace Analytical Services, LLC Description: 2717-FR Date Sampled:11/16/2020 1505

Laboratory ID: VK21043-002 Matrix: Aqueous

Date Received: 11/20/2020

Project Name: 1901155 LACROSSE WELL 23 &

Surrogate	0	Run 1 % Recovery	Acceptance	0	Run 2 % Recovery	Acceptance
13C2_PFTeDA	_	83	25-150	H	73	25-150
13C3_PFBS		94	25-150	Н	100	25-150
13C3_PFHxS		89	25-150	Н	90	25-150
13C3-HFPO-DA		96	25-150	Н	98	25-150
13C4_PFBA		101	25-150	Н	103	25-150
13C4_PFHpA		100	25-150	Н	98	25-150
13C5_PFHxA		97	25-150	Н	96	25-150
13C5_PFPeA		100	25-150	Н	99	25-150
13C6_PFDA		96	25-150	Н	95	25-150
13C7_PFUdA		85	25-150	Н	87	25-150
13C8_PFOA		94	25-150	Н	100	25-150
13C8_PFOS		85	25-150	Н	90	25-150
13C8_PFOSA		98	10-150	Н	92	10-150
13C9_PFNA		92	25-150	Н	96	25-150
d-EtFOSA		77	10-150	Н	78	10-150
d5-EtFOSAA		86	25-150	Н	78	25-150
d9-EtFOSE		78	10-150	Н	66	10-150
d-MeFOSA		78	10-150	Н	77	10-150
d3-MeFOSAA		91	25-150	Н	81	25-150
d7-MeFOSE		83	10-150	Н	67	10-150

LOQ = Limit of Quantitation B = Detected in the method blank E = Quantitation of compound exceeded the calibration range DL = Detection Limit ND = Not detected at or above the DL N = Recovery is out of criteria P = The RPD between two GC columns exceeds 40% J = Estimated result < LOQ and  $\ge$  DL H = Out of holding time W = Reported on wet weight basis

Pace Analytical Services, LLC (formerly Shealy Environmental Services, Inc.) 106 Vantage Point Drive West Columbia, SC 29172 (803) 791-9700 Fax (803) 791-9111 www.pacelabs.com



444 21st Street South · La Crosse, Wisconsin · 54601

December 17, 2020

2560 2nd Avenue East La Crosse, WI 54603

:

Subject: Private Well Sampling Results 2560 2nd Avenue East, La Crosse, WI 54603 Tax parcel # 4-178-0 Sample ID # 178-0

Dear

We have received and reviewed the test results for the sample collected on November 19, 2020 at the above address. Some PFAS compounds were found at levels <u>above</u> the Department of Health Services (DHS) levels recommended for protecting health. These levels are called the "Recommended Public Health Standard" in the table below. The levels found in your well are called the "Sample Result" in the table below.

Because some of the levels are above the recommended Public Health Standard, the City is offering to provide bottled water delivered to your home for drinking, cooking, and brushing your teeth. The bottled water is being provided by Culligan is bottled in Rothschild, WI from a municipal water system. Culligan's source water is filtered and treated by carbon filter, reverse osmosis, distillation and other methods before it is bottled. It has been sampled for PFAS, and no PFAS was detected in the sample. There will be no cost to you for the bottled water. Please complete the attached form and mail it to The OS Group to make arrangements for having a water dispenser and bottles delivered to your home. Call 608-668-2718 or email <u>PFAS@theOSgrp.com</u>. You may also complete this form on line at <u>www.cityoflacrosse.org/bottledwater</u>

The following table summarizes the test results from the sample. **Bolded results** are above a current recommended level intended to protect your health according to the Department of Health Services (DHS).

We collected two samples from your well and sent them to two separate labs as a quality control check. These are referred to as "spilt" samples. The results of the two tests were similar. The results of the higher of the two are shown in the table below.

Private Well Sampling Results for 2560 2nd Avenue East, La Crosse, WI 54603 Tax Parcel # 4-178-0 December 17, 2020

Samp	le	Resu	lts
-			

Compound	Sample Result (unit)	Recomm Public H Standard	ended Iealth (unit <sup>e</sup> )
N-Ethyl Perfluorooctane sulfonamide (NEtFOSA) CAS # 4151-50-2	Not Detected	20 ppt <sup>a,b</sup>	) ppt unds I 6
N-Ethyl perfluorooctane sulfonamidoacetic acid (NEtFOSAA) CAS # 2991-50-6	Not Detected	20 ppt <sup>a,b</sup>	it is 20 compo <i>il</i> of al
N-Ethyl perfluorooctane sulfonamidoethanol (NEtFOSE) CAS # 1691-99-2	Not Detected	20 ppt <sup>a,b</sup>	ed lim ese 6 c ed totc
Perfluorooctane sulfonamide (FOSA) CAS # 754-91-6	Not Detected	20 ppt <sup>a,b</sup>	mend of the
Perfluorooctanoic acid (PFOA) CAS # 335-67-1	19 ppt	20 ppt <sup>a,b</sup>	recom ny <i>on</i> e the <i>c</i> c
Perfluorooctanesulfonic acid (PFOS) CAS # 1763-23-1	6.5 ppt	20 ppt <sup>a,b</sup>	The for a or
Hexafluoropropylene oxide dimer acid (HPFO-DA; GenX) CAS # 13252-13-6	Not Detected		300 ppt <sup>a</sup>
Perfluorobutanesulfonic acid (PFBS) CAS # 375-73-5	4.8 ppt	450	),000 ppt ª
Perfluorohexanesulfonic acid (PFHxS) CAS # 355-46-4	7.9 ppt		40 ppt <sup>a</sup>
Perfluorobutanoic acid (PFBA) CAS # 375-22-4	150 ppt	10	),000 ppt <sup>a</sup>
Perfluorodecanoic acid (PFDA) CAS # 335-76-2	Not Detected		300 ppt <sup>a</sup>
Perfluorododecanoic acid (PFDoA) CAS # 307-55-1	Not Detected		500 ppt <sup>a</sup>
Perfluorohexanoic acid (PFHxA) CAS # 307-24-4	1.9 ppt	150	),000 ppt <sup>a</sup>
Perfluorononanoic acid (PFNA) CAS # 375-95-1	Not Detected		30 ppt <sup>a</sup>
Perfluorotetradecanoic acid (PFTeDA) CAS # 376-06-7	Not Detected	10	),000 ppt <sup>a</sup>
Perfluoroundecanoic acid (PFUdA) CAS # 2058-94-8	Not Detected	3	8,000 ppt <sup>a</sup>
4,8-Dioxa-3H-perfluorononanoic acid (DONA) CAS # 919005-14-4	Not Detected	3	8,000 ppt <sup>a</sup>
Perfluorooctadecanoic acid (PFODA) CAS # 16517-11-6	Not Detected	400	),000 ppt <sup>a</sup>

1H, 1H, 2H, 2H-perflurooctane sulfonic acid (6:2 FTS) CAS # 27619-97-2	17 ppt	None Established <sup>c</sup>		
Perfluoro-1-pentanesulfonic acid (PFPeS) CAS # 2706-91-4	3.8 ppt	None Established <sup>c</sup>		
Perfluoro-n-pentanoic acid (PFPeA) CAS #2706-90-3	7.8 ppt	None Established <sup>c</sup>		
<sup>a</sup> Public health enforcement standard (ES) recommended by DHS. <sup>b</sup> DHS recommends a combined enforcement standard of 20 ng/L and combined preventive action limit of 2 ng/L for FOSA, NEt-FOSE, NEt-FOSA, NetFOSAA, PFOS, and PFOA.				

<sup>c</sup> A current standard is not available; the compound is currently under review by DHS for potential public health standard recommendation.

<sup>d</sup> Public health enforcement standard (ES) in NR 140, Wisconsin Administrative Code.

<sup>e</sup> Units: Parts per trillion (ppt) = nanograms of substance per liter of water (ng/L)

<sup>BL</sup> Detected in the method blank. Possible lab contaminant.

As required by law, we will be submitting these results to the Department of Natural Resources (DNR). The DNR may consult with the Department of Health Services (DHS) about these test results. DHS may review all PFAS tests and follow-up with you directly if any actions are recommended to protect your health.

Thank you for your patience and assistance with our investigation. We will provide updates on the project at <u>https://www.cityoflacrosse.org/wells</u> as our work continues. If you have any questions, please call The OS Group at (608) 668-2718 or email them at <u>PFAS@theOSgrp.com</u>.

You can also contact the DNR and DHS with questions about PFAS or the water sample results at the numbers provided below.

Questions about	<u></u>	<b>Contact</b>	<u>Phone</u>	<u>E-mail Address</u>
Soil & Groundwater Testing, Clean Up	DNR	David Rozeboom	715-215-2078	David.Rozeboom@wisconsin.gov
Drinking Water or Private wells	DNR	Kyle Burton	920-360-2112	kyle.burton@wisconsin.gov
Health Concerns	DHS	Curtis Hedman	608-266-6677	Curtis.Hedman@dhs.wisconsin.gov

On behalf of The City of La Crosse *The OS Group, LLC* 

Attachment: Lab report for your well Bottled Water Acknowledgement

# BOTTLED WATER ACKNOWLEDGEMENT

2560 2nd Avenue East, La Crosse, WI 54603

If you desire to accept the bottled water delivery, please complete and sign this form and return it to The OS Group at <u>PFAS@TheOSqrp.com</u> or mail to 444 21<sup>st</sup> St. S, La Crosse, WI 54601. You may also complete this form electronically on line at <u>www.cityoflacrosse.org/bottledwater</u>. Call 608-668-2718 with any question you may have.

As pre-caution for the protection of human health, the City of La Crosse (The City) will provide, on a temporary basis, bottled water for drinking, cooking and toothbrushing purposes at the above referenced address. The water will be delivered to your home or business by a commercial water delivery service. At the City's cost, a dispenser / cooler and regular deliveries of 5-gallon containers of water will be provided. The City reserves the right to dictate the conditions of delivery, such as minimum and maximum number of containers per delivery, frequency and timing of deliveries. The City reserves the right to periodically review whether The City should continue to provide bottled water, considering factors such as State and Federal standards and guidance, evolving knowledge and understanding of the sources, cause and responsibility for the contamination, new or reinterpreted test results, and the availability of more permanent or cost-effective sources of water for the above purposes. The City of La Crosse makes no warranty or representation regarding the suitability of the bottled water beyond those made by the commercial water delivery service.

All reusable or returnable equipment and supplies, such as the containers and cooler/dispenser, are the property of the commercial water delivery service or the City of La Crosse. By signing below, the Occupant of the above referenced property acknowledges that all reusable or returnable equipment and supplies shall be returned to the commercial water delivery service or the City of La Crosse upon request. The Occupant agrees to provide reasonable access for delivery of bottled water and pick up of reusable or returnable equipment(s) acknowledges that they may be required to sign an agreement with the commercial water delivery service as a condition of receiving bottled water.

**Check ownership:** 

Owner-Occupant	
Occupant Only	
Number of Occupants:	-
Signed:	_ Dated:
Printed Name:	
Phone Number: ()	

# PFAS by LC/MS/MS

Client: Pace Analytical Services, LLC						Laboratory II	D: VK21023-0	001	
Description: 178-0						Matrix	k: Aqueous		
Date Sampled:11/19/2020 1340	Project Na	me: I	LACROSSE WELL 2	23 & 24					
Date Received: 11/21/2020	, piect Num	her 4	40218781						
	Jeer Num		10210701						
RunPrep MethodAnalytical MethodD1SOP SPEPFAS by ID SOP	ilution 1	Anal 12/10	lysis Date Analyst )/2020 2116 MMM	Prep 12/09/2	Date 2020 11	Batch 12 75955			
Parameter	C Numi	AS ber	Analytical Method	Result	Q	LOQ	DL	Units	Run
9-chlorohexadecafluoro-3-oxanone-1-sulfonic acid (9CI-PF3ONS)	756426-5	58-1	PFAS by ID SOP	ND		7.2	1.8	ng/L	1
11-chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11CI-PF3)	763051-9	92-9	PFAS by ID SOP	ND		7.2	1.8	ng/L	1
1H, 1H, 2H, 2H-perfluorodecane sulfonic acid (8:2 FTS)	39108-3	34-4	PFAS by ID SOP	ND		7.2	1.8	ng/L	1
1H, 1H, 2H, 2H-perfluorooctane sulfonic acid (6:2 FTS)	27619-9	97-2	PFAS by ID SOP	17		7.2	1.8	ng/L	1
1H,1H,2H,2H-perfluorododecane sulfonic acid (10:2 FTS)	120226-6	50-0	PFAS by ID SOP	ND		7.2	1.8	ng/L	1
1H,1H,2H,2H-perfluorohexane sulfonic acid (4:2 FTS)	757124-7	72-4	PFAS by ID SOP	ND		7.2	1.8	ng/L	1
Hexafluoropropylene oxide dimer acid (GenX)	13252-7	13-6	PFAS by ID SOP	ND		7.2	1.8	ng/L	1
4,8-dioxa-3H-perfluorononanoic acid (ADONA)	919005-1	14-4	PFAS by ID SOP	ND		7.2	1.8	ng/L	1
N-ethylperfluoro-1-octanesulfonamide (EtFOSA)	4151-5	50-2	PFAS by ID SOP	ND		7.2	1.8	ng/L	1
N-ethylperfluoro-1-octanesulfonamidoacetic acid (EtFOSAA)	2991-5	6-0	PFAS by ID SOP	ND		7.2	1.8	ng/L	1
2-N-ethylperfluoro-1-octanesulfonamido-ethanol (EtFOSE)	1691-9	9-2	PFAS by ID SOP	ND		7.2	1.8	ng/L	1
N-methylperfluoro-1-octanesulfonamide (MeFOSA)	31506-3	32-8	PFAS by ID SOP	ND		14	3.6	ng/L	1
N-methylperfluoro-1-octanesulfonamidoacetic acid (MeFOSAA)	2355-3	81-9	PFAS by ID SOP	ND		7.2	1.8	ng/L	1
2-N-methylperfluoro-1-octanesulfonamido-ethanol (MeFOSE)	24448-0	)9-7	PFAS by ID SOP	ND		7.2	1.8	ng/L	1
Perfluoro-1-butanesulfonic acid (PFBS)	375-7	3-5	PFAS by ID SOP	4.8		3.6	0.90	ng/L	1
Perfluoro-1-decanesulfonic acid (PFDS)	335-7	7-3	PFAS by ID SOP	ND		3.6	0.90	ng/L	1
Perfluoro-1-heptanesulfonic acid (PFHpS)	375-9	2-8	PFAS by ID SOP	ND		3.6	0.90	ng/L	1
Perfluoro-1-nonanesulfonic acid (PFNS)	68259-1	12-1	PFAS by ID SOP	ND		3.6	0.90	ng/L	1
Perfluoro-1-octanesulfonamide (PFOSA)	754-9	91-6	PFAS by ID SOP	ND		3.6	0.90	ng/L	1
Perfluoro-1-pentanesulfonic acid (PFPeS)	2706-9	91-4	PFAS by ID SOP	3.8		3.6	0.90	ng/L	1
Perfluorododecanesulfonic acid (PFDOS)	79780-3	39-5	PFAS by ID SOP	ND		7.2	1.8	ng/L	1
Perfluorohexanesulfonic acid (PFHxS)	355-4	6-4	PFAS by ID SOP	7.9		3.6	0.90	ng/L	1
Perfluoro-n-butanoic acid (PFBA)	375-2	2-4	PFAS by ID SOP	150		3.6	0.90	ng/L	1
Perfluoro-n-decanoic acid (PFDA)	335-7	6-2	PFAS by ID SOP	ND		3.6	0.90	ng/L	1
Perfluoro-n-dodecanoic acid (PFDoA)	307-5	5-1	PFAS by ID SOP	ND		3.6	0.90	ng/L	1
Perfluoro-n-heptanoic acid (PFHpA)	375-8	85-9	PFAS by ID SOP	ND		3.6	0.90	ng/L	1
Perfluoro-n-hexadecanoic acid (PFHxDA)	67905-1	19-5	PFAS by ID SOP	ND		7.2	1.8	ng/L	1
Perfluoro-n-hexanoic acid (PFHxA)	307-2	24-4	PFAS by ID SOP	1.9	J	3.6	0.90	ng/L	1
Perfluoro-n-nonanoic acid (PFNA)	375-9	95-1	PFAS by ID SOP	ND		3.6	0.90	ng/L	1
Perfluoro-n-octadecanoic acid (PFODA)	16517-1	11-6	PFAS by ID SOP	ND		7.2	1.8	ng/L	1
Perfluoro-n-octanoic acid (PFOA)	335-6	57-1	PFAS by ID SOP	19		3.6	0.90	ng/L	1
Perfluoro-n-pentanoic acid (PFPeA)	2706-9	90-3	PFAS by ID SOP	7.8		3.6	0.90	ng/L	1
Perfluoro-n-tetradecanoic acid (PFTeDA)	376-0	)6-7	PFAS by ID SOP	ND		3.6	0.90	ng/L	1
Perfluoro-n-tridecanoic acid (PFTrDA)	72629-9	94-8	PFAS by ID SOP	ND		3.6	0.90	ng/L	1
Perfluoro-n-undecanoic acid (PFUdA)	2058-9	94-8	PFAS by ID SOP	ND		3.6	0.90	ng/L	1
Perfluorooctanesulfonic acid (PFOS)	1763-2	23-1	PFAS by ID SOP	6.5		3.6	0.90	ng/L	1
Surrogate Q % Rev	un 1 A covery	ccep Lin	otance nits						
13C2_4:2FTS	102	25-	150						
13C2_6:2FTS	101	25-	150						
13C2_8:2FTS	104	25-	150						
13C2_PFDoA	91	25-	150						
13C2_PFHxDA	92	25-	150						
13C2_PFTeDA	90	25-	150						
LOQ = Limit of QuantitationB = Detected in the method blankND = Not detected at or above the DLN = Recovery is out of criteriaH = Out of holding timeW = Reported on wet weight basis	E = Quantit P = The RP	ation c PD betv	of compound exceeded the c ween two GC columns excee	calibration i eds 40%	ange Dl J :	<ul> <li>= Detection Lin</li> <li>= Estimated result</li> </ul>	nit It < LOQ and ≥ D	L	

Pace Analytical Services, LLC (formerly Shealy Environmental Services, Inc.) 106 Vantage Point Drive West Columbia, SC 29172 (803) 791-9700 Fax (803) 791-9111 www.pacelabs.com

# PFAS by LC/MS/MS

Client: Pace Analytical Services, LLC		Laboratory ID: VK21023-001
Description: 178-0		Matrix: Aqueous
Date Sampled:11/19/2020 1340	Project Name: LACROSSE WELL 23 & 24	
Date Received: 11/21/2020	Project Number: 40218781	

Surrogate	Run 1 Ac	ceptance Limits
13C3_PFBS	99	25-150
13C3_PFHxS	102	25-150
13C3-HFPO-DA	107	25-150
13C4_PFBA	105	25-150
13C4_PFHpA	105	25-150
13C5_PFHxA	101	25-150
13C5_PFPeA	102	25-150
13C6_PFDA	101	25-150
13C7_PFUdA	96	25-150
13C8_PFOA	103	25-150
13C8_PFOS	94	25-150
13C8_PFOSA	109	10-150
13C9_PFNA	101	25-150
d-EtFOSA	72	10-150
d5-EtFOSAA	99	25-150
d9-EtFOSE	83	10-150
d-MeFOSA	93	10-150
d3-MeFOSAA	101	25-150
d7-MeFOSE	92	10-150

LOQ = Limit of Quantitation	B = Detected in the method blank	E = Quantitation of compound exceeded the calibration range	DL = Detection Limit
ND = Not detected at or above the DL	N = Recovery is out of criteria	P = The RPD between two GC columns exceeds 40%	J = Estimated result < LOQ and $\ge$ DL
H = Out of holding time	W = Reported on wet weight basis		

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#### ANALYTICAL RESULTS

#### Project: LACROSSE WELL 23 & 24

Pace Project No.: 40218781

Sample: 178-0	Lab ID:	40218781001	Collecte	d: 11/19/20	) 13:40	Received: 11/	20/20 09:15 Ma	atrix: Water	
Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
537.1 PFAS Compounds, Water	Analytical Pace Ana	Method: EPA 5	37.1 Prepa	aration Meth Beach	iod: EP	PA 537.1			
11CI-PE3OUdS	<0.0015	ug/l	0.0018	0.0015	1	11/28/20 16:15	12/05/20 04:34	763051-92-9	
9CI-PE3ONS	<0.0010	ug/L	0.0018	0.0010	1	11/28/20 16:15	12/05/20 04:34	756426-58-1	
ADONA	<0.00067	ua/L	0.0018	0.00067	1	11/28/20 16:15	12/05/20 04:34	919005-14-4	
HFPO-DA	<0.0015	ug/L	0.0018	0.0015	1	11/28/20 16:15	12/05/20 04:34	13252-13-6	
NEtFOSAA	<0.00086	ug/L	0.0018	0.00086	1	11/28/20 16:15	12/05/20 04:34	2991-50-6	
NMeFOSAA	<0.0014	ug/L	0.0018	0.0014	1	11/28/20 16:15	12/05/20 04:34	2355-31-9	
Perfluorobutanesulfonic acid	0.0033	ug/L	0.0018	0.00061	1	11/28/20 16:15	12/05/20 04:34	375-73-5	
Perfluorodecanoic acid	<0.0018	ug/L	0.0018	0.0018	1	11/28/20 16:15	12/05/20 04:34	335-76-2	
Perfluorohexanoic acid	0.0018	ug/L	0.0018	0.0012	1	11/28/20 16:15	12/05/20 04:34	307-24-4	
Perfluorododecanoic acid	<0.0013	ug/L	0.0018	0.0013	1	11/28/20 16:15	12/05/20 04:34	307-55-1	
Perfluoroheptanoic acid	<0.00093	ug/L	0.0018	0.00093	1	11/28/20 16:15	12/05/20 04:34	375-85-9	
Perfluorohexanesulfonic acid	0.0054	ug/L	0.0018	0.00068	1	11/28/20 16:15	12/05/20 04:34	355-46-4	
Perfluorononanoic acid	<0.0018	ug/L	0.0018	0.0018	1	11/28/20 16:15	12/05/20 04:34	375-95-1	
Perfluorooctanesulfonic acid	0.0046	ug/L	0.0018	0.0011	1	11/28/20 16:15	12/05/20 04:34	1763-23-1	
Perfluorooctanoic acid	0.013	ug/L	0.0018	0.00081	1	11/28/20 16:15	12/05/20 04:34	335-67-1	
Perfluorotetradecanoic acid	<0.0017	ug/L	0.0018	0.0017	1	11/28/20 16:15	12/05/20 04:34	376-06-7	
Perfluorotridecanoic acid	<0.0016	ug/L	0.0018	0.0016	1	11/28/20 16:15	12/05/20 04:34	72629-94-8	
Perfluoroundecanoic acid	<0.0018	ug/L	0.0018	0.0018	1	11/28/20 16:15	12/05/20 04:34	2058-94-8	
Surrogates									
13C2-PFDA (S)	130	%	70-130		1	11/28/20 16:15	12/05/20 04:34		
13C2-PFHxA (S)	130	%	70-130		1	11/28/20 16:15	12/05/20 04:34		
NEtFOSAA-d5 (S)	114	%	70-130		1	11/28/20 16:15	12/05/20 04:34		
HFPO-DAS (S)	92	%	70-130		1	11/28/20 16:15	12/05/20 04:34		

#### **REPORT OF LABORATORY ANALYSIS**

# BOTTLED WATER ACKNOWLEDGEMENT

2560 2nd Avenue East, La Crosse, WI 54603

If you desire to accept the bottled water delivery, please complete and sign this form and return it to The OS Group at <u>PFAS@TheOSqrp.com</u> or mail to 444 21<sup>st</sup> St. S, La Crosse, WI 54601. You may also complete this form electronically on line at <u>www.cityoflacrosse.org/bottledwater</u>. Call 608-668-2718 with any question you may have.

As pre-caution for the protection of human health, the City of La Crosse (The City) will provide, on a temporary basis, bottled water for drinking, cooking and toothbrushing purposes at the above referenced address. The water will be delivered to your home or business by a commercial water delivery service. At the City's cost, a dispenser / cooler and regular deliveries of 5-gallon containers of water will be provided. The City reserves the right to dictate the conditions of delivery, such as minimum and maximum number of containers per delivery, frequency and timing of deliveries. The City reserves the right to periodically review whether The City should continue to provide bottled water, considering factors such as State and Federal standards and guidance, evolving knowledge and understanding of the sources, cause and responsibility for the contamination, new or reinterpreted test results, and the availability of more permanent or cost-effective sources of water for the above purposes. The City of La Crosse makes no warranty or representation regarding the suitability of the bottled water beyond those made by the commercial water delivery service.

All reusable or returnable equipment and supplies, such as the containers and cooler/dispenser, are the property of the commercial water delivery service or the City of La Crosse. By signing below, the Occupant of the above referenced property acknowledges that all reusable or returnable equipment and supplies shall be returned to the commercial water delivery service or the City of La Crosse upon request. The Occupant agrees to provide reasonable access for delivery of bottled water and pick up of reusable or returnable equipment(s) acknowledges that they may be required to sign an agreement with the commercial water delivery service as a condition of receiving bottled water.

**Check ownership:** 

Owner-Occupant	
Occupant Only	
Number of Occupants:	-
Signed:	_ Dated:
Printed Name:	
Phone Number: ()	



444 21<sup>st</sup> Street South  $\cdot$  La Crosse, Wisconsin  $\cdot$  54601

December 4, 2020

# 3053 Lakota Place LA Crosse, WI 54601

Subject: Private Well Sampling Results 1820 Bainbridge St., La Crosse, WI 54603 Tax parcel # 4-623-0 Sample ID # 623-0

:

Dear

We have received and reviewed the test results for the sample collected on November 19, 2020 at the above address. Some PFAS compounds were found, but the levels found were **below** the Department of Health Services (DHS) levels recommended for protecting health. These levels are called the "Recommended Public Health Standard" in the table below. The levels found in *your* well are called the "Sample Result" in the table below. The detections in your well were very low.

### Sample Results

Compound	Sample Result (unit)	Recommended Public Health Standard (unit <sup>e</sup> )				
N-Ethyl Perfluorooctane sulfonamide (NEtFOSA) CAS # 4151-50-2	Not Detected	20 ppt <sup>a,b</sup>	ppt nds 6			
N-Ethyl perfluorooctane sulfonamidoacetic acid (NEtFOSAA) CAS # 2991-50-6	Not Detected	20 ppt <sup>a,b</sup>	nit is 20 compou <i>tal</i> of all			
N-Ethyl perfluorooctane sulfonamidoethanol (NEtFOSE) CAS # 1691-99-2	Not Detected	20 ppt <sup>a,b</sup>	ded lin Iese 6 Ied tot			
Perfluorooctane sulfonamide (FOSA) CAS # 754-91-6	Not Detected	20 ppt <sup>a,b</sup>	nmen e of th combir			
Perfluorooctanoic acid (PFOA) CAS # 335-67-1	Not Detected	20 ppt <sup>a,b</sup>	e recor any <i>on</i> r the <i>c</i>			
Perfluorooctanesulfonic acid (PFOS) CAS # 1763-23-1	Not Detected	20 ppt <sup>a,b</sup>	The for a			

Private Well Sampling Results for 1820 Bainbridge St., La Crosse, WI 54603 Tax parcel # 4-623-0 Sample ID # 623-0 December 4, 2020

Compound	Sample Result (unit)	Recommended Public Health Standard (unit <sup>e</sup> )
Hexafluoropropylene oxide dimer acid (HPFO-DA; GenX) CAS # 13252-13-6	Not Detected	300 ppt <sup>a</sup>
Perfluorobutanesulfonic acid (PFBS) CAS # 375-73-5	Not Detected	450,000 ppt <sup>a</sup>
Perfluorohexanesulfonic acid (PFHxS) CAS # 355-46-4	1.5 ppt	40 ppt <sup>a</sup>
Perfluorobutanoic acid (PFBA) CAS # 375-22-4	1.8 ppt	10,000 ppt <sup>a</sup>
Perfluorodecanoic acid (PFDA) CAS # 335-76-2	Not Detected	300 ppt <sup>a</sup>
Perfluorododecanoic acid (PFDoA) CAS # 307-55-1	Not Detected	500 ppt <sup>a</sup>
Perfluorohexanoic acid (PFHxA) CAS # 307-24-4	Not Detected	150,000 ppt <sup>a</sup>
Perfluorononanoic acid (PFNA) CAS # 375-95-1	Not Detected	30 ppt <sup>a</sup>
Perfluorotetradecanoic acid (PFTeA) CAS # 376-06-7	Not Detected	10,000 ppt <sup>a</sup>
Perfluoroundecanoic acid (PFUnA) CAS # 2058-94-8	Not Detected	3,000 ppt <sup>a</sup>
4,8-Dioxa-3H-perfluorononanoic acid (DONA) CAS # 919005-14-4	Not Detected	3,000 ppt <sup>a</sup>
Perfluorooctadecanoic acid (PFODA) CAS # 16517-11-6	Not Detected	400,000 ppt <sup>a</sup>

<sup>a</sup> Public health enforcement standard (ES) recommended by DHS.

<sup>b</sup> DHS recommends a combined enforcement standard of 20 ng/L and combined preventive action limit of 2 ng/L for FOSA, NEt-FOSE, NEt-FOSA, NetFOSAA, PFOS, and PFOA.

A current standard is not available; the compound is currently under review by DHS for potential public health standard recommendation.

<sup>d</sup> Public health enforcement standard (ES) in NR 140, Wisconsin Administrative Code.

Units: Parts per trillion (ppt) = nanograms of substance per liter of water (ng/L)

<sup>BL</sup> Detected in the method blank. Possible lab contaminant.

Private Well Sampling Results for 1820 Bainbridge St., La Crosse, WI 54603 Tax parcel # 4-623-0 Sample ID # 623-0 December 4, 2020

As required by law, we will be submitting these results to the Department of Natural Resources (DNR). The DNR may consult with the Department of Health Services (DHS) about these test results. DHS may review all PFAS tests and follow-up with you directly if any actions are recommended to protect your health.

Thank you for your patience and assistance with our investigation. We will provide updates on the project at <u>https://www.cityoflacrosse.org/wells</u> as our work continues. If you have any questions, please call me or email.

You can also contact the DNR and DHS with questions about PFAS or the water sample results at the numbers provided below.

Questions about	•••	<u>Contact</u>	<u>Phone</u>	E-mail Address
Soil & Groundwate Testing, Clean Up	<sup>er</sup> DNR	David Rozeboom	715-215-2078	David.Rozeboom@wisconsin.gov
Drinking Water or Private wells	DNR	Kyle Burton	920-360-2112	kyle.burton@wisconsin.gov
Health Concerns	DHS	Curtis Hedman	608-266-6677	Curtis.Hedman@dhs.wisconsin.gov

The OS Group, LLC

John C. Here

John C. Storlie, PG Principal Hydrogeologist

John.storlie@theosgrp.com Direct: 608-433-9389

Attachment: Lab report for your well



Pace Analytical Services, LLC 1241 Bellevue Street - Suite 9 Green Bay, WI 54302 (920)469-2436

December 04, 2020

Steve Osesek The OS Group, LLC N6746 McCurdy Road Holmen, WI 54636

RE: Project: LACROSSE WELL 23 & 24 Pace Project No.: 40218779

Dear Steve Osesek:

Enclosed are the analytical results for sample(s) received by the laboratory on November 20, 2020. The results relate only to the samples included in this report. Results reported herein conform to the applicable TNI/NELAC Standards and the laboratory's Quality Manual, where applicable, unless otherwise noted in the body of the report.

The test results provided in this final report were generated by each of the following laboratories within the Pace Network:

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Chuskpher Hyska

Christopher Hyska christopher.hyska@pacelabs.com (920)469-2436 Project Manager

Enclosures

cc: John Storlie, The OS Group, LLC



#### **REPORT OF LABORATORY ANALYSIS**



#### SAMPLE SUMMARY

Project: LACROSSE WELL 23 & 24

Pace Project No.: 40218779

Lab ID	Sample ID	Matrix	Date Collected	Date Received
40218779001	623-0	Water	11/19/20 13:20	11/20/20 09:15

#### **REPORT OF LABORATORY ANALYSIS**

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omnany Name:	The OS Group LLC			$\mathbb{Z}$	1		1 1 -			MN:	612-607-1700	WI: 920-469-2436		1 1-> 0-	
anch/Location:	LaCrosse WI		1	1	Pace	Ana	IYTICa	U					COC No.	4048	119
oject Contact:	Steven Osesek		1			ντινν. μ	READS.CL	47)				Quote #:			
ione:	608-433-9388		1	C	HA	AIN	OF	Cl	JST	<b>OD</b>	1	Mail To Contact:	Steven Os	esek	
oject Number:			A=Nor	ne B=l	HCI C	=H2SO4	*Preservat	Ion Code:	l Ater F=N	etbanol G	= NaOH	Mail To Company:	The OS Gr	oup LLC	
oject Name:	La rosse Wall 234	24	H=So	dium Bisul	fate Solul	ion	I=Sodium	Thiosulfat	e J=Ot	10r		Mail To Address:	444 21st S	tS	
oject State:	WI		FILTER	RED?	Y/N	IN						1	LaCrosse,	WI 54601	
mpled By (Print)	Kichie 1 Traced		PRESER	VATION	Pick	A						Invoice To Contact:	Steven Os	esek	
mpled By (Sign)	PUISHE CILLES			· <b>E</b> ) <sup>-</sup>	Letter							Invoice To Company:	The OS Gr	oup LLC	
#:	Reg	gulatory			sted	2						Invoice To Address:			
ata Package O	ptions MS/MSD	ogram:   Matrix	Codes = Water		Reque	5						invoice to Address.	444 21st S LaCrosse,	t S . WI 54601	
EPA Leve	el III (billable) C = Cr	iota DW harcoal GW	V = Drinking V = Ground	g Water I Water	ses	<u></u>						Invoice To Phone:	608-433-93	388	
EPA Leve	el IV NOT needed on S = So your sample SI = SI	oli SW Iudae WP	V = Surface V = Waste P = Wine	Water Water	Jaly	1£						CLIENT	LAB C	OMMENTS	Profile #
CE LAB #	CLIENT FIELD ID	COLLECTI		MATRIX	Ā	一						COMMENTS	(Lab l	Jse Only)	
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ransmit Prelim Ru uil #1:	sh Results by (complète what you want):	Relinquish	1012 ned By:	25	xpry	35	N-20 Date/	Time:	MB_	Receive	d By:	HOW MUL (MH) Date/Time:	-100415	Receipt Temp = K	OT "
ail #2:														Sample Rec	eipt pH
ephone:		Relinquish	ned By:				Date/	Time:		Receive	d By:	Date/Time:		OK / Adj	usted
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					Gifdle		ve Dec	en chi	Lab	Lot# c	oted b of pH p	aper:			<b>7</b>	Lat	Std #	ID of	prese	rvatior	n (if pl	H adju	sted):					compl	eted:		Time:	
	ſ		Gla	ISS						Plast	ic.				Via	als				Ja	ars	]	Ge	enera		s (>6mm) *	1 ≤2	i Act pH ≥9	≥12	ß	djusted	Volum
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F-GB-C-046-Rev.03 (11Feb2020) Sample Preservation Receipt Form

Sample Condition Upon Receipt Form (SCUR)         Project #         Client I Pace Other:         Client I Pace Other:         Tracking #: 39.9 UT3U T03U         Guide I Pace Other:         Client I Pace Other:         Client I Pace Other:         Tracking #: 39.9 UT3U T03U         Guided Seresent: I yes Eno         Seals intact: I yes I no         Custody Seal on Cooler/Box Present: I yes Eno         Cooler Temperature         Imor: Intell for Corr.         Temperature Inter: Intell for Corr.         Biological Tissue is Frozen: I yes I no         Date: II 201-20 ynittals: I         Cable do by Friede Out:         Temp should be above freezing to 6°C.         Biological Tissue is Frozen: I yes I no         Date: II 201-20 ynittals: I         Chain of Custody Present: I yes Eno         Biological Tissue is Frozen: I yes I no         Date: II 201-20 ynittals: I         Other:         Seals intact: I yes I no         Date: II 201: Da	Pace Analytical <sup>®</sup> 1241 Bellevue Street, Green Bay, WI 54302	Samp	ole Co NV-F	Docun ndition Docu RM-G	nent Name: n Upon Receipt (SCU Iment No.: BAY-0014-Rev.00	R) Docume Pace Gr	nt Revised: 26Mar2020 Author: een Bay Quality Office
Courier:       Cleart       Pace other:       Pace other:       Pace other:         Created Seal on Cooler/Box Present:       Pyes Seno       Seals intact:       Pyes I no         Custody Seal on Cooler/Box Present:       Pyes Seno       Seals intact:       Pyes I no         Packing Material:       Bubble Wrap I Bubble Bags.       None       Other         Thermometer Used       SR - M/A       Type of Ice:       Bub Dry None       Description         Cooler Temperature       Incorr.       Macor       Biological Tissue is Frozen:       Pyes I no         Date:       II-2#-2 vinitials:       Macor       Macor       Macor         Chain of Custody Relinguished:       Mres       No       Iwa       I         Chain of Custody Relinguished:       Mres       No       Dwa       I         Chain of Custody Relinguished:       Mres       No       Dwa       Imace         Samples Arrived within Hold Time:       Mres       No       Date/Time:       Macor         Shot Hold Time Ranguested:       Mres       No       Date/Time:       Macor         Sufficient Volume:       For Analysis (<72n):       Tres       No       Date/Time:         Sufficient Volume:       For Analysis: Mres       No       No <t< th=""><th>Sample Co Client Name: <u>THE CS Graup (</u></th><th>ondi</th><th>tion</th><th>Upoi</th><th>n Receipt Form Project #:</th><th>(SCUR)</th><th>40218779</th></t<>	Sample Co Client Name: <u>THE CS Graup (</u>	ondi	tion	Upoi	n Receipt Form Project #:	(SCUR)	40218779
Color of Unitability Search of Color Process Present:	Client Pace Other:		UPS	Г W		40218779	
Cooler Temperature       Uncorr:       http://corr.       Person examining content         Temp Blank Present:       [] yes       [Person examining content       Date:       III:         Temp Blank Present:       [] yes       [Person examining content       Date:       III:         Temp Blank Present:       [] Yes       [Person examining content       Date:       III:         Chain of Custody Present:       [] Yes       [] Yes       [] Yes       [] Yes       [] Yes         Chain of Custody Filled Out:       [] Yes         Chain of Custody Relinquished:       [] Yes       [] Yes       [] No       [] No       [] No       [] No       [] Yes	Custody Seal on Cooler/Box Present: L yes March Custody Seal on Samples Present: D yes March Packing Material: D Bubble Wrap D Bubble Thermometer Used <u>SR - ハ/ム</u>	ono e Bag Type (	Seals Seals Is D of Ice	s intact: intact: None Wet	l yes I no yes I no Other Blue Dry None	Samples o	n ice, cooling process has begun
Chain of Custody Present:       No       No       No       No       No       No       No       I.         Chain of Custody Filled Out:       Image: Stress in the ima	Cooler Temperature       Uncorr:       IDE       /Corr:         Temp Blank Present:       □ yes       Image: Present PresentPresent Pre	Ice.	Biolo	_ ogical T	īssue is Frozen: 🗔	yes <b>[</b> ⊂ no	Person examining contents: Date: 11-31-32/Initials: MLK Labeled By Initials: ML
Chain of Custody Filled Out:       Urs       Urs <thurs< th="">       Urs       Urs</thurs<>	Chain of Custody Present:	Yes	□No	□n/A	1.		
Chain of Custody Relinquished: Bres   Sampler Name & Signature on COC: Fres   Samples Arrived within Hold Time: Fres   Or VOA Samples frozen upon receipt Fres   Image: Short Hold Time Analysis (<72hr):	Chain of Custody Filled Out:	□Yes	<b>M</b> No		2.04#,0101.1	<b>2</b>	MIRILANA
Sampler Name & Signature on COC:       Yes       INo       IN/A       4.         Samples Arrived within Hold Time:       Yes       INo       5.         - VOA Samples frozen upon receipt       IYes       INo       Date/Time:         Short Hold Time Analysis (<72hr):	Chain of Custody Relinquished:	<b>B</b> res	□No		3.		<u> </u>
Samples Arrived within Hold Time:       Image: Samples frozen upon receipt       Image: Sample for frozen upon receipt       Image: Sample for Image	Sampler Name & Signature on COC:	Yes	□No		4		
- VOA Samples frozen upon receipt       Image: Short Hold Time Analysis (<72hr):	Samples Arrived within Hold Time:	Vies	□No		5.		
Short Hold Time Analysis (<72hr):	- VOA Samples frozen upon receipt	☐Yes	□No		Date/Time:		
Rush Turn Around Time Requested:       Image: System       Image: Tree System       Tree System <td>Short Hold Time Analysis (&lt;72hr):</td> <td>□Yes</td> <td>DIRO</td> <td></td> <td>6.</td> <td></td> <td></td>	Short Hold Time Analysis (<72hr):	□Yes	DIRO		6.		
Sufficient Volume:   For Analysis:   For Analysis:   Pace Containers Used:   Pace Containers Used:   Pace IR Containers Used:   Pres   No   Ittered volume received for Dissolved tests   Pres   No   Sample Labels match COC:   Pres   Includes date/time/ID/Analysis   Matrix:   Pres   No   Pres   No   Pres   No   No <tr< td=""><td>Rush Turn Around Time Requested:</td><td>Yes</td><td>□No</td><td></td><td>7. Qish DE-PN</td><td>N</td><td>11 8 11-20-5</td></tr<>	Rush Turn Around Time Requested:	Yes	□No		7. Qish DE-PN	N	11 8 11-20-5
Correct Containers Used: Yes No 9.   -Pace Containers Used: Yes No NA   -Pace IR Containers Used: Yes No MA   Containers Intact: Yes No 10.   Filtered volume received for Dissolved tests Yes No NA   Sample Labels match COC: Yes No NA   -Includes date/time/ID/Analysis Matrix: No NA   Frip Blank Present: Yes No YA   Pace Trip Blank Lust # (if purchased): Yes No	Sufficient Volume: For Analysis: ❤️res □No MS/MSD:	□Yes	15HO	⊡n/A	8.		
-Pace Containers Used: Image: Spinologic Inv/A   -Pace IR Containers Used: Image: Spinologic Inv/A   Containers Intact: Image: Spinologic Inv/A   Containers Intact: Image: Spinologic Inv/A   Filtered volume received for Dissolved tests Image: Spinologic Inv/A   Sample Labels match COC: Image: Spinologic Inv/A   -Includes date/time/ID/Analysis Matrix:   Image: Involution Inv/A Image: Spinologic Inv/A   Frip Blank Present: Image: Image: Spinologic Inv/A   Image: Involution Inv/A Image: Spinologic Inv/A   Prip Blank Custody Seals Present Image: Spinologic Inv/A   Prip Blank Lot # (if purchased): Image: Spinologic Inv/A	Correct Containers Used:	∭a Yes	□No		9.		
-Pace IR Containers Used:       Image: Containers Intact:       Image:	-Pace Containers Used:	□Yes	50No				
Containers Intact: Dres INo 10.     Filtered volume received for Dissolved tests IYes No DN/A     Sample Labels match COC: Dres INo IN/A     -Includes date/time/ID/Analysis Matrix: INO     Trip Blank Present: IYes INo     Includes Custody Seals Present IYes     Includes Lot # (if purchased):	-Pace IR Containers Used:	□Yes	□No				
Filtered volume received for Dissolved tests       Image: Second se	Containers Intact:	<b>S</b> ares	□No		10.		an an an an Anna an Anna an Anna an Anna an Anna. Anna an Anna a Anna an Anna an
Sample Labels match COC:     Yes     No     N/A     12.       -Includes date/time/ID/Analysis     Matrix:     Yes     No     Yes       Trip Blank Present:     Yes     No     Yes     13.       Trip Blank Custody Seals Present     Yes     No     Yes       Pace Trip Blank Lot # (if purchased):     Yes     No     Yes	iltered volume received for Dissolved tests	□Yes	□No	Sa/A	11.		
Trip Blank Present:     Imo     Imo <td>Sample Labels match COC: -Includes date/time/ID/Analysis Matrix:</td> <td>y aves</td> <td>⊡No</td> <td>⊡n/a</td> <td>12.</td> <td></td> <td></td>	Sample Labels match COC: -Includes date/time/ID/Analysis Matrix:	y aves	⊡No	⊡n/a	12.		
Frip Blank Custody Seals Present □Yes □No yr/A Pace Trip Blank Lot # (if purchased):	Trip Blank Present:	□Yes	□No		13.		
Pace Trip Blank Lot # (if purchased)	Frip Blank Custody Seals Present	□Yes	□No	SHI/A			
Client Notification/ Resolution: If checked, see attached form for additional comments Person Contacted: Date/Time: Comments/ Resolution:	Pace Trip Blank Lot # (if purchased): Client Notification/ Resolution: Person Contacted: Comments/ Resolution:			_Date/	lf che Fime:	cked, see attac	hed form for additional comments

PM Review is documented electronically in LIMs. By releasing the project, the PM acknowledges they have reviewed the sample logir

Page\_Page 5222



# **Report of Analysis**

# Pace Analytical Services, LLC

1241 Bellevue Street Suite 9 Green Bay, WI 54302 Attention: Christopher Hyska

Project Name: LACROSSE WELL 23 & 24 Project Number: 40218779 Lot Number:**VK21022** Date Completed:12/04/2020

Kau Coman

12/04/2020 1:41 PM Approved and released by: Project Manager II: **Karen L. Coonan** 





The electronic signature above is the equivalent of a handwritten signature. This report shall not be reproduced, except in its entirety, without the written approval of Pace Analytical Services, LLC.

Pace Analytical Services, LLC (*formerly Shealy Environmental Services, Inc.*) 106 Vantage Point Drive West Columbia, SC 29172 Tel: 803-791-9700 Fax: 803-791-9111 www.pacelabs.com

#### Case Narrative Pace Analytical Services, LLC Lot Number: VK21022

This Report of Analysis contains the analytical result(s) for the sample(s) listed on the Sample Summary following this Case Narrative. The sample receiving date is documented in the header information associated with each sample.

All results listed in this report relate only to the samples that are contained within this report.

Sample receipt, sample analysis, and data review have been performed in accordance with the most current approved The NELAC Institute (TNI) standards, the Pace Analytical Services, LLC ("Pace") Laboratory Quality Manual, standard operating procedures (SOPs), and Pace policies. Any exceptions to the TNI standards, the Laboratory Quality Manual, SOPs or policies are qualified on the results page or discussed below.

If you have any questions regarding this report please contact the Pace Project Manager listed on the cover page.

# Sample Summary Pace Analytical Services, LLC Lot Number: VK21022 Project Name: LACROSSE WELL 23 & 24 Project Number: 40218779

Sample Number	Sample ID	Matrix	Date Sampled	Date Received
001	623-0	Aqueous	11/19/2020 1320	11/21/2020
(1 sample)				

# Detection Summary Pace Analytical Services, LLC Lot Number: VK21022 Project Name: LACROSSE WELL 23 & 24 Project Number: 40218779

Sampl	e Sample ID	Matrix	Parameter	Method	Result	Q	Units	Page
001	623-0	Aqueous	PFHxS	PFAS by ID	1.5	J	ng/L	5
001	623-0	Aqueous	PFBA	PFAS by ID	1.8	J	ng/L	5

(2 detections)

# PFAS by LC/MS/MS

Client: Pace Analytical Services, LLC				Laboratory I	D: VK21022-0	001	
Description: 623-0				Matrix	: Aqueous		
Date Sampled:11/19/2020 1320	Project Nam	ne: LACROSSE WELL 2	23 & 24				
Date Received: 11/21/2020	, piect Numb	er <sup>.</sup> 40218779					
RunPrep MethodAnalytical MethodD1SOP SPEPFAS by ID SOP	ilution A 1 12	nalysis Date Analyst 2/03/2020 0143 MMM	Prep Dat 12/01/2020	e Batch 1245 75114			
Parameter	CA Numbe	S Analytical er Method	Result Q	LOQ	DL	Units	Run
9-chlorohexadecafluoro-3-oxanone-1-sulfonic acid (9CI-PF3ONS)	756426-58	-1 PFAS by ID SOP	ND	7.0	1.7	ng/L	1
11-chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11CI-PF3)	763051-92	-9 PFAS by ID SOP	ND	7.0	1.7	ng/L	1
1H, 1H, 2H, 2H-perfluorodecane sulfonic acid (8:2 FTS)	39108-34	-4 PFAS by ID SOP	ND	7.0	1.7	ng/L	1
1H, 1H, 2H, 2H-perfluorooctane sulfonic acid (6:2 FTS)	27619-97	-2 PFAS by ID SOP	ND	7.0	1.7	ng/L	1
1H,1H,2H,2H-perfluorododecane sulfonic acid (10:2 FTS)	120226-60	0-0 PFAS by ID SOP	ND	7.0	1.7	ng/L	1
1H,1H,2H,2H-perfluorohexane sulfonic acid (4:2 FTS)	757124-72	P-4 PFAS by ID SOP	ND	7.0	1.7	ng/L	1
Hexafluoropropylene oxide dimer acid (GenX)	13252-13	-6 PFAS by ID SOP	ND	7.0	1.7	ng/L	1
4,8-dioxa-3H-perfluorononanoic acid (ADONA)	919005-14	-4 PFAS by ID SOP	ND	7.0	1.7	ng/L	1
N-ethylperfluoro-1-octanesulfonamide (EtFOSA)	4151-50	-2 PFAS by ID SOP	ND	7.0	1.7	ng/L	1
N-ethylperfluoro-1-octanesulfonamidoacetic acid (EtFOSAA)	2991-50	-6 PFAS by ID SOP	ND	7.0	1.7	ng/L	1
2-N-ethylperfluoro-1-octanesulfonamido-ethanol (EtFOSE)	1691-99	-2 PFAS by ID SOP	ND	7.0	1.7	ng/L	1
N-methylperfluoro-1-octanesulfonamide (MeFOSA)	31506-32	-8 PFAS by ID SOP	ND	14	3.5	ng/L	1
N-methylperfluoro-1-octanesulfonamidoacetic acid (MeFOSAA)	2355-31	-9 PFAS by ID SOP	ND	7.0	1.7	ng/L	1
2-N-methylperfluoro-1-octanesulfonamido-ethanol (MeFOSE)	24448-09	P-7 PFAS by ID SOP	ND	7.0	1.7	ng/L	1
Perfluoro-1-butanesulfonic acid (PFBS)	375-73	-5 PFAS by ID SOP	ND	3.5	0.87	ng/L	1
Perfluoro-1-decanesulfonic acid (PFDS)	335-77	-3 PFAS by ID SOP	ND	3.5	0.87	ng/L	1
Perfluoro-1-heptanesulfonic acid (PFHpS)	375-92	-8 PFAS by ID SOP	ND	3.5	0.87	ng/L	1
Perfluoro-1-nonanesulfonic acid (PFNS)	68259-12	-1 PFAS by ID SOP	ND	3.5	0.87	ng/L	1
Perfluoro-1-octanesulfonamide (PFOSA)	754-91	-6 PFAS by ID SOP	ND	3.5	0.87	ng/L	1
Perfluoro-1-pentanesulfonic acid (PFPeS)	2706-91	-4 PFAS by ID SOP	ND	3.5	0.87	ng/L	1
Perfluorododecanesulfonic acid (PFDOS)	79780-39	P-5 PFAS by ID SOP	ND	7.0	1.7	ng/L	1
Perfluorohexanesulfonic acid (PFHxS)	355-46	-4 PFAS by ID SOP	1.5 J	3.5	0.87	ng/L	1
Perfluoro-n-butanoic acid (PFBA)	375-22	-4 PFAS by ID SOP	1.8 J	3.5	0.87	ng/L	1
Perfluoro-n-decanoic acid (PFDA)	335-76	-2 PFAS by ID SOP	ND	3.5	0.87	ng/L	1
Perfluoro-n-dodecanoic acid (PFDoA)	307-55	-1 PFAS by ID SOP	ND	3.5	0.87	ng/L	1
Perfluoro-n-heptanoic acid (PFHpA)	375-85	-9 PFAS by ID SOP	ND	3.5	0.87	ng/L	1
Perfluoro-n-hexadecanoic acid (PFHxDA)	67905-19	P-5 PFAS by ID SOP	ND	7.0	1.7	ng/L	1
Perfluoro-n-hexanoic acid (PFHxA)	307-24	-4 PFAS by ID SOP	ND	3.5	0.87	ng/L	1
Perfluoro-n-nonanoic acid (PFNA)	375-95	-1 PFAS by ID SOP	ND	3.5	0.87	ng/L	1
Perfluoro-n-octadecanoic acid (PFODA)	16517-11	-6 PFAS by ID SOP	ND	7.0	1.7	ng/L	1
Perfluoro-n-octanoic acid (PEOA)	335-67	-1 PFAS by ID SOP	ND	3.5	0.87	ng/L	1
Perfluoro-n-pentanoic acid (PFPeA)	2706-90	-3 PEAS by ID SOP	ND	3.5	0.87	ng/L	1
Perfluoro-n-tetradecanoic acid (PFTeDA)	3/6-06	-7 PEAS by ID SOP	ND	3.5	0.87	ng/L	1
Perfluoro-n-tridecanoic acid (PFTrDA)	72629-94	-8 PFAS by ID SOP	ND	3.5	0.87	ng/L	1
Perfluoro-n-undecanoic acid (PFUdA)	2058-94	-8 PEAS by ID SOP	ND	3.5	0.87	ng/L	1
Perfluorooctanesulfonic acid (PFOS)	1/63-23	- I PEAS BY ID SOP	ND	3.5	0.87	ng/L	I
Rurrogate Q % Re	un 1 Ac covery	ceptance Limits					
13C2_4:2FTS	148	25-150					
13C2_6:2FTS	136	25-150					
13C2_8:2FTS	121	25-150					
13C2_PFDoA	127	25-150					
13C2_PFHxDA	119	25-150					
13C2_PFTeDA	134	25-150					
LOQ = Limit of Quantitation B = Detected in the method blank ND = Not detected at or above the DI N = Pocovorus is out of criteria	E = Quantitat	ion of compound exceeded the c	calibration range	DL = Detection Lim	ht $  00 and > 1$	ור	
H = Out of holding time W = Reported on wet weight basis	r – He RPD	Serveen two Ge columns exce	CUS 4070	J – ∟stimateu resu	n < ∟00 anu <u>&gt;</u> L		
J							

Pace Analytical Services, LLC (formerly Shealy Environmental Services, Inc.) 106 Vantage Point Drive West Columbia, SC 29172 (803) 791-9700 Fax (803) 791-9111 www.pacelabs.com

# PFAS by LC/MS/MS

Client: Pace Analytical Services, LLC	
Description: 623-0	
Date Sampled:11/19/2020 1320	Project Name: LACROSSE WELL 23
Date Received: 11/21/2020	Project Number: 40218779

Laboratory ID: VK21022-001 Matrix: Aqueous Project Name: LACROSSE WELL 23 & 24 Project Number: 40218779 Run 1 Acceptance % Recovery Limits 127 25-150

Surrogate	Run 1 Q % Recovery	Acceptance ry Limits
13C3_PFBS	127	25-150
13C3_PFHxS	129	25-150
13C3-HFPO-DA	133	25-150
13C4_PFBA	139	25-150
13C4_PFHpA	135	25-150
13C5_PFHxA	132	25-150
13C5_PFPeA	137	25-150
13C6_PFDA	139	25-150
13C7_PFUdA	136	25-150
13C8_PFOA	142	25-150
13C8_PFOS	134	25-150
13C8_PFOSA	138	10-150
13C9_PFNA	139	25-150
d-EtFOSA	120	10-150
d5-EtFOSAA	129	25-150
d9-EtFOSE	113	10-150
d-MeFOSA	111	10-150
d3-MeFOSAA	125	25-150
d7-MeFOSE	117	10-150

LOQ = Limit of Quantitation	B = Detected in the method blank	E = Quantitation of compound exceeded the calibration range	DL = Detection Limit
ND = Not detected at or above the DL	N = Recovery is out of criteria	P = The RPD between two GC columns exceeds 40%	J = Estimated result < LOQ and $\ge$ DL
H = Out of holding time	W = Reported on wet weight basis		

Pace Analytical Services, LLC (formerly Shealy Environmental Services, Inc.) 106 Vantage Point Drive West Columbia, SC 29172 (803) 791-9700 Fax (803) 791-9111 www.pacelabs.com QC Summary

# PFAS by LC/MS/MS - MB

Sample ID: VQ75114-001 Batch: 75114 Analytical Method: PFAS by ID SOP Matrix: Aqueous Prep Method: SOP SPE

Prep Date: 12/01/2020 1245

Parameter	Result	Q	Dil	LOQ	DL	Units	Analysis Date
9CI-PF3ONS	ND		1	8.0	2.0	ng/L	12/02/2020 2045
11CI-PF3OUdS	ND		1	8.0	2.0	ng/L	12/02/2020 2045
8:2 FTS	ND		1	8.0	2.0	ng/L	12/02/2020 2045
6:2 FTS	ND		1	8.0	2.0	ng/L	12/02/2020 2045
10:2 FTS	ND		1	8.0	2.0	ng/L	12/02/2020 2045
4:2 FTS	ND		1	8.0	2.0	ng/L	12/02/2020 2045
GenX	ND		1	8.0	2.0	ng/L	12/02/2020 2045
ADONA	ND		1	8.0	2.0	ng/L	12/02/2020 2045
EtFOSA	ND		1	8.0	2.0	ng/L	12/02/2020 2045
EtFOSAA	ND		1	8.0	2.0	ng/L	12/02/2020 2045
EtFOSE	ND		1	8.0	2.0	ng/L	12/02/2020 2045
MeFOSA	ND		1	16	4.0	ng/L	12/02/2020 2045
MeFOSAA	ND		1	8.0	2.0	ng/L	12/02/2020 2045
MeFOSE	ND		1	8.0	2.0	ng/L	12/02/2020 2045
PFBS	ND		1	4.0	1.0	ng/L	12/02/2020 2045
PFDS	ND		1	4.0	1.0	ng/L	12/02/2020 2045
PFHpS	ND		1	4.0	1.0	ng/L	12/02/2020 2045
PFNS	ND		1	4.0	1.0	ng/L	12/02/2020 2045
PFOSA	ND		1	4.0	1.0	ng/L	12/02/2020 2045
PFPeS	ND		1	4.0	1.0	ng/L	12/02/2020 2045
PFDOS	ND		1	8.0	2.0	ng/L	12/02/2020 2045
PFHxS	ND		1	4.0	1.0	ng/L	12/02/2020 2045
PFBA	ND		1	4.0	1.0	ng/L	12/02/2020 2045
PFDA	ND		1	4.0	1.0	ng/L	12/02/2020 2045
PFDoA	ND		1	4.0	1.0	ng/L	12/02/2020 2045
PFHpA	ND		1	4.0	1.0	ng/L	12/02/2020 2045
PFHxDA	ND		1	8.0	2.0	ng/L	12/02/2020 2045
PFHxA	ND		1	4.0	1.0	ng/L	12/02/2020 2045
PFNA	ND		1	4.0	1.0	ng/L	12/02/2020 2045
PFODA	ND		1	8.0	2.0	ng/L	12/02/2020 2045
PFOA	ND		1	4.0	1.0	ng/L	12/02/2020 2045
PFPeA	ND		1	4.0	1.0	ng/L	12/02/2020 2045
PFTeDA	ND		1	4.0	1.0	ng/L	12/02/2020 2045
PFTrDA	ND		1	4.0	1.0	ng/L	12/02/2020 2045
PFUdA	ND		1	4.0	1.0	ng/L	12/02/2020 2045
PFOS	ND		1	4.0	1.0	ng/L	12/02/2020 2045
Surrogate	Q % F	lec	Acceptance Limit				
13C2_4:2FTS	10	3	25-150				
13C2_6:2FTS	11	3	25-150				
13C2_8:2FTS	98	}	25-150				
13C2_PFDoA	11	9	25-150				
13C2_PFHxDA	10	6	25-150				
—							

LOQ = Limit of Quantitation	ND = Not detected at or above the DL	N = Recovery is out of criteria
DL = Detection Limit	J = Estimated result < LOQ and $\geq$ DL	P = The RPD between two GC columns exceeds 40%
	* = RSD is out of criteria	+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

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 West Columbia, SC 29172 (803) 791-9700 Fax (803) 791-9111 www.pacelabs.com

# PFAS by LC/MS/MS - MB

Sample ID: VQ75114-001 Batch: 75114			Matrix: Aqueous Prep Method: SOP SPE
Analytical Method: PFAS by ID SOP			Prep Date: 12/01/2020 1245
Surrogate	Q % Rec	Acceptance Limit	
13C2_PFTeDA	113	25-150	
13C3_PFBS	102	25-150	
13C3_PFHxS	107	25-150	
13C3-HFPO-DA	99	25-150	
13C4_PFBA	104	25-150	
13C4_PFHpA	109	25-150	
13C5_PFHxA	107	25-150	
13C5_PFPeA	109	25-150	
13C6_PFDA	103	25-150	
13C7_PFUdA	108	25-150	
13C8_PFOA	116	25-150	
13C8_PFOS	101	25-150	
13C8_PFOSA	89	10-150	
13C9_PFNA	103	25-150	
d-EtFOSA	81	10-150	
d5-EtFOSAA	107	25-150	
d9-EtFOSE	96	10-150	
d-MeFOSA	82	10-150	
d3-MeFOSAA	101	25-150	
d7-MeFOSE	94	10-150	

 LOQ = Limit of Quantitation
 ND = Not detected at or above the DL
 N = Recovery is out of criteria

 DL = Detection Limit
 J = Estimated result < LOQ and ≥ DL</td>
 P = The RPD between two GC columns exceeds 40%

 \* = RSD is out of criteria
 + = RPD is out of criteria

Page 9 of 17

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# PFAS by LC/MS/MS - LCS

Sample ID: VQ75114-002 Batch: 75114

Analytical Method: PFAS by ID SOP

Matrix: Aqueous Prep Method: SOP SPE

Prep Date: 12/01/2020 1245

	Spike Amount	Result				% Rec	
Parameter	(ng/L)	(ng/L)	Q	Dil	% Rec	Limit	Analysis Date
9CI-PF3ONS	15	17		1	114	50-150	12/02/2020 2056
11CI-PF3OUdS	15	17		1	113	50-150	12/02/2020 2056
8:2 FTS	15	18		1	115	50-150	12/02/2020 2056
6:2 FTS	15	18		1	116	50-150	12/02/2020 2056
10:2 FTS	15	15		1	94	50-150	12/02/2020 2056
4:2 FTS	15	16		1	105	50-150	12/02/2020 2056
GenX	32	35		1	110	50-150	12/02/2020 2056
ADONA	15	18		1	118	50-150	12/02/2020 2056
EtFOSA	16	14		1	89	50-150	12/02/2020 2056
EtFOSAA	16	17		1	107	50-150	12/02/2020 2056
EtFOSE	16	21		1	129	50-150	12/02/2020 2056
MeFOSA	16	19		1	121	50-150	12/02/2020 2056
MeFOSAA	16	20		1	124	50-150	12/02/2020 2056
MeFOSE	16	17		1	105	50-150	12/02/2020 2056
PFBS	14	17		1	117	50-150	12/02/2020 2056
PFDS	15	19		1	125	50-150	12/02/2020 2056
PFHpS	15	17		1	112	50-150	12/02/2020 2056
PFNS	15	17		1	110	50-150	12/02/2020 2056
PFOSA	16	18		1	114	50-150	12/02/2020 2056
PFPeS	15	17		1	112	50-150	12/02/2020 2056
PFDOS	15	17		1	110	50-150	12/02/2020 2056
PFHxS	15	15		1	103	50-150	12/02/2020 2056
PFBA	16	18		1	114	50-150	12/02/2020 2056
PFDA	16	18		1	113	50-150	12/02/2020 2056
PFDoA	16	18		1	112	50-150	12/02/2020 2056
PFHpA	16	18		1	110	50-150	12/02/2020 2056
PFHxDA	16	17		1	107	50-150	12/02/2020 2056
PFHxA	16	18		1	112	50-150	12/02/2020 2056
PFNA	16	18		1	110	50-150	12/02/2020 2056
PFODA	16	20		1	128	50-150	12/02/2020 2056
PFOA	16	17		1	107	50-150	12/02/2020 2056
PFPeA	16	18		1	111	50-150	12/02/2020 2056
PFTeDA	16	19		1	117	50-150	12/02/2020 2056
PFTrDA	16	16		1	102	50-150	12/02/2020 2056
PFUdA	16	16		1	100	50-150	12/02/2020 2056
PFOS	15	17		1	113	50-150	12/02/2020 2056
Surrogate	Q % Rec	Acceptan Limit	ice				
13C2_4:2FTS	98	25-150	)				
13C2_6:2FTS	105	25-150	)				
13C2_8:2FTS	87	25-150	)				
13C2_PFDoA	109	25-150	)				
13C2_PFHxDA	98	25-150	)				

LOQ = Limit of Quantitation	ND = Not detected at or above the DL	N = Recovery is out of criteria
DL = Detection Limit	J = Estimated result < LOQ and $\geq$ DL	P = The RPD between two GC columns exceeds 40%
	* = RSD is out of criteria	+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

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## PFAS by LC/MS/MS - LCS

		J		
Sample ID: VQ75114-002 Batch: 75114 Analytical Method: PFAS by ID SOP			Matrix: Aqueous Prep Method: SOP SPE Prep Date: 12/01/2020 1245	
Surrogate	Q % Rec	Acceptance Limit		
13C2_PFTeDA	102	25-150		
13C3_PFBS	91	25-150		
13C3_PFHxS	97	25-150		
13C3-HFPO-DA	95	25-150		
13C4_PFBA	98	25-150		
13C4_PFHpA	104	25-150		
13C5_PFHxA	96	25-150		
13C5_PFPeA	99	25-150		
13C6_PFDA	91	25-150		
13C7_PFUdA	107	25-150		
13C8_PFOA	108	25-150		
13C8_PFOS	89	25-150		
13C8_PFOSA	87	10-150		
13C9_PFNA	98	25-150		
d-EtFOSA	82	10-150		
d5-EtFOSAA	102	25-150		
d9-EtFOSE	84	10-150		
d-MeFOSA	67	10-150		
d3-MeFOSAA	93	25-150		
d7-MeFOSE	88	10-150		

 LOQ = Limit of Quantitation
 ND = Not detected at or above the DL
 N = Recovery is out of criteria

 DL = Detection Limit
 J = Estimated result < LOQ and ≥ DL</td>
 P = The RPD between two GC columns exceeds 40%

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 Note: Calculations are performed before rounding to avoid round-off errors in calculated results

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Chain of Custody and Miscellaneous Documents

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PACE ANALYTICAL SERVICES 

\*\*\*In order to maintain client confidentiality, location/name of the sampling site, sampler's name and signature may not be provided on this COC document. This chain of custody is considered complete as is since this information is available in the owner laboratory.

# RUSH

Page 1 of 1

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PACE ANALYTICAL SERVICES, , LLC

Page 14 of 17

Page 19 of 22

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eptions	to pr	SSCLA	tion o	heck:	VOA	, Col	liform,	TOC	TOX,	тон,	08G,	WID	RO, P	'henc'i	ics, O	ther:			Head	space	in VC	IA Via	lis (>61	mm) ;	DYes	DNO	1989A	-n ye	3 100K	in.nead	space	corumin r
U 1 lite	er am	ber g	855				в	P1U	1 1歳	er pla	stic ur	npres			V	59A	40 m	nL clea	ar asc	orbic			JG	FU	4 oz	ambe	er jar	unpre	98			
U 1 lite	er cle	ar gla	SS				B	PSU	250	mL p	lastic	UND THE	85 L			591	40 m 40 m	iLam √ alei	ber N ar vial	a mi Luopi	0		wo	SELF	9 0Z	dear	erjar iaru	unpres	95			
S 125	ml_s	inder g	ass i dias	s H2S	804		B	P3N	250	mL p	astic	HNO	3	÷,	ve	59H	40 m	L de	ar viaj	HCL			WP	FU	4 oz	plast	ic jar	unpre	s			
U 120	mLε	mbe	glas	s unp	res		в	P3S	250	mLp	lastic	H2S0	04		V	Mea	40 m	L de	ar vial	MeO	н		SP	5Ť	120	mL pl	astic	Na Ti	hiosul	fate		
u 100	mL a	imbe	glas	s unp	res											59D	40 m	iL cle	ar vla	DI			ZP	LC	ziplo	c bag	1					
															_	_			-			_	-	1.1.1 (A.A.A.)	· · · ·							

C.0.46.Perces (11Feb2020) Sample Preservation Receipt Form

Page 1 of 🖌

Page 20 of 22

Page 15 of 17

# PACE ANALYTICAL SERVICES, LLC

3803						
	Samp	L le Con	dition	ent Name: Upon Receipt (SCL	Documen	t Revised: 26Mar2020
Arace Analytical	04	0.001	Docur	ment No.:		Author:
1241 Bellevus Street, Green Bay, WI 543	02 E	NV-FF	RW-GE	3AY-0014-Rev.00	Pace Gre	en Bay Quality Office
Sample	Condi	tion (	Upon	Receipt Form	(SCUR)	
lient Name: The OS Grau	pul			Project #:	WO#:4	40218779
Courier: 🔲 CS Logistics 🏷 Fed Ex 🛛 🗂 Spec	dee 🗖	UPS	T Wa	altco		ILI BAINE BA BIN
Client Pace Other Tracking #: 3991 4734 705	24				40218779	19     191 19 19
Custody Seal on Cooler/Box Present:	Piono	Seals	intact:	🗍 yes 🕞 no		
Custody Seal on Samples Present: 🕅 yes 🛙	<b>Se</b> no	Seals	intacl:	🗂 yes 🎵 no		
Packing Material: 🛄 Bubble Wrap 🛄 Bu	bble Bag	s 🏞	None	Other		
rhermometer Used <u>SR - Ω/ά</u>	Туре с	of loe:	(Ma)	Blue Dry None	D Samples or	ice, cooling process has begun
Cooler Temperature Uncorr: http://Con			<u> </u>			Person examining contents:
Temp Blank Present: 🔽 yes 🕫 no		Biolog	gical Ti	issue is Frozen: 🗔	yes 🔽 no	Date: 11-31-32 /Initials: MR
Femp should be above freezing to 6°C. Biota Samples may be received at ≤ 0°C if shipped or	Dry Ice.					Labeled By Initials:
Chain of Custody Present:	Yes	ΠNο	□n/A	1.		
Chain of Custody Filled Out:	□Yes	ENc	□n/A	2. pg# pnj.1	<b>F</b>	MLR 1170-70
Chain of Custody Relinquished:	Aves	∐ No	<b>UN</b> IA	3.	with the state	•
Sampler Name & Signature on COC:	Yes	⊡No.	ON/A	4.		-
Samples Arrived within Hold Time:	<b>S</b> res	DN0		5.		
- VOA Samples frozen upon receipt	QYes	ΠNo		Date/Time:	and an enter and	· · · · · · · · · · · · · · · · · · ·
Short Hold Time Analysis (<72hr):	⊡Yes	290		6.		· · · · · · · · · · · · · · · · · · ·
Rush Turn Around Time Requested:	X) es	[]No		7. Oush DECPI	И	HAR 11-20-2
Sufficient Volume:				8.		
For Analysis: Stee CINo MS/M	SD: ⊡Yes	Dreo.				
Correct Containers Used:	Xves.	ПNо		9.		
-Pace Containers Used:	□Yes	5 No				
-Pace IR Containers Used:	⊡Yes					
Containers Intact:	Stres			10.		
Filtered volume received for Dissolved tests	⊡Yas		SIMA	11.		
Sample Labels match COC:	Wes			12.		······································
-Includes date/time/ID/Analysis Matrix:	WIT	Ī		ĸ		
Trip Blank Present:	⊡Yes	DNo		13.		
Trip Blank Custody Seals Present	□Yes	DNo	SINIA			
Pace Trip Blank Lot # (if purchased):		ļ				
Client Notification/ Resolution:				lf ci	lecked, see attac	hed form for additional comments
Person Contacted:			Date/	Time:		
Contributes resolution;				~		
45						
						1

Page 2 of 2



#### Samples Receipt Checklist (SRC) (ME0018C-15) Issuing Authority: Pace ENV - WCOL

Revised:9/29/2020 Page 1 of 1

#### Sample Receipt Checklist (SRC)

Client: Pace Cooler Inspected by/date: AitD / 11/21/2020 Lot #: VK21022						
Means of receipt: Pace Client UPS V FedEx Other:						
Ves No 1. Were custody seals present on the cooler?						
Yes No NA 2. If custody seals were present, were they intact and unbroken?						
pH Strip ID: NA Chlorine Strip ID: NA Tested by: NA						
Original temperature upon receipt / Derived (Corrected) temperature upon receipt %Solid Snap-Cup ID: NA						
2.5 /2.5 °C NA /NA °C NA /NA °C NA /NA °C						
Method: 🗹 Temperature Blank Against Bottles IR Gun ID: 6 IR Gun Correction Factor: 0°C						
Method of coolant: Wet Ice Lice Packs Dry Ice None						
T Yes No ZNA 3. If temperature of any cooler exceeded 6.0°C, was Project Manager Notified?						
PM was Notified by: phone / email / face-to-face (circle one).						
✓ Yes No NA 4. Is the commercial courier's packing slip attached to this form?						
Ves No 5. Were proper custody procedures (relinquished/received) followed?						
res No 6. Were sample IDs listed on the COC?						
Ves No 7. Were sample IDs listed on all sample containers?						
s No 8. Was collection date & time listed on the COC?						
Yes No. 9. Was collection date & time listed on all sample containers?						
V Yes No 10. Did all container label information (ID, date, tune) agree with the COC?						
Y Yes No II. Were tests to be performed listed on the COC?						
12. Did all samples arrive in the proper containers for each test and/or in good condition						
(unbroken, lids on, etc.)?						
Yes No 13. Was adequate sample volume available?						
Yes No 14. Were all samples received within ½ the holding time or 48 hours, whichever comes first?						
Yes V No 15. Were any samples containers missing/excess (circle one) samples Not listed on COC?						
16. For VOA and RSK-175 samples, were bubbles present >"pea-size" (4" or 6mm in diameter)						
in any of the VOA vials?						
Yes No VNA 17. Were all DRO/metals/nutrient samples received at a pH of $\leq 2?$						
Vcs No VNA 18. Were all coundo samples received at a pH > 12 and suffice samples received at a pH > 97 10. Ware all applicable NH (TKN/arapide/phenol/625.) (608.3 (< 0.5mg/L) samples free of						
Yes No KNA residual chlorine?						
20. Were client remarks/requests (i.e. requested dilutions, MS/MSD designations, etc)						
LIYes INO VINA correctly transcribed from the COC into the comment section in LIMS?						
Yes V No 21. Was the quote number listed on the container label? If yes, Quote #						
Sample Preservation (Must be completed for any sample(s) incorrectly preserved or with headspace.)						
Semple(a) NA were received incorrectly preserved and were adjusted accordingly						
in semple receiving with NA mL of circle one: H2SO4, HNO3, 11CL, NaOH using SR # NA						
Time of preservation NA . If more than one preservative is needed, please note in the comments below.						
Sample(s) NA were received with bubbles >6 mm in diameter.						
Samples(s) NA were received with TRC > 0.5 mg/L (If #19 is $n\sigma$ ) and were						
adjusted accordingly in sample receiving with sodium thiosulfate (Na <sub>2</sub> S <sub>2</sub> O <sub>3</sub> ) with Shealy ID: $\frac{NA}{2}$						
SR barcode labels applied by: AHD Date: 11/21/2020						
Comments:						

Pace Analytical Services, LLC (formerly Shealy Environmental Services, Inc.)

106 Vantage Point Drive West Columbia, SC 29172 (803) 791-9700 Fax (803) 791-9111 www.pacelabs.com



444 21st Street South · La Crosse, Wisconsin · 54601

December 23, 2020

# 2559 Bainbridge Street La Crosse, WI 54603

Subject: Private Well Sampling Results 2559 Bainbridge Street, La Crosse, WI 54603 Tax parcel # 4-342-0 Sample ID # 342-0

Dear

We have received and reviewed the test results for the sample collected on November 24, 2020 at the above address. Some PFAS compounds were found at levels <u>above</u> the Department of Health Services (DHS) levels recommended for protecting health. These levels are called the "Recommended Public Health Standard" in the table below. The levels found in your well are called the "Sample Result" in the table below.

Because some of the levels are above the recommended Public Health Standard, the City is offering to provide bottled water delivered to your home for drinking, cooking, and brushing your teeth. The bottled water is being provided by Culligan is bottled in Rothschild, WI from a municipal water system. Culligan's source water is filtered and treated by carbon filter, reverse osmosis, distillation and other methods before it is bottled. It has been sampled for PFAS, and no PFAS was detected in the sample. There will be no cost to you for the bottled water. Please complete the attached form and mail it to The OS Group to make arrangements for having a water dispenser and bottles delivered to your home. You may also complete this form on line at <u>www.cityoflacrosse.org/bottledwater</u>. Call 608-668-2718 or email <u>PFAS@theOSgrp.com</u> with any questions.

The following table summarizes the test results from the sample. **Bolded results** are above a current recommended level intended to protect your health according to the Department of Health Services (DHS).
Private Well Sampling Results for 2559 Bainbridge Street, La Crosse, WI 54603 Tax Parcel # 4-342-0 December 23, 2020

Sampl	e R	esults
-------	-----	--------

Compound	Sample Result (unit)	Recomm Public H Standard	ended Iealth (unit <sup>e</sup> )
N-Ethyl Perfluorooctane sulfonamide (NEtFOSA) CAS # 4151-50-2	Not Detected	20 ppt <sup>a,b</sup>	) ppt unds I 6
N-Ethyl perfluorooctane sulfonamidoacetic acid (NEtFOSAA) CAS # 2991-50-6	Not Detected	20 ppt <sup>a,b</sup>	it is 20 ompo <i>il</i> of al
N-Ethyl perfluorooctane sulfonamidoethanol (NEtFOSE) CAS # 1691-99-2	Not Detected	20 ppt <sup>a,b</sup>	ed lim ese 6 c ed totc
Perfluorooctane sulfonamide (FOSA) CAS # 754-91-6	Not Detected	20 ppt <sup>a,b</sup>	mend of the
Perfluorooctanoic acid (PFOA) CAS # 335-67-1	22 ppt	20 ppt <sup>a,b</sup>	recom ny <i>on</i> e the <i>c</i> c
Perfluorooctanesulfonic acid (PFOS) CAS # 1763-23-1	930 ppt	20 ppt <sup>a,b</sup>	The for a or
Hexafluoropropylene oxide dimer acid (HPFO-DA; GenX) CAS # 13252-13-6	Not Detected		300 ppt <sup>a</sup>
Perfluorobutanesulfonic acid (PFBS) CAS # 375-73-5	19 ppt	450	),000 ppt <sup>a</sup>
Perfluorohexanesulfonic acid (PFHxS) CAS # 355-46-4	460 ppt		40 ppt <sup>a</sup>
Perfluorobutanoic acid (PFBA) CAS # 375-22-4	63 ppt	10	),000 ppt <sup>a</sup>
Perfluorodecanoic acid (PFDA) CAS # 335-76-2	Not Detected		300 ppt <sup>a</sup>
Perfluorododecanoic acid (PFDoA) CAS # 307-55-1	Not Detected		500 ppt <sup>a</sup>
Perfluorohexanoic acid (PFHxA) CAS # 307-24-4	17 ppt	150	),000 ppt <sup>a</sup>
Perfluorononanoic acid (PFNA) CAS # 375-95-1	Not Detected		30 ppt <sup>a</sup>
Perfluorotetradecanoic acid (PFTeDA) CAS # 376-06-7	Not Detected	10	),000 ppt <sup>a</sup>
Perfluoroundecanoic acid (PFUdA) CAS # 2058-94-8	Not Detected	3	8,000 ppt <sup>a</sup>
4,8-Dioxa-3H-perfluorononanoic acid (DONA) CAS # 919005-14-4	Not Detected	3	3,000 ppt <sup>a</sup>
Perfluorooctadecanoic acid (PFODA) CAS # 16517-11-6	Not Detected	400	),000 ppt <sup>a</sup>

Perfluoro-1-heptanesulfonic acid (PFHpS) CAS # 375-92-8	32 ppt	None Established <sup>c</sup>			
Perfluoro-1-pentanesulfonic acid (PFPeS) CAS # 2706-91-4	37 ppt	None Established <sup>c</sup>			
Perfluoro-n-heptanoic acid (PFHpA) CAS # 375-85-9	1.7 ppt	None Established <sup>c</sup>			
Perfluoro-n-pentanoic acid (PFPeA) CAS #2706-90-3	5.7 ppt	None Established <sup>c</sup>			
<ul> <li><sup>3</sup> Public health enforcement standard (ES) recommended by DHS.</li> <li><sup>5</sup> DHS recommends a combined enforcement standard of 20 ng/L and combined preventive action limit of 2 ng/L for FOSA, NEt-FOSE, NEt-FOSA, NetFOSAA, PFOS, and PFOA.</li> <li><sup>6</sup> A current standard is not available; the compound is currently under review by DHS for potential public health standard recommendation.</li> </ul>					
<sup>d</sup> Public health enforcement standard (ES) in NR 140, Wisconsin Administrative Code.					
<sup>3</sup> Units: Parts per trillion (ppt) = nanograms of substance per liter of water (ng/L)					

<sup>BL</sup> Detected in the method blank. Possible lab contaminant.

As required by law, we will be submitting these results to the Department of Natural Resources (DNR). The DNR may consult with the Department of Health Services (DHS) about these test results. DHS may review all PFAS tests and follow-up with you directly if any actions are recommended to protect your health.

Thank you for your patience and assistance with our investigation. We will provide updates on the project at <a href="https://www.cityoflacrosse.org/wells">https://www.cityoflacrosse.org/wells</a> as our work continues. If you have any questions, please call The OS Group at (608) 668-2718 or email them at <a href="https://www.pFAS@theOSgrp.com">PFAS@theOSgrp.com</a>.

You can also contact the DNR and DHS with questions about PFAS or the water sample results at the numbers provided below.

<u>.</u>	<u>Contact</u>	<u>Phone</u>	E-mail Address
DNR	David Rozeboom	715-215-2078	David.Rozeboom@wisconsin.gov
DNR	Kyle Burton	920-360-2112	kyle.burton@wisconsin.gov
DHS	Curtis Hedman	608-266-6677	Curtis.Hedman@dhs.wisconsin.gov
	DNR DNR DNR DHS	ContactDNRDavid RozeboomDNRKyle BurtonDHSCurtis Hedman	ContactPhoneDNRDavid Rozeboom715-215-2078DNRKyle Burton920-360-2112DHSCurtis Hedman608-266-6677

On behalf of The City of La Crosse *The OS Group, LLC* 

Attachment: Lab report for your well Bottled Water Acknowledgement

# BOTTLED WATER ACKNOWLEDGEMENT

2559 Bainbridge Street, La Crosse, WI 54603

If you desire to accept the bottled water delivery, please complete and sign this form and return it to The OS Group at <u>PFAS@TheOSqrp.com</u> or mail to 444 21<sup>st</sup> St. S, La Crosse, WI 54601. You may also complete this form electronically on line at <u>www.cityoflacrosse.org/bottledwater</u>. Call 608-668-2718 with any question you may have.

As pre-caution for the protection of human health, the City of La Crosse (The City) will provide, on a temporary basis, bottled water for drinking, cooking and toothbrushing purposes at the above referenced address. The water will be delivered to your home or business by a commercial water delivery service. At the City's cost, a dispenser / cooler and regular deliveries of 5-gallon containers of water will be provided. The City reserves the right to dictate the conditions of delivery, such as minimum and maximum number of containers per delivery, frequency and timing of deliveries. The City reserves the right to periodically review whether The City should continue to provide bottled water, considering factors such as State and Federal standards and guidance, evolving knowledge and understanding of the sources, cause and responsibility for the contamination, new or reinterpreted test results, and the availability of more permanent or cost-effective sources of water for the above purposes. The City of La Crosse makes no warranty or representation regarding the suitability of the bottled water beyond those made by the commercial water delivery service.

All reusable or returnable equipment and supplies, such as the containers and cooler/dispenser, are the property of the commercial water delivery service or the City of La Crosse. By signing below, the Occupant of the above referenced property acknowledges that all reusable or returnable equipment and supplies shall be returned to the commercial water delivery service or the City of La Crosse upon request. The Occupant agrees to provide reasonable access for delivery of bottled water and pick up of reusable or returnable equipment (s) acknowledges that they may be required to sign an agreement with the commercial water delivery service as a condition of receiving bottled water.

Check ownership:

Owner-Occupant	
Occupant Only	
Number of Occupants:	-
Signed:	_ Dated:
Printed Name:	
Phone Number: ()	

Client: Pace Analytical Ser	vices, LLC				Laboratory II	D: VL01023-	001	
Description: 342-0					Matrix	c Aqueous		
Date Sampled:11/24/2020 1500	P	roiect Nam		= WFLL 2	13 R			
Date Dessived: 12/01/2020	Dro		or: 40210007					
Date Received: 12/01/2020	PIO	јест миттр	el: 402 19007					
Run Prep Method	Analytical Method Di	ilution A	nalysis Date Analyst	Prep D	Date Batch			
1 SOP SPE	PFAS by ID SOP	1 1:	2/10/2020 2252 MMM	12/09/20	20 1129 75956			
2 SOP SPE	PFAS by ID SOP	5 12	2/13/2020 1233 MMM	12/09/20	020 1129 75956			
Parameter		CA Numbe	S Analytical er Method	Result	Q LOQ	DL	Units	Run
9-chlorohexadecafluoro-3-oxanone-1-sul	fonic acid (9CI-PF3ONS)	756426-58	B-1 PFAS by ID SOP	ND	7.5	1.9	ng/L	1
11-chloroeicosafluoro-3-oxaundecane-1-	sulfonic acid (11CI-PF3)	763051-92	2-9 PFAS by ID SOP	ND	7.5	1.9	ng/L	1
1H, 1H, 2H, 2H-perfluorodecane sulfonic	acid (8:2 FTS)	39108-34	I-4 PFAS by ID SOP	ND	7.5	1.9	ng/L	1
1H, 1H, 2H, 2H-perfluorooctane sulfonic	acid (6:2 FTS)	27619-97	-2 PFAS by ID SOP	ND	7.5	1.9	ng/L	1
1H,1H,2H,2H-perfluorododecane sulfonio	c acid (10:2 FTS)	120226-60	0-0 PFAS by ID SOP	ND	7.5	1.9	ng/L	1
1H,1H,2H,2H-perfluorohexane sulfonic a	cid (4:2 FTS)	757124-72	2-4 PFAS by ID SOP	ND	7.5	1.9	ng/L	1
Hexafluoropropylene oxide dimer acid (G	GenX)	13252-13	8-6 PFAS by ID SOP	ND	7.5	1.9	ng/L	1
4,8-dioxa-3H-perfluorononanoic acid (AE	OONA)	919005-14	I-4 PFAS by ID SOP	ND	7.5	1.9	ng/L	1
N-ethylperfluoro-1-octanesulfonamide (E	tFOSA)	4151-50	-2 PFAS by ID SOP	ND	7.5	1.9	ng/L	1
N-ethylperfluoro-1-octanesulfonamidoaco	etic acid (EtFOSAA)	2991-50	-6 PFAS by ID SOP	ND	7.5	1.9	ng/L	1
2-N-ethylperfluoro-1-octanesulfonamido-	ethanol (EtFOSE)	1691-99	-2 PFAS by ID SOP	ND	7.5	1.9	ng/L	1
N-methylperfluoro-1-octanesulfonamide	(MeFOSA)	31506-32	2-8 PFAS by ID SOP	ND	15	3.8	ng/L	1
N-methylperfluoro-1-octanesulfonamidoa	cetic acid (MeFOSAA)	2355-31	-9 PFAS by ID SOP	ND	7.5	1.9	ng/L	1
2-N-methylperfluoro-1-octanesulfonamid	o-ethanol (MeFOSE)	24448-09	9-7 PFAS by ID SOP	ND	7.5	1.9	ng/L	1
Perfluoro-1-butanesulfonic acid (PFBS	5)	375-73	-5 PFAS by ID SOP	19	3.8	0.94	ng/L	1
Perfluoro-1-decanesulfonic acid (PFDS)		335-77	-3 PFAS by ID SOP	ND	3.8	0.94	ng/L	1
Perfluoro-1-heptanesulfonic acid (PFF	łpS)	375-92	-8 PFAS by ID SOP	32	3.8	0.94	ng/L	1
Perfluoro-1-nonanesulfonic acid (PFNS)		68259-12	2-1 PFAS by ID SOP	ND	3.8	0.94	ng/L	1
Perfluoro-1-octanesulfonamide (PFOSA)		754-91	-6 PFAS by ID SOP	ND	3.8	0.94	ng/L	1
Perfluoro-1-pentanesulfonic acid (PFF	PeS)	2706-91	-4 PFAS by ID SOP	37	3.8	0.94	ng/L	1
Perfluorododecanesulfonic acid (PFDOS	)	79780-39	9-5 PFAS by ID SOP	ND	7.5	1.9	ng/L	1
Perfluorohexanesulfonic acid (PFHxS)	)	355-46	-4 PFAS by ID SOP	460	3.8	0.94	ng/L	1
Perfluoro-n-butanoic acid (PFBA)		375-22	-4 PFAS by ID SOP	63	3.8	0.94	ng/L	1
Perfluoro-n-decanoic acid (PFDA)		335-76	-2 PFAS by ID SOP	ND	3.8	0.94	ng/L	1
Perfluoro-n-dodecanoic acid (PFDoA)		307-55	-1 PFAS by ID SOP	ND	3.8	0.94	ng/L	1
Perfluoro-n-heptanoic acid (PFHpA)		375-85	-9 PFAS by ID SOP	1.7	J 3.8	0.94	ng/L	1
Perfluoro-n-hexadecanoic acid (PFHxDA	.)	67905-19	P-5 PFAS by ID SOP	ND	7.5	1.9	ng/L	1
Perfluoro-n-hexanoic acid (PFHxA)		307-24	-4 PFAS by ID SOP	17	3.8	0.94	ng/L	1
Perfluoro-n-nonanoic acid (PFNA)		375-95	-1 PFAS by ID SOP	ND	3.8	0.94	ng/L	1
Perfluoro-n-octadecanoic acid (PFODA)		16517-11	-6 PFAS by ID SOP	ND	7.5	1.9	ng/L	1
Perfluoro-n-octanoic acid (PFOA)		335-67	-1 PFAS by ID SOP	22	3.8	0.94	ng/L	1
Perfluoro-n-pentanoic acid (PFPeA)		2706-90	-3 PFAS by ID SOP	5.7	3.8	0.94	ng/L	1
Perfluoro-n-tetradecanoic acid (PFTeDA)	)	376-06	-7 PFAS by ID SOP	ND	3.8	0.94	ng/L	1
Perfluoro-n-tridecanoic acid (PFTrDA)		72629-94	-8 PFAS by ID SOP	ND	3.8	0.94	ng/L	1
Perfluoro-n-undecanoic acid (PFUdA)		2058-94	-8 PFAS by ID SOP	ND	3.8	0.94	ng/L	1
Perfluorooctanesulfonic acid (PFOS)		1763-23	-1 PFAS by ID SOP	930	19	4.7	ng/L	2
	Ru	n 1 Ac	ceptance Rur	12 Acc	eptance			
Surrogate	Q % Rec	covery	Limits Q % Rec	overy	Limits			
13C2 4:2FTS	1	18	25-150 9	2	25-150			-

Surroyate	Q % R	ecovery	Limits	Q	% Recovery	Limits		
13C2_4:2FTS		118	25-150		95	25-150		
13C2_6:2FTS		101	25-150		106	25-150		
13C2_8:2FTS		99	25-150		105	25-150		
13C2_PFDoA		95	25-150		105	25-150		
13C2_PFHxDA		87	25-150		101	25-150		
LOQ = Limit of Quantitation	B = Detected in the method blank	E = Quantita	ation of compo	und exc	eeded the calibration	ange DL = Detectio	n Limit	
ND = Not detected at or above the DL	N = Recovery is out of criteria	P = The RP	D between two	GC col	umns exceeds 40%	J = Estimated	result < LOQ and $\geq$ DL	
H = Out of holding time	W = Reported on wet weight basis							

Project Number: 40219007

Project Name: 1901155 LACROSSE WELL 23 &

Client: Pace Analytical Services, LLC Description: 342-0 Date Sampled:11/24/2020 1500

Date Received: 12/01/2020

Laboratory ID: VL01023-001

Matrix: Aqueous

Surrogate	0	Run 1 A		0	Run 2 A	cceptance
	Q	% Recovery		Q	% Recovery	
13C2_PFTeDA		87	25-150		104	25-150
13C3_PFBS		95	25-150		107	25-150
13C3_PFHxS		98	25-150		100	25-150
13C3-HFPO-DA		102	25-150		103	25-150
13C4_PFBA		102	25-150		107	25-150
13C4_PFHpA		96	25-150		103	25-150
13C5_PFHxA		96	25-150		106	25-150
13C5_PFPeA		97	25-150		107	25-150
13C6_PFDA		93	25-150		99	25-150
13C7_PFUdA		93	25-150		110	25-150
13C8_PFOA		90	25-150		104	25-150
13C8_PFOS		91	25-150		110	25-150
13C8_PFOSA		96	10-150		103	10-150
13C9_PFNA		93	25-150		108	25-150
d-EtFOSA		76	10-150		93	10-150
d5-EtFOSAA		91	25-150		107	25-150
d9-EtFOSE		73	10-150		98	10-150
d-MeFOSA		84	10-150		112	10-150
d3-MeFOSAA		98	25-150		104	25-150
d7-MeFOSE		78	10-150		99	10-150

LOQ = Limit of QuantitationB = Detected in the method blankE = Quantitation of compound exceeded the calibration rangeDL = Detection LimitND = Not detected at or above the DLN = Recovery is out of criteriaP = The RPD between two GC columns exceeds 40%J = Estimated result < LOQ and ≥ DL</td>H = Out of holding timeW = Reported on wet weight basis

# BOTTLED WATER ACKNOWLEDGEMENT

2559 Bainbridge Street, La Crosse, WI 54603

If you desire to accept the bottled water delivery, please complete and sign this form and return it to The OS Group at <u>PFAS@TheOSqrp.com</u> or mail to 444 21<sup>st</sup> St. S, La Crosse, WI 54601. You may also complete this form electronically on line at <u>www.cityoflacrosse.org/bottledwater</u>. Call 608-668-2718 with any question you may have.

As pre-caution for the protection of human health, the City of La Crosse (The City) will provide, on a temporary basis, bottled water for drinking, cooking and toothbrushing purposes at the above referenced address. The water will be delivered to your home or business by a commercial water delivery service. At the City's cost, a dispenser / cooler and regular deliveries of 5-gallon containers of water will be provided. The City reserves the right to dictate the conditions of delivery, such as minimum and maximum number of containers per delivery, frequency and timing of deliveries. The City reserves the right to periodically review whether The City should continue to provide bottled water, considering factors such as State and Federal standards and guidance, evolving knowledge and understanding of the sources, cause and responsibility for the contamination, new or reinterpreted test results, and the availability of more permanent or cost-effective sources of water for the above purposes. The City of La Crosse makes no warranty or representation regarding the suitability of the bottled water beyond those made by the commercial water delivery service.

All reusable or returnable equipment and supplies, such as the containers and cooler/dispenser, are the property of the commercial water delivery service or the City of La Crosse. By signing below, the Occupant of the above referenced property acknowledges that all reusable or returnable equipment and supplies shall be returned to the commercial water delivery service or the City of La Crosse upon request. The Occupant agrees to provide reasonable access for delivery of bottled water and pick up of reusable or returnable equipment (s) acknowledges that they may be required to sign an agreement with the commercial water delivery service as a condition of receiving bottled water.

Check ownership:

Owner-Occupant	
Occupant Only	
Number of Occupants:	-
Signed:	_ Dated:
Printed Name:	
Phone Number: ()	



444 21st Street South · La Crosse, Wisconsin · 54601

December 30, 2020

2508 2nd Avenue East La Crosse, WI 54603

Subject: Private Well Sampling Results 2508 2nd Avenue East, La Crosse, WI 54603 Tax parcel # 4-189-0 Sample ID # 189-0

Dear

We have received and reviewed the test results for the sample collected on December 2, 2020 at the above address. Some PFAS compounds were found at levels <u>above</u> the Department of Health Services (DHS) levels recommended for protecting health. These levels are called the "Recommended Public Health Standard" in the table below. The levels found in your well are called the "Sample Result" in the table below.

Because some of the levels are above the recommended Public Health Standard, the City is offering to provide bottled water delivered to your home for drinking, cooking, and brushing your teeth. The bottled water is being provided by Culligan is bottled in Rothschild, WI from a municipal water system. Culligan's source water is filtered and treated by carbon filter, reverse osmosis, distillation and other methods before it is bottled. It has been sampled for PFAS, and no PFAS was detected in the sample. There will be no cost to you for the bottled water. Please complete the attached form and mail it to The OS Group to make arrangements for having a water dispenser and bottles delivered to your home. Call 608-668-2718 or email <u>PFAS@theOSgrp.com</u>. You may also complete this form on line at <u>www.cityoflacrosse.org/bottledwater</u>

The following table summarizes the test results from the sample. **Bolded results** are above a current recommended level intended to protect your health according to the Department of Health Services (DHS).

Private Well Sampling Results for 2508 2nd Avenue East, La Crosse, WI 54603 Tax Parcel # 4-189-0 December 30, 2020

Compound	Sample Result (unit)	Recomn Public I Standarc	nended Health I (unit <sup>e</sup> )
N-Ethyl Perfluorooctane sulfonamide (NEtFOSA) CAS # 4151-50-2	Not Detected	20 ppt <sup>a,b</sup>	20 6 1ed
N-Ethyl perfluorooctane sulfonamidoacetic acid (NEtFOSAA) CAS # 2991-50-6	Not Detected	20 ppt <sup>a,b</sup>	imit is these ombir
N-Ethyl perfluorooctane sulfonamidoethanol (NEtFOSE) CAS # 1691-99-2	Not Detected	20 ppt <sup>a,b</sup>	ne of the c
Perfluorooctane sulfonamide (FOSA) CAS # 754-91-6	Not Detected	20 ppt <sup>a,b</sup>	any o any o rds or
Perfluorooctanoic acid (PFOA) CAS # 335-67-1	38 ppt	20 ppt <sup>a,b</sup>	e reco pt for npour
Perfluorooctanesulfonic acid (PFOS) CAS # 1763-23-1	23 ppt	20 ppt <sup>a,b</sup>	Th∈ p∣ cor
Hexafluoropropylene oxide dimer acid (HPFO-DA; GenX) CAS # 13252-13-6	Not Detected		300 ppt <sup>a</sup>
Perfluorobutanesulfonic acid (PFBS) CAS # 375-73-5	120 ppt	450	0,000 ppt <sup>a</sup>
Perfluorohexanesulfonic acid (PFHxS) CAS # 355-46-4	900 ppt		40 ppt <sup>a</sup>
Perfluorobutanoic acid (PFBA) CAS # 375-22-4	15 ppt	10	0,000 ppt <sup>a</sup>
Perfluorodecanoic acid (PFDA) CAS # 335-76-2	Not Detected		300 ppt <sup>a</sup>
Perfluorododecanoic acid (PFDoA) CAS # 307-55-1	Not Detected		500 ppt <sup>a</sup>
Perfluorohexanoic acid (PFHxA) CAS # 307-24-4	51 ppt	150	0,000 ppt ª
Perfluorononanoic acid (PFNA) CAS # 375-95-1	Not Detected		30 ppt <sup>a</sup>
Perfluorotetradecanoic acid (PFTeDA) CAS # 376-06-7	Not Detected	10	0,000 ppt ª
Perfluoroundecanoic acid (PFUdA) CAS # 2058-94-8	Not Detected	:	3,000 ppt ª
4,8-Dioxa-3H-perfluorononanoic acid (DONA) CAS # 919005-14-4	Not Detected	:	3,000 ppt <sup>a</sup>
Perfluorooctadecanoic acid (PFODA) CAS # 16517-11-6	Not Detected	400	0,000 ppt <sup>a</sup>

### Sample Results

Private Well Sampling Results for 2508 2nd Avenue East, La Crosse, WI 54603 Tax Parcel # 4-189-0 December 30, 2020

Perfluoro-1-heptanesulfonic acid (PFHpS) CAS # 375-92-8	9.5 ppt	None Established <sup>c</sup>
Perfluoro-1-pentanesulfonic acid (PFPeS) CAS # 2706-91-4	190 ppt	None Established <sup>c</sup>
Perfluoro-n-heptanoic acid (PFHpA) CAS # 375-85-9	15 ppt	None Established <sup>c</sup>
Perfluoro-n-pentanoic acid (PFPeA) CAS #2706-90-3	12 ppt	None Established <sup>c</sup>

<sup>a</sup> Public health enforcement standard (ES) recommended by DHS.

<sup>b</sup> DHS recommends a combined enforcement standard of 20 ng/L and combined preventive action limit of 2 ng/L for FOSA, NEt-FOSE, NEt-FOSA, NetFOSAA, PFOS, and PFOA.

<sup>c</sup> A current standard is not available; the compound is currently under review by DHS for potential public health standard recommendation.

<sup>d</sup> Public health enforcement standard (ES) in NR 140, Wisconsin Administrative Code.

<sup>e</sup> Units: Parts per trillion (ppt) = nanograms of substance per liter of water (ng/L)

<sup>BL</sup> Detected in the method blank. Possible lab contaminant.

As required by law, we will be submitting these results to the Department of Natural Resources (DNR). The DNR may consult with the Department of Health Services (DHS) about these test results. DHS may review all PFAS tests and follow-up with you directly if any actions are recommended to protect your health.

Thank you for your patience and assistance with our investigation. We will provide updates on the project at <a href="https://www.cityoflacrosse.org/wells">https://www.cityoflacrosse.org/wells</a> as our work continues. If you have any questions, please call The OS Group at (608) 668-2718 or email them at <a href="https://www.pFAS@theOSgrp.com">PFAS@theOSgrp.com</a>.

You can also contact the DNR and DHS with questions about PFAS or the water sample results at the numbers provided below.

Questions about	<u></u>	<u>Contact</u>	<u>Phone</u>	E-mail Address
Soil & Groundwater Testing, Clean Up	DNR	David Rozeboom	715-215-2078	David.Rozeboom@wisconsin.gov
Drinking Water or Private wells	DNR	Kyle Burton	920-360-2112	kyle.burton@wisconsin.gov
Health Concerns	DHS	Curtis Hedman	608-266-6677	Curtis.Hedman@dhs.wisconsin.gov

On behalf of The City of La Crosse *The OS Group, LLC* 

Attachment: Lab report for your well Bottled Water Acknowledgement

# BOTTLED WATER ACKNOWLEDGEMENT

2508 2nd Avenue East, La Crosse, WI 54603

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**Check ownership:** 

Owner-Occupant	
Occupant Only	
Number of Occupants:	_
Signed:	_ Dated:
Printed Name:	
Phone Number: ()	

Client: Pace Analytical Services, LLC				Laboratory ID	): VL08011-0	005	
Description: 189-0				Matrix	: Aqueous		
Date Sampled:12/02/2020 1345	Project Nar	me: LACROSSE WELL 2	23 & 24				
Date Received: 12/08/2020 Pro	oject Numb	per: 40219347					
Dup Drop Method Applytical Method 5	Vilution	Apolycic Data Apolyci	Drop Data	Datab			
1 SOP SPE PFAS by ID SOP	1 1	2/22/2020 2235 MMM	12/21/2020 1	вают 110 77227			
2 SOP SPE PFAS by ID SOP	5 1	2/27/2020 1827 MMM	12/21/2020 1	110 77227			
		2/2//2020 102/ 1000	12/2 1/2020 1				
Parameter	CA Numb	AS Analytical er Method	Result Q	LOQ	DL	Units	Run
9-chlorohexadecafluoro-3-oxanone-1-sulfonic acid (9CI-PF3ONS)	756426-5	8-1 PFAS by ID SOP	ND	8.2	2.0	ng/L	1
11-chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11CI-PF3)	) 763051-9	2-9 PFAS by ID SOP	ND	8.2	2.0	ng/L	1
1H, 1H, 2H, 2H-perfluorodecane sulfonic acid (8:2 FTS)	39108-3	4-4 PFAS by ID SOP	ND	8.2	2.0	ng/L	1
1H, 1H, 2H, 2H-perfluorooctane sulfonic acid (6:2 FTS)	27619-9	7-2 PFAS by ID SOP	ND	8.2	2.0	ng/L	1
1H,1H,2H,2H-perfluorododecane sulfonic acid (10:2 FTS)	120226-6	0-0 PFAS by ID SOP	ND	8.2	2.0	ng/L	1
1H,1H,2H,2H-perfluorohexane sulfonic acid (4:2 FTS)	757124-7	2-4 PFAS by ID SOP	ND	8.2	2.0	ng/L	1
Hexafluoropropylene oxide dimer acid (GenX)	13252-1	3-6 PFAS by ID SOP	ND	8.2	2.0	ng/L	1
4,8-dioxa-3H-perfluorononanoic acid (ADONA)	919005-1	4-4 PFAS by ID SOP	ND	8.2	2.0	ng/L	1
N-ethylperfluoro-1-octanesulfonamide (EtFOSA)	4151-50	0-2 PFAS by ID SOP	ND	8.2	2.0	ng/L	1
N-ethylperfluoro-1-octanesulfonamidoacetic acid (EtFOSAA)	2991-50	0-6 PFAS by ID SOP	ND	8.2	2.0	ng/L	1
2-N-ethylperfluoro-1-octanesulfonamido-ethanol (EtFOSE)	1691-99	9-2 PFAS by ID SOP	ND	8.2	2.0	ng/L	1
N-methylperfluoro-1-octanesulfonamide (MeFOSA)	31506-3	2-8 PFAS by ID SOP	ND	16	4.1	ng/L	1
N-methylperfluoro-1-octanesulfonamidoacetic acid (MeFOSAA)	2355-3	1-9 PFAS by ID SOP	ND	8.2	2.0	ng/L	1
2-N-methylperfluoro-1-octanesulfonamido-ethanol (MeFOSE)	24448-0	9-7 PFAS by ID SOP	ND	8.2	2.0	ng/L	1
Perfluoro-1-butanesulfonic acid (PFBS)	375-73	3-5 PFAS by ID SOP	120	4.1	1.0	ng/L	1
Perfluoro-1-decanesulfonic acid (PFDS)	335-7	7-3 PFAS by ID SOP	ND	4.1	1.0	ng/L	1
Perfluoro-1-heptanesulfonic acid (PFHpS)	375-92	2-8 PFAS by ID SOP	9.5	4.1	1.0	ng/L	1
Perfluoro-1-nonanesulfonic acid (PFNS)	68259-1	2-1 PFAS by ID SOP	ND	4.1	1.0	ng/L	1
Perfluoro-1-octanesulfonamide (PFOSA)	754-91	1-6 PFAS by ID SOP	ND	4.1	1.0	ng/L	1
Perfluoro-1-pentanesulfonic acid (PFPeS)	2706-9	1-4 PFAS by ID SOP	190	4.1	1.0	ng/L	1
Perfluorododecanesulfonic acid (PFDOS)	79780-3	9-5 PFAS by ID SOP	ND	8.2	2.0	ng/L	1
Perfluorohexanesulfonic acid (PFHxS)	355-46	6-4 PFAS by ID SOP	900	20	5.1	ng/L	2
Perfluoro-n-butanoic acid (PFBA)	375-22	2-4 PFAS by ID SOP	15	4.1	1.0	ng/L	1
Perfluoro-n-decanoic acid (PFDA)	335-70	6-2 PFAS by ID SOP	ND	4.1	1.0	ng/L	1
Perfluoro-n-dodecanoic acid (PFDoA)	307-5	5-1 PFAS by ID SOP	ND	4.1	1.0	ng/L	1
Perfluoro-n-heptanoic acid (PFHpA)	375-8	5-9 PFAS by ID SOP	15	4.1	1.0	ng/L	1
Perfluoro-n-hexadecanoic acid (PFHxDA)	67905-1	9-5 PFAS by ID SOP	ND	8.2	2.0	ng/L	1
Perfluoro-n-hexanoic acid (PFHxA)	307-24	4-4 PFAS by ID SOP	51	4.1	1.0	ng/L	1
Perfluoro-n-nonanoic acid (PFNA)	375-9	5-1 PFAS by ID SOP	ND	4.1	1.0	ng/L	1
Perfluoro-n-octadecanoic acid (PFODA)	16517-1	1-6 PFAS by ID SOP	ND	8.2	2.0	ng/L	1
Perfluoro-n-octanoic acid (PFOA)	335-6	7-1 PFAS by ID SOP	38	4.1	1.0	ng/L	1
Perfluoro-n-pentanoic acid (PFPeA)	2706-90	0-3 PFAS by ID SOP	12	4.1	1.0	ng/L	1
Perfluoro-n-tetradecanoic acid (PFTeDA)	376-00	6-7 PFAS by ID SOP	ND	4.1	1.0	ng/L	1
Perfluoro-n-tridecanoic acid (PFTrDA)	72629-9	4-8 PFAS by ID SOP	ND	4.1	1.0	ng/L	1
Perfluoro-n-undecanoic acid (PFUdA)	2058-94	4-8 PFAS by ID SOP	ND	4.1	1.0	ng/L	1
Perfluorooctanesulfonic acid (PFOS)	1763-23	3-1 PFAS by ID SOP	23	4.1	1.0	ng/L	1
	up 1 ^-	contanco Dur		<b>n</b> co			
Surrogate Q % Re	un i Ac covery	Limits Q % Rec	overy Limit	S			

Surrogate	Q % R	ecovery	Limits	Q	% Recovery	Limits
13C2_4:2FTS		90	25-150		103	25-150
13C2_6:2FTS		82	25-150		97	25-150
13C2_8:2FTS		80	25-150		103	25-150
13C2_PFDoA		84	25-150		103	25-150
13C2_PFHxDA		87	25-150		105	25-150
LOQ = Limit of Quantitation	B = Detected in the method blank	E = Quantitat	ion of compoun	d exce	eded the calibration ra	nge DL = Detection Limit
ND = Not detected at or above the DL H = Out of holding time	N = Recovery is out of criteria W = Reported on wet weight basis	P = The RPD	between two G	GC colu	mns exceeds 40%	$J = Estimated result < LOQ and \ge DL$

Client: Pace Analytical Services, LLC Description: 189-0 Date Sampled:12/02/2020 1345 Date Received: 12/08/2020

Project Name: LACROSSE WELL 23 & 24

Project Number: 40219347

Laboratory ID: VL08011-005

Matrix: Aqueous

Surrogate	0	Run 1 A % Recoverv	cceptance Limits	0	Run 2 A % Recoverv	cceptance Limits
13C2_PFTeDA		87	25-150	-	96	25-150
13C3_PFBS		83	25-150		100	25-150
13C3_PFHxS		79	25-150		104	25-150
13C3-HFPO-DA		100	25-150		102	25-150
13C4_PFBA		90	25-150		105	25-150
13C4_PFHpA		86	25-150		102	25-150
13C5_PFHxA		85	25-150		103	25-150
13C5_PFPeA		90	25-150		102	25-150
13C6_PFDA		89	25-150		100	25-150
13C7_PFUdA		98	25-150		99	25-150
13C8_PFOA		96	25-150		101	25-150
13C8_PFOS		87	25-150		98	25-150
13C8_PFOSA		92	10-150		106	10-150
13C9_PFNA		94	25-150		100	25-150
d-EtFOSA		80	10-150		104	10-150
d5-EtFOSAA		93	25-150		103	25-150
d9-EtFOSE		77	10-150		96	10-150
d-MeFOSA		73	10-150		112	10-150
d3-MeFOSAA		98	25-150		104	25-150
d7-MeEOSE		93	10-150		90	10-150

LOQ = Limit of QuantitationB = Detected in the method blankE = Quantitation of compound exceeded the calibration rangeDL = Detection LimitND = Not detected at or above the DLN = Recovery is out of criteriaP = The RPD between two GC columns exceeds 40%J = Estimated result < LOQ and ≥ DL</td>H = Out of holding timeW = Reported on wet weight basis

# BOTTLED WATER ACKNOWLEDGEMENT

2508 2nd Avenue East, La Crosse, WI 54603

If you desire to accept the bottled water delivery, please complete and sign this form and return it to The OS Group at <u>PFAS@TheOSqrp.com</u> or mail to 444 21<sup>st</sup> St. S, La Crosse, WI 54601. You may also complete this form electronically online at <u>www.cityoflacrosse.org/bottledwater</u>. Call 608-668-2718 with any question you may have.

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**Check ownership:** 

Owner-Occupant	
Occupant Only	
Number of Occupants:	_
Signed:	_ Dated:
Printed Name:	
Phone Number: ()	



444 21st Street South · La Crosse, Wisconsin · 54601

December 30, 2020

2529 2nd Avenue East La Crosse, WI 54603

Subject: Private Well Sampling Results 2529 2nd Avenue East, La Crosse, WI 54603 Tax parcel # 4-219-0 Sample ID # 219-0 - Post Filter

#### Dear

We have received and reviewed the test results for the sample collected on **December 2, 2020** at the above address. Some PFAS compounds were found at levels <u>above</u> the Department of Health Services (DHS) levels recommended for protecting health. These levels are called the "Recommended Public Health Standard" in the table below. The levels found in your well are called the "Sample Result" in the table below. **Please note that this sample represents the sample taken from your kitchen faucet after the granular activated carbon filter.** 

Because some of the levels are above the recommended Public Health Standard *even after treatment by your filter*, the City recommends that you use the bottled water being delivered to your home for drinking, cooking, and brushing your teeth. The bottled water is being provided by Culligan is bottled in Rothschild, WI from a municipal water system. Culligan's source water is filtered and treated by carbon filter, reverse osmosis, distillation and other methods before it is bottled. It has been sampled for PFAS, and no PFAS was detected in the sample. There will be no cost to you for the bottled water. You have already completed a bottled water agreement.

The following table summarizes the test results from the sample. **Bolded results** are above a current recommended level intended to protect your health according to the Department of Health Services (DHS).

Private Well Sampling Results for 2529 2nd Avenue East, La Crosse, WI 54603 Tax Parcel # 4-219-0 December 30, 2020

Samp	le Result	S
-		

Compound	Sample Result (unit)	Recomm Public H Standard	ended Iealth (unit <sup>e</sup> )
N-Ethyl Perfluorooctane sulfonamide (NEtFOSA) CAS # 4151-50-2	Not Detected	20 ppt <sup>a,b</sup>	) ppt unds I 6
N-Ethyl perfluorooctane sulfonamidoacetic acid (NEtFOSAA) CAS # 2991-50-6	Not Detected	20 ppt <sup>a,b</sup>	it is 20 ompo <i>il</i> of al
N-Ethyl perfluorooctane sulfonamidoethanol (NEtFOSE) CAS # 1691-99-2	Not Detected	20 ppt <sup>a,b</sup>	ed lim ese 6 c ed totc
Perfluorooctane sulfonamide (FOSA) CAS # 754-91-6	Not Detected	20 ppt <sup>a,b</sup>	mend of the
Perfluorooctanoic acid (PFOA) CAS # 335-67-1	8.6 ppt	20 ppt <sup>a,b</sup>	recom ny <i>one</i> the <i>c</i> c
Perfluorooctanesulfonic acid (PFOS) CAS # 1763-23-1	38 ppt	20 ppt <sup>a,b</sup>	The for a or
Hexafluoropropylene oxide dimer acid (HPFO-DA; GenX) CAS # 13252-13-6	Not Detected		300 ppt <sup>a</sup>
Perfluorobutanesulfonic acid (PFBS) CAS # 375-73-5	12 ppt	450	),000 ppt ª
Perfluorohexanesulfonic acid (PFHxS) CAS # 355-46-4	260 ppt		40 ppt <sup>a</sup>
Perfluorobutanoic acid (PFBA) CAS # 375-22-4	15 ppt	10	),000 ppt <sup>a</sup>
Perfluorodecanoic acid (PFDA) CAS # 335-76-2	Not Detected		300 ppt <sup>a</sup>
Perfluorododecanoic acid (PFDoA) CAS # 307-55-1	Not Detected		500 ppt <sup>a</sup>
Perfluorohexanoic acid (PFHxA) CAS # 307-24-4	7.3 ppt	150	),000 ppt <sup>a</sup>
Perfluorononanoic acid (PFNA) CAS # 375-95-1	Not Detected		30 ppt <sup>a</sup>
Perfluorotetradecanoic acid (PFTeDA) CAS # 376-06-7	Not Detected	10	),000 ppt <sup>a</sup>
Perfluoroundecanoic acid (PFUdA) CAS # 2058-94-8	Not Detected	3	3,000 ppt <sup>a</sup>
4,8-Dioxa-3H-perfluorononanoic acid (DONA) CAS # 919005-14-4	Not Detected	3	8,000 ppt <sup>a</sup>
Perfluorooctadecanoic acid (PFODA) CAS # 16517-11-6	Not Detected	400	),000 ppt <sup>a</sup>

Perfluoro-1-heptanesulfonic acid (PFHpS) CAS # 375-92-8	4.4 ppt	None Established <sup>c</sup>					
Perfluoro-1-pentanesulfonic acid (PFPeS) CAS # 2706-91-4	23 ppt	None Established <sup>c</sup>					
Perfluoro-n-heptanoic acid (PFHpA) CAS # 375-85-9	3.0 ppt	None Established <sup>c</sup>					
Perfluoro-n-pentanoic acid (PFPeA) CAS #2706-90-3	4.5 ppt	None Established <sup>c</sup>					
<sup>3</sup> Public health enforcement standard (ES) recommended by DHS. <sup>9</sup> DHS recommends a combined enforcement standard of 20 ng/L and combined preventive action limit of 2 ng/L for FOSA, NEt-FOSE, NEt-FOSA, NetFOSAA, PFOS, and PFOA. <sup>5</sup> A current standard is not available; the compound is currently under review by DHS for potential public health standard recommendation.							
Public health enforcement standard (ES) in NR 140, Wisconsin Administrative Code. Units: Parts per trillion (ppt) = nanograms of substance per liter of water (ng/L)							

<sup>BL</sup> Detected in the method blank. Possible lab contaminant.

As required by law, we will be submitting these results to the Department of Natural Resources (DNR). The DNR may consult with the Department of Health Services (DHS) about these test results. DHS may review all PFAS tests and follow-up with you directly if any actions are recommended to protect your health.

Thank you for your patience and assistance with our investigation. We will provide updates on the project at <a href="https://www.cityoflacrosse.org/wells">https://www.cityoflacrosse.org/wells</a> as our work continues. If you have any questions, please call The OS Group at (608) 668-2718 or email them at <a href="https://www.pFAS@theOSgrp.com">PFAS@theOSgrp.com</a>.

You can also contact the DNR and DHS with questions about PFAS or the water sample results at the numbers provided below.

Questions about	<u>.</u>	<u>Contact</u>	<u>Phone</u>	E-mail Address
Soil & Groundwater Testing, Clean Up	DNR	David Rozeboom	715-215-2078	David.Rozeboom@wisconsin.gov
Drinking Water or Private wells	DNR	Kyle Burton	920-360-2112	kyle.burton@wisconsin.gov
Health Concerns	DHS	Curtis Hedman	608-266-6677	Curtis.Hedman@dhs.wisconsin.gov

On behalf of The City of La Crosse *The OS Group, LLC* 

Attachment: Lab report for your well Bottled Water Acknowledgement

Client: Pace Analytical Services, LLC				Laboratory II	D: VL08011-0	002	
Description: 219-0 POST-FILTER				Matrix	k: Aqueous		
Date Sampled:12/02/2020 1300	Project Name	e: LACROSSE WELL 2	23 & 24		1		
Date Received: 12/08/2020	Project Numbe	er: 40219347					
Dun Dron Mathod Architical Mathod			Dron Dat-	Detab			
RunPrep MethodAnalytical Method1SOP SPEPFAS by ID SOP	Dilution Ai	nalysis Date Analyst /22/2020 2142 MMM	Prep Date 12/21/2020 1	Batch 110 77227			
Parameter	CAS Numbe	6 Analytical r Method	Result Q	LOQ	DL	Units	Run
9-chlorohexadecafluoro-3-oxanone-1-sulfonic acid (9CI-PF3ONS	5) 756426-58-	1 PFAS by ID SOP	ND	7.8	2.0	ng/L	1
11-chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11CI-PF3.	) 763051-92-	9 PFAS by ID SOP	ND	7.8	2.0	ng/L	1
1H, 1H, 2H, 2H-perfluorodecane sulfonic acid (8:2 FTS)	39108-34-	4 PFAS by ID SOP	ND	7.8	2.0	ng/L	1
1H, 1H, 2H, 2H-perfluorooctane sulfonic acid (6:2 FTS)	27619-97-	2 PFAS by ID SOP	ND	7.8	2.0	ng/L	1
1H,1H,2H,2H-perfluorododecane sulfonic acid (10:2 FTS)	120226-60-	0 PFAS by ID SOP	ND	7.8	2.0	ng/L	1
1H,1H,2H,2H-perfluorohexane sulfonic acid (4:2 FTS)	757124-72-	4 PFAS by ID SOP	ND	7.8	2.0	ng/L	1
Hexafluoropropylene oxide dimer acid (GenX)	13252-13-	6 PFAS by ID SOP	ND	7.8	2.0	ng/L	1
4,8-dioxa-3H-perfluorononanoic acid (ADONA)	919005-14-	4 PFAS by ID SOP	ND	7.8	2.0	ng/L	1
N-ethylperfluoro-1-octanesulfonamide (EtFOSA)	4151-50-	2 PFAS by ID SOP	ND	7.8	2.0	ng/L	1
N-ethylperfluoro-1-octanesulfonamidoacetic acid (EtFOSAA)	2991-50-	6 PFAS by ID SOP	ND	7.8	2.0	ng/L	1
2-N-ethylperfluoro-1-octanesulfonamido-ethanol (EtFOSE)	1691-99-	2 PFAS by ID SOP	ND	7.8	2.0	ng/L	1
N-methylperfluoro-1-octanesulfonamide (MeFOSA)	31506-32-	8 PFAS by ID SOP	ND	16	3.9	ng/L	1
N-methylperfluoro-1-octanesulfonamidoacetic acid (MeFOSAA)	2355-31-	9 PFAS by ID SOP	ND	7.8	2.0	ng/L	1
2-N-methylperfluoro-1-octanesulfonamido-ethanol (MeFOSE)	24448-09-	7 PFAS by ID SOP	ND	7.8	2.0	ng/L	1
Perfluoro-1-butanesulfonic acid (PFBS)	375-73-	5 PFAS by ID SOP	12	3.9	0.98	ng/L	1
Perfluoro-1-decanesulfonic acid (PFDS)	335-77-	3 PFAS by ID SOP	ND	3.9	0.98	ng/L	1
Perfluoro-1-heptanesulfonic acid (PFHpS)	375-92-	8 PFAS by ID SOP	4.4	3.9	0.98	ng/L	1
Perfluoro-1-nonanesulfonic acid (PFNS)	68259-12-	1 PFAS by ID SOP	ND	3.9	0.98	ng/L	1
Perfluoro-1-octanesulfonamide (PFOSA)	754-91-	6 PFAS by ID SOP	ND	3.9	0.98	ng/L	1
Perfluoro-1-pentanesulfonic acid (PFPeS)	2706-91-	4 PFAS by ID SOP	23	3.9	0.98	ng/L	1
Perfluorododecanesulfonic acid (PFDOS)	79780-39-	5 PFAS by ID SOP	ND	7.8	2.0	ng/L	1
Perfluorohexanesulfonic acid (PFHxS)	355-46-	4 PFAS by ID SOP	260	3.9	0.98	ng/L	1
Perfluoro-n-butanoic acid (PFBA)	375-22-	4 PFAS by ID SOP	15	3.9	0.98	ng/L	1
Perfluoro-n-decanoic acid (PFDA)	335-76-	2 PFAS by ID SOP	ND	3.9	0.98	ng/L	1
Perfluoro-n-dodecanoic acid (PFDoA)	307-55-	1 PFAS by ID SOP	ND	3.9	0.98	ng/L	1
Perfluoro-n-heptanoic acid (PFHpA)	375-85-	9 PFAS by ID SOP	3.0 J	3.9	0.98	ng/L	1
Perfluoro-n-hexadecanoic acid (PFHxDA)	67905-19-	5 PFAS by ID SOP	ND	7.8	2.0	ng/L	1
Perfluoro-n-hexanoic acid (PFHxA)	307-24-	4 PFAS by ID SOP	7.3	3.9	0.98	ng/L	1
Perfluoro-n-nonanoic acid (PFNA)	375-95-	1 PFAS by ID SOP	ND	3.9	0.98	ng/L	1
Perfluoro-n-octadecanoic acid (PFODA)	16517-11-	6 PFAS by ID SOP	ND	7.8	2.0	ng/L	1
Perfluoro-n-octanoic acid (PFOA)	335-67-	1 PFAS by ID SOP	8.6	3.9	0.98	ng/L	1
Perfluoro-n-pentanoic acid (PFPeA)	2706-90-	3 PFAS by ID SOP	4.5	3.9	0.98	ng/L	1
Pertluoro-n-tetradecanoic acid (PFTeDA)	376-06-	7 PFAS by ID SOP	ND	3.9	0.98	ng/L	1
Pertluoro-n-tridecanoic acid (PF IrDA)	72629-94-	8 PFAS by ID SOP	ND	3.9	0.98	ng/L	1
Perfluoro-n-undecanoic acid (PFUdA)	2058-94-	8 PFAS by ID SOP	ND	3.9	0.98	ng/L	1
Perfluorooctanesulfonic acid (PFOS)	1763-23-	1 PEAS by ID SOP	38	3.9	0.98	ng/L	1
Surrogate Q % R	Run 1 Acc Recovery l	eptance _imits					
13C2_4:2FTS	95	25-150					
13C2_6:2FTS	82	25-150					
13C2_8:2FTS	96	25-150					
13C2_PFDoA	81	25-150					
13C2_PFHxDA	90	25-150					
13C2_PFTeDA	89	25-150					
	F 0				- 14		
LOQ = Limit of Quantitation B = Detected in the method blank	E = Quantitatio	on of compound exceeded the	calibration range	DL = Detection Lin	hit It all OO and to F	N	
H = Out of holding time W = Reported on wet weight basis	s – merendi S	Servicen (wo Ge columns exce	J 10/0 J	- Loundieu lesu			

Project Number: 40219347

Client: Pace Analytical Services, LLC Description: 219-0 POST-FILTER Date Sampled:12/02/2020 1300 Project Name: LACROSSE WELL 23 & 24

Date Received: 12/08/2020

Laboratory ID: VL08011-002

Matrix: Aqueous

	Run 1	Acceptance
Surrogate	Q % Recovery	Limits
13C3_PFBS	92	25-150
13C3_PFHxS	88	25-150
13C3-HFPO-DA	94	25-150
13C4_PFBA	93	25-150
13C4_PFHpA	91	25-150
13C5_PFHxA	88	25-150
13C5_PFPeA	92	25-150
13C6_PFDA	96	25-150
13C7_PFUdA	83	25-150
13C8_PFOA	91	25-150
13C8_PFOS	81	25-150
13C8_PFOSA	95	10-150
13C9_PFNA	102	25-150
d-EtFOSA	82	10-150
d5-EtFOSAA	86	25-150
d9-EtFOSE	80	10-150
d-MeFOSA	76	10-150
d3-MeFOSAA	103	25-150
d7-MeFOSE	93	10-150

LOQ = Limit of QuantitationB = Detected in the method blankE = Quantitation of compound exceeded the calibration rangeDL = Detection LimitND = Not detected at or above the DLN = Recovery is out of criteriaP = The RPD between two GC columns exceeds 40%J = Estimated result < LOQ and ≥ DL</td>H = Out of holding timeW = Reported on wet weight basis



444 21st Street South · La Crosse, Wisconsin · 54601

December 30, 2020

206 Fanta Reed Road La Crosse, WI 54603

Subject: Private Well Sampling Results 206 Fanta Reed Road, La Crosse, WI 54603 Tax parcel # 4-228-0 Sample ID # 228-0

Dear

We have received and reviewed the test results for the sample collected on December 2, 2020 at the above address. Some PFAS compounds were found, but the levels found were **below** the Department of Health Services (DHS) levels recommended for protecting health. These levels are called the "Recommended Public Health Standard" in the table below. The levels found in *your* well are called the "Sample Result" in the table below.

#### Sample Results

Compound	Sample Result (unit)	Recomn Public I Standard	nended Health I (unit <sup>e</sup> )
N-Ethyl Perfluorooctane sulfonamide (NEtFOSA) CAS # 4151-50-2	Not Detected	20 ppt <sup>a,b</sup>	ppt nds 6
N-Ethyl perfluorooctane sulfonamidoacetic acid (NEtFOSAA) CAS # 2991-50-6	Not Detected	20 ppt <sup>a,b</sup>	nit is 20 compou t <i>al</i> of all
N-Ethyl perfluorooctane sulfonamidoethanol (NEtFOSE) CAS # 1691-99-2	Not Detected	20 ppt <sup>a,b</sup>	ded lin Jese 6 Jed tot
Perfluorooctane sulfonamide (FOSA) CAS # 754-91-6	Not Detected	20 ppt <sup>a,b</sup>	nmen e of th ombir
Perfluorooctanoic acid (PFOA) CAS # 335-67-1	11 ppt	20 ppt <sup>a,b</sup>	e recor any <i>on</i> r the <i>c</i>
Perfluorooctanesulfonic acid (PFOS) CAS # 1763-23-1	Not Detected	20 ppt <sup>a,b</sup>	The for a

Private Well Sampling Results for 206 Fanta Reed Road, La Crosse, WI 54603 Tax parcel # 4-228-0 Sample ID # 228-0 December 30, 2020

Compound	Sample Result (unit)	Recommended Public Health Standard (unit <sup>e</sup> )
Hexafluoropropylene oxide dimer acid (HPFO-DA; GenX) CAS # 13252-13-6	Not Detected	300 ppt <sup>a</sup>
Perfluorobutanesulfonic acid (PFBS) CAS # 375-73-5	6.5 ppt	450,000 ppt <sup>a</sup>
Perfluorohexanesulfonic acid (PFHxS) CAS # 355-46-4	12 ppt	40 ppt <sup>a</sup>
Perfluorobutanoic acid (PFBA) CAS # 375-22-4	110 ppt	10,000 ppt <sup>a</sup>
Perfluorodecanoic acid (PFDA) CAS # 335-76-2	Not Detected	300 ppt <sup>a</sup>
Perfluorododecanoic acid (PFDoA) CAS # 307-55-1	Not Detected	500 ppt <sup>a</sup>
Perfluorohexanoic acid (PFHxA) CAS # 307-24-4	1.4 ppt	150,000 ppt <sup>a</sup>
Perfluorononanoic acid (PFNA) CAS # 375-95-1	Not Detected	30 ppt <sup>a</sup>
Perfluorotetradecanoic acid (PFTeA) CAS # 376-06-7	Not Detected	10,000 ppt <sup>a</sup>
Perfluoroundecanoic acid (PFUnA) CAS # 2058-94-8	Not Detected	3,000 ppt <sup>a</sup>
4,8-Dioxa-3H-perfluorononanoic acid (DONA) CAS # 919005-14-4	Not Detected	3,000 ppt <sup>a</sup>
Perfluorooctadecanoic acid (PFODA) CAS # 16517-11-6	Not Detected	400,000 ppt <sup>a</sup>
Perfluoro-1-pentanesulfonic acid (PFPeS) CAS #2706-91-4	4.4 ppt	None Established <sup>c</sup>
Perfluoro-n-pentanoic acid (PFPeA) CAS # 2706-90-3	2.2 ppt	None Established <sup>c</sup>

<sup>a</sup> Public health enforcement standard (ES) recommended by DHS.

<sup>b</sup> DHS recommends a combined enforcement standard of 20 ng/L and combined preventive action limit of 2 ng/L for FOSA, NEt-FOSE, NEt-FOSA, NetFOSAA, PFOS, and PFOA.

A current standard is not available; the compound is currently under review by DHS for potential public health standard recommendation.

<sup>d</sup> Public health enforcement standard (ES) in NR 140, Wisconsin Administrative Code.

<sup>2</sup> Units: Parts per trillion (ppt) = nanograms of substance per liter of water (ng/L)

<sup>BL</sup> Detected in the method blank. Possible lab contaminant.

Private Well Sampling Results for 206 Fanta Reed Road, La Crosse, WI 54603 Tax parcel # 4-228-0 Sample ID # 228-0 December 30, 2020

As required by law, we will be submitting these results to the Department of Natural Resources (DNR). The DNR may consult with the Department of Health Services (DHS) about these test results. DHS may review all PFAS tests and follow-up with you directly if any actions are recommended to protect your health.

Thank you for your patience and assistance with our investigation. We will provide updates on the project at <u>https://www.cityoflacrosse.org/wells</u> as our work continues. If you have any questions, please call The OS Group at (608) 668-2718 or email them at <u>PFAS@theOSgrp.com</u>.

You can also contact the DNR and DHS with questions about PFAS or the water sample results at the numbers provided below.

Questions about	<u></u>	<u>Contact</u>	<u>Phone</u>	E-mail Address
Soil & Groundwate Testing, Clean Up	<sup>er</sup> DNR	David Rozeboom	715-215-2078	David.Rozeboom@wisconsin.gov
Drinking Water or Private wells	DNR	Kyle Burton	920-360-2112	kyle.burton@wisconsin.gov
Health Concerns	DHS	Curtis Hedman	608-266-6677	Curtis.Hedman@dhs.wisconsin.gov

On behalf of The City of La Crosse *The OS Group, LLC* 

Attachment: Lab report for your well

Client: Pace Analytical Services, LLC				Laboratory II	D: VL08011-0	001	
Description: 228-0				Matrix	k: Aqueous		
Date Sampled:12/02/2020 1245	Project Name	LACROSSE WELL 2	23 & 24		ļ		
Date Received: 12/08/2020	niect Number	. 102103/17					
		. 40217347					
RunPrep MethodAnalytical MethodI1SOP SPEPFAS by ID SOP	Dilution Ana 1 12/2	alysis Date Analyst 22/2020 2131 MMM	Prep Date 12/21/2020 1	Batch 1110 77227			
Parameter	CAS Number	Analytical Method	Result Q	LOQ	DL	Units	Run
9-chlorohexadecafluoro-3-oxanone-1-sulfonic acid (9CI-PF3ONS)	756426-58-1	PFAS by ID SOP	ND	7.7	1.9	ng/L	1
11-chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3)	763051-92-9	PFAS by ID SOP	ND	7.7	1.9	ng/L	1
1H, 1H, 2H, 2H-perfluorodecane sulfonic acid (8:2 FTS)	39108-34-4	PFAS by ID SOP	ND	7.7	1.9	ng/L	1
1H, 1H, 2H, 2H-perfluorooctane sulfonic acid (6:2 FTS)	27619-97-2	PFAS by ID SOP	ND	7.7	1.9	ng/L	1
1H,1H,2H,2H-perfluorododecane sulfonic acid (10:2 FTS)	120226-60-0	PFAS by ID SOP	ND	7.7	1.9	ng/L	1
1H,1H,2H,2H-perfluorohexane sulfonic acid (4:2 FTS)	757124-72-4	PFAS by ID SOP	ND	7.7	1.9	ng/L	1
Hexafluoropropylene oxide dimer acid (GenX)	13252-13-6	PFAS by ID SOP	ND	7.7	1.9	ng/L	1
4,8-dioxa-3H-perfluorononanoic acid (ADONA)	919005-14-4	PFAS by ID SOP	ND	7.7	1.9	ng/L	1
N-ethylperfluoro-1-octanesulfonamide (EtFOSA)	4151-50-2	PFAS by ID SOP	ND	7.7	1.9	ng/L	1
N-ethylperfluoro-1-octanesulfonamidoacetic acid (EtFOSAA)	2991-50-6	PFAS by ID SOP	ND	7.7	1.9	ng/L	1
2-N-ethylperfluoro-1-octanesulfonamido-ethanol (EtFOSE)	1691-99-2	PFAS by ID SOP	ND	7.7	1.9	ng/L	1
N-methylperfluoro-1-octanesulfonamide (MeFOSA)	31506-32-8	PFAS by ID SOP	ND	15	3.9	ng/L	1
N-methylperfluoro-1-octanesulfonamidoacetic acid (MeFOSAA)	2355-31-9	PFAS by ID SOP	ND	7.7	1.9	ng/L	1
2-N-methylperfluoro-1-octanesulfonamido-ethanol (MeFOSE)	24448-09-7	PFAS by ID SOP	ND	7.7	1.9	ng/L	1
Perfluoro-1-butanesulfonic acid (PFBS)	375-73-5	PFAS by ID SOP	6.5	3.9	0.97	ng/L	1
Perfluoro-1-decanesulfonic acid (PFDS)	335-77-3	PFAS by ID SOP	ND	3.9	0.97	ng/L	1
Perfluoro-1-heptanesulfonic acid (PFHpS)	375-92-8	PFAS by ID SOP	ND	3.9	0.97	ng/L	1
Perfluoro-1-nonanesulfonic acid (PFNS)	68259-12-1	PFAS by ID SOP	ND	3.9	0.97	ng/L	1
Perfluoro-1-octanesulfonamide (PFOSA)	754-91-6	PFAS by ID SOP	ND	3.9	0.97	ng/L	1
Perfluoro-1-pentanesulfonic acid (PFPeS)	2706-91-4	PFAS by ID SOP	4.4	3.9	0.97	ng/L	1
Perfluorododecanesulfonic acid (PFDOS)	79780-39-5	PFAS by ID SOP	ND	7.7	1.9	ng/L	1
Perfluorohexanesulfonic acid (PFHxS)	355-46-4	PFAS by ID SOP	12	3.9	0.97	ng/L	1
Perfluoro-n-butanoic acid (PFBA)	375-22-4	PFAS by ID SOP	110	3.9	0.97	ng/L	1
Perfluoro-n-decanoic acid (PFDA)	335-76-2	PFAS by ID SOP	ND	3.9	0.97	ng/L	1
Perfluoro-n-dodecanoic acid (PFDoA)	307-55-1	PFAS by ID SOP	ND	3.9	0.97	ng/L	1
Perfluoro-n-heptanoic acid (PFHpA)	375-85-9	PFAS by ID SOP	ND	3.9	0.97	ng/L	1
Perfluoro-n-hexadecanoic acid (PFHxDA)	67905-19-5	PFAS by ID SOP	ND	7.7	1.9	ng/L	1
Perfluoro-n-hexanoic acid (PFHxA)	307-24-4	PFAS by ID SOP	1.4 J	3.9	0.97	ng/L	1
Perfluoro-n-nonanoic acid (PFNA)	375-95-1	PFAS by ID SOP	ND	3.9	0.97	ng/L	1
Perfluoro-n-octadecanoic acid (PFODA)	16517-11-6	PFAS by ID SOP	ND	7.7	1.9	ng/L	1
Perfluoro-n-octanoic acid (PFOA)	335-67-1	PFAS by ID SOP	11	3.9	0.97	ng/L	1
Perfluoro-n-pentanoic acid (PFPeA)	2706-90-3	PFAS by ID SOP	2.2 J	3.9	0.97	ng/L	1
Perfluoro-n-tetradecanoic acid (PFTeDA)	376-06-7	PFAS by ID SOP	ND	3.9	0.97	ng/L	1
Perfluoro-n-tridecanoic acid (PFTrDA)	72629-94-8	PFAS by ID SOP	ND	3.9	0.97	ng/L	1
Perfluoro-n-undecanoic acid (PFUdA)	2058-94-8	PFAS by ID SOP	ND	3.9	0.97	ng/L	1
Perfluorooctanesulfonic acid (PFOS)	1763-23-1	PFAS by ID SOP	ND	3.9	0.97	ng/L	1
R Surrogate Q % Re	un 1 Acce covery Li	ptance mits					
13C2_4:2FTS	86 2	5-150					
13C2_6:2FTS	85 2	5-150					
13C2_8:2FTS	80 2	5-150					
13C2_PFDoA	80 2	5-150					
13C2_PFHxDA	89 2	5-150					
13C2_PFTeDA	88 2	5-150					
100 Limit of Quantitation D. Detected in the method black	E Quantitati	of compound succeeded the	collibration range	DI Dotastian Lin	sit		
Locg = Limit of Quantitation     B = Defected in the method blank       ND = Not detected at or above the DL     N = Recovery is out of criteria       H = Out of holding time     W = Reported on wet weight basis	E = Quantitation P = The RPD be	etween two GC columns exce	eds 40%	J = Estimated resu	III < LOQ and $\geq D$	L	

Client: Pace Analytical Services, LLC		Laboratory ID: VL08011-001
Description: 228-0		Matrix: Aqueous
Date Sampled:12/02/2020 1245	Project Name: LACROSSE WELL 23 & 24	
Date Received: 12/08/2020	Project Number: 40219347	

Surrogate	Run 1 A Q % Recovery	.cceptance Limits
13C3_PFBS	83	25-150
13C3_PFHxS	86	25-150
13C3-HFPO-DA	96	25-150
13C4_PFBA	88	25-150
13C4_PFHpA	85	25-150
13C5_PFHxA	86	25-150
13C5_PFPeA	91	25-150
13C6_PFDA	88	25-150
13C7_PFUdA	88	25-150
13C8_PFOA	89	25-150
13C8_PFOS	82	25-150
13C8_PFOSA	91	10-150
13C9_PFNA	90	25-150
d-EtFOSA	90	10-150
d5-EtFOSAA	87	25-150
d9-EtFOSE	73	10-150
d-MeFOSA	68	10-150
d3-MeFOSAA	97	25-150
d7-MeFOSE	84	10-150

LOQ = Limit of Quantitation	B = Detected in the method blank	E = Quantitation of compound exceeded the calibration range	DL = Detection Limit
ND = Not detected at or above the DL	N = Recovery is out of criteria	P = The RPD between two GC columns exceeds 40%	J = Estimated result < LOQ and $\ge$ DL
H = Out of holding time	W = Reported on wet weight basis		



444 21st Street South · La Crosse, Wisconsin · 54601

December 30, 2020

2528 Bainbridge Street La Crosse, WI 54603

Subject: Private Well Sampling Results 2528 Bainbridge Street, La Crosse, WI 54603 Tax parcel # 4-234-0 Sample ID # 234-0

### Dear

We have received and reviewed the test results for the sample collected on December 2, 2020 at the above address. Some PFAS compounds were found, but the levels found were **below** the Department of Health Services (DHS) levels recommended for protecting health. These levels are called the "Recommended Public Health Standard" in the table below. The levels found in *your* well are called the "Sample Result" in the table below. **PLEASE NOTE:** At your residence we took a second "duplicate" sample for quality control / quality assurance purposes. The two samples' tests confirmed each other, and there were only minor differences. The results in the table below are based on the highest concentration of contaminants observed in either of the two samples.

Private Well Sampling Results for 2528 Bainbridge Street, La Crosse, WI 54603 Tax parcel # 4-234-0 Sample ID # 234-0 December 30, 2020

1

# Sample Results

Compound	Sample Result (unit)	Recomn Public Standarc	nended Health I (unit <sup>e</sup> )
N-Ethyl Perfluorooctane sulfonamide (NEtFOSA) CAS # 4151-50-2	Not Detected	20 ppt <sup>a,b</sup>	ppt inds 6
N-Ethyl perfluorooctane sulfonamidoacetic acid (NEtFOSAA) CAS # 2991-50-6	Not Detected	20 ppt <sup>a,b</sup>	nit is 20 compou <i>tal</i> of all
N-Ethyl perfluorooctane sulfonamidoethanol (NEtFOSE) CAS # 1691-99-2	Not Detected	20 ppt <sup>a,b</sup>	ded lir 1ese 6 1ed to
Perfluorooctane sulfonamide (FOSA) CAS # 754-91-6	Not Detected	20 ppt <sup>a,b</sup>	nmen e of th ombin
Perfluorooctanoic acid (PFOA) CAS # 335-67-1	2.9 ppt	20 ppt <sup>a,b</sup>	recor any <i>on</i> r the <i>c</i>
Perfluorooctanesulfonic acid (PFOS) CAS # 1763-23-1	2.5 ppt	20 ppt <sup>a,b</sup>	The for a
Hexafluoropropylene oxide dimer acid (HPFO-DA; GenX) CAS # 13252-13-6	Not Detected		300 ppt <sup>a</sup>
Perfluorobutanesulfonic acid (PFBS) CAS # 375-73-5	2.4 ppt	450	),000 ppt <sup>a</sup>
Perfluorohexanesulfonic acid (PFHxS) CAS # 355-46-4	9.2 ppt		40 ppt <sup>a</sup>
Perfluorobutanoic acid (PFBA) CAS # 375-22-4	8.4 ppt	10	),000 ppt <sup>a</sup>
Perfluorodecanoic acid (PFDA) CAS # 335-76-2	Not Detected		300 ppt <sup>a</sup>
Perfluorododecanoic acid (PFDoA) CAS # 307-55-1	Not Detected		500 ppt <sup>a</sup>
Perfluorohexanoic acid (PFHxA) CAS # 307-24-4	Not Detected	150	),000 ppt <sup>a</sup>
Perfluorononanoic acid (PFNA) CAS # 375-95-1	Not Detected		30 ppt <sup>a</sup>
Perfluorotetradecanoic acid (PFTeA) CAS # 376-06-7	Not Detected	10	),000 ppt <sup>a</sup>
Perfluoroundecanoic acid (PFUnA) CAS # 2058-94-8	Not Detected	3	3,000 ppt <sup>a</sup>
4,8-Dioxa-3H-perfluorononanoic acid (DONA) CAS # 919005-14-4	Not Detected	3	,000 ppt <sup>a</sup>

Private Well Sampling Results for 2528 Bainbridge Street, La Crosse, WI 54603 Tax parcel # 4-234-0 Sample ID # 234-0 December 30, 2020

Compound	Sample Result (unit)	Recommended Public Health Standard (unit <sup>e</sup> )
Perfluorooctadecanoic acid (PFODA) CAS # 16517-11-6	Not Detected	400,000 ppt <sup>a</sup>
Perfluoro-n-pentanoic acid (PFPeA) CAS # 2706-90-3	1.1 ppt	None Established <sup>c</sup>
<ul> <li><sup>a</sup> Public health enforcement standard (ES) recommended by DHS.</li> <li><sup>b</sup> DHS recommends a combined enforcement standard of 20 ng/L for FOSA, NEt-FOSE, NEt-FOSA, NetFOSAA, PFOS, and PFOA.</li> <li><sup>c</sup> A current standard is not available; the compound is currently ur standard recommendation.</li> <li><sup>d</sup> Public health enforcement standard (ES) in NR 140. Wisconsin Advisorement and the standard (ES) in NR 140. Wisconsin Advisorement and the standard (ES) in NR 140. Wisconsin Advisorement and the standard (ES) in NR 140. Wisconsin Advisorement and the standard (ES) in NR 140. Wisconsin Advisorement and the standard (ES) in NR 140. Wisconsin Advisorement and the standard (ES) in NR 140. Wisconsin Advisorement and the standard (ES) in NR 140. Wisconsin Advisorement and the standard (ES) in NR 140. Wisconsin Advisorement and the standard (ES) in NR 140. Wisconsin Advisorement and the standard (ES) in NR 140. Wisconsin Advisorement and the standard (ES) in NR 140. Wisconsin Advisorement and the standard (ES) in NR 140. Wisconsin Advisorement and the standard (ES) in NR 140. Wisconsin Advisorement and the standard (ES) in NR 140. Wisconsin Advisorement and the standard (ES) in NR 140. Wisconsin Advisorement and the standard (ES) in NR 140. Wisconsin Advisorement and the standard (ES) in NR 140. Wisconsin Advisorement and the standard (ES) in NR 140. Wisconsin Advisorement and the standard (ES) in NR 140. Wisconsin Advisorement and the standard (ES) in NR 140. Wisconsin Advisorement and the standard (ES) in NR 140. Wisconsin Advisorement and the standard (ES) in NR 140. Wisconsin Advisorement and the standard (ES) in NR 140. Wisconsin Advisorement and the standard (ES) in NR 140. Wisconsin Advisorement and the standard (ES) in NR 140. Wisconsin Advisorement and the standard (ES) in NR 140. Advisorement and the standard (ES) in NR 140. He standard (ES) in</li></ul>	and combined prevent der review by DHS for	tive action limit of 2 ng/L potential public health
<sup>e</sup> Units: Parts per trillion (ppt) = nanograms of substance per liter of <sup>BL</sup> Detected in the method blank. Possible lab contaminant.	of water (ng/L)	

As required by law, we will be submitting these results to the Department of Natural Resources (DNR). The DNR may consult with the Department of Health Services (DHS) about these test results. DHS may review all PFAS tests and follow-up with you directly if any actions are recommended to protect your health.

Thank you for your patience and assistance with our investigation. We will provide updates on the project at <u>https://www.cityoflacrosse.org/wells</u> as our work continues. If you have any questions, please call The OS Group at (608) 668-2718 or email them at <u>PFAS@theOSgrp.com</u>.

You can also contact the DNR and DHS with questions about PFAS or the water sample results at the numbers provided below.

Questions about.	•••	<u>Contact</u>	<u>Phone</u>	E-mail Address
Soil & Groundwate Testing, Clean Up	<sup>r</sup> DNR	David Rozeboom	715-215-2078	David.Rozeboom@wisconsin.gov
Drinking Water or Private wells	DNR	Kyle Burton	920-360-2112	kyle.burton@wisconsin.gov
Health Concerns	DHS	Curtis Hedman	608-266-6677	Curtis.Hedman@dhs.wisconsin.gov

On behalf of The City of La Crosse *The OS Group, LLC* 

Attachment: Lab report for your well

Client: Pace Analytical Services, LLC						Laboratory II	D: VL08011-0	04	
Description: 234-0						Matrix	k: Aqueous		
Date Sampled:12/02/2020 1320	Project Nar	me: L	ACROSSE WELL 2	23 & 24					
Date Received: 12/08/2020	oiect Numb	ber: 4	0219347						
		A I	Data Analyst	Durin	Data	Datala			
RunPrep MethodAnalytical Method1SOP SPEPFAS by ID SOP	1 1	Anai <u>:</u> 12/22	/2020 2213 MMM	Prep 12/21/2	Date 2020 11	Batch 110 77227			
Parameter	C/ Numb	AS ber	Analytical Method	Result	Q	LOQ	DL	Units	Run
9-chlorohexadecafluoro-3-oxanone-1-sulfonic acid (9CI-PF3ONS)	756426-5	8-1	PFAS by ID SOP	ND		7.5	1.9	ng/L	1
11-chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11CI-PF3	) 763051-9	2-9	PFAS by ID SOP	ND		7.5	1.9	ng/L	1
1H, 1H, 2H, 2H-perfluorodecane sulfonic acid (8:2 FTS)	39108-3	4-4	PFAS by ID SOP	ND		7.5	1.9	ng/L	1
1H, 1H, 2H, 2H-perfluorooctane sulfonic acid (6:2 FTS)	27619-9	7-2	PFAS by ID SOP	ND		7.5	1.9	ng/L	1
1H,1H,2H,2H-perfluorododecane sulfonic acid (10:2 FTS)	120226-6	0-0	PFAS by ID SOP	ND		7.5	1.9	ng/L	1
1H,1H,2H,2H-perfluorohexane sulfonic acid (4:2 FTS)	757124-7	2-4	PFAS by ID SOP	ND		7.5	1.9	ng/L	1
Hexafluoropropylene oxide dimer acid (GenX)	13252-1	3-6	PFAS by ID SOP	ND		7.5	1.9	ng/L	1
4,8-dioxa-3H-perfluorononanoic acid (ADONA)	919005-1	4-4	PFAS by ID SOP	ND		7.5	1.9	ng/L	1
N-ethylperfluoro-1-octanesulfonamide (EtFOSA)	4151-50	0-2	PFAS by ID SOP	ND		7.5	1.9	ng/L	1
N-ethylperfluoro-1-octanesulfonamidoacetic acid (EtFOSAA)	2991-50	0-6	PFAS by ID SOP	ND		7.5	1.9	ng/L	1
2-N-ethylperfluoro-1-octanesulfonamido-ethanol (EtFOSE)	1691-99	9-2	PFAS by ID SOP	ND		7.5	1.9	ng/L	1
N-methylperfluoro-1-octanesulfonamide (MeFOSA)	31506-3	2-8	PFAS by ID SOP	ND		15	3.8	ng/L	1
N-methylperfluoro-1-octanesulfonamidoacetic acid (MeFOSAA)	2355-3	1-9	PFAS by ID SOP	ND		7.5	1.9	ng/L	1
2-N-methylperfluoro-1-octanesulfonamido-ethanol (MeFOSE)	24448-0	9-7	PFAS by ID SOP	ND		7.5	1.9	ng/L	1
Perfluoro-1-butanesulfonic acid (PFBS)	375-73	3-5	PFAS by ID SOP	2.3	J	3.8	0.94	ng/L	1
Perfluoro-1-decanesulfonic acid (PFDS)	335-7	7-3	PFAS by ID SOP	ND		3.8	0.94	ng/L	1
Perfluoro-1-heptanesulfonic acid (PFHpS)	375-92	2-8	PFAS by ID SOP	ND		3.8	0.94	ng/L	1
Perfluoro-1-nonanesulfonic acid (PFNS)	68259-1	2-1	PFAS by ID SOP	ND		3.8	0.94	ng/L	1
Perfluoro-1-octanesulfonamide (PFOSA)	754-91	1-6	PFAS by ID SOP	ND		3.8	0.94	ng/L	1
Perfluoro-1-pentanesulfonic acid (PFPeS)	2706-9	1-4	PFAS by ID SOP	ND		3.8	0.94	ng/L	1
Perfluorododecanesulfonic acid (PFDOS)	79780-3	9-5	PFAS by ID SOP	ND		7.5	1.9	ng/L	1
Perfluorohexanesulfonic acid (PFHxS)	355-40	6-4	PFAS by ID SOP	9.2		3.8	0.94	ng/L	1
Perfluoro-n-butanoic acid (PFBA)	375-22	2-4	PFAS by ID SOP	8.4		3.8	0.94	ng/L	1
Perfluoro-n-decanoic acid (PFDA)	335-70	6-2	PFAS by ID SOP	ND		3.8	0.94	ng/L	1
Perfluoro-n-dodecanoic acid (PFDoA)	307-5	5-1	PFAS by ID SOP	ND		3.8	0.94	ng/L	1
	3/5-8	5-9	PFAS by ID SOP	ND		3.8	0.94	ng/L	1
Perfluoro-n-nexadecanoic acid (PFHXDA)	6/905-1	9-5	PFAS by ID SOP	ND		7.5	1.9	ng/L	1
Periluoro-n-nexanoic acid (PEHXA)	307-24	4-4 E 1	PFAS by ID SOP	ND		3.8	0.94	ng/L	1
Periluoro-n-nonanoic acid (PENA)	3/5-9	5-I 1 (	PFAS by ID SOP	ND		3.8	0.94	ng/L	1
Periluoro-n-octadecanoic acid (PFODA)	335-6	1-0 7-1	PEAS by ID SOP	ND 2 0		7.5	1.9	ng/L	1
Perfluoro-n-pentanoic acid (PEPeA)	2706-90	0-3	PEAS by ID SOP	2.7	J	3.0	0.94	ng/L	1
Perfluoro-n-tetradecanoic acid (PETeDA)	376-0	6-7	PEAS by ID SOP		5	3.8	0.94	ng/L	1
Perfluoro-n-tridecanoic acid (PETrDA)	72629-9	4-8	PEAS by ID SOP	ND		3.8	0.94	ng/L	1
Perfluoro-n-undecanoic acid (PEUdA)	2058-9	4-8	PEAS by ID SOP	ND		3.8	0.94	ng/L	1
Perfluorooctanesulfonic acid (PEQS)	1763-2	3-1	PEAS by ID SOP	ND		3.8	0.94	ng/l	1
For the second mean of the second (11 00)	2un 1 Ac	cep	tance	NB		0.0	0.94	lig/L	·
Surrogate Q % Re	ecovery	Lim	iits						
13C2_4:2FTS	101	25-	150						
13C2_6:2FTS	96	25-	150						
13C2_8:2FTS	90	25-	150						
	/9	25-	150						
I3C2_PFHXDA	91	25-	150						
I3C2_PFTEDA	92	25-	150						
LOQ = Limit of Quantitation     B = Detected in the method blank       ND = Not detected at or above the DL     N = Recovery is out of criteria       H = Out of holding time     W = Reported on wet weight basis	E = Quantita P = The RPI	ation of D betw	compound exceeded the creen two GC columns exceed	calibration i eds 40%	ange D J	DL = Detection Lim = Estimated resu	nit It < LOQ and <u>&gt;</u> D	L	

Client: Pace Analytical Services, LLC	
Description: 234-0	
Date Sampled:12/02/2020 1320	Project Name: LACROSSE WELL 23 & 24
Date Received: 12/08/2020	Project Number: 40219347

Laboratory ID: VL08011-004

Matrix: Aqueous

Surrogate	Run 1 A	cceptance
13C3 DEBS		25-150
	24	25-150
I3C3_PFHXS	88	25-150
13C3-HFPO-DA	96	25-150
13C4_PFBA	95	25-150
13C4_PFHpA	91	25-150
13C5_PFHxA	89	25-150
13C5_PFPeA	91	25-150
13C6_PFDA	99	25-150
13C7_PFUdA	99	25-150
13C8 PFOA	93	25-150
13C8 PFOS	87	25-150
13C8 PEOSA	99	10-150
1309 PENA	90	25-150
d-EtEOSA	87	10-150
	05	25 150
	90	20-100
dy-EIFUSE	82	10-150
d-MeFOSA	79	10-150
d3-MeFOSAA	103	25-150
d7-MeFOSE	93	10-150

 LOQ = Limit of Quantitation
 B = Detected in the method blank
 E = Quantitation of compound exceeded the calibration range
 DL = Detection Limit

 ND = Not detected at or above the DL
 N = Recovery is out of criteria
 P = The RPD between two GC columns exceeds 40%
 J = Estimated result < LOQ and ≥ DL</td>

 H = Out of holding time
 W = Reported on wet weight basis
 W = Reported on wet weight basis
 H = Out of holding time
 H = Out of holding time

Date Received 12/08/2020	D	roject Num	her /	40219347	J & Z4					
Dup Drop Mathed			A		D	Det	Datel			
RunPrep MethodI1SOP SPE	PFAS by ID SOP	Dilution 1	Anal 12/27	ysis Date Analyst 2/2020 1838 MMM	Prep 12/21/2	Date 2020 1	Batch 110 77227			
Parameter		C. Numb	AS ber	Analytical Method	Result	Q	LOQ	DL	Units	Ru
9-chlorohexadecafluoro-3-oxanone-1-sulf	onic acid (9CI-PF3ONS)	) 756426-5	58-1	PFAS by ID SOP	ND		7.1	1.8	ng/L	1
11-chloroeicosafluoro-3-oxaundecane-1-s	ulfonic acid (11CI-PF3	.) 763051-9	92-9	PFAS by ID SOP	ND		7.1	1.8	ng/L	1
1H, 1H, 2H, 2H-perfluorodecane sulfonic a	acid (8:2 FTS)	39108-3	34-4	PFAS by ID SOP	ND		7.1	1.8	ng/L	1
1H, 1H, 2H, 2H-perfluorooctane sulfonic a	cid (6:2 FTS)	27619-9	97-2	PFAS by ID SOP	ND		7.1	1.8	ng/L	1
1H,1H,2H,2H-perfluorododecane sulfonic	acid (10:2 FTS)	120226-6	0-0	PFAS by ID SOP	ND		7.1	1.8	ng/L	1
1H,1H,2H,2H-perfluorohexane sulfonic ac	id (4:2 FTS)	757124-7	2-4	PFAS by ID SOP	ND		7.1	1.8	ng/L	1
Hexafluoropropylene oxide dimer acid (Ge	enX)	13252-1	3-6	PFAS by ID SOP	ND		7.1	1.8	ng/L	1
4,8-dioxa-3H-perfluorononanoic acid (ADC	ONA)	919005-1	4-4	PFAS by ID SOP	ND		7.1	1.8	ng/L	1
N-ethylperfluoro-1-octanesulfonamide (Eth	FOSA)	4151-5	0-2	PFAS by ID SOP	ND		7.1	1.8	ng/L	1
N-ethylperfluoro-1-octanesulfonamidoace	tic acid (EtFOSAA)	2991-5	0-6	PFAS by ID SOP	ND		7.1	1.8	ng/L	1
2-N-ethylperfluoro-1-octanesulfonamido-e	thanol (EtFOSE)	1691-9	9-2	PFAS by ID SOP	ND		7.1	1.8	ng/L	1
N-methylperfluoro-1-octanesulfonamide (N	MeFOSA)	31506-3	32-8	PFAS by ID SOP	ND		14	3.5	ng/L	1
N-methylperfluoro-1-octanesulfonamidoad	etic acid (MeFOSAA)	2355-3	1-9	PFAS by ID SOP	ND		7.1	1.8	ng/L	1
2-N-methylperfluoro-1-octanesulfonamido	-ethanol (MeFOSE)	24448-0	)9-7	PFAS by ID SOP	ND		7.1	1.8	ng/L	1
Perfluoro-1-butanesulfonic acid (PFBS)	)	375-7	3-5	PFAS by ID SOP	2.4	J	3.5	0.89	ng/L	1
Perfluoro-1-decanesulfonic acid (PFDS)		335-7	7-3	PFAS by ID SOP	ND		3.5	0.89	ng/L	1
Perfluoro-1-heptanesulfonic acid (PFHpS)	1	375-9	2-8	PFAS by ID SOP	ND		3.5	0.89	ng/L	1
Perfluoro-1-nonanesulfonic acid (PFNS)		68259-1	2-1	PFAS by ID SOP	ND		3.5	0.89	ng/L	1
Perfluoro-1-octanesulfonamide (PFOSA)		754-9	1-6	PFAS by ID SOP	ND		3.5	0.89	ng/L	1
Perfluoro-1-pentanesulfonic acid (PFPeS)		2706-9	1-4	PFAS by ID SOP	ND		3.5	0.89	ng/L	1
Perfluorododecanesulfonic acid (PFDOS)		79780-3	39-5	PFAS by ID SOP	ND		7.1	1.8	ng/L	1
Perfluorohexanesulfonic acid (PFHxS)		355-4	6-4	PFAS by ID SOP	8.7		3.5	0.89	ng/L	1
Perfluoro-n-butanoic acid (PFBA)		375-2	2-4	PFAS by ID SOP	8.2		3.5	0.89	ng/L	1
Perfluoro-n-decanoic acid (PFDA)		335-7	6-2	PFAS by ID SOP	ND		3.5	0.89	ng/L	1
Perfluoro-n-dodecanoic acid (PFDoA)		307-5	5-1	PFAS by ID SOP	ND		3.5	0.89	ng/L	1
Perfluoro-n-heptanoic acid (PFHpA)		375-8	5-9	PFAS by ID SOP	ND		3.5	0.89	ng/L	1
Perfluoro-n-hexadecanoic acid (PFHxDA)		67905-1	9-5	PFAS by ID SOP	ND		7.1	1.8	ng/L	1
Perfluoro-n-hexanoic acid (PFHxA)		307-2	4-4	PFAS by ID SOP	ND		3.5	0.89	ng/L	1
Perfluoro-n-nonanoic acid (PFNA)		375-9	5-1	PFAS by ID SOP	ND		3.5	0.89	ng/L	1
Perfluoro-n-octadecanoic acid (PFODA)		16517-1	1-6	PFAS by ID SOP	ND		7.1	1.8	ng/L	1
Perfluoro-n-octanoic acid (PFOA)		335-6	7-1	PFAS by ID SOP	2.0	J	3.5	0.89	ng/L	1
Perfluoro-n-pentanoic acid (PFPeA)		2706-9	0-3	PFAS by ID SOP	0.95	J	3.5	0.89	ng/L	1
Perfluoro-n-tetradecanoic acid (PFTeDA)		376-0	6-7	PFAS by ID SOP	ND		3.5	0.89	ng/L	1
Perfluoro-n-tridecanoic acid (PFTrDA)		72629-9	94-8	PFAS by ID SOP	ND		3.5	0.89	ng/L	1
Perfluoro-n-undecanoic acid (PFUdA)		2058-9	4-8	PFAS by ID SOP	ND		3.5	0.89	ng/L	1
Perfluorooctanesulfonic acid (PFOS)		1763-2	3-1	PFAS by ID SOP	2.5	J	3.5	0.89	ng/L	1
Surrogate	F Q % R	Run 1 Ao ecovery	ccep Lin	tance hits						
13C2_4:2FTS		90	25-	150						
13C2_6:2FTS		84	25-	150						
13C2_8:2FTS		106	25-	150						
13C2_PFDoA		85	25-	150						
13C2_PFHxDA		92	25-	150						
13C2_PFTeDA		86	25-	150						
LOQ = Limit of Quantitation B = De	tected in the method blank	E = Quantita	ation c	f compound exceeded the o	alibration r	ange [	DL = Detection Lin	nit		

Client: Pace Analytical Services, LLC		Laboratory ID: VL08011-006
Description: DUP#7		Matrix: Aqueous
Date Sampled:12/02/2020	Project Name: LACROSSE WELL 23 & 24	
Date Received: 12/08/2020	Project Number: 40219347	

Surrogate	Run 1 Q % Recovery	Acceptance Limits
13C3_PFBS	88	25-150
13C3_PFHxS	92	25-150
13C3-HFPO-DA	96	25-150
13C4_PFBA	99	25-150
13C4_PFHpA	94	25-150
13C5_PFHxA	92	25-150
13C5_PFPeA	92	25-150
13C6_PFDA	91	25-150
13C7_PFUdA	83	25-150
13C8_PFOA	93	25-150
13C8_PFOS	81	25-150
13C8_PFOSA	95	10-150
13C9_PFNA	90	25-150
d-EtFOSA	87	10-150
d5-EtFOSAA	95	25-150
d9-EtFOSE	89	10-150
d-MeFOSA	97	10-150
d3-MeFOSAA	102	25-150
d7-MeFOSE	83	10-150

LOQ = Limit of Quantitation	B = Detected in the method blank	E = Quantitation of compound exceeded the calibration range	DL = Detection Limit
ND = Not detected at or above the DL	N = Recovery is out of criteria	P = The RPD between two GC columns exceeds 40%	J = Estimated result < LOQ and $\ge$ DL
H = Out of holding time	W = Reported on wet weight basis		



444 21st Street South · La Crosse, Wisconsin · 54601

December 30, 2020

2545 Bainbridge Street La Crosse, WI 54603

Subject: Private Well Sampling Results 2545 Bainbridge Street, La Crosse, WI 54603 Tax parcel # 4-337-0 Sample ID # 337-0

:

Dear

We have received and reviewed the test results for the sample collected on December 2, 2020 at the above address. Some PFAS compounds were found, but the levels found were **below** the Department of Health Services (DHS) levels recommended for protecting health. These levels are called the "Recommended Public Health Standard" in the table below. The levels found in *your* well are called the "Sample Result" in the table below.

#### Sample Results

Compound	Sample Result (unit)	Recomn Public Standarc	nended Health I (unit <sup>e</sup> )
N-Ethyl Perfluorooctane sulfonamide (NEtFOSA) CAS # 4151-50-2	Not Detected	20 ppt <sup>a,b</sup>	) ppt unds I 6
N-Ethyl perfluorooctane sulfonamidoacetic acid (NEtFOSAA) CAS # 2991-50-6	Not Detected	20 ppt <sup>a,b</sup>	it is 20 ompo <i>I</i> of al
N-Ethyl perfluorooctane sulfonamidoethanol (NEtFOSE) CAS # 1691-99-2	Not Detected	20 ppt <sup>a,b</sup>	ed lim ese 6 c ed toto
Perfluorooctane sulfonamide (FOSA) CAS # 754-91-6	Not Detected	20 ppt <sup>a,b</sup>	mend of the mbine
Perfluorooctanoic acid (PFOA) CAS # 335-67-1	3.7 ppt	20 ppt <sup>a,b</sup>	recom ny <i>one</i> the <i>cc</i>
Perfluorooctanesulfonic acid (PFOS) CAS # 1763-23-1	11 ppt	20 ppt <sup>a,b</sup>	The for a or
Hexafluoropropylene oxide dimer acid (HPFO-DA; GenX) CAS # 13252-13-6	Not Detected		300 ppt <sup>a</sup>

Private Well Sampling Results for 2545 Bainbridge Street, La Crosse, WI 54603 Tax parcel # 4-337-0 Sample ID # 337-0 December 30, 2020

Compound	Sample Result (unit)	Recommended Public Health Standard (unit <sup>e</sup> )
Perfluorobutanesulfonic acid (PFBS) CAS # 375-73-5	11 ppt	450,000 ppt <sup>a</sup>
Perfluorohexanesulfonic acid (PFHxS) CAS # 355-46-4	25 ppt	40 ppt <sup>a</sup>
Perfluorobutanoic acid (PFBA) CAS # 375-22-4	82 ppt	10,000 ppt <sup>a</sup>
Perfluorodecanoic acid (PFDA) CAS # 335-76-2	Not Detected	300 ppt <sup>a</sup>
Perfluorododecanoic acid (PFDoA) CAS # 307-55-1	Not Detected	500 ppt <sup>a</sup>
Perfluorohexanoic acid (PFHxA) CAS # 307-24-4	2.2 ppt	150,000 ppt <sup>a</sup>
Perfluorononanoic acid (PFNA) CAS # 375-95-1	Not Detected	30 ppt <sup>a</sup>
Perfluorotetradecanoic acid (PFTeA) CAS # 376-06-7	Not Detected	10,000 ppt <sup>a</sup>
Perfluoroundecanoic acid (PFUnA) CAS # 2058-94-8	Not Detected	3,000 ppt <sup>a</sup>
4,8-Dioxa-3H-perfluorononanoic acid (DONA) CAS # 919005-14-4	Not Detected	3,000 ppt <sup>a</sup>
Perfluorooctadecanoic acid (PFODA) CAS # 16517-11-6	Not Detected	400,000 ppt <sup>a</sup>
Perfluoro-1-heptanesulfonic acid (PFHpS) CAS # 375-92-8	1.3 ppt	None Established <sup>c</sup>
Perfluoro-1-pentanesulfonic acid (PFPeS) CAS #2706-91-4	9.8 ppt	None Established <sup>c</sup>
Perfluoro-n-pentanoic acid (PFPeA) CAS # 2706-90-3	1.7 ppt	None Established <sup>c</sup>

<sup>a</sup> Public health enforcement standard (ES) recommended by DHS.

<sup>b</sup> DHS recommends a combined enforcement standard of 20 ng/L and combined preventive action limit of 2 ng/L for FOSA, NEt-FOSE, NEt-FOSA, NetFOSAA, PFOS, and PFOA.

A current standard is not available; the compound is currently under review by DHS for potential public health standard recommendation.

<sup>4</sup> Public health enforcement standard (ES) in NR 140, Wisconsin Administrative Code.

<sup>2</sup> Units: Parts per trillion (ppt) = nanograms of substance per liter of water (ng/L)

<sup>BL</sup> Detected in the method blank. Possible lab contaminant.

Private Well Sampling Results for 2545 Bainbridge Street, La Crosse, WI 54603 Tax parcel # 4-337-0 Sample ID # 337-0 December 30, 2020

As required by law, we will be submitting these results to the Department of Natural Resources (DNR). The DNR may consult with the Department of Health Services (DHS) about these test results. DHS may review all PFAS tests and follow-up with you directly if any actions are recommended to protect your health.

Thank you for your patience and assistance with our investigation. We will provide updates on the project at <u>https://www.cityoflacrosse.org/wells</u> as our work continues. If you have any questions, please call The OS Group at (608) 668-2718 or email them at <u>PFAS@theOSgrp.com</u>.

You can also contact the DNR and DHS with questions about PFAS or the water sample results at the numbers provided below.

Questions about	<u></u>	<u>Contact</u>	<u>Phone</u>	E-mail Address
Soil & Groundwate Testing, Clean Up	<sup>er</sup> DNR	David Rozeboom	715-215-2078	David.Rozeboom@wisconsin.gov
Drinking Water or Private wells	DNR	Kyle Burton	920-360-2112	kyle.burton@wisconsin.gov
Health Concerns	DHS	Curtis Hedman	608-266-6677	Curtis.Hedman@dhs.wisconsin.gov

On behalf of The City of La Crosse *The OS Group, LLC* 

Attachment: Lab report for your well

Client: Pace Analytical Services, LLC						Laboratory II	D: VL08011-0	003	
Description: 337-0						Matrix	: Aqueous		
Date Sampled:12/02/2020 1315	Project Na	ame:	LACROSSE WELL 2	23 & 24			·		
Date Received: 12/08/2020	, Diect Num	her .	40219347						
	Jeernan	iber.	40217347						
RunPrep MethodAnalytical MethodD1SOP SPEPFAS by ID SOP	ilution 1	Ana 12/22	lysis Date Analyst 2/2020 2203 MMM	Prep 12/21/2	Date 2020 11	Batch 10 77227			
Parameter	C Num	CAS ber	Analytical Method	Result	Q	LOQ	DL	Units	Run
9-chlorohexadecafluoro-3-oxanone-1-sulfonic acid (9CI-PF3ONS)	756426-	58-1	PFAS by ID SOP	ND		7.5	1.9	ng/L	1
11-chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11CI-PF3)	763051-	92-9	PFAS by ID SOP	ND		7.5	1.9	ng/L	1
1H, 1H, 2H, 2H-perfluorodecane sulfonic acid (8:2 FTS)	39108-	34-4	PFAS by ID SOP	ND		7.5	1.9	ng/L	1
1H, 1H, 2H, 2H-perfluorooctane sulfonic acid (6:2 FTS)	27619-	97-2	PFAS by ID SOP	ND		7.5	1.9	ng/L	1
1H,1H,2H,2H-perfluorododecane sulfonic acid (10:2 FTS)	120226-	60-0	PFAS by ID SOP	ND		7.5	1.9	ng/L	1
1H,1H,2H,2H-perfluorohexane sulfonic acid (4:2 FTS)	757124-	72-4	PFAS by ID SOP	ND		7.5	1.9	ng/L	1
Hexafluoropropylene oxide dimer acid (GenX)	13252-	13-6	PFAS by ID SOP	ND		7.5	1.9	ng/L	1
4,8-dioxa-3H-perfluorononanoic acid (ADONA)	919005-	14-4	PFAS by ID SOP	ND		7.5	1.9	ng/L	1
N-ethylperfluoro-1-octanesulfonamide (EtFOSA)	4151-	50-2	PFAS by ID SOP	ND		7.5	1.9	ng/L	1
N-ethylperfluoro-1-octanesulfonamidoacetic acid (EtFOSAA)	2991-	50-6	PFAS by ID SOP	ND		7.5	1.9	ng/L	1
2-N-ethylperfluoro-1-octanesulfonamido-ethanol (EtFOSE)	1691-	99-2	PFAS by ID SOP	ND		7.5	1.9	ng/L	1
N-methylperfluoro-1-octanesulfonamide (MeFOSA)	31506-	32-8	PFAS by ID SOP	ND		15	3.8	ng/L	1
N-methylperfluoro-1-octanesulfonamidoacetic acid (MeFOSAA)	2355-	31-9	PFAS by ID SOP	ND		7.5	1.9	ng/L	1
2-N-methylperfluoro-1-octanesulfonamido-ethanol (MeFOSE)	24448-	09-7	PFAS by ID SOP	ND		7.5	1.9	ng/L	1
Perfluoro-1-butanesulfonic acid (PFBS)	375-	73-5	PFAS by ID SOP	11		3.8	0.94	ng/L	1
Perfluoro-1-decanesulfonic acid (PFDS)	335-	77-3	PFAS by ID SOP	ND		3.8	0.94	ng/L	1
Perfluoro-1-heptanesulfonic acid (PFHpS)	375-	92-8	PFAS by ID SOP	1.3	J	3.8	0.94	ng/L	1
Perfluoro-1-nonanesulfonic acid (PFNS)	68259-	12-1	PFAS by ID SOP	ND		3.8	0.94	ng/L	1
Perfluoro-1-octanesulfonamide (PFOSA)	754-	91-6	PFAS by ID SOP	ND		3.8	0.94	ng/L	1
Perfluoro-1-pentanesulfonic acid (PFPeS)	2706-	91-4	PFAS by ID SOP	9.8		3.8	0.94	ng/L	1
Perfluorododecanesulfonic acid (PFDOS)	79780-	39-5	PFAS by ID SOP	ND		7.5	1.9	ng/L	1
Perfluorohexanesulfonic acid (PFHxS)	355-	46-4	PFAS by ID SOP	25		3.8	0.94	ng/L	1
Perfluoro-n-butanoic acid (PFBA)	375-	22-4	PFAS by ID SOP	82		3.8	0.94	ng/L	1
Perfluoro-n-decanoic acid (PFDA)	335-	/6-2	PEAS by ID SOP	ND		3.8	0.94	ng/L	1
Perfluoro-n-dodecanoic acid (PFDoA)	307-	55-1	PEAS by ID SOP	ND		3.8	0.94	ng/L	1
Perfluoro-n-neptanoic acid (PEHpA)	3/5-	85-9 10 F	PFAS by ID SOP	ND		3.8	0.94	ng/L	1
Perfluoro-n-nexadecanoic acid (PFHxDA)	67905-	19-5	PEAS by ID SOP	ND		7.5	1.9	ng/L	1
Periluoro-n-nexanoic acid (PENA)	307-	24-4	PFAS by ID SOP	2.2	J	3.8	0.94	ng/L	1
Periluoro-n-nonanoic acid (PENA)	3/5-	95-I 11 4	PFAS by ID SOP			3.8 7 F	0.94	ng/L	1
Perluoro-n-octaneic acid (PFODA)	10517-	11-0 67-1	PEAS BY ID SOP	ND 3.7		7.5	1.9	ng/L	1
Perfluoro-n-pentanoic acid ( $PEPeA$ )	2706-	90-3	PEAS by ID SOP	17	J	3.0	0.94	ng/L	1
Perfluoro-n-tetradecanoic acid (PETeDA)	376-	06-7	PEAS by ID SOP		5	3.8	0.94	ng/L	1
Perfluoro-n-tridecanoic acid (PETrDA)	72629-	94-8	PEAS by ID SOP	ND		3.8	0.94	ng/L	1
Perfluoro-n-undecanoic acid (PEUdA)	2058-	94-8	PEAS by ID SOP	ND		3.8	0.94	ng/L	1
Perfluorooctanesulfonic acid (PEQS)	1763-	23-1	PFAS by ID SOP	11		3.8	0.94	ng/L	1
RI	un 1 A		otance			0.0	0.74		
Surrogate Q % Re	covery	Lin	nits						
13C2_4:2FTS	97	25	-150						
1302_0:2F15	ర <b>ు</b>	25	150						
1302_8:2F15	85	25	150						
	07	25	150						
	0/	25	150						
IJUZ_FFIEDA	00	25·	100						
LOQ = Limit of QuantitationB = Detected in the method blankND = Not detected at or above the DLN = Recovery is out of criteriaH = Out of holding timeW = Reported on wet weight basis	E = Quanti P = The R	tation o PD betv	of compound exceeded the c ween two GC columns excee	calibration i eds 40%	ange D J	L = Detection Lin = Estimated resu	nit It < LOQ and ≥ D	L	

Client: Pace Analytical Services, LLC		Laboratory ID: VL08011-003
Description: 337-0		Matrix: Aqueous
Date Sampled:12/02/2020 1315	Project Name: LACROSSE WELL 23 & 24	
Date Received: 12/08/2020	Project Number: 40219347	

Surrogate	Run 1 Q % Recovery	Acceptance Limits
13C3_PFBS	89	25-150
13C3_PFHxS	82	25-150
13C3-HFPO-DA	93	25-150
13C4_PFBA	90	25-150
13C4_PFHpA	84	25-150
13C5_PFHxA	88	25-150
13C5_PFPeA	94	25-150
13C6_PFDA	91	25-150
13C7_PFUdA	95	25-150
13C8_PFOA	91	25-150
13C8_PFOS	84	25-150
13C8_PFOSA	94	10-150
13C9_PFNA	96	25-150
d-EtFOSA	77	10-150
d5-EtFOSAA	87	25-150
d9-EtFOSE	77	10-150
d-MeFOSA	72	10-150
d3-MeFOSAA	104	25-150
d7-MeFOSE	86	10-150

LOQ = Limit of Quantitation	B = Detected in the method blank	E = Quantitation of compound exceeded the calibration range	DL = Detection Limit
ND = Not detected at or above the DL	N = Recovery is out of criteria	P = The RPD between two GC columns exceeds 40%	J = Estimated result < LOQ and $\ge$ DL
H = Out of holding time	W = Reported on wet weight basis		