

September 19, 2018

RE: PFOA and PFOS Groundwater Analytical Results Newell Rubbermaid Former Plant #20 Chilton, Wisconsin SEH No. NERUB 137916 14.00 BRRTS No. 06-08-426946

Kevin D. McKnight Hydrogeologist Wisconsin Department of Natural Resources 625 E. County Road Y, Suite 700 Oshkosh, WI 54901-9731

Dear Mr. McKnight:

On behalf of Newell Brands (formerly Newell Rubbermaid), SEH has performed a groundwater sampling event on the Newell Rubbermaid Former Plant #20 Site (property) in Chilton, Wisconsin. The sampling was performed after the Wisconsin Department of Natural Resources (WDNR) expressed concerns about potential past use of perfluorooctanoic acid (PFOA) and/or perfluorooctanesulfonic acid (PFOS) at the property. These concerns were based on reported historic manufacturing activities at the property. No documentation of actual use of these compounds, and no historic release of these compounds at the property has been identified.

Groundwater Sampling

Prior to groundwater sampling for PFOA and PFOS analysis, SEH discussed the proposed sampling scope with WDNR, concluding that one round of groundwater sampling and analysis from five existing monitoring points (MW-2, MW-5, PZ-5, MW-10, and PZ-10) would be acceptable to assess whether past releases of PFOAs and/or PFOSs had occurred in the vicinity of the property. The locations were selected to provide data from points hydraulically down gradient and side gradient of the property building, including shallow and deep sampling points. The locations of the five selected groundwater monitoring points are provided on the attached Figure 1, "Site Features."

Prior to mobilizing for sampling, SEH contacted the analytical laboratory and attained a list of sampling procedure recommendations for PFOAs and PFOSs based in part on the very low (less than one part per trillion (ppt)) method detection limits, and the desire to minimize the potential of cross contamination. The list of recommendations was followed by SEH during sample collection, handling and shipment. A copy of the list of the "PFAs Sampling Checklist" is attached.

On August 9, 2018, an SEH geologist mobilized to the site and performed a round of groundwater sampling on the five selected monitoring points. The samples were collected using a peristaltic pump, and sample dedicated silicone and HDPE tubing. Groundwater was purged from each monitoring point for approximately 0.5 hours prior to collection of each sample. The samples were placed in laboratory-clean analytical bottles, preserved as necessary, and chilled to 4 degrees C. The samples were transported in a

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sealed cooler via overnight courier to TestAmerica Chicago, in University Park, Illinois for analysis of PFOAs and PFOSs. Standard chain-of-custody documentation was maintained throughout sample collection, handling, and shipment.

Analytical Results

The analytical results indicate that very low concentrations of PFOAs and/or PFOSs were detected in three of the five monitoring points included in the groundwater sampling event. A summary of detections is as follows:

Sampling Point	PFOA Concentration (ppt)	PFOS Concentration (ppt)
MW-2	< 0.75	0.81 ^J
MW-5	1.2 ^J	4.2
PZ-5	< 0.73	< 0.46
MW-10	< 0.74	0.69 ^J
PZ-10	< 0.77	< 0.49

^J See attached laboratory report Page 12 of 25 for data qualification

The analytical package for this round of groundwater sampling is attached.

Regulatory Review

The United States Environmental Protection Agency (USEPA) has established health advisory levels of 70 ng/L (parts per trillion) for PFOAs and PFOSs. These USEPA health advisory levels were established to provide Americans, including the most sensitive populations, with a margin of protection from a lifetime of exposure to PFOAs and PFOSs from drinking water.

No State of Wisconsin groundwater preventive action limits (PALs) or enforcement standards (ESs) have been codified at this time for PFOAs or PFOSs. Based on our recent conversation, WDNR currently acknowledges the USEPA's health advisory level based on drinking water, and is currently considering potential State standards for these compounds. SEH has reviewed the regulatory standards for PFOAs and PFOSs in several other states that have established criteria for these compounds as summarized below^{1,2}.

State ³	Groundwater Value (ppt)	Surface Water Value (ppt)	Drinking Water Value (ppt)
Alaska	PFOA: 400; PFOS 400		
Colorado	PFOA + PFOS: 70		
(proposed)			
Delaware	PFOA+PFOS:70		
Illinois	PFOA: 400; PFOS: 200		
Maine			PFOA + PFOS: 70
MICHIGAN		PFOA: 420; PFOS: 11	
Minnesota			PFOA: 35; PFOS: 27
NEW HAMPSHIRE	PFOA + PFOS: 70		
New Jersey			PFOA: 14
North Carolina	PFOA: 1000		
Texas	PFOA: 290		
VERMONT	PFOA + PFOS: 20		
West Virginia			PFOA: 150,000

¹ Source: Colorado Department of Health & Environment, 2018, "Site Specific Groundwater Standard PFOA/PFOS."

²The state regulatory criteria identified at this time may not include all State water regulations regarding PFOAs and PFOSs.

³ States listed capitalized have set enforcement levels while other values serve only as guidelines, screening levels, or suggestions.

Kevin D. McKnight September 19, 2018 Page 3

Discussion

Based on the results of this round of groundwater sampling and analysis, exceedingly low concentrations of PFOAs and/or PFOSs were detected in the three shallow groundwater sampling points included in the round of sampling. No PFOAs or PFOSs were detected above laboratory detection limits in the two deeper sampling points included in the round of sampling. No historical documentation of onsite use of these compounds or spilling/disposal of these compounds has been identified. Site groundwater is not utilized for human consumption, and the likelihood of human exposure to site groundwater appears to be low.

The concentrations of PFOAs and PFOSs are over an order of magnitude below the USEPA health advisory levels for these compounds based on human exposure to drinking water, and may be related to off-site source(s). The concentrations are also below State regulatory criteria from other states for these compounds identified at this time, and no existing Wisconsin groundwater standards have been established or exceeded. Based on review of existing regulatory information and available information on PFOAs and PFOSs, it appears the concentrations of these compounds identified in site groundwater are well below USEPA health advisory levels, and are below regulatory criteria established in other states. No further investigation of PFOAs and PFOSs at the property appears to be warranted at this time.

Closure

We trust the information provided on this round of groundwater sampling and analysis is satisfactory to address potential concerns of PFOA and PFOS groundwater impacts at the property. We propose completing reentry into the VPLE program and submission of a site closure request, including the information provided herein, for review and approval by WDNR. Please contact me at 715.720.6225 if you have any questions on the contents of this report or suggestions regarding our planned next steps.

Sincerely,

SHORT ELLIOTT HENDRICKSON INC.

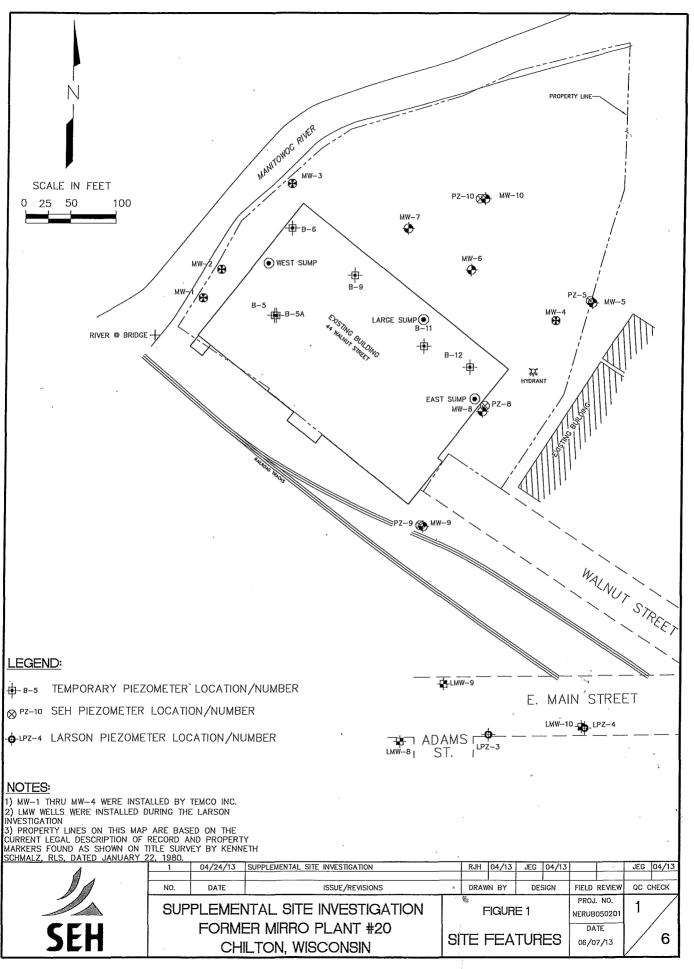
John E. Sulf

John E. Guhl, PG Hydrogeologist

JEG/jeg/ch Attachments: Figure 1: Site Features PFAs Sampling Checklist Test America Chicago Analytical Package

c: Hudson S. Green, Jr., Patriot Environmental Management, LLC

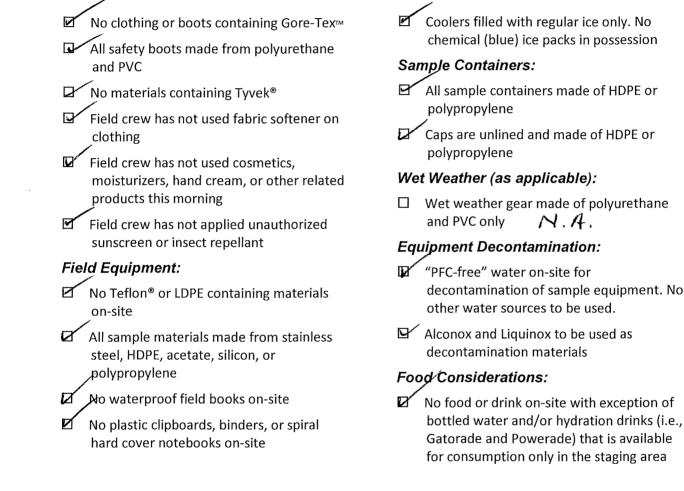
p:\ko\n\nerub\137916\3-env-stdy-regs\30-env-doc\pfoa-pfos results\pfoa pfos analytical results_9.19.18 final.docx



DRAWING DIRECTORY: SB\KO\N\NERUB\050201\FEB 13 SAMPLING\FIGURES\FIGURE 1 - SITE FEATURES

PFAS Sampling Checklist

Date: 8-09-2018 Weather (temp./precipitation): 75° facture Cloud, Site Name: NENC() Former Plant #20 No Precipitation Field Clothing and PPE:



If any applicable boxes cannot be checked, the Field Lead shall describe the noncompliance issues below and work with field personnel to address noncompliance issues prior to commencement of that day's work. Corrective action shall include removal of noncompliance items from the site or removal of worker offsite until in compliance.

Describe the noncompliance issues (include personnel not in compliance) and action/outcome of noncompliance:

Field Lead Name: _ John E. Guhl	
- 7	

PFAS Sampling – Prohibited and Acceptable Items

Prohibited	Acceptable
Teflon [®] containing materials	quipment High-density polyethylene (HDPE) materials
Low density polyethylene (LDPE) materials	Acetate Liners
	Silicon Tubing
Waterproof field books	Loose paper (non-waterproof)
Plastic clipboards, binders, or spiral hard cover notebooks	Aluminum field clipboards or with Masonite
Chemical (blue) ice packs	Regular ice
Field Cloth	ning and PPE
New cotton clothing or synthetic water resistant, waterproof, or stain-treated clothing, clothing containing Gore-Tex [™]	Well-laundered clothing made of natural fibers (preferable cotton)
Clothing laundered using fabric softener	No fabric softener
Boots containing Gore-Tex [™]	Boots made with polyurethane and PVC
Tyvek®	Cotton clothing
No cosmetics, moisturizers, hand cream, or other related products as part of personal cleaning/showering routine on the morning of sampling	 Sunscreens - Alba Organics Natural Sunscreen, Yes To Cucumbers, Aubrey Organics, Jason Natural Sun Block, Kiss my face, Baby sunscreens that are "free" or "natural" Insect Repellents - Jason Natural Quit Bugging Me, Repel Lemon Eucalyptus Insect repellant, Herbal Armor, California Baby Natural Bug Spray, BabyGanics Sunscreen and insect repellant - Avon Skin So Soft Bug Guard Plus – SPF 30 Lotion
Sample (Containers
LDPE or glass containers	HDPE or polypropylene
Teflon-lined caps	Unlined polypropylene caps
Rain	Events
Waterproof or resistant rain gear	Gazebo tent that is only touched or moved prior to and following sampling activities
Equipment De	econtamination
Decon 90 [®]	Alconox [®] and/or Liquinox [®]
Water from an on-site well	Potable water from municipal drinking water suppl
Food Con	siderations
All food and drink, with exceptions noted on right	Bottled water and hydration fluids (i.e, Gatorade® and Powerade®) to be brought and consumed only in the staging areas



THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.

TestAmerica Chicago 2417 Bond Street University Park, IL 60484 Tel: (708)534-5200

TestAmerica Job ID: 500-149762-1 Client Project/Site: Newell Former Plant #20

For:

..... Links

Review your project results through

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Have a Question?

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The

www.testamericainc.com

Visit us at:

Expert

Short Elliott Hendrickson, Inc. dba SEH 10 North Bridge Street Chippewa Falls, Wisconsin 54729-3374

Attn: Mr. John Guhl Sanda Jredenk

Authorized for release by: 8/29/2018 9:47:46 AM

Sandie Fredrick, Project Manager II (920)261-1660 sandie.fredrick@testamericainc.com

The test results in this report meet all 2003 NELAC and 2009 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

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1 2 3 4 5 6 7

Job ID: 500-149762-1

Laboratory: TestAmerica Chicago

Narrative

Job Narrative 500-149762-1

Case Narrative

Comments

No additional comments.

Receipt

The samples were received on 8/10/2018 9:35 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 2.3° C.

LCMS

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Organic Prep

Method(s) 3535: Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate (MS/MSD) associated with preparation batch 320-241512. Method Code: 3535_PFC

Method(s) 3535: The following samples had non-settleable particulate matter which plugged the SPE extraction disk. The amount of sample remaining plus the weight of the bottle are recorded in the "Notes" field of the prep batch. The "Tare Weight" recorded is the weight of the emptied bottle. Prep Batch: 320-241512 Method Code: 3535_PFC

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Detection Summary

TestAmerica Job ID: 500-149762-1

Client Sample ID: MW-2						Lab Sa	mple ID: 500	-149762-
Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D Method	Prep Type
Perfluorooctane Sulfonate (PFOS)	0.81	J	1.8	0.48	ng/L	1	537 (modified)	Total/NA
Client Sample ID: MW-10						Lab Sa	mple ID: 500	-149762-
Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D Method	Prep Type
Perfluorooctane Sulfonate (PFOS)	0.69	J	1.7	0.47	ng/L	1	537 (modified)	Total/NA
Client Sample ID: PZ-10								440700
						Lab Sa	mple ID: 500	-149/62-
No Detections.							•	
							mple ID: 500	
No Detections.	Result	Qualifier	RL	MDL	Unit		mple ID: 500	
No Detections.	Result 1.2		RL 1.7	MDL 0.71		Lab Sa	mple ID: 500)-149762-
No Detections. Client Sample ID: MW-5 Analyte		J		0.71		Lab Sa	mple ID: 500	- 149762 - Prep Type
No Detections. Client Sample ID: MW-5 Analyte Perfluorooctanoic acid (PFOA)	1.2	J	1.7	0.71	ng/L	Lab Sar	Method 537 (modified)	-149762- Prep Type Total/NA Total/NA
No Detections. Client Sample ID: MW-5 Analyte Perfluorooctanoic acid (PFOA) Perfluorooctane Sulfonate (PFOS)	1.2	J	1.7	0.71	ng/L	Lab Sar	Method 537 (modified) 537 (modified)	-149762- Prep Type Total/NA Total/NA
No Detections. Client Sample ID: MW-5 Analyte Perfluorooctanoic acid (PFOA) Perfluorooctane Sulfonate (PFOS) Client Sample ID: PZ-5	1.2	J	1.7	0.71	ng/L	Lab Sar	Method 537 (modified) 537 (modified)	-149762- Prep Type Total/NA Total/NA
No Detections. Client Sample ID: MW-5 Analyte Perfluorooctanoic acid (PFOA) Perfluorooctane Sulfonate (PFOS) Client Sample ID: PZ-5	1.2	J	1.7	0.71	ng/L	Lab Sar	Method 537 (modified) 537 (modified)	- 14976 Prep Ty Total/NA Total/NA
No Detections. Client Sample ID: MW-5 Analyte Perfluorooctanoic acid (PFOA) Perfluorooctane Sulfonate (PFOS) Client Sample ID: PZ-5	1.2	J	1.7	0.71	ng/L	Lab Sar	Method 537 (modified) 537 (modified)	Prep Type Total/NA Total/NA

This Detection Summary does not include radiochemical test results.

Method	Method Description	Protocol	Laboratory
537 (modified)	Fluorinated Alkyl Substances	EPA	TAL SAC
3535	Solid-Phase Extraction (SPE)	SW846	TAL SAC

Protocol References:

EPA = US Environmental Protection Agency

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL SAC = TestAmerica Sacramento, 880 Riverside Parkway, West Sacramento, CA 95605, TEL (916)373-5600

Sample Summary

Client: Short Elliott Hendrickson, Inc. dba SEH Project/Site: Newell Former Plant #20

TestAmerica Job ID: 500-149762-1

	t Hendrickson, Inc. dba SEH ell Former Plant #20		TestAmerica Job ID: 500-14976	2-1
Lab Sample ID	Client Sample ID	Matrix	Collected Receive	<u> </u>
500-149762-1	MW-2	Water		
500-149762-2	MW-10	Water	08/09/18 10:00 08/10/18 09	
500-149762-3	PZ-10	Water	08/09/18 11:00 08/10/18 09	9:35
500-149762-4	MW-5	Water	08/09/18 12:00 08/10/18 09	9:35
500-149762-5	PZ-5	Water	08/09/18 13:00 08/10/18 09	9:35 6
				8
				9
				1

Matrix: Water

Client Sample ID: MW-2 Date Collected: 08/09/18 09:00

Date Received: 08/10/18 09:35

Method: 537 (modified) - Fluorinated Alkyl Substances Analyte Result Qualifier RL MDL Unit D Prepared Dil Fac Analyzed Perfluorooctanoic acid (PFOA) <0.75 1.8 0.75 ng/L 08/22/18 18:32 08/24/18 02:29 1 1.8 0.48 ng/L 08/22/18 18:32 08/24/18 02:29 Perfluorooctane Sulfonate (PFOS) 0.81 J 1 Isotope Dilution %Recovery Qualifier Limits Prepared Analyzed Dil Fac 13C4 PFOS 32 25 - 150 08/22/18 18:32 08/24/18 02:29 1 13C4 PFOA 41 25 - 150 08/22/18 18:32 08/24/18 02:29 1

Matrix: Water

Client Sample ID: MW-10 Date Collected: 08/09/18 10:00

Date Received: 08/10/18 09:35

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorooctanoic acid (PFOA)	<0.74		1.7	0.74	ng/L		08/22/18 18:32	08/24/18 02:36	1
Perfluorooctane Sulfonate (PFOS)	0.69	J	1.7	0.47	ng/L		08/22/18 18:32	08/24/18 02:36	1
Isotope Dilution	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
13C4 PFOS	61		25 - 150				08/22/18 18:32	08/24/18 02:36	1
13C4 PFOA	71		25 - 150				08/22/18 18:32	08/24/18 02:36	1

Matrix: Water

Client Sample ID: PZ-10 Date Collected: 08/09/18 11:00

Date Received: 08/10/18 09:35

Analyte	-	/I Substan Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorooctanoic acid (PFOA)	<0.77		1.8	0.77	ng/L		08/22/18 18:32	08/24/18 02:44	1
Perfluorooctane Sulfonate (PFOS)	<0.49		1.8	0.49	ng/L		08/22/18 18:32	08/24/18 02:44	1
Isotope Dilution	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
13C4 PFOS	56		25 - 150				08/22/18 18:32	08/24/18 02:44	1
13C4 PFOA	62		25 - 150				08/22/18 18:32	08/24/18 02:44	1

Matrix: Water

Client Sample ID: MW-5 Date Collected: 08/09/18 12:00

Date Received: 08/10/18 09:35

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorooctanoic acid (PFOA)	1.2	J	1.7	0.71	ng/L		08/22/18 18:32	08/24/18 02:51	1
Perfluorooctane Sulfonate (PFOS)	4.2		1.7	0.45	ng/L		08/22/18 18:32	08/24/18 02:51	1
Isotope Dilution	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
13C4 PFOS	70		25 - 150				08/22/18 18:32	08/24/18 02:51	1
13C4 PFOA	78		25 - 150				08/22/18 18:32	08/24/18 02:51	1

Matrix: Water

Client Sample ID: PZ-5 Date Collected: 08/09/18 13:00

Date Received: 08/10/18 09:35

Method: 537 (modified) - Fluorinated Alkyl Substances Analyte Result Qualifier RL MDL Unit D Dil Fac Prepared Analyzed <0.73 Perfluorooctanoic acid (PFOA) 1.7 0.73 ng/L 08/22/18 18:32 08/24/18 02:59 1 Perfluorooctane Sulfonate (PFOS) < 0.46 1.7 0.46 ng/L 08/22/18 18:32 08/24/18 02:59 1 Isotope Dilution %Recovery Qualifier Limits Prepared Analyzed Dil Fac 13C4 PFOS 88 25 - 150 08/22/18 18:32 08/24/18 02:59 1 13C4 PFOA 25 - 150 08/22/18 18:32 08/24/18 02:59 95 1

Client: Short Elliott Hendrickson, Inc. dba SEH Project/Site: Newell Former Plant #20

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Qualifiers

LCMS

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.	
<u>¤</u>	Listed under the "D" column to designate that the result is reported on a dry weight basis	
%R	Percent Recovery	
CFL	Contains Free Liquid	8
CNF	Contains No Free Liquid	
DER	Duplicate Error Ratio (normalized absolute difference)	9
Dil Fac	Dilution Factor	
DL	Detection Limit (DoD/DOE)	
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample	
DLC	Decision Level Concentration (Radiochemistry)	
EDL	Estimated Detection Limit (Dioxin)	
LOD	Limit of Detection (DoD/DOE)	
LOQ	Limit of Quantitation (DoD/DOE)	
MDA	Minimum Detectable Activity (Radiochemistry)	
MDC	Minimum Detectable Concentration (Radiochemistry)	
MDL	Method Detection Limit	
ML	Minimum Level (Dioxin)	
NC	Not Calculated	
ND	Not Detected at the reporting limit (or MDL or EDL if shown)	
PQL	Practical Quantitation Limit	
QC	Quality Control	
RER	Relative Error Ratio (Radiochemistry)	
RL	Reporting Limit or Requested Limit (Radiochemistry)	
RPD	Relative Percent Difference, a measure of the relative difference between two points	
TEF	Toxicity Equivalent Factor (Dioxin)	
TEQ	Toxicity Equivalent Quotient (Dioxin)	

QC Association Summary

Client: Short Elliott Hendrickson, Inc. dba SEH Project/Site: Newell Former Plant #20 TestAmerica Job ID: 500-149762-1

LCMS

Prep Batch: 241512

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-149762-1	MW-2	Total/NA	Water	3535	
500-149762-2	MW-10	Total/NA	Water	3535	
500-149762-3	PZ-10	Total/NA	Water	3535	
500-149762-4	MW-5	Total/NA	Water	3535	
500-149762-5	PZ-5	Total/NA	Water	3535	
MB 320-241512/1-A	Method Blank	Total/NA	Water	3535	
LCS 320-241512/2-A	Lab Control Sample	Total/NA	Water	3535	
LCSD 320-241512/3-A	Lab Control Sample Dup	Total/NA	Water	3535	

Analysis Batch: 241767

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch	
500-149762-1	MW-2	Total/NA	Water	537 (modified)	241512	
500-149762-2	MW-10	Total/NA	Water	537 (modified)	241512	
500-149762-3	PZ-10	Total/NA	Water	537 (modified)	241512	
500-149762-4	MW-5	Total/NA	Water	537 (modified)	241512	
500-149762-5	PZ-5	Total/NA	Water	537 (modified)	241512	
MB 320-241512/1-A	Method Blank	Total/NA	Water	537 (modified)	241512	
LCS 320-241512/2-A	Lab Control Sample	Total/NA	Water	537 (modified)	241512	
LCSD 320-241512/3-A	Lab Control Sample Dup	Total/NA	Water	537 (modified)	241512	2

Method: 537 (modified) - Fluorinated Alkyl Substances

Lab Sample ID: MB 320-24 Matrix: Water	1512/1-A							CI	ie		ole ID: Metl Prep Type		
Analysis Batch: 241767											Prep Batc		
	r	MB MB											1012
Analyte		ult Qualifier	RL	I	MDL	Unit		D	Pre	epared	Analyzed	ı	Dil Fac
Perfluorooctanoic acid (PFOA)	<0.	.85	2.0		0.85	ng/L		- 08	/22	2/18 18:32	08/24/18 02	.06 –	
Perfluorooctane Sulfonate (PFOS)	<0.	.54	2.0		0.54	-		08	/22	/18 18:32	08/24/18 02	.06	
· · ·	I	MB MB				C							
Isotope Dilution	%Recove	ery Qualifier	Limits						Pre	epared	Analyzeo	!	Dil Fa
13C4 PFOS		81	25 - 150					08	3/22	2/18 18:32	08/24/18 02	:06	
13C4 PFOA		84	25 - 150					08	8/22	2/18 18:32	08/24/18 02	06	
Lak Osmula ID: 1 00 000 0							0				Lab Oanta		
Lab Sample ID: LCS 320-24	41512/2-A						Clie	nt S	an		Lab Contr		
Matrix: Water											Prep Type		
Analysis Batch: 241767			Spike	109	LCS						Prep Batc %Rec.	n: 24	4151
Analyte			Added	Result			Unit	r	c	%Rec	Limits		
Perfluorooctanoic acid (PFOA)			40.0	40.1	Quu		ng/L			100	64 - 124		
Perfluorooctane Sulfonate			37.1	38.7			ng/L			100	67 - 127		
(PFOS)			0.11								••••		
	LCS I	LCS											
Isotope Dilution	%Recovery	Qualifier	Limits										
13C4 PFOS	79		25 - 150										
13C4 PFOA	90		25 - 150										
Lab Sample ID: LCSD 320-	241512/3-4					6	liont Sa	mnl	م ا	D. Lab	Control Sa	mnl	חוום פ
Matrix: Water	241012/04							, in pr	•		Prep Type		_
Analysis Batch: 241767											Prep Batc		
			Spike	LCSD	LCS	D					%Rec.		RPI
Analyte			Added	Result	Qua	lifier	Unit		C	%Rec	Limits	RPD	Limi
Perfluorooctanoic acid (PFOA)			40.0	42.3			ng/L			106	64 - 124	5	3
Perfluorooctane Sulfonate			37.1	40.2			ng/L			108	67 - 127	4	3
(PFOS)							-						
	LCSD I												
Isotope Dilution	%Recovery	Qualifier	Limits										
13C4 PFOS	88		25 - 150										
13C4 PFOA	95		25 - 150										

ate Collecter								-	Matrix: Wate
Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab	
Total/NA	Prep	3535			241512	08/22/18 18:32	TWL	TAL SAC	
Total/NA	Analysis	537 (modified)		1	241767	08/24/18 02:29	D1R	TAL SAC	
Client Sam		/_10					Lah Sa	ample ID:	500-149762-2
Date Collecter	d: 08/09/18 1	0:00							Matrix: Wate
_	Batch	Batch		Dilution	Batch	Prepared			
Prep Type	Туре	Method	Run	Factor	Number	or Analyzed	Analyst	Lab	
Total/NA	Prep	3535			241512	08/22/18 18:32	TWL	TAL SAC	
Total/NA	Analysis	537 (modified)		1	241767	08/24/18 02:36	D1R	TAL SAC	
Client Sam							Lab Sa	ample ID:	500-149762-3
Date Collecte	d: 08/09/18 1 d: 08/10/18 0	1:00 9:35					Lab Sa	ample ID:	
Date Collected Date Received	d: 08/09/18 1 <u>1: 08/10/18 0</u> Batch	1:00 9:35 Batch		Dilution	Batch	Prepared			
Date Collected Date Received Prep Type	d: 08/09/18 1 d: 08/10/18 0 Batch Type	1:00 9:35 Batch Method	Run	Dilution Factor	Number	or Analyzed	Analyst	Lab	
Date Collecter Date Received Prep Type Total/NA	d: 08/09/18 1 d: 08/10/18 0 Batch Type Prep	1:00 9:35 Batch <u>Method</u> 3535	Run	Factor	Number 241512	or Analyzed 08/22/18 18:32	Analyst TWL	- Lab TAL SAC	
Date Collected Date Received Prep Type	d: 08/09/18 1 d: 08/10/18 0 Batch Type	1:00 9:35 Batch Method	Run		Number 241512	or Analyzed	Analyst TWL	Lab	500-149762-3 Matrix: Wate
Date Collected Date Received Prep Type Total/NA Total/NA Client Samp Date Collected	d: 08/09/18 1 d: 08/10/18 0 Batch Type Prep Analysis Die ID: MW d: 08/09/18 1	1:00 9:35 Batch <u>Method</u> 3535 537 (modified)	Run	Factor	Number 241512	or Analyzed 08/22/18 18:32	Analyst TWL D1R	Lab TAL SAC TAL SAC	Matrix: Wate
Date Collecter Date Received Prep Type Total/NA	d: 08/09/18 1 d: 08/10/18 0 Batch Type Prep Analysis Die ID: MW d: 08/09/18 1	1:00 9:35 Batch <u>Method</u> 3535 537 (modified)	Run	Factor1	Number 241512	or Analyzed 08/22/18 18:32	Analyst TWL D1R	Lab TAL SAC TAL SAC	Matrix: Wate
Date Collected Date Received Prep Type Total/NA Total/NA Client Samp Date Collected Date Received	d: 08/09/18 1 d: 08/10/18 0 Batch Type Prep Analysis Die ID: MW d: 08/09/18 1 d: 08/10/18 0 Batch	1:00 9:35 Batch <u>Method</u> 3535 537 (modified) 7-5 2:00 9:35 Batch		Factor1	Number 241512 241767 Batch	or Analyzed 08/22/18 18:32 08/24/18 02:44 Prepared	Analyst TWL D1R	TAL SAC TAL SAC TAL SAC	Matrix: Wate
Date Collected Date Received Prep Type Total/NA Total/NA Client Samp Date Collected Date Received Prep Type	d: 08/09/18 1 d: 08/10/18 0 Batch Type Prep Analysis DIE ID: MW d: 08/09/18 1 d: 08/10/18 0 Batch Type	1:00 9:35 Batch 3535 537 (modified) 7-5 2:00 9:35 Batch Method	Run	Factor1	Number 241512 241767 Batch Number	or Analyzed 08/22/18 18:32 08/24/18 02:44 Prepared or Analyzed	Analyst TWL D1R Lab Sa	Lab TAL SAC TAL SAC TAL SAC	Matrix: Wate
Date Collected Date Received Prep Type Total/NA Total/NA Client Samp Date Collected Date Received Prep Type Total/NA	d: 08/09/18 1 d: 08/10/18 0 Batch Type Prep Analysis DIE ID: MW d: 08/09/18 1 d: 08/10/18 0 Batch Type Prep	1:00 9:35 Batch Method 3535 537 (modified) 7-5 2:00 9:35 Batch Method 3535		Factor 1 Dilution Factor	Number 241512 241767 Batch Number 241512	or Analyzed 08/22/18 18:32 08/24/18 02:44 Prepared or Analyzed 08/22/18 18:32	Analyst TWL D1R Lab Sa Analyst TWL	- Lab TAL SAC TAL SAC Ample ID: - Lab TAL SAC	Matrix: Wate
Date Collected Date Received Prep Type Total/NA Total/NA Client Samp Date Collected Date Received Prep Type	d: 08/09/18 1 d: 08/10/18 0 Batch Type Prep Analysis DIE ID: MW d: 08/09/18 1 d: 08/10/18 0 Batch Type	1:00 9:35 Batch 3535 537 (modified) 7-5 2:00 9:35 Batch Method		Factor1	Number 241512 241767 Batch Number 241512	or Analyzed 08/22/18 18:32 08/24/18 02:44 Prepared or Analyzed	Analyst TWL D1R Lab Sa Analyst TWL	Lab TAL SAC TAL SAC TAL SAC	

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	3535			241512	08/22/18 18:32	TWL	TAL SAC
Total/NA	Analysis	537 (modified)		1	241767	08/24/18 02:59	D1R	TAL SAC

Laboratory References:

TAL SAC = TestAmerica Sacramento, 880 Riverside Parkway, West Sacramento, CA 95605, TEL (916)373-5600

Accreditation/Certification Summary

Client: Short Elliott Hendrickson, Inc. dba SEH Project/Site: Newell Former Plant #20

Laboratory: TestAmerica Chicago

The accreditations/certifications listed below are applicable to this report.

Authority	Program	EPA Region	Identification Number	Expiration Date
Wisconsin	State Program	5	999580010	08-31-19

Laboratory: TestAmerica Sacramento

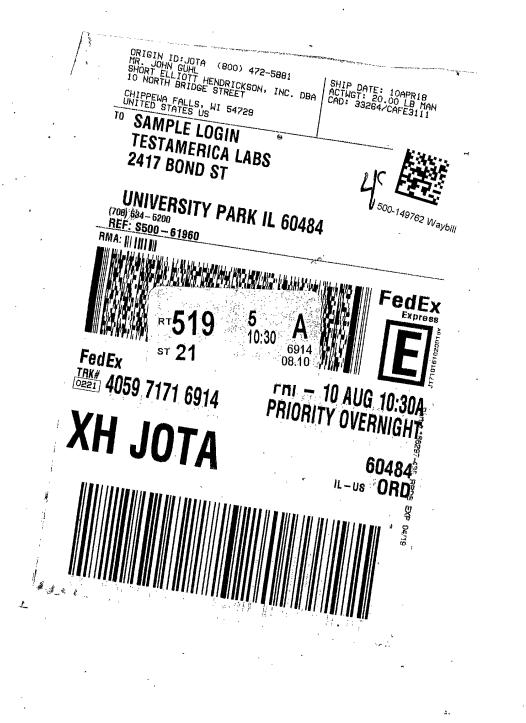
All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	EPA Region	Identification Number	Expiration Date
Alaska (UST)	State Program	10	17-020	01-20-21
ANAB	DoD ELAP		L2468	01-20-21
Arizona	State Program	9	AZ0708	08-11-19
Arkansas DEQ	State Program	6	88-0691	06-17-19
California	State Program	9	2897	01-31-19
Colorado	State Program	8	CA00044	08-31-19
Connecticut	State Program	1	PH-0691	06-30-19
Florida	NELAP	4	E87570	06-30-19
Georgia	State Program	4	N/A	01-28-19
Hawaii	State Program	9	N/A	01-29-19
Illinois	NELAP	5	200060	03-17-19
Kansas	NELAP	7	E-10375	10-31-18
Louisiana	NELAP	6	30612	06-30-19
Maine	State Program	1	CA0004	04-14-20
Michigan	State Program	5	9947	01-31-20
Nevada	State Program	9	CA00044	07-31-19
New Hampshire	NELAP	1	2997	04-18-19
New Jersey	NELAP	2	CA005	06-30-19
New York	NELAP	2	11666	03-31-19
Oregon	NELAP	10	4040	01-29-19
Pennsylvania	NELAP	3	68-01272	03-31-19
Texas	NELAP	6	T104704399	05-31-19
US Fish & Wildlife	Federal		LE148388-0	07-31-19
USDA	Federal		P330-18-00239	01-17-21
USEPA UCMR	Federal	1	CA00044	11-06-18
Utah	NELAP	8	CA00044	02-28-19
Vermont	State Program	1	VT-4040	04-30-19
Virginia	NELAP	3	460278	03-14-19
Washington	State Program	10	C581	05-05-19
West Virginia (DW)	State Program	3	9930C	12-31-18
Wyoming	State Program	8	8TMS-L	01-28-19

12 13 14

THE LEADER IN ENVIRONMENTAL TESTING 2417 Bond Street, University Park, IL 60484 Phone: 708.534.5200 Fax: 708.534.5211	(optional) Report To Contact: John Guhl Company: SEN Inc Address: 10 N. Bridge St Address: Chippena failly, 60154 Phone: 7(5,720.6200	(optional) Bill To Contact: Druch GL Company: Address: Phone:	Chain of Cust Lab Job #: 500 Chain of Custody Number Page of	-149762
	Fax:	Pax: PO#/Reference# 601sau @ S	Temperature °C of Cooler:	23
Client Project #	Preservative	The second contraction of the second contrac		Preservative Key 1. HCL, Cool to 4° 2. H2SO4, Cool to 4°
Project Name NENEL Former Plant Project Lab Project # Sampler Sampler Sample ID Data Project # Lab PM Data PM	Sampling Jate Time 5#00			3. HNO3, Cool to 4° 4. NaOH, Cool to 4° 5. NaOH/Zn, Cool to 4° 6. NaHSO4 7. Cool to 4° 8. None 9. Other
	nate Time ¥35 ₹			Comments
	-18 10:00 Z.W			
	-18 11:00 Z W			
	1-18 12:00 Z W			
	W 5 20:1 9-4			00-149762 COC
Turnaround Time Required (Business Days) ROUTINE 1 Day 2 Days 5 Days 7 Days 10 Days 15 Days Requested Due Date	Sample Disposal Other Return to Client		nths (A fee may be assessed if samples are retained longe	r than 1 month)
Relinguisherther Ballinguisherther Ballinguisherther Ballinguisherther Deter Series Date Date Date Date Date Date Date Date	8 2:00 pro leceived By	anoly company TAULT Dat	08/10/18 Time 935 Lab Cour	ier
Relinquined By Company Date	Time Received By	Company Date	Time Shipp	ed FX Priorith
Relinquished By Company Date	Time Received By	Company Date		
Matrix Key Client Comments WW - Wastewater SE - Sediment W - Wastewater SO - Soil S - Soil L - Leachate SL - Sludge WI - Wipe MS - Miscellaneous DW - Drinking Water OL - Oil O - Other A - Air Context	5Eal # 191983 + #	Lab Comments:		

TAL-4124-500 (1209)



TestAmerica Chicago

Chain of Custody Record



TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

2417 Bond Street University Park, IL 60484 Phone (708) 534-5200 Fax (708) 534-5211

Client Information (Sub Contract Lab)	Sampler:			Lab PM Fredr	ick, Sa	ndie J			Carrier Tra	icking No(s):		COC No: 500-108701.1		
Client Contact.	Phone			E-Mail		101.1			State of Or			Page:		
Shipping/Receiving							mericainc.co red (See note):	om	Wiscons	lin	-	Page 1 of 1		
Company: FestAmerica Laboratories, Inc.							Wisconsin					500-149762-1		
Address: 380 Riverside Parkway, ,	Due Date Requeste 8/20/2018	ed:					Analy	ysis Re	equested			Preservation Co A - HCL	des: M - Hexane	
City: West Sacramento	TAT Requested (da	ays):										B - NaOH C - Zn Acetate	N - None O - AsNaO2	
State, Zip:					128							D - Nitric Acid E - NaHSO4	P - Na2O4S Q - Na2SO3	
CA, 95605	PO #		-									F - MeOH	R - Na2S2O3	
916-373-5600(Tel) 916-372-1059(Fax)		PO #:				Only					in the	G - Amchlor H - Ascorbic Acid	S - H2SO4 T - TSP Dodecahydrate	
Email:	WO #:				s or No) No)	FOS					2	I - Ice J - DI Water	U - Acetone V - MCAA	
Project Name: General Soils/Waters	Project #: 50006628				ered Sample (Yes or MS/MSD (Yes or No)	OAIPI					containers	K - EDTA L - EDA	W - pH 4-5 Z - other (specify)	
Site:	SSOW#:				D (Ye	LC PF								
					SMIS	35_PF					er of			
		Sample	Type (Newater, Sesolid, waste/oll,	Field Filtered Perform MS/N	PFC_IDA/3535_PFC PFOA/PFOS					Total Number			
Sample Identification - Client ID (Lab ID)	Sample Date	Time	G=grab) BT=T		Per Pe	H					10	Special I	nstructions/Note:	
	_>	09:00	Preservation	Contraction of the local division of the loc	XX									
MW-2 (500-149762-1)	8/9/18	Central		Vater		x					2			
MW-10 (500-149762-2)	8/9/18	10:00 Central	1	Vater		x					2			
PZ-10 (500-149762-3)	8/9/18	11:00 Central		Vater		x					2			
MW-5 (500-149762-4)	8/9/18	12:00 Central		Vater		x					2			
PZ-5 (500-149762-5)	8/9/18	13:00 Central		Vater		x					2			
					-									
		-		-					++-					
		-												
Note: Since laboratory accreditations are subject to change, TestAmerica currently maintain accreditation in the State of Origin listed above for ana Laboratories, Inc. attention immediately. If all requested accreditations are	vsis/tests/matrix being analyze	ed, the samples	must be shipped b	ack to the Tr	estAmeri	ca laborator	y or other instruct	ctions will	This sample sh be provided.	hipment is forwa Any changes to	irded under o accreditation	chain-of-custody. If the status should be bro	e laboratory does not ought to TestAmerica	
Possible Hazard Identification					San	nple Disp	oosal (A fee	may be	assessed	if samples	are retain	ed longer than	1 month)	
Unconfirmed							To Client		Disposal B	ly Lab	Arch	ive For	Months	
Deliverable Requested: I, II, III, IV, Other (specify)	Primary Deliver	able Rank: 2			Spe	cial Instru	uctions/QC R	equirem	ients:					
Empty Kit Relinquished by:	11	Date:		1	Time:				Meth	nod of Shipmen				
Relighted by	0/10/18)	1600 Con	Panta		Received to	Up			Date/Tir	ne:	9:10	Company TASAL	
Kelinquished by.	Sine/Time!		600 Con	pany		Received b			and the state of the second	Date/Tir		11.000	Company	
Relinquished by:	Date/Time:		Con	pany		Received b	у:			Date/Tir	ne:		Company	
Custody Seals Intact: Custody Seal No.:						Cooler Terr	perature(s) °C a	and Other	Remarks:	0-	1		1	
Δ Yes Δ No										Ur			Ver: 09/20/2016	

8/29/2018

estAmerica	Sacramento Sample Receiving Notes	
LEADER IN ENVIRONMENTAL TESTING		
	J 500-149762 Field Sheet	
cking # 4059 7174 9309	SO(PQ / FO / 2-Day / Ground / UPS / Courier / GSO /	
	OnTrac / Goldstreak / USPS / Other	
is form to record Sample Custody Seal, Cooler	r Custody Seal, Temperature & corrected Temperature & other observations.	
the job folder with the COC.		
a farma	Therm. ID: (AK-2) AK-3 / AK-5 / AK-6 / HACCP / Other	
otes:	(+0.7°C) IceX Wet Gel Other	
	Cooler Custody Seal:SEAL	
and a subscription of the	Sample Custody Seal:	
	Cooler ID:	
the second s	Temp: Observed 0, 7 Corrected	1
	From: Temp Blank D Sample 🕰	
	Yes No NA	
	Perchlorate has headspace? Alkalinity has no headspace? D D	
	Samples received within holding time?	
	Sample preservatives verified?	
	Cooler compromised/tampered with?	
	Samples compromised/tampered with?	
	Samples w/o discrepancies?	
	Sample containers have legible labels?	
	Containers are not broken or leaking?	
	Sample date/times are provided.	
	Appropriate containers are used?	
	Sample bottles are completely filled?	
	Zero headspace?*	
	Multiphasic samples are not present?	1
	Sample temp OK?	
	Sample out of temp?	
	Initials: AP Date: NV/11/16	

Q:\DOCUMENT-MANAGEMENT\FORMS\QA-812 SAMPLE RECEIVING NOTES.DOC

TestAmerica Chicago 2417 Bond Street

Phone (708) 534-5200 Fax (708) 534-5211

University Park, IL 60484

Chain of Custody Record



TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

Client Information (Sub Contract Lab)	Sampler:			Lab F Free	PM: drick, S	Sandie	J			(Carrier Tra	cking No	(s):		COC No: 500-108701.1	
Client Contact: Shipping/Receiving	Phone:			E-Ma		trick@	Dtestam	ericain	c com		State of Or Niscons				Page: Page 1 of 1	
Company: TestAmerica Laboratories, Inc.	and a second second			Joan	Accred	litations	s Required ram - W	d (See no	ite):		1000115				Job #:	
Address:	Due Date Requeste	d:			State	Flog	ram - vv			500-149762-1 Preservation Codes:						
880 Riverside Parkway, , City:	8/20/2018 TAT Requested (da	wel.			1-1-1-1	-		Ar	nalysis	Requ	lested			-	A - HCL	M - Hexane
West Sacramento	in nequested (se													120	B - NaOH C - Zn Acetate	N - None O - AsNaO2
State, Zip: CA, 95605										11					D - Nitric Acid E - NaHSO4	P - Na2O4S Q - Na2SO3
Phone: 916-373-5600(Tel) 916-372-1059(Fax)	PO #					2									F - MeOH G - Arnchlor H - Ascorbic Acid	R - Na2S2O3 S - H2SO4
Email:	WO #:				No)	PFC_IDA/3535_PFC PFOA/PFOS Only								1	I - Ice J - DI Water	T - TSP Dodecahydrate U - Acetone V - MCAA
Project Name:	Project #:				Sample (Yes or ISD (Yes or No)	APFC								iners	K - EDTA	W - pH 4-5 Z - other (specify)
General Soils/Waters Site:	50006628 SSOW#:				nple (Yes	PFO								conta	Other:	- onter (opcont))
					d San	PFG								5		
			Sample	Matrix (w-water,	Itere n MS	A/353							11	Number		
		Sample	Type (C=comp,	S=solid, O=waste/oil,	eld Fl	C_ID								Total N		
Sample Identification - Client ID (Lab ID)	Sample Date	Time	and the second second	BT=Tissue, AvAir		1ª	-	an Dend	191894 (CH)	1 1000	-	-	S 1907 100	Ě	Special In	structions/Note:
MW-2 (500-149762-1)	8/9/18	09:00		Water	fř	×		1	100					2		
MW-10 (500-149762-2)	8/9/18	Central 10:00		Water	\mathbb{H}	x		+			-			2		
MW-10 (500-149762-2) PZ-10 (500-149762-3)	8/9/18	Central 11:00		Water		x		-		++			++	2		
MW-5 (500-149762-4)	8/9/18	Central 12:00		Water	++	x			-					2		*****
PZ-5 (500-149762-5)	8/9/18	Central 13:00		Water	+	X	+	+		++			++-	2		
12-3 (300-143702-3)	0/3/10	Central		Water	++	+^	++	+		++		\vdash		2		
					++-	-				+ +			++-	-		
					++-	-	++	-		+						
					++-	+								-		
					11	1		1	_							
Note: Since laboratory accreditations are subject to change, TestAme currently maintain accreditation in the State of Origin listed above for	analysis/tests/matrix being analyze	d, the samples	must be shipp	ed back to the	TestAme	erica la	boratory of	or other in	structions							
Laboratories, Inc. attention immediately. If all requested accreditation	ns are current to date, return the sig	ned Chain of C	ustody attesti	ng to said comp												
Possible Hazard Identification					Sa		e Dispo Return T	and a series				The second			ed longer than 1	
Unconfirmed Deliverable Requested: I, II, III, IV, Other (specify)	Primary Delivera	able Rank: 2			Sp				C Requi	_	sposal B ts:	y Lao		Archiv	ve For	Months
Empty Kit Relinquished by:	, ,]	Date:			Time	:		-			Meth	od of Shi	pment:			and the second secon
Relighted by	Daystine		1100	Company		Rece	eived by:	p			_	Da	ate/Time:			Company TASAC
Kelinguished by:	One Time!	/	1600	Company			eived by:	1					8/11/19 ate/Time:	9 4	1110	Company
Relinquished by: Custody Seals Intact: Custody Seal No.: Δ Yes Δ No	Date/Time:	in sei en ine		Company		Rece	eived by					Da	ate/Time:			Company
Custody Seals Intact: Custody Seal No.:						Cool	ler Tempe	rature(s)	°C and O	ther Ren	narks:		7	_		1
Δ Yes Δ No												() 1			N
							- I.	<u> </u>				10-				Ver: 09/20/2016
								ω -			0				0, 01	

2/62/8	Page 22 of 25
TestAmerica The leader in environmental testing	Sacramento Sample Receiving Notes
Tracking # 4059 7174 9309 Use this form to record Sample Custody Seal, Cooler Custo	SO PO / FO / 2-Day / Ground / UPS / Courier / GSO / OnTrac / Goldstreak / USPS / Other ody Seal, Temperature & corrected Temperature & other observations.
Solid instrumentation for occurs of the policy of	Therm. ID: K-2 AK-3 / AK-5 / AK-6 / HACCP / Other Ice_X Wet_X Gel Other Cooler Custody Seal: SEAL Sample Custody Seal: SEAL Sample Custody Seal: SEAL Cooler ID:
	Initials: Ap Date: 0%/14/10 *Containers requiring zero headspace have no headspace, or bubble < 6 mm (1/4")

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2 7 3

QA-812 BWD 08/09/2018

Login Sample Receipt Checklist

Client: Short Elliott Hendrickson, Inc. dba SEH

Login Number: 149762 List Number: 1 Creator: Sanchez, Ariel M

Question	Answer	Comment
Radioactivity wasn't checked or is = background as measured by a survey meter.</td <td>True</td> <td></td>	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	2.3
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Job Number: 500-149762-1

List Source: TestAmerica Chicago

Client: Short Elliott Hendrickson, Inc. dba SEH

The cooler's custody seal, if present, is intact.

COC is filled out with all pertinent information.

Is the Field Sampler's name present on COC?

Sample custody seals, if present, are intact.

Samples were received on ice. Cooler Temperature is acceptable.

Cooler Temperature is recorded.

COC is filled out in ink and legible.

Sample containers have legible labels.

Sample collection date/times are provided.

Appropriate sample containers are used.

Containers are not broken or leaking.

Sample bottles are completely filled.

Multiphasic samples are not present.

Samples do not require splitting or compositing.

Sample Preservation Verified.

Residual Chlorine Checked.

Radioactivity wasn't checked or is </= background as measured by a survey

There are no discrepancies between the containers received and the COC.

Samples are received within Holding Time (excluding tests with immediate

There is sufficient vol. for all requested analyses, incl. any requested

Containers requiring zero headspace have no headspace or bubble is

The cooler or samples do not appear to have been compromised or

Question

tampered with.

COC is present.

HTs)

MS/MSDs

<6mm (1/4").

meter.

Job Number: 500-149762-1

0-149762-1	
acramento	
8 12:02 PM	5
	8
	9
	1

Login Number: 149762	List Source: TestAmerica Sacramento
List Number: 2	List Creation: 08/13/18 12:02 PM
Creator: Gooch, Mayce	

Answer

N/A

True N/A

True

True

True

True

True

True

True False

True

True

True

True

True

True True

N/A

True

N/A

True

True

N/A

Comment

0.7c

Received project as a subcontract.

Isotope Dilution Summary

Client: Short Elliott Hendrickson, Inc. dba SEH Project/Site: Newell Former Plant #20

Method: 537 (modified) - Fluorinated Alkyl Substances

Pren	Type:	· Tota	Ι/ΝΔ
TICP	- ypc		

PFOS PFOA 500-149762-1 MW-2 32 41 500-149762-2 MW-10 61 71 500-149762-3 PZ-10 56 62 500-149762-4 MW-5 70 78 500-149762-5 PZ-5 88 95 LCS 320-241512/2-A Lab Control Sample 79 90 LCSD 320-241512/3-A Lab Control Sample Dup 88 95 MB 320-241512/1-A Method Blank 81 84 Surrogate Legend PFOS = 13C4 PFOS PFOA = 13C4 PFOA				Percent Isotope D	Dilution Recovery (Acceptance Limits)	
500-149762-1 MW-2 32 41 500-149762-2 MW-10 61 71 500-149762-3 PZ-10 56 62 500-149762-4 MW-5 70 78 500-149762-5 PZ-5 88 95 .CS 320-241512/2-A Lab Control Sample 79 90 .CSD 320-241512/3-A Lab Control Sample Dup 88 95 MB 320-241512/1-A Method Blank 81 84 Surrogate Legend PFOS = 13C4 PFOS FOS FOS			PFOS			
500-149762-2 MW-10 61 71 500-149762-3 PZ-10 56 62 500-149762-4 MW-5 70 78 500-149762-5 PZ-5 88 95 CSD 320-241512/2-A Lab Control Sample Dup 88 95 CSD 320-241512/3-A Lab Control Sample Dup 88 95 MB 320-241512/1-A Method Blank 81 84 Surrogate Legend FPGS = 13C4 PFOS FPGS FPGS	_ab Sample ID	Client Sample ID	(25-150)	(25-150)		
500-149762-3 PZ-10 56 62 500-149762-4 MW-5 70 78 500-149762-5 PZ-5 88 95 .CS 320-241512/2-A Lab Control Sample 79 90 .CSD 320-241512/3-A Lab Control Sample Dup 88 95 MB 320-241512/1-A Method Blank 81 84 Surrogate Legend FPOS = 13C4 PFOS FPOS FPOS	500-149762-1		32	41		
500-149762-4 MW-5 70 78 500-149762-5 PZ-5 88 95 LCS 320-241512/2-A Lab Control Sample 79 90 LCSD 320-241512/3-A Lab Control Sample Dup 88 95 MB 320-241512/1-A Method Blank 81 84 Surrogate Legend FOS = 13C4 PFOS FOS FOS FOS	500-149762-2	MW-10	61	71		
500-149762-5 PZ-5 88 95 LCS 320-241512/2-A Lab Control Sample 79 90 LCSD 320-241512/3-A Lab Control Sample Dup 88 95 MB 320-241512/1-A Method Blank 81 84 Surrogate Legend PFOS = 13C4 PFOS V	500-149762-3	PZ-10	56	62		
LCS 320-241512/2-A Lab Control Sample 79 90 LCSD 320-241512/3-A Lab Control Sample Dup 88 95 MB 320-241512/1-A Method Blank 81 84 Surrogate Legend FPOS = 13C4 PFOS FOS	500-149762-4	MW-5	70	78		
LCSD 320-241512/3-A Lab Control Sample Dup 88 95 MB 320-241512/1-A Method Blank 81 84 Surrogate Legend PFOS = 13C4 PFOS FOS	500-149762-5	PZ-5	88	95		
MB 320-241512/1-A Method Blank 81 84 Surrogate Legend PFOS = 13C4 PFOS	_CS 320-241512/2-A	Lab Control Sample	79	90		
Surrogate Legend PFOS = 13C4 PFOS	_CSD 320-241512/3-A	Lab Control Sample Dup	88	95		
PFOS = 13C4 PFOS	MB 320-241512/1-A	Method Blank	81	84		
PFOA = 13C4 PFOA						
	PFOA = 13C4 PFOA					

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