## COMPLETE PFAS SAMPLING RESULTS

						Pub	lic Wa	ater Syst	em Sou	urce b	y Com	mun	ity			
Contaminan of Concern	ADEC Action Levels	Am	bler	Buckland	Deering	Ki	ana	Kivalina	Kobuk	Kotz	ebue	Noa	ıtak	Noorvik	Selawik	Shungnak
(ng/L)	Action Levels	2002 Well	1982 Well	Buckland River	Inmachuk River	Upper Well		Wulik River	Main Well	Devils Lake	Vortac Lake	Well #5	Well #6	Kobuk River	Selawik River	Kobuk River
PFOA	Combination of the analytes	0.31	0.36	ND	ND	ND	ND	ND	0.32	ND	ND	ND	ND	0.23	0.41	ND
PFOS	should not exceed 70 ng/L	ND	ND	ND	ND	ND	ND	ND	0.29	ND	ND	ND	ND	ND	0.43	ND
PFHpA	No	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
PFNA		ND	ND	ND	0.21	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
PFHxS	Action Levels	0.34	0.39	ND	ND	ND	ND	ND	ND	5.43	ND	ND	ND	ND	ND	ND
PFBS		0.27	0.28	ND	0.38	ND	ND	ND	ND	ND	3.82	ND	ND	ND	ND	ND

### Detectable Concentration

### ND = Not Detected

Results are "Not Detected" when the concentration is lower than the Detection Limit.

### **Meansurement Equivalents**

1 ng/L = 1 ppt

One nanogram per liter equals one part per trillion

### **Contaminants Name and Acronym**

Perfluorooctanoic Acid (PFOA)

Perfluorooctane Sulfonate (PFOS)

Perfluoroheptanoic Acid (PFHpA)

Perfluorononanoic Acid (PFNA)

Perfluorohexane Sulfonate (PFHxS)

Perfluorobutane Sulfonate (PFBS)

Presented are the complete PFAS sampling results from each public water system source in the Northwest Arctic Borough (2019). The Department of Environmental Conservation (ADEC) recommends drinking water samples check for 6 different PFAS contaminants. On the left are all six of the PFAS contaminant acronyms that were analyzed. The second table column shows the ADEC Action Levels which mirror the EPA Health Advisory Limit of 70 ng/L for the sum of PFOA and PFOS concentrations (PFOA and PFOS results are outlined red in the table). 11 communities were investigated and 15 different water sources were sampled.

According to ADEC's current health guidelines, all public water system sources in the Northwest Arctic Borough have safe PFAS levels.





Generic Maniilaq Association

Work Order: 1195746

Noatak

Client: Maniilaq Association

**Report Date:** October 17, 2019

Enclosed are the analytical results associated with the above work order. The results apply to the samples as received. All results are intended to be used in their entirety and SGS is not responsible for use of less than the complete report. If you have any questions regarding this report, or if we can be of any other assistance, please contact your SGS Project Manager at 907-562-2343. This document is issued by the Company under its General Conditions of Service accessible at <a href="http://www.sgs.com/en/Terms-and-Conditions.aspx">http://www.sgs.com/en/Terms-and-Conditions.aspx</a>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

SGS maintains a formal Quality Assurance/Quality Control (QA/QC) program. A copy of our Quality Assurance Plan (QAP), which outlines this program, is available at your request. The laboratory certification numbers are AK00971 (DW Chemistry & Microbiology) & 17-021 (CS) for ADEC and 2944.01 for DOD ELAP/ISO 17025 (RCRA methods: 1020B, 1311, 3010A, 3050B, 3520C, 3550C, 5030B, 5035A, 6020A, 7470A, 7471B, 8015C, 8021B, 8082A, 8260C, 8270D, 8270D-SIM, 9040C, 9045D, 9056A, 9060A, AK101 and AK102/103). SGS is only certified for the analytes listed on our Drinking Water Certification, and only those analytes will be reported to the State of Alaska for compliance. Except as specifically noted, all statements and data in this report are in conformance to the provisions set forth by the SGS QAP and, when applicable, other regulatory authorities.

The following descriptors or qualifiers may be found in your report:

\* The analyte has exceeded allowable regulatory or control limits.

! Surrogate out of control limits.

B Indicates the analyte is found in a blank associated with the sample.

CCV/CVA/CVB Continuing Calibration Verification

 $CCCV/CVC/CVCA/CVCB \qquad \quad Closing \ Continuing \ Calibration \ Verification$ 

CL Control Limit

DF Analytical Dilution Factor

DL Detection Limit (i.e., maximum method detection limit)

E The analyte result is above the calibrated range.

GT Greater Than

ICV Initial Calibration Verification

J The quantitation is an estimation.

LCS(D) Laboratory Control Spike (Duplicate)

LLQC/LLIQC Low Level Quantitation Check

LOD Limit of Detection (i.e., 1/2 of the LOQ)

LOQ Limit of Quantitation (i.e., reporting or practical quantitation limit)

LT Less Than MB Method Blank

MS(D) Matrix Spike (Duplicate)

ND Indicates the analyte is not detected.
RPD Relative Percent Difference

U Indicates the analyte was analyzed for but not detected.

Note: Sample summaries which include a result for "Total Solids" have already been adjusted for moisture content.

All DRO/RRO analyses are integrated per SOP.

### Warner, Nicole (Anchorage)

**From:** Sean Peterson <speterson@zendergroup.org>

Sent: Monday, September 30, 2019 1:08 PM

**To:** Warner, Nicole (Anchorage)

**Cc:** Charlotte Sheridan

**Subject:** RE: [EXTERNAL] RE: 1195746 FID/SPID

Follow Up Flag: Follow up Flag Status: Flagged

\*\*\* WARNING: this message is from an EXTERNAL SENDER. Please be cautious, particularly with links and attachments.

\*\*

Sounds great Nicole, these samples do not have to go through the ADEC drinking water program.

----Original Message----

From: "Warner, Nicole (Anchorage)" <NICOLE.WARNER@sgs.com>

Sent: Monday, September 30, 2019 1:04pm

To: "Sean Peterson" <speterson@zendergroup.org>

Cc: "Charlotte Sheridan" <charlotte.sheridan@maniilaq.org>

Subject: RE: [EXTERNAL] RE: 1195746 FID/SPID

Sorry for the confusion!

Generally, if we receive samples with a PWSID on the COC, we are required by ADEC to submit these for compliance, unless otherwise instructed by the client. If these don't need to go through the ADEC Drinking Water Program, then I can make a note of that and attach it to the report.

I hope this helps! Please let me know if I can clarify anything.

Thank you!

-Nicole

From: Sean Peterson speterson@zendergroup.org>

Sent: Monday, September 30, 2019 12:06 PM

To: Warner, Nicole (Anchorage) < NICOLE.WARNER@sgs.com> Cc: Charlotte Sheridan < charlotte.sheridan@maniilaq.org>

Subject: [EXTERNAL] RE: 1195746 FID/SPID

\*\*\* WARNING: this message is from an EXTERNAL SENDER. Please be cautious, particularly with links and attachments.

### Hi Nicole,

I am confused, the samples collected are to be analyzed in the same manner as all of the other samples collected. If they submitted it with a PWSID number, I believe that because the Water Operators are helping collect the samples they are just used to doing it that way. Charlotte does this sound correct?

----Original Message----

From: "Warner, Nicole (Anchorage)" < NICOLE. WARNER@sgs.com>

Sent: Monday, September 30, 2019 10:18am

To: "Charlotte Sheridan" < <a href="mailto:charlotte.sheridan@maniilaq.org">charlotte.sheridan@maniilaq.org</a>, "Sean Peterson" < <a href="mailto:speterson@zendergroup.org">speterson@zendergroup.org</a>

Subject: 1195746 FID/SPID

### Good morning!

I had a question for you regarding workorder 1195746; it looks like these were submitted with a PWSID number for the PFC analysis. We currently do not have any default values for the Facility ID/Sampling Point ID for CMDP submittal for PFCs at this time. Are these samples intended to be submitted to ADEC? If so, can you please assist with the FID/SPID values?

Thank you!

-Nicole

### **Nicole Warner**

SGS North America, Inc Project Manager 200 W Potter Dr Anchorage, AK 99518 Phone: 907-562-2343 Mobile: 550-3217

E-mail: Nicole.warner@sgs.com

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1195746

CHA PWSID

Locations Nationwide

New Jersey North Carolina Alaska

Maryland New York Florida

Profile:364493 Now 1/26/19 www.us.sgs.com

	Page of	nittal - Missing or elay. Information	EC Monitoring	Sample Pt. ID							Data Deliverable Requirements:			Chain of Custody Seal: (Circle)	P BROKEN ABSENT	al Delivery [🎝
5 must be filled out. onset of analysis.		Info Required for ADEC Submittal - Missing or incorrect info may result in a delay. Information	may be found on your ADEC Monitoring Summary.	FAC ID #							Data De		d/or Special Instructions:	2.4 DG/		Delivery Method: Hand Delivery[ ] Commerical Delivery [
structions: Sections 1 - 5 must be filled ou Omissions may delay the onset of analysis.	ıtive	Info Requi	may be	#MSID#	340159	340157					Section 4	Cooler ID:	Requested Turnaround Time and/or Special Instructions:	Temp Blank °C: 2.4	<u>E</u>	Delivery Method: I
Instructions: Sections 1 - Omissions may delay the	3 Preservative	Analysis		Grab								، ۲	Redn			
	Section 3	* U O Z		z ш α ν	7	2						L R		.\	Received For Laboratory By:	< \ \ \ \
	2-1783	nopinali	lag.org	Time of Collection	5411	0/2/					Received Bv:	in Chil	Received By:			
رئ	PHONE #:	PROJECT/ PERMIT#: E-MAIL: Charlotte. Shariden	Profile #: @ wontiles. Or Quote #:	Date of Collection	09/23/17	61/53/10					Date	27)19	1/25/19 3:0pm		Date Time 922<	
Maniilag Association	Charlotte Sheridan		g Association o Association		Well # 5	カギリアM					d By: (1)	Falt, Warren Si.	h LL	(2).(2)		\
CLIENT:	Charle	PROJECT SOLVECT SOLVET SOLVECT SOLVECT SOLVECT SOLVECT SOLVECT SOLVECT SOLVECT SOLVECT	Montile INVOICE TO:	RESERVED for lab use	(I)AB	(2) A3	S no	sectio	6			the state of	Relinquished By: (2)	9 9 9 9	Relinquished By: (4)	

http://www.sgs.com/terms-and-conditions



200 W. Potter Dr., 3180 Pager Rd. Ste. Anchorage, AK 98518 (ph) 190. Fairbanks, AK 907-562-2343, (fax) 907- 99709 (ph) 907-474- 561-5301

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••
Client pickup Date:

(IATA) or air carrier (IATA)

September 4, 2019

Date:

S

Kit request taken by:

Date to ship by: 9/5/2019

Airbill Number:

907-442-7783

Phone #:

Charlotte Sheraton

Project/Permit#:

Noatak

Project Name: Quote #:

Email

Profile #:

If not, please send a request for new profile build.

Does a Profile exist in LIMS?

Client Name: Ordered By:

Maniilaq Association

Notes:

Glient pickup Date:	Be sure to ask if client will ship by ground (DO)	□ Deliver to client:	Ship by/Air Carrier: AK Air Cargo
---------------------	---	----------------------	-----------------------------------

			_								
91114	61/2/6	41/5114	•	Total	Bottles	2					
Date:	Date:	Date:		# QC	Bottles	0					
A.C	MW	AL		Hold	Time	14 d					
Kit prepared by:	Kit (including lid tightness for pres'd bottles) checked by:	Kit packed & shipped by:		Preservative	Lot#						
	iding lid tightness fo				Bottle Lot #						
	Kit (inclu				Pres.	Trizma					
					ize & Type	Teflon Free HDPE					
ıska (OTZ)	Ssociation	ton 907-442-7783	*Required Items		Container Size &	$2 \times 250 \text{ mL}$					
Kotzebue, Alaska (OTZ)	c/o Maniilaq Association	attn: Charlotte Sheraton 907-442-7783	SKIT_Maniilaq Association_Noatak_2019-09-04		Analysis	EPA 537 - PFAS					
	Delivery Address:	. '	Filename: \$		Matrix	ΜQ					
	Delivery,			No.	Samples Matrix	1					

# Track all Lot#? (Required for DOD)

Temperature Blank (circle one: 120-ml OR 500-ml) De Foreign Soil

Pack for Shipping via air carrier (IATA)

Low Level Mercury Trip Blank- Lot#:

Coolers Gel Ice

Water VOA Trip Blank - Lot#: 524 VOA Trip Blank - Lot#:

0 0 5

Soil VOA Trip Blank - Lot#:

Pack for Shipping via ground (DOT)

Total # includes bottles for % Solids

Other Notes/Reminders for Kit Prep:

1. Do not rinse container; be aware of any acid preservative in container.

Attention Client/Sampler:

- Label the container with your sample ID as well as the date/time of collection. 2. Fill container, but do not overfill (except volatile waters).
- 4. Fill out the Chain of Custody.
- Charges may be invoiced for bottles which are unused or improperly used. 5. Add frozen gel packs or ice to your cooler & pack to prevent breakage.

please contact your Project Manager for assistance. Thank you.

If you have any questions concerning this sample kit,

he form to the network. This should not be confirmation to the client email and save \*This will email a copy of this form for

used outside of SGS.

COC initiated by PM (attached)

Send additional instructions/documents (Note to PM: Be sure to attach copy of requested form.)

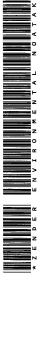
□ DW COC

of SGS COCs - Circle reg'd formation Blank COC

Custody Seals

Labels

**Bubble Wrap** 



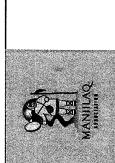
SGS North America Inc. 200 W. Potter Dr., 3180 Peger Rd. Ste. Anchorace, AK 99518 (ph) 190, Fairbanks, AK

Date:
pickup
Client

Time	
-	

		94.	61- 99709 (ph) 907-474- 8656	Sample K	Sample Kit Request		☐ Client pickup Date:  Be sure to ask if clier	nt will ship by ground (	IIMe: (DOT) or air carr	ier (IATA)	
Does	a Profile ex	Does a Profile exist in LIMS? If not, plea	If not, please send a request for new profile build.	ew profile build.							
Client Name:	ë	Zender En	Zender Environmental				Ship by/Air Carrier: AK Air Cargo	AK Air Cargo			
Ordered By:	y:	Sean Peterson	Phone #:		_		Airbill Number:				
Email:	<u>:</u>	<u>speterson@ze</u>	speterson@zendergroup.org				Date to ship by: 8/22/2019	8/22/2019			
Project Name:	 	Noatak	Project/Permit#:				Notes:				
Quote #:	#:		Profile #:				Kit request taken by:	JAN	Date:	August 19, 2019	
		Kotzebue, A	Kotzebue, Alaska (OTZ)				Kit prepared by:	14	Date:	8122/18	
Delivery Address:	.;	c/o Zender E	c/o Zender Environmental		Kit (incl	uding lid tightness l	Kit (including lid tightness for pres'd bottles) checked by:	AIL	Date:	V	
		attn: Sean Peterso	attn: Sean Peterson (907) 854-0505				Kit packed & shipped by:		Date:	_	
Filename:		SKIT_Zender Environmental_Noatak_2019-08-19	*Required Items								
No.							Preservative	Hold	# OC	Total	
Samples Matrix		Analysis	Container	Container Size & Type	Pres.	Bottle Lot #	Lot#	Time	Bottles	Bottles	
MQ 1		EPA 537 - PFAS	2 x 250 mL	Teflon Free HDPE	Trizma			14 d	0	2	
							AND THE PARTY OF				
				-							
☐ Pack for Shin	Pack for Shipping via <i>ground</i> (DOT)	(DOT)	ebutoni # letoT 🗆	Total # includes bottles for % Solide	- Po		Attention Client/Sampler:				
	ping via <i>gro</i> c ping via <i>air</i> c	Pack for Shipping via <b>3/ cana</b> (2017)	Track all 1 ot#2	Track all 1 ot#? (Bequired for DOD)	S 6						
Temperature	Blank ( <i>circle</i>	Temperature Blank (circle one: 120-ml OR 500-ml) ☐ Foreign Soil	D ☐ Foreign Soil				1. Do not rinse container; be aware of any acid preservative in container.	be aware of any acid	I preservative i	n container.	
	Soil VOA Trin Blank - Lot#:						2. Fill container, but do not overfill (except volatile waters)	t overfill (except vola	tile waters).		
-	Water VOA Trip Blank - Lot#:	·#:	Other Notes/	ss/Reminders for Kit Prep:	r Kit Prep:		3. Label the container with your sample ID as well as the date/time of collection.	your sample ID as v	well as the date	Atime of collection.	
☐ 524 VOA Trip	524 VOA Trip Blank - Lot#:				•		4. Fill out the Chain of Custody.	stody.			
	Low Level Mercury Trip Blank- Lot#:	ank- Lot#:					5. Add frozen gel packs or ice to your cooler & pack to prevent breakage.	rice to your cooler &	pack to preve	nt breakage.	
☑ Coolers							Charges may be invoiced for bottles which are unused or improperly used.	I for bottles which a	are unused or	improperly used.	
Gelice							If you have any questions concerning this sample kit, please contact your Project Manager for assistance. Thank your	s concerning this sa	ample kit, istance. <i>Tha</i>	nk vou	
							piedes comact year tolog				
	S Circle rea'd	Custody Seals SGS COCs - <i>Circle rea'd forma</i> 🗆 Blank COC	000 MG	区OC initiated by PM (attached)	M (attached)		*This will email a copy of this form for	of this form for			
Send addition	al instruction	Send additional instructions/documents (Note to PM: Be sure to attach copy of requested form.)	: Be sure to attach	copy of requested t	orm.)		the form to the network. This should not be	This should not be			
							חספת חתופותם	O 305.			

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# Chris Dankmeyer, Maniilaq Environmental Health Manager PO Box 43, Kotzebue, Alaska 99752 Phone: 907-442-7173

Water System Name:		Facility Name:		
Noatak Utilities	Ý	Nostak Utilities	Hites	
Public Water System ID #:		Facility ID #:		
340189				
Mailing Address:			State:	Zip Code:
Po.80×41		Noatak	Alaska	1266
Date/Time Collected:	Sample Collection Point:		Collected By:	
	Well # 5		materian + met	× 50.
69 /23 / 69	カキ IPM			
(12 : >0 am(pm)				
Source Water Type:	Flowinging Stream (FS)	Reservoir/Lake (RL)	Other: (describe)	scribe)
			C) WN dX	3

USA

USA

No of

Pieces

2

2	15.0		П							AS AGREE	ט א	olume: 1.771
Prepaid		Wei	ght C	harge	Collect	Other	Charges					
	AS AGREEI	)				XE	ЗС	10.00				
	,	Valua	tion	Charge								
			-									
			Tax									
	·		_									
	Total O	ther (	Char	es Due Agent		conta	ins dan	gerous good	s, such pa	rt is properly descr	ribed by nar	that insofar as any part of the consignment ne and is in proper condition for carriage I consent to the inspection of this cargo.
	Total Ot	her C	harg	es Due Carrier		For: SGS CT and Signature of Shipper or his Agent ENVIRONMENTAL SVS						
				,		CS	- THIS	SHIPMENT I	OES NOT	_		S SHIPMENT <u>DOES</u> CONTAIN NGEROUS GOODS
	Total Prepaid		П	Total Co	llect							
	AS AGREEI	)										
						25	Sep	2019 1	5:59	Kotze	bue	Alaska Airlines
					<u> </u>	Exe	cuted On	(Date)		at (Place	e)	Signature of Issuing Carrier or its Agent
l			١									027-3725 5002

### Alert Expeditors Inc.

Citywide Delivery • 440-3351 8421 Flamingo Drive • Anchorage, Alaska 99502

From		0)2
To	Labs	me
Collect □	Prepay □ Account □	Advance Charges □
Job # 072	PO#	725-500
		garage and solution
- Carrier -	and Make	
	and the second s	
Shipped Signature	Mon	
		Total Charge



e-Sample Receipt Form

SGS Workorder #:

1195746



						9 ) 1	4 0
Review Criteria	ndition (Yes, N	lo, N/A		Exce	ptions No	ted below	
Chain of Custody / Temperature Requirement	ents		N/A	Exemption per	mitted if sam	pler hand carries	s/delivers.
Were Custody Seals intact? Note # & locati		1L 1R					
COC accompanied sample							
· · · · · · · · · · · · · · · · · · ·							
DOD: Were samples received in COC corresponding cooler							
N/A **Exemption permitted if chille	ed & collec	ted <8 h	nours	ago, or for sam	ples where cl	nilling is not requ	ired
Temperature blank compliant* (i.e., 0-6 °C after CF	Yes	Cooler	ID:	1	@	2.4 °C Therr	n. ID: <b>D61</b>
		Cooler	ID:		@	°C Therr	n. ID:
If samples received without a temperature blank, the "cooler temperature" will be		Cooler	ID:		@	°C Thern	
documented instead & "COOLER TEMP" will be noted to the right. "ambient" or "chilled" v	will		_				
be noted if neither is available.		Cooler	_		@	°C Thern	
		Cooler	ID:		@	°C Thern	n. ID:
*If >6°C, were samples collected <8 hours ago	? N/A						
If <0°C, were sample containers ice free	? N/A						
, , , , , , , , , , , , , , , , , , , ,	1071						
Note: Identify containing reaching at the containing of							
Note: Identify containers received at non-compliant temperature Use form FS-0029 if more space is neede							
Use form F5-0029 if more space is neede	a.						
Holding Time / Documentation / Sample Condition Requir	rements	Note: Ref	er to fo	orm F-083 "Sample	e Guide" for spe	ecific holding times	
Were samples received within holding time				•		<u> </u>	
,							
	0.0						
Do samples match COC** (i.e.,sample IDs,dates/times collected	d)? Yes						
**Note: If times differ <1hr, record details & login per COC.							
***Note: If sample information on containers differs from COC, SGS will default to COC in	nformation						
Were analytical requests clear? (i.e., method is specified for analysis	es Yes						
with multiple option for analysis (Ex: BTEX, Meta							
	•						
			NIZA	I+++			0/0000 * \
			N/A	***Exemption p	permitted for	metals (e.g,200.	8/6020A).
Were proper containers (type/mass/volume/preservative***)used	d? Yes						
Volatile / LL-Hg Require	ments						
Were Trip Blanks (i.e., VOAs, LL-Hg) in cooler with sample:	s? N/A						
Were all water VOA vials free of headspace (i.e., bubbles ≤ 6mm							
Were all soil VOAs field extracted with MeOH+BF							
Note to Client: Any "No", answer above indicates non-con	npliance v	ith stan	dard p	procedures and	may impact	data quality.	
Additional no	tes (if ar	nlicah	le)·				
Additional no	too (ii ap	γριισαυ	.0/.				



### **Sample Containers and Preservatives**

Container Id	<u>Preservative</u>	<u>Container</u>	Container Id	<u>Preservative</u>	<u>Container</u>
		<u>Condition</u>			<u>Condition</u>
1195746001-A	Trizma	ОК			
1195746001-B	Trizma	OK			
1195746002-A	Trizma	OK			
1195746002-B	Trizma	OK			

### **Container Condition Glossary**

Containers for bacteriological, low level mercury and VOA vials are not opened prior to analysis and will be assigned condition code OK unless evidence indicates than an inappropriate container was submitted.

- OK The container was received at an acceptable pH for the analysis requested.
- BU The container was received with headspace greater than 6mm.
- DM The container was received damaged.
- FR The container was received frozen and not usable for Bacteria or BOD analyses.
- IC The container provided for microbiology analysis was not a laboratory-supplied, pre-sterilized container and therefore was not suitable for analysis.
- NC- The container provided was not preserved or was under-preserved. The method does not allow for additional preservative added after collection.
- PA The container was received outside of the acceptable pH for the analysis requested. Preservative was added upon receipt and the container is now at the correct pH. See the Sample Receipt Form for details on the amount and lot # of the preservative added.
- PH The container was received outside of the acceptable pH for the analysis requested. Preservative was added upon receipt, but was insufficient to bring the container to the correct pH for the analysis requested. See the Sample Receipt Form for details on the amount and lot # of the preservative added. QN Insufficient sample quantity provided.





# FINAL LAB REPORT

1195746

31901691

16-Oct-2019

Prepared by

### **SGS NORTH AMERICA**

Prepared for

### SGS North America Inc.

Julie Shumway

200 W. Potter Dr. Anchorage, AK 99518 Phone: 907-562-2343

Email: julie.shumway@sgs.com

This report is approved by

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Tamara Burkamper

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Senior Project Manager

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Results reported relate only to the items tested.



### **Laboratory Qualifiers**

### **Report Definitions**

DL Method, Instrument, or Estimated Detection Limit per Analytical Method

CL Control Limits for the recovery result of a parameter

LOQ Reporting Limit
DF Dilution Factor

RPD Relative Percent Difference

LCS(D) Laboratory Control Spike (Duplicate)

MS(D) Matrix Spike (Duplicate)

MB Method Blank

### **Qualifier Definitions**

\* Recovery or RPD outside of control limits

B Analyte was detected in the Lab Method Blank at a level above the LOQ

U Undetected (Reported as ND or < DL)

J Estimated Concentration.

E Amount detected is greater than the Upper Calibration Limit

TIC Tentatively Identified Compound

ND Not Detected

P RPD > 40% between results of dual columns

D Spike or surrogate was diluted out in order to achieve a parameter result within instrument calibration

range

Samples requiring manual integrations for various congeners and/or standards are marked and dated by the analyst. A code definition is provided below:

M1 Mis-identified peak

M2 Software did not integrate peak

M3 Incorrect baseline construction (i.e. not all of peak included; two peaks integrated as one)
M4 Pattern integration required (i.e. DRO, GRO, PCB, Toxaphene and Technical Chlordane)

M5 Other - Explained in case narrative

Note Results pages that include a value for "Solids (%)" have been adjusted for moisture content.



### Sample Summary

Client Sample ID	Lab Sample ID	Collected	Received	Matrix
Well # 5	31901691001	09/23/2019 11:45	10/02/2019 10:09	Drinking Water
Well # 6	31901691002	09/23/2019 12:10	10/02/2019 10:09	Drinking Water



### Results of Well # 5

Client Sample ID: Well # 5 Client Project ID: 1195746 Lab Sample ID: 31901691001-A Lab Project ID: 31901691 Collection Date: 09/23/2019 11:45 Received Date: 10/02/2019 10:09

Matrix: Drinking Water

Solids (%):

### Results by EPA 537 v1.1

<u>Parameter</u>	<u>Result</u>	Qual	<u>DL</u>	LOQ/CL	<u>Units</u>	<u>DF</u>	Date Analyzed
PFHpA	ND	U	0.196	1.96	ng/L	1	10/15/2019 18:26
PFOA	ND	U	0.196	1.96	ng/L	1	10/15/2019 18:26
PFNA	ND	U	0.196	1.96	ng/L	1	10/15/2019 18:26
PFBS	ND	U	0.196	1.96	ng/L	1	10/15/2019 18:26
PFHxS	ND	U	0.196	1.96	ng/L	1	10/15/2019 18:26
PFOS	ND	U	0.196	1.96	ng/L	1	10/15/2019 18:26
Surrogates							
13C2-PFHxA	94.0			70.0-130	%	1	10/15/2019 18:26
13C2-PFDA	99.8			70.0-130	%	1	10/15/2019 18:26
d5-NEtFOSAA	91.7			70.0-130	%	1	10/15/2019 18:26

### **Batch Information**

Analytical Batch: XLC1404

Analytical Method: EPA 537 v1.1

Instrument: TQS2
Analyst: FNS

Prep Batch: HXX2427

Prep Method: EPA 537 v1.1 Prep
Prep Date/Time: 10/04/2019 14:26
Prep Initial Wt./Vol.: 255 mL
Prep Extract Vol: 1 mL



### Results of Well # 6

Client Sample ID: Well # 6 Client Project ID: 1195746 Lab Sample ID: 31901691002-A Lab Project ID: 31901691 Collection Date: 09/23/2019 12:10 Received Date: 10/02/2019 10:09

Matrix: Drinking Water

Solids (%):

### Results by EPA 537 v1.1

<u>Parameter</u>	<u>Result</u>	<u>Qual</u>	<u>DL</u>	LOQ/CL	<u>Units</u>	<u>DF</u>	<u>Date Analyzed</u>
PFHpA	ND	U	0.200	2.00	ng/L	1	10/15/2019 19:00
PFOA	ND	U	0.200	2.00	ng/L	1	10/15/2019 19:00
PFNA	ND	U	0.200	2.00	ng/L	1	10/15/2019 19:00
PFBS	ND	U	0.200	2.00	ng/L	1	10/15/2019 19:00
PFHxS	ND	U	0.200	2.00	ng/L	1	10/15/2019 19:00
PFOS	ND	U	0.200	2.00	ng/L	1	10/15/2019 19:00
Surrogates							
13C2-PFHxA	101			70.0-130	%	1	10/15/2019 19:00
13C2-PFDA	106			70.0-130	%	1	10/15/2019 19:00
d5-NEtFOSAA	97.5			70.0-130	%	1	10/15/2019 19:00

### **Batch Information**

Analytical Batch: XLC1404
Analytical Method: EPA 537 v1.1

Instrument: TQS2
Analyst: FNS

Prep Batch: HXX2427

Prep Method: EPA 537 v1.1 Prep
Prep Date/Time: 10/04/2019 14:26
Prep Initial Wt./Vol.: 250 mL
Prep Extract Vol: 1 mL

# SGS North America Inc. CHAIN OF CUSTODY RECORD

1195746

Locations Nationwide

Alaska

Florida

New Jersey

Colorado

Texas

North Carolina Louisiana

Virginia

					_									www.us	s.sgs.com			
CLIENT:	SGS North Am	erica Inc Ala	ska Division		SG	S Refere	nce: 3	190	101691 sgs nc						Page 1 of 1			
CONTACT:	Julie Shumway	PHONE NO:	(907) 50	62-2343	Addi	itional	Comm	ents:	ts: All soils report out in dry weight unless									
PROJECT	1195746	PWSID#:			#	Preserv- ative	00											
NAME:	1133740	NPDL#:			С	Used:	Triuma											
REPORTS TO: Julie Shumway		E-MAIL:	Julie.Shumw	ay@sgs.cor		TYPE												
	Env.Alaska.RefLabTeam@sgs.com		N T	C = COMP														
NVOICE TO:		QUOTE #:			A	G = GRAB	l l											
	SGS - Alaska	P.O. #:	1195	5746	N	MI = Multi	윤		- 1									
RESERVED for lab use	SAMPLE IDENTIFICATION	DATE mm/dd/yy	TIME HHMM	MATRIX/ MATRIX CODE	E R S	Incre- mental Soils	EPA 537				MS	MSD	SGS lab #		ocation ID			
	Well #5	09/23/2019	11:45:00	DW	2	GRA	Х						1195746001					
	Well #6	09/23/2019	12:10:00	DW	2	GRA	Х						1195746002					
							$\vdash$	_										
			-	-	-		$\vdash$											
					-													
					-			-+										
								-	_						<u> </u>			
elinquished E	By: (1)	Date	Time	Received I	Bv:			I	OOD P	roject	?		NO	Data Deliver	able Requirements			
												242/3	. /	Juliu Bellive.	able requirements			
								Report to DL (J Flags)? YES If J- Report as DL/LOD/LOQ.			Level I							
elinquished E	Ву: (2)	Date	Time	Received I	Зу:				Cooler ID:			Level I						
								Requested Turnaround Time and-or Spe		nd-or Spec	ial Instructions:							
	(0)								Ple	ease	repo	rt PF	OS, PFOA, P	FNA, PFHx	S, PFHpA, and			
elinquished E	By: (3)	Date	Time	Received I	Зу:		PFBS.  Temp Blank °C:  Chain of Custo											
									Chain of C	ustody Seal: (Circle								
elinquished E	By: (4)	Date / /	Time	Received F	or Lab	Laboratory By: Or Ambient [ ]		BROKEN ABSEN										
VII	MMURILI	10/1/19	0820	ONCL	M	10:	09											

[X 200 W. Potter Drive Anchorage, AK 99518 Tel: (907) 562-2343 Fax: (907) 561-5301 [ 5500 Business Drive Wilmington, NC 28405 Tel: (910) 350-1903 Fax: (910) 350-1557

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### SGS North America Inc.

### Sample Receipt Checklist (SRC)

Client:	SGS-NA-AK	Work	Order No.:	31901691
1.	x Shipped Hand Delivered	Notes:	UPS Next Day A	
2.	_x_COC Present on ReceiptNo COCAdditional Transmittal Forms			
3.	_x_ Custody Tape on Container No Custody Tape			
4.	_x_ Samples Intact Samples Broken / Leaking			
5.	<ul> <li>X Chilled on Receipt Actual Temp.(s) in °C:</li> <li>Ambient on Receipt</li> <li>Walk-in on Ice; Coming down to temp.</li> <li>X Temperature Blank Present</li> <li>WV samples-proxy not allowed</li> </ul>	2.3	Them	nometer ID#: IR4-Probe
6.	_x_ Sufficient Sample Submitted Insufficient Sample Submitted			
7.	Chlorine absent HNO3 < 2 HCL < 2 X Additional Preservatives verified (see notes)	Trizma		
8.	_x_Received Within Holding Time Not Received Within Holding Time			
9.	_x_No Discrepancies NotedDiscrepancies NotedNCDENR notified of Discrepancies*			
10.	No Headspace present in VOC vialsHeadspace present in VOC vials >6mm	N/A		
Comments: _				
	Inspe	cted and Lo	gged in by: AMO	