

Vista Work Order No. 1901115

Mr. Government of Jersey
Maison Le Pape, The Parade
St Helier, JERSEY JE2 3PU

Dear Enclosed are the results for the sample set received at Vista Analytical Laboratory on May 13, 2019 under your Project Name 'GOJ/2019/SAM/001'.

Vista Analytical Laboratory is committed to serving you effectively. If you require additional information, please contact me at the contact me at th



Vista Analytical Laboratory certifies that the report herein meets all the requirements set forth by NELAP for those applicable test methods. Results relate only to the samples as received by the laboratory. This report should not be reproduced except in full without the written approval of Vista.

Vista Analytical Laboratory ph fx: www.vista-analytical.com

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Vista Work Order No. 1901115 Case Narrative

Sample Condition on Receipt:

Three milk samples and three potato samples were received in good condition and within the method temperature requirements. The samples were received and stored securely in accordance with Vista standard operating procedures and EPA methodology.

Analytical Notes:

PFAS Isotope Dilution Method

The milk samples were extracted and analyzed for PFOS using the PFAS Isotope Dilution Method. This method is listed on Vista's NELAP certificate as Modified EPA Method 537. The results include both linear and branched isomers.

Quality Control

The Initial Calibration and Continuing Calibration Verifications met the acceptance criteria.

A Method Blank and Laboratory Control Sample (LCS)/Laboratory Control Sample Duplicate (LCSD) were extracted and analyzed with the preparation batch. No analytes were detected in the Method Blank above the Reporting Limit. The LCS/LCSD recoveries were within the method acceptance criteria.

The recoveries of all internal standards in the QC and field samples were within the acceptance criteria.

VAL-PFAS

The potato samples were extracted and analyzed for PFOS using VAL Method PFAS. The results include both linear and branched isomers. Results for all other analytes include the linear isomers only.

Quality Control

The Initial Calibration and Continuing Calibration Verifications met the method acceptance criteria.

A Method Blank and Ongoing Precision and Recovery (OPR) sample were extracted and analyzed with the preparation batch. No analytes were detected in the Method Blank above the Reporting Limit (RL). The OPR recoveries were within the method acceptance criteria.

The labeled standard recoveries for all QC and field samples were within the acceptance criteria.

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Sample Inventory Report

Vista Sample ID	Client Sample ID	Sampled	Received	Components/Containers
1901115-01	4328209	10-May-19 00:00	13-May-19 10:00	HDPE Bottle, 125 mL
1901115-02	4328208	10-May-19 00:00	13-May-19 10:00	HDPE Bottle, 125 mL
1901115-03	4303587	10-May-19 00:00	13-May-19 10:00	HDPE Bottle, 125 mL
1901115-04	MT149	10-May-19 00:00	13-May-19 10:00	Plastic Bag
1901115-05	P249	10-May-19 00:00	13-May-19 10:00	Plastic Bag
1901115-06	030519	10-May-19 00:00	13-May-19 10:00	Plastic Bag

ANALYTICAL RESULTS

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Sample ID: Me	ethod Blank								PFAS Iso	tope Dilution	Method
Client Data Name: Project:	Government of Jersey GOJ/2019/SAM/001		Matrix:	Aqueous		oratory Data Sample:	B9E0147-	BLK1	Column:	ВЕН С18	
Analyte		CAS Number	Conc. (ng/L)	a = 2	RL	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
PFOS		1763-23-1	ND		50.0		B9E0147	22-May-19	0.00500 L	23-May-19 21:59	9 1
Labeled Standard	ls	Type	% Recovery	Limits		Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
13C8-PFOS		IS	83.4	60 - 130			B9E0147	22-May-19	0.00500 L	23-May-19 21:59	9 1

Results reported to RL.



Sample	ID: LCSD							<					PFAS 1	Isoto	pe Dilution M	lethod
Name: Project: Matrix:	Government of Jers GOJ/2019/SAM/00 Aqueous				Lab Sample: QC Batch: Samp Size:	B9I	E0147-BS1/B9 E0147 0500/0.00500		SD1				Date Extracted: Column:		22-May-19 BEH C18	
Analyte	CAS Number	LCS (ng/L)	LCS Spike Amt	LCS % Rec	LCS Quals	LCSD (ng/L)	LCSD Spike Amt	LCSD % Rec	RPD	LCSD Ouals	%Rec Limits		LCS Analyzed	LCS Dil	LCSD Analyzed	LCSD Dil
PFOS	1763-23-1	2250	2000	112		2200	2000	110	2.14		70-130	30	23-May-19 21:38	1	23-May-19 21:	48 1
Labeled S	tandards	Туре		LCS % Rec	LCS Quals		-	LCSD % Rec		LCSD Ouals	Limits		LCS Analyzed	LCS Dil	LCSD Analyzed	LCSD Dil
13C8-PFC	S	IS		82.8		1.30		89.7	1		60-130	4 15 - 55	23-May-19 21:38	1	23-May-19 21:	48 1

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Sample ID: Me	thod Blank										VAL	- PFAS
	Government of Jersey GOJ/2019/SAM/001	8	Matrix:	Solid		1 1	oratory Data Sample:	B9E0167-	BLK1	Column:	BEH C18	2
Analyte	,	CAS Number	Conc. (ng/g)		2	RL	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
PFOS		1763-23-1	ND			2.00		B9E0167	29-May-19	1.00 g	02-Jun-19 01:44	1
Labeled Standard	S	Туре	% Recovery		Limits		Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
13C8-PFOS		IS	88.8		60 - 130			B9E0167	29-May-19	1.00 g	02-Jun-19 01:44	1

The results are reported in dry weight.

The sample size is reported in wet weight.

Results reported to RL.



Sample ID: O	PR											VAI	- PFAS
Client Data Name: Project:	Government of Jersey GOJ/2019/SAM/001		Matrix:	Solid	20			oratory Data Sample:	B9E0167-	BS1	Column:	BEH C18	
Analyte	C	AS Number	Amt Found (ng/g)	Spike Amt	% Rec	Limi	ts	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
PFOS		1763-23-1	9.87	10.0	98.7	70 -	130		B9E0167	29-May-19	1.00 g	02-Jun-19 01:33	1
Labeled Standar	ds		Туре		% Rec	Limi	its	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
13C8-PFOS			IS		85.5	60-	130		B9E0167	29-May-19	1.00 g	02-Jun-19 01:33	1

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Sample ID: 4	1328209								PFAS Iso	tope Dilution	Method
Client Data Name: Project: Location:	Government of Jersey GOJ/2019/SAM/001 Milk		Matrix: Date Collected:	Milk 10-May-19 00:00	L	aboratory Data ab Sample: Date Received:	1901115-0 13-May-1		Column:	ВЕН С18	
Analyte	5	CAS Number	Conc. (ng/L)		RL	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
PFOS		1763-23-1	ND		50.0		B9E0147	22-May-19	0.00500 L	23-May-19 22:10) 1
Labeled Standa	ards	Туре	% Recovery	Limits		Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
13C8-PFOS		IS	72.9	60 - 130			B9E0147	22-May-19	0.00500 L	23-May-19 22:10	0 1

Results reported to RL.



Sample ID: 4	328208								PFAS Iso	tope Dilution I	Method
Client Data Name: Project: Location:	Government of Jersey GOJ/2019/SAM/001 Milk		Matrix: Date Collected:	Milk 10-May-19 00:00	Lab	boratory Data Sample: te Received:	1901115-0 13-May-1		Column:	ВЕН С18	
Analyte		CAS Number	Conc. (ng/L)		RL	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
PFOS		1763-23-1	ND		50.0		B9E0147	22-May-19	0.00500 L	23-May-19 22:20	1
Labeled Standa	rds	Туре	% Recovery	Limits		Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
13C8-PFOS		IS	78.5	60 - 130			B9E0147	22-May-19	0.00500 L	23-May-19 22:20	1

Results reported to RL.



Sample ID: 4	303587								PFAS Iso	tope Dilution I	Method
Client Data Name: Project: Location:	Government of Jersey GOJ/2019/SAM/001 Milk	>	Matrix: Date Collected:	Milk 10-May-19 00:00	Lab	boratory Data o Sample: te Received:	1901115-0 13-May-19		Column:	ВЕН С18	
Analyte		CAS Number	Conc. (ng/L)		RL	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
PFOS		1763-23-1	ND		50.0		B9E0147	22-May-19	0.00500 L	23-May-19 22:31	1
Labeled Standa	rds	Туре	% Recovery	Limits	7.0	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
13C8-PFOS		IS	85.5	60 - 130			B9E0147	22-May-19	0.00500 L	23-May-19 22:31	1

Results reported to RL.



Sample ID:	MT149									VAL	- PFAS
Client Data Name: Project: Location:	Government of Jersey GOJ/2019/SAM/001 Potatoes		Matrix: Date Collected:	Solid 10-May-19 00:00	Lab Dat	ooratory Data Sample: e Received: solids:	1901115-0 13-May-1		Column:	ВЕН С18	
Analyte	3	CAS Number	Conc. (ng/g)		RL	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
PFOS		1763-23-1	ND		1.99		B9E0167	29-May-19	5.75 g	31-May-19 08:19	1
Labeled Stand	ards	Туре	% Recovery	Limits		Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
13C8-PFOS		IS	66.6	60 - 130			B9E0167	29-May-19	5.75 g	31-May-19 08:19	1

The results are reported in dry weight.

The sample size is reported in wet weight.

Results reported to RL.

When reported, PFHxS, PFOA, PFOS, MeFOSAA and EtFOSAA include both linear and branched isomers. Only the linear isomer is reported for all other analytes.

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Sample ID: I	P249									VAL	- PFAS
Client Data Name: Project:	Government of Jersey GOJ/2019/SAM/001		Matrix: Date Collected:	Solid 10-May-19 00:00	La Da	aboratory Data b Sample: ate Received:	1901115-0 13-May-19		Column:	ВЕН С18	-
Location:	Potatoes	0.00	Constant		-	Solids:	15.2	Entropted	Comp Cigo		D'Int're
Analyte		CAS Number	Conc. (ng/g)		RL	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
PFOS		1763-23-1	ND		1.99		B9E0167	29-May-19	6.60 g	31-May-19 08:31	1
Labeled Standa	ards	Туре	% Recovery	Limits		Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
13C8-PFOS		IS	65.3	60 - 130			B9E0167	29-May-19	6.60 g	31-May-19 08:31	1 1

The results are reported in dry weight.

The sample size is reported in wet weight.

Results reported to RL.

When reported, PFHxS, PFOA, PFOS, MeFOSAA and EtFOSAA include both linear and branched isomers. Only the linear isomer is reported for all other analytes.

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Sample ID: 0	030519									VAL	- PFAS
Client Data Name: Project: Location:	Government of Jersey GOJ/2019/SAM/001 Potatoes		Matrix: Date Collected:	Solid 10-May-19 00:00	Lab Dat	oratory Data Sample: e Received: olids:	1901115-0 13-May-1 9.18	1970	Column:	ВЕН С18	2
Analyte		CAS Number	Conc. (ng/g)		ŔL	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
PFOS		1763-23-1	ND		2.00		B9E0167	29-May-19	10.9 g	31-May-19 09:23	1
Labeled Standa	ards	Type	% Recovery	Limits		Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
13C8-PFOS		IS	70.3	60 - 130			B9E0167	29-May-19	10.9 g	31-May-19 09:23	1

The results are reported in dry weight.

The sample size is reported in wet weight.

Results reported to RL.

When reported, PFHxS, PFOA, PFOS, MeFOSAA and EtFOSAA include both linear and branched isomers. Only the linear isomer is reported for all other analytes.

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DATA QUALIFIERS & ABBREVIATIONS

В	This compound was also detected in the method blank
Conc.	Concentration
D	Dilution
DL	Detection limit
Е	The associated compound concentration exceeded the calibration range of the instrument
Н	Recovery and/or RPD was outside laboratory acceptance limits
I	Chemical Interference
j	The amount detected is below the Reporting Limit/LOQ
LOD	Limits of Detection
LOQ	Limits of Quantitation
M	Estimated Maximum Possible Concentration (CA Region 2 projects only)
NA	Not applicable
ND	Not Detected
P	The reported concentration may include contribution from chlorinated diphenyl ether(s).
Q	The ion transition ratio is outside of the acceptance criteria.
TEQ	Toxic Equivalency
U	Not Detected (specific projects only)
*	See Cover Letter

Unless otherwise noted, solid sample results are reported in dry weight. Tissue samples are reported in wet weight.

Vista Analytical Laboratory Certifications

Accrediting Authority	Certificate Number			
Alaska Department of Environmental Conservation	17-013			
Arkansas Department of Environmental Quality	19-013-0			
California Department of Health – ELAP	2892			
DoD ELAP - A2LA Accredited - ISO/IEC 17025:2005	3091.01			
Florida Department of Health	E87777			
Hawaii Department of Health	N/A			
Louisiana Department of Environmental Quality	01977			
Maine Department of Health	2018017			
Michigan Department of Environmental Quality	9932			
Minnesota Department of Health	1521520			
New Hampshire Environmental Accreditation Program	207718			
New Jersey Department of Environmental Protection	CA003			
New York Department of Health	11411			
Oregon Laboratory Accreditation Program	4042-010			
Pennsylvania Department of Environmental Protection	015			
Texas Commission on Environmental Quality	T104704189-19-10			
Virginia Department of General Services	9618			
Washington Department of Ecology	C584-19			
Wisconsin Department of Natural Resources	998036160			

Current certificates and lists of licensed parameters are located in the Quality Assurance office and are available upon request.

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NELAP Accredited Test Methods

MATRIX: Air				
Description of Test	Method			
Determination of Polychlorinated p-Dioxins & Polychlorinated	EPA 23			
Dibenzofurans				
Determination of Polychlorinated p-Dioxins & Polychlorinated	EPA TO-9A			
Dibenzofurans				

MATRIX: Biological Tissue					
Description of Test	Method				
Tetra- through Octa-Chlorinated Dioxins and Furans by Isotope	EPA 1613B				
Dilution GC/HRMS					
Brominated Diphenyl Ethers by HRGC/HRMS	EPA 1614A				
Chlorinated Biphenyl Congeners in Water, Soil, Sediment, and Tissue	EPA 1668A/C				
by GC/HRMS					
Pesticides in Water, Soil, Sediment, Biosolids, and Tissue by	EPA 1699				
HRGC/HRMS					
Perfluorinated Alkyl Acids in Drinking Water by SPE and LC/MS/MS	EPA 537				
·					
Polychlorinated Dibenzo-p-Dioxins and Polychlorinated Dibenzofurans by	EPA 8280A/B				
GC/HRMS					
Polychlorinated Dibenzodioxins (PCDDs) and Polychlorinated	EPA				
Dibenzofurans (PCDFs) by GC/HRMS	8290/8290A				

MATRIX: Drinking Water	
Description of Test	Method
2,3,7,8-Tetrachlorodibenzo- p-dioxin (2,3,7,8-TCDD) GC/HRMS	EPA
	1613/1613B
1,4-Dioxane (1,4-Diethyleneoxide) analysis by GC/HRMS	EPA 522
Perfluorinated Alkyl Acids in Drinking Water by SPE and LC/MS/MS	EPA 537
Perfluorinated Alkyl Acids in Drinking Water by SPE and LC/MS/MS	ISO 25101 2009

MATRIX: Non-Potable Water			
Description of Test	Method		
Tetra- through Octa-Chlorinated Dioxins and Furans by Isotope Dilution GC/HRMS	EPA 1613B		
Brominated Diphenyl Ethers by HRGC/HRMS	EPA 1614A		
Chlorinated Biphenyl Congeners in Water, Soil, Sediment, and Tissue by GC/HRMS	EPA 1668A/C		
Pesticides in Water, Soil, Sediment, Biosolids, and Tissue by HRGC/HRMS	EPA 1699		
Perfluorinated Alkyl Acids in Drinking Water by SPE and LC/MS/MS	EPA 537		
Dioxin by GC/HRMS	EPA 613		
Polychlorinated Dibenzo-p-Dioxins and Polychlorinated	EPA 8280A/B		
Dibenzofurans by GC/HRMS			
Polychlorinated Dibenzodioxins (PCDDs) and Polychlorinated	EPA		
Dibenzofurans (PCDFs) by GC/HRMS	8290/8290A		

MATRIX: Solids	
Description of Test	Method
Tetra-Octa Chlorinated Dioxins and Furans by Isotope Dilution GC/HRMS	EPA 1613
Tetra- through Octa-Chlorinated Dioxins and Furans by Isotope Dilution GC/HRMS	EPA 1613B
Brominated Diphenyl Ethers by HRGC/HRMS	EPA 1614A
Chlorinated Biphenyl Congeners in Water, Soil, Sediment, and Tissue by GC/HRMS	EPA 1668A/C
Pesticides in Water, Soil, Sediment, Biosolids, and Tissue by HRGC/HRMS	EPA 1699
Perfluorinated Alkyl Acids in Drinking Water by SPE and LC/MS/MS	EPA 537
Polychlorinated Dibenzo-p-Dioxins and Polychlorinated	EPA 8280A/B
Dibenzofurans by GC/HRMS	
Polychlorinated Dibenzodioxins (PCDDs) and Polychlorinated	EPA
Dibenzofurans (PCDFs) by GC/HRMS	8290/8290A

Growth, Housing and Environment

Environmental Health PO Box 228 | Jersey | UK | JE4 9SS



10th May 2019

Our ref: GOJ/2019/SAM/001

Export of Bovine milk and potato samples to the USA for scientific analysis -

NOT FOR HUMAN CONSUMPTION

Exporting Country: Jersey, Channel Islands, (British Isles)

For Signature by: States Veterinary Officer

I. Identification of the Consignment

- a) Description of Samples:
 - 1 x Milk sample 125ml 4328209
 - 1 x Milk sample 125ml 4328208
 - 1 x Milk sample 125ml 4303587
 - 1 x bag of potatoes 153g MT149
 - 1 x bag of potatoes 78g P249
 - 1 x bag of potatoes 155g 030519
- b) Type and number of packages:3x milk samples in 125ml bottles3x potato samples plastic bags
- c) Net weight of samples: Milk - 375 millilitres / 12.6 fl. Ounces Potato - 386 grams / 13.6 Ounces

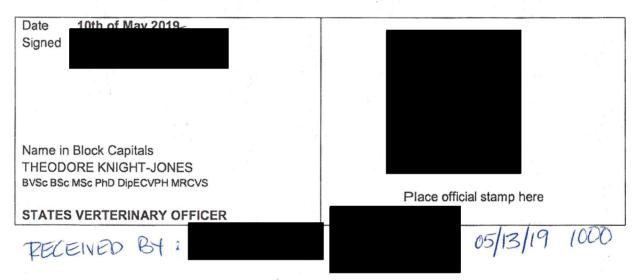


- Country of Origin: Jersey, Channel Islands (British Isles)
 Name and address of exporter: Environmental Health Department, PO Box 228, Jersey, JE4 9SS
- III. Destination of the consignment
 - a) The consignment was despatched from: Jersey, Channel Islands, (British Isles)
 - To: Vista Analytical Lab, 1104 Windfield Way, El Dorado Hills, CA 95762, USA



IV. Health Information

- I, the undersigned, hereby certify that:-
- -the enclosed items are as described in paragraph 'I', are for scientific testing only and NOT INTENDED FOR HUMAN CONSUMPTION.
- -the only animal origin ingredient in the product is: milk
- -The milk/milk product was processed in Jersey, Channel Islands, (British Isles), a region listed in 9 CFR 94.1(a)(2) from milk produced in Jersey, Channel Islands, (British Isles), a region listed in 9 CFR 94.1(a)(2) as free of foot-and-mouth disease.
- -The milk/milk product has never been in any region where foot-and-mouth disease exists except when moving under seal as described in 9 CFR 94.16(c).



Work Order 19010115



Sample Log-In Checklist

Vista Work Orde	er#:(90		15			age#	1 std	of <u>2</u>	anala Announced
Samples Arrival:	Date/Time	l	000	Initials:			ation:	WR-I (: NA		
Logged In:	Date/Time	12	12	Initials:				WR-2 :: 63	-	
Delivered By:	FedEx	UPS	On Tra	c GSO	DHI	-	Han Delive		Ot	her
Preservation:	Ice		Blu	ie Ice		Dry	Ice		No	ne
Temp °C: 1.4	(uncorrect		rohe use	ed: Y /(N)	1. 1		***************************************	(- ID		
Temp °C: 1.3	(corrected)		/ (N)		iner	mome	ter ID:	112-4	
		1.7	14 2					YES	NO	LAIA
Adequate Sample	Volume Red							/	NO	NA
Holding Time Acc					STATE OF THE PROPERTY OF THE P		***************************************	1		
Shipping Containe					Martin Martin Martin	THE STREET, ST		1		
Chinaina					/					
Shipping Docume								V		
Airbill	Trk#	CO. W. C.	8054	1678		THE RESERVE OF THE PERSON NAMED IN COLUMN 1		V		
Sample Container	Intact?			The second secon			-	1		
Sample Custody S	Seals Intact?									V
Chain of Custody /	Sample Doo	umenta	ation Pre	sent?		**************************************		V		
COC Anomaly/Sample Acceptance Form completed?							V			
If Chlorinated or Di	inking Water	Sampl	es. Acce	otable Pres	servati	on?				V
Preservation Docu	mented:	Na₂S Other	₂ O ₃	Trizma	None	Section 2015 Section 2015 Section 2015		Yes	No	(NA)
Shipping Container		Vis	ta	Client	Ret	ain	Ret		Disp	
Comments: — SE	E ATT	ACHE	ED C	ooles	7	1446	TUTO			
					05	16	19			
ID.: LR - SLC	Res	v No.: 3		Rev Date: 05 (October 2	018	Page	e: 1 of 1		×

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Sample Log-In Checklist – Additional Information

Page # 2 of 2 W0#: 1901115 Cooler # (of)

Sample Label ID	Notes
4328209 - PFOS	BATCH NO 322942 Spt. 20999 - 073 125ml HDPE
4328208- PFOS	BATCH NO 322942 Spt 20999 = 073 125ml HDPE
4303587 - PFOS	BATCH NO 321605 Spt 20999-073 125ml HDPE
JERSEY - MT149	010519
JERSEY- P249 B	D 010519
JERSEY- UKSAN	RE 030519
	ED PORTIONS WERE
MADE THE LOG	SAMPLE 10'S FOR
	Recorded By/Date:

ID.: LR - SI

Rev No.: 1

Rev Date: 05 October 2018

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