



**Groundwater Sample Results,
Level 4 Data Report, Electronic Data Deliverable,
Data Validation Report, Sample Location Report,
SDG 20L162**

*NS
Treasure Island, CA*

April 2021



1835 W. 205th Street
Torrance, CA 90501
Tel: (310) 618-8889

Date: 01-15-2021
EMAX Batch No.: 20L162

Attn: Sevda Aleckson

NOREAS
16361 Scientific Way
Irvine, CA 92618

Subject: Laboratory Report
Project: TREASURE ISLAND, IR SITE 6

Enclosed is the Laboratory report for samples received on 12/17/20.
The data reported relate only to samples listed below :

Sample ID	Control #	Col Date	Matrix	Analysis
06-MW25-1220	L162-01	12/15/20	WATER	PFCS
06-MW26-1220	L162-02	12/15/20	WATER	PFCS
06-MW30-1220	L162-03	12/15/20	WATER	PFCS
06-MW31-1220	L162-04	12/15/20	WATER	PFCS
06-MW31-1220 DUP	L162-05	12/15/20	WATER	PFCS
06-MW32-1220	L162-06	12/15/20	WATER	PFCS
06-MW33-1220	L162-07	12/15/20	WATER	PFCS
06-MW34-1220	L162-08	12/15/20	WATER	PFCS
06-MW35-1220	L162-09	12/15/20	WATER	PFCS
06-MW36-1220	L162-10	12/15/20	WATER	PFCS
QCFB-121520	L162-11	12/15/20	WATER	PFCS
06-MW30-1220MS	L162-03M	12/15/20	WATER	PFCS
06-MW30-1220MSD	L162-03S	12/15/20	WATER	PFCS

NOTE: PFCS was subcontracted to Maxxam.

The results are summarized on the following pages.

Please feel free to call if you have any questions concerning these results.

Sincerely yours,

Caspar J. Pang
Laboratory Director

This report is confidential and intended solely for the use of the individual or entity to whom it is addressed. This report shall not be reproduced except in full or without the written approval of EMAX.

EMAX certifies that results included in this report meets all TNI & DOD requirements unless noted in the Case Narrative.

NELAP Accredited Certificate Number CA002912018-15
ANAB Accredited DoD ELAP and ISO/IEC 17025 Certificate Number L2278 Testing
California ELAP Accredited Certificate Number 2672

CHAIN-OF-CUSTODY RECORD

COC No. **TI-039**

PAGE 1 of 1

Project Name/No:		Former Naval Station Treasure Island, San Francisco, CA		Purchase Order No.		17023		Laboratory SDG No:		20162									
Project Location:		IR Site 6 - 2020 PFAS 4Q20 Event		Laboratory Name:		EMAX, Inc.		ANALYSES REQUIRED											
Company Name:		NOREAS, Inc.		Laboratory Contact:		Richard Beauvil		PFAS Table B-15 Compliant											
Address:		16361 Scientific Way Irvine, CA 92618		Laboratory Address:		1835 W. 205th Street Torrance, CA 90501													
Project Manager:		Hamlet Hamparsumian		Laboratory Phone:		(310) 618-8889, ext. 118													
Phone/Fax No.		(949) 877-3720		Airbill No.		COURIER													
Project Contact:		Ryley Robitaille		Contact Phone:		(714) 273-5132													
Sample ID		Sampling Location		Date		Time		Matrix		QC Level (3/4)		Unpreserved		Preserved		# of Containers		MS/MSD	
06-MW25-1220		06-MW25		12/15/2020		0910		W		4		2		-		2		X	
06-MW26-1220		06-MW26		12/15/2020		1030		W		4		2		-		2		X	
06-MW30-1220		06-MW30		12/15/2020		1135		W		4		6		-		6		X	
06-MW31-1220		06-MW31		12/15/2020		1055		W		4		2		-		2		X	
06-MW31-1220 Dup		06-MW31 Dup		12/15/2020		1100		W		4		2		-		2		X	
06-MW32-1220		06-MW32		12/15/2020		0950		W		4		2		-		2		X	
06-MW33-1220		06-MW33		12/15/2020		1025		W		4		2		-		2		X	
06-MW34-1220		06-MW34		12/15/2020		0925		W		4		2		-		2		X	
06-MW35-1220		06-MW35		12/15/2020		0950		W		4		2		-		2		X	
06-MW36-1220		06-MW36		12/15/2020		0850		W		4		2		-		2		X	
QCEB-121520		Equipment Blank		12/15/2020		1415		W		4		2		-		2		X	
Special Instructions: All analytical and QC requirements specified in the Final Sampling and Analysis Plan (May 2017) must be followed. PFAS Free Water Lot Number COM1921										Turnaround Time: ☐ 24 HR ☐ 48 HR ☐ 72 HR X STANDARD OR ☐									
Sampler(s) Name(s): Michael Price Relinquished By (signature): [Signature] Date: 12/17/20 Company: NOREAS, Inc. Time: 0800										Matrix: W: Groundwater or Drinking water; S: Soil; W: Waste Sample Condition Upon Receipt (For Laboratory Use) Cooler Temp (°C): 2.9 Sample Condition: ☒ Intact ☐ Broken Cooler Seal: ☒ Intact ☐ Broken									
Received By (signature): [Signature] Date: 12/17/20 Company: [Signature] Time: 0800																			
Received By (signature): Date: Company:																			

DISTRIBUTION: White - Laboratory; Blue - Project File

SAMPLE RECEIPT FORM 1

Reference: EMAX-SM02 Rev.11

Form: SM02F1

Type of Delivery ☐ Fedex ☐ UPS ☐ GSO ☐ Others	Airbill / Tracking Number	ECN <u>20L162</u>
☐ EMAX Courier ☒ Client Delivery		Recipient <u>Health</u>
		Date <u>12/17/20</u> Time <u>05:00</u>

COC INSPECTION					
☒ Client Name	☒ Client PM/FC	☐ Sampler Name	☒ Sampling Date/Time	☒ Sample ID	☐ Matrix
☐ Address	☐ Tel # / Fax #	☐ Courier Signature	☒ Analysis Required	☐ Preservative (if any)	☒ TAT
Safety Issues (if any)		☐ High concentrations expected	☐ From Superfund Site	☐ Rad screening required	
Note: _____					

PACKAGING INSPECTION					
Container	☒ Cooler	☐ Box	☐ Other		
Condition	☐ Custody Seal	☐ Intact	☐ Damaged		
Packaging	☐ Bubble Pack	☐ Styrofoam	☐ Popcorn		
Temperatures (Cool, ≤6 °C but not frozen)	☐ Cooler 1 _____ °C	☐ Cooler 2 _____ °C	☐ Cooler 3 _____ °C	☒ Sufficient	☒ Plastic Bags
	☐ Cooler 6 _____ °C	☐ Cooler 7 _____ °C	☐ Cooler 8 _____ °C	☒ Cooler 4 <u>29</u> °C	☐ Cooler 5 _____ °C
Thermometer: A - S/N <u>200291758</u>	B - S/N <u>200291755</u>	C - S/N _____	D - S/N _____	☐ Cooler 9 _____ °C	☐ Cooler 10 _____ °C
Comments: ☐ Temperature is out of range. PM was informed IMMEDIATELY.					
Note: _____					

DISCREPANCIES				
LabSampleID	LabSampleContainerID	Code	ClientSample Label ID / Information	Corrective Action
11	25, 26	D3	Label reads QCFB-121520	R1

☐ pH holding time requirement for water samples is 15 mins. Water samples for pH analysis are received beyond 15 minutes from sampling time.

NOTES/OBSERVATIONS:

LEGEND:

Code Description- Sample Management

- D1 Analysis is not indicated in _____
- D2 Analysis mismatch COC vs label
- D3 Sample ID mismatch COC vs label
- D4 Sample ID is not indicated in _____
- D5 Container -[improper] [leaking] [broken]
- D6 Date/Time is not indicated in _____
- D7 Date/Time mismatch COC vs label
- D8 Sample listed in COC is not received
- D9 Sample received is not listed in COC
- D10 No initial/date on corrections in COC/label
- D11 Container count mismatch COC vs received
- D12 Container size mismatch COC vs received

Code Description-Sample Management

- D13 Out of Holding Time
- D14 Bubble is >6mm
- D15 No trip blank in cooler
- D16 Preservation not indicated in _____
- D17 Preservation mismatch COC vs label
- D18 Insufficient chemical preservative
- D19 Insufficient Sample
- D20 No filtration info for dissolved analysis
- D21 No sample for moisture determination
- D22 _____
- D23 _____
- D24 _____

☐ Continue to next page.

Code Description-Sample Management

- R1 Proceed as indicated in ☒ COC ☐ Label
- R2 Refer to attached instruction
- R3 Cancel the analysis
- R4 Use vial with smallest bubble first
- R5 Log-in with latest sampling date and time+1 min
- R6 Adjust pH as necessary
- R7 Filter and preserved as necessary
- R8 _____
- R9 _____
- R10 _____
- R11 _____
- R12 _____

REVIEWS:

Sample Labeling

Date

SRF

Date

PM

Date

EMAX Laboratories, Inc. 1835 W. 205th St., Torrance, Ca 90501

Andy Mai

From: Ryley Robitaille <ryley.robitaille@NOREASINC.COM>
Sent: Monday, December 21, 2020 10:06 AM
To: Richard Beauvil
Cc: Andy Mai
Subject: RE: 20L124, 20L155, 20L160, , 20L161, 20L162 LOGINS FOR YOUR REVIEW.

Follow Up Flag: Follow up
Flag Status: Flagged

Hi Richard (or Andy, I think Richard is out),

For SDG 20L162, can you please change the sample ID of sample #11 to QCFB-121520? Everything else looks good.

Ryley Robitaille, PE
Associate Engineer | NOREAS
16361 Scientific Way | Irvine, CA 92620 | www.noreasinc.com
949.877.3726 (office) | 714.273.5132 (cell) | ryley.robitaille@noreasinc.com
CA PE License No. CH 6789

From: Richard Beauvil [<mailto:RBeauvil@emaxlabs.com>]
Sent: Friday, December 18, 2020 5:02 PM
To: Ryley Robitaille <ryley.robitaille@NOREASINC.COM>
Cc: Sevda Aleckson <sevda.aleckson@NOREASINC.COM>; Jinny Hong <jinny.hong@NOREASINC.COM>; Michael Price <michael.price@NOREASINC.COM>
Subject: 20L124, 20L155, 20L160, , 20L161, 20L162 LOGINS FOR YOUR REVIEW.

Richard M. Beauvil
Project Manager/Safety Officer
1835 W. 205th Street
Torrance, CA 90501
Tel: 310-618-8889 X118
rbeauvil@emaxlabs.com

EMAX is interested in your feedback; please provide your comments to:
customerservice@emaxlabs.com

EMAX Holidays Schedule Update:

Christmas Days: Thursday, Friday, Monday December 24, 25, 28 2020
New Year's Day: Friday, December 31st, January 1st, 2021

REPORTING CONVENTIONS

DATA QUALIFIERS:

Lab Qualifier	AFCEE Qualifier	Description
J	F	Indicates that the analyte is positively identified and the result is less than LOQ/RL but greater than LOD/MDL/DL.
N		Indicates presumptive evidence of a compound.
B	B	Indicates that the analyte is found in the associated method blank as well as in the sample at above QC level.
E	J	Indicates that the result is above the maximum calibration range or estimated value.
*	*	Out of QC limit.

Note: The above qualifiers are used to flag the results unless the project requires a different set of qualification criteria.

ACRONYMS AND ABBREVIATIONS:

CRDL	Contract Required Detection Limit
RL	Reporting Limit
MRL	Method Reporting Limit
MDL	Method Detection Limit
DL	Detection Limit
LOD	Limit of Detection
LOQ	Limit of Quantitation
DO	Diluted out

DATES

The date and time information for leaching and preparation reflect the beginning date and time of the procedure unless the method, protocol, or project specifically requires otherwise.

LABORATORY REPORT FOR

NOREAS

TREASURE ISLAND, IR SITE 6

PFCS

SDG#: 20L162



Attention: Richard Beauvil

EMAX Laboratories Inc
1835 W 205th St
Torrance, CA
USA 90501

Your P.O. #: 20L162
Your Project #: TREASURE ISLAND, IR SITE 6
Site Location: T10000006825
Your C.O.C. #: 20L162

Report Date: 2021/01/11
Report #: R6476715
Version: 1 - Final

CERTIFICATE OF ANALYSIS

BV LABS JOB #: C0Y2685

Received: 2020/12/23, 13:43

Sample Matrix: Water
Samples Received: 11

Analyses	Date		Date Analyzed	Laboratory Method	Analytical Method
	Quantity	Extracted			
PFAS in water by SPE/LC-MS/MS (1)	11	2020/12/29	2020/12/31	CAM SOP-00894	EPA 537 m

Remarks:

Bureau Veritas Laboratories are accredited to ISO/IEC 17025 for specific parameters on scopes of accreditation. Unless otherwise noted, procedures used by BV Labs are based upon recognized Provincial, Federal or US method compendia such as CCME, MELCC, EPA, APHA.

All work recorded herein has been done in accordance with procedures and practices ordinarily exercised by professionals in BV Labs profession using accepted testing methodologies, quality assurance and quality control procedures (except where otherwise agreed by the client and BV Labs in writing). All data is in statistical control and has met quality control and method performance criteria unless otherwise noted. All method blanks are reported; unless indicated otherwise, associated sample data are not blank corrected. Where applicable, unless otherwise noted, Measurement Uncertainty has not been accounted for when stating conformity to the referenced standard.

BV Labs liability is limited to the actual cost of the requested analyses, unless otherwise agreed in writing. There is no other warranty expressed or implied. BV Labs has been retained to provide analysis of samples provided by the Client using the testing methodology referenced in this report. Interpretation and use of test results are the sole responsibility of the Client and are not within the scope of services provided by BV Labs, unless otherwise agreed in writing. BV Labs is not responsible for the accuracy or any data impacts, that result from the information provided by the customer or their agent.

Solid sample results, except biota, are based on dry weight unless otherwise indicated. Organic analyses are not recovery corrected except for isotope dilution methods.

Results relate to samples tested. When sampling is not conducted by BV Labs, results relate to the supplied samples tested.

This Certificate shall not be reproduced except in full, without the written approval of the laboratory.

Reference Method suffix "m" indicates test methods incorporate validated modifications from specific reference methods to improve performance.

* RPDs calculated using raw data. The rounding of final results may result in the apparent difference.

(1) Per- and polyfluoroalkyl substances (PFAS) identified as surrogates on the certificate of analysis represent the extracted internal standard.



Attention: Richard Beauvil

EMAX Laboratories Inc
1835 W 205th St
Torrance, CA
USA 90501

Your P.O. #: 20L162
Your Project #: TREASURE ISLAND, IR SITE 6
Site Location: T10000006825
Your C.O.C. #: 20L162

Report Date: 2021/01/11
Report #: R6476715
Version: 1 - Final

CERTIFICATE OF ANALYSIS

BV LABS JOB #: C0Y2685
Received: 2020/12/23, 13:43

Encryption Key

Please direct all questions regarding this Certificate of Analysis to your Project Manager.

Lori Dufour, Project Manager
Email: Lori.Dufour@bureauveritas.com
Phone# (905) 817-5700

=====

BV Labs has procedures in place to guard against improper use of the electronic signature and have the required "signatories", as per ISO/IEC 17025, signing the reports. For Service Group specific validation please refer to the Validation Signature Page.



RESULTS OF ANALYSES OF WATER

BV Labs ID		OMI155				OMI156				
Sampling Date		2020/12/15 09:10				2020/12/15 10:30				
COC Number		20L162				20L162				
	UNITS	06-MW25-1220	DL	LOD	LOQ	06-MW26-1220	DL	LOD	LOQ	QC Batch
Miscellaneous Parameters										
Perfluorohexanoic acid (PFHxA)	ug/L	2.6 (1)	0.027	0.070	0.10	0.18	0.0061	0.016	0.023	7129853
Perfluoroheptanoic acid (PFHpA)	ug/L	0.68 (1)	0.034	0.070	0.10	0.11	0.0077	0.016	0.023	7129853
Perfluorooctanoic acid (PFOA)	ug/L	2.1 (1)	0.025	0.070	0.10	0.40	0.0058	0.016	0.023	7129853
Perfluorononanoic acid (PFNA)	ug/L	0.080 J (1)	0.026	0.070	0.10	0.013 J	0.0059	0.016	0.023	7129853
Perfluorodecanoic acid (PFDA)	ug/L	0.070 U (1)	0.020	0.070	0.10	0.016 U	0.0045	0.016	0.023	7129853
Perfluoroundecanoic acid (PFUnA)	ug/L	0.070 U (1)	0.031	0.070	0.10	0.016 U	0.0071	0.016	0.023	7129853
Perfluorododecanoic acid (PFDoA)	ug/L	0.080 U (1)	0.040	0.080	0.10	0.018 U	0.0092	0.018	0.023	7129853
Perfluorotridecanoic acid (PFTRDA)	ug/L	0.070 U (1)	0.032	0.070	0.10	0.016 U	0.0074	0.016	0.023	7129853
Perfluorotetradecanoic acid (PFTEDA)	ug/L	0.070 U (1)	0.034	0.070	0.10	0.016 U	0.0078	0.016	0.023	7129853
Perfluorobutanesulfonic acid (PFBS)	ug/L	0.18 (1)	0.028	0.070	0.10	0.019 J	0.0064	0.016	0.023	7129853
Perfluorohexanesulfonic acid (PFHxS)	ug/L	2.4 (1)	0.022	0.070	0.10	0.46	0.0051	0.016	0.023	7129853
Perfluorooctanesulfonic acid (PFOS)	ug/L	16 (2)	0.29	0.70	1.0	1.5 (3)	0.063	0.15	0.20	7129853
EtFOSA	ug/L	0.080 U (4)	0.035	0.080	0.20	0.016 U (5)	0.0070	0.016	0.040	7139995
MeFOSA	ug/L	0.080 U (4)	0.039	0.080	0.20	0.016 U (5)	0.0078	0.016	0.040	7139995
Surrogate Recovery (%)										
13C2-Perfluorodecanoic acid	%	89				90				7129853
13C2-Perfluorododecanoic acid	%	86				79				7129853
DL = Detection Limit LOD = Limit of Detection LOQ = Limit of Quantitation QC Batch = Quality Control Batch N/A = Not Applicable (1) Due to high concentrations of the associated target analytes, a reduced sample volume was extracted and analyzed. Detection limit was adjusted accordingly (5x). (2) Due to high concentration of the target analyte, a reduced sample volume was extracted and analyzed. Detection limit was adjusted accordingly (50x). (3) Due to high concentration of the target analyte, a reduced sample volume was extracted and analyzed. Detection limit was adjusted accordingly (10x). (4) Due to high concentrations of the associated target analytes, a reduced sample volume was extracted and analyzed. Detection limit was adjusted accordingly (5x). Initial analyses of the sample was performed within the method defined hold time. The sample was reanalysed outside the method defined hold time (14 days) for QC purposes. Due to their chemical structure, PFAS are chemically and biologically stable in the environment and resist typical environmental degradation processes. Reanalyses outside the method defined hold time should not have a significant impact on the data. (5) Initial analyses of the sample was performed within the method defined hold time. The sample was reanalysed outside the method defined hold time (14 days) for QC purposes. Due to their chemical structure, PFAS are chemically and biologically stable in the environment and resist typical environmental degradation processes. Reanalyses outside the method defined hold time should not have a significant impact on the data.										



BUREAU
VERITAS

BV Labs Job #: COY2685
Report Date: 2021/01/11

EMAX Laboratories Inc
Client Project #: TREASURE ISLAND, IR SITE 6
Site Location: T10000006825
Your P.O. #: 20L162

RESULTS OF ANALYSES OF WATER

BV Labs ID		OMI155				OMI156				
Sampling Date		2020/12/15 09:10				2020/12/15 10:30				
COC Number		20L162				20L162				
	UNITS	06-MW25-1220	DL	LOD	LOQ	06-MW26-1220	DL	LOD	LOQ	QC Batch
13C2-Perfluorohexanoic acid	%	91				95				7129853
13C2-perfluorotetradecanoic acid	%	86				79				7129853
13C2-Perfluoroundecanoic acid	%	88				85				7129853
13C3-Perfluorobutanesulfonic acid	%	91				94				7129853
13C4-Perfluoroheptanoic acid	%	94				97				7129853
13C4-Perfluorooctanesulfonic acid	%	84				96				7129853
13C4-Perfluorooctanoic acid	%	91				95				7129853
13C5-Perfluorononanoic acid	%	92				94				7129853
18O2-Perfluorohexanesulfonic acid	%	92				96				7129853
D3-MeFOSA	%	42 (1)				53				7139995
D5-EtFOSA	%	41 (2)				54				7139995

DL = Detection Limit

LOD = Limit of Detection

LOQ = Limit of Quantitation

QC Batch = Quality Control Batch

N/A = Not Applicable

(1) Extracted internal standard analyte recovery was below the defined lower control limit (LCL). Laboratory spiked water resulted in satisfactory recovery of the extracted internal standard analyte. When considered together, these QC data suggest that matrix interferences may be biasing the data low for the associated native analyte (MeFOSA).

(2) Extracted internal standard analyte recovery was below the defined lower control limit (LCL). Laboratory spiked water resulted in satisfactory recovery of the extracted internal standard analyte. When considered together, these QC data suggest that matrix interferences may be biasing the data low for the associated native analyte (EtFOSA).



BUREAU
VERITAS

BV Labs Job #: COY2685
Report Date: 2021/01/11

EMAX Laboratories Inc
Client Project #: TREASURE ISLAND, IR SITE 6
Site Location: T10000006825
Your P.O. #: 20L162

RESULTS OF ANALYSES OF WATER

BV Labs ID		OMI157					OMI158				
Sampling Date		2020/12/15 11:35					2020/12/15 10:55				
COC Number		20L162					20L162				
	UNITS	06-MW30-1220	DL	LOD	LOQ	QC Batch	06-MW31-1220	DL	LOD	LOQ	QC Batch
Miscellaneous Parameters											
Perfluorohexanoic acid (PFHxA)	ug/L	0.021 J	0.0058	0.015	0.022	7129853	1.6 (1)	0.058	0.15	0.20	7129853
Perfluoroheptanoic acid (PFHpA)	ug/L	0.015 U	0.0074	0.015	0.022	7129853	0.75	0.0074	0.015	0.022	7129853
Perfluorooctanoic acid (PFOA)	ug/L	0.045	0.0055	0.015	0.022	7129853	0.44	0.0055	0.015	0.022	7129853
Perfluorononanoic acid (PFNA)	ug/L	0.015 U	0.0056	0.015	0.022	7129853	0.032	0.0056	0.015	0.022	7129853
Perfluorodecanoic acid (PFDA)	ug/L	0.015 U	0.0043	0.015	0.022	7129853	0.015 U	0.0043	0.015	0.022	7129853
Perfluoroundecanoic acid (PFUnA)	ug/L	0.015 U	0.0068	0.015	0.022	7129853	0.015 U	0.0068	0.015	0.022	7129853
Perfluorododecanoic acid (PFDoA)	ug/L	0.018 U	0.0088	0.018	0.022	7129853	0.018 U	0.0088	0.018	0.022	7129853
Perfluorotridecanoic acid (PFTRDA)	ug/L	0.015 U	0.0070	0.015	0.022	7129853	0.015 U	0.0070	0.015	0.022	7129853
Perfluorotetradecanoic acid (PFTEDA)	ug/L	0.015 U	0.0075	0.015	0.022	7129853	0.015 U	0.0075	0.015	0.022	7129853
Perfluorobutanesulfonic acid (PFBS)	ug/L	0.0079 J	0.0062	0.015	0.022	7129853	0.12	0.0062	0.015	0.022	7129853
Perfluorohexanesulfonic acid (PFHxS)	ug/L	0.045	0.0048	0.015	0.022	7129853	3.5 (1)	0.048	0.15	0.20	7129853
Perfluorooctanesulfonic acid (PFOS)	ug/L	0.10	0.0063	0.015	0.022	7129853	0.93	0.0063	0.015	0.022	7129853
EtFOSA	ug/L	0.016 U (2)	0.0070	0.016	0.040	7139995	0.018 U	0.0077	0.018	0.045	7129853
MeFOSA	ug/L	0.018 U	0.0086	0.018	0.045	7129853	0.018 U	0.0086	0.018	0.045	7129853
Surrogate Recovery (%)											
13C2-Perfluorodecanoic acid	%	93				7129853	87				7129853
13C2-Perfluorododecanoic acid	%	81				7129853	68				7129853
13C2-Perfluorohexanoic acid	%	95				7129853	97				7129853
13C2-perfluorotetradecanoic acid	%	75				7129853	55				7129853
13C2-Perfluoroundecanoic acid	%	89				7129853	78				7129853
13C3-Perfluorobutanesulfonic acid	%	93				7129853	79				7129853
13C4-Perfluoroheptanoic acid	%	97				7129853	87				7129853
13C4-Perfluorooctanesulfonic acid	%	95				7129853	94				7129853
13C4-Perfluorooctanoic acid	%	95				7129853	91				7129853
13C5-Perfluorononanoic acid	%	96				7129853	91				7129853
18O2-Perfluorohexanesulfonic acid	%	96				7129853	100				7129853
DL = Detection Limit LOD = Limit of Detection LOQ = Limit of Quantitation QC Batch = Quality Control Batch N/A = Not Applicable (1) Due to high concentration of the target analyte, a reduced sample volume was extracted and analyzed. Detection limit was adjusted accordingly (10x). (2) Initial analyses of the sample was performed within the method defined hold time. The sample was reanalysed outside the method defined hold time (14 days) for QC purposes. Due to their chemical structure, PFAS are chemically and biologically stable in the environment and resist typical environmental degradation processes. Reanalyses outside the method defined hold time should not have a significant impact on the data.											



BUREAU
VERITAS

BV Labs Job #: COY2685
Report Date: 2021/01/11

EMAX Laboratories Inc
Client Project #: TREASURE ISLAND, IR SITE 6
Site Location: T10000006825
Your P.O. #: 20L162

RESULTS OF ANALYSES OF WATER

BV Labs ID		OMI157					OMI158				
Sampling Date		2020/12/15 11:35					2020/12/15 10:55				
COC Number		20L162					20L162				
	UNITS	06-MW30-1220	DL	LOD	LOQ	QC Batch	06-MW31-1220	DL	LOD	LOQ	QC Batch
D3-MeFOSA	%	52				7129853	59				7129853
D5-EtFOSA	%	78				7139995	53				7129853
DL = Detection Limit LOD = Limit of Detection LOQ = Limit of Quantitation QC Batch = Quality Control Batch N/A = Not Applicable											



BV Labs Job #: COY2685
Report Date: 2021/01/11

EMAX Laboratories Inc
Client Project #: TREASURE ISLAND, IR SITE 6
Site Location: T10000006825
Your P.O. #: 20L162

RESULTS OF ANALYSES OF WATER

BV Labs ID		OMI159					OMI160				
Sampling Date		2020/12/15 11:00					2020/12/15 09:50				
COC Number		20L162					20L162				
	UNITS	06-MW31-1220 DUP	DL	LOD	LOQ	QC Batch	06-MW32-1220	DL	LOD	LOQ	QC Batch

Miscellaneous Parameters

Perfluorohexanoic acid (PFHxA)	ug/L	1.5 (1)	0.058	0.15	0.20	7129853	1.4 (2)	0.027	0.070	0.10	7129853
Perfluoroheptanoic acid (PFHpA)	ug/L	0.75	0.0074	0.015	0.022	7129853	0.93 (2)	0.034	0.070	0.10	7129853
Perfluorooctanoic acid (PFOA)	ug/L	0.43	0.0055	0.015	0.022	7129853	0.97 (2)	0.025	0.070	0.10	7129853
Perfluorononanoic acid (PFNA)	ug/L	0.033	0.0056	0.015	0.022	7129853	0.061 J (2)	0.026	0.070	0.10	7129853
Perfluorodecanoic acid (PFDA)	ug/L	0.015 U	0.0043	0.015	0.022	7129853	0.070 U (2)	0.020	0.070	0.10	7129853
Perfluoroundecanoic acid (PFUnA)	ug/L	0.015 U	0.0068	0.015	0.022	7129853	0.070 U (2)	0.031	0.070	0.10	7129853
Perfluorododecanoic acid (PFDoA)	ug/L	0.018 U	0.0088	0.018	0.022	7129853	0.080 U (2)	0.040	0.080	0.10	7129853
Perfluorotridecanoic acid (PFTRDA)	ug/L	0.015 U	0.0070	0.015	0.022	7129853	0.070 U (2)	0.032	0.070	0.10	7129853
Perfluorotetradecanoic acid (PFTEDA)	ug/L	0.015 U	0.0075	0.015	0.022	7129853	0.070 U (2)	0.034	0.070	0.10	7129853
Perfluorobutanesulfonic acid (PFBS)	ug/L	0.13	0.0062	0.015	0.022	7129853	0.091 J (2)	0.028	0.070	0.10	7129853
Perfluorohexanesulfonic acid (PFHxS)	ug/L	3.6 (1)	0.048	0.15	0.20	7129853	4.9 (2)	0.022	0.070	0.10	7129853
Perfluorooctanesulfonic acid (PFOS)	ug/L	0.99	0.0063	0.015	0.022	7129853	16 (3)	0.29	0.70	1.0	7129853
EtFOSA	ug/L	0.018 U	0.0077	0.018	0.045	7129853	0.080 U (4)	0.035	0.080	0.20	7139995
MeFOSA	ug/L	0.018 U	0.0086	0.018	0.045	7129853	0.080 U (4)	0.039	0.080	0.20	7139995

Surrogate Recovery (%)

13C2-Perfluorodecanoic acid	%	89				7129853	89				7129853
13C2-Perfluorododecanoic acid	%	74				7129853	87				7129853
13C2-Perfluorohexanoic acid	%	89				7129853	90				7129853
13C2-perfluorotetradecanoic acid	%	54				7129853	87				7129853
13C2-Perfluoroundecanoic acid	%	81				7129853	90				7129853
13C3-Perfluorobutanesulfonic acid	%	79				7129853	91				7129853

DL = Detection Limit

LOD = Limit of Detection

LOQ = Limit of Quantitation

QC Batch = Quality Control Batch

N/A = Not Applicable

- (1) Due to high concentration of the target analyte, a reduced sample volume was extracted and analyzed. Detection limit was adjusted accordingly (10x).
- (2) Due to high concentrations of the associated target analytes, a reduced sample volume was extracted and analyzed. Detection limit was adjusted accordingly (5x).
- (3) Due to high concentration of the target analyte, a reduced sample volume was extracted and analyzed. Detection limit was adjusted accordingly (50x).
- (4) Due to high concentrations of the associated target analytes, a reduced sample volume was extracted and analyzed. Detection limit was adjusted accordingly (5x). Initial analyses of the sample was performed within the method defined hold time. The sample was reanalysed outside the method defined hold time (14 days) for QC purposes. Due to their chemical structure, PFAS are chemically and biologically stable in the environment and resist typical environmental degradation processes. Reanalyses outside the method defined hold time should not have a significant impact on the data.



BUREAU
VERITAS

BV Labs Job #: COY2685
Report Date: 2021/01/11

EMAX Laboratories Inc
Client Project #: TREASURE ISLAND, IR SITE 6
Site Location: T10000006825
Your P.O. #: 20L162

RESULTS OF ANALYSES OF WATER

BV Labs ID		OMI159					OMI160				
Sampling Date		2020/12/15 11:00					2020/12/15 09:50				
COC Number		20L162					20L162				
	UNITS	06-MW31-1220 DUP	DL	LOD	LOQ	QC Batch	06-MW32-1220	DL	LOD	LOQ	QC Batch
13C4-Perfluoroheptanoic acid	%	91				7129853	93				7129853
13C4-Perfluorooctanesulfonic acid	%	91				7129853	94				7129853
13C4-Perfluorooctanoic acid	%	95				7129853	91				7129853
13C5-Perfluorononanoic acid	%	93				7129853	89				7129853
18O2-Perfluorohexanesulfonic acid	%	91				7129853	90				7129853
D3-MeFOSA	%	57				7129853	42 (1)				7139995
D5-EtFOSA	%	59				7129853	41 (2)				7139995

DL = Detection Limit

LOD = Limit of Detection

LOQ = Limit of Quantitation

QC Batch = Quality Control Batch

N/A = Not Applicable

(1) Extracted internal standard analyte recovery was below the defined lower control limit (LCL). Laboratory spiked water resulted in satisfactory recovery of the extracted internal standard analyte. When considered together, these QC data suggest that matrix interferences may be biasing the data low for the associated native analyte (MeFOSA).

(2) Extracted internal standard analyte recovery was below the defined lower control limit (LCL). Laboratory spiked water resulted in satisfactory recovery of the extracted internal standard analyte. When considered together, these QC data suggest that matrix interferences may be biasing the data low for the associated native analyte (EtFOSA).



BUREAU
VERITAS

BV Labs Job #: COY2685
Report Date: 2021/01/11

EMAX Laboratories Inc
Client Project #: TREASURE ISLAND, IR SITE 6
Site Location: T10000006825
Your P.O. #: 20L162

RESULTS OF ANALYSES OF WATER

BV Labs ID		OMI161				OMI162				
Sampling Date		2020/12/15 10:25				2020/12/15 09:25				
COC Number		20L162				20L162				
	UNITS	06-MW33-1220	DL	LOD	LOQ	06-MW34-1220	DL	LOD	LOQ	QC Batch
Miscellaneous Parameters										
Perfluorohexanoic acid (PFHxA)	ug/L	1.1 (1)	0.011	0.028	0.040	0.21	0.0061	0.016	0.023	7129853
Perfluoroheptanoic acid (PFHpA)	ug/L	0.54 (1)	0.013	0.028	0.040	0.079	0.0077	0.016	0.023	7129853
Perfluorooctanoic acid (PFOA)	ug/L	1.2 (1)	0.010	0.028	0.040	0.18	0.0058	0.016	0.023	7129853
Perfluorononanoic acid (PFNA)	ug/L	0.042 (1)	0.010	0.028	0.040	0.012 J	0.0059	0.016	0.023	7129853
Perfluorodecanoic acid (PFDA)	ug/L	0.028 U (1)	0.0078	0.028	0.040	0.016 U	0.0045	0.016	0.023	7129853
Perfluoroundecanoic acid (PFUnA)	ug/L	0.028 U (1)	0.012	0.028	0.040	0.016 U	0.0071	0.016	0.023	7129853
Perfluorododecanoic acid (PFDoA)	ug/L	0.032 U (1)	0.016	0.032	0.040	0.018 U	0.0092	0.018	0.023	7129853
Perfluorotridecanoic acid (PFTRDA)	ug/L	0.028 U (1)	0.013	0.028	0.040	0.016 U	0.0074	0.016	0.023	7129853
Perfluorotetradecanoic acid (PFTEDA)	ug/L	0.028 U (1)	0.014	0.028	0.040	0.016 U	0.0078	0.016	0.023	7129853
Perfluorobutanesulfonic acid (PFBS)	ug/L	0.081 (1)	0.011	0.028	0.040	0.032	0.0064	0.016	0.023	7129853
Perfluorohexanesulfonic acid (PFHxS)	ug/L	2.0 (1)	0.0088	0.028	0.040	0.80	0.0051	0.016	0.023	7129853
Perfluorooctanesulfonic acid (PFOS)	ug/L	7.5 (2)	0.11	0.28	0.40	2.3 (3)	0.063	0.15	0.20	7129853
EtFOSA	ug/L	0.032 U (1)	0.014	0.032	0.080	0.018 U	0.0081	0.018	0.047	7129853
MeFOSA	ug/L	0.032 U (1)	0.016	0.032	0.080	0.018 U	0.0090	0.018	0.047	7129853
Surrogate Recovery (%)										
13C2-Perfluorodecanoic acid	%	91				93				7129853
13C2-Perfluorododecanoic acid	%	84				83				7129853
13C2-Perfluorohexanoic acid	%	92				94				7129853
13C2-perfluorotetradecanoic acid	%	78				83				7129853
13C2-Perfluoroundecanoic acid	%	89				91				7129853
13C3-Perfluorobutanesulfonic acid	%	95				93				7129853
13C4-Perfluoroheptanoic acid	%	95				98				7129853
13C4-Perfluorooctanesulfonic acid	%	95				96				7129853
13C4-Perfluorooctanoic acid	%	92				96				7129853
13C5-Perfluorononanoic acid	%	92				96				7129853
18O2-Perfluorohexanesulfonic acid	%	96				97				7129853
DL = Detection Limit LOD = Limit of Detection LOQ = Limit of Quantitation QC Batch = Quality Control Batch N/A = Not Applicable (1) Due to high concentrations of the associated target analytes, a reduced sample volume was extracted and analyzed. Detection limit was adjusted accordingly (2x). (2) Due to high concentration of the target analyte, a reduced sample volume was extracted and analyzed. Detection limit was adjusted accordingly (20x). (3) Due to high concentration of the target analyte, a reduced sample volume was extracted and analyzed. Detection limit was adjusted accordingly (10x).										



BUREAU
VERITAS

BV Labs Job #: COY2685
Report Date: 2021/01/11

EMAX Laboratories Inc
Client Project #: TREASURE ISLAND, IR SITE 6
Site Location: T10000006825
Your P.O. #: 20L162

RESULTS OF ANALYSES OF WATER

BV Labs ID		OMI161				OMI162				
Sampling Date		2020/12/15 10:25				2020/12/15 09:25				
COC Number		20L162				20L162				
	UNITS	06-MW33-1220	DL	LOD	LOQ	06-MW34-1220	DL	LOD	LOQ	QC Batch
D3-MeFOSA	%	51				54				7129853
D5-EtFOSA	%	53				53				7129853
DL = Detection Limit LOD = Limit of Detection LOQ = Limit of Quantitation QC Batch = Quality Control Batch N/A = Not Applicable										



BUREAU
VERITAS

BV Labs Job #: COY2685
Report Date: 2021/01/11

EMAX Laboratories Inc
Client Project #: TREASURE ISLAND, IR SITE 6
Site Location: T10000006825
Your P.O. #: 20L162

RESULTS OF ANALYSES OF WATER

BV Labs ID		OMI163					OMI164				
Sampling Date		2020/12/15 09:50					2020/12/15 08:50				
COC Number		20L162					20L162				
	UNITS	06-MW35-1220	DL	LOD	LOQ	QC Batch	06-MW36-1220	DL	LOD	LOQ	QC Batch
Miscellaneous Parameters											
Perfluorohexanoic acid (PFHxA)	ug/L	0.24	0.0061	0.016	0.023	7129853	0.16	0.0061	0.016	0.023	7129853
Perfluoroheptanoic acid (PFHpA)	ug/L	0.13	0.0077	0.016	0.023	7129853	0.093	0.0077	0.016	0.023	7129853
Perfluorooctanoic acid (PFOA)	ug/L	0.17	0.0058	0.016	0.023	7129853	0.089	0.0058	0.016	0.023	7129853
Perfluorononanoic acid (PFNA)	ug/L	0.024	0.0059	0.016	0.023	7129853	0.0088 J	0.0059	0.016	0.023	7129853
Perfluorodecanoic acid (PFDA)	ug/L	0.016 U	0.0045	0.016	0.023	7129853	0.016 U	0.0045	0.016	0.023	7129853
Perfluoroundecanoic acid (PFUnA)	ug/L	0.016 U	0.0071	0.016	0.023	7129853	0.016 U	0.0071	0.016	0.023	7129853
Perfluorododecanoic acid (PFDoA)	ug/L	0.018 U	0.0092	0.018	0.023	7129853	0.018 U	0.0092	0.018	0.023	7129853
Perfluorotridecanoic acid (PFTRDA)	ug/L	0.016 U	0.0074	0.016	0.023	7129853	0.016 U	0.0074	0.016	0.023	7129853
Perfluorotetradecanoic acid (PFTEDA)	ug/L	0.016 U	0.0078	0.016	0.023	7129853	0.016 U	0.0078	0.016	0.023	7129853
Perfluorobutanesulfonic acid (PFBS)	ug/L	0.034	0.0064	0.016	0.023	7129853	0.025	0.0064	0.016	0.023	7129853
Perfluorohexanesulfonic acid (PFHxS)	ug/L	0.99	0.0051	0.016	0.023	7129853	0.58	0.0051	0.016	0.023	7129853
Perfluorooctanesulfonic acid (PFOS)	ug/L	3.0 (1)	0.063	0.15	0.20	7129853	0.86	0.0066	0.016	0.023	7129853
EtFOSA	ug/L	0.018 U	0.0081	0.018	0.046	7129853	0.016 U (2)	0.0070	0.016	0.040	7139995
MeFOSA	ug/L	0.018 U	0.0090	0.018	0.046	7129853	0.016 U (2)	0.0078	0.016	0.040	7139995
Surrogate Recovery (%)											
13C2-Perfluorodecanoic acid	%	89				7129853	90				7129853
13C2-Perfluorododecanoic acid	%	77				7129853	79				7129853
13C2-Perfluorohexanoic acid	%	94				7129853	92				7129853
13C2-perfluorotetradecanoic acid	%	78				7129853	78				7129853
13C2-Perfluoroundecanoic acid	%	82				7129853	84				7129853
13C3-Perfluorobutanesulfonic acid	%	92				7129853	91				7129853
13C4-Perfluoroheptanoic acid	%	95				7129853	94				7129853
13C4-Perfluorooctanesulfonic acid	%	88				7129853	93				7129853
13C4-Perfluorooctanoic acid	%	94				7129853	93				7129853
13C5-Perfluorononanoic acid	%	92				7129853	91				7129853
18O2-Perfluorohexanesulfonic acid	%	94				7129853	94				7129853
DL = Detection Limit LOD = Limit of Detection LOQ = Limit of Quantitation QC Batch = Quality Control Batch N/A = Not Applicable (1) Due to high concentration of the target analyte, a reduced sample volume was extracted and analyzed. Detection limit was adjusted accordingly (10x). (2) Initial analyses of the sample was performed within the method defined hold time. The sample was reanalysed outside the method defined hold time (14 days) for QC purposes. Due to their chemical structure, PFAS are chemically and biologically stable in the environment and resist typical environmental degradation processes. Reanalyses outside the method defined hold time should not have a significant impact on the data.											



BUREAU
VERITAS

BV Labs Job #: COY2685
Report Date: 2021/01/11

EMAX Laboratories Inc
Client Project #: TREASURE ISLAND, IR SITE 6
Site Location: T10000006825
Your P.O. #: 20L162

RESULTS OF ANALYSES OF WATER

BV Labs ID		OMI163					OMI164				
Sampling Date		2020/12/15 09:50					2020/12/15 08:50				
COC Number		20L162					20L162				
	UNITS	06-MW35-1220	DL	LOD	LOQ	QC Batch	06-MW36-1220	DL	LOD	LOQ	QC Batch
D3-MeFOSA	%	56				7129853	63				7139995
D5-EtFOSA	%	52				7129853	59				7139995
DL = Detection Limit LOD = Limit of Detection LOQ = Limit of Quantitation QC Batch = Quality Control Batch N/A = Not Applicable											



BUREAU
VERITAS

BV Labs Job #: COY2685
Report Date: 2021/01/11

EMAX Laboratories Inc
Client Project #: TREASURE ISLAND, IR SITE 6
Site Location: T10000006825
Your P.O. #: 20L162

RESULTS OF ANALYSES OF WATER

BV Labs ID		OMI165				
Sampling Date		2020/12/15 14:15				
COC Number		20L162				
	UNITS	QCFB-121520	DL	LOD	LOQ	QC Batch
Miscellaneous Parameters						
Perfluorohexanoic acid (PFHxA)	ug/L	0.014 U	0.0053	0.014	0.020	7129853
Perfluoroheptanoic acid (PFHpA)	ug/L	0.014 U	0.0067	0.014	0.020	7129853
Perfluorooctanoic acid (PFOA)	ug/L	0.014 U	0.0050	0.014	0.020	7129853
Perfluorononanoic acid (PFNA)	ug/L	0.014 U	0.0051	0.014	0.020	7129853
Perfluorodecanoic acid (PFDA)	ug/L	0.014 U	0.0039	0.014	0.020	7129853
Perfluoroundecanoic acid (PFUnA)	ug/L	0.014 U	0.0062	0.014	0.020	7129853
Perfluorododecanoic acid (PFDoA)	ug/L	0.016 U	0.0080	0.016	0.020	7129853
Perfluorotridecanoic acid (PFTRDA)	ug/L	0.014 U	0.0064	0.014	0.020	7129853
Perfluorotetradecanoic acid (PFTEA)	ug/L	0.014 U	0.0068	0.014	0.020	7129853
Perfluorobutanesulfonic acid (PFBS)	ug/L	0.014 U	0.0056	0.014	0.020	7129853
Perfluorohexanesulfonic acid (PFHxS)	ug/L	0.014 U	0.0044	0.014	0.020	7129853
Perfluorooctanesulfonic acid (PFOS)	ug/L	0.014 U	0.0057	0.014	0.020	7129853
EtFOSA	ug/L	0.016 U	0.0070	0.016	0.040	7129853
MeFOSA	ug/L	0.016 U	0.0078	0.016	0.040	7129853
Surrogate Recovery (%)						
13C2-Perfluorodecanoic acid	%	91				7129853
13C2-Perfluorododecanoic acid	%	81				7129853
13C2-Perfluorohexanoic acid	%	93				7129853
13C2-perfluorotetradecanoic acid	%	80				7129853
13C2-Perfluoroundecanoic acid	%	89				7129853
13C3-Perfluorobutanesulfonic acid	%	95				7129853
13C4-Perfluoroheptanoic acid	%	96				7129853
13C4-Perfluorooctanesulfonic acid	%	89				7129853
13C4-Perfluorooctanoic acid	%	94				7129853
13C5-Perfluorononanoic acid	%	93				7129853
18O2-Perfluorohexanesulfonic acid	%	94				7129853
D3-MeFOSA	%	57				7129853
D5-EtFOSA	%	53				7129853
DL = Detection Limit LOD = Limit of Detection LOQ = Limit of Quantitation QC Batch = Quality Control Batch N/A = Not Applicable						



BUREAU
VERITAS

BV Labs Job #: COY2685
Report Date: 2021/01/11

EMAX Laboratories Inc
Client Project #: TREASURE ISLAND, IR SITE 6
Site Location: T10000006825
Your P.O. #: 20L162

TEST SUMMARY

BV Labs ID: OMI155
Sample ID: 06-MW25-1220
Matrix: Water

Collected: 2020/12/15
Shipped:
Received: 2020/12/23

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
PFAS in water by SPE/LC-MS/MS	LCMS	7139995	2021/01/07	2021/01/08	Patrick Yu Peng Li

BV Labs ID: OMI156
Sample ID: 06-MW26-1220
Matrix: Water

Collected: 2020/12/15
Shipped:
Received: 2020/12/23

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
PFAS in water by SPE/LC-MS/MS	LCMS	7139995	2021/01/07	2021/01/08	Patrick Yu Peng Li

BV Labs ID: OMI157
Sample ID: 06-MW30-1220
Matrix: Water

Collected: 2020/12/15
Shipped:
Received: 2020/12/23

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
PFAS in water by SPE/LC-MS/MS	LCMS	7139995	2021/01/07	2021/01/08	Patrick Yu Peng Li

BV Labs ID: OMI158
Sample ID: 06-MW31-1220
Matrix: Water

Collected: 2020/12/15
Shipped:
Received: 2020/12/23

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
PFAS in water by SPE/LC-MS/MS	LCMS	7129853	2020/12/29	2020/12/31	Adnan Khan

BV Labs ID: OMI159
Sample ID: 06-MW31-1220 DUP
Matrix: Water

Collected: 2020/12/15
Shipped:
Received: 2020/12/23

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
PFAS in water by SPE/LC-MS/MS	LCMS	7129853	2020/12/29	2020/12/31	Adnan Khan

BV Labs ID: OMI160
Sample ID: 06-MW32-1220
Matrix: Water

Collected: 2020/12/15
Shipped:
Received: 2020/12/23

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
PFAS in water by SPE/LC-MS/MS	LCMS	7139995	2021/01/07	2021/01/08	Patrick Yu Peng Li

BV Labs ID: OMI161
Sample ID: 06-MW33-1220
Matrix: Water

Collected: 2020/12/15
Shipped:
Received: 2020/12/23

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
PFAS in water by SPE/LC-MS/MS	LCMS	7129853	2020/12/29	2020/12/31	Adnan Khan



BUREAU
VERITAS

BV Labs Job #: COY2685
Report Date: 2021/01/11

EMAX Laboratories Inc
Client Project #: TREASURE ISLAND, IR SITE 6
Site Location: T10000006825
Your P.O. #: 20L162

TEST SUMMARY

BV Labs ID: OMI162
Sample ID: 06-MW34-1220
Matrix: Water

Collected: 2020/12/15
Shipped:
Received: 2020/12/23

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
PFAS in water by SPE/LC-MS/MS	LCMS	7129853	2020/12/29	2020/12/31	Adnan Khan

BV Labs ID: OMI163
Sample ID: 06-MW35-1220
Matrix: Water

Collected: 2020/12/15
Shipped:
Received: 2020/12/23

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
PFAS in water by SPE/LC-MS/MS	LCMS	7129853	2020/12/29	2020/12/31	Adnan Khan

BV Labs ID: OMI164
Sample ID: 06-MW36-1220
Matrix: Water

Collected: 2020/12/15
Shipped:
Received: 2020/12/23

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
PFAS in water by SPE/LC-MS/MS	LCMS	7139995	2021/01/07	2021/01/08	Patrick Yu Peng Li

BV Labs ID: OMI165
Sample ID: QCFB-121520
Matrix: Water

Collected: 2020/12/15
Shipped:
Received: 2020/12/23

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
PFAS in water by SPE/LC-MS/MS	LCMS	7129853	2020/12/29	2020/12/31	Adnan Khan



BUREAU
VERITAS

BV Labs Job #: COY2685
Report Date: 2021/01/11

EMAX Laboratories Inc
Client Project #: TREASURE ISLAND, IR SITE 6
Site Location: T10000006825
Your P.O. #: 20L162

GENERAL COMMENTS

Sample OMI155, PFAS in water by SPE/LC-MS/MS: Test repeated.
Sample OMI156, PFAS in water by SPE/LC-MS/MS: Test repeated.
Sample OMI157, PFAS in water by SPE/LC-MS/MS: Test repeated.
Sample OMI160, PFAS in water by SPE/LC-MS/MS: Test repeated.
Sample OMI164, PFAS in water by SPE/LC-MS/MS: Test repeated.

Results relate only to the items tested.

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EMAX Laboratories Inc

Client Project #: TREASURE ISLAND, IR SITE 6

Site Location: T10000006825

Your P.O. #: 20L162

QUALITY ASSURANCE REPORT

QA/QC Batch	Init	QC Type	Parameter	Date Analyzed	Value	% Recovery	UNITS	QC Limits
7129853	AKH	Matrix Spike(OMI157)	13C2-Perfluorodecanoic acid	2020/12/31		91	%	50 - 150
			13C2-Perfluorododecanoic acid	2020/12/31		83	%	50 - 150
			13C2-Perfluorohexanoic acid	2020/12/31		96	%	50 - 150
			13C2-perfluorotetradecanoic acid	2020/12/31		81	%	50 - 150
			13C2-Perfluoroundecanoic acid	2020/12/31		87	%	50 - 150
			13C3-Perfluorobutanesulfonic acid	2020/12/31		92	%	50 - 150
			13C4-Perfluoroheptanoic acid	2020/12/31		96	%	50 - 150
			13C4-Perfluorooctanesulfonic acid	2020/12/31		94	%	50 - 150
			13C4-Perfluorooctanoic acid	2020/12/31		93	%	50 - 150
			13C5-Perfluorononanoic acid	2020/12/31		95	%	50 - 150
			18O2-Perfluorohexanesulfonic acid	2020/12/31		97	%	50 - 150
			D3-MeFOSA	2020/12/31		62	%	50 - 150
			D5-EtFOSA	2020/12/31		59	%	50 - 150
			Perfluorohexanoic acid (PFHxA)	2020/12/31		108	%	72 - 129
			Perfluoroheptanoic acid (PFHpA)	2020/12/31		106	%	72 - 130
			Perfluorooctanoic acid (PFOA)	2020/12/31		115	%	71 - 133
			Perfluorononanoic acid (PFNA)	2020/12/31		103	%	69 - 130
			Perfluorodecanoic acid (PFDA)	2020/12/31		109	%	71 - 129
			Perfluoroundecanoic acid (PFUnA)	2020/12/31		102	%	69 - 133
			Perfluorododecanoic acid (PFDoA)	2020/12/31		102	%	72 - 134
			Perfluorotridecanoic acid (PFTDA)	2020/12/31		105	%	65 - 144
			Perfluorotetradecanoic acid(PFTEDA)	2020/12/31		101	%	71 - 132
			Perfluorobutanesulfonic acid (PFBS)	2020/12/31		107	%	72 - 130
			Perfluorohexanesulfonic acid(PFHxS)	2020/12/31		111	%	68 - 131
			Perfluorooctanesulfonic acid (PFOS)	2020/12/31		126	%	65 - 140
			EtFOSA	2020/12/31		101	%	67 - 135
			MeFOSA	2020/12/31		95	%	68 - 141
7129853	AKH	Matrix Spike DUP(OMI157)	13C2-Perfluorodecanoic acid	2020/12/31		96	%	50 - 150
			13C2-Perfluorododecanoic acid	2020/12/31		87	%	50 - 150
			13C2-Perfluorohexanoic acid	2020/12/31		99	%	50 - 150
			13C2-perfluorotetradecanoic acid	2020/12/31		81	%	50 - 150
			13C2-Perfluoroundecanoic acid	2020/12/31		89	%	50 - 150
			13C3-Perfluorobutanesulfonic acid	2020/12/31		98	%	50 - 150
			13C4-Perfluoroheptanoic acid	2020/12/31		99	%	50 - 150
			13C4-Perfluorooctanesulfonic acid	2020/12/31		98	%	50 - 150
			13C4-Perfluorooctanoic acid	2020/12/31		98	%	50 - 150
			13C5-Perfluorononanoic acid	2020/12/31		97	%	50 - 150
			18O2-Perfluorohexanesulfonic acid	2020/12/31		98	%	50 - 150
			D3-MeFOSA	2020/12/31		57	%	50 - 150
			D5-EtFOSA	2020/12/31		54	%	50 - 150
			Perfluorohexanoic acid (PFHxA)	2020/12/31		112	%	72 - 129
			Perfluoroheptanoic acid (PFHpA)	2020/12/31		111	%	72 - 130
			Perfluorooctanoic acid (PFOA)	2020/12/31		115	%	71 - 133
			Perfluorononanoic acid (PFNA)	2020/12/31		107	%	69 - 130
			Perfluorodecanoic acid (PFDA)	2020/12/31		112	%	71 - 129
			Perfluoroundecanoic acid (PFUnA)	2020/12/31		109	%	69 - 133
			Perfluorododecanoic acid (PFDoA)	2020/12/31		105	%	72 - 134
			Perfluorotridecanoic acid (PFTDA)	2020/12/31		112	%	65 - 144
			Perfluorotetradecanoic acid(PFTEDA)	2020/12/31		106	%	71 - 132
			Perfluorobutanesulfonic acid (PFBS)	2020/12/31		108	%	72 - 130
			Perfluorohexanesulfonic acid(PFHxS)	2020/12/31		118	%	68 - 131



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Your P.O. #: 20L162

QUALITY ASSURANCE REPORT(CONT'D)

QA/QC Batch	Init	QC Type	Parameter	Date Analyzed	Value	% Recovery	UNITS	QC Limits
7129853	AKH	MS/MSD RPD	Perfluorooctanesulfonic acid (PFOS)	2020/12/31		126	%	65 - 140
			EtFOSA	2020/12/31		97	%	67 - 135
			MeFOSA	2020/12/31		99	%	68 - 141
			Perfluorohexanoic acid (PFHxA)	2020/12/31	3.3		%	30
			Perfluoroheptanoic acid (PFHpA)	2020/12/31	4.4		%	30
			Perfluorooctanoic acid (PFOA)	2020/12/31	0.069		%	30
			Perfluorononanoic acid (PFNA)	2020/12/31	4.1		%	30
			Perfluorodecanoic acid (PFDA)	2020/12/31	3.1		%	30
			Perfluoroundecanoic acid (PFUnA)	2020/12/31	6.8		%	30
			Perfluorododecanoic acid (PFDoA)	2020/12/31	3.5		%	30
			Perfluorotridecanoic acid (PFTRDA)	2020/12/31	6.7		%	30
			Perfluorotetradecanoic acid(PFTEDA)	2020/12/31	4.9		%	30
			Perfluorobutanesulfonic acid (PFBS)	2020/12/31	0.33		%	30
			Perfluorohexanesulfonic acid(PFHxS)	2020/12/31	5.6		%	30
			Perfluorooctanesulfonic acid (PFOS)	2020/12/31	0.14		%	30
			EtFOSA	2020/12/31	3.3		%	30
			MeFOSA	2020/12/31	3.3		%	30
7129853	AKH	Spiked Blank	13C2-Perfluorodecanoic acid	2020/12/31		91	%	50 - 150
			13C2-Perfluorododecanoic acid	2020/12/31		84	%	50 - 150
			13C2-Perfluorohexanoic acid	2020/12/31		95	%	50 - 150
			13C2-perfluorotetradecanoic acid	2020/12/31		85	%	50 - 150
			13C2-Perfluoroundecanoic acid	2020/12/31		85	%	50 - 150
			13C3-Perfluorobutanesulfonic acid	2020/12/31		95	%	50 - 150
			13C4-Perfluoroheptanoic acid	2020/12/31		96	%	50 - 150
			13C4-Perfluorooctanesulfonic acid	2020/12/31		99	%	50 - 150
			13C4-Perfluorooctanoic acid	2020/12/31		96	%	50 - 150
			13C5-Perfluorononanoic acid	2020/12/31		93	%	50 - 150
			18O2-Perfluorohexanesulfonic acid	2020/12/31		95	%	50 - 150
			D3-MeFOSA	2020/12/31		72	%	50 - 150
			D5-EtFOSA	2020/12/31		71	%	50 - 150
			Perfluorohexanoic acid (PFHxA)	2020/12/31		107	%	72 - 129
			Perfluoroheptanoic acid (PFHpA)	2020/12/31		109	%	72 - 130
			Perfluorooctanoic acid (PFOA)	2020/12/31		107	%	71 - 133
			Perfluorononanoic acid (PFNA)	2020/12/31		109	%	69 - 130
			Perfluorodecanoic acid (PFDA)	2020/12/31		113	%	71 - 129
			Perfluoroundecanoic acid (PFUnA)	2020/12/31		109	%	69 - 133
			Perfluorododecanoic acid (PFDoA)	2020/12/31		109	%	72 - 134
			Perfluorotridecanoic acid (PFTRDA)	2020/12/31		108	%	65 - 144
			Perfluorotetradecanoic acid(PFTEDA)	2020/12/31		106	%	71 - 132
			Perfluorobutanesulfonic acid (PFBS)	2020/12/31		108	%	72 - 130
			Perfluorohexanesulfonic acid(PFHxS)	2020/12/31		108	%	68 - 131
			Perfluorooctanesulfonic acid (PFOS)	2020/12/31		104	%	65 - 140
			EtFOSA	2020/12/31		109	%	67 - 135
			MeFOSA	2020/12/31		103	%	68 - 141
7129853	AKH	Method Blank	13C2-Perfluorodecanoic acid	2020/12/31		80	%	50 - 150
			13C2-Perfluorododecanoic acid	2020/12/31		73	%	50 - 150
			13C2-Perfluorohexanoic acid	2020/12/31		85	%	50 - 150
			13C2-perfluorotetradecanoic acid	2020/12/31		71	%	50 - 150
			13C2-Perfluoroundecanoic acid	2020/12/31		75	%	50 - 150
			13C3-Perfluorobutanesulfonic acid	2020/12/31		86	%	50 - 150
			13C4-Perfluoroheptanoic acid	2020/12/31		88	%	50 - 150

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Your P.O. #: 20L162

QUALITY ASSURANCE REPORT(CONT'D)

QA/QC Batch	Init	QC Type	Parameter	Date Analyzed	Value	% Recovery	UNITS	QC Limits
			13C4-Perfluorooctanesulfonic acid	2020/12/31		79	%	50 - 150
			13C4-Perfluorooctanoic acid	2020/12/31		82	%	50 - 150
			13C5-Perfluorononanoic acid	2020/12/31		82	%	50 - 150
			18O2-Perfluorohexanesulfonic acid	2020/12/31		86	%	50 - 150
			D3-MeFOSA	2020/12/31		58	%	50 - 150
			D5-EtFOSA	2020/12/31		56	%	50 - 150
			Perfluorohexanoic acid (PFHxA)	2020/12/31	0.014 U, LOD=0.014		ug/L	
			Perfluoroheptanoic acid (PFHpA)	2020/12/31	0.014 U, LOD=0.014		ug/L	
			Perfluorooctanoic acid (PFOA)	2020/12/31	0.014 U, LOD=0.014		ug/L	
			Perfluorononanoic acid (PFNA)	2020/12/31	0.014 U, LOD=0.014		ug/L	
			Perfluorodecanoic acid (PFDA)	2020/12/31	0.014 U, LOD=0.014		ug/L	
			Perfluoroundecanoic acid (PFUnA)	2020/12/31	0.014 U, LOD=0.014		ug/L	
			Perfluorododecanoic acid (PFDoA)	2020/12/31	0.016 U, LOD=0.016		ug/L	
			Perfluorotridecanoic acid (PFTRDA)	2020/12/31	0.014 U, LOD=0.014		ug/L	
			Perfluorotetradecanoic acid(PFTEDA)	2020/12/31	0.014 U, LOD=0.014		ug/L	
			Perfluorobutanesulfonic acid (PFBS)	2020/12/31	0.014 U, LOD=0.014		ug/L	
			Perfluorohexanesulfonic acid(PFHxS)	2020/12/31	0.014 U, LOD=0.014		ug/L	
			Perfluorooctanesulfonic acid (PFOS)	2020/12/31	0.014 U, LOD=0.014		ug/L	
			EtFOSA	2020/12/31	0.016 U, LOD=0.016		ug/L	
			MeFOSA	2020/12/31	0.016 U, LOD=0.016		ug/L	
7139995	YPL	Matrix Spike(OMI157)	D3-MeFOSA	2021/01/08		58	%	50 - 150
			D5-EtFOSA	2021/01/08		56	%	50 - 150
			EtFOSA	2021/01/08		88	%	67 - 135
			MeFOSA	2021/01/08		87	%	68 - 141
7139995	YPL	Matrix Spike DUP(OMI157)	D3-MeFOSA	2021/01/08		72	%	50 - 150
			D5-EtFOSA	2021/01/08		69	%	50 - 150
			EtFOSA	2021/01/08		89	%	67 - 135
			MeFOSA	2021/01/08		88	%	68 - 141
7139995	YPL	MS/MSD RPD	EtFOSA	2021/01/08	0.90		%	30
			MeFOSA	2021/01/08	1.7		%	30
7139995	YPL	Spiked Blank	D3-MeFOSA	2021/01/08		76	%	50 - 150
			D5-EtFOSA	2021/01/08		82	%	50 - 150
			EtFOSA	2021/01/08		87	%	67 - 135
			MeFOSA	2021/01/08		93	%	68 - 141
7139995	YPL	Method Blank	D3-MeFOSA	2021/01/08		80	%	50 - 150
			D5-EtFOSA	2021/01/08		81	%	50 - 150
			EtFOSA	2021/01/08	0.016 U, LOD=0.016		ug/L	



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QUALITY ASSURANCE REPORT(CONT'D)

QA/QC	Batch	Init	QC Type	Parameter	Date Analyzed	Value	% Recovery	UNITS	QC Limits
				MeFOSA	2021/01/08	0.016 U, LOD=0.016		ug/L	
Matrix Spike: A sample to which a known amount of the analyte of interest has been added. Used to evaluate sample matrix interference.									
Spiked Blank: A blank matrix sample to which a known amount of the analyte, usually from a second source, has been added. Used to evaluate method accuracy.									
Method Blank: A blank matrix containing all reagents used in the analytical procedure. Used to identify laboratory contamination.									
Surrogate: A pure or isotopically labeled compound whose behavior mirrors the analytes of interest. Used to evaluate extraction efficiency.									



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VALIDATION SIGNATURE PAGE

The analytical data and all QC contained in this report were reviewed and validated by the following individual(s).

Sin Chii Chia, Scientific Specialist

BV Labs has procedures in place to guard against improper use of the electronic signature and have the required "signatories", as per ISO/IEC 17025, signing the reports. For Service Group specific validation please refer to the Validation Signature Page.

N6247316C2018|0000|QTR12017|Site 00006|06-MW25-1220||Maxxam
 Analytics|||NA||DL1|W|||||20201229|15:55:48|20201231|16:14:00|OMI155||COY2685||5.00|1|||335-67-1|2.1||UG_L||||Y|PR|TRG||Due to high concentrations of the associated target analytes, a reduced sample volume was extracted and analyzed.
 Detect|||||||0.025|||||0.10|||COY2685||7129853|7129853|7129853|7129853|||20210111|Y
 N6247316C2018|0000|QTR12017|Site 00006|06-MW25-1220||Maxxam
 Analytics|||NA||DL1|W|||||20201229|15:55:48|20201231|16:14:00|OMI155||COY2685||5.00|1|||1763-23-1|16||UG_L||||Y|PR|TRG||Due to high concentration of the target analyte, a reduced sample volume was extracted and analyzed. Detection limit
 was|||||||0.29|||||1.0|||COY2685||7129853|7129853|7129853|7129853|||20210111|Y
 N6247316C2018|0000|QTR12017|Site 00006|06-MW25-1220||Maxxam
 Analytics|||NA||DL1|W|||||20201229|15:55:48|20201231|16:14:00|OMI155||COY2685||5.00|1|||376-06-7|0.070||UG_L|U||||N|PR|TRG||Due to high concentrations of the associated target analytes, a reduced sample volume was extracted and analyzed.
 Detect|||||||0.034|||||0.10|||COY2685||7129853|7129853|7129853|7129853|||20210111|Y
 N6247316C2018|0000|QTR12017|Site 00006|06-MW25-1220||Maxxam
 Analytics|||NA||DL1|W|||||20201229|15:55:48|20201231|16:14:00|OMI155||COY2685||5.00|1|||72629-94-8|0.070||UG_L|U||||N|PR|TRG||Due to high concentrations of the associated target analytes, a reduced sample volume was extracted and analyzed.
 Detect|||||||0.032|||||0.10|||COY2685||7129853|7129853|7129853|7129853|||20210111|Y
 N6247316C2018|0000|QTR12017|Site 00006|06-MW25-1220||Maxxam
 Analytics|||NA||DL1|W|||||20201229|15:55:48|20201231|16:14:00|OMI155||COY2685||5.00|1|||2058-94-8|0.070||UG_L|U||||N|PR|TRG||Due to high concentrations of the associated target analytes, a reduced sample volume was extracted and analyzed.
 Detect|||||||0.031|||||0.10|||COY2685||7129853|7129853|7129853|7129853|||20210111|Y
 N6247316C2018|0000|QTR12017|Site 00006|06-MW26-1220||Maxxam
 Analytics|||NA||RAO|W|||||20210107|14:49:19|20210108|09:41:00|OMI156||COY2685||1.00|1|||4151-50-2|0.016|0.016|UG_L|U||||N|PR|TRG||Initial analyses of the sample was performed within the method defined hold time. The sample was reanalysed outside
 the|||||||0.0070|||||0.040|||COY2685||7139995|7139995|7139995|7139995|||20210111|Y
 N6247316C2018|0000|QTR12017|Site 00006|06-MW26-1220||Maxxam
 Analytics|||NA||RAO|W|||||20210107|14:49:19|20210108|09:41:00|OMI156||COY2685||1.00|1|||31506-32-8|0.016|0.016|UG_L|U||||N|PR|TRG||Initial analyses of the sample was performed within the method defined hold time. The sample was reanalysed outside
 the|||||||0.0078|||||0.040|||COY2685||7139995|7139995|7139995|7139995|||20210111|Y
 N6247316C2018|0000|QTR12017|Site 00006|06-MW26-1220||Maxxam
 Analytics|||NA||DL1|W|||||20201229|15:55:48|20201231|16:35:00|OMI156||COY2685||1.15|1|||375-73-5|0.019||UG_L|J||||Y|PR|TRG|||||||0.0064|||||0.023|||COY2685||7129853|7129853|7129853|7129853|||20210111|Y
 N6247316C2018|0000|QTR12017|Site 00006|06-MW26-1220||Maxxam
 Analytics|||NA||DL1|W|||||20201229|15:55:48|20201231|16:35:00|OMI156||COY2685||1.15|1|||335-76-2|0.016||UG_L|U||||N|PR|TRG|||||||0.0045|||||0.023|||COY2685||7129853|7129853|7129853|7129853|||20210111|Y
 N6247316C2018|0000|QTR12017|Site 00006|06-MW26-1220||Maxxam
 Analytics|||NA||DL1|W|||||20201229|15:55:48|20201231|16:35:00|OMI156||COY2685||1.15|1|||307-55-1|0.018||UG_L|U||||N|PR|TRG|||||||0.0092|||||0.023|||COY2685||7129853|7129853|7129853|7129853|||20210111|Y
 N6247316C2018|0000|QTR12017|Site 00006|06-MW26-1220||Maxxam
 Analytics|||NA||DL1|W|||||20201229|15:55:48|20201231|16:35:00|OMI156||COY2685||1.15|1|||375-85-9|0.11||UG_L||||Y|PR|TRG|||||||0.0077|||||0.023|||COY2685||7129853|7129853|7129853|7129853|||20210111|Y
 N6247316C2018|0000|QTR12017|Site 00006|06-MW26-1220||Maxxam
 Analytics|||NA||DL1|W|||||20201229|15:55:48|20201231|16:35:00|OMI156||COY2685||1.15|1|||307-24-4|0.18||UG_L||||Y|PR|TRG|||||||0.0061|||||0.023|||COY2685||7129853|7129853|7129853|7129853|||20210111|Y
 N6247316C2018|0000|QTR12017|Site 00006|06-MW26-1220||Maxxam
 Analytics|||NA||DL1|W|||||20201229|15:55:48|20201231|16:35:00|OMI156||COY2685||1.15|1|||355-46-

4|0.46||UG_L||||Y|PR|TRG|||||||0.0051||||0.023|||C0Y2685||7129853|7129853|7129853|7129853|||20210111|Y
N6247316C2018|0000|QTR12017|Site 00006|06-MW26-1220||Maxxam
Analytics|||NA||DL1|W|||||20201229|15:55:48|20201231|16:35:00|OMI156||C0Y2685||1.15|1|||375-95-1|0.013||UG_L|J||||Y|PR|TRG|||||||0.0059||||0.023|||C0Y2685||7129853|7129853|7129853|7129853|||20210111|Y
N6247316C2018|0000|QTR12017|Site 00006|06-MW26-1220||Maxxam
Analytics|||NA||DL1|W|||||20201229|15:55:48|20201231|16:35:00|OMI156||C0Y2685||1.15|1|||335-67-1|0.40||UG_L||||Y|PR|TRG|||||||0.0058||||0.023|||C0Y2685||7129853|7129853|7129853|7129853|||20210111|Y
N6247316C2018|0000|QTR12017|Site 00006|06-MW26-1220||Maxxam
Analytics|||NA||DL1|W|||||20201229|15:55:48|20201231|16:35:00|OMI156||C0Y2685||1.15|1|||1763-23-1|1.5||UG_L||||Y|PR|TRG||Due to high concentration of the target analyte, a reduced sample volume was extracted and analyzed. Detection limit was|||||0.063||||0.20|||C0Y2685||7129853|7129853|7129853|7129853|||20210111|Y
N6247316C2018|0000|QTR12017|Site 00006|06-MW26-1220||Maxxam
Analytics|||NA||DL1|W|||||20201229|15:55:48|20201231|16:35:00|OMI156||C0Y2685||1.15|1|||376-06-7|0.016||UG_L|U||||N|PR|TRG|||||||0.0078||||0.023|||C0Y2685||7129853|7129853|7129853|7129853|||20210111|Y
N6247316C2018|0000|QTR12017|Site 00006|06-MW26-1220||Maxxam
Analytics|||NA||DL1|W|||||20201229|15:55:48|20201231|16:35:00|OMI156||C0Y2685||1.15|1|||72629-94-8|0.016||UG_L|U||||N|PR|TRG|||||||0.0074||||0.023|||C0Y2685||7129853|7129853|7129853|7129853|||20210111|Y
N6247316C2018|0000|QTR12017|Site 00006|06-MW26-1220||Maxxam
Analytics|||NA||DL1|W|||||20201229|15:55:48|20201231|16:35:00|OMI156||C0Y2685||1.15|1|||2058-94-8|0.016||UG_L|U||||N|PR|TRG|||||||0.0071||||0.023|||C0Y2685||7129853|7129853|7129853|7129853|||20210111|Y
N6247316C2018|0000|QTR12017|Site 00006|06-MW30-1220||Maxxam
Analytics|||NA||RAO|W|||||20210107|14:49:19|20210108|09:48:00|OMI157||C0Y2685||1.00|1|||4151-50-2|0.016|0.016|UG_L|U||||N|PR|TRG||Initial analyses of the sample was performed within the method defined hold time. The sample was reanalysed outside the|||||0.0070||||0.040|||C0Y2685||7139995|7139995|7139995|7139995|||20210111|Y
N6247316C2018|0000|QTR12017|Site 00006|06-MW30-1220||Maxxam
Analytics|||NA||DL1|W|||||20201229|15:55:48|20201231|16:56:00|OMI157||C0Y2685||1.10|1|||31506-32-8|0.018||UG_L|U||||N|PR|TRG|||||||0.0086||||0.045|||C0Y2685||7129853|7129853|7129853|7129853|||20210111|Y
N6247316C2018|0000|QTR12017|Site 00006|06-MW30-1220||Maxxam
Analytics|||NA||DL1|W|||||20201229|15:55:48|20201231|16:56:00|OMI157||C0Y2685||1.10|1|||375-73-5|0.0079||UG_L|J||||Y|PR|TRG|||||||0.0062||||0.022|||C0Y2685||7129853|7129853|7129853|7129853|||20210111|Y
N6247316C2018|0000|QTR12017|Site 00006|06-MW30-1220||Maxxam
Analytics|||NA||DL1|W|||||20201229|15:55:48|20201231|16:56:00|OMI157||C0Y2685||1.10|1|||335-76-2|0.015||UG_L|U||||N|PR|TRG|||||||0.0043||||0.022|||C0Y2685||7129853|7129853|7129853|7129853|||20210111|Y
N6247316C2018|0000|QTR12017|Site 00006|06-MW30-1220||Maxxam
Analytics|||NA||DL1|W|||||20201229|15:55:48|20201231|16:56:00|OMI157||C0Y2685||1.10|1|||307-55-1|0.018||UG_L|U||||N|PR|TRG|||||||0.0088||||0.022|||C0Y2685||7129853|7129853|7129853|7129853|||20210111|Y
N6247316C2018|0000|QTR12017|Site 00006|06-MW30-1220||Maxxam
Analytics|||NA||DL1|W|||||20201229|15:55:48|20201231|16:56:00|OMI157||C0Y2685||1.10|1|||375-85-9|0.015||UG_L|U||||N|PR|TRG|||||||0.0074||||0.022|||C0Y2685||7129853|7129853|7129853|7129853|||20210111|Y
N6247316C2018|0000|QTR12017|Site 00006|06-MW30-1220||Maxxam
Analytics|||NA||DL1|W|||||20201229|15:55:48|20201231|16:56:00|OMI157||C0Y2685||1.10|1|||307-24-4|0.021||UG_L|J||||Y|PR|TRG|||||||0.0058||||0.022|||C0Y2685||7129853|7129853|7129853|7129853|||20210111|Y
N6247316C2018|0000|QTR12017|Site 00006|06-MW30-1220||Maxxam

Analytics|||NA||DL1|W|||||20201229|15:55:48|20201231|16:56:00|OMI157||COY2685||1.10|1|||355-46-4|0.045||UG_L||||Y|PR|TRG|||||||0.0048|||||0.022|||COY2685||7129853|7129853|7129853|7129853|||20210111|Y
N6247316C2018|0000|QTR12017|Site 00006|06-MW30-1220||Maxxam
Analytics|||NA||DL1|W|||||20201229|15:55:48|20201231|16:56:00|OMI157||COY2685||1.10|1|||375-95-1|0.015||UG_L|U||||N|PR|TRG|||||||0.0056|||||0.022|||COY2685||7129853|7129853|7129853|7129853|||20210111|Y
N6247316C2018|0000|QTR12017|Site 00006|06-MW30-1220||Maxxam
Analytics|||NA||DL1|W|||||20201229|15:55:48|20201231|16:56:00|OMI157||COY2685||1.10|1|||335-67-1|0.045||UG_L||||Y|PR|TRG|||||||0.0055|||||0.022|||COY2685||7129853|7129853|7129853|7129853|||20210111|Y
N6247316C2018|0000|QTR12017|Site 00006|06-MW30-1220||Maxxam
Analytics|||NA||DL1|W|||||20201229|15:55:48|20201231|16:56:00|OMI157||COY2685||1.10|1|||1763-23-1|0.10||UG_L||||Y|PR|TRG|||||||0.0063|||||0.022|||COY2685||7129853|7129853|7129853|7129853|||20210111|Y
N6247316C2018|0000|QTR12017|Site 00006|06-MW30-1220||Maxxam
Analytics|||NA||DL1|W|||||20201229|15:55:48|20201231|16:56:00|OMI157||COY2685||1.10|1|||376-06-7|0.015||UG_L|U||||N|PR|TRG|||||||0.0075|||||0.022|||COY2685||7129853|7129853|7129853|7129853|||20210111|Y
N6247316C2018|0000|QTR12017|Site 00006|06-MW30-1220||Maxxam
Analytics|||NA||DL1|W|||||20201229|15:55:48|20201231|16:56:00|OMI157||COY2685||1.10|1|||72629-94-8|0.015||UG_L|U||||N|PR|TRG|||||||0.0070|||||0.022|||COY2685||7129853|7129853|7129853|7129853|||20210111|Y
N6247316C2018|0000|QTR12017|Site 00006|06-MW30-1220||Maxxam
Analytics|||NA||DL1|W|||||20201229|15:55:48|20201231|16:56:00|OMI157||COY2685||1.10|1|||2058-94-8|0.015||UG_L|U||||N|PR|TRG|||||||0.0068|||||0.022|||COY2685||7129853|7129853|7129853|7129853|||20210111|Y
N6247316C2018|0000|QTR12017|Site 00006|06-MW31-1220||Maxxam
Analytics|||NA||DL1|W|||||20201229|15:55:48|20201231|15:39:00|OMI158||COY2685||1.10|1|||4151-50-2|0.018||UG_L|U||||N|PR|TRG|||||||0.0077|||||0.045|||COY2685||7129853|7129853|7129853|7129853|||20210111|Y
N6247316C2018|0000|QTR12017|Site 00006|06-MW31-1220||Maxxam
Analytics|||NA||DL1|W|||||20201229|15:55:48|20201231|15:39:00|OMI158||COY2685||1.10|1|||31506-32-8|0.018||UG_L|U||||N|PR|TRG|||||||0.0086|||||0.045|||COY2685||7129853|7129853|7129853|7129853|||20210111|Y
N6247316C2018|0000|QTR12017|Site 00006|06-MW31-1220||Maxxam
Analytics|||NA||DL1|W|||||20201229|15:55:48|20201231|15:39:00|OMI158||COY2685||1.10|1|||375-73-5|0.12||UG_L||||Y|PR|TRG|||||||0.0062|||||0.022|||COY2685||7129853|7129853|7129853|7129853|||20210111|Y
N6247316C2018|0000|QTR12017|Site 00006|06-MW31-1220||Maxxam
Analytics|||NA||DL1|W|||||20201229|15:55:48|20201231|15:39:00|OMI158||COY2685||1.10|1|||335-76-2|0.015||UG_L|U||||N|PR|TRG|||||||0.0043|||||0.022|||COY2685||7129853|7129853|7129853|7129853|||20210111|Y
N6247316C2018|0000|QTR12017|Site 00006|06-MW31-1220||Maxxam
Analytics|||NA||DL1|W|||||20201229|15:55:48|20201231|15:39:00|OMI158||COY2685||1.10|1|||307-55-1|0.018||UG_L|U||||N|PR|TRG|||||||0.0088|||||0.022|||COY2685||7129853|7129853|7129853|7129853|||20210111|Y
N6247316C2018|0000|QTR12017|Site 00006|06-MW31-1220||Maxxam
Analytics|||NA||DL1|W|||||20201229|15:55:48|20201231|15:39:00|OMI158||COY2685||1.10|1|||375-85-9|0.75||UG_L||||Y|PR|TRG|||||||0.0074|||||0.022|||COY2685||7129853|7129853|7129853|7129853|||20210111|Y
N6247316C2018|0000|QTR12017|Site 00006|06-MW31-1220||Maxxam
Analytics|||NA||DL1|W|||||20201229|15:55:48|20201231|15:39:00|OMI158||COY2685||1.10|1|||307-24-4|1.6||UG_L||||Y|PR|TRG||Due to high concentration of the target analyte, a reduced sample volume was extracted and analyzed. Detection limit was|||||0.058||||0.20|||COY2685||7129853|7129853|7129853|7129853|||20210111|Y
N6247316C2018|0000|QTR12017|Site 00006|06-MW31-1220||Maxxam

Analytics||NA||DL1|W|||||20201229|15:55:48|20201231|15:39:00|OMI158||COY2685||1.10|1||355-46-4|3.5||UG_L||||Y|PR|TRG||Due to high concentration of the target analyte, a reduced sample volume was extracted and analyzed. Detection limit was|||||0.048||||0.20||COY2685||7129853|7129853|7129853|7129853||20210111|Y
N6247316C2018|0000|QTR12017|Site 00006|06-MW31-1220||Maxxam
Analytics||NA||DL1|W|||||20201229|15:55:48|20201231|15:39:00|OMI158||COY2685||1.10|1||375-95-1|0.032||UG_L||||Y|PR|TRG||||||0.0056||||0.022||COY2685||7129853|7129853|7129853|7129853||20210111|Y
N6247316C2018|0000|QTR12017|Site 00006|06-MW31-1220||Maxxam
Analytics||NA||DL1|W|||||20201229|15:55:48|20201231|15:39:00|OMI158||COY2685||1.10|1||335-67-1|0.44||UG_L||||Y|PR|TRG||||||0.0055||||0.022||COY2685||7129853|7129853|7129853|7129853||20210111|Y
N6247316C2018|0000|QTR12017|Site 00006|06-MW31-1220||Maxxam
Analytics||NA||DL1|W|||||20201229|15:55:48|20201231|15:39:00|OMI158||COY2685||1.10|1||1763-23-1|0.93||UG_L||||Y|PR|TRG||||||0.0063||||0.022||COY2685||7129853|7129853|7129853|7129853||20210111|Y
N6247316C2018|0000|QTR12017|Site 00006|06-MW31-1220||Maxxam
Analytics||NA||DL1|W|||||20201229|15:55:48|20201231|15:39:00|OMI158||COY2685||1.10|1||376-06-7|0.015||UG_L|U||N|PR|TRG||||||0.0075||||0.022||COY2685||7129853|7129853|7129853|7129853||20210111|Y
N6247316C2018|0000|QTR12017|Site 00006|06-MW31-1220||Maxxam
Analytics||NA||DL1|W|||||20201229|15:55:48|20201231|15:39:00|OMI158||COY2685||1.10|1||72629-94-8|0.015||UG_L|U||N|PR|TRG||||||0.0070||||0.022||COY2685||7129853|7129853|7129853|7129853||20210111|Y
N6247316C2018|0000|QTR12017|Site 00006|06-MW31-1220||Maxxam
Analytics||NA||DL1|W|||||20201229|15:55:48|20201231|15:39:00|OMI158||COY2685||1.10|1||2058-94-8|0.015||UG_L|U||N|PR|TRG||||||0.0068||||0.022||COY2685||7129853|7129853|7129853|7129853||20210111|Y
N6247316C2018|0000|QTR12017|Site 00006|06-MW31-1220 DUP||Maxxam
Analytics||NA||DL1|W|||||20201229|15:55:48|20201231|15:39:00|OMI159||COY2685||1.10|1||4151-50-2|0.018||UG_L|U||N|PR|TRG||||||0.0077||||0.045||COY2685||7129853|7129853|7129853|7129853||20210111|Y
N6247316C2018|0000|QTR12017|Site 00006|06-MW31-1220 DUP||Maxxam
Analytics||NA||DL1|W|||||20201229|15:55:48|20201231|15:39:00|OMI159||COY2685||1.10|1||31506-32-8|0.018||UG_L|U||N|PR|TRG||||||0.0086||||0.045||COY2685||7129853|7129853|7129853|7129853||20210111|Y
N6247316C2018|0000|QTR12017|Site 00006|06-MW31-1220 DUP||Maxxam
Analytics||NA||DL1|W|||||20201229|15:55:48|20201231|15:39:00|OMI159||COY2685||1.10|1||375-73-5|0.13||UG_L||||Y|PR|TRG||||||0.0062||||0.022||COY2685||7129853|7129853|7129853|7129853||20210111|Y
N6247316C2018|0000|QTR12017|Site 00006|06-MW31-1220 DUP||Maxxam
Analytics||NA||DL1|W|||||20201229|15:55:48|20201231|15:39:00|OMI159||COY2685||1.10|1||335-76-2|0.015||UG_L|U||N|PR|TRG||||||0.0043||||0.022||COY2685||7129853|7129853|7129853|7129853||20210111|Y
N6247316C2018|0000|QTR12017|Site 00006|06-MW31-1220 DUP||Maxxam
Analytics||NA||DL1|W|||||20201229|15:55:48|20201231|15:39:00|OMI159||COY2685||1.10|1||307-55-1|0.018||UG_L|U||N|PR|TRG||||||0.0088||||0.022||COY2685||7129853|7129853|7129853|7129853||20210111|Y
N6247316C2018|0000|QTR12017|Site 00006|06-MW31-1220 DUP||Maxxam
Analytics||NA||DL1|W|||||20201229|15:55:48|20201231|15:39:00|OMI159||COY2685||1.10|1||375-85-9|0.75||UG_L||||Y|PR|TRG||||||0.0074||||0.022||COY2685||7129853|7129853|7129853|7129853||20210111|Y
N6247316C2018|0000|QTR12017|Site 00006|06-MW31-1220 DUP||Maxxam
Analytics||NA||DL1|W|||||20201229|15:55:48|20201231|15:39:00|OMI159||COY2685||1.10|1||307-24-4|1.5||UG_L||||Y|PR|TRG||Due to high concentration of the target analyte, a reduced sample volume was extracted and analyzed. Detection limit was|||||0.058||||0.20||COY2685||7129853|7129853|7129853|7129853||20210111|Y

N6247316C2018|0000|QTR12017|Site 00006|06-MW31-1220 DUP||Maxxam
Analytics|||NA||DL1|W|||||20201229|15:55:48|20201231|15:39:00|OMI159||C0Y2685||1.10|1|||355-46-4|3.6||UG_L||||Y|PR|TRG||Due to high concentration of the target analyte, a reduced sample volume was extracted and analyzed. Detection limit was||||||0.048|||||0.20|||C0Y2685||7129853|7129853|7129853|7129853|||20210111|Y

N6247316C2018|0000|QTR12017|Site 00006|06-MW31-1220 DUP||Maxxam
Analytics|||NA||DL1|W|||||20201229|15:55:48|20201231|15:39:00|OMI159||C0Y2685||1.10|1|||375-95-1|0.033||UG_L||||Y|PR|TRG|||||||0.0056|||||0.022|||C0Y2685||7129853|7129853|7129853|7129853|||20210111|Y

N6247316C2018|0000|QTR12017|Site 00006|06-MW31-1220 DUP||Maxxam
Analytics|||NA||DL1|W|||||20201229|15:55:48|20201231|15:39:00|OMI159||C0Y2685||1.10|1|||335-67-1|0.43||UG_L||||Y|PR|TRG|||||||0.0055|||||0.022|||C0Y2685||7129853|7129853|7129853|7129853|||20210111|Y

N6247316C2018|0000|QTR12017|Site 00006|06-MW31-1220 DUP||Maxxam
Analytics|||NA||DL1|W|||||20201229|15:55:48|20201231|15:39:00|OMI159||C0Y2685||1.10|1|||1763-23-1|0.99||UG_L||||Y|PR|TRG|||||||0.0063|||||0.022|||C0Y2685||7129853|7129853|7129853|7129853|||20210111|Y

N6247316C2018|0000|QTR12017|Site 00006|06-MW31-1220 DUP||Maxxam
Analytics|||NA||DL1|W|||||20201229|15:55:48|20201231|15:39:00|OMI159||C0Y2685||1.10|1|||376-06-7|0.015||UG_L|U|||N|PR|TRG|||||||0.0075|||||0.022|||C0Y2685||7129853|7129853|7129853|7129853|||20210111|Y

N6247316C2018|0000|QTR12017|Site 00006|06-MW31-1220 DUP||Maxxam
Analytics|||NA||DL1|W|||||20201229|15:55:48|20201231|15:39:00|OMI159||C0Y2685||1.10|1|||72629-94-8|0.015||UG_L|U|||N|PR|TRG|||||||0.0070|||||0.022|||C0Y2685||7129853|7129853|7129853|7129853|||20210111|Y

N6247316C2018|0000|QTR12017|Site 00006|06-MW31-1220 DUP||Maxxam
Analytics|||NA||DL1|W|||||20201229|15:55:48|20201231|15:39:00|OMI159||C0Y2685||1.10|1|||2058-94-8|0.015||UG_L|U|||N|PR|TRG|||||||0.0068|||||0.022|||C0Y2685||7129853|7129853|7129853|7129853|||20210111|Y

N6247316C2018|0000|QTR12017|Site 00006|06-MW32-1220||Maxxam
Analytics|||NA||RAO|W|||||20210107|14:49:19|20210108|09:55:00|OMI160||C0Y2685||5.00|1|||4151-50-2|0.080|0.080|UG_L|U|||N|PR|TRG||Due to high concentrations of the associated target analytes, a reduced sample volume was extracted and analyzed.
Detect||||||0.035|||||0.20|||C0Y2685||7139995|7139995|7139995|7139995|||20210111|Y

N6247316C2018|0000|QTR12017|Site 00006|06-MW32-1220||Maxxam
Analytics|||NA||RAO|W|||||20210107|14:49:19|20210108|09:55:00|OMI160||C0Y2685||5.00|1|||31506-32-8|0.080|0.080|UG_L|U|||N|PR|TRG||Due to high concentrations of the associated target analytes, a reduced sample volume was extracted and analyzed.
Detect||||||0.039|||||0.20|||C0Y2685||7139995|7139995|7139995|7139995|||20210111|Y

N6247316C2018|0000|QTR12017|Site 00006|06-MW32-1220||Maxxam
Analytics|||NA||DL1|W|||||20201229|15:55:49|20201231|17:52:00|OMI160||C0Y2685||5.00|1|||375-73-5|0.091||UG_L|J||||Y|PR|TRG||Due to high concentrations of the associated target analytes, a reduced sample volume was extracted and analyzed.
Detect||||||0.028|||||0.10|||C0Y2685||7129853|7129853|7129853|7129853|||20210111|Y

N6247316C2018|0000|QTR12017|Site 00006|06-MW32-1220||Maxxam
Analytics|||NA||DL1|W|||||20201229|15:55:49|20201231|17:52:00|OMI160||C0Y2685||5.00|1|||335-76-2|0.070||UG_L|U|||N|PR|TRG||Due to high concentrations of the associated target analytes, a reduced sample volume was extracted and analyzed.
Detect||||||0.020|||||0.10|||C0Y2685||7129853|7129853|7129853|7129853|||20210111|Y

N6247316C2018|0000|QTR12017|Site 00006|06-MW32-1220||Maxxam
Analytics|||NA||DL1|W|||||20201229|15:55:49|20201231|17:52:00|OMI160||C0Y2685||5.00|1|||307-55-1|0.080||UG_L|U|||N|PR|TRG||Due to high concentrations of the associated target analytes, a reduced sample volume was extracted and analyzed.
Detect||||||0.040|||||0.10|||C0Y2685||7129853|7129853|7129853|7129853|||20210111|Y

N6247316C2018|0000|QTR12017|Site 00006|06-MW32-1220||Maxxam
Analytics|||NA||DL1|W|||||20201229|15:55:49|20201231|17:52:00|OMI160||C0Y2685||5.00|1|||375-85-9|0.93||UG_L||||Y|PR|TRG||Due to high concentrations of the associated target analytes, a reduced sample

volume was extracted and analyzed.

Detect|||||0.034||||0.10|||C0Y2685||7129853|7129853|7129853|7129853|||20210111|Y
N6247316C2018|0000|QTR12017|Site 00006|06-MW32-1220||Maxxam
Analytics|||NA||DL1|W|||||20201229|15:55:49|20201231|17:52:00|OMI160||C0Y2685||5.00|1|||307-24-4|1.4||UG_L||||Y|PR|TRG||Due to high concentrations of the associated target analytes, a reduced sample volume was extracted and analyzed.

Detect|||||0.027||||0.10|||C0Y2685||7129853|7129853|7129853|7129853|||20210111|Y
N6247316C2018|0000|QTR12017|Site 00006|06-MW32-1220||Maxxam
Analytics|||NA||DL1|W|||||20201229|15:55:49|20201231|17:52:00|OMI160||C0Y2685||5.00|1|||355-46-4|4.9||UG_L||||Y|PR|TRG||Due to high concentrations of the associated target analytes, a reduced sample volume was extracted and analyzed.

Detect|||||0.022||||0.10|||C0Y2685||7129853|7129853|7129853|7129853|||20210111|Y
N6247316C2018|0000|QTR12017|Site 00006|06-MW32-1220||Maxxam
Analytics|||NA||DL1|W|||||20201229|15:55:49|20201231|17:52:00|OMI160||C0Y2685||5.00|1|||375-95-1|0.061||UG_L|J||||Y|PR|TRG||Due to high concentrations of the associated target analytes, a reduced sample volume was extracted and analyzed.

Detect|||||0.026||||0.10|||C0Y2685||7129853|7129853|7129853|7129853|||20210111|Y
N6247316C2018|0000|QTR12017|Site 00006|06-MW32-1220||Maxxam
Analytics|||NA||DL1|W|||||20201229|15:55:49|20201231|17:52:00|OMI160||C0Y2685||5.00|1|||335-67-1|0.97||UG_L||||Y|PR|TRG||Due to high concentrations of the associated target analytes, a reduced sample volume was extracted and analyzed.

Detect|||||0.025||||0.10|||C0Y2685||7129853|7129853|7129853|7129853|||20210111|Y
N6247316C2018|0000|QTR12017|Site 00006|06-MW32-1220||Maxxam
Analytics|||NA||DL1|W|||||20201229|15:55:49|20201231|17:52:00|OMI160||C0Y2685||5.00|1|||1763-23-1|16||UG_L||||Y|PR|TRG||Due to high concentration of the target analyte, a reduced sample volume was extracted and analyzed. Detection limit

was|||||0.29||||1.0|||C0Y2685||7129853|7129853|7129853|7129853|||20210111|Y
N6247316C2018|0000|QTR12017|Site 00006|06-MW32-1220||Maxxam
Analytics|||NA||DL1|W|||||20201229|15:55:49|20201231|17:52:00|OMI160||C0Y2685||5.00|1|||376-06-7|0.070||UG_L|U||||N|PR|TRG||Due to high concentrations of the associated target analytes, a reduced sample volume was extracted and analyzed.

Detect|||||0.034||||0.10|||C0Y2685||7129853|7129853|7129853|7129853|||20210111|Y
N6247316C2018|0000|QTR12017|Site 00006|06-MW32-1220||Maxxam
Analytics|||NA||DL1|W|||||20201229|15:55:49|20201231|17:52:00|OMI160||C0Y2685||5.00|1|||72629-94-8|0.070||UG_L|U||||N|PR|TRG||Due to high concentrations of the associated target analytes, a reduced sample volume was extracted and analyzed.

Detect|||||0.032||||0.10|||C0Y2685||7129853|7129853|7129853|7129853|||20210111|Y
N6247316C2018|0000|QTR12017|Site 00006|06-MW32-1220||Maxxam
Analytics|||NA||DL1|W|||||20201229|15:55:49|20201231|17:52:00|OMI160||C0Y2685||5.00|1|||2058-94-8|0.070||UG_L|U||||N|PR|TRG||Due to high concentrations of the associated target analytes, a reduced sample volume was extracted and analyzed.

Detect|||||0.031||||0.10|||C0Y2685||7129853|7129853|7129853|7129853|||20210111|Y
N6247316C2018|0000|QTR12017|Site 00006|06-MW33-1220||Maxxam
Analytics|||NA||DL1|W|||||20201229|15:55:49|20201231|18:13:00|OMI161||C0Y2685||2.00|1|||4151-50-2|0.032||UG_L|U||||N|PR|TRG||Due to high concentrations of the associated target analytes, a reduced sample volume was extracted and analyzed.

Detect|||||0.014||||0.080|||C0Y2685||7129853|7129853|7129853|7129853|||20210111|Y
N6247316C2018|0000|QTR12017|Site 00006|06-MW33-1220||Maxxam
Analytics|||NA||DL1|W|||||20201229|15:55:49|20201231|18:13:00|OMI161||C0Y2685||2.00|1|||31506-32-8|0.032||UG_L|U||||N|PR|TRG||Due to high concentrations of the associated target analytes, a reduced sample volume was extracted and analyzed.

Detect|||||0.016||||0.080|||C0Y2685||7129853|7129853|7129853|7129853|||20210111|Y
N6247316C2018|0000|QTR12017|Site 00006|06-MW33-1220||Maxxam
Analytics|||NA||DL1|W|||||20201229|15:55:49|20201231|18:13:00|OMI161||C0Y2685||2.00|1|||375-73-5|0.081||UG_L||||Y|PR|TRG||Due to high concentrations of the associated target analytes, a reduced sample volume was extracted and analyzed.

Detect|||||0.011||||0.040|||C0Y2685||7129853|7129853|7129853|7129853|||20210111|Y

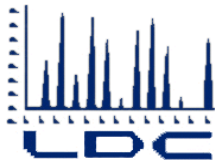
N6247316C2018|0000|QTR12017|Site 00006|06-MW33-1220||Maxxam
Analytics|||NA||DL1|W|||||20201229|15:55:49|20201231|18:13:00|OMI161||COY2685||2.00|1|||335-76-2|0.028||UG_L|U|||N|PR|TRG||Due to high concentrations of the associated target analytes, a reduced sample volume was extracted and analyzed.
Detect||||||0.0078||||0.040|||COY2685||7129853|7129853|7129853|7129853|||20210111|Y
N6247316C2018|0000|QTR12017|Site 00006|06-MW33-1220||Maxxam
Analytics|||NA||DL1|W|||||20201229|15:55:49|20201231|18:13:00|OMI161||COY2685||2.00|1|||307-55-1|0.032||UG_L|U|||N|PR|TRG||Due to high concentrations of the associated target analytes, a reduced sample volume was extracted and analyzed.
Detect||||||0.016||||0.040|||COY2685||7129853|7129853|7129853|7129853|||20210111|Y
N6247316C2018|0000|QTR12017|Site 00006|06-MW33-1220||Maxxam
Analytics|||NA||DL1|W|||||20201229|15:55:49|20201231|18:13:00|OMI161||COY2685||2.00|1|||375-85-9|0.54||UG_L|U|||Y|PR|TRG||Due to high concentrations of the associated target analytes, a reduced sample volume was extracted and analyzed.
Detect||||||0.013||||0.040|||COY2685||7129853|7129853|7129853|7129853|||20210111|Y
N6247316C2018|0000|QTR12017|Site 00006|06-MW33-1220||Maxxam
Analytics|||NA||DL1|W|||||20201229|15:55:49|20201231|18:13:00|OMI161||COY2685||2.00|1|||307-24-4|1.1||UG_L|U|||Y|PR|TRG||Due to high concentrations of the associated target analytes, a reduced sample volume was extracted and analyzed.
Detect||||||0.011||||0.040|||COY2685||7129853|7129853|7129853|7129853|||20210111|Y
N6247316C2018|0000|QTR12017|Site 00006|06-MW33-1220||Maxxam
Analytics|||NA||DL1|W|||||20201229|15:55:49|20201231|18:13:00|OMI161||COY2685||2.00|1|||355-46-4|2.0||UG_L|U|||Y|PR|TRG||Due to high concentrations of the associated target analytes, a reduced sample volume was extracted and analyzed.
Detect||||||0.0088||||0.040|||COY2685||7129853|7129853|7129853|7129853|||20210111|Y
N6247316C2018|0000|QTR12017|Site 00006|06-MW33-1220||Maxxam
Analytics|||NA||DL1|W|||||20201229|15:55:49|20201231|18:13:00|OMI161||COY2685||2.00|1|||375-95-1|0.042||UG_L|U|||Y|PR|TRG||Due to high concentrations of the associated target analytes, a reduced sample volume was extracted and analyzed.
Detect||||||0.010||||0.040|||COY2685||7129853|7129853|7129853|7129853|||20210111|Y
N6247316C2018|0000|QTR12017|Site 00006|06-MW33-1220||Maxxam
Analytics|||NA||DL1|W|||||20201229|15:55:49|20201231|18:13:00|OMI161||COY2685||2.00|1|||335-67-1|1.2||UG_L|U|||Y|PR|TRG||Due to high concentrations of the associated target analytes, a reduced sample volume was extracted and analyzed.
Detect||||||0.010||||0.040|||COY2685||7129853|7129853|7129853|7129853|||20210111|Y
N6247316C2018|0000|QTR12017|Site 00006|06-MW33-1220||Maxxam
Analytics|||NA||DL1|W|||||20201229|15:55:49|20201231|18:13:00|OMI161||COY2685||2.00|1|||1763-23-1|7.5||UG_L|U|||Y|PR|TRG||Due to high concentration of the target analyte, a reduced sample volume was extracted and analyzed. Detection limit
was||||||0.11||||0.40|||COY2685||7129853|7129853|7129853|7129853|||20210111|Y
N6247316C2018|0000|QTR12017|Site 00006|06-MW33-1220||Maxxam
Analytics|||NA||DL1|W|||||20201229|15:55:49|20201231|18:13:00|OMI161||COY2685||2.00|1|||376-06-7|0.028||UG_L|U|||N|PR|TRG||Due to high concentrations of the associated target analytes, a reduced sample volume was extracted and analyzed.
Detect||||||0.014||||0.040|||COY2685||7129853|7129853|7129853|7129853|||20210111|Y
N6247316C2018|0000|QTR12017|Site 00006|06-MW33-1220||Maxxam
Analytics|||NA||DL1|W|||||20201229|15:55:49|20201231|18:13:00|OMI161||COY2685||2.00|1|||72629-94-8|0.028||UG_L|U|||N|PR|TRG||Due to high concentrations of the associated target analytes, a reduced sample volume was extracted and analyzed.
Detect||||||0.013||||0.040|||COY2685||7129853|7129853|7129853|7129853|||20210111|Y
N6247316C2018|0000|QTR12017|Site 00006|06-MW33-1220||Maxxam
Analytics|||NA||DL1|W|||||20201229|15:55:49|20201231|18:13:00|OMI161||COY2685||2.00|1|||2058-94-8|0.028||UG_L|U|||N|PR|TRG||Due to high concentrations of the associated target analytes, a reduced sample volume was extracted and analyzed.
Detect||||||0.012||||0.040|||COY2685||7129853|7129853|7129853|7129853|||20210111|Y
N6247316C2018|0000|QTR12017|Site 00006|06-MW34-1220||Maxxam
Analytics|||NA||DL1|W|||||20201229|15:55:49|20201231|18:34:00|OMI162||COY2685||1.15|1|||4151-50-

2|0.018||UG_L|U||N|PR|TRG|0.0081|0.047||C0Y2685|7129853|7129853|7129853|7129853||20210111|Y
N6247316C2018|0000|QTR12017|Site 00006|06-MW34-1220||Maxxam
Analytics||NA||DL1|W|||20201229|15:55:49|20201231|18:34:00|OMI162||C0Y2685||1.15|1||31506-32-8|0.018||UG_L|U||N|PR|TRG|0.0090|0.047||C0Y2685|7129853|7129853|7129853|7129853||20210111|Y
N6247316C2018|0000|QTR12017|Site 00006|06-MW34-1220||Maxxam
Analytics||NA||DL1|W|||20201229|15:55:49|20201231|18:34:00|OMI162||C0Y2685||1.15|1||375-73-5|0.032||UG_L|||Y|PR|TRG|0.0064|0.023||C0Y2685|7129853|7129853|7129853|7129853||20210111|Y
N6247316C2018|0000|QTR12017|Site 00006|06-MW34-1220||Maxxam
Analytics||NA||DL1|W|||20201229|15:55:49|20201231|18:34:00|OMI162||C0Y2685||1.15|1||335-76-2|0.016||UG_L|U||N|PR|TRG|0.0045|0.023||C0Y2685|7129853|7129853|7129853|7129853||20210111|Y
N6247316C2018|0000|QTR12017|Site 00006|06-MW34-1220||Maxxam
Analytics||NA||DL1|W|||20201229|15:55:49|20201231|18:34:00|OMI162||C0Y2685||1.15|1||307-55-1|0.018||UG_L|U||N|PR|TRG|0.0092|0.023||C0Y2685|7129853|7129853|7129853|7129853||20210111|Y
N6247316C2018|0000|QTR12017|Site 00006|06-MW34-1220||Maxxam
Analytics||NA||DL1|W|||20201229|15:55:49|20201231|18:34:00|OMI162||C0Y2685||1.15|1||375-85-9|0.079||UG_L|||Y|PR|TRG|0.0077|0.023||C0Y2685|7129853|7129853|7129853|7129853||20210111|Y
N6247316C2018|0000|QTR12017|Site 00006|06-MW34-1220||Maxxam
Analytics||NA||DL1|W|||20201229|15:55:49|20201231|18:34:00|OMI162||C0Y2685||1.15|1||307-24-4|0.21||UG_L|||Y|PR|TRG|0.0061|0.023||C0Y2685|7129853|7129853|7129853|7129853||20210111|Y
N6247316C2018|0000|QTR12017|Site 00006|06-MW34-1220||Maxxam
Analytics||NA||DL1|W|||20201229|15:55:49|20201231|18:34:00|OMI162||C0Y2685||1.15|1||355-46-4|0.80||UG_L|||Y|PR|TRG|0.0051|0.023||C0Y2685|7129853|7129853|7129853|7129853||20210111|Y
N6247316C2018|0000|QTR12017|Site 00006|06-MW34-1220||Maxxam
Analytics||NA||DL1|W|||20201229|15:55:49|20201231|18:34:00|OMI162||C0Y2685||1.15|1||375-95-1|0.012||UG_L|J||Y|PR|TRG|0.0059|0.023||C0Y2685|7129853|7129853|7129853|7129853||20210111|Y
N6247316C2018|0000|QTR12017|Site 00006|06-MW34-1220||Maxxam
Analytics||NA||DL1|W|||20201229|15:55:49|20201231|18:34:00|OMI162||C0Y2685||1.15|1||335-67-1|0.18||UG_L|||Y|PR|TRG|0.0058|0.023||C0Y2685|7129853|7129853|7129853|7129853||20210111|Y
N6247316C2018|0000|QTR12017|Site 00006|06-MW34-1220||Maxxam
Analytics||NA||DL1|W|||20201229|15:55:49|20201231|18:34:00|OMI162||C0Y2685||1.15|1||1763-23-1|2.3||UG_L|||Y|PR|TRG||Due to high concentration of the target analyte, a reduced sample volume was extracted and analyzed. Detection limit was||0.063||0.20||C0Y2685|7129853|7129853|7129853|7129853||20210111|Y
N6247316C2018|0000|QTR12017|Site 00006|06-MW34-1220||Maxxam
Analytics||NA||DL1|W|||20201229|15:55:49|20201231|18:34:00|OMI162||C0Y2685||1.15|1||376-06-7|0.016||UG_L|U||N|PR|TRG|0.0078|0.023||C0Y2685|7129853|7129853|7129853|7129853||20210111|Y
N6247316C2018|0000|QTR12017|Site 00006|06-MW34-1220||Maxxam
Analytics||NA||DL1|W|||20201229|15:55:49|20201231|18:34:00|OMI162||C0Y2685||1.15|1||72629-94-8|0.016||UG_L|U||N|PR|TRG|0.0074|0.023||C0Y2685|7129853|7129853|7129853|7129853||20210111|Y
N6247316C2018|0000|QTR12017|Site 00006|06-MW34-1220||Maxxam
Analytics||NA||DL1|W|||20201229|15:55:49|20201231|18:34:00|OMI162||C0Y2685||1.15|1||2058-94-8|0.016||UG_L|U||N|PR|TRG|0.0071|0.023||C0Y2685|7129853|7129853|7129853|7129853||20210111|Y
N6247316C2018|0000|QTR12017|Site 00006|06-MW35-1220||Maxxam
Analytics||NA||DL1|W|||20201229|15:55:49|20201231|19:02:00|OMI163||C0Y2685||1.15|1||4151-50-

2|0.018||UG_L|U|||N|PR|TRG| |||||0.0081|||0.046|||C0Y2685||7129853|7129853|7129853|7129853|||20210111|Y
N6247316C2018|0000|QTR12017|Site 00006|06-MW35-1220||Maxxam
Analytics|||NA||DL1|W|||20201229|15:55:49|20201231|19:02:00|OMI163||C0Y2685||1.15|1||31506-32-8|0.018||UG_L|U|||N|PR|TRG| |||||0.0090|||0.046|||C0Y2685||7129853|7129853|7129853|7129853|||20210111|Y
N6247316C2018|0000|QTR12017|Site 00006|06-MW35-1220||Maxxam
Analytics|||NA||DL1|W|||20201229|15:55:49|20201231|19:02:00|OMI163||C0Y2685||1.15|1||375-73-5|0.034||UG_L| |||Y|PR|TRG| |||||0.0064|||0.023|||C0Y2685||7129853|7129853|7129853|7129853|||20210111|Y
N6247316C2018|0000|QTR12017|Site 00006|06-MW35-1220||Maxxam
Analytics|||NA||DL1|W|||20201229|15:55:49|20201231|19:02:00|OMI163||C0Y2685||1.15|1||335-76-2|0.016||UG_L|U|||N|PR|TRG| |||||0.0045|||0.023|||C0Y2685||7129853|7129853|7129853|7129853|||20210111|Y
N6247316C2018|0000|QTR12017|Site 00006|06-MW35-1220||Maxxam
Analytics|||NA||DL1|W|||20201229|15:55:49|20201231|19:02:00|OMI163||C0Y2685||1.15|1||307-55-1|0.018||UG_L|U|||N|PR|TRG| |||||0.0092|||0.023|||C0Y2685||7129853|7129853|7129853|7129853|||20210111|Y
N6247316C2018|0000|QTR12017|Site 00006|06-MW35-1220||Maxxam
Analytics|||NA||DL1|W|||20201229|15:55:49|20201231|19:02:00|OMI163||C0Y2685||1.15|1||375-85-9|0.13||UG_L| |||Y|PR|TRG| |||||0.0077|||0.023|||C0Y2685||7129853|7129853|7129853|7129853|||20210111|Y
N6247316C2018|0000|QTR12017|Site 00006|06-MW35-1220||Maxxam
Analytics|||NA||DL1|W|||20201229|15:55:49|20201231|19:02:00|OMI163||C0Y2685||1.15|1||307-24-4|0.24||UG_L| |||Y|PR|TRG| |||||0.0061|||0.023|||C0Y2685||7129853|7129853|7129853|7129853|||20210111|Y
N6247316C2018|0000|QTR12017|Site 00006|06-MW35-1220||Maxxam
Analytics|||NA||DL1|W|||20201229|15:55:49|20201231|19:02:00|OMI163||C0Y2685||1.15|1||355-46-4|0.99||UG_L| |||Y|PR|TRG| |||||0.0051|||0.023|||C0Y2685||7129853|7129853|7129853|7129853|||20210111|Y
N6247316C2018|0000|QTR12017|Site 00006|06-MW35-1220||Maxxam
Analytics|||NA||DL1|W|||20201229|15:55:49|20201231|19:02:00|OMI163||C0Y2685||1.15|1||375-95-1|0.024||UG_L| |||Y|PR|TRG| |||||0.0059|||0.023|||C0Y2685||7129853|7129853|7129853|7129853|||20210111|Y
N6247316C2018|0000|QTR12017|Site 00006|06-MW35-1220||Maxxam
Analytics|||NA||DL1|W|||20201229|15:55:49|20201231|19:02:00|OMI163||C0Y2685||1.15|1||335-67-1|0.17||UG_L| |||Y|PR|TRG| |||||0.0058|||0.023|||C0Y2685||7129853|7129853|7129853|7129853|||20210111|Y
N6247316C2018|0000|QTR12017|Site 00006|06-MW35-1220||Maxxam
Analytics|||NA||DL1|W|||20201229|15:55:49|20201231|19:02:00|OMI163||C0Y2685||1.15|1||1763-23-1|3.0||UG_L| |||Y|PR|TRG||Due to high concentration of the target analyte, a reduced sample volume was extracted and analyzed. Detection limit was|||0.063|||0.20|||C0Y2685||7129853|7129853|7129853|7129853|||20210111|Y
N6247316C2018|0000|QTR12017|Site 00006|06-MW35-1220||Maxxam
Analytics|||NA||DL1|W|||20201229|15:55:49|20201231|19:02:00|OMI163||C0Y2685||1.15|1||376-06-7|0.016||UG_L|U|||N|PR|TRG| |||||0.0078|||0.023|||C0Y2685||7129853|7129853|7129853|7129853|||20210111|Y
N6247316C2018|0000|QTR12017|Site 00006|06-MW35-1220||Maxxam
Analytics|||NA||DL1|W|||20201229|15:55:49|20201231|19:02:00|OMI163||C0Y2685||1.15|1||72629-94-8|0.016||UG_L|U|||N|PR|TRG| |||||0.0074|||0.023|||C0Y2685||7129853|7129853|7129853|7129853|||20210111|Y
N6247316C2018|0000|QTR12017|Site 00006|06-MW35-1220||Maxxam
Analytics|||NA||DL1|W|||20201229|15:55:49|20201231|19:02:00|OMI163||C0Y2685||1.15|1||2058-94-8|0.016||UG_L|U|||N|PR|TRG| |||||0.0071|||0.023|||C0Y2685||7129853|7129853|7129853|7129853|||20210111|Y
N6247316C2018|0000|QTR12017|Site 00006|06-MW36-1220||Maxxam
Analytics|||NA||RAO|W|||20210107|14:49:19|20210108|10:02:00|OMI164||C0Y2685||1.00|1||4151-50-

2|0.016|0.016|UG_L|U|||N|PR|TRG||Initial analyses of the sample was performed within the method defined hold time. The sample was reanalysed outside the|||||0.0070||||0.040|||C0Y2685||7139995|7139995|7139995|7139995|||20210111|Y
N6247316C2018|0000|QTR12017|Site 00006|06-MW36-1220||Maxxam
Analytics|||NA||RAO|W|||||20210107|14:49:19|20210108|10:02:00|OMI164||C0Y2685||1.00|1|||31506-32-8|0.016|0.016|UG_L|U|||N|PR|TRG||Initial analyses of the sample was performed within the method defined hold time. The sample was reanalysed outside the|||||0.0078||||0.040|||C0Y2685||7139995|7139995|7139995|7139995|||20210111|Y
N6247316C2018|0000|QTR12017|Site 00006|06-MW36-1220||Maxxam
Analytics|||NA||DL1|W|||||20201229|15:55:49|20201231|19:23:00|OMI164||C0Y2685||1.15|1|||375-73-5|0.025||UG_L||||Y|PR|TRG|||||||0.0064||||0.023|||C0Y2685||7129853|7129853|7129853|7129853|||20210111|Y
N6247316C2018|0000|QTR12017|Site 00006|06-MW36-1220||Maxxam
Analytics|||NA||DL1|W|||||20201229|15:55:49|20201231|19:23:00|OMI164||C0Y2685||1.15|1|||335-76-2|0.016||UG_L|U|||N|PR|TRG|||||||0.0045||||0.023|||C0Y2685||7129853|7129853|7129853|7129853|||20210111|Y
N6247316C2018|0000|QTR12017|Site 00006|06-MW36-1220||Maxxam
Analytics|||NA||DL1|W|||||20201229|15:55:49|20201231|19:23:00|OMI164||C0Y2685||1.15|1|||307-55-1|0.018||UG_L|U|||N|PR|TRG|||||||0.0092||||0.023|||C0Y2685||7129853|7129853|7129853|7129853|||20210111|Y
N6247316C2018|0000|QTR12017|Site 00006|06-MW36-1220||Maxxam
Analytics|||NA||DL1|W|||||20201229|15:55:49|20201231|19:23:00|OMI164||C0Y2685||1.15|1|||375-85-9|0.093||UG_L||||Y|PR|TRG|||||||0.0077||||0.023|||C0Y2685||7129853|7129853|7129853|7129853|||20210111|Y
N6247316C2018|0000|QTR12017|Site 00006|06-MW36-1220||Maxxam
Analytics|||NA||DL1|W|||||20201229|15:55:49|20201231|19:23:00|OMI164||C0Y2685||1.15|1|||307-24-4|0.16||UG_L||||Y|PR|TRG|||||||0.0061||||0.023|||C0Y2685||7129853|7129853|7129853|7129853|||20210111|Y
N6247316C2018|0000|QTR12017|Site 00006|06-MW36-1220||Maxxam
Analytics|||NA||DL1|W|||||20201229|15:55:49|20201231|19:23:00|OMI164||C0Y2685||1.15|1|||355-46-4|0.58||UG_L||||Y|PR|TRG|||||||0.0051||||0.023|||C0Y2685||7129853|7129853|7129853|7129853|||20210111|Y
N6247316C2018|0000|QTR12017|Site 00006|06-MW36-1220||Maxxam
Analytics|||NA||DL1|W|||||20201229|15:55:49|20201231|19:23:00|OMI164||C0Y2685||1.15|1|||375-95-1|0.0088||UG_L|J||||Y|PR|TRG|||||||0.0059||||0.023|||C0Y2685||7129853|7129853|7129853|7129853|||20210111|Y
N6247316C2018|0000|QTR12017|Site 00006|06-MW36-1220||Maxxam
Analytics|||NA||DL1|W|||||20201229|15:55:49|20201231|19:23:00|OMI164||C0Y2685||1.15|1|||335-67-1|0.089||UG_L||||Y|PR|TRG|||||||0.0058||||0.023|||C0Y2685||7129853|7129853|7129853|7129853|||20210111|Y
N6247316C2018|0000|QTR12017|Site 00006|06-MW36-1220||Maxxam
Analytics|||NA||DL1|W|||||20201229|15:55:49|20201231|19:23:00|OMI164||C0Y2685||1.15|1|||1763-23-1|0.86||UG_L||||Y|PR|TRG|||||||0.0066||||0.023|||C0Y2685||7129853|7129853|7129853|7129853|||20210111|Y
N6247316C2018|0000|QTR12017|Site 00006|06-MW36-1220||Maxxam
Analytics|||NA||DL1|W|||||20201229|15:55:49|20201231|19:23:00|OMI164||C0Y2685||1.15|1|||376-06-7|0.016||UG_L|U|||N|PR|TRG|||||||0.0078||||0.023|||C0Y2685||7129853|7129853|7129853|7129853|||20210111|Y
N6247316C2018|0000|QTR12017|Site 00006|06-MW36-1220||Maxxam
Analytics|||NA||DL1|W|||||20201229|15:55:49|20201231|19:23:00|OMI164||C0Y2685||1.15|1|||72629-94-8|0.016||UG_L|U|||N|PR|TRG|||||||0.0074||||0.023|||C0Y2685||7129853|7129853|7129853|7129853|||20210111|Y
N6247316C2018|0000|QTR12017|Site 00006|06-MW36-1220||Maxxam
Analytics|||NA||DL1|W|||||20201229|15:55:49|20201231|19:23:00|OMI164||C0Y2685||1.15|1|||2058-94-8|0.016||UG_L|U|||N|PR|TRG|||||||0.0071||||0.023|||C0Y2685||7129853|7129853|7129853|7129853|||20210111|Y
N6247316C2018|0000|QTR12017|Site 00006|QCFB-121520||Maxxam

Analytics|||NA||000|W|)|||20201229|15:55:49|20201231|19:44:00|OMI165||COY2685||1.00|1||4151-50-2|0.016||UG_L|U|||N|PR|TRG|)|||||0.0070|||0.040|||COY2685||7129853|7129853|7129853|7129853|||20210111|Y
N6247316C2018|0000|QTR12017|Site 00006|QCFB-121520||Maxxam
Analytics|||NA||000|W|)|||20201229|15:55:49|20201231|19:44:00|OMI165||COY2685||1.00|1||31506-32-8|0.016||UG_L|U|||N|PR|TRG|)|||||0.0078|||0.040|||COY2685||7129853|7129853|7129853|7129853|||20210111|Y
N6247316C2018|0000|QTR12017|Site 00006|QCFB-121520||Maxxam
Analytics|||NA||000|W|)|||20201229|15:55:49|20201231|19:44:00|OMI165||COY2685||1.00|1||375-73-5|0.014||UG_L|U|||N|PR|TRG|)|||||0.0056|||0.020|||COY2685||7129853|7129853|7129853|7129853|||20210111|Y
N6247316C2018|0000|QTR12017|Site 00006|QCFB-121520||Maxxam
Analytics|||NA||000|W|)|||20201229|15:55:49|20201231|19:44:00|OMI165||COY2685||1.00|1||335-76-2|0.014||UG_L|U|||N|PR|TRG|)|||||0.0039|||0.020|||COY2685||7129853|7129853|7129853|7129853|||20210111|Y
N6247316C2018|0000|QTR12017|Site 00006|QCFB-121520||Maxxam
Analytics|||NA||000|W|)|||20201229|15:55:49|20201231|19:44:00|OMI165||COY2685||1.00|1||307-55-1|0.016||UG_L|U|||N|PR|TRG|)|||||0.0080|||0.020|||COY2685||7129853|7129853|7129853|7129853|||20210111|Y
N6247316C2018|0000|QTR12017|Site 00006|QCFB-121520||Maxxam
Analytics|||NA||000|W|)|||20201229|15:55:49|20201231|19:44:00|OMI165||COY2685||1.00|1||375-85-9|0.014||UG_L|U|||N|PR|TRG|)|||||0.0067|||0.020|||COY2685||7129853|7129853|7129853|7129853|||20210111|Y
N6247316C2018|0000|QTR12017|Site 00006|QCFB-121520||Maxxam
Analytics|||NA||000|W|)|||20201229|15:55:49|20201231|19:44:00|OMI165||COY2685||1.00|1||307-24-4|0.014||UG_L|U|||N|PR|TRG|)|||||0.0053|||0.020|||COY2685||7129853|7129853|7129853|7129853|||20210111|Y
N6247316C2018|0000|QTR12017|Site 00006|QCFB-121520||Maxxam
Analytics|||NA||000|W|)|||20201229|15:55:49|20201231|19:44:00|OMI165||COY2685||1.00|1||355-46-4|0.014||UG_L|U|||N|PR|TRG|)|||||0.0044|||0.020|||COY2685||7129853|7129853|7129853|7129853|||20210111|Y
N6247316C2018|0000|QTR12017|Site 00006|QCFB-121520||Maxxam
Analytics|||NA||000|W|)|||20201229|15:55:49|20201231|19:44:00|OMI165||COY2685||1.00|1||375-95-1|0.014||UG_L|U|||N|PR|TRG|)|||||0.0051|||0.020|||COY2685||7129853|7129853|7129853|7129853|||20210111|Y
N6247316C2018|0000|QTR12017|Site 00006|QCFB-121520||Maxxam
Analytics|||NA||000|W|)|||20201229|15:55:49|20201231|19:44:00|OMI165||COY2685||1.00|1||335-67-1|0.014||UG_L|U|||N|PR|TRG|)|||||0.0050|||0.020|||COY2685||7129853|7129853|7129853|7129853|||20210111|Y
N6247316C2018|0000|QTR12017|Site 00006|QCFB-121520||Maxxam
Analytics|||NA||000|W|)|||20201229|15:55:49|20201231|19:44:00|OMI165||COY2685||1.00|1||1763-23-1|0.014||UG_L|U|||N|PR|TRG|)|||||0.0057|||0.020|||COY2685||7129853|7129853|7129853|7129853|||20210111|Y
N6247316C2018|0000|QTR12017|Site 00006|QCFB-121520||Maxxam
Analytics|||NA||000|W|)|||20201229|15:55:49|20201231|19:44:00|OMI165||COY2685||1.00|1||376-06-7|0.014||UG_L|U|||N|PR|TRG|)|||||0.0068|||0.020|||COY2685||7129853|7129853|7129853|7129853|||20210111|Y
N6247316C2018|0000|QTR12017|Site 00006|QCFB-121520||Maxxam
Analytics|||NA||000|W|)|||20201229|15:55:49|20201231|19:44:00|OMI165||COY2685||1.00|1||72629-94-8|0.014||UG_L|U|||N|PR|TRG|)|||||0.0064|||0.020|||COY2685||7129853|7129853|7129853|7129853|||20210111|Y
N6247316C2018|0000|QTR12017|Site 00006|QCFB-121520||Maxxam
Analytics|||NA||000|W|)|||20201229|15:55:49|20201231|19:44:00|OMI165||COY2685||1.00|1||2058-94-8|0.014||UG_L|U|||N|PR|TRG|)|||||0.0062|||0.020|||COY2685||7129853|7129853|7129853|7129853|||20210111|Y



LABORATORY DATA CONSULTANTS, INC.

2701 Loker Ave. West, Suite 220, Carlsbad, CA 92010 Bus: 760-827-1100 Fax: 760-827-1099

NOREAS, Inc.
16501 Scientific Way
Irvine, CA 92618
ATTN: Ms. Sevda Aleckson
Sevda.Aleckson@noreasinc.com

March 5, 2021

SUBJECT: Treasure Island, IR Site 6, Data Validation

Dear Ms. Aleckson,

Enclosed is the final validation report for the fraction listed below. This SDG was received on January 21, 2021. Attachment 1 is a summary of the samples that were reviewed for analysis.

LDC Project #50315:

SDG #

20L162/C0Y2685

Fraction:

Perfluoroalkyl & Polyfluoroalkyl Substances

The data validation was performed under Level III & IV guidelines. The analyses were validated using the following documents, as applicable to each method:

- Final Sampling and Analysis Plan, Field Sampling Plan and Quality Assurance Project Plan, Basewide Groundwater and Soil Gas Monitoring at Installation Restoration Sites 6, 12, 21, and 24, Former Naval Station Treasure Island, San Francisco, California; April 2017
- U.S. Department of Defense Quality Systems Manual for Environmental Laboratories, Version 5.3; 2019
- USEPA National Functional Guidelines for Organic Superfund Methods Data Review; August 2014

Please feel free to contact us if you have any questions.

Sincerely,

Pei Geng
pgeng@lab-data.com
Project Manager/Senior Chemist

Shaded cells indicate Level IV validation (all other cells are Level III validation). These sample counts do not include MS/MSD, and DUPs

Laboratory Data Consultants, Inc. Data Validation Report

Project/Site Name: Treasure Island, IR Site 6

LDC Report Date: February 16, 2021

Parameters: Perfluoroalkyl & Polyfluoroalkyl Substances

Validation Level: Stage 4

Laboratory: EMAX Laboratories, Inc./Bureau Veritas Canada, Inc.

Sample Delivery Group (SDG): 20L162/C0Y2685

Sample Identification	Laboratory Sample Identification	Matrix	Collection Date
06-MW25-1220	20L162-01/OMI155	Water	12/15/20
06-MW26-1220	20L162-02/OMI156	Water	12/15/20
06-MW30-1220	20L162-03/OMI157	Water	12/15/20
06-MW31-1220	20L162-04/OMI158	Water	12/15/20
06-MW31-1220 DUP	20L162-05/OMI159	Water	12/15/20
06-MW32-1220	20L162-06/OMI160	Water	12/15/20
06-MW33-1220	20L162-07/OMI161	Water	12/15/20
06-MW34-1220	20L162-08/OMI162	Water	12/15/20
06-MW35-1220	20L162-09/OMI163	Water	12/15/20
06-MW36-1220	20L162-10/OMI164	Water	12/15/20
QCFB-121520	20L162-11/OMI165	Water	12/15/20
06-MW30-1220MS	20L162-03/OMI157MS	Water	12/15/20
06-MW30-1220MSD	20L162-03/OMI157MSD	Water	12/15/20

Introduction

This Data Validation Report (DVR) presents data validation findings and results for the associated samples listed on the cover page. Data validation was performed in accordance with the Final Sampling and Analysis Plan (Field Sampling Plan and Quality Assurance Project Plan), Basewide Groundwater and Soil Gas Monitoring at Installation Restoration Sites 6, 12, 21, and 24, Former Naval Station Treasure Island, San Francisco, California (April 2017), the U.S. Department of Defense (DoD) Quality Systems Manual (QSM) for Environmental Laboratories, Version 5.3 (2019), and a modified outline of the USEPA National Functional Guidelines (NFG) for Superfund Organic Methods Data Review (August 2014). Where specific guidance was not available, the data has been evaluated in a conservative manner consistent with industry standards using professional experience.

The analyses were performed by the following methods:

Perfluoroalkyl and Polyfluoroalkyl Substances (PFAS) by Environmental Protection Agency (EPA) Method 537 Modified and LC/MS/MS and Isotope Dilution Compliant with Table B-15 of DoD QSM 5.3

All sample results were subjected to Stage 4 data validation, which is comprised of the quality control (QC) summary forms as well as the raw data, to confirm sample quantitation and identification.

The following are definitions of the data qualifiers utilized during data validation:

- J (Estimated): The compound or analyte was analyzed for and positively identified by the laboratory; however the reported concentration is estimated due to non-conformances discovered during data validation.
- U (Non-detected): The compound or analyte was analyzed for and positively identified by the laboratory; however the compound or analyte should be considered non-detected at the reported concentration due to the presence of contaminants detected in the associated blank(s).
- UJ (Non-detected estimated): The compound or analyte was reported as not detected by the laboratory; however the reported quantitation/detection limit is estimated due to non-conformances discovered during data validation.
- R (Rejected): The sample results were rejected due to gross non-conformances discovered during data validation. Data qualified as rejected is not usable.
- NA (Not Applicable): The non-conformance discovered during data validation demonstrates a high bias, while the affected compound or analyte in the associated sample(s) was reported as not detected by the laboratory and did not warrant the qualification of the data.

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

Qualification Codes

- 1 Holding Times Exceeded
- 2 Sample Preservation / Cooler Temperature Exceeded Acceptance Criteria
- 3 Sample Custody Potentially Compromised Sample Integrity
- 4 Missing/Incomplete Deliverables
- 5 Calibration Did Not Meet Method Criteria
- 6 Equipment/Field Blank Contamination
- 7 Laboratory Method or Calibration Blank Contamination
- 8 Matrix Spike % Recovery Exceeded Acceptance Criteria
- 9 Matrix Spike Duplicate (RPD or Duplicate Sample Analysis) Exceeded Acceptance Criteria
- 10A Laboratory Control Sample % Recovery Exceeded Acceptance Criteria
- 10B Laboratory Control Sample Duplicate (RPD) Exceeded Acceptance Criteria
- 11 ICP Interference Check Analysis Exceeded Method Criteria
- 12 RPD Between Two Columns (Pesticides/PCBs only)
- 13 Surrogate Recoveries Exceeded Acceptance Criteria
- 14 Field Duplicates RPD Exceeded Project Criteria
- 15 Peak Resolution did not meet method criteria
- 16 Serial Dilution Analysis Exceeded Method Criteria
- 17 Chemical Recoveries Exceeded Acceptance Criteria
- 18 Trip Blank Contamination
- 19 Internal Standards Did Not Meet Method Criteria
- 20 Calibration Range exceeded Method Criteria
- 21 Potential False Positives
- 22 Do not use, other result more technically sound (overall assessment)
- 23 Estimated Maximum Possible Concentration
- 24 Trace Detection Below the LOQ (RL) and Above the DL (MDL)
- 25 Other

I. Sample Receipt and Technical Holding Times

All samples were received in good condition and cooler temperatures upon receipt met validation criteria.

All technical holding time requirements were met with the following exceptions:

Sample	Compound	Total Days From Sample Collection Until Extraction	Required Holding Time (in Days) From Sample Collection Until Extraction	Flag	A or P
06-MW25-1220 06-MW26-1220 06-MW32-1220 06-MW36-1220	MeFOSAA EtFOSAA	23	14	UJ (all non-detects) UJ (all non-detects)	A
06-MW30-1220	EtFOSAA	23	14	UJ (all non-detects)	A

II. LC/MS Instrument Performance Check

Instrument performance was checked and the requirements were met.

III. Initial Calibration and Initial Calibration Verification

Initial calibration was performed as required by the method.

A curve fit, based on the initial calibration, was established for quantitation. The coefficient of determination (r^2) was greater than or equal to 0.990.

For each calibration standard, all compounds were within 70-130% of their true value.

The signal to noise (S/N) ratio was within validation criteria for all compounds.

Retention time windows were established as required by the method.

The percent differences (%D) of the initial calibration verification (ICV) standard were less than or equal to 30.0% for all compounds.

IV. Continuing Calibration

Continuing calibration was performed at required frequencies.

The percent differences (%D) were less than or equal to 30.0% for all compounds.

The signal to noise (S/N) ratio was within validation criteria for all compounds.

The percent differences (%D) of the instrument sensitivity check (ISC) were less than or equal to 30.0% for all compounds.

Retention times of all compounds in the calibration standards were within the established retention time windows.

All compound concentrations were at the limit of quantitation (LOQ) for the ISC standard.

V. Laboratory Blanks

Laboratory blanks were analyzed as required by the methods. No contaminants were found in the laboratory blanks.

VI. Field Blanks

Sample QCFB-121520 was identified as a field blank. No contaminants were found.

VII. Matrix Spike/Matrix Spike Duplicates

Matrix spike (MS) and matrix spike duplicate (MSD) sample analysis was performed on an associated project sample. Percent recoveries (%R) were within QC limits. Relative percent differences (RPD) were within QC limits.

VIII. Laboratory Control Samples

Laboratory control samples (LCS) were analyzed as required by the methods. Percent recoveries (%R) were within QC limits.

IX. Field Duplicates

Samples 06-MW31-1220 and 06-MW31-1220 DUP were identified as field duplicates. No results were detected in any of the samples with the following exceptions:

Compound	Concentration (ug/L)		RPD (Limits)	Flag	A or P
	06-MW31-1220	06-MW31-1220 DUP			
Perfluorohexanoic acid	1.6	1.5	6 (≤30)	-	-
Perfluoroheptanoic acid	0.75	0.75	0 (≤30)	-	-
Perfluorooctanoic acid	0.44	0.43	2 (≤30)	-	-
Perfluorononanoic acid	0.032	0.033	3 (≤30)	-	-
Perfluorobutanesulfonic acid	0.12	0.13	8 (≤30)	-	-
Perfluorohexanesulfonic acid	3.5	3.6	3 (≤30)	-	-
Perfluorooctanesulfonic acid	0.93	0.99	6 (≤30)	-	-

X. Labeled Compounds

Labeled compound recoveries (%R) were not within QC limits for sample 06-MW25-1220 and 06-MW32-1220. No data were qualified for samples analyzed at greater than or equal to 5X dilution.

XI. Compound Quantitation

All compound quantitations met validation criteria.

XII. Target Compound Identifications

All target compound identifications met validation criteria.

XIII. System Performance

The system performance was acceptable.

XIV. Overall Assessment of Data

The analysis was conducted within all specifications of the methods, DoD QSM version 5.3 and project SAP. This review also included verification of analytes, methods, reporting limits, instrument performance and method QC acceptance limits, which were found to be compliant with the project documents. No results were rejected.

Due to technical holding time, data were qualified as estimated in five samples.

The quality control criteria reviewed, other than those discussed above, were met and are considered acceptable.

Treasure Island, IR Site 6

Perfluoroalkyl & Polyfluoroalkyl Substances - Data Qualification Summary - SDG 20L162/C0Y2685

Sample	Compound	Flag	A or P	Reason (Code)
06-MW25-1220 06-MW26-1220 06-MW32-1220 06-MW36-1220	MeFOSAA EtFOSAA	UJ (all non-detects) UJ (all non-detects)	A	Technical holding times (1)
06-MW30-1220	EtFOSAA	UJ (all non-detects)	A	Technical holding times (1)

Treasure Island, IR Site 6

Perfluoroalkyl & Polyfluoroalkyl Substances - Laboratory Blank Data Qualification Summary - SDG 20L162/C0Y2685

No Sample Data Qualified in this SDG

Treasure Island, IR Site 6

Perfluoroalkyl & Polyfluoroalkyl Substances - Field Blank Data Qualification Summary - SDG 20L162/C0Y2685

No Sample Data Qualified in this SDG

LDC #: 50315A96 **VALIDATION COMPLETENESS WORKSHEET**
 SDG #: 20L162/C0Y2685 Level IV
 Laboratory: EMAX Laboratories, Inc./Bureau Veritas Canada, Inc.

Date: 2/5/21
 Page: 1 of 1
 Reviewer: [Signature]
 2nd Reviewer: [Signature]

METHOD: LC/MS Perfluoroalkyl & Polyfluoroalkyl Substances (EPA Method 537M) / QSM 5.3

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

	Validation Area		Comments
I.	Sample receipt/Technical holding times	A, SW	
II.	LC/MS Instrument performance check	A	
III.	Initial calibration/ICV	A, A	TV/ICV = 30
IV.	Continuing calibration/ISC	A/A	D = 30
V.	Laboratory Blanks	A	F
V.I	Field blanks	ND	EB = 11
VII.	Matrix spike/Matrix spike duplicates	A	
VIII.	Laboratory control samples	A	LC
IX.	Field duplicates	SW	D = 4+5
X.	Labeled Compounds	SW	
XI.	Compound quantitation RL/LOQ/LODs	A	
XII.	Target compound identification	A	
XIII.	System performance	A	
XIV.	Overall assessment of data	A	

Note: A = Acceptable
 N = Not provided/applicable
 SW = See worksheet

ND = No compounds detected
 R = Rinsate
 FB = Field blank

D = Duplicate
 TB = Trip blank
 EB = Equipment blank

SB=Source blank
 OTHER:

	Client ID	Sublab ID	Lab ID	Matrix	Date
1	06-MW25-1220	OMI 155	20L162-01	Water	12/15/20
2	06-MW26-1220	56	20L162-02	Water	12/15/20
3	06-MW30-1220	57	20L162-03	Water	12/15/20
4	06-MW31-1220	58	20L162-04	Water	12/15/20
5	06-MW31-1220 DUP	59	20L162-05	Water	12/15/20
6	06-MW32-1220	60	20L162-06	Water	12/15/20
7	06-MW33-1220	61	20L162-07	Water	12/15/20
8	06-MW34-1220	62	20L162-08	Water	12/15/20
9	06-MW35-1220	63	20L162-09	Water	12/15/20
10	06-MW36-1220	64	20L162-10	Water	12/15/20
11	QC/B-121520 ok	65	20L162-11	Water	12/15/20
12	06-MW30-1220MS	57MS	20L162-03MS	Water	12/15/20
13	06-MW30-1220MSD	57MSD	20L162-03MSD	Water	12/15/20
14					
15					

712985, 7139995

Method: LC/MS/MS and Isotope Dilution Compliant with Table B-15 of DoD QSM 5.3

Validation Area	Yes	No	NA	Findings/Comments
I. Technical holding times				
Were all technical holding times met?	√			
Were cooler temperature criteria met?	√			
II. LC/MS Instrument performance check				
Were the instrument performance reviewed and found to be within the validation criteria?	√			
III. Initial calibration and Initial calibration verification				
Did the laboratory perform a 5-point calibration prior to sample analysis?	√			
Were all percent relative standard deviations (%RSD) ≤ 20%?			√	
Was a curve fit used for evaluation? If yes, did the initial calibration meet the coefficient of determination (r ²) criteria of ≥ 0.990?	√			
Were all analytes within 70-130% or percent differences (%D) ≤ 30% of their true value for each calibration standard?	√			
Was the signal to noise (S/N) ratio for all compounds within the validation criteria?	√			
Were the retention time windows properly established?	√			
Was an initial calibration verification (ICV) standard analyzed after each initial calibration for each instrument?	√			
Were all ICV percent differences (%D) of the initial calibration verification ≤ 30%?	√			
IV. Continuing calibration and Instrument sensitivity check				
Was a continuing calibration analyzed prior to sample analysis, after every 10 samples and at the end of the analytical sequence?	√			
Were all percent differences (%D) of the continuing calibration ≤ 30%?	√			
Were all the retention times within the acceptance windows?	√			
Was the signal to noise (S/N) ratio for all compounds within the validation criteria?	√			
Were all percent differences (%D) of the Instrument Sensitivity Check ≤ 30%?	√			
V. Laboratory Blanks				
Was a laboratory blank associated with every sample in this SDG?	√			
Was a laboratory blank analyzed for each matrix and concentration?	√			
Was there contamination in the laboratory blanks?		√		
VI. Field blanks				
Were field blanks identified in this SDG?	√			
Were target compounds detected in the field blanks?		√		

Validation Area	Yes	No	NA	Findings/Comments
VII. Matrix spike/Matrix spike duplicates				
Were matrix spike (MS) and matrix spike duplicate (MSD) analyzed in this SDG?	√			
Were the MS/MSD percent recoveries (%R) and the relative percent differences (RPD) within the QC limits?	√			
VIII. Laboratory control samples				
Was an LCS analyzed per extraction batch for this SDG?	√			
Were the LCS percent recoveries (%R) and relative percent difference (RPD) within the QC limits?	√			
IX. Field duplicates				
Were field duplicate pairs identified in this SDG?	√			
Were target compounds detected in the field duplicates?	√			
X. Labeled compounds				
Were labeled compound percent recoveries (%R) within the QC limits?		√		
Were retention times within 0.4 minutes of the associated calibration standard?	√			
XI. Compound quantitation				
Did the laboratory reporting limits (i.e. DL, LOD, LOQ) meet the QAPP?	√			
Did reported results include both branched and linear isomers?	√			
Were the correct ion transition, labeled compound and relative response factor (RRF) used to quantitate the compound?	√			
Were compound retention times within 0.1 minutes of the associated labeled compound for compounds with a labeled analog?	√			
Were compound quantitation and reporting limits adjusted to reflect all sample dilutions and dry weight factors applicable to Stage 4 validation?	√			
XII. Target compound identification				
Was the signal to noise (S/N) ratio for all compounds within the validation criteria?	√			
Were two transitions and the ion transition ratio per analyte monitored and documented with the exception of PFBA and PFPeA?	√			
Were ion ratios between 50-150%?	√			
XIII. System performance				
System performance was found to be acceptable.	√			
XIV. Overall assessment of Data				
Overall assessment of data was found to be acceptable.	√			

TARGET COMPOUND WORKSHEET

METHOD: PFAS

A. Perfluorohexanoic acid (PFHxA)			
B. Perfluoroheptanoic acid (PFHpA)			
C. Perfluorooctanoic acid (PFOA)			
D. Perfluorononanoic acid (PFNA)			
E. Perfluorodecanoic acid (PFDA)			
F. Perfluoroundecanoic acid (PFUnA)			
G. Perfluorododecanoic acid (PFDoA)			
H. Perfluorotridecanoic acid (PFTriDA)			
I. Perfluorotetradecanoic acid (PFTeDA)			
J. Perfluorobutanesulfonic acid (PFBS)			
K. Perfluorohexanesulfonic acid (PFHxS)			
L. Perfluoroheptanesulfonic acid (PFHpS)			
M. Perfluorooctanesulfonic acid (PFOS)			
N. Perfluorodecanesulfonic acid (PFDS)			
O. Perfluorooctane Sulfonamide (PFOSA)			
P. Perfluorobutanoic acid (PFBA)			
Q. Perfluoropentanoic acid (PFPeA)			
R. 6:2 Fluorotelomer sulfonic acid			
S. 8:2 Fluorotelomer sulfonic acid			
T. N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)			
U. N-Ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)			
V. 1H,1H,2H,2H-Perfluorohexanesulfonic Acid (4:2FTS)			

VALIDATION FINDINGS WORKSHEET

Technical Holding Times

Method: LC/MS/MS and Isotope Dilution Compliant with Table B-15 of DoD QSM 5.3

All circled dates have exceeded the technical holding times.

(Y/ N N/A) Were all cooler temperatures within validation criteria?

[illegible]

TECHNICAL HOLDING TIME CRITERIA

Water: Extracted within 14 days, analyzed within 28 days.
Soil: Extracted within 28 days, analyzed within 28 days.

LDC #: 50315A96**VALIDATION FINDINGS WORKSHEET**
Field DuplicatesPage: 1 of 1
Reviewer: SC**Method:** LC/MS/MS and Isotope Dilution Compliant with Table B-15 of DoD QSM 5.3

Compound	Concentration (ug/L)		RPD _{≤30}	
	4	5		
A	1.6	1.5	6	
B	0.75	0.75	0	
C	0.44	0.43	2	
D	0.032	0.033	3	
J	0.12	0.13	8	
K	3.5	3.6	3	
M	0.93	0.99	6	

LDC #: 50315A96

VALIDATION FINDINGS WORKSHEET

Labeled Compounds

Page: 1 of 1
Reviewer: 7

METHOD: LC/MS/MS and Isotope Dilution Compliant with Table B-15 of DoD QSM 5.3

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Y (N) N/A	Were all labeled compound recoveries within the QC criteria?
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[illegible]

VALIDATION FINDINGS WORKSHEET
Initial Calibration Calculation Verification

Method: LC/MS/MS and Isotope Dilution Compliant with Table B-15 of DoD QSM 5.3

Calibration Date	Instrument	Analyte	Standard	(Y) Response ratio	(X) Concentration ratio
12/31/2020	LCMS05	PFOA	1	0.13832	0.830
			2	0.50108	3.000
			3	1.24708	8.000
			4	2.46441	16.000
			5	4.84949	30.000
			6	6.65840	41.700

Linear

	Calculated	Reported
Constant	-0.014626	0.006255
X Coefficient(s)	0.16022	0.158960
Correlation Coefficient	0.999815	
Coefficient of Determination (r^2)	0.999629	1.00000

Calibration Date	Instrument	Analyte	Standard	(Y) Response ratio	(X) Concentration ratio
12/31/2020	LCMS05	PFOS	1	0.17497	0.830
			2	0.59605	3.000
			3	1.42826	8.000
			4	2.88614	16.000
			5	5.52837	30.000
			6	7.56527	41.700

Linear

	Calculated	Reported
Constant	0.016968	0.026930
X Coefficient(s)	0.18163	0.181023
Correlation Coefficient	0.999898	
Coefficient of Determination (r^2)	0.999795	1.00000

VALIDATION FINDINGS WORKSHEET
Continuing Calibration Calculation Verification

Method: LC/MS/MS and Isotope Dilution Compliant with Table B-15 of DoD QSM 5.3

The percent difference (%D) of the initial calibration average Relative Response Factors (RRFs) and the continuing calibration RRFs were recalculated for the compounds identified below using the following calculation:

$$\% \text{ Difference} = 100 * (\text{ave. RRF} - \text{RRF}) / \text{ave. RRF}$$
$$\text{RRF} = (\text{Ax})(\text{Cis}) / (\text{Ais})(\text{Cx})$$

Where:

ave. RRF = initial calibration average RRF

RRF = continuing calibration RRF

Ax = Area of compound

Cx = Concentration of compound,

Ais = Area of associated internal standard

Cis = Concentration of internal standard

#	Standard ID	Calibration Date	Compound (IS)	True Conc	Reported Conc	Recalculated Conc	Reported %R	Recalculated %R
1	7129853_10	12/31/2020	PFOA (13C4-PFOA)	0.830	0.9128	0.9128	110.0	110.0
			PFOS (13C4-PFOS)	0.830	0.7773	0.7782	93.6	93.8
2	7129853_29	12/31/2020	PFOA (13C4-PFOA)	16.000	16.0116	16.0115	100.1	100.1
			PFOS (13C4-PFOS)	16.000	15.7848	15.7839	98.7	98.6
3	7129853_39	12/31/2020	PFOA (13C4-PFOA)	16.000	15.5900	15.5899	97.4	97.4
			PFOS (13C4-PFOS)	16.000	15.0784	15.0778	94.2	94.2
4			PFOA (13C4-PFOA)					
			PFOS (13C4-PFOS)					
5			PFOA (13C4-PFOA)					
			PFOS (13C4-PFOS)					

LDC #: 50315A96

VALIDATION FINDINGS WORKSHEET

Matrix Spike/Matrix Spike Duplicates Results Verification

Page: 1 of 1
Reviewer: SC

Method: LC/MS/MS and Isotope Dilution Compliant with Table B-15 of DoD QSM 5.3

The percent recoveries (%R) and relative percent differences (RPD) of the matrix spike and matrix spike duplicate were recalculated for the compounds identified below using the following calculation:

$$\text{SSC} = (\text{Area spike}) (\text{Conc IS}) / (\text{Area IS}) (\text{average RRF spike})$$
$$\% \text{Recovery} = 100 * (\text{SSC} - \text{SC}) / \text{SA}$$

Where: SSC = Spiked concentration

SC = Sample concentration

SA = Spike added

$$RPD = |MS - MSD| * 2 / (MS + MSD)$$

MS = Matrix spike recovery

MSD = Matrix spike duplicate recovery

MS/MSD ID: 12/13[illegible]

LDC #: 50315A96

VALIDATION FINDINGS WORKSHEET

LCS Results Verification

Page: 1 of 1
Reviewer: SC

Method: LC/MS/MS and Isotope Dilution Compliant with Table B-15 of DoD QSM 5.3

The percent recoveries (%R) and relative percent differences (RPD) of the laboratory control sample and laboratory control duplicate were recalculated for the compounds identified below using the following calculation:

$$SSC = (\text{Area spike}) (\text{Conc IS}) / (\text{Area IS}) (\text{average RRF spike})$$
$$\% \text{Recovery} = 100 * \text{SSC} / \text{SA}$$

Where:

SSC = Spiked concentration

LCS = Laboratory control spike recovery

SA = Spike added

LCSD = Laboratory control spike duplicate recovery

$$RPD = |LCS - LCSD| * 2 / (LCS + LCSD)$$

LCS/LCSD ID: 7129853LCS

[illegible]

LDC #: 50315A96

VALIDATION FINDINGS WORKSHEET

Sample Results Verification

Page: 1 of 1
Reviewer: SC

Method: LC/MS/MS and Isotope Dilution Compliant with Table B-15 of DoD QSM 5.3

Compound results for all Level IV samples reported with a positive detect were recalculated and verified using the following equation:

$$\text{Concentration} = \frac{(Ax) (Vt) (Df)}{(RRF) (Vo)}$$

Where:

A_x = Area or height of the peak for the compound to be measured

A_{is} = Area or height of the peak for the internal standard

Cis = Concentration of the internal standard

DF = Dilution factor

V_t = Volume of extract in milliliters (mL)

RRF = Average relative response factor

V_o = Volume of sample in milliliters (mL)

Wt = Weight of sample in grams (g)

[illegible]

INSTALLATION_ID	SITE_NAME	LOCATION_NAME	LOCATION_TYPE_DESC	COORD_X	COORD_Y	SAMPLE_NAME	SAMPLE_MATRIX_DESC	SAMPLE_TYPE_DESC	COLLECT_DATE	ANALYTICAL_METHOD_GRP_DESC	SDG
NAVSTA TI	SITE 00006	06-MW25	Monitoring Well	6021164.38	2130489.47	06-MW25-1220	Groundwater	Normal (Regular)	15-Dec-20	Perfluoroalkyl Compounds	20L162
NAVSTA TI	SITE 00006	06-MW26	Monitoring Well	6021167.06	2130576.16	06-MW26-1220	Groundwater	Normal (Regular)	15-Dec-20	Perfluoroalkyl Compounds	20L162
NAVSTA TI	SITE 00006	06-MW30	Monitoring Well	6021164.04	2130315.21	06-MW30-1220	Groundwater	Normal (Regular)	15-Dec-20	Perfluoroalkyl Compounds	20L162
NAVSTA TI	SITE 00006	06-MW31	Monitoring Well	6021361.5	2130320.31	06-MW31-1220	Groundwater	Normal (Regular)	15-Dec-20	Perfluoroalkyl Compounds	20L162
NAVSTA TI	SITE 00006	06-MW31	Monitoring Well	6021361.5	2130320.31	06-MW31-1220 DUP	Groundwater	Field duplicate	15-Dec-20	Perfluoroalkyl Compounds	20L162
NAVSTA TI	SITE 00006	06-MW32	Monitoring Well	6021359.03	2130646.04	06-MW32-1220	Groundwater	Normal (Regular)	15-Dec-20	Perfluoroalkyl Compounds	20L162
NAVSTA TI	SITE 00006	06-MW33	Monitoring Well	6021251.13	2130701.09	06-MW33-1220	Groundwater	Normal (Regular)	15-Dec-20	Perfluoroalkyl Compounds	20L162
NAVSTA TI	SITE 00006	06-MW34	Monitoring Well	6021541.46	2130591.53	06-MW34-1220	Groundwater	Normal (Regular)	15-Dec-20	Perfluoroalkyl Compounds	20L162
NAVSTA TI	SITE 00006	06-MW35	Monitoring Well	6021429.59	2130616.91	06-MW35-1220	Groundwater	Normal (Regular)	15-Dec-20	Perfluoroalkyl Compounds	20L162
NAVSTA TI	SITE 00006	06-MW36	Monitoring Well	6021421.91	2130432.23	06-MW36-1220	Groundwater	Normal (Regular)	15-Dec-20	Perfluoroalkyl Compounds	20L162